SANDVIK
Coromant

2020

Ferramentas Rotativas

FRESAMENTO
FURAÇÃO
MANDRILAMENTO
ADAPTADORES PARA FERRAMENTAS ROTATIVAS





POR

Vamos introduzir nossos novos catálogos

O catálogo consiste em três volumes: Ferramentas para Torneamento, Ferramentas Rotativas e Ferramentas Sólidas Rotativas. No total, mais de 30.000 produtos standard foram lançados.

Ferramentas para Torneamento – Torneamento geral, Cortes e canais, Torneamento de roscas, Ferramentas multifunção, Sistemas de fixação de ferramentas e Adaptadores para ferramentas de torneamento

Ferramentas Rotativas – Fresamento, Furação, Mandrilamento e Adaptadores para ferramentas rotativas

Ferramentas Sólidas Rotativas – Fresamento, Furação, Rosqueamento com macho e Alargamento

Use as visões gerais dos produtos no início de cada capítulo para encontrar sua área de interesse e uma referência levará você para a página do produto. As referências visuais no final de cada página do produto irão guiá-lo para mais informações e os produtos relacionados, como suportes, pastilhas e dados de corte.

Nossa oferta total com aproximadamente 50.000 produtos standard que podem ser encontrados em : **www.sandvik.coromant.com**. Se você não encontrar o que precisa, temos uma ampla gama de produtos que podem ser personalizados mediante sua solicitação.

Visite www.sandvik.coromant.com para obter as últimas medidas e tolerâncias, dados de corte detalhados e solicitar todos os produtos e componentes disponíveis.



Explicação sobre os símbolos de referência:


Pastilhas

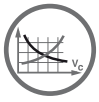

Fresas


Corpos da broca


Ferramentas para mandrilamento

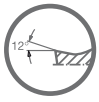

Adaptadores


Acessórios


Dados de corte



Descrição da classe



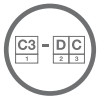
Descrição da geometria



Explicação sobre parâmetros



Tailor Made



Chave de código



Informações sobre refrigeração


Informação


Primeira escolha

Boa escolha

Não disponível

Nossa recomendação de primeira escolha é um bom ponto de partida para a maioria das operações, pois você pode escolher uma classe com outras características, se necessário.

I Fresamento

J Furação

K Mandrilamento

L Adaptadores para ferramentas rotativas

M Acessórios

N Informações gerais

Fresamento

Ferramentas para faceamento I3

CoroMill® 345 I4-I8
CoroMill® 245 I9-I12
CoroMill® 425 I13-I15
CoroMill® 745 I16-I19
CoroMill® 360 I20-I22
CoroMill® 365 I23-I26

Ferramentas para fresamento com altos avanços I27

CoroMill® 419 I28-I31
CoroMill® 210 I32-I36
CoroMill® 415 I37-I41
CoroMill® 745 I42-I45

Ferramentas para fresamento de cantos a 90 graus I46

CoroMill® 490 I47-I56
CoroMill® 390 I57-I78
CoroMill® 690 I79-I82
CoroMill® Century I83-I89

Ferramentas para fresamento de perfis I90

CoroMill® 300 I91-I99
CoroMill® 200 I100-I104
CoroMill® 216 I105-I111

Ferramentas para fresamento lateral I112

CoroMill® 331 I113-I134

Ferramentas para fresamento de canais I135

CoroMill® QD I136-I141
CoroMill® 328 I142-I144
CoroMill® 327 I145-I147

Ferramentas para fresamento de roscas I135

CoroMill® 328 I148
CoroMill® 327 I149-I150

Ferramentas para fresamento de chanfros I135

CoroMill® 327 I150
CoroMill® 495 I151-I153

Para ver o programa completo, acesse www.sandvik.coromant.com

Como escolher sua ferramenta para fresamento

Passo da fresa

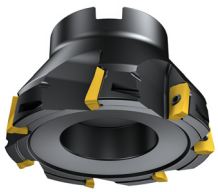
L



Passo largo

• Número de pastilhas reduzido, forças de corte baixas. Máquinas pequenas. Melhor produtividade quando a estabilidade e a potência forem limitadas. Balanço longo.

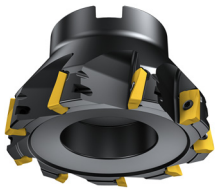
M



Passo fino

Fresamento de uso geral e produção mista. Sempre a primeira escolha.

H

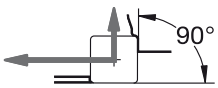


Passo extra-fino

Máximo número de pastilhas para melhor produtividade em condições estáveis. Materiais de cavacos curtos ou resistentes ao calor.

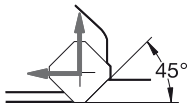
Ângulo de posição

Ângulo de posição de 90°



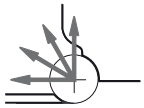
- Peças com paredes finas
- Peças com fixação fraca
- Onde é necessário um perfil em 90°

Ângulo de posição de 45°



- Primeira escolha para uso geral
- Reduz vibração com longos balanços
- Efeito de afinamento de cavacos permite maior produtividade

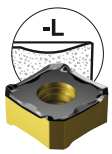
Fresas com pastilha redonda



- Aresta de corte mais resistente com várias posições de indexação
- Fresa de uso geral
- Maior efeito de afinamento dos cavacos para ligas resistentes ao calor

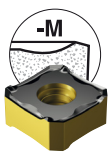
Geometrias de pastilhas

Leve



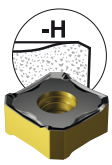
Extra positiva, usinagem leve, forças de corte baixas e baixas faixas de avanço.

Média



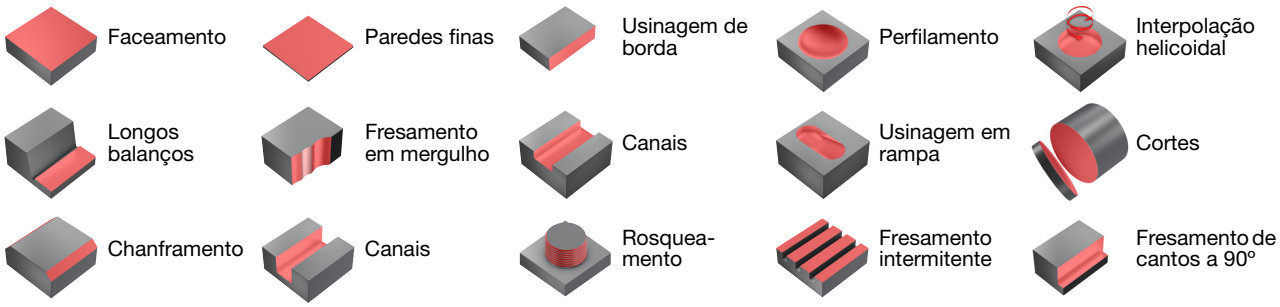
Para uso geral na maioria dos materiais.

Pesada



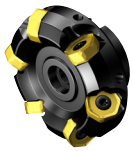
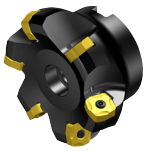
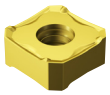
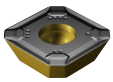
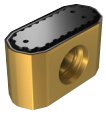
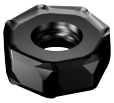
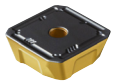
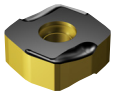
Aresta de corte reforçada, usinagem pesada, alta segurança da aresta e altas taxas de avanço.

Explicação sobre os símbolos da aplicação



POR

Ferramentas para faceamento

	CoroMill® 345	CoroMill® 245	CoroMill® 425	CoroMill® 745	CoroMill® 360	CoroMill® 365
						
Página	I5	I10	I14	I17	I21	I23
Material	P M K N S H	P M K N S H	K	P M K S	P M K	P M K N S H
Operação principal						
KAPR	45°	45°	25°	42°	60°	65°
D_c mm	40 - 250	32 - 250	100 - 500	63 - 250	160 - 400	50 - 250
DCX mm	54.1 - 264.1	44.5 - 268.8	107.0 - 507.0	78.2 - 264.4	175.0 - 420.8	50.0 - 166.7
APMX mm	6	6 - 10	0.90	5.20	13 - 18	6.0
Pastilha						
Tamanhos da pastilha	13	12 & 18	17	21	19 & 28	15
Acoplamentos	Coromant Capto® Haste cilíndrica Árvore	Árvore Haste cilíndrica	Árvore Montagem Cap	Coromant Capto® Árvore	Árvore	Coromant Capto® Arbor
Refrigeração interna	✓	✗	✗	✓	✓	✓
Opções	Tip-seat com proteção do calço	Tip-seat com proteção do calço	Cassetes ajustáveis para pastilhas Wiper		Desenho de cassete intercambiável	Refrigeração interna nos modelos selecionados
Outras operações						

CoroMill® 345

Fresa de facear para alta produtividade

J

Aplicação

- Faceamento
- Desbaste ao acabamento

Área de aplicação ISO:

P M K N S H



K

Características e benefícios

- Baixo custo por peça devido às oito arestas de corte
- Alto rendimento – com a alta produtividade da refrigeração interna, é possível obter alta produtividade também em materiais difíceis
- Usinagem segura graças aos tip-seats protegidos por calços e corpo robusto da fresa
- Utilização da máquina e produtividade otimizadas com quatro passos diferentes
- Ampla área de aplicação – use o mesmo conceito para aplicações diferentes

L

www.sandvik.coromant.com/coromill345

Acoplamentos

- Coromant Capto®
- Árvore
- Haste cilíndrica

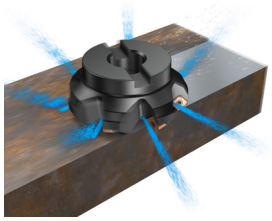
Pastilhas

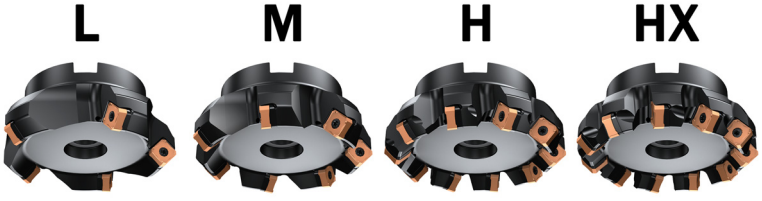
- Oito arestas de corte
- Pastilhas Wiper para excelente acabamento superficial com alto avanço por dente

M

Refrigeração interna

A refrigeração de cada alojamento de pastilha assegura bom escoamento de cavacos e bom desempenho em materiais difíceis.





Passo largo | Passo fino | Passo extra fino | Passo extra fino plus

N

 I5

 I8

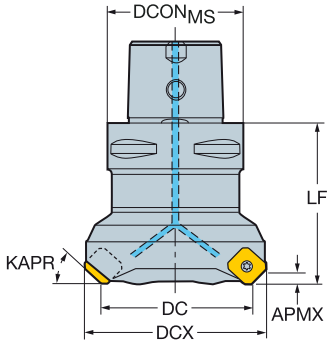
POR

Fresa de facear CoroMill® 345

Coromant Capto® - Refrigeração interna

KAPR 45°





DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	LF	NM	KG	RPMX	CICT	MIID
40.0	13	C4	6.00	3		4	345-040C4-13M	40.0	54.1	60.0	3.0	0.89	19600	4	345R-1305
50.0	13	C5	6.00	3		4	345-050C5-13M	50.0	64.1	60.0	3.0	1.39	17500	4	345R-1305
	13	C6	6.00	3		4	345-050C6-13M	63.0	64.1	60.0	3.0	1.80	17500	4	345R-1305
	13	C5	6.00	3	5		345-050C5-13H	50.0	64.1	60.0	3.0	1.48	17500	5	345R-1305
	13	C6	6.00	3	5		345-050C6-13H	63.0	64.1	60.0	3.0	1.79	17500	5	345R-1305
63.0	13	C5	6.00	3		5	345-063C5-13M	50.0	77.1	60.0	3.0	1.53	15500	5	345R-1305
	13	C6	6.00	3		5	345-063C6-13M	63.0	77.1	60.0	3.0	1.91	15500	5	345R-1305
	13	C5	6.00	3	6		345-063C5-13H	50.0	77.1	60.0	3.0	1.62	15500	6	345R-1305
	13	C6	6.00	3	6		345-063C6-13H	63.0	77.1	60.0	3.0	1.97	15500	6	345R-1305
80.0	13	C6	6.00	3		6	345-080C6-13M	63.0	94.1	70.0	3.0	2.46	13700	6	345R-1305
	13	C8	6.00	3		6	345-080C8-13M	80.0	94.1	70.0	3.0	3.32	13700	6	345R-1305
	13	C6	6.00	3	8		345-080C6-13H	63.0	94.1	70.0	3.0	2.54	13700	8	345R-1305
100.0	13	C8	6.00	3		7	345-100C8-13M	80.0	114.1	80.0	3.0	4.01	12200	7	345R-1305

Componentes		
Parafuso da pastilha	Calço	Parafuso do calço
416.1-834	5322 474-01	5512 090-11

Para a lista completa de componentes, acesse www.sandvik.coromant.com

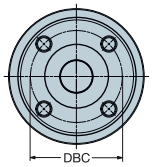
I8 L2 N23 N9 N15

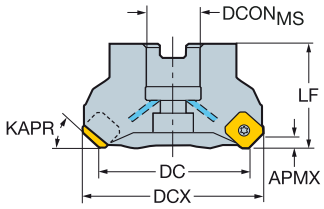
Fresa de facear CoroMill® 345

Árvore - refrigeração interna

STDNO ISO6462
KAPR 45°







DC		CZCMS	APMXFFW	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	DBC	DCX	LF	NM	KG	RPMX	CICT	MIID
40.0	13	22	6.00	1		3	345-040Q22-13L	22.0	A		54.1	45.0	3.0	0.68	19600	3	345R-1305
	13	22	6.00	1		4	345-040Q22-13M	22.0	A		54.1	45.0	3.0	0.67	19600	4	345R-1305
50.0	13	22	6.00	1		3	345-050Q22-13L	22.0	A		64.1	45.0	3.0	0.82	17500	3	345R-1305
	13	22	6.00	1		4	345-050Q22-13M	22.0	A		64.1	45.0	3.0	0.78	17500	4	345R-1305
	13	22	6.00	1	5		345-050Q22-13H	22.0	A		64.1	45.0	3.0	0.82	17500	5	345R-1305
63.0	13	22	6.00	1		4	345-063Q22-13L	22.0	A		77.1	45.0	3.0	0.98	15500	4	345R-1305
	13	22	6.00	1		5	345-063Q22-13M	22.0	A		77.1	45.0	3.0	0.94	15500	5	345R-1305
	13	22	6.00	1	6		345-063Q22-13H	22.0	A		77.1	45.0	3.0	0.60	15500	6	345R-1305
	13	22	6.00	1	7		345-063Q22-13HX	22.0	A		77.1	45.0	3.0	1.03	15500	7	345R-1305
80.0	13	27	6.00	1		4	345-080Q27-13L	27.0	A		94.1	50.0	3.0	1.65	13700	4	345R-1305
	13	27	6.00	1		6	345-080Q27-13M	27.0	A		94.1	50.0	3.0	1.72	13700	6	345R-1305
	13	27	6.00	1	8		345-080Q27-13H	27.0	A		94.1	50.0	3.0	1.72	13700	8	345R-1305
	13	27	6.00	1	9		345-080Q27-13HX	27.0	A		94.1	50.0	3.0	1.76	13700	9	345R-1305
100.0	13	32	6.00	1		5	345-100Q32-13L	32.0	A		114.1	50.0	3.0	2.30	12200	5	345R-1305
	13	32	6.00	1		7	345-100Q32-13M	32.0	A		114.1	50.0	3.0	2.29	12200	7	345R-1305
	13	32	6.00	1	10		345-100Q32-13H	32.0	A		114.1	50.0	3.0	2.31	12200	10	345R-1305
	13	32	6.00	1	11		345-100Q32-13HX	32.0	A		114.1	50.0	3.0	2.38	12200	11	345R-1305
125.0	13	40	6.00	1		6	345-125Q40-13L	40.0	B		139.1	63.0	3.0	3.64	10900	6	345R-1305
	13	40	6.00	1		8	345-125Q40-13M	40.0	B		139.1	63.0	3.0	3.48	10900	8	345R-1305
	13	40	6.00	1	12		345-125Q40-13H	40.0	B		139.1	63.0	3.0	3.63	10900	12	345R-1305
	13	40	6.00	1	14		345-125Q40-13HX	40.0	B		139.1	63.0	3.0	3.64	10900	14	345R-1305
160.0	13	40S	6.00	0		7	345-160Q40-13L	40.0	C	66.7	174.1	63.0	3.0	4.59	9600	7	345R-1305
	13	40S	6.00	0		10	345-160Q40-13M	40.0	C	66.7	174.1	63.0	3.0	4.50	9600	10	345R-1305
	13	40S	6.00	0		12	345-160Q40-13H	40.0	C	66.7	174.1	63.0	3.0	4.72	9600	12	345R-1305
	13	40S	6.00	0	16		345-160Q40-13HX	40.0	C	66.7	174.1	63.0	3.0	4.58	9600	16	345R-1305
200.0	13	60	6.00	0		12	345-200Q60-13M	60.0	C	101.6	214.1	63.0	3.0	10.60	8600	12	345R-1305
	13	60	6.00	0		16	345-200Q60-13H	60.0	C	101.6	214.1	63.0	3.0	6.64	8600	16	345R-1305
250.0	13	60	6.00	0		14	345-250Q60-13M	60.0	C	101.6	264.1	63.0	3.0	10.36	7700	14	345R-1305
	13	60	6.00	0		18	345-250Q60-13H	60.0	C	101.6	264.1	63.0	3.0	10.79	7700	18	345R-1305

	Componentes			
DC	Parafuso para refrigeração	Parafuso da pastilha	Calço	Parafuso do calço
40.00-63.00	5512-073-01	416.1-834	5322 474-01	5512 090-11
80.00	5512-073-02	416.1-834	5322 474-01	5512 090-11
100.00	5512-073-05	416.1-834	5322 474-01	5512 090-11
125.00-160.00	5512-098-03	416.1-834	5322 474-01	5512 090-11
250.00		416.1-834	5322 474-01	5512 090-11

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I8


L2


M1



N23



N9



N15

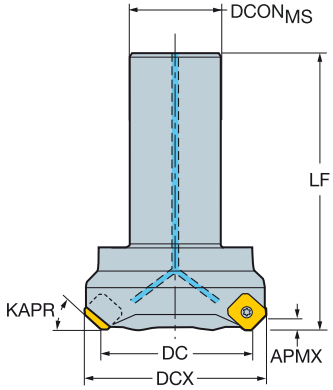
POR

Fresa de facear CoroMill® 345

Haste cilíndrica - refrigeração interna

KAPR 45°





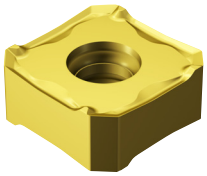
DC		CZCMS	APMXFFW	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	LF	NM	KG	RPMX	CICT	MIID
40.0	13	32	6.00	1	4	**345-040A32-13M**	32.0	54.1	120.0	3.0	1.26	19600	4	345R-1305
50.0	13	32	6.00	1	3	**345-050A32-13L**	32.0	64.1	120.0	3.0	1.41	17500	3	345R-1305
	13	32	6.00	1	4	**345-050A32-13M**	32.0	54.1	120.0	3.0	1.41	17500	4	345R-1305

Componentes		
Parafuso da pastilha	Calço	Parafuso do calço
416.1-834	5322 474-01	5512 090-11

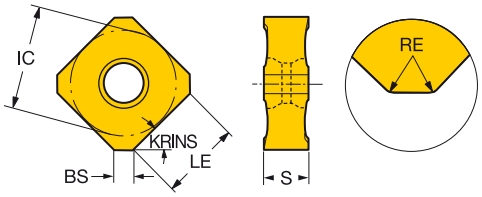
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I8 L2 N23 N9 N15

Pastilha CoroMill® 345 para fresamento

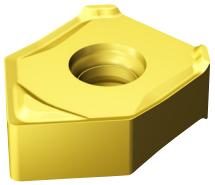


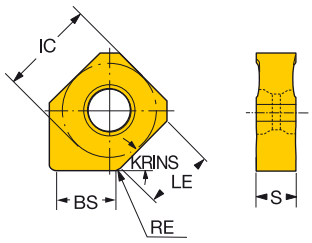
KRINS 45°



			RE	Código para pedido	P 1130	P 4220	P 4330	P 4340	P 530	M 1040	M 2040	M 530	K 1020	K 3040	K 3220	K 3330	K H13A	K K20W	N 1130	N 530	N H13A	S S30T	S S40T	S H13A	H 1010	H 1130	H 530	Dimensões, mm IC	LE	S	BS
Leve	KL	13	0.80	345R-1305E-KL									★	☆	☆	☆	☆	☆			☆			☆				13.0	8.8	5.60	2.0
			0.80	345R-1305M-KL		☆							★	☆		☆		☆										13.0	8.8	5.60	2.0
	ML	13	0.80	345R-13T5E-ML	☆					★	☆								☆			★	☆			☆		13.0	8.8	5.95	2.0
	PL	13	0.80	345R-1305E-PL	☆		★	☆	☆			☆													★	☆	☆	13.0	8.8	5.60	2.0
			0.80	345R-1305M-PL	☆	☆	★	☆																	★	☆		13.0	8.8	5.60	2.0
Média	KM	13	0.80	345R-1305E-KM					☆			☆	☆	☆		★				☆					★		☆	13.0	8.8	5.60	2.0
			0.80	345R-1305M-KM										☆	☆	★		☆										13.0	8.8	5.60	2.0
	MM	13	0.80	345R-13T5E-MM	☆					★	☆								☆			★	☆			☆		13.0	8.8	5.95	2.0
			0.80	345R-13T5M-MM	☆					★	☆								☆			★	☆			☆		13.0	8.8	5.95	2.0
	PM	13	0.80	345L-1305M-PM	☆		★	☆																		☆		13.0	8.8	5.60	2.0
			0.80	345R-1305M-PM	☆	☆	★	☆	☆			☆													★	☆	☆	13.0	8.8	5.60	2.0
Pesada	KH	13	0.80	345R-1305M-KH			☆							☆	☆	★		☆										13.0	8.8	5.60	2.0
	PH	13	0.80	345R-1305M-PH	☆	☆	★	☆						★					☆						★	☆		13.0	8.8	5.60	2.0

KRINS 45°





TECHNOLOGY Wiper

			RE	Código para pedido	P 1130	P 4330	P 530	M 1040	M 2040	M 530	K 1020	K 3220	K 3330	K H13A	K K20W	N 1130	N 530	N H13A	S H13A	S S30T	S S40T	H 1010	H 1130	H 530	Dimensões, mm IC	LE	S	BS	BSR
Leve	KW8	13	1.00	345N-1305E-KW8							☆	☆	☆	☆	☆			☆	☆						13.0	8.8	5.60	8.0	500.0
	MW8	13	1.00	345N-13T5E-MW8	☆			☆	☆							☆				☆	☆		☆		13.0	8.8	5.95	8.0	500.0
	PW5	13	1.00	345N-1305E-PW5	☆	☆										☆			☆			☆	☆		13.0	8.8	5.60	5.0	500.0
	PW8	13	1.00	345N-1305E-PW8	☆	☆	☆			☆						☆	☆					☆	☆	☆	13.0	8.8	5.60	8.0	500.0

A pastilha Wiper T5 deve ser usada com pastilha standard T5

I5 I154 I175 N23 N10 N2

SANDVIK Coromant

CoroMill® 245

Fresa de facear de corte leve para desbaste pesado a acabamento espelhado

Aplicação

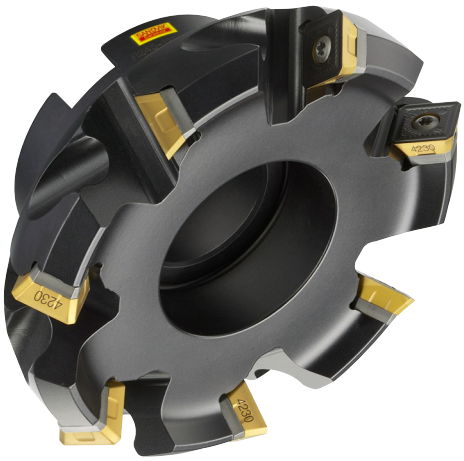
- Faceamento
- Desbaste ao acabamento

Área de aplicação ISO

P M K N S H

Características e benefícios

- Fácil de usar e alta produtividade
- Corte leve com baixo consumo de potência
- Tolerância estreita combinada com a pastilha Wiper para acabamento superficial superior
- Fresa de facear 45°
- Desbaste pesado até acabamento espelhado
- Ação de corte suave e leve para forças de corte baixas
- Disponível com sistema de cassete intercambiável, um conceito para desbaste até semiacabamento de aços



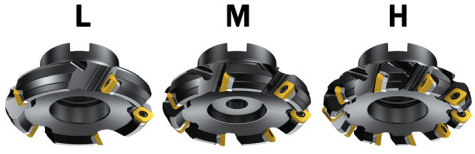
www.sandvik.coromant.com/coromill245

Acoplamentos

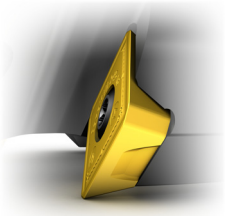
- Árvore
- Haste cilíndrica

Pastilhas

- Quatro arestas de corte
- Ampla gama de classes e geometrias incluindo classes de CBN e cerâmica
- Pastilhas Wiper para acabamento com alto avanço

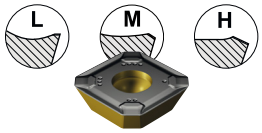


Passo largo Passo fino Passo extra fino



Ação de corte leve

Pastilhas positivas de face única posicionadas para proporcionar uma ação de corte suave e forças de corte muito baixas.



 I10

 I12



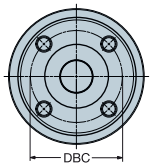
N6

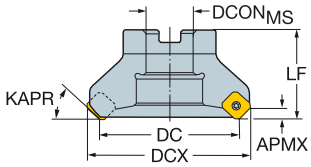
Fresa de facear CoroMill® 245

Árvore

STDNO ISO6462
KAPR 45°







DC		CZCMS	APMXFFW			Código para pedido	Dimensões, mm DCONMS	ISO	DBC	DCX	LF	NM	KG	RPMX	CICT	MIID
50.0	12	22	6.00		3	R245-050Q22-12L	22.0	A		62.5	40.0	3.0	0.65	16250	3	R245-12T3..
	12	22	6.00	4		R245-050Q22-12M	22.0	A		62.5	40.0	3.0	0.67	16250	4	R245-12T3..
	12	22	6.00	5		R245-050Q22-12H	22.0	A		62.5	40.0	3.0	0.62	16250	5	R245-12T3..
63.0	12	22	6.00		4	R245-063Q22-12L	22.0	A		75.5	40.0	3.0	0.89	14400	4	R245-12T3..
	12	22	6.00	5		R245-063Q22-12M	22.0	A		75.5	40.0	3.0	0.84	14400	5	R245-12T3..
	12	22	6.00	6		R245-063Q22-12H	22.0	A		75.5	40.0	3.0	0.87	14400	6	R245-12T3..
80.0	12	27	6.00		4	R245-080Q27-12L	27.0	B		92.5	50.0	3.0	1.50	12700	4	R245-12T3..
	12	27	6.00	6		R245-080Q27-12M	27.0	B		92.5	50.0	3.0	1.45	12700	6	R245-12T3..
	12	27	6.00	8		R245-080Q27-12H	27.0	B		92.5	50.0	3.0	1.40	12700	8	R245-12T3..
	18	32	10.00		4	R245-080Q32-18M	32.0	B		98.8	50.0	5.0	1.72	6100	4	R245-18T6..
	18	32	10.00		5	R245-080Q32-18H	32.0	B		98.8	50.0	5.0	1.60	6100	5	R245-18T6..
100.0	12	32	6.00		5	R245-100Q32-12L	32.0	B		112.5	50.0	3.0	1.77	11300	5	R245-12T3..
	12	32	6.00	7		R245-100Q32-12M	32.0	B		112.5	50.0	3.0	1.81	11300	7	R245-12T3..
	12	32	6.00	10		R245-100Q32-12H	32.0	B		112.5	50.0	3.0	1.74	11300	10	R245-12T3..
	18	32	10.00		4	R245-100Q32-18M	32.0	B		118.8	50.0	5.0	2.08	5400	4	R245-18T6..
	18	32	10.00		6	R245-100Q32-18H	32.0	B		118.8	50.0	5.0	1.92	5400	6	R245-18T6..
125.0	12	40	6.00		6	R245-125Q40-12L	40.0	B		137.5	63.0	3.0	3.20	10100	6	R245-12T3..
	12	40	6.00	8		R245-125Q40-12M	40.0	B		137.5	63.0	3.0	3.12	10100	8	R245-12T3..
	12	40	6.00	12		R245-125Q40-12H	40.0	B		137.5	63.0	3.0	3.10	10100	12	R245-12T3..
	18	40	10.00		5	R245-125Q40-18M	40.0	B		138.8	63.0	5.0	3.74	4900	5	R245-18T6..
	18	40	10.00		7	R245-125Q40-18H	40.0	B		138.8	63.0	5.0	3.64	4900	7	R245-18T6..
160.0	12	40S	6.00		7	R245-160Q40-12L	40.0	C	66.7	172.5	63.0	3.0	4.63	8900	7	R245-12T3..
	12	40S	6.00	10		R245-160Q40-12M	40.0	C	66.7	172.5	63.0	3.0	4.50	8900	10	R245-12T3..
	12	40S	6.00	16		R245-160Q40-12H	40.0	C	66.7	172.5	63.0	3.0	4.49	8900	16	R245-12T3..
	18	40S	10.00		6	R245-160Q40-18M	40.0	C	66.7	178.8	63.0	5.0	5.11	4300	6	R245-18T6..
	18	40S	10.00		9	R245-160Q40-18H	40.0	C	66.7	178.8	63.0	5.0	4.99	4300	9	R245-18T6..
200.0	12	60	6.00		8	R245-200Q60-12L	60.0	C	101.6	212.5	63.0	3.0	6.43	7950	8	R245-12T3..
	12	60	6.00	12		R245-200Q60-12M	60.0	C	101.6	212.5	63.0	3.0	10.64	7950	12	R245-12T3..
	18	60	10.00		8	R245-200Q60-18M	60.0	C	101.6	218.8	63.0	5.0	6.24	3800	8	R245-18T6..
	18	60	10.00		12	R245-200Q60-18H	60.0	C	101.6	218.8	63.0	5.0	6.43	3800	12	R245-18T6..
250.0	12	60	6.00		10	R245-250Q60-12L	60.0	C	101.6	262.5	63.0	3.0	9.12	7100	10	R245-12T3..
	12	60	6.00	14		R245-250Q60-12M	60.0	C	101.6	262.5	63.0	3.0	8.93	7100	14	R245-12T3..
	12	60	6.00	24		R245-250Q60-12H	60.0	C	101.6	262.5	63.0	3.0	8.74	7100	24	R245-12T3..
	18	60	10.00		10	R245-250Q60-18M	60.0	C	101.6	268.8	63.0	5.0	17.22	3400	10	R245-18T6..
	18	60	10.00		14	R245-250Q60-18H	60.0	C	101.6	268.8	63.0	5.0	16.00	3400	14	R245-18T6..

		Componentes		
DC		Parafuso da pastilha	Calço	Parafuso do calço
50.00-250.00	12	5513 020-01	5322 472-01	5512 090-09
80.00-100.00	18	5513 020-55		
125.00-250.00	18	5513 020-26	5322 472-03	5512 090-10

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I12 L2 M1 N23 N6 N9

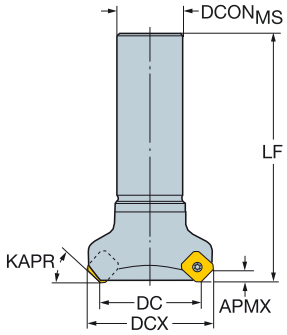
SANDVIK Coromant

Fresa de facear CoroMill® 245

Haste cilíndrica

KAPR 45°





DC		CZC$_{MS}$	APMX$_{FFW}$			Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	LB	LF	NM	KG	RPMX	CICT	MIID
32.0	12	32	6.00	3		**R245-032A32-12M**	32.0	44.5	39.0	117.0	3.0	0.97	18250	3	R245-12T3..
40.0	12	32	6.00		3	**R245-040A32-12L**	32.0	52.5	39.0	120.0	3.0	1.06	18250	3	R245-12T3..
50.0	12	32	6.00		3	**R245-050A32-12L**	32.0	62.5	39.0	120.0	3.0	1.28	16250	3	R245-12T3..
	12	32	6.00	4		**R245-050A32-12M**	32.0	62.5	39.0	120.0	3.0	1.33	16250	4	R245-12T3..
63.0	12	32	6.00		4	**R245-063A32-12L**	32.0	75.5	39.0	120.0	3.0	1.48	14400	4	R245-12T3..
	12	32	6.00	5		**R245-063A32-12M**	32.0	75.5	39.0	120.0	3.0	1.49	14400	5	R245-12T3..
80.0	12	32	6.00		4	**R245-080A32-12L**	32.0	92.5	39.0	120.0	3.0	1.80	12700	4	R245-12T3..
	12	32	6.00	6		**R245-080A32-12M**	32.0	92.5	39.0	120.0	3.0	1.74	12700	6	R245-12T3..

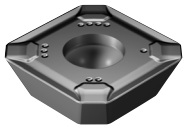
		Componentes		
DC		Parafuso da pastilha	Calço	Parafuso do calço
32.00	12	5513 020-01		
40.00-80.00	12	5513 020-01	5322 472-01	5512 090-09

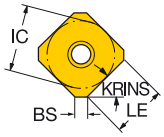
Para a lista completa de componentes, acesse www.sandvik.coromant.com

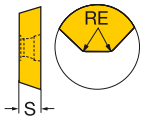
I12 L2 N23 N6 N9

Pastilha CoroMill® 245 para fresamento

KRINS 45°

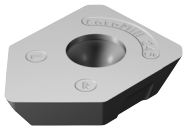




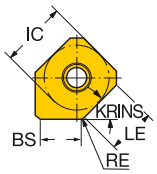


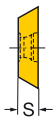
			RE	Código para pedido	P					M			K						N				S				H			Dimensões, mm			
					1130	4220	4230	4340	530	1040	2040	530	1020	3040	3220	3330	H13A	K15W	K20W	1130	530	H10	H13A	1130	H13A	S30T	S40T	1010	1130	530	IC	LE	S	BS
Leve	AL	12	1.50	R245-12 T3 E-AL																		★									13.4	10.0	3.97	2.3
	KL	12	1.50	R245-12 T3 E-KL									★		☆	☆	☆	☆				★		☆							13.4	10.0	3.97	2.1
			1.50	R245-12 T3 M-KL									★	☆	☆	☆			☆												13.4	10.0	3.97	2.0
	ML	12	1.50	R245-12 T3 E-ML	☆					★										☆				★					☆		13.4	10.0	3.97	2.1
	PL	12	1.50	R245-12 T3 E-PL	☆		★		☆			☆								☆	☆			☆		★	☆	★	☆	☆	13.4	10.0	3.97	2.1
			1.50	R245-12 T3 M-PL	☆	☆	★	☆												☆				☆		★	☆	★	☆		13.4	10.0	3.97	2.1
Média	KM	12	1.50	R245-12 T3 M-KM									☆	☆	☆	★	☆		☆			★		☆							13.4	10.0	3.97	2.0
		18	1.00	R245-18 T6 M-KM									☆	☆	☆	★			☆												18.0	13.9	6.10	1.5
	MM	12	1.50	R245-12 T3 K-MM						★									☆							★	☆				13.4	10.0	3.97	2.1
		18	1.00	R245-18 T6 M-MM							★																				18.0	13.9	6.10	1.5
	PM	12	1.50	R245-12 T3 M-PM	☆	☆	★	☆	☆			☆								☆	☆			☆				★	☆	☆	13.4	10.0	3.97	2.1
		18	1.00	R245-18 T6 M-PM	☆	☆	★	☆												☆				☆				★	☆		18.0	13.9	6.10	1.5
Pesada	KH	12	1.50	R245-12 T3 M-KH									☆	☆	☆	★			☆												13.4	10.0	3.97	2.0
	PH	12	1.60	R245-12 T3 M-PH		☆	★	☆																							13.4	9.8	3.97	1.5

KRINS 45°



TECHNOLOGY Wiper

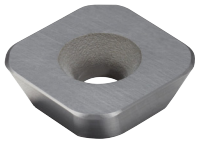


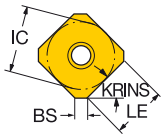


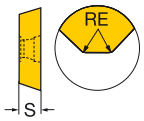
			RE	Código para pedido	P	M	K						N				S			H			Dimensões, mm				
					1130	530	530	1020	3220	3330	CB50	H13A	K15W	H10	1130	530	H13A	1130	H13A	1010	1130	530	CB50	IC	LE	S	BS	BSR
Leve	W	12	2.50	R245-12 T3 E-W	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	13.4	3.5	3.97	6.4	400.0
		18	1.00	R245-18 T6 E-W	☆			☆							☆			☆			☆			18.0	13.9	6.10	10.8	500.0

Materiais de corte avançados

KRINS 45°







		RE	Código para pedido	K		N	H		Dimensões, mm			
				6190	CB50	CD10	6190	CB50	IC	LE	S	BS
Leve	12	1.50	R245-12 T3 E		☆	★		☆	13.4	3.5	3.97	1.4
		2.50	R245-12 T3 E1	☆			☆		13.4	10.0	3.97	0.4


I10


I154



I175



N23



N10


N2

CoroMill® 425

Faceamento com acabamento facilmente ajustável

Aplicação

- Faceamento de acabamento em ferros fundidos
- Principais peças: Blocos de motores e cabeçotes do cilindro
- Outras peças: Carcaças de eixo, suporte de freio, cárters



Área de aplicação ISO:

K

Características e benefícios

- Fácil de usar
- Oito arestas de corte
- Sistema de ajuste preciso e confiável

www.sandvik.coromant.com/coromill425

Acoplamentos

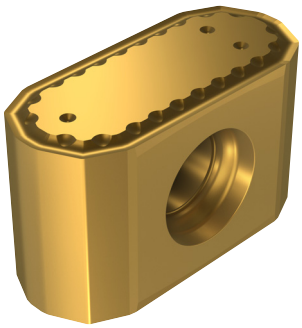
- Árvore
- Montagem Cap

Pastilhas

- Oito arestas de corte

Pastilhas Wiper ajustáveis

A CoroMill® 425 foi projetada para facilitar o ajuste das pastilhas Wiper. Você pode ajustar a pastilha Wiper para cima ou para baixo sem soltar o parafuso de fixação do cassete. Devido ao desenho, o sistema de ajuste é bastante estável e preciso.



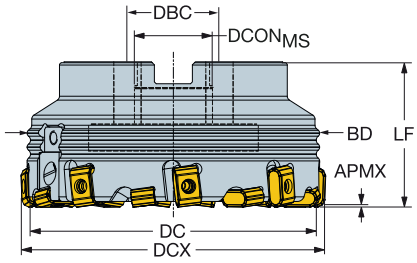
I14 I15

Fresa de facear CoroMill® 425

Árvore

STDNO ISO6462
KAPR 25°



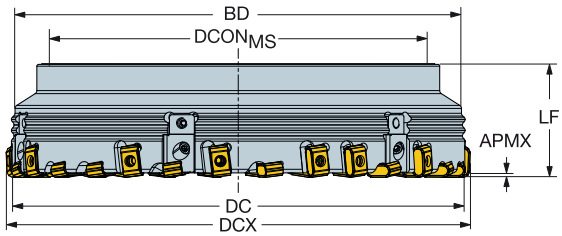


DC		CZC$_{MS}$	APMX	ZADJ		Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	DBC	DCX	BD	LF	NM	KG	RPMX	CICT	MIID
100.0	17	32	0.9	2	12	425-100Q32-17H	32.0	A		107.0	101.9	63.0	3.0	2.23	4770	12	425N-1707
125.0	17	40	0.9	2	16	425-125Q40-17H	40.0	B		132.0	126.6	63.0	3.0	3.45	3820	16	425N-1707
160.0	17	40S	0.9	3	18	425-160Q40-17H	40.0	C	66.7	167.0	161.3	63.0	3.0	5.10	2980	18	425N-1707
200.0	17	60	0.9	3	24	425-200Q60-17H	60.0	C	101.6	207.0	201.1	63.0	3.0	7.69	2390	24	425N-1707
250.0	17	60	0.9	6	30	425-250Q60-17H	60.0	C	101.6	257.0	251.1	63.0	3.0	12.99	1910	30	425N-1707

Montagem Cap

KAPR 25°





DC		CZC$_{MS}$	APMX	ZADJ		Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	BD	LF	NM	KG	RPMX	CICT	MIID
250.0	17	250	0.9	6	30	425-250P-17H	203.7	257.0	251.1	63.0	3.0	9.62	1910	30	425N-1707
	17	250	0.9	6	30	L425-250P-17H	203.7	257.0	251.1	63.0	3.0	9.62	1910	30	425N-1707
315.0	17	315	0.9	6	36	425-315P-17H	268.7	322.0	316.1	63.0	3.0	13.60	1520	36	425N-1707
	17	315	0.9	6	36	L425-315P-17H	268.7	322.0	316.1	63.0	3.0	13.60	1520	36	425N-1707
355.0	17	355	0.9	6	48	425-355P-17H	308.7	362.0	356.1	63.0	3.0	16.45	1340	48	425N-1707
	17	355	0.9	6	48	L425-355P-17H	308.7	362.0	356.1	63.0	3.0	16.45	1340	48	425N-1707
400.0	17	400	0.9	9	54	425-400P-17H	353.7	407.0	401.1	63.0	3.0	20.09	1190	54	425N-1707
	17	400	0.9	9	54	L425-400P-17H	353.7	407.0	401.1	63.0	3.0	20.09	1190	54	425N-1707
500.0	17	500	0.9	9	54	425-500P-17M	453.7	507.0	501.1	63.0	3.0	30.92	950	54	425N-1707
	17	500	0.9	9	54	L425-500P-17M	453.7	507.0	501.1	63.0	3.0	42.00	950	54	425N-1707

Componentes

Parafuso de fixação	Cunha	Parafuso	Parafuso	Parafuso da pastilha	Cassete
3212 012-260	5332 010-09	5516 035-09	5513 014-75	5513 020-13	R425-CA-17-2

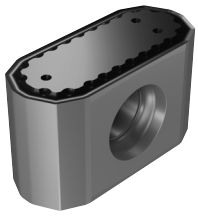
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I41 L2 M1 N23 N9

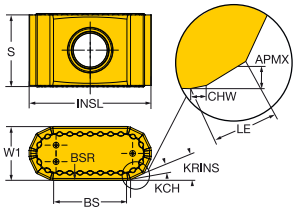
SANDVIK Coromant

POR

Pastilha CoroMill® 425 para fresamento



KRINS 25°



						K					Dimensões, mm				
			KCH	CHW	Código para pedido	1010	1020	3220	3330	K20W	W1	LE	S	BS	BSR
Leve	KLW	17	14°	0.4	425N-1707E-KLW12	★	☆	☆	☆	☆	7.5	2.1	10.00	10.4	1250.0

I14 I154 I175 N23 N10

CoroMill® 745

Conceitos de faceamento multiarestas e fresamento de alto avanço

Aplicação

- Faceamento
- Desbaste ao replace with semiacabamento
- Fresamento com altos avanços

Área de aplicação ISO:

P M K S

Características e benefícios

- Conceito multiarestas para a produção de lotes grandes, linhas transfer flexíveis e quando a máxima utilização da ferramenta for importante
- A CoroMill 745 com ângulo de posição de 42° é usada para aplicações ISO P, K, M e S com APMX de 5,2 mm
- Fresa CoroMill 745 para alto avanço com ângulo de posição de 25° é usada como um impulsionador de produtividade em aplicações ISO P e ISO K em que o APMX é 2,8 mm
- Com o exclusivo passo MD diferencial, é uma excelente ferramenta solucionadora de problemas de usinagem de peças sensíveis à vibração e com set-ups fracos



Fresa de facear CoroMill® 745 Veja página I17.

Fresa para faceamento de alto avanço Veja página I43. CoroMill® 745

www.sandvik.coromant.com/coromill745

Acoplamentos

- Coromant Capto®
- Árvore

Pastilhas

- 14 arestas de corte
- O tip seat seguro e a pastilha grande e robusta com geometrias de corte leve e resistentes foram desenvolvidas para uma usinagem previsível e confiável.

Tecnologia revolucionária

Disponível com ângulo de posição de 42° para profundidades de cortes maiores e em uma versão de avanço mais alto com ângulo de posição de 25° para taxas de remoção de metal mais altas. São usadas as mesmas pastilhas em ambas as fresas.





Passo MD diferencial

O exclusivo passo MD diferencial é a primeira escolha em operações de desbaste em que a ação de corte leve é necessária, por exemplo na usinagem de peças sensíveis à vibração e com set-ups fracos. Ele é um solucionador de problemas perfeito quando a vibração for uma limitação na produção. O comprimento e o peso do corpo da fresa foram reduzidos para impulsionar o desempenho em aplicações pouco produtivas. A fresa tem um desenho de passo diferencial logaritímico e a posição da pastilha é radialmente compensada para produzir uma carga de cavacos uniforme por toda a pastilha.

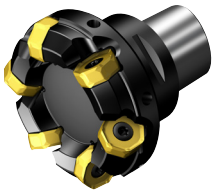
 I17

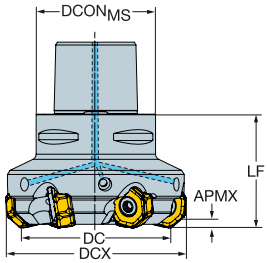
 I19

Fresa de facear CoroMill® 745

Coromant Capto® - Refrigeração interna

KAPR 42°





DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	LF	NM	KG	RPMX	CICT	MIID
63.0	21	C5	5.20	3	5	**745-063C5-21M**	50.0	78.2	60.0	12.0	1.30	5894	5	745R-2109
	21	C6	5.20	3	5	**745-063C6-21M**	63.0	78.2	60.0	12.0	1.84	5894	5	745R-2109
	21	C5	5.20	3	7	**745-063C5-21H**	50.0	78.2	60.0	12.0	1.34	5894	7	745R-2109
	21	C6	5.20	3	7	**745-063C6-21H**	63.0	78.2	60.0	12.0	1.66	5894	7	745R-2109
80.0	21	C6	5.20	3	6	**745-080C6-21M**	63.0	95.2	60.0	12.0	2.21	5324	6	745R-2109
	21	C8	5.20	3	6	**745-080C8-21M**	80.0	95.2	65.0	12.0	3.12	5324	6	745R-2109
	21	C6	5.20	3	9	**745-080C6-21H**	63.0	95.2	60.0	12.0	2.09	5324	9	745R-2109
	21	C8	5.20	3	9	**745-080C8-21H**	80.0	95.2	65.0	12.0	3.23	5324	9	745R-2109
100.0	21	C8	5.20	3	7	**745-100C8-21M**	80.0	115.2	65.0	12.0	3.66	4765	7	745R-2109
	21	C8	5.20	3	11	**745-100C8-21H**	80.0	115.2	65.0	12.0	3.62	4765	11	745R-2109

Componentes
Parafuso da pastilha
5513 020-80

Para a lista completa de componentes, acesse www.sandvik.coromant.com

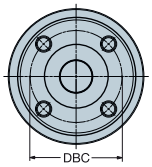
I19 L2 N23 N9 N15

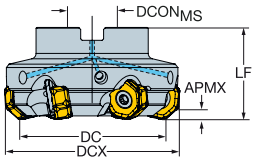
Fresa de facear CoroMill® 745

Árvore - refrigeração interna

STDNO ISO6462
KAPR 42°







DC		CZCMS	APMXFFW	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	DBC	DCX	LF	NM	KG	RPMX	CICT	MIID
63.0	21	22	5.20	3	5		745-063Q22-21M	22.0	A		78.2	50.0	12.0	0.80	5894	5	745R-2109
	21	22	5.20	3		5	745-063Q22-21MD	22.0	A		78.2	46.0	12.0	0.83	5894	5	745R-2109
	21	22	5.20	3	7		745-063Q22-21H	22.0	A		78.2	50.0	12.0	0.98	5894	7	745R-2109
80.0	21	27	5.20	3	6		745-080Q27-21M	27.0	A		95.2	50.0	12.0	1.48	5324	6	745R-2109
	21	27	5.20	3		6	745-080Q27-21MD	27.0	A		95.2	48.0	12.0	1.38	5324	6	745R-2109
	21	27	5.20	3	9		745-080Q27-21H	27.0	A		95.2	50.0	12.0	1.37	5324	9	745R-2109
100.0	21	32	5.20	3	7		745-100Q32-21M	32.0	A		115.2	50.0	12.0	2.19	4765	7	745R-2109
	21	32	5.20	3		7	745-100Q32-21MD	32.0	A		115.2	50.0	12.0	2.12	4765	7	745R-2109
	21	32	5.20	3	11		745-100Q32-21H	32.0	A		115.2	50.0	12.0	2.01	4765	11	745R-2109
125.0	21	40	5.20	3	8		745-125Q40-21M	40.0	B		140.2	63.0	12.0	3.75	4216	8	745R-2109
	21	40	5.20	3		8	745-125Q40-21MD	40.0	B		140.2	54.0	12.0	2.95	4216	8	745R-2109
	21	40	5.20	3	14		745-125Q40-21H	40.0	B		140.2	63.0	12.0	3.53	4216	14	745R-2109
160.0	21	40	5.20	3	10		745-160Q40-21M	40.0	B		175.2	63.0	12.0	5.26	3675	10	745R-2109
	21	40	5.20	3		10	745-160Q40-21MD	40.0	B		175.2	60.0	12.0	4.70	3675	10	745R-2109
	21	40	5.20	3	16		745-160Q40-21H	40.0	B		175.2	63.0	12.0	4.75	3675	16	745R-2109
200.0	21	60	5.20	0	14		745-200Q60-21M	60.0	C	101.6	215.2	63.0	12.0	6.31	3292	14	745R-2109
	21	60	5.20	0	21		745-200Q60-21H	60.0	C	101.6	215.2	63.0	12.0	6.61	3292	21	745R-2109
250.0	21	60	5.20	0	16		745-250Q60-21M	60.0	C	101.6	264.4	63.0	12.0	9.40	2998	16	745R-2109
	21	60	5.20	0	26		745-250Q60-21H	60.0	C	101.6	264.4	63.0	12.0	9.00	2998	26	745R-2109

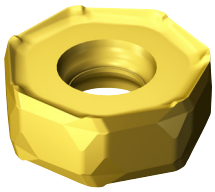
	Componentes	
DC	Parafuso para refrigeração	Parafuso da pastilha
63.00	5512 073-01	5513 020-80
80.00	5512 073-02	5513 020-80
100.00	5512 073-05	5513 020-80
125.00-160.00	5512 098-03	5513 020-80
250.00	-	5513 020-80

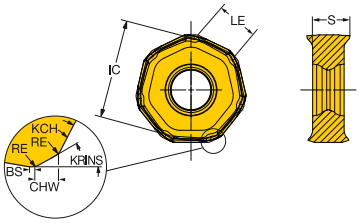
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I45 L2 M1 N23 N9 N15

Pastilha CoroMill® 745 para fresamento

KRINS 42°





			RE	KCH	CHW	Código para pedido	P				M		K				S		Dimensões, mm				
							1130	4220	4230	4240	1040	2040	1020	3040	K20D	K20W	S30T	S40T	IC	LE	S	BS	BSR
Média	M30	21	1.00	17°	1.3	745R-2109E-M30	★	☆	★	☆			★	☆	☆	☆			21.0	8.9	9.00	0.3	25.0
	M31	21	1.00			745R-2109E-M31	★	☆	★	☆	★	☆	★	☆	☆	☆	★	☆	21.0	7.1	9.00	1.9	150.0
	M50	21	1.00	17°	1.3	745R-2109E-M50	☆	☆	★	☆				★	☆	☆			21.0	8.9	9.00	0.3	25.0
			1.00	17°	1.3	745L-2109E-M50			★						☆	☆			21.0	8.5	9.00	0.3	25.0
Pesada	H50	21	1.00	17°	1.3	745R-2109E-H50		☆	★	☆				★	☆	☆			21.0	8.9	9.00	0.3	25.0

745R-2109E-M31 não é recomendada para fresa CoroMill 745 de alto avanço com ângulo de posição de 25°.

I17 I154 I175 N23 N10

CoroMill® 360

Fresa de facear para usinagem pesada

Área de aplicação ISO:

P M K

Aplicação

- Faceamento para usinagem pesada

Características e benefícios

- Os cassetes de pastilhas intercambiáveis, com interfaces serrilhadas, propiciam posicionamento preciso e seguro, além de fácil manuseio
- Separar os cassetes para cada tamanho de pastilha para uso no mesmo corpo da fresa reduz o tempo de máquinas paradas e o estoque
- Desenho da ferramenta versão direita ou esquerda disponível
- Solução de cassete exclusiva



M **H**



A solução de cassete exclusiva com pastilhas fixadas por cunha proporciona alta segurança e fácil manuseio na indexação de pastilhas. O mesmo corpo é usado para ambos os tamanhos do cassete. Há uma cunha e um cassete separados para o tamanho respectivo da pastilha. Durante a substituição, certifique-se de possuir o tamanho correto de cada um.



I21 I22

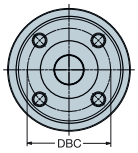
SANDVIK Coromant

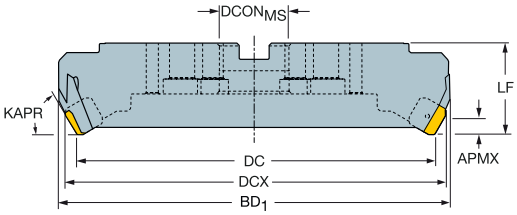
Fresa de facear CoroMill® 360

Árvore

STDNO ISO6462
KAPR 60°







DC		CZC$_{MS}$	APMX	ZADJ			Código para pedido	DCON$_{MS}$	ISO	DBC	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
								Dimensões, mm											
160.0	19	40	13.0	6		6	360-160Q40-Z6D19	40.0	B		175.0	186.6	13.0	80.0	16.0	16.11	795	6	360R-1906
	19	40	13.0	8	8		360-160Q40-Z8E19	40.0	B		175.0	186.6	13.0	80.0	16.0	10.66	795	8	360R-1906
	28	40	18.0	8	8		360-160Q40-Z8E28	40.0	B		180.8	186.2	18.0	80.0	16.0	15.47	795	8	360R-2807
200.0	19	60	13.0	8		8	360-200Q60-Z8D19	60.0	C	101.6	215.0	226.6	13.0	80.0	16.0	19.96	640	8	360R-1906
	19	60	13.0	10	10		360-200Q60-Z10E19	60.0	C	101.6	215.0	226.6	13.0	80.0	16.0	19.78	640	10	360R-1906
	28	60	18.0	10	10		360-200Q60-Z10E28	60.0	C	101.6	220.8	226.2	18.0	80.0	16.0	15.20	640	10	360R-2807
250.0	19	60	13.0	10		10	360-250Q60-Z10D19	60.0	C	101.6	265.0	276.6	13.0	80.0	16.0	26.77	510	10	360R-1906
	19	60	13.0	12	12		360-250Q60-Z12E19	60.0	C	101.6	265.0	276.6	13.0	80.0	16.0	27.00	510	12	360R-1906
	28	60	18.0	10		10	360-250Q60-Z10D28	60.0	C	101.6	270.8	276.2	18.0	80.0	16.0	26.50	510	10	360R-2807
	28	60	18.0	12	12		360-250Q60-Z12E28	60.0	C	101.6	270.8	276.2	18.0	80.0	16.0	26.13	510	12	360R-2807
315.0	19	60	13.0	12		12	360-315Q60-Z12D19	60.0	C		330.0	341.6	13.0	80.0	16.0	42.32	405	12	360R-1906
	28	60	18.0	12		12	360-315Q60-Z12D28	60.0	C		335.8	341.2	18.0	80.0	16.0	39.90	405	12	360R-2807
	28	60	18.0	15	15		360-315Q60-Z15E28	60.0	C		335.8	341.2	18.0	80.0	16.0	34.00	405	15	360R-2807
400.0	19	60	13.0	15		15	360-400Q60-Z15D19	60.0	C		415.0	426.6	13.0	80.0	16.0	60.00	320	15	360R-1906
	28	60	18.0	15		15	360-400Q60-Z15D28	60.0	C		420.8	426.2	18.0	80.0	16.0	58.00	320	15	360R-2807

		Componentes				
DC		Cassete	Cunha da pastilha	Parafuso da cunha da pastilha	Cunha do cassete	Parafuso da cunha do cassete
160.00-315.00	19	360R-CA-19	360R-IW-19	267.21-830	5431 105-08	5516 010-06
200.00-400.00	28	360R-CA-28	360R-IW-28	267.21-830	5431 105-08	5516 010-06

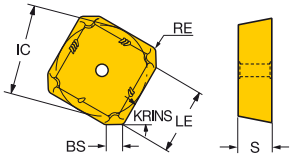
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I22 L2 M1 N23 N9

Pastilha CoroMill® 360 para fresamento



KRINS 60°



		SSC	RE	Código para pedido	P 4220	P 4330	P 4340	M 2030	M 2040	K 3040	K 3330	Dimensões, mm IC	LE	S	BS	BSR
Pesada	KH	19	1.60	360R-19 06M-KH						☆	★	18.9	15.0	6.35	2.2	200.0
		28	1.70	360L-2807M-KH						★		28.5	20.0	7.94	4.6	200.0
			1.70	360R-28 07M-KH						☆	★	28.5	20.0	7.94	4.6	200.0
	MH	19	1.60	360L-1906M-MH					★			18.9	15.0	6.35	2.2	200.0
			1.60	360R-19 06M-MH				☆	★			18.9	15.0	6.35	2.2	200.0
		28	1.70	360L-2807M-MH					★			28.5	20.0	7.94	4.6	200.0
			1.70	360R-28 07M-MH					★			28.5	20.0	7.94	4.6	200.0
	PH	19	1.60	360L-1906M-PH		★						18.9	15.0	6.35	2.2	200.0
			1.60	360R-19 06M-PH	☆	★	☆					18.9	15.0	6.35	2.2	200.0
		28	1.70	360L-2807M-PH		★						28.5	20.0	7.94	4.6	200.0
			1.70	360R-28 07M-PH		★	☆					28.5	20.0	7.94	4.6	200.0

I21 I154 I175 N23 N10

CoroMill® 365

Faceamento seguro de ferros fundidos e aços

Área de aplicação ISO

P M K N S H

Aplicação

- Faceamento
- Desbaste ao semiacabamento



Características e benefícios

- Desenho exclusivo com oito arestas de corte para usinagem altamente produtiva a fim de alcançar o baixo custo por peça
- A pastilha multiaresta autoposicionadora proporciona uma usinagem confiável e robusta
- Acoplamento Coromant Capto® ou montada em Árvore
- Desenho com refrigeração interna
- Geometria e classe marcadas a laser na pastilha para fácil identificação
- Pastilhas Wiper para melhor acabamento superficial

A CoroMill® 365 é a ferramenta essencial para faceamento em desbaste ao semiacabamento de peças em ferros fundidos e aços. Use a ferramenta para produção em séries grandes e aplicações nas quais a alta taxa de remoção de metal seja crítica.

Pastilhas

- O desenho da ferramenta proporciona uma ampla superfície de apoio e ótima distribuição das forças de corte.

I24 I26

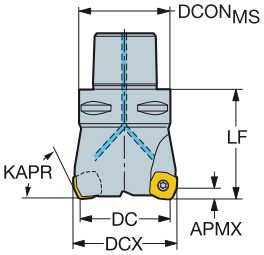
Fresa de facear CoroMill® 365

Coromant Capto®

Fixação por parafuso

KAPR 65°





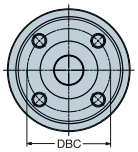
DC		CZCMS	APMX	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	LF	NM	KG	RPMX	CICT	MIID
60.0	15	C6	6.0	3	5	R365-063C6-S15M	63.0	69.7	60.0	3.0	1.88	13600	5	R365-1505ZNE

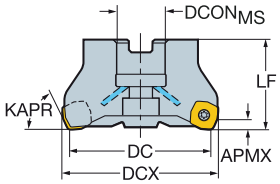
Árvore

Fixação por parafuso

STDNO ISO6462
KAPR 65°







DC		CZCMS	APMX	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	DBC	DCX	LF	NM	KG	RPMX	CICT	MIID
50.0	15	22	6.0	1	5		R365-050Q22-S15H	22.0	A		56.7	50.0	3.0	0.68	15700	5	R365-1505ZNE
63.0	15	22	6.0	1		5	R365-063Q22-S15M	22.0	A		69.7	50.0	3.0	1.00	13600	5	R365-1505ZNE
	15	22	6.0	1	6		R365-063Q22-S15H	22.0	A		69.7	50.0	3.0	0.98	13600	6	R365-1505ZNE
80.0	15	27	6.0	1		6	R365-080Q27-S15M	27.0	A		86.7	50.0	3.0	1.70	11500	6	R365-1505ZNE
	15	27	6.0	1	8		R365-080Q27-S15H	27.0	A		86.7	50.0	3.0	1.68	11500	8	R365-1505ZNE
100.0	15	32	6.0	1		7	R365-100Q32-S15M	32.0	A		106.7	50.0	3.0	2.20	9900	7	R365-1505ZNE
	15	32	6.0	1	10		R365-100Q32-S15H	32.0	A		106.7	50.0	3.0	2.20	9900	10	R365-1505ZNE
125.0	15	40	6.0	1		8	R365-125Q40-S15M	40.0	B		131.7	63.0	3.0	3.94	8500	8	R365-1505ZNE
	15	40	6.0	1	12		R365-125Q40-S15H	40.0	B		131.7	63.0	3.0	3.87	8500	12	R365-1505ZNE
160.0	15	40S	6.0	0		10	R365-160Q40-S15M	40.0	C	66.7	166.7	63.0	3.0	5.80	7500	10	R365-1505ZNE
	15	40S	6.0	0	14		R365-160Q40-S15H	40.0	C	66.7	166.7	63.0	3.0	5.76	7500	14	R365-1505ZNE

Componentes
Parafuso
5513 020-29

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I26 L2 N23 N15 N9

SANDVIK Coromant

POR

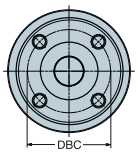
Fresa de facear CoroMill® 365

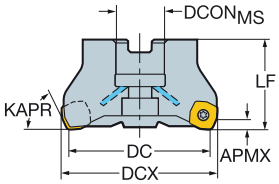
Árvore

Desenho com fixação por cunha-grampo



STDNO ISO6462
KAPR 65°





DC		CZC_{MS}	APMX		Código para pedido	Dimensões, mm $DCON_{MS}$	ISO	DBC	DCX	LF	NM	KG	RPMX	CICT	MIID
80.0	15	27	6.0	10	**R365-080Q27-W15H**	27.0	A		86.7	50.0	6.0	1.79	11200	10	R365-1505ZNE
	15	27	6.0	10	**L365-080Q27-W15H**	27.0	A		86.7	50.0	6.0	1.79	11200	10	L365-1505ZNE
100.0	15	32	6.0	14	**R365-100Q32-W15H**	32.0	A		106.7	50.0	6.0	2.26	9900	14	R365-1505ZNE
125.0	15	40	6.0	18	**R365-125Q40-W15H**	40.0	B		131.7	63.0	6.0	4.00	8800	18	R365-1505ZNE
	15	40	6.0	18	**L365-125Q40-W15H**	40.0	B		131.7	63.0	6.0	4.00	8800	18	L365-1505ZNE
160.0	15	40S	6.0	22	**R365-160Q40-W15H**	40.0	C	66.7	166.7	63.0	6.0	5.86	7700	22	R365-1505ZNE
200.0	15	60	6.0	28	**R365-200Q60-W15H**	60.0	C	101.6	206.7	63.0	6.0	14.54	6800	28	R365-1505ZNE
250.0	15	60	6.0	36	**R365-250Q60-W15H**	60.0	C	101.6	256.7	63.0	6.0	20.16	6100	36	R365-1505ZNE

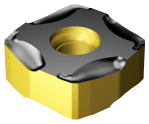
Componentes	
Parafuso da cunha	Cunha
339-831	5431 058-01

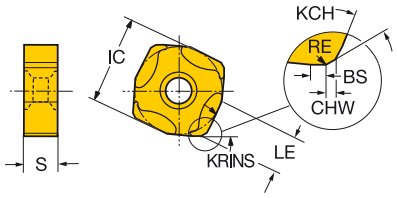
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I26 L2 N23 N15 N9

Pastilha CoroMill® 365 para fresamento

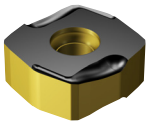
KRINS 65°



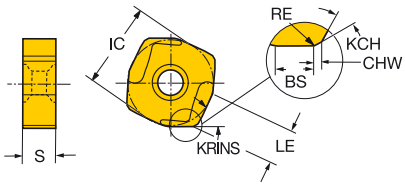


			RE	KCH	CHW	Código para pedido	P			M	K				N	S	H		Dimensões, mm				
							1130	4220	4330	1130	1020	3330	K20D	K20W	1130	1130	1010	1130	IC	LE	S	BS	BSR
Leve	KL	15		30°	0.7	L365-1505ZNE-KL					★	☆							15.0	6.4	5.66	1.5	
			0.30	35°	0.7	R365-1505ZNE-KL					★	☆	☆	☆					15.0	6.4	5.66	1.5	150.0
	PL	15	0.30	35°	0.7	R365-1505ZNE-PL	☆			☆					☆	☆		☆	15.0	6.4	5.66	1.5	150.0
Média	KM	15	0.30	35°	0.7	L365-1505ZNE-KM					☆	★	☆	☆					15.0	6.4	5.66	1.5	
			0.30	35°	0.7	R365-1505ZNE-KM					☆	★	☆	☆					15.0	6.4	5.66	1.5	150.0
	PM	15	0.30	35°	0.7	R365-1505ZNE-PM	☆	☆	★	☆					☆	☆	★	☆	15.0	6.4	5.66	1.5	150.0

KRINS 65°



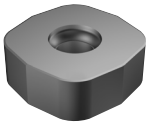
TECHNOLOGY Wiper

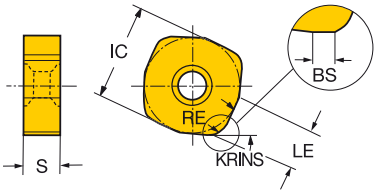


			RE	KCH	CHW	Código para pedido	P		M		K				H		Dimensões, mm				
							1030	1130	1030	1130	1020	K20W	3220	3330	1030	1130	IC	LE	S	BS	BSR
Leve	KW4	15	0.55	35°	0.8	N365-1505ZNE-KW4					☆	☆	☆	☆			15.0	6.4	5.66	4.0	200.0
	KW8	15	0.20	35°	0.8	N365-1505ZNE-KW8					☆	☆	☆	☆			15.0	6.4	5.66	8.0	431.0
	PW4	15	0.55	35°	0.8	N365-1505ZNE-PW4	☆		☆						☆		15.0	6.4	5.66	4.0	200.0
	PW8	15	0.20	35°	0.8	N365-1505ZNE-PW8		☆		☆						☆	15.0	6.4	5.66	8.0	431.0

Materiais de corte avançados

KRINS 65°

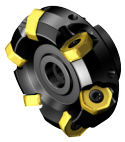
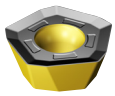
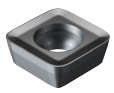
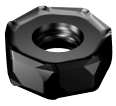
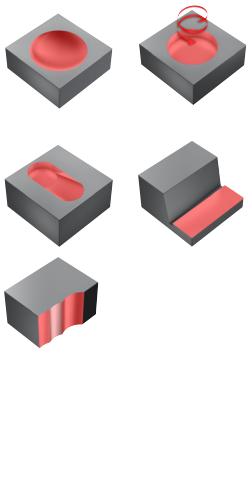
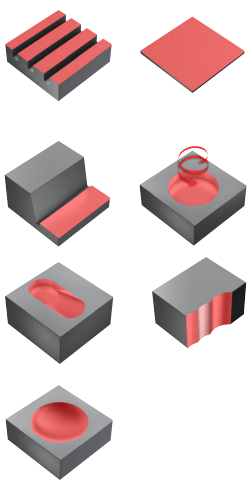
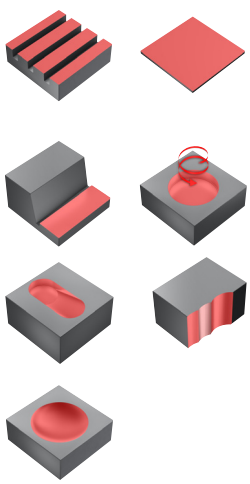




		RE	Código para pedido	K	H	Dimensões, mm				
				6190	6190	IC	LE	S	BS	BSR
Leve	15	3.60	N365-1505ZNE	☆	☆	15.0	6.4	5.66	1.2	150.0
Média	15	3.60	N365-150536E	☆	☆	15.0	6.4	5.66		

I24 I154 I175 N23 N10

Ferramentas para fresamento com altos avanços

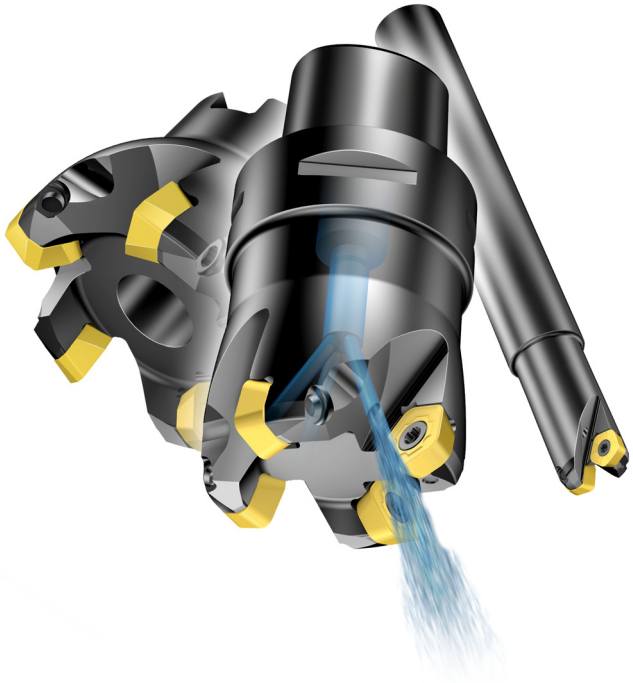
	CoroMill® 419	CoroMill® 210	CoroMill® 415	CoroMill® 745
				
Página	I29	I33	I38	I43
Material	P M K S H	P M K S H	P M S H	P K
Operação principal				
KAPR	19°	10°	15°	25°
D_c mm	17.4 - 85.3	10.9 - 136	4.6 - 23.6	63 - 160
DCX mm	32.0 - 100.0	25 - 160	13 - 32	86.4 - 183.4
APMX mm	2	1.2 - 2	0.85 - 1.2	2.80
Pastilha				
Tamanhos da pastilha	14	09 & 14	05 & 07	21
Acoplamentos	Coromant Capto® Haste cilíndrica Árvore	Coromant Capto® Haste cilíndrica Árvore Acoplamento com rosca Weldon	Haste cilíndrica Coromant EH Acoplamento com rosca	Coromant Capto® Árvore
Refrigeração interna	✓	✓	✓	✓
Opções			iLock	
Outras operações				

CoroMill® 419

Fresamento com altos avanços

Aplicação

- Fresa de facear para altos avanços
- Perfilamento
- Usinagem em rampa
- Interpolação helicoidal
- Usinagem de peças que exigem longos balanços
- Adequada para máquinas com baixa potência e dispositivos de fixação fracos
- Desbaste ao semiacabamento



Área de aplicação ISO:

P M K N S H

Características e benefícios

- Alta produtividade em aplicações que exigem ação de corte leve
- Vida útil longa da ferramenta, especialmente em materiais difíceis de usinar
- Pastilhas robustas para usinagem confiável
- Baixo consumo de potência
- A refrigeração interna em todas as fresas permite usinagem com refrigeração eficiente e refrigeração a ar comprimido
- Forças axiais reduzidas com um ângulo de posição de 19° e ângulo de inclinação axial positivo

www.sandvik.coromant.com/coromill419

Acoplamentos

- Coromant Capto®
- Árvore
- Haste cilíndrica

Pastilhas

- Cinco arestas de corte
- Pastilha com fase paralela para faceamento de alto avanço e pastilha com raio para usinagem de bolsões
- Ampla gama de geometrias e classes

L



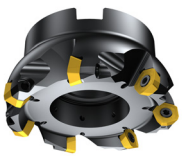
Passo largo

M



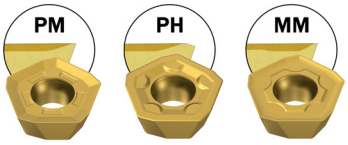
Passo fino

H

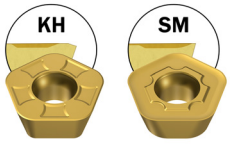


Passo extra fino

Faceamento



Fresamento de perfil e faceamento





I29



I31



N6

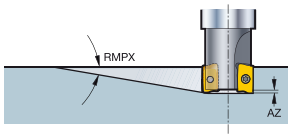
SANDVIK Coromant

Fresa de facear CoroMill® 419

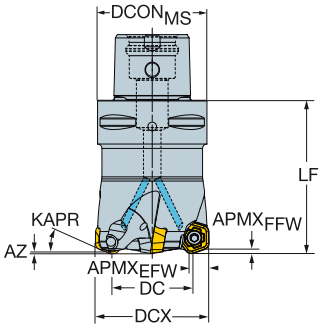
Coromant Capto® - Refrigeração interna

Fresamento com altos avanços





KAPR 19°

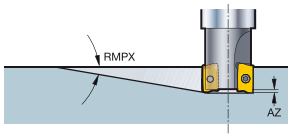


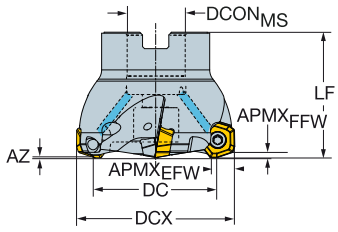
DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	DCX	LF	NM	KG	RPMX	CICT	MIID
21.4	14	C3	8.0	2.00	9°	2.0	3	2		419-036C3-14L	32.0	36.0	50.0	5.0	0.36	22400	2	419R-1405
27.4	14	C4	8.0	2.00	8°	2.0	3		3	419-042C4-14M	40.0	42.0	70.0	5.0	0.62	19900	3	419R-1405
37.4	14	C5	8.0	2.00	8°	2.0	3		4	419-052C5-14M	50.0	52.0	70.0	5.0	1.08	17100	4	419R-1405
51.3	14	C6	8.0	2.00	6°	2.0	3		5	419-066C6-14M	63.0	66.0	70.0	5.0	1.73	14600	5	419R-1405
69.3	14	C8	8.0	2.00	5°	2.0	3	6		419-084C8-14H	80.0	84.0	70.0	5.0	3.02	12600	6	419R-1405

Árvore - refrigeração interna

STDNO ISO 6462
KAPR 19°







DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	DCX	LF	NM	KG	RPMX	CICT	MIID
29.4	14	16	8.0	2.00	8°	2.0	1		3	419-044Q16-14M	16.0	A	44.0	45.0	5.0	0.37	19300	3	419R-1405
35.4	14	22	8.0	2.00	8°	2.0	1		4	419-050Q22-14M	22.0	A	50.0	45.0	5.0	0.43	17600	4	419R-1405
37.4	14	22	8.0	2.00	8°	2.0	1	5		419-052Q22-14H	22.0	A	52.0	45.0	5.0	0.50	17100	5	419R-1405
39.4	14	22	8.0	2.00	8°	2.0	1		4	419-054Q22-14M	22.0	A	54.0	45.0	5.0	0.47	16800	4	419R-1405
	14	22	8.0	2.00	8°	2.0	1	5		419-054Q22-14H	22.0	A	54.0	45.0	5.0	0.47	16800	5	419R-1405
48.3	14	22	8.0	2.00	7°	2.0	1		4	419-063Q22-14L	22.0	A	63.0	50.0	5.0	0.63	15100	4	419R-1405
	14	22	8.0	2.00	7°	2.0	1		5	419-063Q22-14M	22.0	A	63.0	50.0	5.0	0.58	15100	5	419R-1405
51.3	14	22	8.0	2.00	6°	2.0	1		5	419-066Q22-14M	22.0	A	66.0	50.0	5.0	0.66	14600	5	419R-1405
	14	22	8.0	2.00	6°	2.0	1	6		419-066Q22-14H	22.0	A	66.0	50.0	5.0	0.65	14600	6	419R-1405
65.3	14	27	8.0	2.00	5°	2.0	1		5	419-080Q27-14M	27.0	A	80.0	50.0	5.0	1.07	13000	5	419R-1405
	14	27	8.0	2.00	5°	2.0	1	6		419-080Q27-14H	27.0	A	80.0	50.0	5.0	1.06	13000	6	419R-1405
69.3	14	27	8.0	2.00	5°	2.0	1		6	419-084Q27-14M	27.0	A	84.0	50.0	5.0	1.12	12600	6	419R-1405
	14	27	8.0	2.00	5°	2.0	1	7		419-084Q27-14H	27.0	A	84.0	50.0	5.0	1.15	12600	7	419R-1405
85.3	14	32	8.0	2.00	0°	2.0	1		6	419-100Q32-14M	32.0	B	100.0	50.0	5.0	1.68	11400	6	419R-1405
	14	32	8.0	2.00	0°	2.0	1	7		419-100Q32-14H	32.0	B	100.0	50.0	5.0	1.69	11400	7	419R-1405

Componentes
Parafuso da pastilha
5513 020-78

Para a lista completa de componentes, acesse www.sandvik.coromant.com

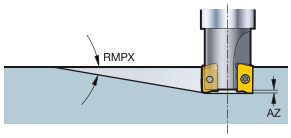
I31 L2 M1 N23 N6 N9 N15

Fresa de facear CoroMill® 419

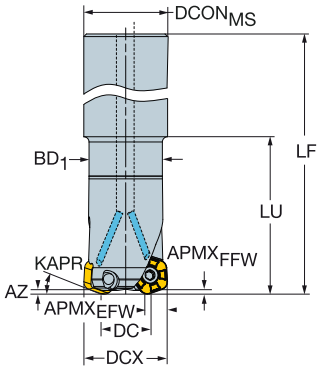
Haste cilíndrica - refrigeração interna

Fresamento com altos avanços





KAPR 19°



DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	LU	NM	KG	RPMX	CICT	MIID
17.4	14	32	8.0	2.00	10°	2.0	1	2		**419-032A32L-14L**	32.0	32.0	28.0	57.0	250.0	60.0	5.0	1.40	24700	2	419R-1405
25.4	14	32	8.0	2.00	8°	2.0	1		3	**419-040A32L-14M**	32.0	40.0	28.0		250.0		5.0	1.50	20600	3	419R-1405

Componentes
Parafuso da pastilha
5513 020-78

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I31


L2



N23


N6



N9

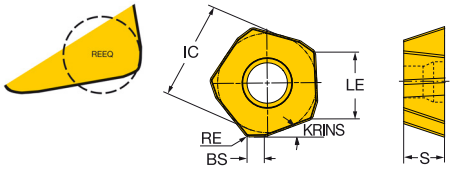


N15

Pastilha CoroMill® 419 para fresamento



KRINS 19°



			RE	Código para pedido	P				M			K			N	S			H		Dimensões, mm				
					1130	4220	4330	4340	1040	1130	2040	1020	3040	3330	1130	1130	S30T	S40T	1010	1130	IC	LE	S	BS	REEQ
Média	MM	14	0.80	419R-1405E-MM	★		★		★	☆	☆				☆	☆	★	☆	★	☆	13.5	9.0	5.47	2.0	4.50
	PM	14	0.80	419R-1405M-PM	★	☆	★	☆	★	☆	☆	★		★	☆	☆	★	☆		☆	13.5	9.0	5.47	2.0	4.50
	SM	14	3.00	419N-140530E-SM	★		★	☆	★	☆	☆				☆	☆	★	☆		☆	13.5	9.0	5.47		4.50
Pesada	KH	14	3.00	419N-140530M-KH		☆	★					☆	★	★							13.5	9.0	5.47		4.50
	PH	14	0.80	419R-1405M-PH			☆	★						★					★		13.5	9.0	5.47	2.0	4.50

I29 I154 I175 N23 N10

CoroMill® 210

Faceamento com altos avanços e fresamento em mergulho

J

Aplicação

- Fresa de facear para altos avanços
- Fresamento em mergulho
- Usinagem em rampa
- Desbaste ao semiacabamento
- Interpolação helicoidal
- Perfilamento

Área de aplicação ISO:

P M K N S H

K

Características e benefícios

- Alto avanço da mesa devido ao efeito de afinamento do cavaco – alta produtividade
- Fresa de facear de primeira escolha na usinagem com longos balanços
- Ferramenta multifunção. Faceamento, possibilidades de mandrilamento, usinagem em rampa e fresamento em mergulho
- Refrigeração interna



L

www.sandvik.coromant.com/coromill210

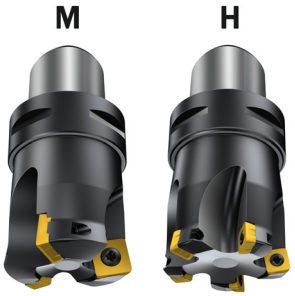
Acoplamentos

- Coromant Capto®
- Árvore
- Haste cilíndrica
- Acoplamento com rosca

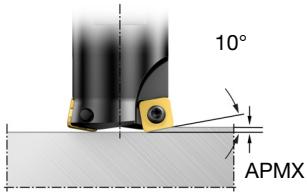
Pastilhas

- Quatro arestas de corte
- Geometrias e classes de pastilha para todos os materiais, exceto ISO N
- Geometria E-xM para excelente desempenho em titânio

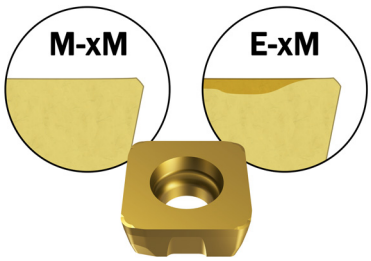
M



Passo fino Passo extra fino



O ângulo de posição de 10° permite faixas de avanço extremas durante o faceamento.



Avanço por dente (f_z) 1,5 mm para pastilhas tamanho 09 e 2 mm (pol.) de avanço por dente (f_z) para pastilhas tamanho 14.

N



I33



I36

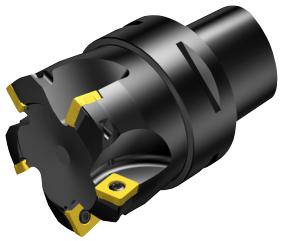
SANDVIK Coromant

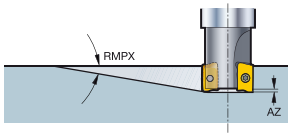
POR

Fresa de facear CoroMill® 210

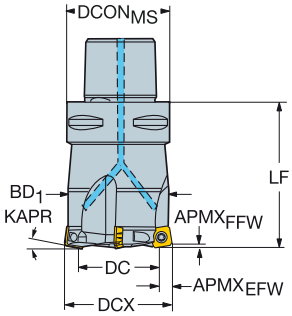
Coromant Capto® - Refrigeração interna

Fresamento com altos avanços





KAPR 10°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	BD	LF	NM	KG	RPMX	CICT	MIID
21.9	09	C3	8.0	1.20	7°	1.8	3	2		R210-036C3-09M	32.0	36.0	33.0	50.0	3.0	0.44	30900	2	R210-090412M-
	09	C3	8.0	1.20	7°	1.8	3	3		R210-036C3-09H	32.0	36.0	33.0	50.0	3.0	0.37	30900	3	R210-090412M-
27.9	09	C4	8.0	1.20	5°	1.8	3		3	R210-042C4-09M	40.0	42.0	39.0	60.0	3.0	0.79	27600	3	R210-090412M-
	09	C4	8.0	1.20	5°	1.8	3	4		R210-042C4-09H	40.0	42.0	39.0	60.0	3.0	0.60	27600	4	R210-090412M-
28.0	14	C5	13.0	2.00	5°	2.0	3		3	R210-052C5-14M	50.0	52.0	47.7	70.0	5.0	1.21	20800	3	R210-140512M-
	14	C5	13.0	2.00	3°	2.0	3	4		R210-052C5-14H	50.0	52.0	47.7	70.0	5.0	1.21	20800	4	R210-140512M-
30.0	14	C5	13.0	2.00	5°	2.0	3	4		R210-054C5-14H	50.0	54.0	49.7	70.0	5.0	1.35	23600	4	R210-140512M-
37.9	09	C5	8.0	1.20	3°	1.8	3		4	R210-052C5-09M	50.0	52.0	49.0	70.0	3.0	1.26	24000	4	R210-090412M-
	09	C5	8.0	1.20	3°	1.8	3	5		R210-052C5-09H	50.0	52.0	49.0	70.0	3.0	1.20	24000	5	R210-090412M-
39.9	09	C5	8.0	1.20	3°	1.8	3	5		R210-054C5-09H	50.0	54.0	51.0	70.0	3.0	1.15	23600	5	R210-090412M-
42.0	14	C6	13.0	2.00	3°	2.0	3		4	R210-066C6-14M	63.0	66.0	61.7	72.0	5.0	2.02	17700	4	R210-140512M-
	14	C6	13.0	2.00	3°	2.0	3	5		R210-066C6-14H	63.0	66.0	61.7	72.0	5.0	2.03	17700	5	R210-140512M-
51.9	09	C6	8.0	1.20	2°	1.8	3		6	R210-066C6-09M	63.0	66.0	63.0	72.0	3.0	2.05	21300	6	R210-090412M-
58.0	14	C8	13.0	2.00	2°	2.0	3		5	R210-082C8-14M	80.0	82.0	77.7	80.0	5.0	3.50	15100	5	R210-140512M-
	14	C8	13.0	2.00	2°	2.0	3	6		R210-082C8-14H	80.0	82.0	77.7	80.0	5.0	3.46	15100	6	R210-140512M-
62.0	14	C8	13.0	2.00	2°	2.0	3	6		R210-086C8-14H	80.0	86.0	81.7	80.0	5.0	3.67	14700	6	R210-140512M-

	Componentes
	Parafuso da pastilha
09	5513 020-02
14	5513 020-50

Para a lista completa de componentes, acesse www.sandvik.coromant.com

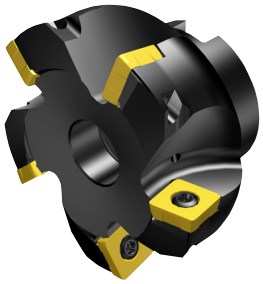
I36 L2 N23 N9 N15

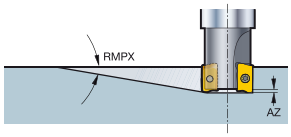
Fresa de facear CoroMill® 210

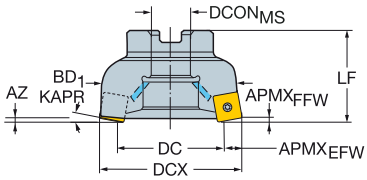
Árvore - refrigeração interna

Fresamento com altos avanços

STDNO ISO6462
KAPR 10°







DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	DCX	BD	LF	NM	KG	RPMX	CICT	MIID
35.9	09	22	8.0	1.20	3°	1.8	1		4	R210-050Q22-09M	22.0	A	50.0	47.0	50.0	3.0	0.43	24500	4	R210-090412M-
	09	22	8.0	1.20	3°	1.8	1	5		R210-050Q22-09H	22.0	A	50.0	47.0	50.0	3.0	0.63	24500	5	R210-090412M-
39.0	14	22	13.0	2.00	3°	2.0	1		4	R210-063Q22-14M	22.0	A	63.0	58.7	50.0	5.0	0.76	18300	4	R210-140512M-
	14	27	13.0	2.00	3°	2.0	1		4	R210-063Q27-14M	27.0	A	63.0	58.7	50.0	5.0	0.81	18300	4	R210-140512M-
	14	22	13.0	2.00	3°	2.0	1	5		R210-063Q22-14H	22.0	A	63.0	58.7	50.0	5.0	0.50	18300	5	R210-140512M-
48.9	09	22	8.0	1.20	2°	1.8	1		5	R210-063Q22-09M	22.0	A	63.0	60.0	50.0	3.0	0.85	21800	5	R210-090412M-
	09	27	8.0	1.20	2°	1.8	1		5	R210-063Q27-09M	27.0	A	63.0	60.0	50.0	3.0	1.05	21800	5	R210-090412M-
	09	22	8.0	1.20	2°	1.8	1	6		R210-063Q22-09H	22.0	A	63.0	60.0	50.0	3.0	0.81	21800	6	R210-090412M-
56.0	14	27	13.0	2.00	2°	2.0	1		5	R210-080Q27-14M	27.0	A	80.0	75.7	50.0	5.0	1.10	15400	5	R210-140512M-
	14	27	13.0	2.00	2°	2.0	1	6		R210-080Q27-14H	27.0	A	80.0	75.7	50.0	5.0	1.20	15400	6	R210-140512M-
76.0	14	32	13.0	2.00	1°	2.0	1		6	R210-100Q32-14M	32.0	B	100.0	95.7	50.0	5.0	1.85	13400	6	R210-140512M-
	14	32	13.0	2.00	1°	2.0	1	7		R210-100Q32-14H	32.0	B	100.0	95.7	50.0	5.0	1.92	13400	7	R210-140512M-
101.0	14	40	13.0	2.00	1°	2.0	1		7	R210-125Q40-14M	40.0	B	125.0	120.7	63.0	5.0	3.83	11400	7	R210-140512M-
136.0	14	40	13.0	2.00	1°	2.0	1		8	R210-160Q40-14M	40.0	B	160.0	155.7	63.0	5.0	5.78	10400	8	R210-140512M-

	Componentes
	Parafuso da pastilha
09	5513 020-02
14	5513 020-50

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I36 L2 M1 N23 N9 N15

SANDVIK Coromant

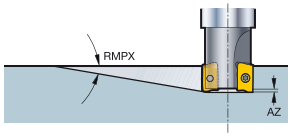
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Fresa de facear CoroMill® 210

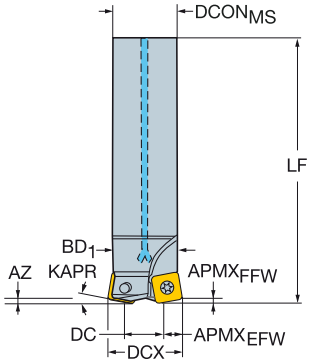
Haste cilíndrica - refrigeração interna

Fresamento com altos avanços





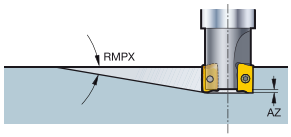
KAPR 10°



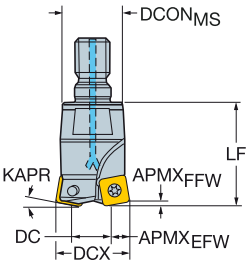
DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
10.9	09	20	8.0	1.20	14°	1.8	1	2		R210-025A20-09M	20.0	25.0	22.0	35.0	180.0	3.0	0.54	17200	2	R210-090412M-
17.9	09	25	8.0	1.20	8°	1.8	1	2		R210-032A25-09M	25.0	32.0	29.0	45.0	210.0	3.0	0.88	11000	2	R210-090412M-
	09	25	8.0	1.20	8°	1.8	1	3		R210-032A25-09H	25.0	32.0	29.0	45.0	210.0	3.0	0.50	11000	3	R210-090412M-
20.9	09	32	8.0	1.20	7°	1.8	1	3		R210-035A32-09H	32.0	35.0	32.0	45.0	210.0	3.0	1.30	11000	3	R210-090412M-
27.9	09	32	8.0	1.20	5°	1.8	1		3	R210-042A32-09M	32.0	42.0	39.0	50.0	250.0	3.0	1.83	8000	3	R210-090412M-
	09	32	8.0	1.20	5°	1.8	1	4		R210-042A32-09H	32.0	42.0	39.0	50.0	250.0	3.0	1.77	8000	4	R210-090412M-

Acoplamento com rosca - Refrigeração interna





KAPR 10°



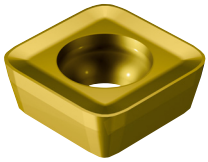
DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	BD	LF	NM	KG	RPMX	CICT	MIID
10.9	09	M12	8.0	1.20	14°	1.8	1	2	R210-025T12-09M	20.8	25.0	22.0	35.0	3.0	0.24	15000	2	R210-090412M-
17.9	09	M16	8.0	1.20	8°	1.8	1	2	R210-032T16-09M	28.8	32.0	29.0	45.0	3.0	0.36	15000	2	R210-090412M-
20.9	09	M16	8.0	1.20	7°	1.8	1	3	R210-035T16-09H	28.8	35.0	32.0	50.0	3.0	0.37	15000	3	R210-090412M-
27.9	09	M16	8.0	1.20	5°	1.8	1	4	R210-042T16-09H	28.8	42.0	39.0	50.0	3.0	0.44	15000	4	R210-090412M-

Componentes
Parafuso da pastilha
5513 020-02

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I36 L2 N23 N9 N15

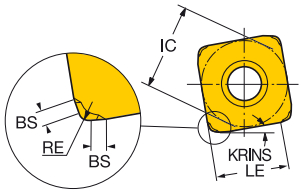
Pastilha CoroMill® 210 para fresamento

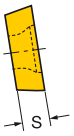


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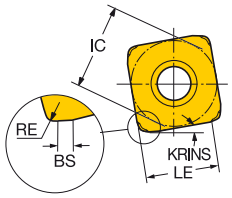


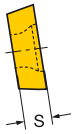
10°
R210..E-KM





10°
R210..M-PM





						P				M			K			N	S			H		Dimensões, mm					
			RE	Código para pedido		1130	4220	4330	4340	1040	1130	2040	1020	3040	3330	1130	1130	S30T	S40T	1010	1130	IC	LE	S	BS	BSR	REEQ
Média	KM	09	1.00	R210-09 04 12M-KM									☆	☆	★							9.4	6.2	4.00	0.8		2.50
			1.40	R210-09 04 14E-KM									☆	☆	★							9.5	5.7	4.50	0.7	50.0	2.50
		14	1.00	R210-14 05 12M-KM									☆	☆	★							14.5	11.3	4.76	0.8		3.50
			1.40	R210-14 05 14E-KM									☆	☆	★							14.6	10.8	5.26	0.7	50.0	3.50
	MM	09	1.00	R210-09 04 12M-MM						★		☆										9.4	6.2	4.00	0.8		2.50
			1.40	R210-09 04 14E-MM						★		☆										9.5	5.7	4.50	0.7	50.0	2.50
		14	1.00	R210-14 05 12M-MM						★		☆										14.5	11.3	4.76	0.8		3.50
			1.40	R210-14 05 14E-MM						★		☆										14.6	10.8	5.26	0.7	50.0	3.50
	PM	09	1.00	R210-09 04 12M-PM		★	☆	★	☆		☆					☆	☆	★	☆	★	☆	9.4	6.2	4.00	0.8		2.50
			1.40	R210-09 04 14E-PM		★	☆	★	☆		☆						☆	★	☆			9.5	5.7	4.50	0.7	50.0	2.50
		14	1.00	R210-14 05 12M-PM		★	☆	★	☆		☆					☆	☆	★	☆	★	☆	14.5	11.3	4.76	0.8		3.50
			1.40	R210-14 05 14E-PM		★	☆	★	☆		☆					☆	☆	★	☆	★	☆	14.6	10.8	5.26	0.7	50.0	3.50

I33 I154 I175 N23 N10

SANDVIK Coromant

CoroMill® 415

Fresa para faceamento de alto avanço e diâmetro pequeno

Aplicação

- Fresa de facear para altos avanços
- Fresamento em mergulho
- Usinagem em rampa
- Desbaste ao semiacabamento
- Interpolação helicoidal
- Perfilamento



Área de aplicação ISO:

P M S H

Características e benefícios

- Ferramenta versátil para uma ampla gama de aplicações
- Canais de refrigeração para melhor escoamento de cavacos
- Pode ser combinada com o acoplamento Coromant EH e adaptadores antivibratórios Silent Tools™ para usinagem sem vibração, com alta confiabilidade e um ganho significativo de produtividade
- Exclusiva interface do assento de pastilha iLock™ resultando em menos peças sucateadas. O assento de pastilha iLock™ também facilita o manuseio de pequenas pastilhas
- Opções Tailor Made disponíveis

www.sandvik.coromant.com/coromill415

Acoplamentos

- Haste cilíndrica
- Coromant EH
- Acoplamento com rosca

Pastilhas

- Quatro arestas de corte
- A exclusiva solução iLock™ proporciona indexação fácil e precisa da pastilha, maior confiabilidade e vida útil da ferramenta consideravelmente melhor

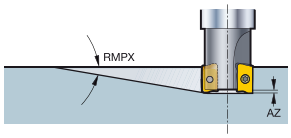
I38 I41

Fresa para facear CoroMill® 415

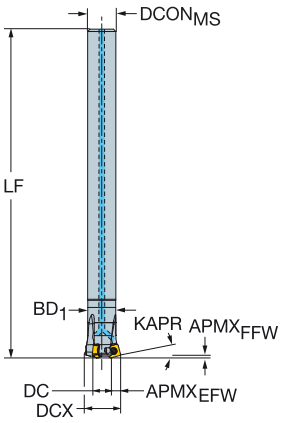
Haste cilíndrica - refrigeração interna

Fresamento com altos avanços





KAPR 15°



DC		CZCMS	APMXEFW	APMXFFW	RMPX	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
4.6	05	12	3.0	0.85	0.85°	1	2	**415-013A12-05H**	12.0	13.0	11.0	15.0	140.0	0.6	0.16	23600	2	415N-050206M
7.6	05	12	3.0	0.85	0.97°	1	3	**415-016A12-05H**	12.0	16.0	12.0	15.0	140.0	0.6	0.16	21300	3	415N-050206M
11.6	05	16	3.0	0.85	0.62°	1	3	**415-020A16-05L**	16.0	20.0	16.0	15.0	200.0	0.6	0.37	19000	3	415N-050206M
	05	16	3.0	0.85	0.62°	1	4	**415-020A16-05M**	16.0	20.0	16.0	15.0	200.0	0.6	0.33	19000	4	415N-050206M
	05	16	3.0	0.85	0.62°	1	5	**415-020A16-05H**	16.0	20.0	16.0	15.0	200.0	0.6	0.27	19000	5	415N-050206M
13.5	07	20	4.5	1.20	0.61°	1	4	**415-025A20-07H**	20.0	25.0	19.0	15.0	200.0	1.2	0.50	15700	4	415N-070310M
16.6	05	20	3.0	0.85	0.64°	1	5	**415-025A20-05M**	20.0	25.0	21.0	15.0	200.0	0.6	0.50	17000	5	415N-050206M
20.5	07	25	4.5	1.20	0.63°	1	5	**415-032A25-07H**	25.0	32.0	26.0	15.0	250.0	1.2	0.95	13900	5	415N-070310M

	Componentes
	Parafuso da pastilha
05	5513 020-28
07	5513 020-56

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I41 L2 N23 N9 N15

SANDVIK Coromant

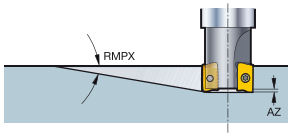
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Fresa para facear CoroMill® 415

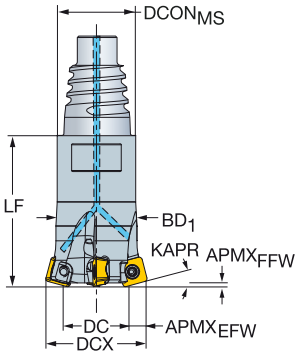
Coromant EH - Refrigeração interna

Fresamento com altos avanços





KAPR 15°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
4.6	05	E12	3.0	0.85	0.85°	1	2	**415-13EH12-05H**	11.7	13.0	11.0	10.0	25.0	0.6	0.14	23600	2	415N-050206M
7.6	05	E16	3.0	0.85	0.97°	1	3	**415-16EH16-05H**	15.5	16.0	12.0	12.0	30.0	0.6	0.06	21300	3	415N-050206M
8.6	07	E16	4.5	1.20	0.56°	1	2	**415-20EH16-07H**	15.5	20.0	14.0	12.0	35.0	1.2	0.17	17500	2	415N-070310M
	07	E20	4.5	1.20	0.56°	1	2	**415-20EH20-07H**	19.3	20.0	14.0	15.0	35.0	1.2	0.13	17500	2	415N-070310M
11.6	05	E16	3.0	0.85	0.62°	1	4	**415-20EH16-05M**	15.5	20.0	16.0	12.0	30.0	0.6	0.05	19000	4	415N-050206M
	05	E20	3.0	0.85	0.62°	1	4	**415-20EH20-05M**	19.3	20.0	16.0	13.0	32.0	0.6	0.07	19000	4	415N-050206M
	05	E16	3.0	0.85	0.62°	1	5	**415-20EH16-05H**	15.5	20.0	16.0	12.0	30.0	0.6	0.16	19000	5	415N-050206M
	05	E20	3.0	0.85	0.62°	1	5	**415-20EH20-05H**	19.3	20.0	16.0	13.0	32.0	0.6	0.19	19000	5	415N-050206M
13.5	07	E20	4.5	1.20	0.61°	1	3	**415-25EH20-07M**	19.3	25.0	19.0	15.0	35.0	1.2	0.08	15700	3	415N-070310M
	07	E25	4.5	1.20	0.61°	1	3	**415-25EH25-07M**	24.2	25.0	19.0	18.0	40.0	1.2	0.12	15700	3	415N-070310M
	07	E20	4.5	1.20	0.61°	1	4	**415-25EH20-07H**	19.3	25.0	19.0	15.0	35.0	1.2	0.20	15700	4	415N-070310M
	07	E25	4.5	1.20	0.61°	1	4	**415-25EH25-07H**	24.2	25.0	19.0	18.0	40.0	1.2	0.18	15700	4	415N-070310M
16.6	05	E20	3.0	0.85	0.64°	1	5	**415-25EH20-05M**	19.3	25.0	21.0	13.0	32.0	0.6	0.08	17000	5	415N-050206M
	05	E25	3.0	0.85	0.64°	1	5	**415-25EH25-05M**	24.2	25.0	21.0	15.0	35.0	0.6	0.12	17000	5	415N-050206M
	05	E20	3.0	0.85	0.64°	1	6	**415-25EH20-05H**	19.3	25.0	21.0	13.0	32.0	0.6	0.20	17000	6	415N-050206M
	05	E25	3.0	0.85	0.64°	1	6	**415-25EH25-05H**	24.2	25.0	21.0	15.0	35.0	0.6	0.24	17000	6	415N-050206M
20.5	07	E25	4.5	1.20	0.63°	1	4	**415-32EH25-07M**	24.2	32.0	26.0	18.0	40.0	1.2	0.19	13900	4	415N-070310M
	07	E25	4.5	1.20	0.63°	1	5	**415-32EH25-07H**	24.2	32.0	26.0	18.0	40.0	1.2	0.16	13900	5	415N-070310M
23.6	05	E25	3.0	0.85	0.65°	1	7	**415-32EH25-05H**	24.2	32.0	28.0	15.0	35.0	0.6	0.16	15000	7	415N-050206M

	Componentes
	Parafuso da pastilha
05	5513 020-28
07	5513 020-56

Para a lista completa de componentes, acesse www.sandvik.coromant.com

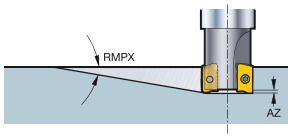
I41 L2 N23 N9 N15 N3

Fresa para facear CoroMill® 415

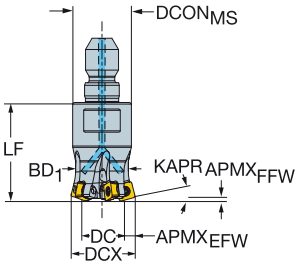
Acoplamento com rosca - Refrigeração interna

Fresamento com altos avanços





KAPR 15°



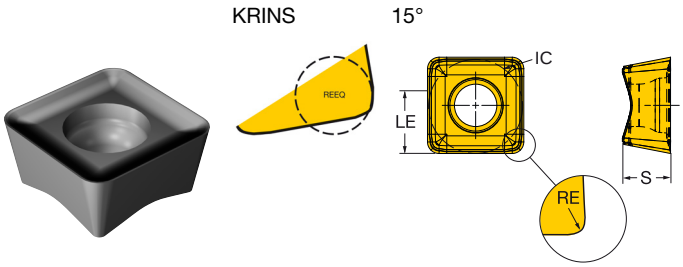
									Dimensões, mm									
DC		CZC_{MS}	$APMX_{EFW}$	$APMX_{FFW}$	RMPX	CNSC		**Código para pedido**	$DCON_{MS}$	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
4.6	05	M8	3.0	0.85	0.85°	1	2	**415-13T08-05H**	12.8	13.0	11.0	10.0	25.0	0.6	0.02	23600	2	415N-050206M
7.6	05	M8	3.0	0.85	0.97°	1	3	**415-16T08-05H**	12.8	16.0	12.0	10.0	25.0	0.6	0.03	21300	3	415N-050206M
11.6	05	M10	3.0	0.85	0.62°	1	5	**415-20T10-05H**	17.8	20.0	16.0	12.0	30.0	0.6	0.05	19000	5	415N-050206M
13.5	07	M12	4.5	1.20	0.61°	1	4	**415-25T12-07H**	20.8	25.0	19.0	15.0	38.0	1.2	0.09	15700	4	415N-070310M
16.6	05	M12	3.0	0.85	0.64°	1	6	**415-25T12-05H**	20.8	25.0	21.0	15.0	35.0	0.6	0.10	17000	6	415N-050206M
20.5	07	M16	4.5	1.20	0.63°	1	5	**415-32T16-07H**	28.8	32.0	26.0	15.0	40.0	1.2	0.19	13900	5	415N-070310M

	Componentes
	Parafuso da pastilha
05	5513 020-28
07	5513 020-56

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I41 N23 N9 N15

Pastilha CoroMill® 415 para fresamento



			RE	Código para pedido	P		M		S				H		Dimensões, mm			
					1130	4340	1040	1130	1130	H13A	S30T	S40T	1010	1130	IC	LE	S	REEQ
Média	M30	05	0.60	415N-05 02 06M-M30	★	☆	★	☆	☆	☆	★	☆	★	☆	5.0	3.8	2.21	1.50
		05	1.20	415N-05 02 12E-M30	★		★		☆		★	☆		☆	5.0	3.0	2.21	2.00
		05	1.20	415N-05 02 12M-M30	★		★	☆	☆		★	☆	★	☆	5.0	3.0	2.21	2.00
		07	1.00	415N-07 03 10M-M30	★	☆	★	☆	☆	☆	★	☆	★	☆	7.0	5.0	3.07	2.20
		07	2.00	415N-07 03 20E-M30	★		★		☆		★	☆		☆	7.0	3.0	3.07	2.20
		07	2.00	415N-07 03 20M-M30	★		★	☆	☆		★	☆	★	☆	7.0	3.0	3.07	2.80

415N-05 02 12M-M30 aumenta DC em 1,0 mm e reduz DCX em 0,26 mm e LF em 0,13 mm
415N-07 03 20M-M30 aumenta DC em 1,7 mm e reduz DCX em 0,44 mm e LF em 0,22 mm
(comparado com o uso da ferramenta com MIID)

I38 I154 I175 N23 N10

CoroMill® 745

Conceitos de faceamento multiarestas e fresamento de alto avanço.

Aplicação

- Faceamento
- Desbaste ao semiacabamento
- Fresamento com altos avanços

Área de aplicação ISO:

P K

Características e benefícios

- Conceito multiarestas para a produção de lotes grandes, linhas transfer flexíveis e quando a máxima utilização da ferramenta for importante
- A CoroMill 745 com ângulo de posição de 42° é usada para aplicações ISO P, K, M e S com APMX de 5,2 mm
- Fresa CoroMill 745 para alto avanço com ângulo de posição de 25° é usada como um impulsionador de produtividade em aplicações ISO P e ISO K em que o APMX é 2,8 mm
- Com o exclusivo passo MD diferencial, é uma excelente ferramenta solucionadora de problemas de usinagem de peças sensíveis à vibração e com set-ups fracos



Fresa de facear CoroMill® 745 Veja página I17.
Fresa para faceamento de alto avanço CoroMill® 745 Veja página I43.

www.sandvik.coromant.com/coromill745

Acoplamentos

- Coromant Capto®
- Árvore

Pastilhas

- 14 arestas de corte
- O tip seat seguro e a pastilha grande e robusta com geometrias de corte leve e resistentes foram desenvolvidas para uma usinagem previsível e confiável

Tecnologia revolucionária

Disponível com ângulo de posição de 42° para profundidades de cortes maiores e em uma versão de avanço mais alto com ângulo de posição de 25° para taxas de remoção de metal mais altas. São usadas as mesmas pastilhas em ambas as fresas.





Passo MD diferencial

O exclusivo passo MD diferencial é a primeira escolha em operações de desbaste em que a ação de corte leve é necessária, por exemplo na usinagem de peças sensíveis à vibração e com set-ups fracos. Ele é um solucionador de problemas perfeito quando a vibração for uma limitação na produção. O comprimento e o peso do corpo da fresa foram reduzidos para impulsionar o desempenho em aplicações pouco produtivas. A fresa tem um desenho de passo diferencial logaritímico e a posição da pastilha é radialmente compensada para produzir uma carga de cavacos uniforme por toda a pastilha.

I43 I45

POR

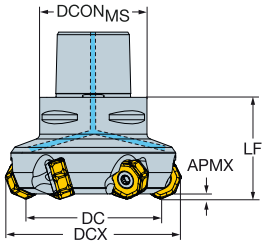
Fresa de facear CoroMill® 745

Coromant Capto® - Refrigeração interna

Fresamento com altos avanços

KAPR 25°





DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	LF	NM	KG	RPMX	CICT	MIID
63.0	21	C5	2.80	3	5	**725-063C5-21M**	50.0	86.4	60.0	12.0	1.30	5894	5	745R-2109
	21	C6	2.80	3	5	**725-063C6-21M**	63.0	86.4	60.0	12.0	1.70	5894	5	745R-2109
	21	C5	2.80	3	7	**725-063C5-21H**	50.0	86.4	60.0	12.0	1.20	5894	7	745R-2109
	21	C6	2.80	3	7	**725-063C6-21H**	63.0	86.4	60.0	12.0	1.60	5894	7	745R-2109
80.0	21	C6	2.80	3	5	**725-080C6-21M**	63.0	103.4	65.0	12.0	2.06	5324	5	745R-2109
	21	C8	2.80	3	6	**725-080C8-21M**	80.0	103.4	65.0	12.0	3.04	5324	6	745R-2109
	21	C6	2.80	3	9	**725-080C6-21H**	63.0	103.4	65.0	12.0	1.93	5324	9	745R-2109
	21	C8	2.80	3	9	**725-080C8-21H**	80.0	103.4	65.0	12.0	2.91	5324	9	745R-2109
100.0	21	C8	2.80	3	7	**725-100C8-21M**	80.0	123.4	65.0	12.0	3.67	4765	7	745R-2109
	21	C8	2.80	3	11	**725-100C8-21H**	80.0	123.4	65.0	12.0	3.49	4765	11	745R-2109

Componentes
Parafuso da pastilha
5513 020-80

Para a lista completa de componentes, acesse www.sandvik.coromant.com

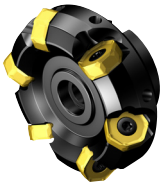
I45 L2 N23 N9 N15

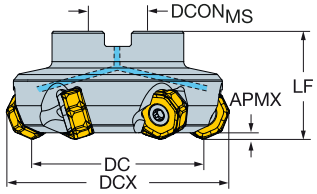
Fresa de facear CoroMill® 745

Árvore - refrigeração interna

Fresamento com altos avanços

STDNO ISO 6462
KAPR 25°





DC		CZCMS	APMXFFW	CNSC		Código para pedido	Dimensões, mm DCONMS	ISO	DCX	LF	NM	KG	RPMX	CICT	MIID
63.0	21	22	2.80	3	5	**725-063Q22-21M**	22.0	A	86.4	50.0	12.0	0.90	5894	5	745R-2109
	21	22	2.80	3	7	**725-063Q22-21H**	22.0	A	86.4	50.0	12.0	0.81	5894	7	745R-2109
80.0	21	27	2.80	3	6	**725-080Q27-21M**	27.0	A	103.4	50.0	12.0	1.36	5324	6	745R-2109
	21	27	2.80	3	9	**725-080Q27-21H**	27.0	A	103.4	50.0	12.0	1.23	5324	9	745R-2109
100.0	21	32	2.80	3	7	**725-100Q32-21M**	32.0	A	123.4	50.0	12.0	2.33	4765	7	745R-2109
	21	32	2.80	3	11	**725-100Q32-21H**	32.0	A	123.4	50.0	12.0	2.18	4765	11	745R-2109
125.0	21	40	2.80	3	8	**725-125Q40-21M**	40.0	B	148.4	63.0	12.0	3.97	4216	8	745R-2109
	21	40	2.80	3	14	**725-125Q40-21H**	40.0	B	148.4	63.0	12.0	3.17	4216	14	745R-2109
160.0	21	40	2.80	3	10	**725-160Q40-21M**	40.0	B	183.4	63.0	12.0	4.86	3675	10	745R-2109
	21	40	2.80	3	16	**725-160Q40-21H**	40.0	B	183.4	63.0	12.0	5.31	3675	16	745R-2109

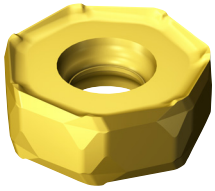
	Componentes	
DC	Parafuso para refrigeração	Parafuso da pastilha
63.00	5512 073-01	5513 020-80
80.00	5512 073-02	5513 020-80
100.00	5512 073-05	5513 020-80
125.00-160.00	5512 098-03	5513 020-80
250.00	-	5513 020-80

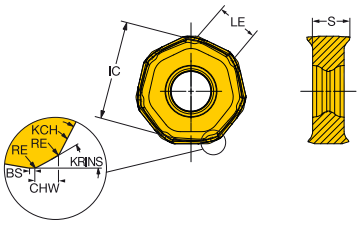
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I45 L2 M1 N23 N9 N15

Pastilha CoroMill® 745 para fresamento

KRINS 42°

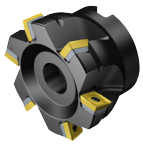
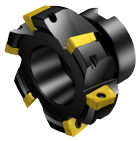
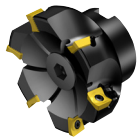
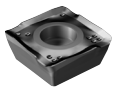
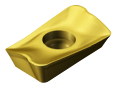
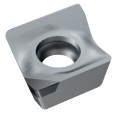
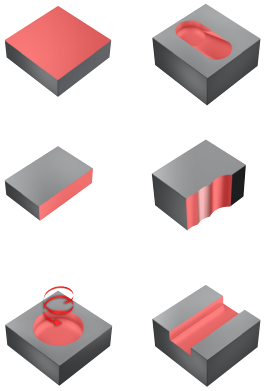
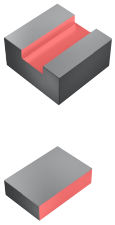




			RE	KCH	CHW	Código para pedido	P 1130	P 4220	P 4230	P 4240	K 1020	K 3040	K K20D	K K20W	IC	LE	S	BS	BSR
															Dimensões, mm				
Média	M30	21	1.00	17°	1.3	745R-2109E-M30	★	☆	★	☆	★	☆	☆	☆	21.0	8.9	9.00	0.3	25.0
	M50	21	1.00	17°	1.3	745L-2109E-M50			★				☆	☆	21.0	8.5	9.00	0.3	25.0
			1.00	17°	1.3	745R-2109E-M50	★	☆	★	☆		★	☆	☆	21.0	8.9	9.00	0.3	25.0
Pesada	H50	21	1.00	17°	1.3	745R-2109E-H50		☆	☆	☆		☆	☆	☆	21.0	8.9	9.00	0.3	25.0

I43 I154 I175 N23 N10

Ferramentas para fresamento de cantos a 90 graus

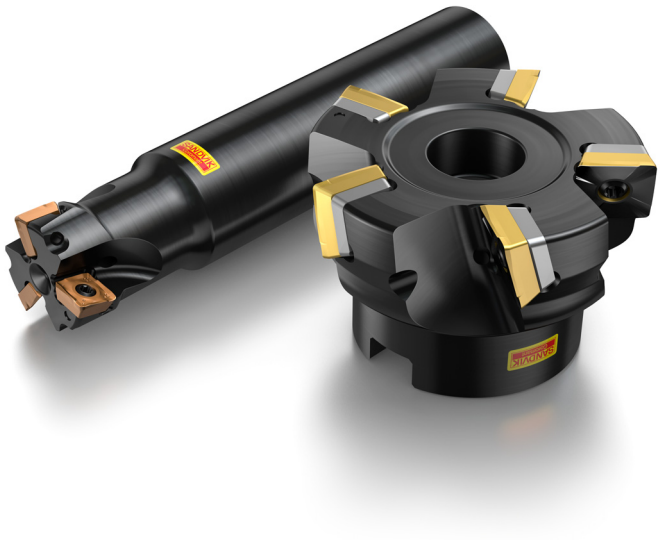
	CoroMill® 490	CoroMill® 390	CoroMill® 690	CoroMill® Century
				
Página	I47	I57	I79	I83
Material	P M K N S H	P M K N S H	S	P M K N S H
Operação principal				
KAPR	90°	90°	90°	90°
D_c mm	20 - 250	9.7 - 200	40 - 100	40 - 200
APMX mm	5.5 - 10.0	5.8 - 85	46 - 108	11
Pastilha				
Tamanhos da pastilha	8 & 14	07,11,17 & 18	10 & 14	11
Acoplamentos	Coromant Capto® Coromant EH Haste cilíndrica Weldon HSK Árvore	Coromant Capto® Coromant EH Haste cilíndrica Árvore Weldon Acoplamento com rosca	Coromant Capto® HSK Árvore	Coromant Capto® HSK Árvore
Refrigeração interna	✓	✓	✓	✓
Opções		Corpos das fresas antivibratórios disponíveis		Desenho de cassete intercambiável
Outras operações				

CoroMill® 490

Fresa para faceamento e cantos a 90 graus em perfis precisos

Aplicação

- Fresamento de cantos a 90°
- Fresamento de cantos a 90° repetido
- Interpolação circular
- Faceamento



Área de aplicação ISO:

P M K N S H

Características e benefícios

- Excelente flexibilidade, alta precisão e boas tolerâncias
- Ação de corte leve e tranquila com forças baixas de corte
- Alta produtividade com excepcionais geometrias e classes de pastilha
- Arestas de corte vivas e sem rebarbas, perfis suaves
- Característica da peça concluída em apenas um passe
- Corte em 90 graus real sem degraus vivos
- O desempenho de corte leve proporciona uma utilização otimizada de máquinas-ferramentas com baixa potência. Isso também facilita o uso da fresa em montagens de ferramentas ampliadas
- Hastes menores para fresas com diâmetros maiores, usando pastilhas de 8 mm, permitem que essas fresas se adaptem em porta-ferramentas menores
- Versões maiores melhoram a acessibilidade e proporcionam folga natural para dispositivos de fixação estreitos

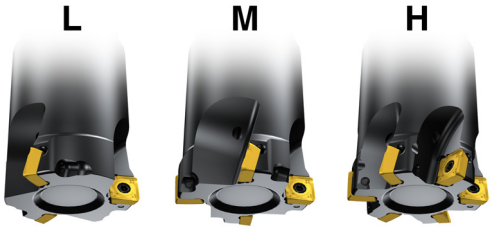
www.sandvik.coromant.com/coromill490

Acoplamentos

- Coromant Capto®
- Árvore
- Haste cilíndrica
- Weldon
- Coromant EH
- HSK
- Hastes muito pequenas para fresas cilíndricas
- Versões de tamanhos grandes estão disponíveis para as fresas tipo árvore, Coromant Capto® e Coromant EH

Pastilhas

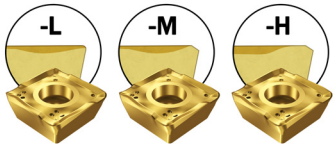
- Quatro arestas de corte
- Classes de metal duro, CBN e de cerâmica



Passo largo Passo fino Passo extra fino

Precisão

As arestas da pastilha têm uma ligeira coroa para compensar a deflexão. Devido a esta geometria, a distorção angular durante o fresamento de cantos a 90 graus é minimizada e degraus entre os passes repetitivos são evitados.



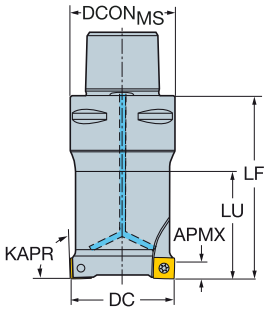
I48 I55 N6

Fresa CoroMill® 490 para cantos a 90 graus

Coromant Capto® - Refrigeração interna

KAPR 90°





DC		CZCMS	APMXFFW	CNSC		Código para pedido	Dimensões, mm DCONMS	LB	LF	LU	NM	KG	RPMX	CICT	MIID
20.0	08	C3	5.50	3	2	490-020C3-08L	32.0	40.0	80.0	40.0	1.2	0.37	48500	2	490R-08T308
	08	C4	5.50	3	2	490-020C4-08L	40.0	40.0	70.0	40.0	1.2	0.62	39000	2	490R-08T308
25.0	08	C3	5.50	3	3	490-025C3-08M	32.0	60.0	80.0	60.0	1.2	0.39	40400	3	490R-08T308
	08	C4	5.50	3	3	490-025C4-08M	40.0	45.0	70.0	45.0	1.2	0.43	39000	3	490R-08T308
	08	C5	5.50	3	3	490-025C5-08M	50.0	50.0	75.0	50.0	1.2	0.85	28000	3	490R-08T308
	08	C6	5.50	3	3	490-025C6-08M	63.0	53.0	80.0	53.0	1.2	1.41	20000	3	490R-08T308
32.0	08	C3	5.50	3	4	490-032C3-08M	32.0	60.0	80.0	60.0	1.2	0.50	33900	4	490R-08T308
	08	C4	5.50	3	4	490-032C4-08M	40.0	45.0	70.0	45.0	1.2	0.75	33900	4	490R-08T308
	08	C5	5.50	3	4	490-032C5-08M	50.0	50.0	75.0	50.0	1.2	0.90	28000	4	490R-08T308
	08	C6	5.50	3	4	490-032C6-08M	63.0	53.0	80.0	53.0	1.2	1.44	20000	4	490R-08T308
36.0	08	C3	5.50	3	4	490-036C3-08M	32.0	30.0	50.0	30.0	1.2	0.55	31300	4	490R-08T308
40.0	08	C4	5.50	3	4	490-040C4-08M	40.0	45.0	70.0	45.0	1.2	0.82	29300	4	490R-08T308
	08	C5	5.50	3	4	490-040C5-08M	50.0	50.0	75.0	50.0	1.2	1.09	28000	4	490R-08T308
	08	C4	5.50	3	6	490-040C4-08H	40.0	45.0	70.0	45.0	1.2	0.88	29300	6	490R-08T308
	08	C5	5.50	3	6	490-040C5-08H	50.0	50.0	75.0	50.0	1.2	1.10	28000	6	490R-08T308
	08	C6	5.50	3	6	490-040C6-08H	63.0	53.0	80.0	53.0	1.2	1.62	20000	6	490R-08T308
	14	C4	10.00	3	3	490-040C4-14M	40.0	45.0	70.0	45.0	3.0	0.82	26400	3	490R-1404
	14	C5	10.00	3	3	490-040C5-14M	50.0	50.0	75.0	50.0	3.0	1.02	26400	3	490R-1404
	14	C6	10.00	3	3	490-040C6-14M	63.0	53.0	80.0	53.0	3.0	1.56	20000	3	490R-1404
	14	C4	10.00	3	4	490-040C4-14H	40.0	70.0	70.0	45.0	3.0	0.82	26400	4	490R-1404
	14	C5	10.00	3	4	490-040C5-14H	50.0	50.0	75.0	50.0	3.0	1.03	26400	4	490R-1404
	14	C6	10.00	3	4	490-040C6-14H	63.0	53.0	80.0	53.0	3.0	1.52	20000	4	490R-1404
44.0	08	C4	5.50	3	5	490-044C4-08M	40.0	40.0	60.0		1.2	0.83	27600	5	490R-08T308
	08	C4	5.50	3	6	490-044C4-08H	40.0	40.0	60.0		1.2	0.79	27600	6	490R-08T308
	14	C4	10.00	3	3	490-044C4-14M	40.0	45.0	70.0		3.0	0.89	24600	3	490R-1404
	14	C4	10.00	3	4	490-044C4-14H	40.0	70.0	70.0		3.0	0.89	24600	4	490R-1404
50.0	08	C5	5.50	3	5	490-050C5-08M	50.0	50.0	75.0	50.0	1.2	1.28	25500	5	490R-08T308
	08	C6	5.50	3	5	490-050C6-08M	63.0	53.0	80.0	53.0	1.2	1.84	20000	5	490R-08T308
	08	C5	5.50	3	7	490-050C5-08H	50.0	50.0	75.0	50.0	1.2	1.26	25500	7	490R-08T308
	08	C6	5.50	3	7	490-050C6-08H	63.0	53.0	80.0	53.0	1.2	1.86	20000	7	490R-08T308
	14	C5	10.00	3	4	490-050C5-14M	50.0	53.0	75.0	50.0	3.0	1.26	13700	4	490R-1404
	14	C6	10.00	3	4	490-050C6-14M	63.0	53.0	80.0	53.0	3.0	1.80	13700	4	490R-1404
	14	C5	10.00	3	5	490-050C5-14H	50.0	50.0	75.0	50.0	3.0	1.23	22400	5	490R-1404
	14	C6	10.00	3	5	490-050C6-14H	63.0	53.0	80.0	53.0	3.0	1.75	20000	5	490R-1404
54.0	08	C5	5.50	3	5	490-054C5-08M	50.0	40.0	60.0		1.2	1.34	24300	5	490R-08T308
	08	C5	5.50	3	7	490-054C5-08H	50.0	40.0	60.0		1.2	1.34	24300	7	490R-08T308
	14	C5	10.00	3	4	490-054C5-14M	50.0	60.0	60.0		3.0	1.31	13000	4	490R-1404
	14	C5	10.00	3	5	490-054C5-14H	50.0	60.0	60.0		3.0	1.26	21300	5	490R-1404
63.0	08	C6	5.50	3	6	490-063C6-08M	63.0	23.0	50.0	23.0	1.2	1.69	20000	6	490R-08T308
	08	C6	5.50	3	8	490-063C6-08H	63.0	23.0	50.0	23.0	1.2	1.67	20000	8	490R-08T308
	14	C6	10.00	3	5	490-063C6-14M	63.0	53.0	80.0	53.0	3.0	2.18	11700	5	490R-1404
	14	C6	10.00	3	6	490-063C6-14H	63.0	53.0	80.0	53.0	3.0	2.16	11700	6	490R-1404
66.0	08	C6	5.50	3	6	490-066C6-08M	63.0	28.0	50.0		1.2	1.70	20000	6	490R-08T308
	08	C6	5.50	3	8	490-066C6-08H	63.0	28.0	50.0		1.2	1.72	20000	8	490R-08T308
	14	C6	10.00	3	5	490-066C6-14M	63.0	65.0	65.0		3.0	1.93	11400	5	490R-1404
	14	C6	10.00	3	6	490-066C6-14H	63.0	65.0	65.0		3.0	1.94	11400	6	490R-1404

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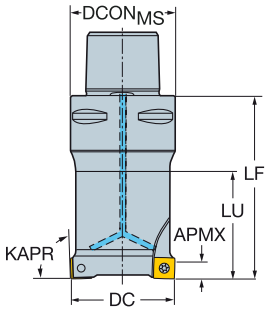
POR

Fresa CoroMill® 490 para cantos a 90 graus

Coromant Capto® - Refrigeração interna

KAPR 90°





DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	LB	LF	LU	NM	KG	RPMX	CICT	MIID
80.0	08	C8	5.50	3		8	490-080C8-08M	80.0		80.0	45.0	1.2	3.73	14000	8	490R-08T308
	08	C8	5.50	3		10	490-080C8-08H	80.0		80.0	45.0	1.2	3.76	14000	10	490R-08T308
	14	C6	10.00	3		6	490-080C6-14M	63.0	65.0	65.0	65.0	3.0	2.33	10100	6	490R-1404
	14	C8	10.00	3		6	490-080C8-14M	80.0		80.0	45.0	3.0	3.59	10100	6	490R-1404
	14	C6	10.00	3	8		490-080C6-14H	63.0	65.0	65.0	65.0	3.0	2.33	10100	8	490R-1404
	14	C8	10.00	3	8		490-080C8-14H	80.0		80.0	45.0	3.0	3.59	10100	8	490R-1404
84.0	08	C8	5.50	3		8	490-084C8-08M	80.0		60.0		1.2	3.13	14000	8	490R-08T308
	08	C8	5.50	3		10	490-084C8-08H	80.0		60.0		1.2	3.19	14000	10	490R-08T308
	14	C8	10.00	3		6	490-084C8-14M	80.0		70.0		3.0	3.39	9800	6	490R-1404
	14	C8	10.00	3	8		490-084C8-14H	80.0		70.0		3.0	3.39	9800	8	490R-1404

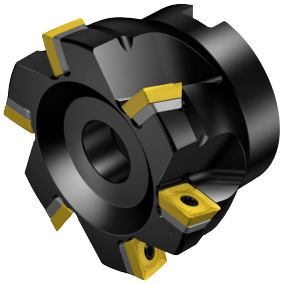
	Componentes		
	Parafuso da pastilha	Calço	Parafuso do calço
08	5513 020-35		
14	5513 020-72	5322 471-01	5512 090-01

Para a lista completa de componentes, acesse www.sandvik.coromant.com

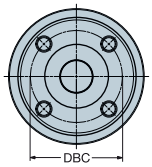
I55 L2 N23 N6 N9 N15

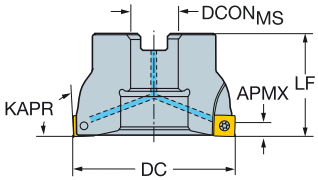
Fresa CoroMill® 490 para cantos a 90 graus

Árvore - refrigeração interna



STDNO ISO6462
KAPR 90°





DC		CZCMS	APMXFFW	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	DBC	LF	NM	KG	RPMX	CICT	MIID
40.0	08	16	5.50	1		4	490-040Q16-08M	16.0	A		40.0	1.2	0.46	29300	4	490R-08T308
	08	16	5.50	1	6		490-040Q16-08H	16.0	A		40.0	1.2	0.23	29300	6	490R-08T308
44.0	08	16	5.50	1		5	490-044Q16-08M	16.0	A		40.0	1.2	0.50	27600	5	490R-08T308
50.0	08	22	5.50	1		4	490-050Q22-08L	22.0	A		40.0	1.2	0.66	25500	4	490R-08T308
	08	22	5.50	1		5	490-050Q22-08M	22.0	A		40.0	1.2	0.48	25500	5	490R-08T308
	08	22	5.50	1	7		490-050Q22-08H	22.0	A		40.0	1.2	0.37	25500	7	490R-08T308
	14	22	10.00	1		4	490-050Q22-14M	22.0	A		40.0	3.0	0.38	13700	4	490R-1404
	14	22	10.00	1	5		490-050Q22-14H	22.0	A		40.0	3.0	0.36	22400	5	490R-1404
54.0	08	22	5.50	1		5	490-054Q22-08M	22.0	A		40.0	1.2	0.69	24300	5	490R-08T308
	14	22	10.00	1		4	490-054Q22-14M	22.0	A		40.0	3.0	0.67	13000	4	490R-1404
63.0	08	22	5.50	1		5	490-063Q22-08L	22.0	A		40.0	1.2	0.77	22200	5	490R-08T308
	08	22	5.50	1		6	490-063Q22-08M	22.0	A		40.0	1.2	0.53	22200	6	490R-08T308
	08	22	5.50	1	8		490-063Q22-08H	22.0	A		40.0	1.2	0.50	22200	8	490R-08T308
	14	22	10.00	1		5	490-063Q22-14M	22.0	A		40.0	3.0	0.51	11700	5	490R-1404
	14	22	10.00	1	6		490-063Q22-14H	22.0	A		40.0	3.0	0.71	11700	6	490R-1404
66.0	08	22	5.50	1		6	490-066Q22-08M	22.0	A		40.0	1.2	0.75	21600	6	490R-08T308
	14	22	10.00	1		5	490-066Q22-14M	22.0	A		40.0	3.0	0.76	11400	5	490R-1404
80.0	08	27	5.50	1		6	490-080Q27-08L	27.0	A		50.0	1.2	1.43	19400	6	490R-08T308
	08	27	5.50	1		8	490-080Q27-08M	27.0	A		50.0	1.2	1.39	19400	8	490R-08T308
	08	27	5.50	1		10	490-080Q27-08H	27.0	A		50.0	1.2	1.20	19400	10	490R-08T308
	14	27	10.00	1		6	490-080Q27-14M	27.0	A		50.0	3.0	1.11	10100	6	490R-1404
	14	27	10.00	1	8		490-080Q27-14H	27.0	A		50.0	3.0	1.12	10100	8	490R-1404
84.0	08	27	5.50	1		8	490-084Q27-08M	27.0	A		50.0	1.2	1.78	18900	8	490R-08T308
	14	27	10.00	1		6	490-084Q27-14M	27.0	A		50.0	3.0	1.61	9800	6	490R-1404
100.0	08	32	5.50	0		6	490-100Q32-08L	32.0	B		50.0	1.2	2.15	17100	6	490R-08T308
	08	32	5.50	0		8	490-100Q32-08M	32.0	B		50.0	1.2	2.10	17100	8	490R-08T308
	08	32	5.50	0		10	490-100Q32-08H	32.0	B		50.0	1.2	2.10	17100	10	490R-08T308
	14	32	10.00	1		5	490-100Q32-14L	32.0	B		50.0	3.0	2.07	8900	5	490R-1404
	14	32	10.00	1		7	490-100Q32-14M	32.0	B		50.0	3.0	1.99	8900	7	490R-1404
	14	32	10.00	1	10		490-100Q32-14H	32.0	B		50.0	3.0	2.00	8900	10	490R-1404
125.0	08	40	5.50	0		8	490-125Q40-08L	40.0	B		63.0	1.2	3.51	15200	8	490R-08T308
	08	40	5.50	0		10	490-125Q40-08M	40.0	B		63.0	1.2	3.44	15200	10	490R-08T308
	08	40	5.50	0		12	490-125Q40-08H	40.0	B		63.0	1.2	3.46	15200	12	490R-08T308
	14	40	10.00	1		6	490-125Q40-14L	40.0	B		63.0	3.0	3.37	7800	6	490R-1404
	14	40	10.00	1		8	490-125Q40-14M	40.0	B		63.0	3.0	3.05	7800	8	490R-1404
	14	40	10.00	1	12		490-125Q40-14H	40.0	B		63.0	3.0	3.29	7800	12	490R-1404
160.0	14	40S	10.00	0		8	490-160Q40-14L	40.0	C	66.7	63.0	3.0	5.05	6800	8	490R-1404
	14	40S	10.00	0		12	490-160Q40-14M	40.0	C	66.7	63.0	3.0	5.01	6800	12	490R-1404
	14	40S	10.00	0	15		490-160Q40-14H	40.0	C	66.7	63.0	3.0	5.06	6800	15	490R-1404
200.0	14	60	10.00	0		10	490-200Q60-14L	60.0	C	101.6	63.0	3.0	13.11	6000	10	490R-1404
	14	60	10.00	0		16	490-200Q60-14M	60.0	C	101.6	63.0	3.0	11.79	6000	16	490R-1404
250.0	14	60	10.00	0		12	490-250Q60-14L	60.0	C	101.6	63.0	3.0	15.50	5300	12	490R-1404
	14	60	10.00	0		18	490-250Q60-14M	60.0	C	101.6	63.0	3.0	17.52	5300	18	490R-1404

Para componentes, visite www.sandvik.coromant.com

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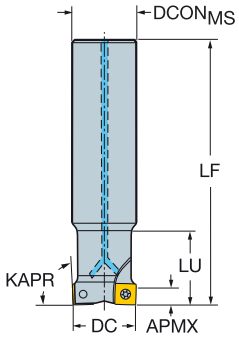
SANDVIK Coromant

Fresa CoroMill® 490 para cantos a 90 graus

Haste cilíndrica - refrigeração interna



KAPR 90°



DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	LF	LU	NM	KG	RPMX	CICT	MIID
20.0	08	16	5.50	1	2		490-020A16-08L	16.0	100.0		1.2	0.24	48500	2	490R-08T308
	08	20	5.50	1	2		490-020A20-08L	20.0	110.0	25.0	1.2	0.33	48500	2	490R-08T308
22.0	08	20	5.50	1	2		490-022A20L-08L	20.0	170.0		1.2	0.47	20300	2	490R-08T308
25.0	08	20	5.50	1	2		490-025A20-08L	20.0	110.0		1.2	0.34	40400	2	490R-08T308
	08	25	5.50	1	2		490-025A25-08L	25.0	120.0	32.0	1.2	0.49	40400	2	490R-08T308
	08	20	5.50	1	3		490-025A20-08M	20.0	110.0		1.2	0.32	40400	3	490R-08T308
	08	25	5.50	1	3		490-025A25-08M	25.0	120.0	32.0	1.2	0.46	40400	3	490R-08T308
28.0	08	25	5.50	1	2		490-028A25L-08L	25.0	210.0		1.2	0.84	11000	2	490R-08T308
32.0	08	25	5.50	1		3	490-032A25-08L	25.0	120.0		1.2	0.55	33900	3	490R-08T308
	08	32	5.50	1		3	490-032A32-08L	32.0	130.0	40.0	1.2	0.81	33900	3	490R-08T308
	08	25	5.50	1	4		490-032A25-08M	25.0	120.0		1.2	0.55	33900	4	490R-08T308
	08	32	5.50	1	4		490-032A32-08M	32.0	130.0	40.0	1.2	0.81	33900	4	490R-08T308
40.0	08	32	5.50	1		3	490-040A32-08L	32.0	170.0		1.2	1.18	20300	3	490R-08T308
	08	32	5.50	1		4	490-040A32-08M	32.0	170.0		1.2	1.16	20300	4	490R-08T308
	08	32	5.50	1	6		490-040A32-08H	32.0	170.0		1.2	1.18	20300	6	490R-08T308
	14	32	10.00	1		3	490-040A32-14M	32.0	170.0		3.0	1.12	26400	3	490R-1404
	14	32	10.00	1		3	490-040A32L-14M	32.0	250.0		3.0	1.77	7600	3	490R-1404
	14	32	10.00	1	4		490-040A32-14H	32.0	170.0		3.0	1.13	26400	4	490R-1404
50.0	14	32	10.00	1		3	490-050A32-14L	32.0	120.0		3.0	1.07	13700	3	490R-1404
	14	32	10.00	1		4	490-050A32-14M	32.0	120.0		3.0	0.90	13700	4	490R-1404
63.0	14	32	10.00	1		4	490-063A32-14L	32.0	120.0		3.0	1.43	11700	4	490R-1404
	14	32	10.00	1		5	490-063A32-14M	32.0	120.0		3.0	1.43	11700	5	490R-1404

	Componentes		
	Parafuso da pastilha	Calço	Parafuso do calço
08	5513 020-35		
14	5513 020-72	5322 471-01	5512 090-01

Para a lista completa de componentes, acesse www.sandvik.coromant.com

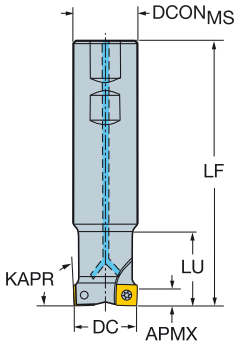
I55 L2 N23 N6 N9 N15

Fresa CoroMill® 490 para cantos a 90 graus

Weldon - Refrigeração interna



KAPR 90°



DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	LB	LF	LU	NM	KG	RPMX	CICT	MIID
20.0	08	16	5.50	1	2		490-020B16-08L	16.0	WE	25.0	74.0		1.2	0.20	48500	2	490R-08T308
	08	20	5.50	1	2		490-020B20-08L	20.0	WE	25.0	76.0	25.0	1.2	0.25	48500	2	490R-08T308
25.0	08	20	5.50	1	2		490-025B20-08L	20.0	WE	32.0	83.0		1.2	0.28	40400	2	490R-08T308
	08	25	5.50	1	3		490-025B25-08M	25.0	WE	32.0	88.0	32.0	1.2	0.37	40400	3	490R-08T308
32.0	08	25	5.50	1		3	490-032B25-08L	25.0	WE	40.0	98.0		1.2	0.46	33900	3	490R-08T308
	08	32	5.50	1		3	490-032B32-08L	32.0	WE	40.0	100.0	40.0	1.2	0.62	33900	3	490R-08T308
	08	25	5.50	1	4		490-032B25-08M	25.0	WE	40.0	98.0		1.2	0.47	33900	4	490R-08T308
	08	32	5.50	1	4		490-032B32-08M	32.0	WE	40.0	100.0	40.0	1.2	0.62	33900	4	490R-08T308
40.0	08	32	5.50	1		4	490-040B32-08M	32.0	WE	50.0	112.0		1.2	0.79	29300	4	490R-08T308
	08	32	5.50	1	6		490-040B32-08H	32.0	WE	50.0	112.0		1.2	0.81	29300	6	490R-08T308
	14	32	10.00	1		3	490-040B32-14M	32.0	WE	50.0	112.0		3.0	0.76	26400	3	490R-1404
	14	32	10.00	1	4		490-040B32-14H	32.0	WE	50.0	112.0		3.0	0.77	26400	4	490R-1404

	Componentes
	Parafuso da pastilha
08	5513 020-35
14	5513 020-72

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I55 L2 N23 N6 N9 N15

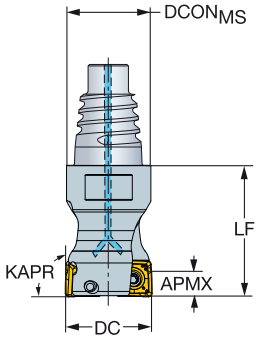
POR

Fresa CoroMill® 490 para cantos a 90 graus

Coromant EH - Refrigeração interna

KAPR 90°





DC		CZCMS	APMXFFW	CNSC			Código para pedido	Dimensões, mm DCONMS	LF	NM	KG	RPMX	CICT	MIID
20.0	08	E20	5.50	1	2		**490-020EH20-08L**	19.3	30.0	1.2	0.14	48500	2	490R-08T308
25.0	08	E25	5.50	1	2		**490-025EH25-08L**	24.2	35.0	1.2	0.18	40400	2	490R-08T308
	08	E25	5.50	1	3		**490-025EH25-08M**	24.2	35.0	1.2	0.19	40400	3	490R-08T308
32.0	08	E25	5.50	1		3	**490-032EH25-08L**	24.2	35.0	1.2	0.21	33900	3	490R-08T308
	08	E25	5.50	1	4		**490-032EH25-08M**	24.2	35.0	1.2	0.18	33900	4	490R-08T308

		Componentes
DC		Parafuso da pastilha
20.00	08	5513 020-36
25.00-32.00	08	5513 020-35

Para a lista completa de componentes, acesse www.sandvik.coromant.com

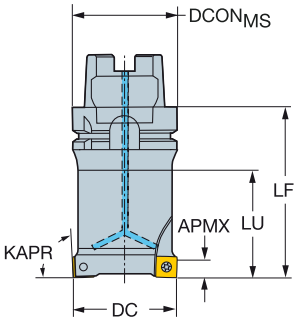
I55 L2 N23 N6 N9 N15 N3

Fresa CoroMill® 490 para cantos a 90 graus

HSK - Refrigeração interna



KAPR 90°



DC		CZCMS	APMXFFW	CNSC		Código para pedido	Dimensões, mm DCONMS	ISO	LF	LU	NM	KG	RPMX	CICT	MIID
20.0	08	63	5.50	1	2	490-020HA06-08L	63.0	A	95.0	40.0	1.2	1.27	30000	2	490R-08T308
25.0	08	63	5.50	1	3	490-025HA06-08M	63.0	A	95.0	50.0	1.2	1.25	30000	3	490R-08T308
32.0	08	63	5.50	1	4	490-032HA06-08M	63.0	A	95.0	58.0	1.2	1.33	30000	4	490R-08T308
40.0	08	63	5.50	1	6	490-040HA06-08H	63.0	A	95.0	58.0	1.2	1.57	29300	6	490R-08T308
50.0	08	63	5.50	1	5	490-050HA06-08M	63.0	A	95.0	63.0	1.2	1.84	25500	5	490R-08T308
	08	63	5.50	1	7	490-050HA06-08H	63.0	A	95.0	58.0	1.2	1.86	25500	7	490R-08T308
63.0	08	63	5.50	1	6	490-063HA06-08M	63.0	A	70.0	44.0	1.2	1.81	22200	6	490R-08T308
	08	63	5.50	1	8	490-063HA06-08H	63.0	A	70.0	44.0	1.2	1.80	22200	8	490R-08T308
80.0	08	63	5.50	1	8	490-080HA06-08M	63.0	A	70.0		1.2	2.03	19400	8	490R-08T308

Componentes
Parafuso da pastilha
5513 020-35

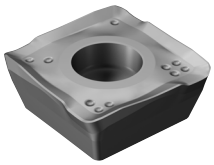
Para a lista completa de componentes, acesse www.sandvik.coromant.com

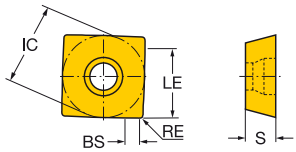
I55 L2 N23 N6 N9 N15

SANDVIK Coromant

Pastilha CoroMill® 490 para fresamento

KRINS 90°





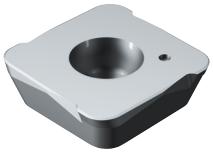
			RE	Código para pedido	P					M					K					N		S				H			Dimensões, mm			
					1130	4220	4330	4340	530	1040	1130	2040	4340	530	1020	3040	3220	3330	H13A	1130	H13A	1130	H13A	S30T	S40T	1010	1130	530	IC	LE	S	BS
Leve	KL	08	0.40	490R-08T304M-KL											★	☆		☆											8.5	5.6	3.30	1.5
			0.80	490R-08T308M-KL											★	☆		☆											8.5	5.6	3.30	1.2
	ML	08	0.40	490R-08T304E-ML						★		☆									★		☆						8.5	5.6	3.30	1.5
			0.80	490R-08T308E-ML	★					★	☆	☆								☆	★	☆	☆	★	☆		☆		8.5	5.6	3.30	1.2
		14	0.80	490R-140408E-ML						★		☆							☆		★		☆	★	☆				13.8	10.3	3.90	2.0
	PL	08	0.40	490R-08T304M-PL	★		★	☆			☆		☆									☆					☆		8.5	5.6	3.30	1.5
			0.80	490R-08T308M-PL	★	☆	★	☆	☆		☆		☆	☆								☆				★	☆	☆	8.5	5.6	3.30	1.2
		14	0.80	490R-140408M-PL	★		★	☆			☆		☆		★	☆		☆		☆		☆					☆		13.8	10.3	3.90	2.0
Média	KM	08	0.80	490R-08T308M-KM											☆	☆	☆	★											8.5	5.6	3.30	1.2
			1.20	490R-08T312M-KM											☆	☆		★											8.5	5.6	3.30	0.9
			1.60	490R-08T316M-KM											☆			★											8.5	5.6	3.30	0.6
	MM	08	0.80	490R-08T308E-MM	★					★	☆	☆										☆		★	☆				8.5	5.6	3.30	1.2
			0.80	490R-08T308M-MM						★		☆												★	☆				8.5	5.6	3.30	1.2
			1.20	490R-08T312E-MM						★		☆																	8.5	5.6	3.30	0.9
			1.60	490R-08T316E-MM						★		☆																	8.5	5.6	3.30	0.6
		14	0.80	490R-140408E-MM						★		☆																	13.8	10.3	3.90	2.0
			0.80	490R-140408M-MM						★		☆												★	☆				13.8	10.3	3.90	2.0
			1.20	490R-140412E-MM						★		☆												★	☆				13.8	10.3	3.90	1.6
			1.60	490R-140416E-MM						★		☆																	13.8	10.3	3.90	1.2
			2.00	490R-140420E-MM						★		☆																	13.8	10.3	3.90	0.9
			2.00	490R-140420M-MM						★		☆																	13.8	10.3	3.90	0.9
	PM	08	0.80	490R-08T308M-PM	★	☆	★	☆			☆		☆									☆				★	☆		8.5	5.6	3.30	1.2
			1.20	490R-08T312M-PM	★	☆	★	☆			☆		☆									☆				★	☆		8.5	5.6	3.30	0.9
			1.60	490R-08T316M-PM	★	☆	★	☆			☆		☆									☆				★	☆		8.5	5.6	3.30	0.6
		14	0.80	490R/L-140408M-PM			★									☆	☆												13.8	10.3	3.90	2.0
			0.80	490R-140408M-PM	★	☆		☆			☆		☆		☆			★		☆		☆					☆		13.8	10.3	3.90	2.0
			1.20	490R-140412M-PM	★		★	☆			☆		☆		☆	☆	☆	★		☆		☆					☆		13.8	10.3	3.90	2.0
			1.60	490R-140416M-PM	★		★	☆			☆		☆		☆	☆	☆	★		☆		☆					☆		13.8	10.3	3.90	1.2
			2.00	490R-140420M-PM	★	☆	★	☆			☆		☆		☆	☆	☆	★		☆		☆					☆		13.8	10.3	3.90	0.9
Pesada	KH	08	0.80	490R-08T308M-KH											☆	☆	☆	★											8.5	5.6	3.30	1.2
			1.60	490R-08T316M-KH											☆			★											8.5	5.6	3.30	0.6
	PH	08	0.80	490R-08T308M-PH	☆	☆	☆	★			☆		☆									☆					☆		8.5	5.6	3.30	1.2
			1.60	490R-08T316M-PH	☆	☆	☆	★			☆		☆									☆					☆		8.5	5.6	3.30	0.6
		14	0.80	490R-140408M-PH	☆	☆	☆	★			☆		☆		☆	☆	☆	★		☆		☆					☆		13.8	10.3	3.90	2.0
			2.00	490R-140420M-PH	☆	☆	☆	★			☆		☆		☆	☆	☆	★		☆		☆					☆		13.8	10.3	3.90	0.9

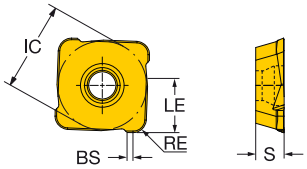
I48 I154 I175 N23 N10

Pastilha CoroMill® 490 para fresamento

Materiais de corte avançados

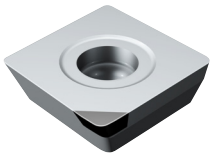
KRINS 90°

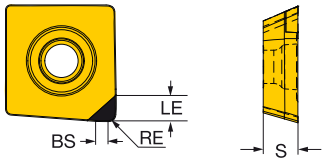




					K	H	Dimensões, mm			
			RE	Código para pedido	6190	6190	IC	LE	S	BS
Média	PO	14	2.00	490R-140420E	★	☆	13.8	5.0	3.90	0.8
			2.00	490R-140408E	★		13.8	5.0	3.90	0.8

KRINS 90°





					K	H	Dimensões, mm			
			RE	Código para pedido	CB50	CB50	IC	LE	S	BS
Média	PO	14	0.80	490R-140408E	☆	★	13.8	2.0	3.90	1.5

I48 I154 I175 N23 N10

CoroMill® 390

Fresas para cantos a 90 graus versáteis com capacidade para usinagem em rampa na produção mista

Aplicação

- Fresamento de cantos a 90°
- Fresamento de cantos a 90° repetido
- Torno-fresamento
- Fresamento de cantos a 90° profundos
- Usinagem de borda
- Usinagem de bolsões
- Usinagem em rampa linear e helicoidal

Área de aplicação ISO:

P M K N S H



Características e benefícios

- Tolerâncias estreitas propiciam excelente acabamento superficial e ressaltos mínimos
- Profundidade de corte grande e capacidade para usinar em rampa acentuada
- Está disponível diâmetro maior para folga
- Tecnologia antivibratória Silent Tools™ integrada para maior remoção de metais e melhor acabamento superficial
- Disponível em uma versão mais curta para centros de torneamento
- Refrigeração interna na maioria das fresas

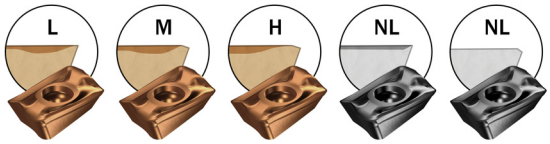
www.sandvik.coromant.com/coromill390

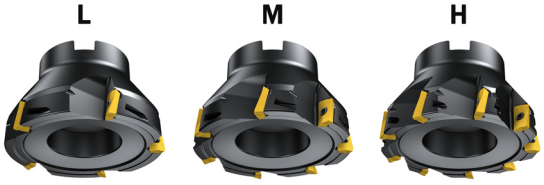
Corpos da fresa

- Coromant Capto®
- Árvore
- Haste cilíndrica
- Weldon
- Coromant EH
- Acoplamento com rosca
- Versões de tamanhos grandes estão disponíveis para as fresas tipo árvore, Coromant Capto® e Coromant EH
- Hastes muito pequenas em fresas cilíndricas

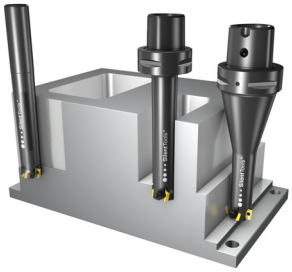
Pastilhas

- Duas arestas de corte
- Classes de metal duro e de PCD
- As geometrias de pastilhas de corte leve e as classes de alto desempenho foram projetadas para uma usinagem sem vibrações e com baixas forças de corte, proporcionando um fresamento seguro em todos os materiais





Passo largo Passo fino Passo extra fino



Os corpos de fresas antivibratórios Silent Tools aumentam a produtividade com longos balanços


I58


I74



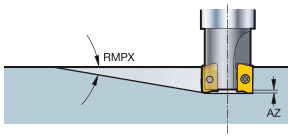
N6

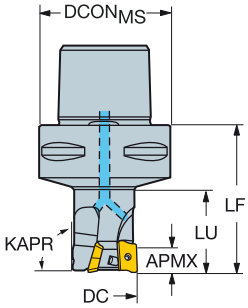
Fresa CoroMill® 390 para cantos a 90 graus

Coromant Capto® - Refrigeração interna



KAPR 90°





DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	LF	LU	NM	KG	RPMX	CICT	MIID
16.0	11	C3	5.5	10.00	10°	1.0	3	2		R390-016C3-11L050	32.0	50.0	25.0	1.2	0.28	39000	2	R390-11..
	11	C4	5.5	10.00	10°	1.0	3	2		R390-016C4-11L	40.0	50.0	25.0	1.2	0.41	39000	2	R390-11..
20.0	11	C3	5.5	10.00	5°	1.0	3	2		R390-020C3-11L050	32.0	50.0	25.0	1.2	0.29	34600	2	R390-11..
	11	C4	5.5	10.00	5°	1.0	3	2		R390-020C4-11L	40.0	50.0	25.0	1.2	0.42	34600	2	R390-11..
	11	C3	5.5	10.00	5°	1.0	3	3		R390-020C3-11M050	32.0	50.0	25.0	1.2	0.29	34600	3	R390-11..
	11	C5	5.5	10.00	5°	1.0	3	3		R390-020C5-11M095	50.0	95.0	40.0	1.2	1.00	34600	3	R390-11..
	11	C6	5.5	10.00	5°	1.0	3	3		R390-020C6-11M110	63.0	110.0	40.0	1.2	1.75	34600	3	R390-11..
25.0	11	C3	5.5	10.00	5°	1.0	3	2		R390-025C3-11L050	32.0	50.0	32.0	1.2	0.31	36500	2	R390-11..
	11	C4	5.5	10.00	5°	1.0	3	2		R390-025C4-11L	40.0	55.0	32.0	1.2	0.42	36500	2	R390-11..
	11	C3	5.5	10.00	5°	1.0	3	3		R390-025C3-11M050	32.0	50.0	32.0	1.2	0.28	36500	3	R390-11..
	11	C4	5.5	10.00	5°	1.0	3	3		R390-025C4-11M	40.0	55.0	32.0	1.2	0.44	36500	3	R390-11..
	11	C5	5.5	10.00	5°	1.0	3	3		R390-025C5-11M095	50.0	95.0	45.0	1.2	1.06	36500	3	R390-11..
	11	C6	5.5	10.00	5°	1.0	3	3		R390-025C6-11M110	63.0	110.0	45.0	1.2	1.60	36500	3	R390-11..
32.0	11	C3	5.5	10.00	3°	1.0	3		2	R390-032C3-11L050	32.0	50.0	35.0	1.2	0.38	31000	2	R390-11..
	11	C3	5.5	10.00	3°	1.0	3		3	R390-032C3-11M050	32.0	50.0	35.0	1.2	0.38	31000	3	R390-11..
	11	C4	5.5	10.00	3°	1.0	3		3	R390-032C4-11M	40.0	65.0	40.0	1.2	0.52	31000	3	R390-11..
	11	C5	5.5	10.00	3°	1.0	3		3	R390-032C5-11M	50.0	65.0	40.0	1.2	0.88	31000	3	R390-11..
	11	C5	5.5	10.00	3°	1.0	3		3	R390-032C5-11M095	50.0	95.0	50.0	1.2	1.10	31000	3	R390-11..
	11	C6	5.5	10.00	3°	1.0	3	3		R390-032C6-11M080	63.0	80.0	40.0	1.2	1.52	31000	3	R390-11..
	11	C6	5.5	10.00	3°	1.0	3		3	R390-032C6-11M110	63.0	110.0	50.0	1.2	1.81	31000	3	R390-11..
36.0	11	C3	5.5	10.00	2°	1.0	3	3		R390-036C3-11M050	32.0	50.0		1.2	0.38	29000	3	R390-11..
	11	C3	5.5	10.00	2°	1.0	3	3		R390-036C3-11M075	32.0	75.0		1.2	0.54	29000	3	R390-11..
40.0	11	C4	5.5	10.00	2°	1.0	3		4	R390-040C4-11M	40.0	70.0	70.0	1.2	0.82	27000	4	R390-11..
	11	C5	5.5	10.00	2°	1.0	3		4	R390-040C5-11M	50.0	75.0	50.0	1.2	1.05	27000	4	R390-11..
	11	C6	5.5	10.00	2°	1.0	3	4		R390-040C6-11M080	63.0	80.0	40.0	1.2	1.20	27000	4	R390-11..
	11	C4	5.5	10.00	2°	1.0	3		6	R390-040C4-11H	40.0	70.0	50.0	1.2	0.56	27000	6	R390-11..
	11	C5	5.5	10.00	2°	1.0	3		6	R390-040C5-11H	50.0	75.0	50.0	1.2	1.07	27000	6	R390-11..
	18	C4	1.1	15.40	6°	0.0	3	3		R390-040C4-18M060	40.0	60.0	40.0	3.0	0.48	9200	3	R390-18..
	18	C5	1.1	15.40	6°	0.0	3	3		R390-040C5-18M080	50.0	80.0	40.0	3.0	1.13	9200	3	R390-18..
	18	C6	1.1	15.40	6°	0.0	3	3		R390-040C6-18M100	63.0	100.0	50.0	3.0	1.91	9200	3	R390-18..
44.0	11	C4	5.5	10.00	1°	1.0	3	4		R390-044C4-11M060	40.0	60.0		1.2	0.77	25600	4	R390-11..
	11	C4	5.5	10.00	1°	1.0	3	4		R390-044C4-11M075	40.0	75.0		1.2	0.88	25600	4	R390-11..
	18	C4	1.1	15.40	6°	0.0	3	2		R390-044C4-18L080	40.0	80.0		3.0	1.10	8600	2	R390-18..
	18	C4	1.1	15.40	6°	0.0	3	3		R390-044C4-18M060	40.0	60.0		3.0	0.80	8600	3	R390-18..
	18	C4	1.1	15.40	6°	0.0	3	3		R390-044C4-18M080	40.0	80.0		3.0	1.00	8600	3	R390-18..
50.0	11	C5	5.5	10.00	1°	1.0	3	5		R390-050C5-11M060	50.0	60.0	40.0	1.2	1.08	23700	5	R390-11..
	11	C6	5.5	10.00	1°	1.0	3	5		R390-050C6-11M080	63.0	80.0	40.0	1.2	1.82	23700	5	R390-11..
	18	C5	1.1	15.40	5°	0.0	3	4		R390-050C5-18M060	50.0	60.0	40.0	3.0	1.08	7900	4	R390-18..
	18	C6	1.1	15.40	5°	0.0	3	4		R390-050C6-18M080	63.0	80.0	40.0	3.0	1.85	7900	4	R390-18..
54.0	11	C5	5.5	10.00	1°	1.0	3	5		R390-054C5-11M060	50.0	60.0		1.2	1.09	22700	5	R390-11..
	11	C5	5.5	10.00	1°	1.0	3	5		R390-054C5-11M080	50.0	80.0		1.2	1.60	22700	5	R390-11..
	18	C5	1.1	15.40	5°	0.0	3	4		R390-054C5-18M060	50.0	60.0		3.0	1.28	7500	4	R390-18..
	18	C5	1.1	15.40	5°	0.0	3	4		R390-054C5-18M080	50.0	80.0		3.0	1.58	7500	4	R390-18..
63.0	11	C5	5.5	10.00	1°	1.0	3	6		R390-063C5-11M060	50.0	60.0		1.2	1.53	20700	6	R390-11..
	11	C6	5.5	10.00	1°	1.0	3	6		R390-063C6-11M080	63.0	80.0	40.0	1.2	2.25	20700	6	R390-11..
	18	C5	1.1	15.40	4°	0.0	3	5		R390-063C5-18M060	50.0	60.0		3.0	1.45	6800	5	R390-18..
	18	C6	1.1	15.40	4°	0.0	3	5		R390-063C6-18M060	63.0	60.0	38.0	3.0	1.81	6800	5	R390-18..

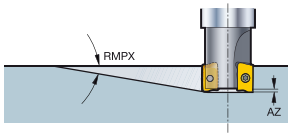
I74 L2 N23 N6 N9 N15

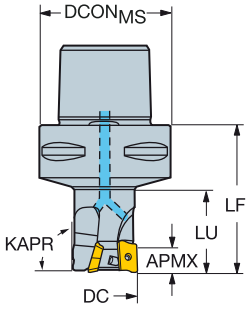
Fresa CoroMill® 390 para cantos a 90 graus

Coromant Capto® - Refrigeração interna

KAPR 90°







DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	LF	LU	NM	KG	RPMX	CICT	MIID
66.0	11	C6	5.5	10.00	1°	1.0	3	6	R390-066C6-11M060	63.0	60.0		1.2	1.88	20200	6	R390-11..
	11	C6	5.5	10.00	1°	1.0	3	6	R390-066C6-11M080	63.0	80.0		1.2	2.30	20200	6	R390-11..
	18	C6	1.1	15.40	3°	0.0	3	5	R390-066C6-18M060	63.0	60.0		3.0	1.83	6700	5	R390-18..
	18	C6	1.1	15.40	3°	0.0	3	5	R390-066C6-18M080	63.0	80.0		3.0	2.25	6700	5	R390-18..
80.0	11	C6	5.5	10.00	0°	1.0	3	7	R390-080C6-11M060	63.0	60.0		1.2	2.14	18200	7	R390-11..
	11	C6	5.5	10.00	0°	1.0	3	7	R390-080C6-11M080	63.0	80.0		1.2	2.71	18200	7	R390-11..
	18	C6	1.1	15.40	3°	0.0	3	6	R390-080C6-18M060	63.0	60.0		3.0	1.80	5900	6	R390-18..
84.0	18	C8	1.1	15.40	2°	0.0	3	6	R390-084C8-18M070	80.0	70.0		3.0	3.39	5800	6	R390-18..
	18	C8	1.1	15.40	2°	0.0	3	6	R390-084C8-18M100	80.0	100.0		3.0	4.50	5800	6	R390-18..

	Componentes
DC	Parafuso da pastilha
16.00-20.00	5513 020-36
25.00-80.00	5513 020-35
40.00-84.00	5513 020-29

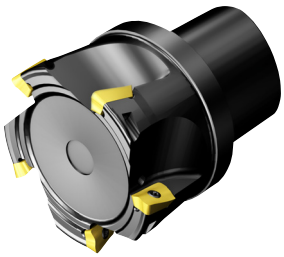
Para a lista completa de componentes, acesse www.sandvik.coromant.com

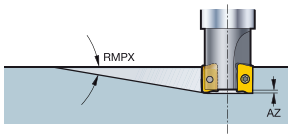
I74 L2 N23 N6 N9 N15

Fresa CoroMill® 390 para cantos a 90 graus

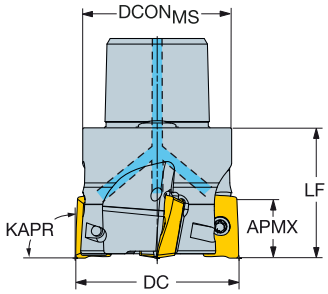
Coromant Capto® - Refrigeração interna

Versão curta sem canais para garra





KAPR 90°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	LF	NM	KG	RPMX	CICT	MIID
44.0	11	C4	5.5	10.00	1°	1.0	3	4	**R390-044C4T-11H**	40.0	35.0	1.2	0.40	25600	4	R390-11..
	17	C4	8.5	15.70	3°	1.5	3	4	**R390-044C4T-17M**	40.0	35.0	3.0	0.35	20600	4	R390-17..
54.0	11	C5	5.5	10.00	1°	1.0	3	5	**R390-054C5T-11H**	50.0	35.0	1.2	0.62	22700	5	R390-11..
	17	C5	8.5	15.70	2°	1.5	3	5	**R390-054C5T-17M**	50.0	35.0	3.0	0.94	18200	5	R390-17..

Nota: Somente para fixação por segmento.

	Componentes
	Parafuso da pastilha
11	5513 020-35
17	5513 020-39

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 N23 N6 N9 N15

SANDVIK Coromant

POR

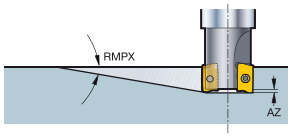
Fresa CoroMill® 390 para cantos a 90 graus

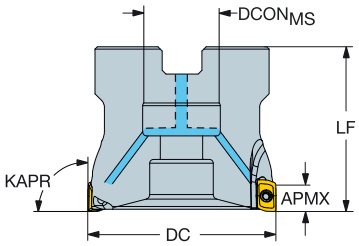
Árvore - refrigeração interna

Fresa para cantos a 90 graus Lightweight

STDNO ISO6462
KAPR 90°







DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	ISO	LF	NM	KG	RPMX	CICT	MIID
40.0	11	16	5.5	10.00	2°	1.0	1	3	**R390-040Q16LW-11L**	16.0	A	30.0	1.2	0.05	10000	3	R390-11..
	11	16	5.5	10.00	2°	1.0	1	4	**R390-040Q16LW-11M**	16.0	A	30.0	1.2	0.05	10000	4	R390-11..
50.0	11	22	5.5	10.00	1°	1.0	1	3	**R390-050Q22LW-11L**	22.0	A	30.0	1.2	0.07	10000	3	R390-11..
	11	22	5.5	10.00	1°	1.0	1	4	**R390-050Q22LW-11M**	22.0	A	30.0	1.2	0.07	10000	4	R390-11..

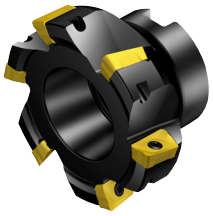
		Componentes	
DC		Parafuso da pastilha	Parafuso
40.00	11	5513 020-35	3213 010-412
50.00	11	5513 020-35	3213 010-461

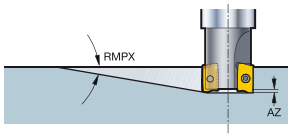
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 M1 N23 N6 N9 N15

Fresa CoroMill® 390 para cantos a 90 graus

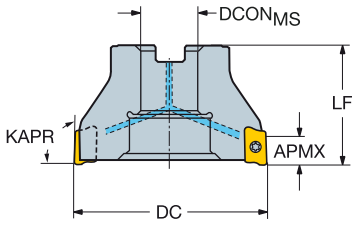
Árvore - refrigeração interna





STDNO
KAPR

ISO 6462
90°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	LF	NM	KG	RPMX	CICT	MIID
40.0	07	16	2.0	5.80	0°	0.5	1		7	R390-040Q16-07M	16.0	A	35.0	0.5	0.20	21500	7	390R-07..
	07	16	2.0	5.80	0°	0.5	1		10	R390-040Q16-07H	16.0	A	35.0	0.5	0.20	21500	10	390R-07..
	11	16	5.5	10.00	2°	1.0	1		4	R390-040Q16-11M	16.0	A	40.0	1.2	0.44	27000	4	R390-11..
	11	16	5.5	10.00	2°	1.0	1		6	R390-040Q16-11H	16.0	A	40.0	1.2	0.50	27000	6	R390-11..
	17	16	8.5	15.70	3°	1.5	1	2		R390-040Q16-17L	16.0	A	40.0	3.0	0.38	21900	2	R390-17..
	17	16	8.5	15.70	3°	1.5	1		3	R390-040Q16-17M	16.0	A	40.0	3.0	0.46	21900	3	R390-17..
	17	16	8.5	15.70	3°	1.5	1	4		R390-040Q16-17H	16.0	A	40.0	3.0	0.20	21900	4	R390-17..
44.0	11	16	5.5	10.00	1°	1.0	1		4	R390-044Q16-11M	16.0	A	40.0	1.2	0.20	25600	4	R390-11..
	17	16	8.5	15.70	3°	1.5	1		3	R390-044Q16-17M	16.0	A	40.0	3.0	0.20	20600	3	R390-17..
50.0	11	22	5.5	10.00	1°	1.0	1		5	R390-050Q22-11M	22.0	A	40.0	1.2	0.35	23700	5	R390-11..
	11	22	5.5	10.00	1°	1.0	1		7	R390-050Q22-11H	22.0	A	40.0	1.2	0.38	23700	7	R390-11..
	17	22	8.5	15.70	2°	1.5	1		3	R390-050Q22-17L	22.0	A	40.0	3.0	0.35	19000	3	R390-17..
	17	22	8.5	15.70	2°	1.5	1		4	R390-050Q22-17M	22.0	A	40.0	3.0	0.32	19000	4	R390-17..
	17	22	8.5	15.70	2°	1.5	1		5	R390-050Q22-17H	22.0	A	40.0	3.0	0.30	19000	5	R390-17..
	18	22	1.1	15.40	5°	0.0	1		3	R390-050Q22-18L	22.0	A	40.0	3.0	0.59	7900	3	R390-18..
	18	22	1.1	15.40	5°	0.0	1		4	R390-050Q22-18M	22.0	A	40.0	3.0	0.58	7900	4	R390-18..
	18	22	1.1	15.40	5°	0.0	1	5		R390-050Q22-18H	22.0	A	40.0	3.0	0.30	7900	5	R390-18..
54.0	11	22	5.5	10.00	1°	1.0	1		5	R390-054Q22-11M	22.0	A	40.0	1.2	0.39	22600	5	R390-11..
	17	22	8.5	15.70	2°	1.5	1		4	R390-054Q22-17M	22.0	A	40.0	3.0	0.37	18200	4	R390-17..
	18	22	1.1	15.40	5°	0.0	1		4	R390-054Q22-18M	22.0	A	40.0	3.0	0.30	7500	4	R390-18..
63.0	11	22	5.5	10.00	1°	1.0	1		6	R390-063Q22-11M	22.0	A	40.0	1.2	0.68	20700	6	R390-11..
	11	22	5.5	10.00	1°	1.0	1		8	R390-063Q22-11H	22.0	A	40.0	1.2	0.48	20700	8	R390-11..
	17	22	8.5	15.70	2°	1.5	1		4	R390-063Q22-17L	22.0	A	40.0	3.0	0.50	16500	4	R390-17..
	17	22	8.5	15.70	2°	1.5	1		5	R390-063Q22-17M	22.0	A	40.0	3.0	0.48	16500	5	R390-17..
	17	22	8.5	15.70	2°	1.5	1		6	R390-063Q22-17H	22.0	A	40.0	3.0	0.68	16500	6	R390-17..
	18	22	1.1	15.40	4°	0.0	1		4	R390-063Q22-18L	22.0	A	40.0	3.0	0.81	6800	4	R390-18..
	18	22	1.1	15.40	4°	0.0	1		5	R390-063Q22-18M	22.0	A	40.0	3.0	0.70	6800	5	R390-18..
	18	22	1.1	15.40	4°	0.0	1	6		R390-063Q22-18H	22.0	A	40.0	3.0	0.70	6800	6	R390-18..
66.0	11	22	5.5	10.00	3°	1.0	1		6	R390-066Q22-11M	22.0	A	40.0	1.2	0.72	20200	6	R390-11..
	17	22	8.5	15.70	1°	1.5	1		5	R390-066Q22-17M	22.0	A	40.0	3.0	0.50	16100	5	R390-17..
	18	22	1.1	15.40	3°	0.0	1		6	R390-066Q22-18M	22.0	A	40.0	3.0	0.71	6700	5	R390-18..
80.0	11	27	5.5	10.00	0°	1.0	1		7	R390-080Q27-11M	27.0	A	50.0	1.2	1.08	18200	7	R390-11..
	11	27	5.5	10.00	0°	1.0	1		10	R390-080Q27-11H	27.0	A	50.0	1.2	0.72	18200	10	R390-11..
	17	27	8.5	15.70	1°	1.5	1		4	R390-080Q27-17L	27.0	A	50.0	3.0	1.06	14400	4	R390-17..
	17	27	8.5	15.70	1°	1.5	1		6	R390-080Q27-17M	27.0	A	50.0	3.0	0.96	14400	6	R390-17..
	17	27	8.5	15.70	1°	1.5	1		8	R390-080Q27-17H	27.0	A	50.0	3.0	0.94	14400	8	R390-17..
	18	27	1.1	15.40	3°	0.0	1		4	R390-080Q27-18L	27.0	A	50.0	3.0	1.05	5900	4	R390-18..
	18	27	1.1	15.40	3°	0.0	1		6	R390-080Q27-18M	27.0	A	50.0	3.0	1.00	5900	6	R390-18..
84.0	11	27	5.5	10.00	3°	1.0	1		7	R390-084Q27-11M	27.0	A	50.0	1.2	1.41	17700	7	R390-11..
	17	27	8.5	15.70	1°	1.5	1		6	R390-084Q27-17M	27.0	A	50.0	3.0	1.07	14100	6	R390-17..
	18	27	1.1	15.40	3°	0.0	1		6	R390-084Q27-18M	27.0	A	50.0	3.0	1.25	5800	6	R390-18..
100.0	17	32	8.5	15.70	0°	1.5	1		5	R390-100Q32-17L	32.0	B	50.0	3.0	1.77	12700	5	R390-17..
	17	32	8.5	15.70	0°	1.5	1		7	R390-100Q32-17M	32.0	B	50.0	3.0	1.73	12700	7	R390-17..
	17	32	8.5	15.70	0°	1.5	1		9	R390-100Q32-17H	32.0	B	50.0	3.0	1.57	12700	9	R390-17..
	18	32	1.1	15.40	2°	0.0	1		5	R390-100Q32-18L	32.0	B	50.0	3.0	1.83	5200	5	R390-18..
	18	32	1.1	15.40	2°	0.0	1		7	R390-100Q32-18M	32.0	B	50.0	3.0	1.75	5200	7	R390-18..
125.0	17	40	8.5	15.70	0°	1.5	1		6	R390-125Q40-17L	40.0	B	63.0	3.0	2.71	11200	6	R390-17..
	17	40	8.5	15.70	0°	1.5	1		8	R390-125Q40-17M	40.0	B	63.0	3.0	2.70	11200	8	R390-17..
	17	40	8.5	15.70	0°	1.5	1		11	R390-125Q40-17H	40.0	B	63.0	3.0	2.74	11200	11	R390-17..
	18	40	1.1	15.40	1°	0.0	1		6	R390-125Q40-18L	40.0	B	63.0	3.0	2.72	4600	6	R390-18..
	18	40	1.1	15.40	1°	0.0	1		8	R390-125Q40-18M	40.0	B	63.0	3.0	2.76	4600	8	R390-18..

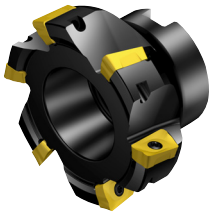
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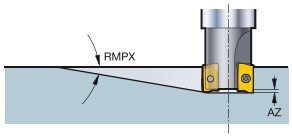
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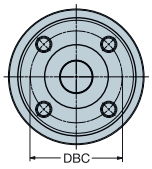
Fresa CoroMill® 390 para cantos a 90 graus

Árvore

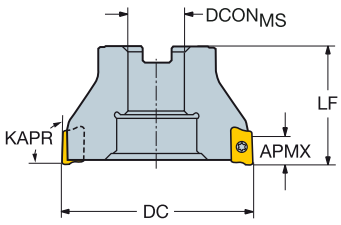




STDNO
KAPR



ISO6462
90°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	DBC	LF	NM	KG	RPMX	CICT	MIID
160.0	18	40S	1.1	15.40	1°	0.0	0	8	R390-160Q40-18L	40.0	C	66.7	63.0	3.0	3.33	4000	8	R390-18..
	18	40S	1.1	15.40	1°	0.0	0	12	R390-160Q40-18M	40.0	C	66.7	63.0	3.0	4.00	4000	12	R390-18..
200.0	18	60	1.1	15.40	1°	0.0	0	10	R390-200Q60-18L	60.0	C	101.6	63.0	3.0	5.38	3600	10	R390-18..

	Componentes
	Parafuso da pastilha
07	5513 020-82
11	5513 020-35
17	5513 020-39
18	5513 020-29

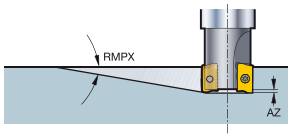
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 M1 N23 N6 N9

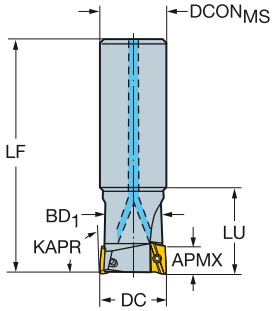
Fresa CoroMill® 390 para cantos a 90 graus

Haste cilíndrica - refrigeração interna





KAPR 90°



DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	BD1	LF	LU	NM	KG	RPMX	CICT	MIID
9.7	07	10	2.0	5.80	7°	0.5	1	2		R390-0097A10-07L	10.0	9.2	60.0	15.0	0.5	0.07	55600	2	390R-07..
10.0	07	9	2.0	5.80	7°	0.5	1	2		R390-010A09L-07L	9.0	9.3	100.0		0.5	0.08	54100	2	390R-07..
	07	10	2.0	5.80	7°	0.5	1	2		R390-010A10-07L	10.0	9.3	60.0	15.0	0.5	0.07	54100	2	390R-07..
11.7	07	12	2.0	5.80	5°	0.5	1	2		R390-0117A12-07L	12.0	11.0	70.0	15.0	0.5	0.09	47400	2	390R-07..
	07	12	2.0	5.80	5°	0.5	1		3	R390-0117A12-07M	12.0	11.0	70.0	15.0	0.5	0.09	47400	3	390R-07..
12.0	07	10	2.0	5.80	5°	0.5	1	2		R390-012A10L-07L	10.0	11.3	120.0		0.5	0.11	46500	2	390R-07..
	07	12	2.0	5.80	5°	0.5	1	2		R390-012A12-07L	12.0	11.3	70.0	18.0	0.5	0.09	46500	2	390R-07..
	07	12	2.0	5.80	5°	0.5	1		3	R390-012A12-07M	12.0	11.3	70.0	18.0	0.5	0.09	46500	3	390R-07..
	11	16	5.5	10.00	6°	1.0	1	1		R390-012A16-11L	16.0		95.0	17.2	1.2	0.24	68600	1	R390-11..
13.7	07	14	2.0	5.80	3°	0.5	1	2		R390-0137A14-07L	14.0	12.9	80.0	15.0	0.5	0.12	42000	2	390R-07..
	07	14	2.0	5.80	3°	0.5	1		3	R390-0137A14-07M	14.0	12.9	80.0	15.0	0.5	0.12	42000	3	390R-07..
14.0	07	12	2.0	5.80	3°	0.5	1		3	R390-014A12L-07M	12.0	13.2	140.0		0.5	0.16	33800	3	390R-07..
	07	14	2.0	5.80	3°	0.5	1		3	R390-014A14-07M	14.0	13.2	80.0	20.0	0.5	0.12	41400	3	390R-07..
15.7	07	16	2.0	5.80	3°	0.5	1		3	R390-0157A16-07M	16.0	14.7	90.0	18.0	0.5	0.16	38100	3	390R-07..
16.0	07	14	2.0	5.80	3°	0.5	1		3	R390-016A14L-07M	14.0	15.0	160.0		0.5	0.23	24100	3	390R-07..
	07	16	2.0	5.80	3°	0.5	1		3	R390-016A16-07M	16.0	15.0	90.0	25.0	0.5	0.16	37600	3	390R-07..
	07	16	2.0	5.80	3°	0.5	1		4	R390-016A16-07H	16.0	15.0	90.0	25.0	0.5	0.16	37600	4	390R-07..
	11	16	5.5	10.00	10°	1.0	1	2		R390-016A16-11L	16.0		100.0	25.0	1.2	0.15	41500	2	R390-11..
	11	16	5.5	10.00	10°	1.0	1	2		R390-016A16L-11L	16.0		145.0	25.0	1.2	0.23	31000	2	R390-11..
18.0	11	16	5.5	10.00	7°	1.0	1	2		R390-018A16L-11L	16.0		145.0		1.2	0.20	31000	2	R390-11..
20.0	07	20	2.0	5.80	2°	0.5	1		4	R390-020A20-07M	20.0	19.0	110.0	25.0	0.5	0.29	32500	4	390R-07..
	07	20	2.0	5.80	2°	0.5	1		5	R390-020A20-07H	20.0	19.0	110.0	25.0	0.5	0.27	32500	5	390R-07..
	11	20	5.5	10.00	5°	1.0	1	2		R390-020A20-11L	20.0		110.0	25.0	1.2	0.26	34600	2	R390-11..
	11	20	5.5	10.00	5°	1.0	1	2		R390-020A20L-11L	20.0		170.0	40.0	1.2	0.50	20300	2	R390-11..
	11	20	5.5	10.00	5°	1.0	1	3		R390-020A20-11M	20.0		110.0	25.0	1.2	0.34	34600	3	R390-11..
22.0	11	20	5.5	10.00	5°	1.0	1	2		R390-022A20L-11L	20.0		170.0		1.2	0.41	20300	2	R390-11..
25.0	07	25	2.0	5.80	1°	0.5	1		5	R390-025A25-07M	25.0	24.0	120.0	32.0	0.5	0.46	28200	5	390R-07..
	07	25	2.0	5.80	1°	0.5	1		7	R390-025A25-07H	25.0	24.0	120.0	32.0	0.5	0.47	28200	7	390R-07..
	11	25	5.5	10.00	5°	1.0	1	2		R390-025A25-11L	25.0		120.0	32.0	1.2	0.54	36500	2	R390-11..
	11	25	5.5	10.00	5°	1.0	1	2		R390-025A25L-11L	25.0		210.0	50.0	1.2	0.83	11000	2	R390-11..
	11	25	5.5	10.00	5°	1.0	1	3		R390-025A25-11M	25.0		120.0	32.0	1.2	0.42	36500	3	R390-11..
	11	25	5.5	10.00	5°	1.0	1	4		R390-025A25-11H	25.0		120.0	32.0	1.2	0.54	36500	4	R390-11..
	17	25	8.5	15.70	15°	1.5	1	2		R390-025A25-17L	25.0		120.0	32.0	3.0	0.50	30800	2	R390-17..
	17	25	8.5	15.70	15°	1.5	1	2		R390-025A25L-17L	25.0		210.0	50.0	3.0	0.84	11000	2	R390-17..
30.0	11	25	5.5	10.00	3°	1.0	1	2		R390-030A25L-11L	25.0		210.0		1.2	0.86	11000	2	R390-11..
32.0	11	32	5.5	10.00	3°	1.0	1	2		R390-032A32-11L	32.0		130.0	40.0	1.2	0.74	31000	2	R390-11..
	11	32	5.5	10.00	3°	1.0	1	2		R390-032A32L-11L	32.0		250.0	65.0	1.2	1.66	7600	2	R390-11..
	11	32	5.5	10.00	3°	1.0	1		3	R390-032A32-11M	32.0		130.0	40.0	1.2	0.82	31000	3	R390-11..
	11	32	5.5	10.00	3°	1.0	1		5	R390-032A32-11H	32.0		130.0	40.0	1.2	0.79	31000	5	R390-11..
	17	32	8.5	15.70	6°	1.5	1	2		R390-032A32-17L	32.0		130.0	40.0	3.0	0.82	25600	2	R390-17..
	17	32	8.5	15.70	6°	1.5	1	2		R390-032A32L-17L	32.0		250.0	65.0	3.0	1.67	7600	2	R390-17..
	17	32	8.5	15.70	6°	1.5	1		3	R390-032A32-17M	32.0		130.0	40.0	3.0	0.81	25600	3	R390-17..

I74 L2 N23 N6 N9 N15

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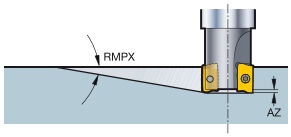
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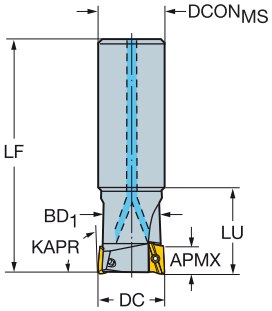
Fresa CoroMill® 390 para cantos a 90 graus

Haste cilíndrica - refrigeração interna

KAPR 90°







DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	BD$_1$	LF	LU	NM	KG	RPMX	CICT	MIID
40.0	11	32	5.5	10.00	2°	1.0	1	2		R390-040A32-11L	32.0		170.0		1.2	1.19	27000	2	R390-11..
	11	32	5.5	10.00	2°	1.0	1	2		R390-040A32L-11L	32.0		250.0		1.2	1.82	7600	2	R390-11..
	11	32	5.5	10.00	2°	1.0	1		4	R390-040A32-11M	32.0		170.0		1.2	1.16	27000	4	R390-11..
	11	32	5.5	10.00	2°	1.0	1		6	R390-040A32-11H	32.0		170.0		1.2	1.19	27000	6	R390-11..
	17	32	8.5	15.70	3°	1.5	1	2		R390-040A32-17L	32.0		170.0		3.0	1.19	21900	2	R390-17..
	17	32	8.5	15.70	3°	1.5	1	2		R390-040A32L-17L	32.0		250.0		3.0	1.84	7600	2	R390-17..
	17	32	8.5	15.70	3°	1.5	1		3	R390-040A32-17M	32.0		170.0		3.0	1.14	21900	3	R390-17..
	17	32	8.5	15.70	3°	1.5	1	4		R390-040A32-17H	32.0		170.0		3.0	1.14	21900	4	R390-17..

		Componentes
DC		Parafuso da pastilha
10.00-25.00	07	5513 020-82
12.00-22.00	11	5513 020-36
25.00-40.00	11	5513 020-35
25.00	17	5513 020-37
32.00-40.00	17	5513 020-39

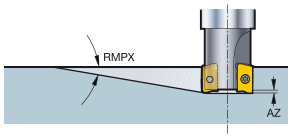
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 N23 N6 N9 N15

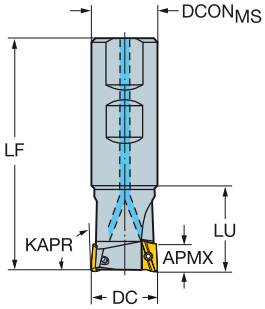
Fresa CoroMill® 390 para cantos a 90 graus

Weldon - Refrigeração interna





KAPR 90°



DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	LF	LU	NM	KG	RPMX	CICT	MIID
12.0	11	16	5.5	10.00	6°	1.0	1	1		R390-012B16-11L	16.0	WE	68.0	17.2	1.2	0.18	68600	1	R390-11..
16.0	11	16	5.5	10.00	10°	1.0	1	2		R390-016B16-11L	16.0	WE	73.0	25.0	1.2	0.11	41500	2	R390-11..
20.0	11	20	5.5	10.00	5°	1.0	1	2		R390-020B20-11L	20.0	WE	81.0	25.0	1.2	0.19	34600	2	R390-11..
	11	20	5.5	10.00	5°	1.0	1	3		R390-020B20-11M	20.0	WE	81.0	25.0	1.2	0.29	34600	3	R390-11..
25.0	11	25	5.5	10.00	5°	1.0	1	2		R390-025B25-11L	25.0	WE	88.0	32.0	1.2	0.41	36500	2	R390-11..
	11	25	5.5	10.00	5°	1.0	1	3		R390-025B25-11M	25.0	WE	88.0	32.0	1.2	0.38	36500	3	R390-11..
	11	25	5.5	10.00	5°	1.0	1	4		R390-025B25-11H	25.0	WE	88.0	32.0	1.2	0.38	36500	4	R390-11..
	17	25	8.5	15.70	15°	1.5	1	2		R390-025B25-17L	25.0	WE	88.0	32.0	3.0	0.41	30800	2	R390-17..
32.0	11	32	5.5	10.00	3°	1.0	1	2		R390-032B32-11L	32.0	WE	100.0	40.0	1.2	0.65	31000	2	R390-11..
	11	32	5.5	10.00	3°	1.0	1		3	R390-032B32-11M	32.0	WE	100.0	40.0	1.2	0.68	31000	3	R390-11..
	11	32	5.5	10.00	3°	1.0	1		5	R390-032B32-11H	32.0	WE	100.0	40.0	1.2	0.65	31000	5	R390-11..
	17	32	8.5	15.70	6°	1.5	1	2		R390-032B32-17L	32.0	WE	100.0	40.0	3.0	0.64	25600	2	R390-17..
	17	32	8.5	15.70	6°	1.5	1		3	R390-032B32-17M	32.0	WE	100.0	40.0	3.0	0.62	25600	3	R390-17..
40.0	11	32	5.5	10.00	2°	1.0	1		4	R390-040B32-11M	32.0	WE	110.0		1.2	0.81	27000	4	R390-11..
	11	32	5.5	10.00	2°	1.0	1		6	R390-040B32-11H	32.0	WE	110.0		1.2	0.84	27000	6	R390-11..
	17	32	8.5	15.70	3°	1.5	1	2		R390-040B32-17L	32.0	WE	110.0		3.0	0.82	21900	2	R390-17..
	17	32	8.5	15.70	3°	1.5	1		3	R390-040B32-17M	32.0	WE	110.0		3.0	0.80	21900	3	R390-17..
	17	32	8.5	15.70	3°	1.5	1	4		R390-040B32-17H	32.0	WE	110.0		3.0	0.80	21900	4	R390-17..

		Componentes
DC		Parafuso da pastilha
12.00-20.00	11	5513 020-36
25.00-40.00	11	5513 020-35
25.00	17	5513 020-37
32.00-40.00	17	5513 020-39

Para a lista completa de componentes, acesse www.sandvik.coromant.com

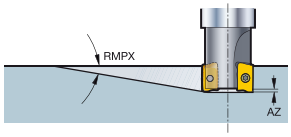
I74 L2 N23 N6 N9 N15

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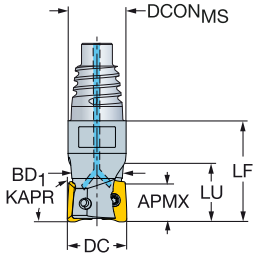
Fresa CoroMill® 390 para cantos a 90 graus

Coromant EH - Refrigeração interna





KAPR 90°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	BD	LB	LF	LU	NM	KG	RPMX	CICT	MIID
9.7	07	E10	2.0	5.80	7°	0.5	1	2		R390-0097EH10-07L	9.7	9.2	12.5	20.0	12.5	0.5	0.12	55600	2	390R-07..
10.0	07	E10	2.0	5.80	7°	0.5	1	2		R390-010EH10-07L	9.7	9.3	12.5	20.0	12.5	0.5	0.07	54100	2	390R-07..
11.7	07	E12	2.0	5.80	5°	0.5	1	2		R390-0117EH12-07L	11.7	11.0	11.9	20.0	11.9	0.5	0.04	47400	2	390R-07..
12.0	07	E12	2.0	5.80	5°	0.5	1	2		R390-012EH12-07L	11.7	11.3	11.9	20.0	11.9	0.5	0.12	46500	2	390R-07..
	07	E12	2.0	5.80	5°	0.5	1		3	R390-012EH12-07M	11.7	11.3	11.9	20.0	11.9	0.5	0.07	46500	3	390R-07..
13.7	07	E12	2.0	5.80	3°	0.5	1	2		R390-0137EH12-07L	11.7	12.9	20.0	20.0		0.5	0.13	42000	2	390R-07..
	07	E12	2.0	5.80	3°	0.5	1		3	R390-0137EH12-07M	11.7	12.9	20.0	20.0		0.5	0.12	42000	3	390R-07..
14.0	07	E12	2.0	5.80	3°	0.5	1		3	R390-014EH12-07M	11.7	13.2	20.0	20.0		0.5	0.07	41400	3	390R-07..
15.7	07	E16	2.0	5.80	3°	0.5	1		3	R390-0157EH16-07M	15.5	14.7	15.7	25.0	15.7	0.5	0.10	38100	3	390R-07..
16.0	07	E16	2.0	5.80	3°	0.5	1		3	R390-016EH16-07M	15.5	15.0	15.7	25.0	15.7	0.5	0.09	37600	3	390R-07..
	07	E16	2.0	5.80	3°	0.5	1		4	R390-016EH16-07H	15.5	15.0	15.7	25.0	15.7	0.5	0.14	37600	4	390R-07..
	11	E16	5.5	10.00	10°	1.0	1	2		R390-016EH16-11L	15.5			27.0		1.2	0.08	41500	2	R390-11..
18.0	07	E16	2.0	5.80	2°	0.5	1		3	R390-018EH16-07M	15.5	17.0	25.0	25.0		0.5	0.10	34800	3	390R-07..
	11	E16	5.5	10.00	5°	1.0	1	2		R390-018EH16-11L	15.5			27.0		1.2	0.11	31000	2	R390-11..
20.0	07	E20	2.0	5.80	2°	0.5	1		4	R390-020EH20-07M	19.3	19.0	14.4	25.0	14.4	0.5	0.10	32500	4	390R-07..
	07	E20	2.0	5.80	2°	0.5	1		5	R390-020EH20-07H	19.3	19.0	14.4	25.0	14.4	0.5	0.16	32500	5	390R-07..
	11	E20	5.5	10.00	5°	1.0	1	2		R390-020EH20-11L	19.3			30.0		1.2	0.13	34600	2	R390-11..
	11	E20	5.5	10.00	5°	1.0	1	3		R390-020EH20-11M	19.3			30.0		1.2	0.13	34600	3	R390-11..
22.0	11	E20	5.5	10.00	5°	1.0	1	2		R390-022EH20-11L	19.3			30.0		1.2	0.14	36500	2	R390-11..
	11	E20	5.5	10.00	5°	1.0	1	3		R390-022EH20-11M	19.3			30.0		1.2	0.14	36500	3	R390-11..
25.0	07	E20	2.0	5.80	1°	0.5	1		5	R390-025EH20-07M	19.3	24.0	25.0	25.0		0.5	0.07	28200	5	390R-07..
	07	E25	2.0	5.80	1°	0.5	1		5	R390-025EH25-07M	24.2	24.0	13.9	25.0	13.9	0.5	0.20	28200	5	390R-07..
	07	E20	2.0	5.80	1°	0.5	1		7	R390-025EH20-07H	19.3	24.0	25.0	25.0		0.5	0.07	28200	7	390R-07..
	07	E25	2.0	5.80	1°	0.5	1		7	R390-025EH25-07H	24.2	24.0	13.9	25.0	13.9	0.5	0.20	28200	7	390R-07..
	11	E25	5.5	10.00	5°	1.0	1	2		R390-025EH25-11L	24.2			35.0		1.2	0.13	36400	2	R390-11..
	11	E25	5.5	10.00	5°	1.0	1	3		R390-025EH25-11M	24.2			35.0		1.2	0.14	36400	3	R390-11..
	11	E25	5.5	10.00	5°	1.0	1	4		R390-025EH25-11H	24.2			35.0		1.2	0.19	36400	4	R390-11..
	17	E25	8.5	15.70	15°	1.5	1	2		R390-025EH25-17L	24.2			40.0		3.0	0.20	30800	2	R390-17..
28.0	11	E25	5.5	10.00	1°	1.0	1	2		R390-028EH25-11L	24.2			35.0		1.2	0.20	31000	2	R390-11..
	11	E25	5.5	10.00	2°	1.0	1	3		R390-028EH25-11M	24.2			35.0		1.2	0.20	31000	3	R390-11..
32.0	07	E25	2.0	5.80	1°	0.5	1		6	R390-032EH25-07M	24.2	30.4	25.0	25.0		0.5	0.12	24400	6	390R-07..
	07	E25	2.0	5.80	1°	0.5	1		8	R390-032EH25-07H	24.2	30.4	25.0	25.0		0.5	0.12	24400	8	390R-07..
	11	E25	5.5	10.00	3°	1.0	1	2		R390-032EH25-11L	24.2			35.0		1.2	0.23	31000	2	R390-11..
	11	E25	5.5	10.00	3°	1.0	1		3	R390-032EH25-11M	24.2			35.0		1.2	0.21	31000	3	R390-11..
	11	E25	5.5	10.00	3°	1.0	1		5	R390-032EH25-11H	24.2			35.0		1.2	0.21	31000	5	R390-11..
	17	E25	8.5	15.70	6°	1.5	1	2		R390-032EH25-17L	24.2			40.0		3.0	0.22	25600	2	R390-17..
	17	E25	8.5	15.70	6°	1.5	1		3	R390-032EH25-17M	24.2			40.0		3.0	0.18	25600	3	R390-17..

		Componentes
DC		Parafuso da pastilha
10.00-32.00	07	5513 020-82
16.00-22.00	11	5513 020-36
25.00-32.00	11	5513 020-35
25.00	17	5513 020-37
32.00	17	5513 020-39

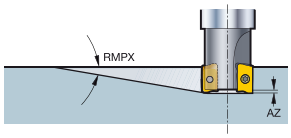
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 N23 N6 N9 N15 N3

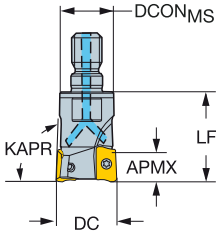
Fresa CoroMill® 390 para cantos a 90 graus

Acoplamento com rosca - Refrigeração interna





KAPR 90°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	LF	NM	KG	RPMX	CICT	MIID
16.0	11	M8	5.5	10.00	10°	1.0	0	2	**R390-16T08-11L**	12.8	25.0	1.2	0.13	10900	2	R390-11..
20.0	11	M10	5.5	10.00	5°	1.0	1	2	**R390-20T10-11L**	17.8	30.0	1.2	0.16	9900	2	R390-11..
	11	M10	5.5	10.00	5°	1.0	1	3	**R390-20T10-11M**	17.8	30.0	1.2	0.18	9900	3	R390-11..
25.0	11	M12	5.5	10.00	5°	1.0	1	2	**R390-25T12-11L**	20.8	35.0	1.2	0.20	8100	2	R390-11..
	11	M12	5.5	10.00	5°	1.0	1	3	**R390-25T12-11M**	20.8	35.0	1.2	0.20	8100	3	R390-11..
32.0	11	M16	5.5	10.00	3°	1.0	1	2	**R390-32T16-11L**	28.8	45.0	1.2	0.32	9100	2	R390-11..
	11	M16	5.5	10.00	3°	1.0	1	3	**R390-32T16-11M**	28.8	45.0	1.2	0.31	9100	3	R390-11..
35.0	11	M16	5.5	10.00	3°	1.0	1	2	**R390-35T16-11L**	28.8	45.0	1.2	0.39	9100	2	R390-11..
	11	M16	5.5	10.00	3°	1.0	1	3	**R390-35T16-11M**	28.8	45.0	1.2	0.34	9100	3	R390-11..
40.0	11	M16	5.5	10.00	2°	1.0	1	2	**R390-40T16-11L**	28.8	45.0	1.2	0.40	9100	2	R390-11..
	11	M16	5.5	10.00	2°	1.0	1	4	**R390-40T16-11M**	28.8	45.0	1.2	0.40	9100	4	R390-11..
42.0	11	M16	5.5	10.00	1°	1.0	1	4	**R390-42T16-11M**	28.8	45.0	1.2	0.40	9100	4	R390-11..

		Componentes
DC		Parafuso da pastilha
16.00-20.00	11	5513 020-36
25.00-42.00	11	5513 020-35

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 N23 N6 N9 N15 N3

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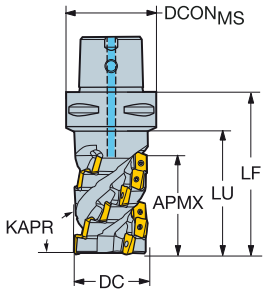
POR

Fresa CoroMill® 390 de aresta longa para cantos a 90 graus

Coromant Capto® - Refrigeração interna

KAPR 90°





DC		CZCMS	APMXFFW	CNSC			Código para pedido	Dimensões, mm DCONMS	LF	LU	NM	KG	RPMX	CICT	MIID
32.0	11	C5	36.00	3	2		R390-032C5-36L	50.0	71.7	46.0	1.2	1.12	21700	8	R390-11..
	11	C5	36.00	3		3	R390-032C5-36M	50.0	71.7	45.0	1.2	0.60	21700	12	R390-11..
	11	C5	54.00	3	2		R390-032C5-54L	50.0	89.4	63.0	1.2	1.14	21700	12	R390-11..
	11	C6	63.00	3	2		R390-032C6-63L	63.0	100.2	72.0	1.2	1.51	21700	14	R390-11..
	11	C6	45.00	3		3	R390-032C6-45M	63.0	82.5	54.0	1.2	1.40	21700	15	R390-11..
	11	C5	54.00	3		3	R390-032C5-54M	50.0	89.4	63.0	1.2	1.16	21700	18	R390-11..
36.0	11	C3	36.00	3	2		R390-036C3-36L	32.0	66.7	66.0	1.2	0.70	20200	8	R390-11..
	11	C3	36.00	3		3	R390-036C3-36M	32.0	66.7	66.0	1.2	0.65	20200	12	R390-11..
40.0	11	C5	54.00	3		3	R390-040C5-54M	50.0	89.4	63.0	1.2	0.80	18900	18	R390-11..
	11	C6	63.00	3		3	R390-040C6-63M	63.0	100.2	72.0	1.2	1.28	18900	21	R390-11..
	11	C5	54.00	3		4	R390-040C5-54H	50.0	89.4	63.0	1.2	1.31	18900	24	R390-11..
	11	C6	63.00	3		4	R390-040C6-63H	63.0	100.2	72.0	1.2	1.65	18900	28	R390-11..
44.0	11	C4	45.00	3		3	R390-044C4-45M	40.0	80.5		1.2	0.97	17800	15	R390-11..
	18	C4	43.00	3	2		R390-044C4-43L	40.0	78.6		3.0	0.90	8600	6	R390-18..
	18	C5	43.00	3	2		R390-044C5-43L	50.0	78.6	53.0	3.0	1.29	9200	6	R390-18..
	18	C5	57.00	3		2	R390-044C5-57L	50.0	92.6	67.0	3.0	1.36	9200	8	R390-18..
	18	C6	57.00	3	2		R390-044C6-57L	63.0	94.6	67.0	3.0	1.69	9200	8	R390-18..
50.0	11	C5	36.00	3		3	R390-050C5-36L	50.0	71.7	50.0	1.2	1.31	16600	12	R390-11..
	11	C5	36.00	3		4	R390-050C5-36M	50.0	71.7	50.0	1.2	1.44	16600	16	R390-11..
	11	C5	54.00	3		3	R390-050C5-54L	50.0	89.4	67.0	1.2	1.20	16600	18	R390-11..
	11	C5	36.00	3	5		R390-050C5-36H	50.0	71.7	50.0	1.2	1.29	16600	20	R390-11..
	11	C5	54.00	3		4	R390-050C5-54M	50.0	89.4	67.0	1.2	1.59	16600	24	R390-11..
	11	C6	63.00	3		4	R390-050C6-63M	63.0	100.2	72.0	1.2	1.99	16600	28	R390-11..
	11	C6	63.00	3	5		R390-050C6-63H	63.0	100.2	72.0	1.2	2.00	16600	35	R390-11..
	18	C5	43.00	3	2		R390-050C5-43L	50.0	78.6	53.0	3.0	1.00	7900	6	R390-18..
	18	C6	43.00	3		3	R390-050C6-43M	63.0	80.6	53.0	3.0	1.70	7900	9	R390-18..
	18	C6	71.00	3	2		R390-050C6-71L	63.0	108.7	81.0	3.0	2.04	7900	10	R390-18..
	18	C8	57.00	3		3	R390-050C8-57M	80.0	102.6	67.0	3.0	2.76	7900	12	R390-18..
	18	C6	71.00	3	3		R390-050C6-71M	63.0	108.7	81.0	3.0	1.50	7900	15	R390-18..
54.0	11	C5	54.00	3		4	R390-054C5-54M	50.0	89.4		1.2	1.70	16000	24	R390-11..
	18	C5	43.00	3		3	R390-054C5-43M	50.0	78.6		3.0	1.00	7500	9	R390-18..
63.0	18	C6	43.00	3		4	R390-063C6-43M	63.0	80.6	53.0	3.0	2.09	6800	12	R390-18..
	18	C6	57.00	3		3	R390-063C6-57L	63.0	94.6	67.0	3.0	2.36	6800	12	R390-18..
	18	C8	57.00	3		4	R390-063C8-57M	80.0	102.6	67.0	3.0	3.19	6800	16	R390-18..
	18	C8	85.00	3		3	R390-063C8-85L	80.0	130.7	95.0	3.0	3.73	6800	18	R390-18..
66.0	11	C6	45.00	3		4	R390-066C6-45M	63.0	82.5		1.2	2.00	13900	20	R390-11..
	18	C6	57.00	3		3	R390-066C6-57L	63.0	94.6		3.0	2.47	6700	12	R390-18..
80.0	18	C8	71.00	3		3	R390-080C8-71L	80.0	116.7	81.0	3.0	4.64	5900	15	R390-18..
	18	C8	57.00	3	5		R390-080C8-57H	80.0	102.6	67.0	3.0	4.04	5900	20	R390-18..
84.0	18	C8	57.00	3		4	R390-084C8-57M	80.0	102.6		3.0	4.15	5800	16	R390-18..
100.0	18	C8	57.00	3		4	R390-100C8-57M	80.0	102.6		3.0	5.46	5200	16	R390-18..
	18	C8	71.00	3		4	R390-100C8-71M	80.0	116.7		3.0	6.01	5200	20	R390-18..
	18	C8	57.00	3	6		R390-100C8-57H	80.0	102.6		3.0	5.08	5200	24	R390-18..

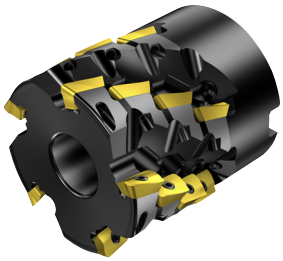
	Componentes
	Parafuso da pastilha
11	5513 024-01
18	5513 036-01

Para a lista completa de componentes, acesse www.sandvik.coromant.com

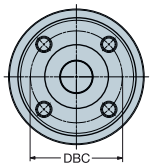
I74 L2 N23 N6 N9 N15

Fresa CoroMill® 390 de aresta longa para cantos a 90 graus

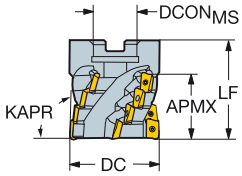
Árvore



STDNO
KAPR



ISO6462
90°



DC		CZCMS	APMXFFW			Código para pedido	Dimensões, mm DCONMS	ISO	DBC	LF	NM	KG	RPMX	CICT	MIID
40.0	11	16	36.00		3	R390-040Q16-36M	16.0	A		56.7	1.2	0.80	18900	12	R390-11..
	11	16	36.00	4		R390-040Q16-36H	16.0	A		56.7	1.2	0.30	18900	16	R390-11..
44.0	11	16	45.00		3	R390-044Q16-45M	16.0	A		65.5	1.2	0.98	17800	15	R390-11..
	18	16	43.00	2		R390-044Q16-43L	16.0	A		68.6	3.0	0.91	8600	6	R390-18..
50.0	11	22	36.00		4	R390-050Q22-36M	22.0	A		56.7	1.2	0.94	16600	16	R390-11..
	11	22	54.00		3	R390-050Q22-54L	22.0	A		74.4	1.2	1.09	16600	18	R390-11..
	11	22	36.00	5		R390-050Q22-36H	22.0	A		56.7	1.2	0.99	16600	20	R390-11..
	18	22	57.00		2	R390-050Q22-57L	22.0	A		82.6	3.0	1.09	7900	8	R390-18..
54.0	11	22	36.00		4	R390-054Q22-36M	22.0	A		56.7	1.2	1.08	16000	16	R390-11..
	18	22	57.00	2		R390-054Q22-57L	22.0	A		82.6	3.0	0.91	7500	8	R390-18..
63.0	18	27	57.00		3	R390-063Q27-57L	27.0	A		82.6	3.0	1.58	6800	12	R390-18..
80.0	18	32	71.00		3	R390-080Q32-71L	32.0	A		96.7	3.0	2.88	5900	15	R390-18..
100.0	18	40	57.00		4	R390-100Q40-57M	40.0	B		82.6	3.0	3.37	5200	16	R390-18..
125.0	18	40	43.00	6		R390-125Q40-43L	40.0	B		68.6	3.0	5.00	4600	18	R390-18..
160.0	18	40S	43.00	8		R390-160Q40-43L	40.0	C	66.7	68.6	3.0	7.21	4000	24	R390-18..

	Componentes
	Parafuso da pastilha
11	5513 024-01
18	5513 036-01

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 M1 N23 N6 N9

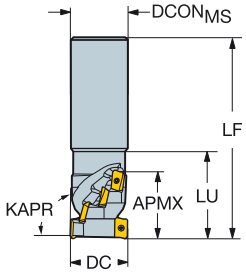
SANDVIK Coromant

Fresa CoroMill® 390 de aresta longa para cantos a 90 graus

Haste cilíndrica



KAPR 90°



DC		CZC$_{MS}$	APMX$_{FFW}$			Código para pedido	Dimensões, mm DCON$_{MS}$	LF	LU	NM	KG	RPMX	CICT	MIID
32.0	11	25	36.00	2		R390-032A25-36L	25.0	108.7		1.2	0.59	21700	8	R390-11..
	11	32	36.00	2		R390-032A32-36L	32.0	112.7	48.0	1.2	0.74	21700	8	R390-11..
40.0	11	40	45.00		3	R390-040A40-45M	40.0	131.5	58.0	1.2	1.23	18900	15	R390-11..

Componentes
Parafuso da pastilha
5513 024-01

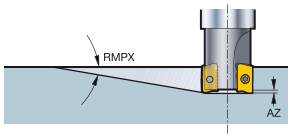
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 N23 N6 N9

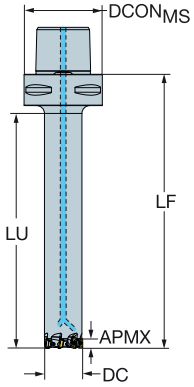
Fresa para cantos a 90º CoroMill® 390 antivibratória

Coromant Capto® - Refrigeração interna





KAPR 90°



DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	LF	LU	NM	KG	RPMX	CICT	MIID
20.0	07	C5	2.0	5.80	2°	0.5	3	5	R390-020C5D-07H145	50.0	145.0	120.0	0.5	0.92	20000	5	390R-07..
	07	C6	2.0	5.80	2°	0.5	3	5	R390-020C6D-07H147	63.0	147.0	120.0	0.5	1.25	20000	5	390R-07..
	11	C5	5.5	10.00	5°	1.0	3	2	R390-020C5D-11L145	50.0	145.0	120.0	1.2	0.91	20000	2	R390-11..
	11	C6	5.5	10.00	5°	1.0	3	2	R390-020C6D-11L147	63.0	147.0	120.0	1.2	1.24	20000	2	R390-11..
25.0	07	C5	2.0	5.80	1°	0.5	3	7	R390-025C5D-07H175	50.0	175.0	150.0	0.5	1.19	20000	7	390R-07..
	07	C6	2.0	5.80	1°	0.5	3	7	R390-025C6D-07H177	63.0	177.0	150.0	0.5	1.52	20000	7	390R-07..
	11	C5	5.5	10.00	5°	1.0	3	2	R390-025C5D-11L175	50.0	175.0	150.0	1.2	1.19	20000	2	R390-11..
	11	C6	5.5	10.00	5°	1.0	3	2	R390-025C6D-11L177	63.0	177.0	150.0	1.2	1.53	20000	2	R390-11..
32.0	07	C5	2.0	5.80	1°	0.5	3	8	R390-032C5D-07H217	50.0	217.0	192.0	0.5	1.82	15000	8	390R-07..
	07	C6	2.0	5.80	1°	0.5	3	8	R390-032C6D-07H219	63.0	219.0	192.0	0.5	2.15	15000	8	390R-07..
	11	C5	5.5	10.00	3°	1.0	3	2	R390-032C5D-11L217	50.0	217.0	192.0	1.2	1.83	15000	2	R390-11..
	11	C6	5.5	10.00	3°	1.0	3	2	R390-032C6D-11L219	63.0	219.0	192.0	1.2	2.17	15000	2	R390-11..

		Componentes
DC		Parafuso da pastilha
20.00-32.00	07	5513 020-82
20.00	11	5513 020-36
25.00-32.00	11	5513 020-35

Para a lista completa de componentes, acesse www.sandvik.coromant.com

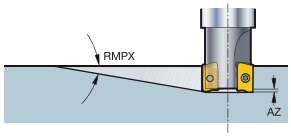
I74 L2 N23 N6 N9 N15 L109

POR

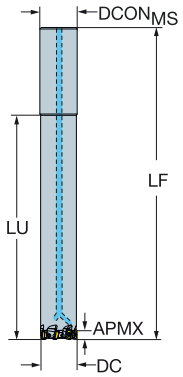
Fresa para cantos a 90º CoroMill® 390 antivibratória

Haste cilíndrica - refrigeração interna





KAPR 90°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	LF	LU	NM	KG	RPMX	CICT	MIID
20.0	07	20	2.0	5.80	2°	0.5	1	5	**R390-020A20D-07H**	20.0	173.0	120.0	0.5	0.71	20000	5	390R-07..
	11	20	5.5	10.00	5°	1.0	1	2	**R390-020A20D-11L**	20.0	171.0	120.0	1.2	0.73	20000	2	R390-11..
25.0	07	25	2.0	5.80	1°	0.5	1	7	**R390-025A25D-07H**	25.0	208.0	150.0	0.5	0.96	20000	7	390R-07..
	11	25	5.5	10.00	5°	1.0	1	2	**R390-025A25D-11L**	25.0	208.0	150.0	1.2	0.95	20000	2	R390-11..
32.0	07	32	2.0	5.80	1°	0.5	1	8	**R390-032A32D-07H**	32.0	254.0	192.0	0.5	1.74	15000	8	390R-07..
	11	32	5.5	10.00	3°	1.0	1	2	**R390-032A32D-11L**	32.0	254.0	192.0	1.2	1.48	15000	2	R390-11..

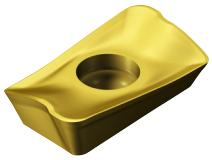
		Componentes
DC		Parafuso da pastilha
20.00-32.00	07	5513 020-82
20.00	11	5513 020-36
25.00-32.00	11	5513 020-35

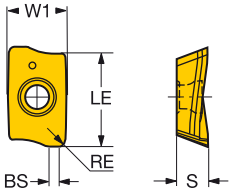
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I74 L2 N23 N6 N9 N15 L109

Pastilha CoroMill® 390 para fresamento

KRINS 90°



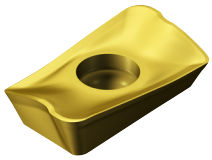


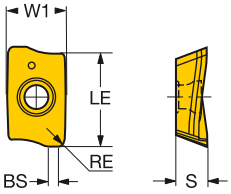
			RE	Código para pedido	P					M				K				N			S				H			Dimensões, mm			
					1130	4220	4330	4340	530	1040	1130	2040	530	1020	3040	3330	H13A	1130	530	H13A	1130	H13A	S30T	S40T	1010	1130	530	W1	LE	S	BS
Leve	KL	07	0.40	390R-070204E-KL										★														4.0	5.9	2.40	0.7
			0.80	390R-070208E-KL										★														4.0	5.9	2.40	0.7
		11	0.80	R390-11 T3 08E-KL													☆			★		☆						6.8	10.0	3.59	1.5
			0.80	R390-11 T3 08M-KL										★	☆	☆	☆			★		☆						6.8	10.0	3.59	1.2
		17	0.80	R390-17 04 08E-KL													☆			★		☆						9.6	15.7	4.76	1.5
			0.80	R390-17 04 08M-KL										★	☆	☆	☆			★		☆						9.6	15.7	4.76	1.5
		18	0.80	R390-18 06 08H-KL										★	☆	☆												11.0	15.4	6.33	1.0
			1.20	R390-18 06 12H-KL										★	☆	☆												11.0	15.4	6.33	1.0
			3.10	R390-18 06 31H-KL										★	☆	☆												11.0	15.4	6.33	1.0
	ML	07	0.20	390R-070202E-ML						★																		4.0	5.9	2.40	0.7
			0.40	390R-070204E-ML						★													★					4.0	5.9	2.40	0.7
			0.80	390R-070208E-ML						★													★					4.0	5.9	2.40	0.7
			1.20	390R-070212E-ML						★																		4.0	5.9	2.40	0.7
			1.60	390R-070216E-ML						★																		4.0	5.9	2.40	0.2
		11	0.80	R390-11 T3 08E-ML						★		☆											★	☆				6.8	10.0	3.59	1.5
			1.60	R390-11 T3 16E-ML						★		☆											★	☆				6.8	10.0	3.59	0.8
			2.40	R390-11 T3 24E-ML						★		☆											★	☆				6.8	10.0	3.59	
			3.10	R390-11 T3 31E-ML						★		☆											★	☆				6.8	10.0	3.59	
		17	0.80	R390-17 04 08E-ML						★		☆											★	☆				9.6	15.7	4.76	1.5
		18	0.80	R390-18 06 08H-ML						★		☆																11.0	15.4	6.33	1.0
			1.20	R390-18 06 12H-ML						★		☆																11.0	15.4	6.33	1.0
			1.60	R390-18 06 16H-ML						★		☆																11.0	15.4	6.33	1.0
			2.00	R390-18 06 20H-ML						★		☆																11.0	15.4	6.33	1.0
			2.40	R390-18 06 24H-ML						★		☆																11.0	15.4	6.33	1.0
			3.10	R390-18 06 31H-ML						★		☆																11.0	15.4	6.33	1.0
			4.00	R390-18 06 40H-ML						★		☆																11.0	15.4	6.33	1.0
			5.00	R390-18 06 50H-ML						★		☆																11.0	15.4	6.33	1.0
			6.00	R390-18 06 60H-ML						★		☆																11.0	15.4	6.33	1.0
			6.40	R390-18 06 64H-ML						★		☆																11.0	15.4	6.33	1.0
	NL	07	0.20	390R-070202E-NL																★								4.0	5.9	2.40	0.7
			0.40	390R-070204E-NL																★								4.0	5.9	2.40	0.7
			0.80	390R-070208E-NL																★								4.0	5.9	2.40	0.7
		11	0.40	R390-11 T3 04E-NL																★								6.8	10.0	3.59	0.9
			0.80	R390-11 T3 08E-NL																★								6.8	10.0	3.59	1.5
			2.00	R390-11 T3 20E-NL																★								6.8	10.0	3.59	
			3.10	R390-11 T3 31E-NL																★								6.8	10.0	3.59	
		17	0.80	R390-17 04 08E-NL																★								9.6	15.7	4.76	1.5
			2.00	R390-17 04 20E-NL																★								9.6	15.7	4.76	0.3
			3.10	R390-17 04 31E-NL																★								9.6	15.7	4.76	
			4.00	R390-17 04 40E-NL																★								9.6	15.7	4.76	
			5.00	R390-17 04 50E-NL																★								9.6	15.7	4.76	

I58 I154 I175 N23 N10

Pastilha CoroMill® 390 para fresamento

KRINS 90°



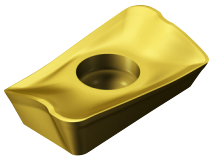


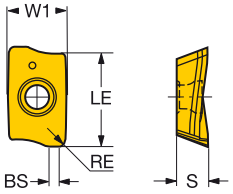
			RE	Código para pedido	P					M				K				N			S				H			Dimensões, mm			
					1130	4220	4330	4340	530	1040	1130	2040	530	1020	3040	3330	H13A	1130	530	H13A	1130	H13A	S30T	S40T	1010	1130	530	W1	LE	S	BS
Light	PL	07	0.20	390R-070202E-PL	★						☆							☆			☆					☆		4.0	5.9	2.40	0.7
			0.40	390R-070204E-PL	★						☆							☆			☆					☆		4.0	5.9	2.40	0.7
			0.80	390R-070208E-PL	★						☆							☆			☆					☆		4.0	5.9	2.40	0.7
			1.20	390R-070212E-PL	★						☆							☆			☆					☆		4.0	5.9	2.40	0.7
			1.60	390R-070216E-PL	★						☆							☆			☆					☆		4.0	5.9	2.40	0.2
		11	0.40	R390-11 T3 04E-PL	★						☆							☆			☆	★	☆			☆		6.8	10.0	3.59	0.9
			0.80	R390-11 T3 08E-PL	★				☆		☆		☆					☆	☆		☆				★	☆	☆	6.8	10.0	3.59	1.5
			0.80	R390-11 T3 08M-PL	★	☆	★	☆	☆		☆		☆					☆	☆		☆		★	☆	★	☆	☆	6.8	10.0	3.59	1.2
		17	0.80	R390-17 04 08E-PL	★			★	☆		☆		☆					☆	☆		☆				★	☆	☆	9.6	15.7	4.76	1.5
			0.80	R390-17 04 08M-PL	★	☆	★	☆	☆		☆		☆					☆	☆		☆		★	☆	★	☆	☆	9.6	15.7	4.76	1.5
		18	0.80	R390-18 06 08H-PL	★			★	☆		☆							☆			☆		★	☆	★	☆		11.0	15.4	6.33	1.0
			1.20	R390-18 06 12H-PL	★	☆	★	☆			☆							☆			☆		★	☆	★	☆		11.0	15.4	6.33	1.0
			1.60	R390-18 06 16H-PL	★			★			☆							☆			☆					☆		11.0	15.4	6.33	1.0
			2.00	R390-18 06 20H-PL	★						☆							☆			☆					☆		11.0	15.4	6.33	1.0
			2.40	R390-18 06 24H-PL	★						☆							☆			☆					☆		11.0	15.4	6.33	1.0
			3.10	R390-18 06 31H-PL	★						☆							☆			☆					☆		11.0	15.4	6.33	1.0
			4.00	R390-18 06 40H-PL	★						☆							☆			☆					☆		11.0	15.4	6.33	1.0
			5.00	R390-18 06 50H-PL	★						☆							☆			☆				★	☆		11.0	15.4	6.33	1.0
			6.00	R390-18 06 60H-PL	★						☆							☆			☆				★	☆		11.0	15.4	6.33	1.0
			6.40	R390-18 06 64H-PL	★						☆							☆			☆				★	☆		11.0	15.4	6.33	1.0
Média	KM	07	0.40	390R-070204M-KM										☆		★												4.0	5.9	2.40	0.7
			0.80	390R-070208M-KM										☆		★												4.0	5.9	2.40	0.7
			1.60	390R-070216M-KM										★														4.0	5.9	2.40	0.2
		11	0.20	R390-11 T3 02E-KM												☆				★		☆						6.8	10.0	3.59	0.7
			0.40	R390-11 T3 04M-KM										☆	☆	★	☆			★		☆						6.8	10.0	3.59	0.9
			0.80	R390-11 T3 08M-KM										☆	☆	★	☆			★		☆						6.8	10.0	3.59	1.2
			1.20	R390-11 T3 12E-KM												☆				★		☆						6.8	10.0	3.59	0.8
			1.60	R390-11 T3 16E-KM												☆				★		☆						6.8	10.0	3.59	0.8
			1.60	R390-11 T3 16M-KM										☆		★	☆			★		☆						6.8	10.0	3.59	0.4
			2.00	R390-11 T3 20E-KM												☆				★		☆						6.8	10.0	3.59	0.4
			2.40	R390-11 T3 24E-KM												☆				★		☆						6.8	10.0	3.59	
			3.10	R390-11 T3 31E-KM												☆				★		☆						6.8	10.0	3.59	
			3.10	R390-11 T3 31M-KM										☆		★	☆			★		☆						6.8	10.0	3.59	
		17	0.40	R390-17 04 04E-KM												☆				★		☆						9.6	15.7	4.76	1.0
			0.40	R390-17 04 04M-KM										☆	☆	★	☆			★		☆						9.6	15.7	4.76	1.0
			0.80	R390-17 04 08M-KM										☆	☆	★	☆			★		☆						9.6	15.7	4.76	1.5
			1.20	R390-17 04 12E-KM												☆				★		☆						9.6	15.7	4.76	1.1
			1.60	R390-17 04 16E-KM												☆				★		☆						9.6	15.7	4.76	0.7
			1.60	R390-17 04 16M-KM										☆		★	☆			★		☆						9.6	15.7	4.76	0.7
			2.00	R390-17 04 20E-KM												☆				★		☆						9.6	15.7	4.76	0.3
			2.40	R390-17 04 24E-KM												☆				★		☆						9.6	15.7	4.76	
			3.10	R390-17 04 31E-KM												☆				★		☆						9.6	15.7	4.76	
			3.10	R390-17 04 31M-KM										☆		★	☆			★		☆						9.6	15.7	4.76	
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			6.00	R390-17 04 60E-KM												☆				★		☆						9.6	15.7	4.76	
			6.35	R390-17 04 64E-KM												☆				★		☆						9.6	15.7	4.76	
		18	0.80	R390-18 06 08M-KM										☆	☆	★												11.0	15.4	6.33	1.1
			1.20	R390-18 06 12M-KM										☆	☆	★												11.0	15.4	6.33	1.1
			1.60	R390-18 06 16M-KM										☆	☆	★												11.0	15.4	6.33	1.1
			2.00	R390-18 06 20M-KM										☆	☆	★												11.0	15.4	6.33	0.5
			3.10	R390-18 06 31M-KM										☆	☆	★												11.0	15.4	6.33	0.5
	KMR	18	1.20	R390-18 06 12M-KMR										☆	☆	★												11.0	15.4	6.33	0.3

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Pastilha CoroMill® 390 para fresamento

KRINS 90°





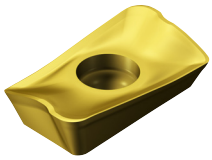
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Medium	MM	07	0.20	390R-070202M-MM						★																		4.0	5.9	2.40	0.7
			0.40	390R-070204E-MM						★													★					4.0	5.9	2.40	0.7
			0.40	390R-070204M-MM						★													★					4.0	5.9	2.40	0.7
			0.80	390R-070208E-MM						★													★					4.0	5.9	2.40	0.7
			0.80	390R-070208M-MM						★													★					4.0	5.9	2.40	0.7
			1.20	390R-070212M-MM						★													★					4.0	5.9	2.40	0.7
			1.60	390R-070216M-MM						★													★					4.0	5.9	2.40	0.2
		11	0.20	R390-11 T3 02E-MM						★																		6.8	10.0	3.59	0.7
			0.80	R390-11 T3 08M-MM						★		☆											★	☆				6.8	10.0	3.59	1.2
			1.20	R390-11 T3 12E-MM						★																		6.8	10.0	3.59	0.8
			1.60	R390-11 T3 16E-MM						★																		6.8	10.0	3.59	0.4
			2.00	R390-11 T3 20E-MM						★																		6.8	10.0	3.59	
			2.40	R390-11 T3 24E-MM						★																		6.8	10.0	3.59	
			3.10	R390-11 T3 31E-MM						★																		6.8	10.0	3.59	
		17	0.40	R390-17 04 04E-MM						★																		9.6	15.7	4.76	1.0
			0.80	R390-17 04 08M-MM						★		☆											★	☆				9.6	15.7	4.76	1.5
			1.20	R390-17 04 12E-MM						★																		9.6	15.7	4.76	1.1
			1.60	R390-17 04 16E-MM						★																		9.6	15.7	4.76	0.7
			2.00	R390-17 04 20E-MM						★																		9.6	15.7	4.76	0.3
			2.40	R390-17 04 24E-MM						★																		9.6	15.7	4.76	
			3.10	R390-17 04 31E-MM						★																		9.6	15.7	4.76	
			4.00	R390-17 04 40E-MM						★																		9.6	15.7	4.76	
			4.80	R390-17 04 48E-MM						★																		9.6	15.7	4.76	
			5.00	R390-17 04 50E-MM						★																		9.6	15.7	4.76	
			6.00	R390-17 04 60E-MM						★																		9.6	15.7	4.76	
			6.35	R390-17 04 64E-MM						★																		9.6	15.7	4.76	
		18	0.80	R390-18 06 08M-MM						★		☆																11.0	15.4	6.33	1.1
			1.20	R390-18 06 12M-MM						★		☆																11.0	15.4	6.33	1.1
			1.60	R390-18 06 16M-MM						★		☆																11.0	15.4	6.33	1.1
			2.00	R390-18 06 20M-MM						★		☆																11.0	15.4	6.33	0.5
			3.10	R390-18 06 31M-MM						★		☆																11.0	15.4	6.33	0.5
	MMR	18	1.20	R390-18 06 12M-MMR						★		☆																11.0	15.4	6.33	0.3

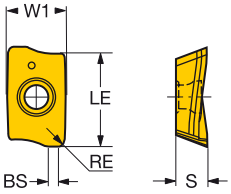
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SANDVIK Coromant

Pastilha CoroMill® 390 para fresamento

KRINS 90°



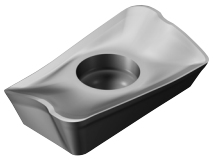


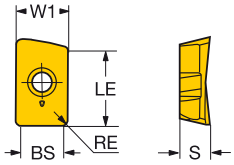
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Medium	PM	07	0.20	390R-070202M-PM	★			★			☆							☆			☆					☆		4.0	5.9	2.40	0.7
			0.40	390R-070204M-PM	★		★	☆			☆							☆			☆					☆		4.0	5.9	2.40	0.7
			0.80	390R-070208M-PM	★		★	☆			☆							☆			☆					☆		4.0	5.9	2.40	0.7
			1.20	390R-070212M-PM	★			★			☆							☆			☆					☆		4.0	5.9	2.40	0.7
			1.60	390R-070216M-PM	★			★			☆							☆			☆					☆		4.0	5.9	2.40	0.2
		11	0.20	R390-11 T3 02E-PM	★			★			☆							☆			☆					☆		6.8	10.0	3.59	0.7
			0.40	R390-11 T3 04M-PM	★	☆		★	☆		☆		☆					☆	☆		☆					☆	☆	6.8	10.0	3.59	0.9
			0.80	R390-11 T3 08M-PM	★	☆	★	☆	☆		☆		☆					☆	☆		☆		★	☆	★	☆	☆	6.8	10.0	3.59	1.2
			1.20	R390-11 T3 12E-PM	★			★			☆							☆			☆		★	☆	★	☆		6.8	10.0	3.59	0.8
			1.60	R390-11 T3 16E-PM	★			★			☆							☆			☆				★	☆		6.8	10.0	3.59	0.4
			1.60	R390-11 T3 16M-PM	★	☆		★			☆							☆			☆		★	☆	★	☆		6.8	10.0	3.59	0.4
			2.00	R390-11 T3 20E-PM	★			★			☆							☆			☆		★	☆	★	☆		6.8	10.0	3.59	
			2.40	R390-11 T3 24E-PM	★			★			☆							☆			☆					☆		6.8	10.0	3.59	
			3.10	R390-11 T3 31E-PM	★			★			☆							☆			☆				★	☆		6.8	10.0	3.59	
			3.10	R390-11 T3 31M-PM	★	☆		★			☆							☆			☆		★	☆	★	☆		6.8	10.0	3.59	
		17	0.40	R390-17 04 04E-PM	★			★			☆							☆			☆		★	☆		☆		9.6	15.7	4.76	1.0
			0.40	R390-17 04 04M-PM	★	☆		★	☆		☆		☆					☆	☆		☆					☆	☆	9.6	15.7	4.76	1.0
			0.80	R390-17 04 08M-PM	★	☆	★	☆	☆		☆		☆					☆	☆		☆		★	☆	★	☆	☆	9.6	15.7	4.76	1.5
			1.20	R390-17 04 12E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	1.1
			1.60	R390-17 04 16E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	0.7
			1.60	R390-17 04 16M-PM	★	☆		★			☆							☆			☆		★	☆		☆		9.6	15.7	4.76	0.7
			2.00	R390-17 04 20E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	0.3
			2.40	R390-17 04 24E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	
			3.10	R390-17 04 31E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	
			3.10	R390-17 04 31M-PM	★	☆		★			☆							☆			☆		★	☆		☆		9.6	15.7	4.76	
			4.00	R390-17 04 40E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	
			4.80	R390-17 04 48E-PM	★						☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	
			5.00	R390-17 04 50E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	
			6.00	R390-17 04 60E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	
			6.35	R390-17 04 64E-PM	★			★			☆							☆			☆		★	☆	★	☆		9.6	15.7	4.76	
		18	0.80	R390-18 06 08M-PM	★	☆	★	☆			☆							☆			☆					☆		11.0	15.4	6.33	1.1
			1.20	R390-18 06 12M-PM	★	☆	★	☆			☆							☆			☆		★	☆	★	☆		11.0	15.4	6.33	1.1
			1.60	R390-18 06 16M-PM	★	☆	★	☆			☆							☆			☆		★	☆		☆		11.0	15.4	6.33	1.1
			2.00	R390-18 06 20M-PM	★	☆	★	☆			☆							☆			☆					☆		11.0	15.4	6.33	0.5
			3.10	R390-18 06 31M-PM	★	☆	★	☆			☆							☆			☆		★	☆		☆		11.0	15.4	6.33	0.5
	PMR	18	1.20	R390-18 06 12M-PMR	★		★	☆			☆							☆			☆		★	☆		☆		11.0	15.4	6.33	0.3
Pesada	KH	11	1.00	R390-11 T3 10M-KH										☆	☆	★												6.8	10.0	3.59	1.0
		17	0.80	R390-17 04 08M-KH										☆	☆	★												9.6	15.7	4.76	1.5
	MH	11	1.00	R390-11 T3 10M-MH						★		☆																6.8	10.0	3.59	1.0
	PH	11	1.00	R390-11 T3 10M-PH	☆	☆	☆	★			☆							☆			☆		★	☆		☆		6.8	10.0	3.59	1.0
		17	0.80	R390-17 04 08M-PH		☆		★																				9.6	15.7	4.76	1.5
			1.60	R390-17 04 16M-PH			☆	★																				9.6	15.7	4.76	1.5

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Pastilha CoroMill® 390 para fresamento

KRINS 90°

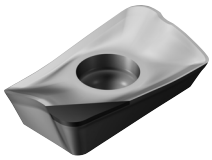


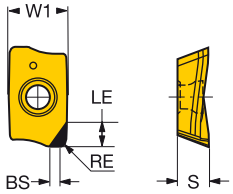


Wiper TECHNOLOGY

			RE	Código para pedido	P	M	K		N	S	H	Dimensões, mm			
					1130	1130	1020	1025	1130	1130	1130	W1	LE	S	BS
Leve	KTW	18	1.60	R390-18 06 16H-KTW			★					11.0	15.4	6.33	8.6
	PLW	11	0.80	R390-11 T3 08E-PLW	★	☆		☆	☆	☆	☆	6.8	10.0	3.59	5.0
		18	1.60	R390-18 06 16H-PTW	★	☆				☆	☆	11.0	15.4	6.33	8.6

KRINS 90°





Materiais de corte avançados

			RE	Código para pedido	N	Dimensões, mm			
					CD10	W1	LE	S	BS
Leve	NL	11	0.40	R390-11T304E-P4-NL	★	6.8	4.0	3.59	2.2
		17	0.80	R390-170408E-P6-NL	★	9.6	6.0	4.76	1.8

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SANDVIK Coromant

CoroMill® 690

A aresta de corte para fresamento de titânio

Aplicação

- Fresamento de perfis 2D de titânio
- Usinagem de borda e canais em cheio

Área de aplicação ISO:

S



Características e benefícios

- Fresamento de titânio com alta produtividade
- Interface iLock™ proporciona um processo seguro, maior avanço e vida útil da ferramenta mais longa
- Fornecimento de fluido de corte, individual para cada bolsão da pastilha
- Fluxo e pressão totalmente controlados através de furos roscados - por olhais ou parafusos
- Pastilhas para desempenho otimizado no fresamento de topo e faceamento

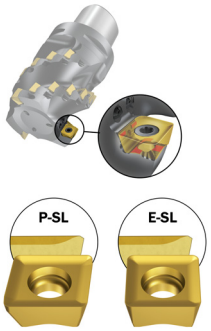
www.sandvik.coromant.com/coromill690

Acoplamentos

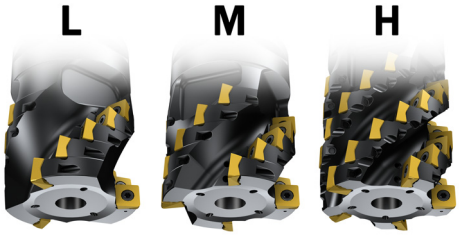
- Coromant Capto®
- Árvore
- HSK
- Versões de tamanhos muito grandes estão disponíveis

Pastilhas

- Quatro arestas de corte
- Geometria SL otimizada para titânio



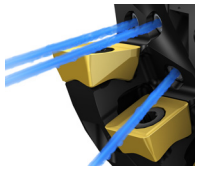
P-SL = pastilha lateral (ou periferia)
E-SL = pastilha da extremidade



Passo largo Passo fino Passo extra fino

Refrigeração

Durante o corte, os cavacos podem ter a tendência de grudar na aresta de corte. Isso significa que a próxima rotação da fresa irá recortar o cavaco novamente. Ao equipar todos os bolsões da pastilha com olhais para refrigeração de alta pressão, você pode aplicar refrigeração máxima quando necessário. Isto elimina o constante problema de desempenho da aresta de corte de forma eficiente. Fornecer fluido de corte a todos os bolsões da pastilha em fresas com aresta longa requer capacidade de pressão e volume da bomba altos.



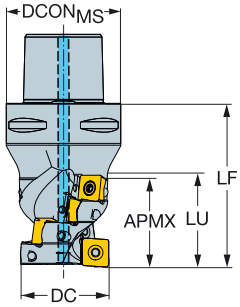
I80 I82

Fresa CoroMill® 690 de aresta longa para cantos a 90 graus

Coromant Capto® - Refrigeração interna

KAPR 90°





DC	APMXFFW			CZCMS	CNSC			Código para pedido	Dimensões, mm DCONMS	DCX	LF	LU	NM	KG	RPMX	CICT	MIIDE	MIIDP
40.0	53.0	10E	10P	C6	3	2		690-040C6-1053H	63.0	40.0	95.0	55.0	3.0	1.54	5000	10	690-100508M-E-SL	690-100510M-P-SL
44.0	46.0	10E	10P	C4	3	3		690-044C4-1046H	40.0	44.0	82.0		3.0	0.81	5000	15	690-100508M-E-SL	690-100510M-P-SL
50.0	53.0	10E	10P	C5	3	3		690-050C5-1053H	50.0	50.0	90.0	70.0	3.0	1.16	5000	3	690-100508M-E-SL	690-100510M-P-SL
54.0	53.0	10E	10P	C5	3	3		690-054C5-1053H	50.0	54.0	90.0		3.0	1.31	5000	3	690-100508M-E-SL	690-100510M-P-SL
	61.0	14E	14P	C5	3	3		690-054C5-1461H	50.0	54.0	97.0		5.0	1.39	5000	3	690-140608M-E-SL	690-140610M-P-SL
63.0	60.0	10E	10P	C6	3		3	690-063C6-1060M	63.0	63.0	100.0	78.0	3.0	2.21	5000	3	690-100508M-E-SL	690-100510M-P-SL
	61.0	14E	14P	C6	3	3		690-063C6-1461H	63.0	63.0	103.0	79.0	5.0	2.13	5000	3	690-140608M-E-SL	690-140610M-P-SL
	112.0	10E	10P	C6	3	4		690-063C6-10112H	63.0	63.0	156.0	134.0	3.0	2.85	5000	56	690-100508M-E-SL	690-100510M-P-SL
66.0	49.0	14E	14P	C6	3	3		690-066C6-1449H	63.0	66.0	90.0		5.0	2.01	5000	3	690-140608M-E-SL	690-140610M-P-SL
	53.0	10E	10P	C6	3	4		690-066C6-1053H	63.0	66.0	92.0		3.0	2.19	5000	24	690-100508M-E-SL	690-100510M-P-SL
	105.0	10E	10P	C6	3	4		690-066C6-10105H	63.0	66.0	150.0		3.0	2.88	5000	52	690-100508M-E-SL	690-100510M-P-SL
80.0	73.0	14E	14P	C8	3	4		690-080C8-1473H	80.0	80.0	128.0	92.0	5.0	4.24	5000	4	690-140608M-E-SL	690-140610M-P-SL
84.0	61.0	14E	14P	C8	3		4	690-084C8-1461M	80.0	84.0	110.0		5.0	3.93	5000	4	690-140608M-E-SL	690-140610M-P-SL
	61.0	14E	14P	C8	3		3	690-084C8-1461L	80.0	84.0	112.0		5.0	3.99	5000	3	690-140608M-E-SL	690-140610M-P-SL
	84.0	14E	14P	C8	3	5		690-084C8-1484H	80.0	84.0	132.0		5.0	4.57	5000	5	690-140608M-E-SL	690-140610M-P-SL
100.0	108.0	14E	14P	C8	3	4		690-100C8-14108M	80.0	100.0	160.0		5.0	6.80	5000	4	690-140608M-E-SL	690-140610M-P-SL

		Componentes	
DC		Parafuso da pastilha	Parafuso do plugue
40.00	10	5513 020-68	3214 010-202
44.00	10	5513 020-68	3214 010-202
50.00-66.00	10	5513 020-68	3214 010-253
54.00-100.00	14	5513 020-55	3214 010-253

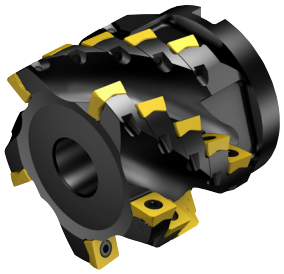
Para a lista completa de componentes, acesse www.sandvik.coromant.com

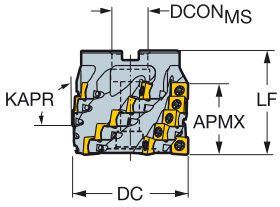
I82 L2 N23 N9 N15

Fresa CoroMill® 690 de aresta longa para cantos a 90 graus

Árvore

STDNO ISO6462
KAPR 90°



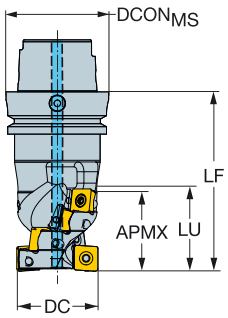


DC	APMXFFW			CZCMS			Código para pedido	Dimensões, mm DCONMS	ISO	DCX	LF	NM	KG	RPMX	CICT	MIIDE	MIIDP
50.0	46.0	10E	10P	22	3		690-050Q22-1046H	22.0	A	50.0	75.0	3.0	0.98	5000	3	690-100508M-E-SL	690-100510M-P-SL
63.0	46.0	10E	10P	27		3	690-063Q27-1046M	27.0	A	63.0	80.0	3.0	1.48	5000	3	690-100508M-E-SL	690-100510M-P-SL
	49.0	14E	14P	27	3		690-063Q27-1449H	27.0	A	63.0	80.0	5.0	1.30	5000	9	690-140608M-E-SL	690-140610M-P-SL
80.0	61.0	14E	14P	32		3	690-080Q32-1461M	32.0	A	80.0	98.0	5.0	2.42	5000	3	690-140608M-E-SL	690-140610M-P-SL
100.0	61.0	14E	14P	32	5		690-100Q32-1461H	32.0	A	100.0	90.0	5.0	3.56	5000	5	690-140608M-E-SL	690-140610M-P-SL

HSK - Refrigeração interna

KAPR 90°





DC	APMXFFW			CZCMS	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	LF	LU	NM	KG	RPMX	CICT	MIIDE	MIIDP
63.0	105.0	10E	10P	125	1	4	690-063HA12-10105H	125.0	63.0	180.0	110.0	3.0	7.51	5000	4	690-100508M-E-SL	690-100510M-P-SL

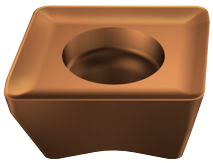
		Componentes	
DC		Parafuso da pastilha	Parafuso do plugue
50.00-63.00	10	5513 020-68	3214 010-253
63.00-100.00	14	5513 020-55	3214 010-253

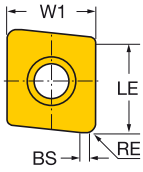
Para a lista completa de componentes, acesse www.sandvik.coromant.com

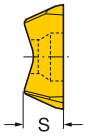
I82 L2 M1 N23 N9

Pastilha CoroMill® 690 para fresamento

KRINS 90°





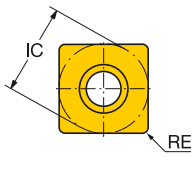


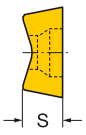
Pastilha da extremidade

			RE	Código para pedido	S 1030	S 2040	S S30T	S S40T	Dimensões, mm W1	LE	S	BS
Leve	SL	10E	0.80	690-100508M-E-SL	☆	☆	★	☆	10.0	10.0	5.20	1.0
			1.20	690-100512M-E-SL	☆		★	☆	10.0	10.0	5.20	1.0
			1.60	690-100516M-E-SL	☆	☆	★	☆	10.0	10.0	5.20	1.0
			2.00	690-100520M-E-SL	☆		★	☆	10.0	10.0	5.20	1.0
			3.10	690-100531M-E-SL	☆	☆	★	☆	10.0	10.0	5.20	1.0
		14E	0.80	690-140608M-E-SL	☆	☆	★	☆	14.5	14.7	6.35	1.0
			1.20	690-140612M-E-SL	☆		★	☆	14.5	14.7	6.35	1.0
			1.60	690-140616M-E-SL	☆		★	☆	14.5	14.7	6.35	1.0
			2.00	690-140620M-E-SL				☆	14.5	14.7	6.35	1.0
			2.40	690-140624M-E-SL				☆	14.5	14.7	6.35	1.0
			3.10	690-140631M-E-SL	☆		★	☆	14.5	14.7	6.35	1.0
			5.00	690-140650M-E-SL			★		14.5	15.7	6.35	1.0
			6.00	690-140660M-E-SL	☆		★		14.5	16.5	6.35	1.0
			6.35	690-140664M-E-SL			★		14.5	16.7	6.35	1.0

KRINS 90°







Pastilha periférica

			RE	Código para pedido	S 1030	S 2040	S S30T	S S40T	Dimensões, mm IC	LE	S
Leve	SL	10P	1.00	690-100510M-P-SL	☆	☆	★	☆	10.0	9.0	5.20
		14P	1.00	690-140610M-P-SL	☆	☆	★	☆	14.5	13.5	6.35

CoroMill® Century

Fresa de facear de corte leve para acabamento com alta velocidade

Aplicação

- Fresamento de cantos a 90°
- Faceamento



Área de aplicação ISO:

P M K N S H

Características e benefícios

- Segurança na usinagem com altas velocidades devido ao desenho da ferramenta
- Escoamento de cavacos intensificado por meio do fluido de corte acelerado
- Fácil ajuste de microprecisão, dentro da faixa de ajuste de 0,1 mm
- Corpo de alumínio alta-liga com montagem tipo Árvore
- Opção de pastilha Wiper para acabamento com altos avanços

www.sandvik.coromant.com/coromillcentury

Acoplamentos

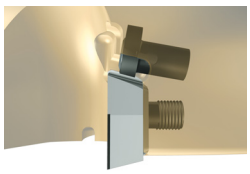
- Coromant Capto®
- Árvore
- HSK

Pastilhas

- Uma ou duas arestas de corte
- Amplo programa de raios de canto e chanfro
- Geometrias e classes de pastilhas para todos os materiais incluindo PCD e CBN

Microajuste?

Ajuste de microprecisão da pastilha dentro da faixa de ajuste de 0,1 mm na solução de cassete.

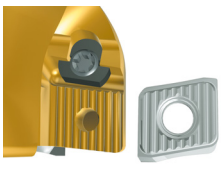


Macroajuste

Macroajuste da pastilha dentro da faixa de ajuste de 1 mm.

Ajuste da pastilha

O posicionamento da pastilha serrilhada proporciona alta segurança contra o movimento da mesma.



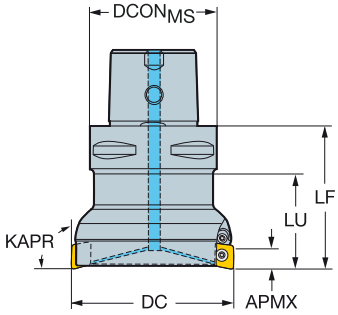
I84 I87 N6

Fresa CoroMill® Century para cantos a 90 graus

Coromant Capto® - Refrigeração interna

KAPR 90°





DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC	ZADJ		Código para pedido	Dimensões, mm DCON$_{MS}$	LF	LU	NM	KG	RPMX	CICT	MIID
40.0	11	C3	11.00	3	3	3	**R590-040C3-11M**	32.0	55.0	40.0	3.0	0.65	48000	3	R590-1105..
	11	C4	11.00	3	3	3	**R590-040C4-11M**	40.0	63.0	40.0	3.0	0.83	39000	3	R590-1105..
50.0	11	C5	11.00	3	4	4	**R590-050C5-11M**	50.0	63.0	40.0	3.0	1.38	28000	4	R590-1105..
63.0	11	C5	11.00	3	5	5	**R590-063C5-11M**	50.0	63.0	40.0	3.0	1.50	28000	5	R590-1105..
80.0	11	C6	11.00	3	6	6	**R590-080C6-11M**	63.0	71.0		3.0	2.38	20000	6	R590-1105..

Componentes

Parafuso da pastilha	Dispositivo de ajuste	Parafuso do dispositivo de ajuste
5513 020-25	5513 014-021	5513 014-02

Para a lista completa de componentes, acesse www.sandvik.coromant.com

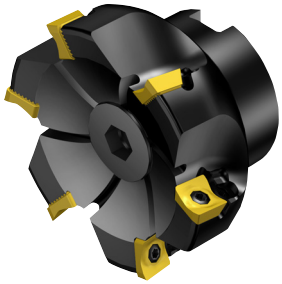
I87 L2 N23 N9 N15

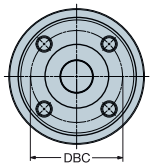
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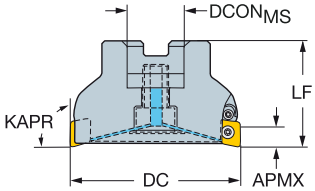
Fresa CoroMill® Century para cantos a 90 graus

Árvore - refrigeração interna

STDNO ISO6462
KAPR 90°







DC		CZCMS	APMXFFW	CNSC	ZADJ		Código para pedido	Dimensões, mm DCONMS	ISO	DBC	LF	NM	KG	RPMX	CICT	MIID
50.0	11	22	11.00	1	4	4	R590-050Q22S-11M	22.0	A		40.0	3.0	0.68	41600	4	R590-1105..
63.0	11	22	11.00	1	5	5	R590-063Q22S-11M	22.0	A		40.0	3.0	0.81	35100	5	R590-1105..
80.0	11	27	11.00	1	6	6	R590-080Q27A-11M	27.0	A		50.0	3.0	1.04	27500	6	R590-1105..
	11	27	11.00	1	6	6	R590-080Q27S-11M	27.0	A		50.0	3.0	1.57	27500	6	R590-1105..
100.0	11	32	11.00	1	6	6	R590-100Q32A-11M	32.0	A		50.0	3.0	1.37	23800	6	R590-1105..
	11	32	11.00	1	6	6	R590-100Q32S-11M	32.0	A		50.0	3.0	2.21	23800	6	R590-1105..
125.0	11	40	11.00	1	8	8	R590-125Q40A-11M	40.0	B		63.0	3.0	1.84	20700	8	R590-1105..
	11	40	11.00	1	8	8	R590-125Q40S-11M	40.0	B		63.0	3.0	3.34	20700	8	R590-1105..
160.0	11	40	11.00	1	10	10	R590-160Q40A-11M	40.0	B		63.0	3.0	2.74	17900	10	R590-1105..
	11	40	11.00	1	10	10	R590-160Q40S-11M	40.0	B		63.0	3.0	5.65	17900	10	R590-1105..
200.0	11	60	11.00	0	16	16	R590-200Q60A-11M	60.0	C	101.6	63.0	3.0	7.26	15700	16	R590-1105..
	11	60	11.00	0	16	16	R590-200Q60S-11M	60.0	C	101.6	63.0	3.0	12.00	15700	16	R590-1105..

		Componentes			
DC		Parafuso da pastilha	Parafuso para refrigeração	Dispositivo de ajuste	Parafuso do dispositivo de ajuste
50.00-63.00	11	5513 020-25	5512 087-01	5513 014-021	5513 014-02
80.00	11	5513 020-25	5512 087-02	5513 014-021	5513 014-02
100.00	11	5513 020-25	5512 087-03	5513 014-021	5513 014-02
125.00-160.00	11	5513 020-25	5512 098-03	5513 014-021	5513 014-02
200.00	11	5513 020-25		5513 014-021	5513 014-02

Para a lista completa de componentes, acesse www.sandvik.coromant.com

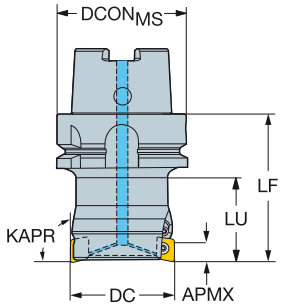
I87 L2 M1 N23 N9 N15

Fresa CoroMill® Century para cantos a 90 graus

HSK - Refrigeração interna

KAPR 90°





DC		CZC$_{MS}$	APMX$_{FFW}$	CNSC	ZADJ		Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	LF	LU	NM	KG	RPMX	CICT	MIID
40.0	11	63	11.00	1	3	3	**R590-040HA06-11M**	63.0	A	71.0	40.0	3.0	1.41	20000	3	R590-1105..
50.0	11	63	11.00	1	4	4	**R590-050HA06-11M**	63.0	A	71.0	40.0	3.0	1.58	20000	4	R590-1105..

Componentes		
Parafuso da pastilha	Dispositivo de ajuste	Parafuso do dispositivo de ajuste
5513 020-25	5513 014-021	5513 014-02

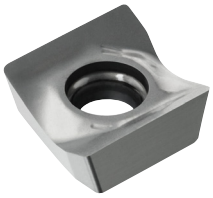
Para a lista completa de componentes, acesse www.sandvik.coromant.com

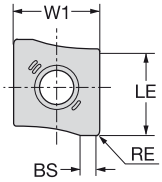
I87 L2 N23 N9 N15

SANDVIK Coromant

Pastilha CoroMill® Century para fresamento

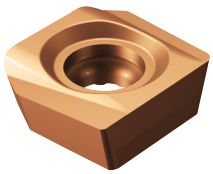
KRINS 90°

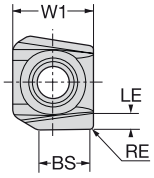




			RE	Código para pedido	K		N	H	Dimensões, mm			
					1020	H10	H10	1130	W1	LE	S	BS
Leve	KL	11	0.80	R590-110508H-KL	★				11.5	11.0	5.00	1.7
	NL	11	0.40	R590-110504H-NL		☆	★		11.5	11.0	5.00	2.0
	PL	11	0.80	R590-110508H-PL				☆	11.5	11.0	5.00	1.7

KRINS 90°





TECHNOLOGY Wiper

			RE	Código para pedido	P	M	K	N		S	H	Dimensões, mm				
					1130	1130	1020	1130	H10	1130	1130	W1	LE	S	BS	BSR
Leve	KTW	11	0.40	R590-110504H-KTW			☆					11.5	11.0	5.00	7.0	
	KW	11	0.80	R590-110508H-KW							☆	11.5	11.0	5.00	7.0	500.0
	NW	11	0.40	R590-110504H-NW					☆		☆	11.5	11.0	5.00	7.0	500.0
	PTW	11	0.40	R590-110504H-PTW	☆	☆		☆		☆	☆	11.5	11.0	5.00	7.0	
	PW	11	0.80	R590-110508H-PW	☆	☆		☆		☆	☆	11.5	11.0	5.00	7.0	500.0

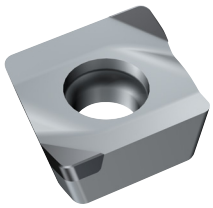
Certifique-se de escolher a pastilha de corte e a pastilha Wiper com os mesmos valores RE/KCH

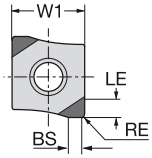
I84 I154 I175 N23 N6 N10 N2

Pastilha CoroMill® Century para fresamento

Materiais de corte avançados

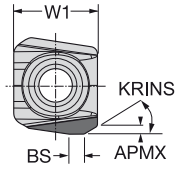
KRINS 90°



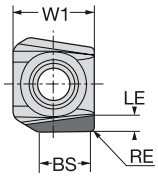


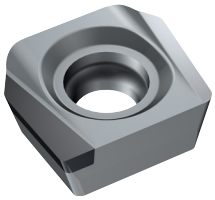
			RE	KCH	CHW	Código para pedido	K CB50	H CB50	Dimensões, mm W1	LE	S	BS	BSR
Leve	KL	11		30°	1.0	L590-1105H-ZC2-KL	☆	☆	11.5	3.0	5.00	2.3	200.0
				60°	1.5	R590-1105H-ZC2-KL	☆	☆	11.5	3.0	5.00	2.3	200.0
Média	KM	11	0.80			R590-110508H-PR2-KM	☆	☆	11.5	2.0	5.00	1.5	25.0

KRINS 90°
R/L590..H-Z..-KW



90°
R590..PR2-KW





TECHNOLOGY Wiper

			RE	KCH	CHW	Código para pedido	K CB50	H CB50	Dimensões, mm W1	LE	S	BS	BSR
Leve	KW	11		30°	1.0	L590-1105H-ZC2-KW	☆	☆	11.5	3.0	5.00	5.9	390.0
				60°	1.5	R590-1105H-ZC2-KW	☆	☆	11.5	3.0	5.00	5.9	390.0
	NW	11	0.80			R590-110508H-PR2-KW	☆	☆	11.5	2.0	5.00	7.1	393.0

Certifique-se de escolher a pastilha de corte e a pastilha Wiper com os mesmos valores RE/KCH

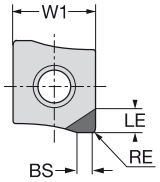
I84 I154 I175 N23 N6 N10 N2

Pastilha CoroMill® Century para fresamento

Materiais de corte avançados

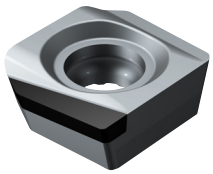
KRINS 90°

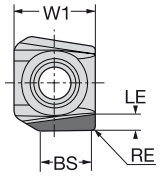




			RE	KCH	CHW	Código para pedido	N CD10	Dimensões, mm W1	LE	S	BS	BSR
Leve	NL	11		45°	1.0	R590-1105H-PC2-NL	★	11.5	3.0	5.00	1.5	200.0
				45°	1.0	R590-1105H-PC5-NL	★	11.5	6.0	5.00	1.5	200.0
			0.40			R590-1105H-PR2-NL	★	11.5	3.0	5.00	2.2	200.0
			0.40			R590-1105H-PR5-NL	★	11.5	6.0	5.00	2.2	200.0
				45°	0.3	R590-1105H-PS2-NL	★	11.5	3.0	5.00	2.2	200.0
				45°	0.1	R590-1105H-PS5-NL	★	11.5	6.0	5.00	2.2	200.0

KRINS 90°





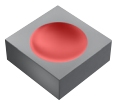
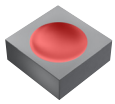
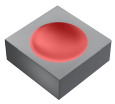
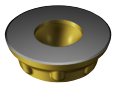
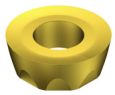
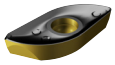
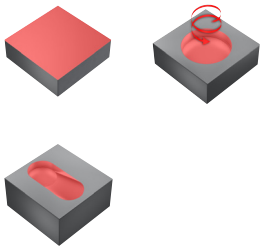
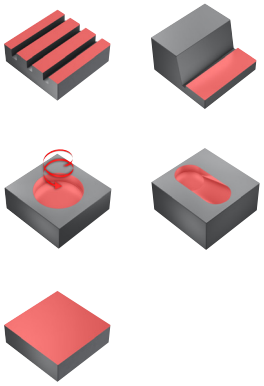
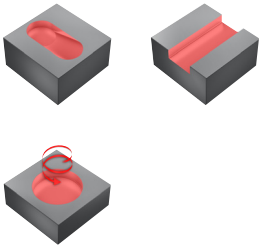
TECHNOLOGY Wiper

			RE	KCH	CHW	Código para pedido	N CD10	Dimensões, mm W1	LE	S	BS	BSR
Leve	NW	11		45°	1.2	R590-1105H-RC2-NW	☆	11.5	3.0	5.00	6.0	500.0
			0.40			R590-1105H-RR2-NW	☆	11.5	3.0	5.00	6.8	500.0
				45°	0.3	R590-1105H-RS2-NW	☆	11.5	3.0	5.00	7.0	500.0

Certifique-se de escolher a pastilha de corte e a pastilha Wiper com os mesmos valores RE/KCH

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Ferramentas para fresamento de perfis

	CoroMill® 300	CoroMill® 200	CoroMill® 216
			
Página	I91	I100	I105
Material	P M K N S H	P M K N S H	P M K N S H
Operação principal			
KAPR	0°	0°	90°
D_c mm	5 - 180	15 - 140	10 - 50
DCX mm	10 - 200	25 - 160	10 - 50
APMX mm	2.5 - 10	5 - 10	8.6 - 44.6
Pastilha			
Tamanhos da pastilha	05,07,08,10,12,16 & 20	10,12,16 & 20	10,12,16,20,25,30,32, 40 & 50
Acoplamentos	Coromant Capto® Coromant EH Cilíndrica Árvore Weldon Acoplamento com rosca	Haste cilíndrica Árvore	Coromant Capto® Haste cilíndrica Coromant EH Acoplamento com rosca Weldon
Refrigeração interna	✓		✓
Opções		Tip-seat com proteção do calço	
Outras operações			

CoroMill® 300

Fresas para perfilamento e faceamento de corte leve

Aplicação

- Fresamento de canais em cheio
- Faceamento
- Usinagem em rampa
- Perfilamento
- Fresamento de bolsões

Área de aplicação ISO:

P M K N S H



Características e benefícios

- Produto universal com uma ampla variedade de aplicação
- Amplo programa que abrange muitas aplicações
- As fresas com desenho positivo têm ação de corte leve e geram baixas forças de corte, o que permite o uso de versões de fresas de facear com passo extra fino com pastilhas pequenas para maior produtividade com altas velocidades e altos avanços da mesa
- Fresas de topo com acessibilidade e ação de corte excelentes em todas as direções de avanço para usinagem multieixos de perfis complexos

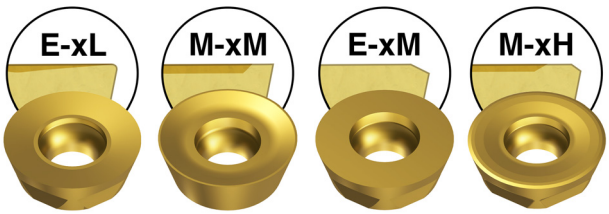
www.sandvik.coromant.com/coromill300

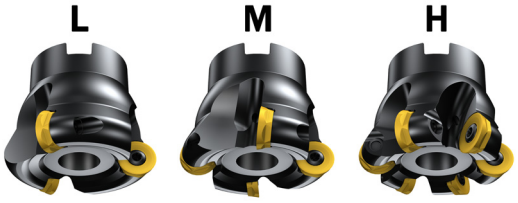
Acoplamentos

- Coromant Capto®
- Árvore
- Haste cilíndrica
- Weldon
- Coromant EH
- Acoplamentos com rosca e classes para todos os materiais

Pastilhas

- Geometrias e classes de pastilha para todos os materiais

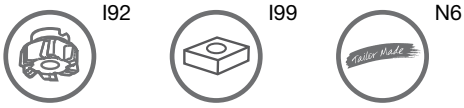




Passo largo Passo fino Passo extra fino

A solução de indexação da pastilha específica para pastilhas de tamanho 20 evita o movimento da pastilha e permite que todas as arestas de corte sejam usadas.



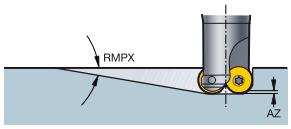


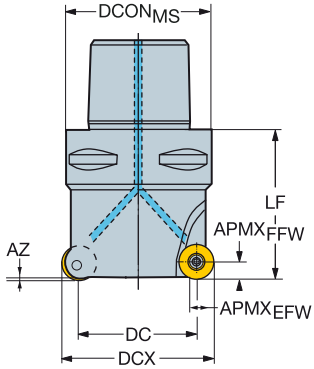
Fresa de facear CoroMill® 300

Coromant Capto® - Refrigeração interna

Desenho positivo







DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	BD	LF	NM	KG	RPMX	CICT	MIID
23.0	12	C3	9.0	6.00	10°	3.0	3		3	R300-035C3-12M	32.0	35.0	28.3	43.0	3.0	0.36	32900	3	R300-1240..
	12	C3	9.0	6.00	10°	3.0	3	4		R300-035C3-12H	32.0	35.0	28.3	43.0	3.0	0.30	32900	4	R300-1240..
25.0	10	C3	7.5	5.00	7°	2.3	3	4		R300-035C3-10H	32.0	35.0	29.1	40.0	3.0	0.36	43200	4	R300-1032..
27.0	08	C3	6.0	4.00	4°	1.9	3		4	R300-035C3-08M	32.0	35.0	30.3	40.0	1.2	0.31	33800	4	R300-0828..
	08	C3	6.0	4.00	4°	1.9	3	5		R300-035C3-08H	32.0	35.0	30.3	40.0	1.2	0.31	33800	5	R300-0828..
30.0	12	C4	9.0	6.00	7°	3.0	3		3	R300-042C4-12M	40.0	42.0	35.3	50.0	3.0	0.60	28300	3	R300-1240..
	12	C4	9.0	6.00	7°	3.0	3	4		R300-042C4-12H	40.0	42.0	35.3	50.0	3.0	0.58	28300	4	R300-1240..
32.0	10	C4	7.5	5.00	5°	2.3	3	5		R300-042C4-10H	40.0	42.0	36.1	50.0	3.0	0.58	37200	5	R300-1032..
34.0	08	C4	6.0	4.00	3°	1.9	3	6		R300-042C4-08H	40.0	42.0	37.3	50.0	1.2	0.40	29800	6	R300-0828..
36.0	16	C5	12.0	8.00	7°	3.8	3		4	R300-052C5-16M	50.0	52.0	40.9	60.0	5.0	1.04	20600	4	R300-1648..
	16	C5	12.0	8.00	7°	3.8	3	5		R300-052C5-16H	50.0	52.0	40.9	60.0	5.0	1.04	20600	5	R300-1648..
40.0	12	C5	9.0	6.00	5°	3.0	3		4	R300-052C5-12M	50.0	52.0	45.3	50.0	3.0	0.98	24400	4	R300-1240..
	12	C5	9.0	6.00	5°	3.0	3	5		R300-052C5-12H	50.0	52.0	45.3	50.0	3.0	0.99	24000	5	R300-1240..
44.0	08	C5	6.0	4.00	2°	1.9	3	8		R300-052C5-08H	50.0	52.0	47.3	50.0	1.2	1.00	26100	8	R300-0828..
46.0	20	C6	15.0	10.00	9°	6.0	3		4	R300-066C6-20M	63.0	66.0		80.0	7.5	1.88	18478	4	R300-2060..
	20	C6	15.0	10.00	9°	6.0	3	5		R300-066C6-20H	63.0	66.0		80.0	7.5	1.83	18478	5	R300-2060..
50.0	16	C6	12.0	8.00	4°	3.8	3		5	R300-066C6-16M	63.0	66.0	54.9	60.0	5.0	1.77	17600	5	R300-1648..
	16	C6	12.0	8.00	4°	3.8	3	6		R300-066C6-16H	63.0	66.0	54.9	60.0	5.0	1.75	17600	6	R300-1648..
54.0	12	C6	9.0	6.00	3°	3.0	3		5	R300-066C6-12M	63.0	66.0	59.3	50.0	3.0	1.65	21700	5	R300-1240..
	12	C6	9.0	6.00	3°	3.0	3	7		R300-066C6-12H	63.0	66.0	59.3	50.0	3.0	1.67	21700	7	R300-1240..
58.0	08	C6	6.0	4.00	1°	1.9	3	10		R300-066C6-08H	63.0	66.0	61.3	50.0	1.2	1.65	23100	10	R300-0828..
60.0	20	C6	15.0	10.00	6°	6.0	3		5	R300-080C6-20M	63.0	80.0		80.0	7.5	2.24	15622	5	R300-2060..
	20	C6	15.0	10.00	6°	6.0	3	6		R300-080C6-20H	63.0	80.0		80.0	7.5	2.20	15622	6	R300-2060..
64.0	16	C6	12.0	8.00	3°	3.8	3		5	R300-080C6-16M	63.0	80.0	68.9	60.0	5.0	2.02	15400	5	R300-1648..
	16	C6	12.0	8.00	3°	3.8	3	7		R300-080C6-16H	63.0	80.0	68.9	60.0	5.0	2.02	15400	7	R300-1648..
68.0	12	C6	9.0	6.00	2°	3.0	3		6	R300-080C6-12M	63.0	80.0	73.3	50.0	3.0	1.82	18900	6	R300-1240..
	12	C6	9.0	6.00	2°	3.0	3	8		R300-080C6-12H	63.0	80.0	59.3	50.0	3.0	1.72	18900	8	R300-1240..
72.0	08	C6	6.0	4.00	1°	1.9	3	12		R300-080C6-08H	63.0	80.0	75.3	50.0	1.2	1.84	20500	12	R300-0828..
80.0	20	C8	15.0	10.00	4°	6.0	3		6	R300-100C8-20M	80.0	100.0		80.0	7.5	3.72	12843	6	R300-2060..
	20	C8	15.0	10.00	4°	6.0	3	7		R300-100C8-20H	80.0	100.0		80.0	7.5	3.48	12843	7	R300-2060..

	Componentes
	Parafuso da pastilha
08	5513 020-56
10	5513 020-09
12	5513 020-09
16	5513 020-50
20	5513 020-31

Para a lista completa de componentes, acesse www.sandvik.coromant.com

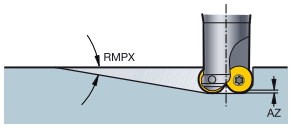
I99 L2 N23 N6 N9 N15

Fresa de facear CoroMill® 300

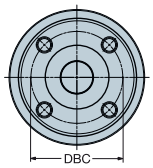
Árvore - refrigeração interna

Desenho positivo

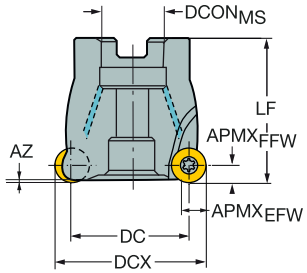




STDNO



ISO6462



DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	ISO	DBC	DCX	LF	NM	KG	RPMX	CICT	MIID
32.0	08	16	6.0	4.00	3°	1.9	1		5	R300-040Q16-08M	16.0	A		40.0	40.0	1.2	0.44	30800	5	R300-0828..
	08	16	6.0	4.00	3°	1.9	1	6		R300-040Q16-08H	16.0	A		40.0	40.0	1.2	0.20	30800	6	R300-0828..
38.0	12	22	9.0	6.00	5°	3.0	1		4	R300-050Q22-12M	22.0	A		50.0	50.0	3.0	0.44	25000	4	R300-1240..
	12	22	9.0	6.00	5°	3.0	1	5		R300-050Q22-12H	22.0	A		50.0	50.0	3.0	0.40	25000	5	R300-1240..
40.0	12	22	9.0	6.00	5°	3.0	1		4	R300-052Q22-12M	22.0	A		52.0	50.0	3.0	0.79	24400	4	R300-1240..
	12	22	9.0	6.00	5°	3.0	1	5		R300-052Q22-12H	22.0	A		52.0	50.0	3.0	0.46	24400	5	R300-1240..
42.0	08	22	6.0	4.00	2°	1.9	1	8		R300-050Q22-08H	22.0	A		50.0	50.0	1.2	0.45	26700	8	R300-0828..
44.0	08	22	6.0	4.00	2°	1.9	1	8		R300-052Q22-08H	22.0	A		52.0	50.0	1.2	0.85	26100	8	R300-0828..
47.0	16	22	12.0	8.00	5°	3.8	1		4	R300-063Q22-16M	22.0	A		63.0	50.0	5.0	0.72	18200	4	R300-1648..
	16	22	12.0	8.00	5°	3.8	1	6		R300-063Q22-16H	22.0	A		63.0	50.0	5.0	0.86	18200	6	R300-1648..
51.0	12	22	9.0	6.00	3°	3.0	1		4	R300-063Q22-12L	22.0	A		63.0	50.0	3.0	0.97	22100	4	R300-1240..
	12	22	9.0	6.00	3°	3.0	1		5	R300-063Q22-12M	22.0	A		63.0	50.0	3.0	0.60	22100	5	R300-1240..
	12	22	9.0	6.00	3°	3.0	1	7		R300-063Q22-12H	22.0	A		63.0	50.0	3.0	0.57	22100	7	R300-1240..
55.0	08	22	6.0	4.00	1°	1.9	1	10		R300-063Q22-08H	22.0	A		63.0	50.0	1.2	0.82	23700	10	R300-0828..
60.0	20	27	15.0	10.00	6°	6.0	1		5	R300-080Q27-20M	27.0	A		80.0	50.0	7.5	0.95	15622	5	R300-2060..
	20	27	15.0	10.00	6°	6.0	1	6		R300-080Q27-20H	27.0	A		80.0	50.0	7.5	1.07	15622	6	R300-2060..
64.0	16	27	12.0	8.00	3°	3.8	1		5	R300-080Q27-16M	27.0	A		80.0	50.0	5.0	0.98	15400	5	R300-1648..
	16	27	12.0	8.00	3°	3.8	1	7		R300-080Q27-16H	27.0	A		80.0	50.0	5.0	1.15	15400	7	R300-1648..
68.0	12	27	9.0	6.00	2°	3.0	1		6	R300-080Q27-12M	27.0	A		80.0	50.0	3.0	0.90	18900	6	R300-1240..
	12	27	9.0	6.00	2°	3.0	1	8		R300-080Q27-12H	27.0	A		80.0	50.0	3.0	1.06	18900	8	R300-1240..
72.0	08	27	6.0	4.00	1°	1.9	1	12		R300-080Q27-08H	27.0	A		80.0	50.0	1.2	1.31	20500	12	R300-0828..
80.0	20	32	15.0	10.00	4°	6.0	1		5	R300-100Q32-20L	32.0	A		100.0	63.0	7.5	2.46	12843	5	R300-2060..
	20	32	15.0	10.00	4°	6.0	1		6	R300-100Q32-20M	32.0	A		100.0	63.0	7.5	2.40	12843	6	R300-2060..
	20	32	15.0	10.00	4°	6.0	1	7		R300-100Q32-20H	32.0	A		100.0	63.0	7.5	2.41	12843	7	R300-2060..
84.0	16	32	12.0	8.00	2°	3.8	1		6	R300-100Q32-16M	32.0	A		100.0	50.0	5.0	1.68	13300	6	R300-1648..
	16	32	12.0	8.00	2°	3.8	1	8		R300-100Q32-16H	32.0	A		100.0	50.0	5.0	1.67	13300	8	R300-1648..
105.0	20	40	15.0	10.00	3°	6.0	1		7	R300-125Q40-20M	40.0	B		125.0	63.0	7.5	3.03	10768	7	R300-2060..
	20	40	15.0	10.00	3°	6.0	1	9		R300-125Q40-20H	40.0	B		125.0	63.0	7.5	2.93	10768	9	R300-2060..
109.0	16	32	12.0	8.00	1°	3.8	1		8	R300-125Q32-16M	32.0	A		125.0	63.0	5.0	2.55	11900	8	R300-1648..
	16	32	12.0	8.00	1°	3.8	1	10		R300-125Q32-16H	32.0	A		125.0	63.0	5.0	2.88	11900	10	R300-1648..
140.0	20	40	15.0	10.00	2°	6.0	1		9	R300-160Q40-20M	40.0	B		160.0	63.0	7.5	4.93	9106	9	R300-2060..
	20	40	15.0	10.00	2°	6.0	1	11		R300-160Q40-20H	40.0	B		160.0	63.0	7.5	4.83	9106	11	R300-2060..
180.0	20	60	15.0	10.00	1°	6.0	0		11	R300-200Q60-20M	60.0	C	101.6	200.0	63.0	7.5	11.20	7799	11	R300-2060..

	Componentes
	Parafuso da pastilha
08	5513 020-56
12	5513 020-09
16	5513 020-50
20	5513 020-31

Para a lista completa de componentes, acesse www.sandvik.coromant.com

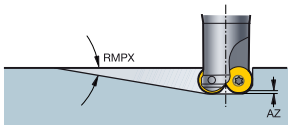
I99 L2 M1 N23 N6 N9 N15

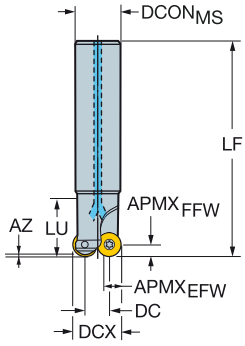
Fresa de facear CoroMill® 300

Haste cilíndrica - refrigeração interna

Desenho positivo







DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
15.0	10	20	7.5	5.00	13°	2.3	1		2	**R300-025A20-10M**	20.0	25.0	19.1	33.0	150.0	3.0	0.50	2850	2	R300-1032..
17.0	08	20	6.0	4.00	8°	1.9	1		3	**R300-025A20-08M**	20.0	25.0	20.3	25.0	150.0	1.2	0.44	7200	3	R300-0828..
20.0	12	25	9.0	6.00	12°	3.0	1		2	**R300-032A25-12M**	25.0	32.0	25.3	25.0	190.0	3.0	0.82	8900	2	R300-1240..
	12	25	9.0	6.00	12°	3.0	1	3		**R300-032A25-12H**	25.0	32.0	25.3	25.0	150.0	3.0	0.65	3550	3	R300-1240..
22.0	10	25	7.5	5.00	7°	2.3	1		3	**R300-032A25-10M**	25.0	32.0	26.1	25.0	190.0	3.0	0.82	1470	3	R300-1032..
	10	25	7.5	5.00	7°	2.3	1	4		**R300-032A25-10H**	25.0	32.0	26.1	25.0	150.0	3.0	0.70	2850	4	R300-1032..
24.0	08	25	6.0	4.00	5°	1.9	1		4	**R300-032A25-08M**	25.0	32.0	27.3	25.0	190.0	1.2	0.79	9000	4	R300-0828..
	08	25	6.0	4.00	5°	1.9	1	5		**R300-032A25-08H**	25.0	32.0	27.3	25.0	150.0	1.2	0.61	3590	5	R300-0828..
28.0	12	32	9.0	6.00	8°	3.0	1		3	**R300-040A32-12M**	32.0	40.0	33.3	25.0	250.0	3.0	1.78	1140	3	R300-1240..
	12	32	9.0	6.00	8°	3.0	1	4		**R300-040A32-12H**	32.0	40.0	33.3	25.0	150.0	3.0	1.01	2850	4	R300-1240..

		Componentes
DC		Parafuso da pastilha
17.00-24.00	08	5513 020-56
15.00	10	5513 020-43
22.00	10	5513 020-09
20.00-28.00	12	5513 020-09

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I99 L2 N23 N6 N9 N15

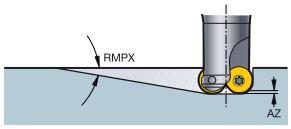
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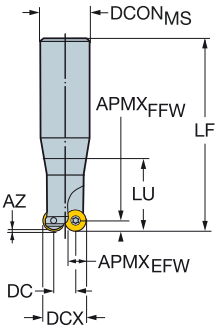
Fresa de facear CoroMill® 300

Haste cilíndrica

Desenho neutro







DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ		Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	BD	LB	LF	LU	NM	KG	RPMX	CICT	MIID
5.0	05	16	3.8	2.50	20°	1.8	2	R300-010A16L-05L	16.0	10.0	9.1	18.0	160.0	25.4	0.6	0.32	15900	2	R300-0517..
	07 20	16	5.3	3.50	20°	1.0	2	R300-012A16L-07L	16.0	12.0	10.4	21.0	200.0	37.8	0.9	0.38	8900	2	R300-0720..
8.0	07 24	20	5.3	3.50	20°	0.9	2	R300-015A20L-07L	20.0	15.0	13.4	25.0	200.0	43.8	0.9	0.54	12700	2	R300-0724..
	08	20	6.0	4.00	20°	1.8	2	R300-016A20L-08L	20.0	16.0	14.1	25.0	200.0	51.9	1.2	0.54	12700	2	R300-0828..
10.0	10	25	7.5	5.00	20°	3.4	2	R300-020A25L-10L	25.0	20.0	18.1	30.0	250.0	48.8	3.0	0.87	8100	2	R300-1032..
12.0	12	25	9.0	6.00	20°	2.7	2	R300-024A25L-12L	25.0	24.0	22.1	30.0	250.0	76.0	3.0	1.20	8900	2	R300-1240..
13.0	12	32	9.0	6.00	20°	1.4	2	R300-025A32L-12L	32.0	25.0	23.1	30.0	250.0	42.9	3.0	1.69	15800	2	R300-1240..
16.0	16	32	12.0	8.00	20°	4.8	2	R300-032A32L-16L	32.0	32.0	29.0	40.0	250.0	72.2	5.0	1.76	8700	2	R300-1648..

	Componentes
DC	Parafuso da pastilha
5.00	05	5513 020-40
5.00	07 20	5513 020-41
8.00	07 24	5513 020-42
8.00	08	5513 020-36
10.00	10	5513 020-43
12.00-13.00	12	5513 020-39
16.00	16	5513 020-50

Para a lista completa de componentes, acesse www.sandvik.coromant.com

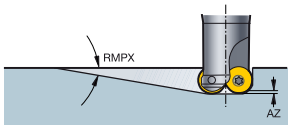
I99 L2 N23 N6 N9

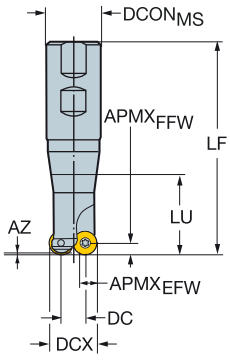
Fresa de facear CoroMill® 300

Weldon

Desenho neutro







DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ		Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	DCX	BD	LB	LF	LU	NM	KG	RPMX	CICT	MIID
5.0	07 20	16	5.3	3.50	20°	1.0	2	R300-012B16L-07L	16.0	WE	12.0	10.4	21.0	109.0	37.6	0.9	0.24	34000	2	R300-0720..
8.0	07 24	20	5.3	3.50	20°	0.9	2	R300-015B20L-07L	20.0	WE	15.0	13.4	25.0	131.0	43.6	0.9	0.38	25000	2	R300-0724..
	08	20	6.0	4.00	20°	1.8	2	R300-016B20L-08L	20.0	WE	16.0	14.1	25.0	131.0	51.6	1.2	0.38	24700	2	R300-0828..
10.0	10	25	7.5	5.00	20°	3.4	2	R300-020B25L-10L	25.0	WE	20.0	18.1	30.0	137.0	48.4	3.0	0.58	34000	2	R300-1032..
13.0	12	32	9.0	6.00	20°	1.4	2	R300-025B32L-12L	32.0	WE	25.0	23.1	30.0	141.0	42.8	3.0	0.82	20200	2	R300-1240..

	Componentes	
DC		Parafuso da pastilha
5.00	07 20	5513 020-41
8.00	07 24	5513 020-42
8.00	08	5513 020-36
10.00	10	5513 020-43
13.00	12	5513 020-39

Para a lista completa de componentes, acesse www.sandvik.coromant.com

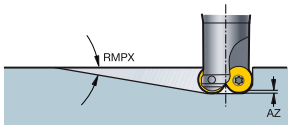
I99 L2 N23 N6 N9

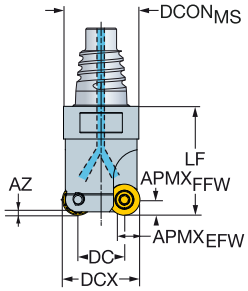
SANDVIK Coromant

Fresa de facear CoroMill® 300

Coromant EH - Refrigeração interna







Desenho neutro

DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
5.0	05	E10	3.8	2.50	20°	1.8	1	2	R300-10EH10-05L	9.7	10.0	9.0	13.1	20.0	0.6	0.06	20000	2	R300-0517..
	07 20	E12	5.3	3.50	20°	1.0	1	2	R300-12EH12-07L	11.7	12.0	10.3	17.5	25.0	0.9	0.07	20000	2	R300-0720..
7.0	05	E12	3.8	2.50	10°	1.0	1	3	R300-12EH12-05M	11.7	12.0	11.0	12.5	20.0	0.6	0.10	20000	3	R300-0517..
8.0	07 20	E12	5.3	3.50	20°	1.1	1	3	R300-15EH12-07M	11.7	15.0	13.3	17.5	25.0	0.9	0.10	20000	3	R300-0720..
	07 24	E12	5.3	3.50	20°	0.9	1	2	R300-15EH12-07L	11.7	15.0	13.3	17.5	25.0	0.9	0.10	20000	2	R300-0724..
	08	E16	6.0	4.00	20°	1.8	1	2	R300-16EH16-08L	15.5	16.0	14.0	21.3	30.0	1.2	0.09	20000	2	R300-0828..
9.0	07 20	E16	5.3	3.50	15°	0.9	1	3	R300-16EH16-07M	15.5	16.0	14.3	16.3	25.0	0.9	0.11	20000	3	R300-0720..
10.0	10	E20	7.5	5.00	20°	3.4	1	2	R300-20EH20-10L	19.3	20.0	18.0	25.0	35.0	3.0	0.12	20000	2	R300-1032..
12.0	08	E20	6.0	4.00	12°	1.5	1	3	R300-20EH20-08M	19.3	20.0	18.0	20.0	30.0	1.2	0.13	20000	3	R300-0828..
	12	E20	9.0	6.00	20°	2.7	1	2	R300-24EH20-12L	19.3	24.0	22.0	25.0	35.0	3.0	0.17	15000	2	R300-1240..
15.0	10	E25	7.5	5.00	15°	1.1	1	2	R300-25EH25-10L	24.2	25.0	23.0	24.5	35.0	3.0	0.20	15000	2	R300-1032..
	10	E25	7.5	5.00	15°	1.3	1	3	R300-25EH25-10M	24.2	25.0	23.0	24.5	35.0	3.0	0.19	15000	3	R300-1032..
16.0	16	E25	12.0	8.00	20°	4.8	1	2	R300-32EH25-16L	24.2	32.0	28.9	29.5	40.0	5.0	0.23	15000	2	R300-1648..
20.0	12	E25	9.0	6.00	15°	1.4	1	3	R300-32EH25-12M	24.2	32.0	30.0	24.5	35.0	3.0	0.21	15000	3	R300-1240..
22.0	10	E25	7.5	5.00	10°	1.7	1	4	R300-32EH25-10H	24.2	32.0	30.0	24.5	35.0	3.0	0.23	15000	4	R300-1032..

Desenho positivo

DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
17.0	08	E25	6.0	4.00	5°	0.6	1		3	R300-25EH25-08M	24.2	25.0	20.3	24.5	35.0	1.2	0.17	15000	3	R300-0828..
24.0	08	E25	6.0	4.00	5°	2.0	1		4	R300-32EH25-08M	24.2	32.0	27.3	24.5	35.0	1.2	0.21	15000	4	R300-0828..
	08	E25	6.0	4.00	5°	2.0	1	5		R300-32EH25-08H	24.2	32.0	27.3	24.5	35.0	1.2	0.20	15000	5	R300-0828..

Desenho neutro

	Componentes
DC	Parafuso da pastilha
5.00-9.00 07 20	5513 020-41
8.00 07 24	5513 020-42
5.00-7.00 05	5513 020-40
8.00-12.00 08	5513 020-36
10.00-22.00 10	5513 020-43
12.00-20.00 12	5513 020-39
16.00 16	5513 020-50

Desenho positivo

Componentes
Parafuso da pastilha
5513 020-56

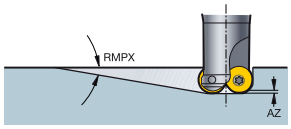
Para a lista completa de componentes, acesse www.sandvik.coromant.com

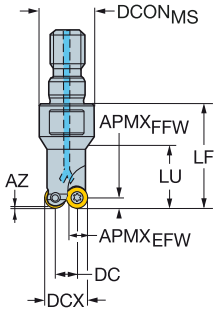
I99 L2 N23 N6 N9 N15 N3

Fresa de facear CoroMill® 300

Acoplamento com rosca - Refrigeração interna







Desenho neutro

DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	LU	NM	KG	RPMX	CICT	MIID
5.0	07 20	M8	5.3	3.50	20°	1.0	0	2	R300-12T08-07L	12.8	12.0	10.4	21.0	25.0	17.3	0.9	0.09	9100	2	R300-0720..
7.0	05	M8	3.8	2.50	10°	1.0	0	3	R300-12T08-05M	12.8	12.0	11.1	18.0	25.0		0.6	0.05	9100	3	R300-0517..
8.0	07 24	M8	5.3	3.50	20°	0.9	0	2	R300-15T08-07L	12.8	15.0	13.4		25.0		0.9	0.10	9100	2	R300-0724..
	08	M8	6.0	4.00	20°	1.8	0	2	R300-16T08-08L	12.8	16.0	14.0		25.0		1.2	0.05	9100	2	R300-0828..
10.0	10	M10	7.5	5.00	20°	3.4	1	2	R300-20T10-10L	17.8	20.0	18.1		30.0		3.0	0.09	9100	2	R300-1032..
12.0	08	M10	6.0	4.00	12°	1.5	1	3	R300-20T10-08M	17.8	20.0	18.1		30.0		1.2	0.03	9100	3	R300-0828..
	12	M12	9.0	6.00	20°	2.7	1	2	R300-24T12-12L	20.8	24.0	22.1		35.0		3.0	0.18	9100	2	R300-1240..
15.0	10	M12	7.5	5.00	15°	1.1	1	2	R300-25T12-10L	20.8	25.0	23.1		35.0		3.0	0.16	9100	2	R300-1032..
	10	M12	7.5	5.00	15°	1.3	1	3	R300-25T12-10M	20.8	25.0	23.1		35.0		3.0	0.20	9100	3	R300-1032..
20.0	12	M16	9.0	6.00	15°	1.4	1	3	R300-32T16-12M	28.8	32.0	30.1		45.0		3.0	0.31	9100	3	R300-1240..
22.0	10	M16	7.5	5.00	10°	1.7	1	4	R300-32T16-10H	28.8	32.0	30.1		45.0		3.0	0.33	9100	4	R300-1032..
23.0	12	M16	9.0	6.00	16°	5.0	1	3	R300-35T16-12M	28.8	35.0	33.1		45.0		3.0	0.34	9100	3	R300-1240..
25.0	10	M16	7.5	5.00	10°	3.6	1	4	R300-35T16-10H	28.8	35.0	33.1		45.0		3.0	0.38	9100	4	R300-1032..
28.0	12	M16	9.0	6.00	13°	5.0	1	4	R300-40T16-12M	28.8	40.0	38.1		45.0		3.0	0.35	9100	4	R300-1240..
30.0	10	M16	7.5	5.00	8°	3.6	1	5	R300-40T16-10H	28.8	40.0	38.1		45.0		3.0	0.37	9100	5	R300-1032..
	12	M16	9.0	6.00	12°	5.0	1	4	R300-42T16-12M	28.8	42.0	40.1		45.0		3.0	0.04	9100	4	R300-1240..
32.0	10	M16	7.5	5.00	7°	3.6	1	5	R300-42T16-10H	28.8	42.0	40.1		45.0		3.0	0.41	9100	5	R300-1032..

Desenho positivo

DC		CZCMS	APMXEFW	APMXFFW	RMPX	AZ	CNSC			Código para pedido	Dimensões, mm DCONMS	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
17.0	08	M12	6.0	4.00	8°	1.9	1		3	R300-25T12-08M	20.8	25.0	20.3	18.0	35.0	1.2	0.18	9100	3	R300-0828..
24.0	08	M16	6.0	4.00	5°	1.9	1		4	R300-32T16-08M	28.8	32.0	27.3	28.0	45.0	1.2	0.30	9100	4	R300-0828..
	08	M16	6.0	4.00	5°	1.9	1	5		R300-32T16-08H	28.8	32.0	27.3	28.0	45.0	1.2	0.30	9100	5	R300-0828..
32.0	08	M16	6.0	4.00	3°	1.9	1	6		R300-40T16-08H	28.8	40.0	35.3	28.0	45.0	1.2	0.38	9100	6	R300-0828..

Desenho neutro

	Componentes
DC	Parafuso da pastilha
5.00 07 20	5513 020-41
8.00 07 24	5513 020-42
7.00 05	5513 020-40
8.00-12.00 08	5513 020-36
10.00-32.00 10	5513 020-43
12.00-30.00 12	5513 020-39

Desenho positivo

Componentes
Parafuso da pastilha
5513 020-56

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I99



N23



N6



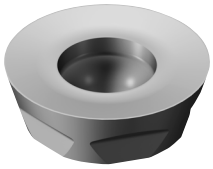
N9

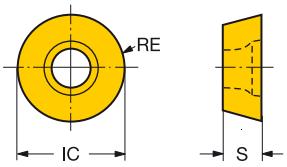


N15

SANDVIK Coromant

Pastilha CoroMill® 300 para fresamento





		RE	Código para pedido	P				M		K			N		S				H		Dimensões, mm	
				1130	4220	4330	4340	1040	1130	2040	1020	3040	3330	H13A	1130	H13A	1130	H13A	S30T	S40T	1010	1130	IC	S
Leve	08	4.00	R300-0828E-KL										☆		★			☆					8.0	2.78
		4.00	R300-0828E-PL	★					☆						☆		☆		★	☆	★	☆	8.0	2.78
	10	5.00	R300-1032E-KL										☆		★			☆					10.0	3.18
		5.00	R300-1032E-PL	★					☆						☆		☆		★	☆	★	☆	10.0	3.18
	12	6.00	R300-1240E-ML					★		☆													12.0	3.97
		6.00	R300-1240E-PL	☆			★		☆						☆		☆		★	☆	★	☆	12.0	3.97
	16	8.00	R300-1648E-ML					★		☆													16.0	4.76
		8.00	R300-1648E-PL	☆					☆						☆		☆		★	☆		☆	16.0	4.76
	20	10.00	R300-2060E-ML					★		☆													20.0	6.48
		10.00	R300-2060E-PL	☆					☆						☆		☆			★		☆	20.0	6.48
Média	05	2.50	R300-0517E-PM	★			☆		☆						☆		☆					☆	5.0	1.70
	07 20	3.50	R300-0720E-MM							★													7.0	1.99
	07 20	3.50	R300-0720E-PM	★			☆								☆		☆					☆	7.0	1.99
	07 24	3.50	R300-0724E-MM							★													7.0	2.38
	07 24	3.50	R300-0724E-PM	★			☆								☆		☆					☆	7.0	2.38
	08	4.00	R300-0828E-KM								★												8.0	2.78
		4.00	R300-0828E-MM					★		☆													8.0	2.78
		4.00	R300-0828E-PM	☆			★		☆						☆		☆		★	☆	★	☆	8.0	2.78
		4.00	R300-0828M-MM					★		☆													8.0	2.78
		4.00	R300-0828M-PM	☆			★		☆						☆		☆		★	☆		☆	8.0	2.78
	10	5.00	R300-1032E-MM					★		☆													10.0	3.18
		5.00	R300-1032E-PM	☆			★		☆						☆		☆		★	☆	★	☆	10.0	3.18
		5.00	R300-1032M-MM					★		☆													10.0	3.18
		5.00	R300-1032M-PM	☆		★	☆		☆						☆		☆		★	☆		☆	10.0	3.18
	12	6.00	R300-1240E-KM								☆		★										12.0	3.97
		6.00	R300-1240E-MM					★		☆													12.0	3.97
		6.00	R300-1240E-PM	☆			★		☆						☆		☆		★	☆	★	☆	12.0	3.97
		6.00	R300-1240M-MM					★		☆													12.0	3.97
		6.00	R300-1240M-PM	☆	☆	★	☆		☆						☆		☆		★	☆		☆	12.0	3.97
	16	8.00	R300-1648E-MM					★		☆													16.0	4.76
		8.00	R300-1648E-PM	☆			★		☆						☆		☆		★	☆	★	☆	16.0	4.76
		8.00	R300-1648M-MM					★		☆													16.0	4.76
		8.00	R300-1648M-PM	☆		★	☆		☆						☆		☆		★	☆		☆	16.0	4.76
	20	10.00	R300-2060E-MM							☆													20.0	6.48
		10.00	R300-2060E-PM	☆					☆						☆		☆			★	★	☆	20.0	6.48
		10.00	R300-2060M-MM					★		☆													20.0	6.48
		10.00	R300-2060M-PM	☆		★	☆		☆						☆		☆			★		☆	20.0	6.48
Pesada	08	4.00	R300-0828M-KH									☆	★										8.0	2.78
		4.00	R300-0828M-MH							★													8.0	2.78
		4.00	R300-0828M-PH	☆		★	☆		☆						☆		☆					☆	8.0	2.78
	10	5.00	R300-1032M-KH										★										10.0	3.18
		5.00	R300-1032M-MH							★													10.0	3.18
		5.00	R300-1032M-PH	☆	☆	★	☆		☆						☆		☆					☆	10.0	3.18
	12	6.00	R300-1240M-KH								☆	☆	★										12.0	3.97
		6.00	R300-1240M-MH							★													12.0	3.97
		6.00	R300-1240M-PH	☆	☆	★	☆		☆						☆		☆			★	★	☆	12.0	3.97
	16	8.00	R300-1648M-KH								☆	☆	★										16.0	4.76
		8.00	R300-1648M-MH							★													16.0	4.76
		8.00	R300-1648M-PH	☆	☆	★	☆		☆						☆		☆			★	★	☆	16.0	4.76
	20	10.00	R300-2060M-KH									☆	★										20.0	6.48
		10.00	R300-2060M-MH							★													20.0	6.48
		10.00	R300-2060M-PH	☆	☆	★	☆		☆						☆		☆				★	☆	20.0	6.48

I92 I154 I175 N23 N10

CoroMill® 200

Faceamento robusto e fresa para perfis

Aplicação

- Fresamento de canais em cheio
- Faceamento
- Usinagem em rampa
- Perfilamento
- Fresamento de bolsões

Área de aplicação ISO:

P M K N S H



Características e benefícios

- Confiabilidade e segurança do processo
- Alta taxa de remoção de metal
- Proteção do calço disponível

www.sandvik.coromant.com/coromill200

Acoplamentos

- Árvore
- Haste cilíndrica

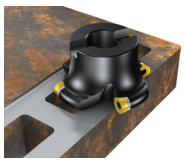
Pastilhas

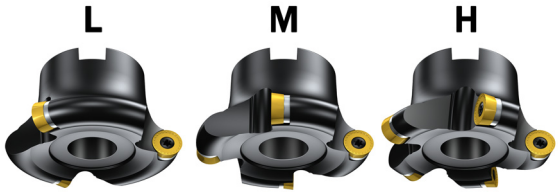
- 8 arestas de corte
- Geometrias e classes de pastilha para todos os materiais
- Geometrias de pastilha para faixas de remoção de cavacos elevadas – grandes AP e f_z



Confiabilidade e segurança do processo

As robustas arestas de corte tornam a fresa resistente em condições difíceis como interrupções (furos, lacunas etc.) e/ou cascas abrasivas.





Passo largo Passo fino Passo extra fino

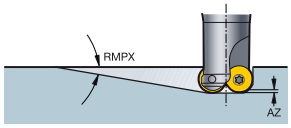
I101 I103

POR

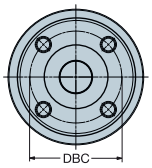
Fresa de facear CoroMill® 200

Árvore

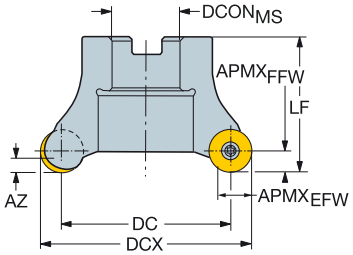




STDNO



ISO6462



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ			Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	DBC	DCX	BD	LF	NM	KG	RPMX	CICT	MIID
38.0	12	22	9.0	6.00	6°	3.7		3	R200-038Q22-12L	22.0	A		50.0	50.0	50.0	3.0	0.65	18800	3	RCKT 12 04 M0
	12	22	9.0	6.00	6°	3.7		4	R200-038Q22-12M	22.0	A		50.0	50.0	50.0	3.0	0.66	18800	4	RCKT 12 04 M0
	12	22	9.0	6.00	6°	3.7	5		R200-038Q22-12H	22.0	A		50.0	50.0	50.0	3.0	0.78	18800	5	RCKT 12 04 M0
40.0	12	22	9.0	6.00	6°	3.7		3	R200-040Q22-12L	22.0	A		52.0	52.0	50.0	3.0	0.70	18000	3	RCKT 12 04 M0
	12	22	9.0	6.00	6°	3.7		4	R200-040Q22-12M	22.0	A		52.0	52.0	50.0	3.0	0.68	18000	4	RCKT 12 04 M0
	12	22	9.0	6.00	6°	3.7	5		R200-040Q22-12H	22.0	A		52.0	52.0	50.0	3.0	0.66	18000	5	RCKT 12 04 M0
47.0	16	22	12.0	8.00	7°	4.9		4	R200-047Q22-16M	22.0	A		63.0	63.0	50.0	5.0	0.80	15300	4	RCKT 16 06 M0
50.0	16	27	12.0	8.00	6°	4.9		4	R200-050Q27-16M	27.0	A		66.0	66.0	50.0	5.0	0.86	14500	4	RCKT 16 06 M0
	16	27	12.0	8.00	6°	4.9	5		R200-050Q27-16H	27.0	A		66.0	66.0	50.0	5.0	0.75	14500	5	RCKT 16 06 M0
51.0	12	22	9.0	6.00	4°	3.7		3	R200-051Q22-12L	22.0	A		63.0	63.0	50.0	3.0	0.81	16200	3	RCKT 12 04 M0
	12	22	9.0	6.00	4°	3.7		4	R200-051Q22-12M	22.0	A		63.0	63.0	50.0	3.0	0.74	16200	4	RCKT 12 04 M0
	12	22	9.0	6.00	4°	3.7	5		R200-051Q22-12H	22.0	A		63.0	63.0	50.0	3.0	0.82	16200	5	RCKT 12 04 M0
60.0	20	27	15.0	10.00	7°	6.1		3	R200-060Q27-20L	27.0	A		80.0	80.0	50.0	7.5	1.00	10600	3	RCKT 20 06 M0
	20	27	15.0	10.00	7°	6.1	4		R200-060Q27-20M	27.0	A		80.0	80.0	50.0	7.5	0.89	10600	4	RCKT 20 06 M0
64.0	16	27	12.0	8.00	5°	4.9		4	R200-064Q27-16L	27.0	A		80.0	80.0	50.0	5.0	1.16	13100	4	RCKT 16 06 M0
	16	27	12.0	8.00	5°	4.9	5		R200-064Q27-16M	27.0	A		80.0	80.0	50.0	5.0	1.02	13100	5	RCKT 16 06 M0
	16	27	12.0	8.00	5°	4.9	6		R200-064Q27-16H	27.0	A		80.0	80.0	50.0	5.0	0.96	13100	6	RCKT 16 06 M0
68.0	12	27	9.0	6.00	3°	3.7		4	R200-068Q27-12L	27.0	A		80.0	80.0	50.0	3.0	1.05	14000	4	RCKT 12 04 M0
	12	27	9.0	6.00	3°	3.7		6	R200-068Q27-12M	27.0	A		80.0	80.0	50.0	3.0	0.92	14000	6	RCKT 12 04 M0
80.0	20	32	15.0	10.00	5°	6.1		4	R200-080Q32-20L	32.0	B		100.0	100.0	63.0	7.5	1.73	9200	4	RCKT 20 06 M0
	20	32	15.0	10.00	5°	6.1	6		R200-080Q32-20M	32.0	B		100.0	100.0	63.0	7.5	1.54	9200	6	RCKT 20 06 M0
84.0	16	32	12.0	8.00	3°	4.9		6	R200-084Q32-16M	32.0	B		100.0	100.0	50.0	5.0	1.62	11400	6	RCKT 16 06 M0
88.0	12	32	9.0	6.00	2°	3.7		4	R200-088Q32-12L	32.0	B		100.0	100.0	50.0	3.0	1.66	12300	4	RCKT 12 04 M0
	12	32	9.0	6.00	2°	3.7		6	R200-088Q32-12M	32.0	B		100.0	100.0	50.0	3.0	1.50	12300	6	RCKT 12 04 M0
105.0	20	32	15.0	10.00	3°	6.1		5	R200-105Q32-20L	32.0	B		125.0	125.0	63.0	7.5	2.44	8000	5	RCKT 20 06 M0
	20	32	15.0	10.00	3°	6.1	6		R200-105Q32-20M	32.0	B		125.0	125.0	63.0	7.5	2.28	8000	6	RCKT 20 06 M0
109.0	16	32	12.0	8.00	2°	4.9		5	R200-109Q32-16L	32.0	B		125.0	125.0	50.0	5.0	2.26	10000	5	RCKT 16 06 M0
	16	32	12.0	8.00	2°	4.9		6	R200-109Q32-16M	32.0	B		125.0	125.0	50.0	5.0	2.33	10000	6	RCKT 16 06 M0
140.0	20	40S	15.0	10.00	2°	6.1		6	R200-140Q40-20L	40.0	C	66.7	160.0	160.0	63.0	7.5	3.72	6900	6	RCKT 20 06 M0
	20	40S	15.0	10.00	2°	6.1	8		R200-140Q40-20M	40.0	C	66.7	160.0	160.0	63.0	7.5	3.60	6900	8	RCKT 20 06 M0

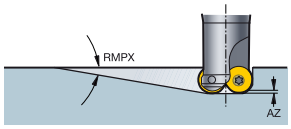
Para componentes, visite www.sandvik.coromant.com

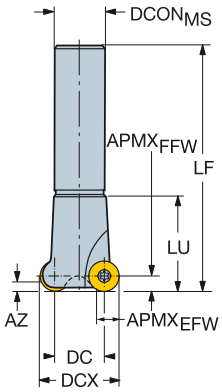
I103 L2 M1 N23 N9

Fresa de facear CoroMill® 200

Haste cilíndrica







DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ			Código para pedido	Dimensões, mm DCON$_{MS}$	DCX	BD	LB	LF	NM	KG	RPMX	CICT	MIID
15.0	10	20	7.5	5.00	13°	2.9	2		R200-015A20-10M	20.0	25.0	25.0	25.0	150.0	3.0	0.54	37500	2	RCKT 10 T3 M0
	10	20	7.5	5.00	13°	2.9	3		R200-015A20-10H	20.0	25.0	25.0	25.0	150.0	3.0	0.49	37500	3	RCKT 10 T3 M0
20.0	12	25	9.0	6.00	13°	3.7	2		R200-020A25-12M	25.0	32.0	32.0	32.0	190.0	3.0	0.84	31100	2	RCKT 12 04 M0
	12	25	9.0	6.00	13°	3.7	3		R200-020A25-12H	25.0	32.0	32.0	32.0	190.0	3.0	0.86	31100	3	RCKT 12 04 M0
24.0	16	32	12.0	8.00	13°	4.9	2		R200-024A32-16L	32.0	40.0	40.0	40.0	240.0	5.0	1.72	21800	2	RCKT 16 06 M0
	16	32	12.0	8.00	13°	4.9	3		R200-024A32-16M	32.0	40.0	40.0	40.0	240.0	5.0	1.64	21800	3	RCKT 16 06 M0
28.0	12	32	9.0	6.00	9°	3.7	2		R200-028A32-12L	32.0	40.0	40.0	40.0	240.0	3.0	1.76	26300	2	RCKT 12 04 M0
	12	32	9.0	6.00	9°	3.7		3	R200-028A32-12M	32.0	40.0	40.0	40.0	240.0	3.0	1.74	26300	3	RCKT 12 04 M0
30.0	20	32	15.0	10.00	13°	6.1	2		R200-030A32-20L	32.0	50.0	50.0	50.0	240.0	7.5	1.88	20900	2	RCKT 20 06 M0
	20	32	15.0	10.00	13°	6.1	3		R200-030A32-20M	32.0	50.0	50.0	50.0	240.0	7.5	1.79	20900	3	RCKT 20 06 M0
34.0	16	32	12.0	8.00	11°	4.9	3		R200-034A32-16M	32.0	50.0	50.0	50.0	240.0	5.0	1.81	18300	3	RCKT 16 06 M0
38.0	12	32	9.0	6.00	6°	3.7	3		R200-038A32-12L	32.0	50.0	50.0	50.0	240.0	3.0	1.86	22500	3	RCKT 12 04 M0
	12	32	9.0	6.00	6°	3.7		4	R200-038A32-12M	32.0	50.0	50.0	50.0	240.0	3.0	1.84	22500	4	RCKT 12 04 M0

	Componentes
Parafuso da pastilha	
10	5513 020-09
12	5513 020-09
16	5513 020-07
20	5513 020-08

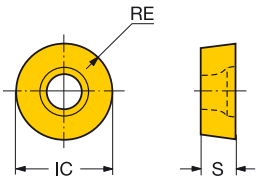
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I103 L2 N23 N9

SANDVIK Coromant

Pastilha CoroMill® 200 para fresamento





			RE	Código para pedido	P					M					K					N				S						H			Dimensões, mm	
					1130	4220	4330	4340	530	1040	1130	2040	530	1020	3040	3220	3330	H13A	1130	530	H10F	H13A	1130	H10F	H13A	S30T	S40T	1010	1130	530	IC	S
Leve	KL	10	5.00	RCHT 10 T3 M0-KL														☆				★			☆							10.0	3.97
		12	6.00	RCHT 12 04 M0-KL														☆				★			☆							12.0	4.76
		16	8.00	RCHT 16 06 M0-KL														☆				★			☆							16.0	6.35
		20	10.00	RCHT 20 06 M0-KL														☆				★			☆							20.0	6.35
	ML	10	5.00	RCHT 10 T3 M0-ML						★		☆																					10.0	3.97
		12	6.00	RCHT1204M0-ML						★		☆																					12.0	4.76
		16	8.00	RCHT 16 06 M0-ML						★		☆																					16.0	6.35
		20	10.00	RCHT 20 06 M0-ML								☆																					20.0	6.35
	PL	10	5.00	RCHT 10 T3 M0-PL	★						☆								☆				☆					★	☆				10.0	3.97
		12	6.00	RCHT 12 04 M0-PL	★				☆		☆		☆						☆	☆			☆					★	☆	☆			12.0	4.76
		16	8.00	RCHT 16 06 M0-PL	★						☆								☆				☆						☆				16.0	6.35
		20	10.00	RCHT 20 06 M0-PL	★						☆								☆				☆						☆				20.0	6.35
Média	KM	10	5.00	RCKT 10 T3 M0-KM										☆	☆		★																10.0	3.97
		12	6.00	RCKT 12 04 M0-KM										☆	☆	☆	★																12.0	4.76
		16	8.00	RCKT 16 06 M0-KM										☆	☆	☆	★																16.0	6.35
		20	10.00	RCKT 20 06 M0-KM										☆	☆	☆	★																20.0	6.35
	MM	10	5.00	RCKT 10 T3 M0-MM						★		☆																					10.0	3.97
		12	6.00	RCKT 12 04 M0-MM						★		☆																					12.0	4.76
		16	8.00	RCKT 16 06 M0-MM						★		☆																					16.0	6.35
		20	10.00	RCKT 20 06 M0-MM						★		☆																					20.0	6.35
	PM	10	5.00	RCKT 10 T3 M0-PM	☆	☆	★	☆			☆								☆				☆			★			☆				10.0	3.97
		12	6.00	RCKT 12 04 M0-PM	☆	☆	★	☆			☆								☆				☆			★	☆		☆				12.0	4.76
		16	8.00	RCKT 16 06 M0-PM	☆	☆	★	☆			☆								☆				☆			★	☆		☆				16.0	6.35
		20	10.00	RCKT 20 06 M0-PM	☆	☆	★	☆			☆								☆				☆			★	☆		☆				20.0	6.35
	WM	10	5.00	RCKT 10 T3 M0-WM					☆				☆							☆	☆		★							☆			10.0	3.97
		12	6.00	RCKT 12 04 M0-WM					☆				☆							☆	☆		★							☆			12.0	4.76
		16	8.00	RCKT 16 06 M0-WM																☆			★										16.0	6.35
		20	10.00	RCKT 20 06 M0-WM																													20.0	6.35
Pesada	KH	10	5.00	RCKT 10 T3 M0-KH											☆		★																10.0	3.97
		12	6.00	RCKT 12 04 M0-KH										☆	☆	☆	★																12.0	4.76
		16	8.00	RCKT 16 06 M0-KH										☆	☆	☆	★																16.0	6.35
		20	10.00	RCKT 20 06 M0-KH										☆	☆	☆	★																20.0	6.35
	PH	10	5.00	RCKT 10 T3 M0-PH	☆		★	☆			☆								☆				☆						☆				10.0	3.97
		12	6.00	RCKT 12 04 M0-PH	☆	☆	★	☆			☆								☆				☆						☆				12.0	4.76
		16	8.00	RCKT 16 06 M0-PH	☆	☆	★	☆			☆								☆				☆						☆				16.0	6.35
		20	10.00	RCKT 20 06 M0-PH	☆	☆	★	☆			☆								☆				☆						☆				20.0	6.35

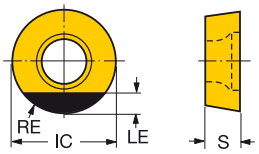
I101 I154 I175 N23 N10

Pastilha CoroMill® 200 para fresamento

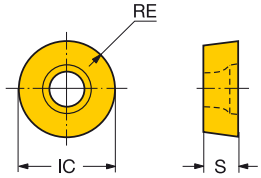
Materiais de corte avançados



RCHT



RCKT



			RE	Código para pedido	K 6190	K CB50	H 6190	H CB50	Dimensões, mm IC	LE	S
Leve	PO	12	6.00	RCHT 12 04 M0		☆		☆	12.0	3.0	4.76
Média	SK15	12	6.00	RCKT 12 04 MO	☆		☆		12.0		4.76
		16	8.00	RCKT 16 06 MO	☆		☆		16.0		6.35

I101 I154 I175 N23 N10

SANDVIK Coromant

CoroMill® 216

Uma removedora de metal para perfilamento de semiacabamento e desbaste

Aplicação

- Perfilamento
- Fresamento em cópia
- Fresamento em contorno
- Desbaste ao semiacabamento

Área de aplicação ISO:

P M K N S H



Características e benefícios

- Segurança e confiabilidade máximas
- Alta taxa de remoção de metal
- Fácil de aplicar

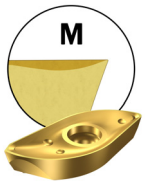
www.sandvik.coromant.com/coromill216

Acoplamentos

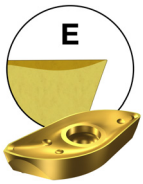
- Coromant Capto®
- Haste cilíndrica
- Weldon
- Coromant EH
- Acoplamento com rosca

Pastilhas

- Duas arestas de corte
- Geometrias e classes de pastilha para todos os materiais



pastilhas para maior segurança



pastilhas com arestas mais vivas e maior precisão

Posicionamento da pastilha

Mesmas pastilhas para posição central e periférica

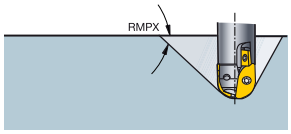


I106 I111

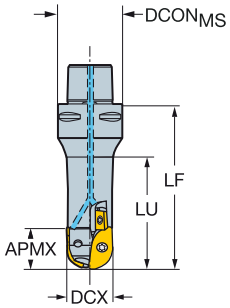
Fresa CoroMill® 216 Ball Nose

Coromant Capto® - Refrigeração interna





KAPR 90°



DC	APMXFFW	APMXEFW			CZCMS	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	BD1	LF	LU	NM	KG	RPMX	CICTBALL	MIIDBALL	CICTSP	MIIDSP
30.0	28.3	15.0	30		C3	85°	15.0	3	2	**R216-30C3-070**	32.0	30.0	26.8	70.0	50.6	5.0	0.39	18500	2	R216-30 06		
32.0	28.6	16.0	32		C3	85°	16.0	3	2	**R216-32C3-070**	32.0	32.0	29.0	70.0		5.0	0.42	18500	2	R216-32 06		
40.0	31.6	20.0	40		C4	85°	20.0	3	2	**R216-40C4-080**	40.0	40.0	37.0	80.0		7.5	0.87	8000	2	R216-40 07		
50.0	44.6	25.0	50	16	C5	85°	25.0	3	2	**R216-50C5-125**	50.0	50.0	46.4	125.0		10.0	1.65	7000	2	R216-50 07	2	APMT 160408-M

	Componentes		
	Parafuso da pastilha	Calço	Parafuso da pastilha de proteção
30	5513 020-07		
32	5513 020-07		
40	5513 020-31		
50	5513 021-03	5322 475-01	5513 020-09

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I111 L2 N23 N9 N15

SANDVIK Coromant

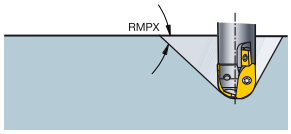
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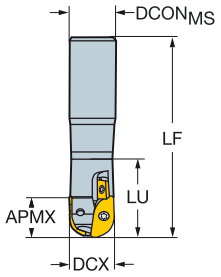
Fresa CoroMill® 216 Ball Nose

Haste cilíndrica - refrigeração interna

KAPR 90°







DC	APMXFFW	APMXEFW			CZCMS	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	DCX	BD1	LF	LU	NM	KG	RPMX	CICTBALL	MIIDBALL	CICTSP	MIIDSP
10.0	8.6	5.0	10		16	85°	5.0	0	2	**R216-10A16-050**	16.0	10.0	9.2	160.0	22.1	0.6	0.31	15900	2	R216-10 02		
12.0	10.8	6.0	12		20	85°	6.0	0	2	**R216-12A20-045**	20.0	12.0	10.8	200.0	22.0	1.2	0.54	21000	2	R216-12 02		
16.0	14.4	8.0	16		20	85°	8.0	1	2	**R216-16A20-045**	20.0	16.0	14.7	200.0	29.6	1.2	0.54	20000	2	R216-16 03		
20.0	17.9	10.0	20		25	85°	10.0	1	2	**R216-20A25-055**	25.0	20.0	18.4	200.0	36.5	2.0	0.68	24000	2	R216-20 T3		
25.0	22.3	12.5	25		32	85°	12.5	1	2	**R216-25A32-065**	32.0	25.0	23.2	250.0	43.4	3.0	1.69	24000	2	R216-25 04		
30.0	26.9	15.0	30	16	32	85°	15.0	1	2	**R216-30A32-070**	32.0	30.0	26.8	250.0	60.4	5.0	1.74	19500	2	R216-30 06	1	APMT 160408-M
32.0	28.6	16.0	32		32	85°	16.0	1	2	**R216-32A32-070**	32.0	32.0	29.0	250.0	70.0	5.0	1.56	18500	2	R216-32 06		

		Componentes	
		Parafuso da pastilha	Parafuso da pastilha de proteção
10		5513 020-40	
12		5513 020-36	
16		5513 020-36	
20		5513 020-16	
25		5513 020-52	
30	16	5513 020-07	5513 020-09
32		5513 020-07	

Para a lista completa de componentes, acesse www.sandvik.coromant.com

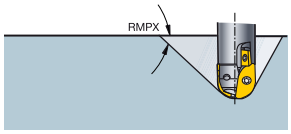
I111 L2 N23 N9 N15

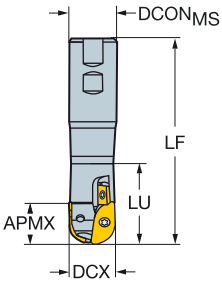
Fresa CoroMill® 216 Ball Nose

Weldon - Refrigeração interna

KAPR 90°







DC	APMXFFW	APMXEFW			CZCMS	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCONMS	ISO	DCX	BD1	LF	LU	NM	KG	RPMX	CICTBALL	MIIDBALL	CICTSP	MIIDSP
12.0	10.8	6.0	12		20	85°	6.0	0	2	R216-12B20-060	20.0	WE	12.0	10.8	111.0	24.0	1.2	0.30	21000	2	R216-12 02		
	10.8	6.0	12		20	85°	6.0	0	2	R216-12B20-040	20.0	WE	12.0	10.8	91.0	21.2	1.2	0.27	21000	2	R216-12 02		
16.0	14.4	8.0	16		20	85°	8.0	1	2	R216-16B20-040	20.0	WE	16.0	14.7	91.0	28.2	1.2	0.28	20000	2	R216-16 03		
	14.4	8.0	16		20	85°	8.0	1	2	R216-16B20-060	20.0	WE	16.0	14.7	111.0	33.8	1.2	0.31	20000	2	R216-16 03		
20.0	17.9	10.0	20		25	85°	10.0	1	2	R216-20B25-050	25.0	WE	20.0	18.4	107.0	35.2	2.0	0.42	24000	2	R216-20 T3		
	17.9	10.0	20		25	85°	10.0	1	2	R216-20B25-070	25.0	WE	20.0	18.4	127.0	40.6	2.0	0.47	24000	2	R216-20 T3		
25.0	22.3	12.5	25		25	85°	12.5	1	2	R216-25B25-060	25.0	WE	25.0	23.2	117.0	60.0	3.0	0.49	24000	2	R216-25 04		
	22.3	12.5	25		25	85°	12.5	1	2	R216-25B25-080	25.0	WE	25.0	23.2	137.0	80.0	3.0	0.55	24000	2	R216-25 04		
30.0	26.9	15.0	30	16	32	85°	15.0	1	2	R216-30B32-070	32.0	WE	30.0	26.8	131.0	60.4	5.0	0.78	19500	2	R216-30 06	1	APMT 160408-M
	26.9	15.0	30	16	32	85°	15.0	1	2	R216-30B32-100	32.0	WE	30.0	26.8	161.0	90.4	5.0	0.86	19500	2	R216-30 06	1	APMT 160408-M
32.0	28.6	16.0	32		32	85°	16.0	1	2	R216-32B32-100	32.0	WE	32.0	29.0	161.0	100.0	5.0	0.87	18500	2	R216-32 06		
	28.6	16.0	32		32	85°	16.0	1	2	R216-32B32-070	32.0	WE	32.0	29.0	131.0	70.0	5.0	0.77	18500	2	R216-32 06		
40.0	36.5	20.0	40	16	40	85°	20.0	1	2	R216-40B40-100	40.0	WE	40.0	37.0	171.0	100.0	7.5	1.37	8000	2	R216-40 07	2	APMT 160408-M
	36.5	20.0	40	16	40	85°	20.0	1	2	R216-40B40-150	40.0	WE	40.0	37.0	221.0	150.0	7.5	1.94	8000	2	R216-40 07	2	APMT 160408-M
50.0	44.6	25.0	50		40	85°	25.0	1	2	R216-50B40-100	40.0	WE	50.0	47.0	171.0		10.0	1.88	7000	2	R216-50 07		
	44.6	25.0	50	16	50	85°	25.0	1	2	R216-50B50-125	50.0	WE	50.0	46.4	206.0	125.0	10.0	2.80	7000	2	R216-50 07	2	APMT 160408-M
	44.6	25.0	50	16	50	85°	25.0	1	2	R216-50B50-175	50.0	WE	50.0	46.4	256.0	175.0	10.0	3.43	7000	2	R216-50 07	2	APMT 160408-M

		Componentes			
		Parafuso da pastilha	Calço	Parafuso do calço	Parafuso da pastilha de proteção
12		5513 020-36			
16		5513 020-36			
20		5513 020-16			
25		5513 020-52			
32		5513 020-07			
30	16	5513 020-07			5513 020-09
40	16	5513 020-31			5513 020-09
50	16	5513 021-03	5322 475-01	5513 020-09	

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I111 L2 N23 N9 N15

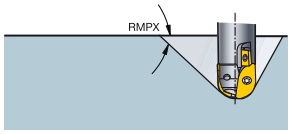
SANDVIK Coromant

POR

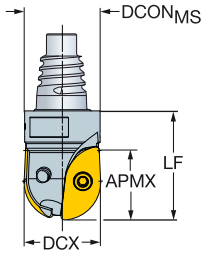
Fresa CoroMill® 216 Ball Nose

Coromant EH - Refrigeração interna





KAPR 90°



DC		CZCMS	APMXFFW	RMPX	CNSC		Código para pedido	Dimensões, mm DCONMS	LF	NM	KG	RPMX	CICT	MIID
10.0	10	E10	8.60	85°	0	2	**R216-10EH10**	9.7	20.0	0.6	0.09	12700	2	R216-10 02
12.0	12	E12	10.80	85°	0	2	**R216-12EH12**	11.7	20.0	1.2	0.09	12700	2	R216-12 02
16.0	16	E16	14.40	85°	1	2	**R216-16EH16**	15.5	25.0	1.2	0.11	12700	2	R216-16 03
20.0	20	E20	17.90	85°	1	2	**R216-20EH20**	19.3	30.0	2.0	0.13	12700	2	R216-20 T3
25.0	25	E25	22.30	85°	1	2	**R216-25EH25**	24.2	35.0	3.0	0.17	12700	2	R216-25 04
30.0	30	E25	26.90	85°	1	2	**R216-30EH25**	24.2	50.0	5.0	0.20	12700	2	R216-30 06
32.0	32	E25	28.60	85°	1	2	**R216-32EH25**	24.2	50.0	5.0	0.24	12700	2	R216-32 06

	Componentes
	Parafuso da pastilha
10	5513 020-40
12	5513 020-36
16	5513 020-36
20	5513 020-16
25	5513 020-52
30	5513 020-07
32	5513 020-07

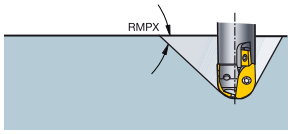
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I111 L2 N23 N9 N15 N3

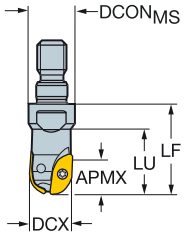
Fresa CoroMill® 216 Ball Nose

Acoplamento com rosca - Refrigeração interna





KAPR 90°



DC		CZC$_{MS}$	APMX$_{EFW}$	APMX$_{FFW}$	RMPX	AZ	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	BD$_1$	LF	LU	NM	KG	RPMX	CICT	MIID
10.0	10	M8	5.0	8.60	85°	5.0	0	2	**R216-10T08**	12.8	9.2	25.0	17.8	0.6	0.05	12700	2	R216-10 02
12.0	12	M8	6.0	10.80	85°	6.0	0	2	**R216-12T08**	12.8	10.8	25.0	18.3	1.2	0.09	12700	2	R216-12 02
16.0	16	M8	8.0	14.40	85°	8.0	0	2	**R216-16T08**	12.8	14.7	25.0		1.2	0.11	12700	2	R216-16 03
20.0	20	M10	10.0	17.90	85°	10.0	1	2	**R216-20T10**	17.8	18.4	30.0		2.0	0.14	12700	2	R216-20 T3
25.0	25	M12	12.5	22.30	85°	12.5	1	2	**R216-25T12**	20.8	23.2	35.0		3.0	0.17	12700	2	R216-25 04
30.0	30	M16	15.0	26.90	85°	15.0	1	2	**R216-30T16**	28.8	26.8	45.0		5.0	0.25	12700	2	R216-30 06
32.0	32	M16	16.0	28.60	85°	16.0	1	2	**R216-32T16**	28.8	29.0	45.0		5.0	0.26	12700	2	R216-32 06

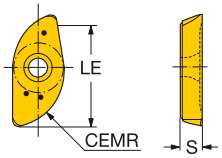
	Componentes
	Parafuso da pastilha
10	5513 020-40
12	5513 020-36
16	5513 020-36
20	5513 020-16
25	5513 020-52
30	5513 020-07
32	5513 020-07

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I111 N23 N9 N15 N3

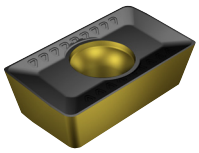
Pastilha CoroMill® 216 Ball Nose

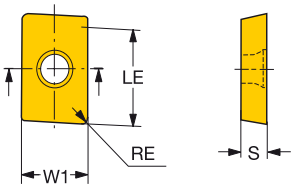




		CEMR	Código para pedido	P			M			K			N		S			H		Dimensões, mm	
				1130	4220	4340	1130	2040	4340	4220	4340	H13A	1130	H13A	1130	H13A	S30T	1010	1130	LE	S
Média	10	4.9	R216-10 02 E-M	★			☆	★					☆		☆			★	☆	8.6	1.70
	12	5.9	R216-12 02 E-M	★			☆	★					☆		☆		★		☆	10.8	2.38
		6.0	R216-12 02 M-M	★		★	☆		☆		☆		☆		☆			★	☆	10.8	2.38
	16	7.8	R216-16 03 E-M	★			☆	★					☆		☆		★		☆	14.4	3.18
		8.0	R216-16 03 M-M	★	☆	★	☆	★	☆	☆	☆	☆	☆	★	☆	☆		★	☆	14.4	3.18
	20	9.8	R216-20 T3 E-M	★			☆	★					☆		☆		★		☆	17.9	3.97
		10.0	R216-20 T3 M-M	★	☆	★	☆	★	☆	☆	☆	☆	☆	★	☆	☆		★	☆	17.9	3.97
	25	12.3	R216-25 04 E-M	★			☆	★					☆		☆				☆	22.3	4.76
		12.5	R216-25 04 M-M	★	☆	★	☆	★	☆	☆	☆		☆		☆			★	☆	22.3	4.76
	30	14.7	R216-30 06 E-M	★			☆						☆		☆		★		☆	26.9	6.35
		15.0	R216-30 06 M-M	★	☆	★	☆		☆	☆	☆		☆		☆			★	☆	26.9	6.35
	32	15.7	R216-32 06 E-M	★			☆	★					☆		☆				☆	28.6	6.35
		16.0	R216-32 06 M-M	★	☆	★	☆	★	☆	☆	☆		☆		☆			★	☆	28.6	6.35
	40	19.7	R216-40 07 E-M	★			☆						☆		☆		★		☆	36.5	7.94
		20.0	R216-40 07 M-M	★		★	☆		☆		☆		☆		☆				☆	36.5	7.94
	50	24.6	R216-50 07 E-M	★			☆						☆		☆				☆	44.6	7.94
		25.0	R216-50 07 M-M	★		★	☆		☆		☆		☆		☆				☆	44.6	7.94

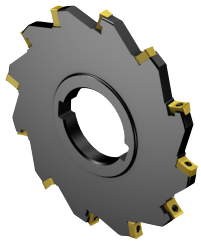
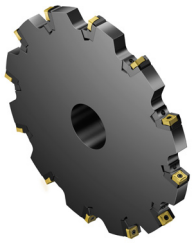
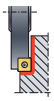
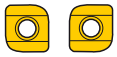
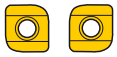
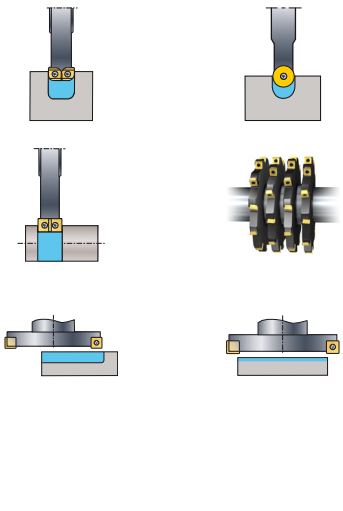
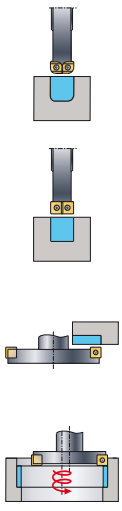
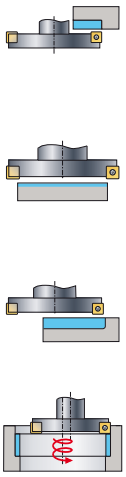
Pastilha para proteção da haste





			RE	Código para pedido	P	M	K	Dimensões, mm		
					4340	4340	4340	W1	LE	S
Média	WHX	16	0.80	APMT 16 04 08-M	☆	☆	☆	9.2	16.0	4.76

Ferramentas para fresamento lateral

				CoroMill® 331		
	Fresa de facear e de disco 3 cortes ajustável			Fresa de facear e de disco 3 cortes	Fresa de facear e de disco 2 cortes ajustável	
						
Página	I121-I123			I125	I126-I127	
Material	P M K N S H					
Operação principal						
KAPR	90°			90°	90°	
D_c mm	80 - 315			40 - 125	80 - 315	
APMX mm	6.0 - 26.5			6.0 - 10	7.6 - 10.6	
CDX mm	114.5			34	114.5	
Pastilha	 N331.1A	 R/L331.1A	 RCHT, RCKT	 N331.1A	 N331.1A	 R/L331.1A
Tamanhos da pastilha	04,05,08,11 & 14	* 04,05,08,11 & 14	10,12 & 16	04,05 & 08	11	*04,05,08,11 & 14
Acoplamentos	Árvore Cilíndrica Furo com rasgo de chaveta Weldon			Árvore Cilíndrica Furo com rasgo de chaveta	Árvore Cilíndrica Furo com rasgo de chaveta Weldon	
Outras operações						

* Pastilha R/L331.1A – somente com fresa Tailor Made

CoroMill® 331

Fresa de disco e de facear multifunção

Aplicação

- Canais
- Corte
- Fresamento de corte lateral duplo
- Fresamento de cantos a 90°
- Faceamento
- Fresamento com trem de fresas
- Usinagem em rampa circular



Área de aplicação ISO:

P M K N S H

Características e benefícios

- Ampla gama de opções de montagem
- Fixação do cassete por cunha
- Precisão, segurança e estabilidade devido aos serrilhados
- Algumas vezes, pode não haver a dimensão exata que você precisa. Se este for o caso, procure nosso serviço Tailor Made.
- Fácil de ajustar de acordo com a largura desejada
- Cassete com mecanismo tipo mola
- Segurança com faixa de ajuste controlada por pino
- Refrigeração interna

www.sandvik.coromant.com/coromill331

Acoplamentos

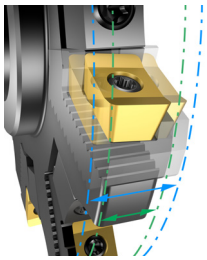
- Furo com rasgo de chaveta
- Árvore
- Haste cilíndrica
- Bolsões ajustáveis para alta precisão
- Bolsões fixos para alta densidade de dentes

Pastilhas

- Pastilha de corte leve com tolerância H para a maioria dos materiais
- Opções de pastilhas redondas e um amplo programa de raios de cantos
- Pastilhas com oito arestas para operações de faceamento disponíveis.
- Geometrias e classes de pastilha para todos os materiais



Precisão, segurança e estabilidade devido aos serrilhados



Ampla faixa de ajuste

Bolsões ajustáveis para flexibilidade

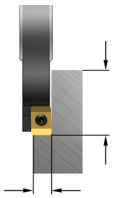
 I116

 I130



N6

Fresamento de uma lateral

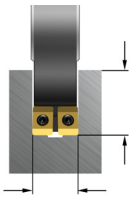


CDX ≤ 114.5 mm

a_p ≤ 10.6 mm

Tailor Made

Fresamento de disco duplo corte lateral

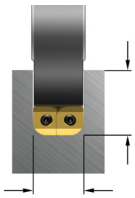


CDX ≤ 114.5 mm

a_p ≤ 27.2 - 33.8 mm

Tailor Made

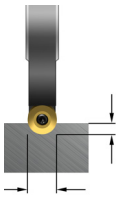
Canais em cheio com raio



CDX ≤ 114.5 mm

a_p ≤ 6 - 26.5 mm

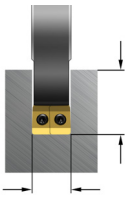
Raio completo



CDX ≤ 114.5 mm

a_p ≤ 10 - 16 mm

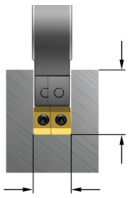
Bolsão fixo para canal em cheio



CDX ≤ 34.0 mm

a_p ≤ 6 - 10 mm

Cassete para canal em cheio



CDX ≤ 114.5 mm

a_p ≤ 6 - 26.5 mm

Tailor Made

Fresas com cassetes são fornecidas ajustadas com a largura mínima de canal. Tailor Made para fresas ajustadas com outras larguras.

Fresas para diferentes larguras de canal e pastilhas disponíveis

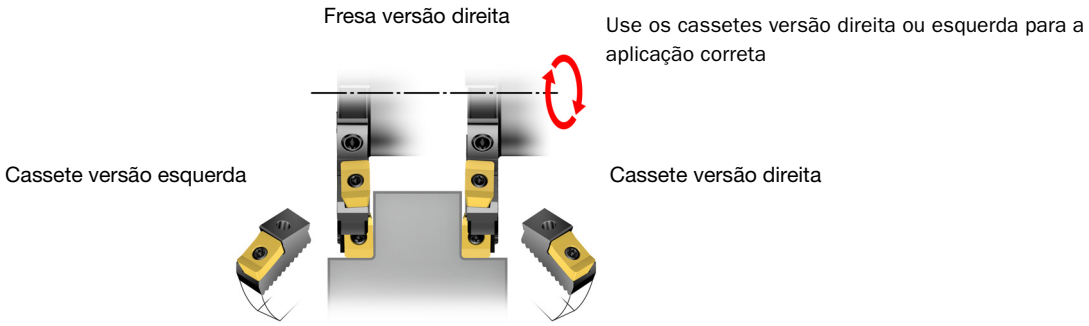
Corpos da fresa			Pastilhas neutras		Pastilhas versão direita e esquerda				
Faixa da largura do canal: mm	Versões da fresa (fim do código)	Tamanho da pastilha	Raio (RE) 0,5 mm	Raio (RE) 0,8 mm	Raio (RE) 1.52 mm	Raio (RE) 2,29 mm	Raio (RE) 3,05 mm	Raio (RE) 4.83 mm	Raio (RE) 6.35 mm
6-8	CM	04	●		●	●			
8-10	DM	05		●	●	●	●		
10-12	EM	08		●	●	●	●		
12-15	FM	08		●	●	●	●		
15-17.5	KM	11		●	●	●	●	●	●
17.5-20.5	LM	11		●	●	●	●	●	●
20.5-23.5	QM	14		●	●	●	●	●	●
23.5-26.5	RM	14		●	●	●	●	●	●

Tailor Made

Outros raios da pastilha disponíveis como Tailor Made.

Corpos de fresa, cassetes e pastilhas para combinar para todas as aplicações

Fresa de facear e fresa de disco 2 cortes



Fresa de facear e fresa de disco 3 cortes

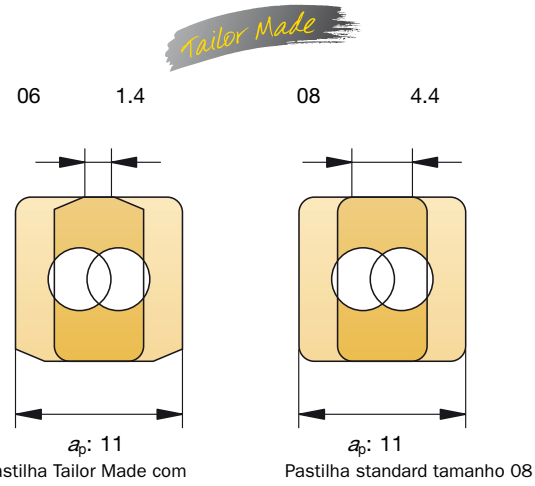


Comprimento reduzido da aresta de corte para pastilhas Tailor Made

Na usinagem de canais use a menor largura da fresa, a sobreposição é o fator mais crítico a ser otimizado.

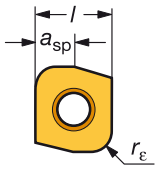
O comprimento reduzido da aresta de corte minimiza a sobreposição, o que, por sua vez, reduz o desgaste na zona de sobreposição, produzindo um melhor controle de cavacos e diminuindo o consumo de potência em até 10%.

Opções de pastilha Tailor Made com comprimento reduzido da aresta de corte e disponíveis mediante solicitação.



a_p: 11
Pastilha Tailor Made com comprimento reduzido da aresta de corte.

a_p: 11
Pastilha standard tamanho 08

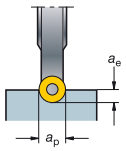


$$a_{sp} \approx \frac{a_p}{2} + 0{,}2$$

Escoamento de cavacos facilitado

Fresamento de canais em cheio com fresa de pastilha redonda

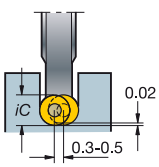
a_e máx. IC/2



Profundidade de corte axial máxima a_p = IC
Profundidade de corte radial máxima a_e = IC/2

Nota: O comprimento de contato da aresta de corte é de 180°

a_e maior que IC/2



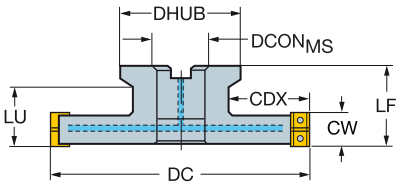
Para canais com profundidade maior que IC/2, um ajuste de 0,3 - 0,5 mm de cada cassete é recomendado. Isso alargará o canal em 0,5 mm e reduzirá o comprimento de contato para cada pastilha em até 90°, resultando em formação e escoamento mais favoráveis e reduzindo a vibração e o consumo de energia.

Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

Árvore - refrigeração interna

STDNO ISO 6462
KAPR 90°





								Dimensões, mm										
CW	CWX	DC	CDX		CZC_{MS}	CNSC		Código para pedido	$DCON_{MS}$	ISO	LF	LU	DHUB	BAR	NM	KG	RPMX	CICT	MIID
6.00	8.0	80	20.0	04	27	1	3	R331.32C-080Q27CM	27.0	A	50.00	26	51.0	80	0.8	0.51	19300	6	N331.1A-04
		100	22.0	04	27	1	4	R331.32C-100Q27CM	27.0	A	50.00		51.0	80	0.8	0.75	17100	8	N331.1A-04
		125	29.5	04	32	1	5	R331.32C-125Q32CM	32.0	B	50.00		61.0	80	0.8	0.92	15100	10	N331.1A-04
		160	41.0	04	40	1	6	R331.32C-160Q40CM	40.0	B	50.00		73.0	80	0.8	1.38	13200	12	N331.1A-04
8.00	10.0	80	20.0	05	27	1	3	R331.32C-080Q27DM	27.0	A	50.00		51.0	80	1.2	0.54	15000	6	N331.1A-05
		100	22.0	05	27	1	4	R331.32C-100Q27DM	27.0	A	50.00		51.0	80	1.2	1.01	13200	8	N331.1A-05
		125	29.5	05	32	1	5	R331.32C-125Q32DM	32.0	B	50.00		61.0	80	1.2	1.09	11700	10	N331.1A-05
		160	41.0	05	40	1	6	R331.32C-160Q40DM	40.0	B	50.00	26	73.0	80	1.2	1.53	10200	12	N331.1A-05
10.00	12.0	80	20.0	08	27	1	3	R331.32C-080Q27EM	27.0	A	50.00	26	51.0	80	1.2	0.70	18100	6	N331.1A-08
		100	22.0	08	27	1	4	R331.32C-100Q27EM	27.0	A	50.00		51.0	80	1.2	1.10	15900	8	N331.1A-08
		125	29.5	08	32	1	5	R331.32C-125Q32EM	32.0	B	50.00		61.0	80	1.2	1.30	14100	10	N331.1A-08
		160	41.0	08	40	1	6	R331.32C-160Q40EM	40.0	B	50.00		73.0	80	1.2	1.98	12400	12	N331.1A-08
12.00	15.0	80	20.0	08	27	1	3	R331.32C-080Q27FM	27.0	A	50.00	26	51.0	80	1.2	0.62	18100	6	N331.1A-08
		100	22.0	08	27	1	4	R331.32C-100Q27FM	27.0	A	50.00		51.0	80	1.2	0.92	15900	8	N331.1A-08
		125	29.5	08	32	1	5	R331.32C-125Q32FM	32.0	B	50.00		61.0	80	1.2	1.21	14100	10	N331.1A-08
		160	41.0	08	40	1	6	R331.32C-160Q40FM	40.0	B	50.00		73.0	80	1.2	1.94	12400	12	N331.1A-08
15.00	17.5	100	25.5	11	27	1	3	R331.32C-100Q27KM	27.0	A	50.00	32.5	51.0	80	3.0	0.98	14000	6	N331.1A-11
		125	29.5	11	32	1	4	R331.32C-125Q32KM	32.0	B	50.00		61.0	80	3.0	1.23	12400	8	N331.1A-11
		160	41.0	11	40	1	5	R331.32C-160Q40KM	40.0	B	50.00		73.0	80	3.0	2.17	10800	10	N331.1A-11
17.50	20.5	125	29.5	11	32	1	4	R331.32C-125Q32LM	32.0	B	50.00		61.0	80	3.0	1.42	12400	8	N331.1A-11
		160	41.0	11	40	1	5	R331.32C-160Q40LM	40.0	B	50.00		73.0	80	3.0	2.35	10800	10	N331.1A-11
20.50	23.5	160	41.0	14	40	1	5	R331.32C-160Q40QM	40.0	B	50.00		73.0	80	3.0	2.63	9000	10	N331.1A-14
23.50	26.5	160	41.0	14	40	1	5	R331.32C-160Q40RM	40.0	B	50.00		73.0	80	3.0	3.00	9000	10	N331.1A-14

		Componentes		
CW	DC	Parafuso da pastilha	Cunha	Parafuso
6.00	80.00-100.00	5513 020-19	5431 105-07	5516 014-06
6.00	125.00	5513 020-19	5431 105-07	5516 014-06
6.00	160.00	5513 020-19	5431 105-07	5516 014-06
7.90	160.00	5513 020-34	5431 105-06	5516 014-05
8.00	80.00-100.00	5513 020-34	5431 105-06	5516 014-05
8.00	125.00	5513 020-34	5431 105-06	5516 014-05
10.00	80.00-100.00	5513 020-24	5431 105-01	269-832
10.00	125.00	5513 020-24	5431 105-01	269-832
10.00	160.00	5513 020-24	5431 105-01	269-832
12.00	80.00-100.00	5513 020-24	5431 105-02	269-832
12.00	125.00	5513 020-24	5431 105-02	269-832
12.00	160.00	5513 020-24	5431 105-02	269-832
15.00	100.00	5513 020-29	5431 105-04	339-831
15.00	125.00	5513 020-29	5431 105-04	339-831
15.00	160.00	5513 020-29	5431 105-04	339-831
17.50	125.00	5513 020-29	5431 105-04	5516 010-02
17.50	160.00	5513 020-29	5431 105-04	5516 010-02
20.50	160.00	5513 020-29	5431 105-05	5516 010-02
23.50	160.00	5513 020-29	5431 105-05	5516 010-02

Para a lista completa de componentes, acesse www.sandvik.coromant.com

	Acessórios
CZC_{MS}	Parafuso para refrigeração
27	5512 098-05
32	5512 098-04
40	5512 098-03

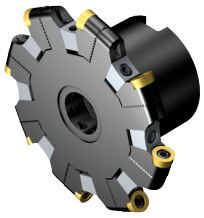
I130 L2 M1 N23 N6

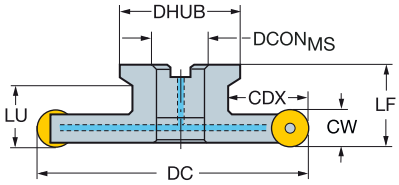
SANDVIK Coromant

Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

Árvore - refrigeração interna

STDNO ISO 6462





CW	DC	CDX		CZC_{MS}	CNSC		Código para pedido	Dimensões, mm $DCON_{MS}$	ISO	LF	LU	DHUB	BAR	NM	KG	RPMX	RE	CICT	MIID
10.00	82	21.6	10	27	1	6	R331.32C-082Q27EMQ	27.0	A	50.00	26	51.0	80	1.2	0.59	19500	5.0	6	RCKT 10 T3 M0
	102	23.0	10	27	1	8	R331.32C-102Q27EMQ	27.0	A	50.00		51.0	80	3.0	0.95	15900	5.0	8	RCKT 10 T3 M0
	127	30.5	10	32	1	10	R331.32C-127Q32EMQ	32.0	B	50.00		61.0	80	3.0	1.20	14100	5.0	10	RCKT 10 T3 M0
	162	42.0	10	40	1	12	R331.32C-162Q40EMQ	40.0	B	50.00		73.0	80	3.0	1.85	12400	5.0	12	RCKT 10 T3 M0
12.00	82	21.0	12	27	1	6	R331.32C-082Q27FMQ	27.0	A	50.00	26	51.0	80	3.0	0.66	18100	6.0	6	RCKT 12 04 M0
	102	23.0	12	27	1	8	R331.32C-102Q27FMQ	27.0	A	50.00		51.0	80	3.0	1.00	15900	6.0	8	RCKT 12 04 M0
	127	30.5	12	32	1	10	R331.32C-127Q32FMQ	32.0	B	50.00		61.0	80	3.0	1.29	14100	6.0	10	RCKT 12 04 M0
	162	42.0	12	40	1	12	R331.32C-162Q40FMQ	40.0	B	50.00		73.0	80	3.0	2.03	12400	6.0	12	RCKT 12 04 M0
16.00	102	26.5	16	27	1	6	R331.32C-102Q27KMQ	27.0	A	50.00	32.5	51.0	80	5.0	0.90	14000	8.0	6	RCKT 16 06 M0
	127	30.5	16	32	1	8	R331.32C-127Q32KMQ	32.0	B	50.00		61.0	80	5.0	1.38	12400	8.0	8	RCKT 16 06 M0
	162	42.0	16	40	1	10	R331.32C-162Q40KMQ	40.0	B	50.00		73.0	80	5.0	2.22	10800	8.0	10	RCKT 16 06 M0

	Componentes			
CW	DC	Cassete versão neutra	Parafuso da pastilha	Cunha	Parafuso
10.0	82.00	5521 250-02	5513 020-09	5431 105-01	269-832
10.0	102.00	5521 250-02	5513 020-09	5431 105-01	5516 010-02
10.0	127.00-162.00	5521 250-02	5513 020-09	5431 105-01	339-831
12.0	82.00	5521 250-03	5513 020-09	5431 105-02	269-832
12.0	102.00	5521 250-03	5513 020-09	5431 105-02	5516 010-02
12.0	127.00-162.00	5521 250-03	5513 020-09	5431 105-02	339-831
16.0	102.00-162.00	5521 250-05	5513 020-07	5431 105-04	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com

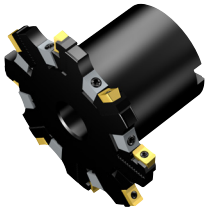
	Acessórios
CZC_{MS}	Parafuso para refrigeração
27	5512 098-05
32	5512 098-04
40	5512 098-03

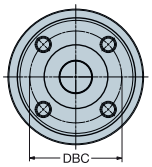
I130 L2 M1 N23 N6

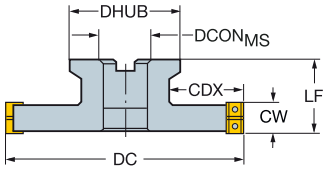
Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

Árvore

STDNO ISO6462
KAPR 90°









N331.1A

CW	CWX	DC	CDX		CZCMS		Código para pedido	Dimensões, mm DCONMS	ISO	DBC	LF	DHUB	NM	KG	RPMX	CICT	MIID
6.00	8.0	200	51.0	04	40S	8	R331.32-200Q40CM06.00	40.0	C	66.7	63.00	96.0	0.8	6.70	11700	16	N331.1A-04
8.00	10.0	200	51.0	05	40S	8	R331.32-200Q40DM08.00	40.0	C	66.7	63.10	96.0	1.2	8.61	9100	16	N331.1A-05
10.00	12.0	200	51.0	08	40S	8	R331.32-200Q40EM10.00	40.0	C	66.7	63.00	96.0	1.2	8.88	11000	16	N331.1A-08
12.00	15.0	200	51.0	08	40S	8	R331.32-200Q40FM12.00	40.0	C	66.7	63.00	96.0	1.2	7.64	11000	16	N331.1A-08
15.00	17.5	200	51.0	11	40S	6	R331.32-200Q40KM15.00	40.0	C	66.7	63.00	96.0	3.0	9.46	9600	12	N331.1A-11
		250	56.0	11	60	8	R331.32-250Q60KM15.00	60.0	C	101.6	63.00	136.0	3.0	12.73	8500	16	N331.1A-11
		315	88.5	11	60	10	R331.32-315Q60KM15.00	60.0	C	101.6	63.00	136.0	3.0	18.32	7600	20	N331.1A-11
17.50	20.5	200	51.0	11	40S	6	R331.32-200Q40LM17.50	40.0	C	66.7	63.00	96.0	3.0	8.44	9600	12	N331.1A-11
		250	56.0	11	60	8	R331.32-250Q60LM17.50	60.0	C	101.6	63.00	136.0	3.0	12.76	8500	16	N331.1A-11
		315	88.5	11	60	10	R331.32-315Q60LM17.50	60.0	C	101.6	63.00	136.0	3.0	20.00	7600	20	N331.1A-11
20.50	23.5	200	51.0	14	40S	6	R331.32-200Q40QM20.50	40.0	C	66.7	63.00	96.0	3.0	10.30	8000	12	N331.1A-14
		250	56.0	14	60	8	R331.32-250Q60QM20.50	60.0	C	101.6	63.00	136.0	3.0	13.30	7100	16	N331.1A-14
		315	88.5	14	60	10	R331.32-315Q60QM20.50	60.0	C	101.6	63.00	136.0	3.0	19.20	6300	20	N331.1A-14
23.50	26.5	200	51.0	14	40S	6	R331.32-200Q40RM23.50	40.0	C	66.7	63.00	96.0	3.0	10.80	8000	12	N331.1A-14
		250	56.0	14	60	8	R331.32-250Q60RM23.50	60.0	C	101.6	63.00	136.0	3.0	14.00	7100	16	N331.1A-14
		315	88.5	14	60	10	R331.32-315Q60RM23.50	60.0	C	101.6	63.00	136.0	3.0	20.44	6300	20	N331.1A-14

CW	DC	Componentes Parafuso da pastilha	Cunha	Parafuso
6.00	200.00	5513 020-19	5431 105-07	5516 014-06
8.00	200.00	5513 020-34	5431 105-06	5516 014-04
10.00	200.00	5513 020-24	5431 105-01	339-831
12.00	200.00	5513 020-24	5431 105-02	339-831
15.00-17.50	200.00-315.00	5513 020-29	5431 105-04	339-831
20.50-23.50	200.00-315.00	5513 020-29	5431 105-05	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I130


L2


M1



N23



N6

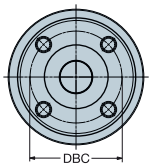
SANDVIK Coromant

Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

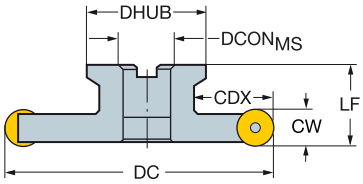
Árvore



STDNO



ISO6462





RCKT
RCHT

CW	DC	CDX		CZC_{MS}		Código para pedido	Dimensões, mm $DCON_{MS}$	ISO	DBC	LF	DHUB	NM	KG	RPMX	RE	CICT	MIID
10.00	202	52.0	10	40S	16	**R331.32-202Q40EMQ**	40.0	C	66.7	63.00	96.0	3.0	8.79	11000	5.0	16	RCKT 10 T3 M0
12.00	202	52.0	12	40S	16	**R331.32-202Q40FMQ**	40.0	C	66.7	63.00	96.0	3.0	9.07	11000	6.0	16	RCKT 12 04 M0
16.00	202	52.0	16	40S	12	**R331.32-202Q40KMQ**	40.0	C	66.7	63.50	96.0	5.0	10.00	9600	8.0	12	RCKT 16 06 M0

		Componentes		
CW	DC	Parafuso da pastilha	Cunha	Parafuso
10.00	202.00	5513 020-09	5431 105-01	339-831
12.00	202.00	5513 020-09	5431 105-02	339-831
16.00	202.00	5513 020-07	5431 105-04	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I103


L2


M1



N23

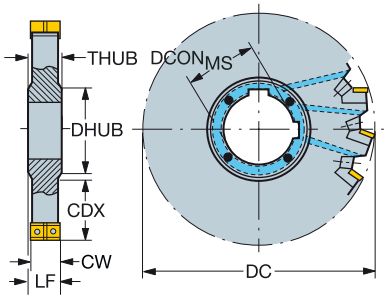

N6

Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

Furo com rasgo de chaveta - Refrigeração interna

KAPR 90°





CW	CWX	DC	CDX		CZC$_{MS}$	CNSC		Código para pedido	Dimensões, mm DCON$_{MS}$	LF	DRVCT	DHUB	THUB	BAR	NM	KG	RPMX	CICT	MIID
6.00	8.0	80	19.5	04	27	1	3	N331.32C-080S27CM	27.0	10.00	1	39.0	14.0	80	0.8	0.37	19300	6	N331.1A-04
		100	25.5	04	32	1	4	N331.32C-100S32CM	32.0	10.00	1	47.0	14.0	80	0.8	0.49	17100	8	N331.1A-04
		125	34.0	04	40	1	5	N331.32C-125S40CM	40.0	10.00	2	55.0	14.0	80	0.8	0.63	15100	10	N331.1A-04
		160	51.5	04	40	1	6	N331.32C-160S40CM	40.0	10.00	2	55.0	14.0	80	0.8	1.02	13200	12	N331.1A-04
8.00	10.0	80	19.5	05	27	1	3	N331.32C-080S27DM	27.0	12.00	1	39.0	16.0	80	1.2	0.46	15000	6	N331.1A-05
		100	25.5	05	32	1	4	N331.32C-100S32DM	32.0	12.00	1	47.0	16.0	80	1.2	0.59	13200	8	N331.1A-05
		125	34.0	05	40	1	5	N331.32C-125S40DM	40.0	12.00	2	55.0	16.0	80	1.2	0.75	11700	10	N331.1A-05
		160	51.5	05	40	1	6	N331.32C-160S40DM	40.0	12.00	2	55.0	16.0	80	1.2	1.24	10200	12	N331.1A-05
10.00	12.0	80	19.5	08	27	1	3	N331.32C-080S27EM	27.0	13.00	1	39.0	16.0	80	1.2	0.42	18100	6	N331.1A-08
		100	25.5	08	32	1	4	N331.32C-100S32EM	32.0	13.00	1	47.0	16.0	80	1.2	0.62	15900	8	N331.1A-08
		125	34.0	08	40	1	5	N331.32C-125S40EM	40.0	13.00	2	55.0	16.0	80	1.2	0.93	14100	10	N331.1A-08
		160	51.5	08	40	1	6	N331.32C-160S40EM	40.0	13.00	2	55.0	16.0	80	1.2	1.46	12400	12	N331.1A-08
12.00	15.0	80	19.5	08	27	1	3	N331.32C-080S27FM	27.0	14.00	1	39.0	16.0	80	1.2	0.52	18100	6	N331.1A-08
		100	25.5	08	32	1	4	N331.32C-100S32FM	32.0	14.00	1	47.0	16.0	80	1.2	0.69	15900	8	N331.1A-08
		125	34.0	08	40	1	5	N331.32C-125S40FM	40.0	14.00	2	55.0	16.0	80	1.2	1.04	14100	10	N331.1A-08
		160	51.5	08	40	1	6	N331.32C-160S40FM	40.0	14.00	2	55.0	16.0	80	1.2	1.68	12400	12	N331.1A-08
15.00	17.5	100	25.5	11	32	1	3	N331.32C-100S32KM	32.0	16.75	1	47.0	18.5	80	3.0	0.82	14000	6	N331.1A-11
		125	34.0	11	40	1	4	N331.32C-125S40KM	40.0	16.75	1	55.0	18.5	80	3.0	1.23	12400	8	N331.1A-11
		160	51.5	11	40	1	5	N331.32C-160S40KM	40.0	16.75	2	55.0	18.5	80	3.0	2.01	10800	10	N331.1A-11
17.50	20.5	125	34.0	11	40	1	4	N331.32C-125S40LM	40.0	19.50	1	55.0	21.5	80	3.0	1.41	12400	8	N331.1A-11
		160	51.5	11	40	1	5	N331.32C-160S40LM	40.0	19.50	2	55.0	21.5	80	3.0	2.20	10800	10	N331.1A-11
20.50	23.5	160	51.5	14	40	1	5	N331.32C-160S40QM	40.0	22.50	2	55.0	24.5	80	3.0	2.55	9000	10	N331.1A-14
23.50	26.5	160	51.5	14	40	1	5	N331.32C-160S40RM	40.0	25.50	2	55.0	27.5	80	3.0	2.78	9000	10	N331.1A-14

		Componentes		
CW	DC	Parafuso da pastilha	Cunha	Parafuso
6.0	80-160	5513 020-19	5431 105-07	5516 014-06
8.0	80-160	5513 020-34	5431 105-06	5516 014-05
10.0	80-160	5513 020-24	5431 105-01	269-832
12.0	80-160	5513 020-24	5431 105-02	269-832
15.0	100-160	5513 020-29	5431 105-04	5516 010-02
17.5	125-160	5513 020-29	5431 105-04	5516 010-02
20.5	160	5513 020-29	5431 105-05	5516 010-02
23.5	160	5513 020-29	5431 105-05	5516 010-02

Para a lista completa de componentes, acesse www.sandvik.coromant.com

	Acessórios	
CZC$_{MS}$	Jogo de parafusos de refrigeração	Jogo de anel de espaçamento
27	5512 076-101	5549 091-032
32	5512 076-102	5549 091-042
40	5512 076-103	5549 091-052

I130 L2 N23 N6

POR

Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

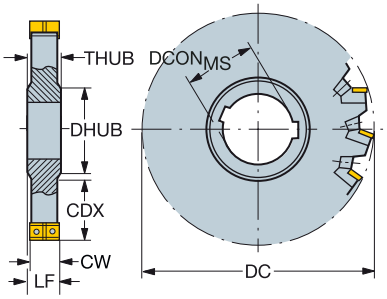
Furo com rasgo de chaveta

KAPR 90°





N331.1A



CW	CWX	DC	CDX		CZC_{MS}		Código para pedido	Dimensões, mm $DCON_{MS}$	LF	DRVCT	DHUB	THUB	NM	KG	RPMX	CICT	MIID
6.00	8.0	200	64.5	04	50	8	N331.32-200S50CM06.00	50.0	10.00	2	69.0	14.0	0.8	1.34	11700	16	N331.1A-04
8.00	10.0	200	64.5	05	50	8	N331.32-200S50DM08.00	50.0	12.00	2	69.0	16.0	1.2	1.67	9100	16	N331.1A-05
10.00	12.0	200	64.5	08	50	8	N331.32-200S50EM10.00	50.0	13.00	2	69.0	16.0	1.2	1.98	11000	16	N331.1A-08
12.00	15.0	200	64.5	08	50	8	N331.32-200S50FM12.00	50.0	14.00	2	69.0	16.0	1.2	2.38	11000	16	N331.1A-08
15.00	17.5	200	64.5	11	50	6	N331.32-200S50KM15.00	50.0	16.75	2	69.0	18.5	3.0	2.88	9600	12	N331.1A-11
		250	89.5	11	50	8	N331.32-250S50KM15.00	50.0	16.75	2	69.0	18.5	3.0	7.74	8500	16	N331.1A-11
		315	114.5	11	60	10	N331.32-315S60KM15.00	60.0	16.75	2	84.0	18.5	3.0	13.20	7600	20	N331.1A-11
17.50	20.5	200	64.5	11	50	6	N331.32-200S50LM17.50	50.0	19.50	2	69.0	21.5	3.0	3.29	9600	12	N331.1A-11
		250	89.5	11	50	8	N331.32-250S50LM17.50	50.0	19.50	2	69.0	21.5	3.0	8.42	8500	16	N331.1A-11
		315	114.5	11	60	10	N331.32-315S60LM17.50	60.0	19.50	2	84.0	21.5	3.0	12.94	7600	20	N331.1A-11
20.50	23.5	200	64.5	14	50	6	N331.32-200S50QM20.50	50.0	22.50	2	69.0	24.5	3.0	3.86	8000	12	N331.1A-14
		250	89.5	14	50	8	N331.32-250S50QM20.50	50.0	22.50	2	69.0	24.5	3.0	7.10	7100	16	N331.1A-14
		315	114.5	14	60	10	N331.32-315S60QM20.50	60.0	22.50	2	84.0	24.5	3.0	14.28	6300	20	N331.1A-14
23.50	26.5	200	64.5	14	50	6	N331.32-200S50RM23.50	50.0	25.50	2	69.0	27.5	3.0	4.35	8000	12	N331.1A-14
		250	89.5	14	50	8	N331.32-250S50RM23.50	50.0	25.50	2	69.0	27.5	3.0	10.16	7100	16	N331.1A-14
		315	114.5	14	60	10	N331.32-315S60RM23.50	60.0	25.50	2	84.0	27.5	3.0	19.26	6300	20	N331.1A-14

		Componentes		
CW	DC	Parafuso da pastilha	Cunha	Parafuso
6.00	200.00	5513 020-19	5431 105-07	5516 014-06
8.00	200.00	5513 020-34	5431 105-06	5516 014-04
10.00	200.00	5513 020-24	5431 105-01	5516 010-02
12.00	200.00	5513 020-24	5431 105-02	5516 010-02
15.00-17.50	200.00-315.00	5513 020-29	5431 105-04	339-831
20.50-23.50	200.00-315.00	5513 020-29	5431 105-05	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I130


L2



N23



N6

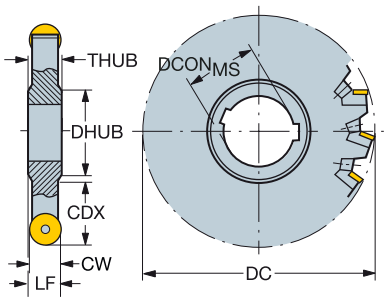
Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

Furo com rasgo de chaveta





RCKT
RCHT



CW	DC	CDX		CZC$_{MS}$		Código para pedido	Dimensões, mm DCON$_{MS}$	LF	DRVCT	DHUB	THUB	NM	KG	RPMX	RE	CICT	MIID
10.00	82	20.5	10	27	6	**N331.32-082S27EMQ**	27.0	13.00	1	39.0	16.0	3.0	0.56	18100	5.0	6	RCKT 10 T3 M0
	102	26.5	10	32	8	**N331.32-102S32EMQ**	32.0	13.00	1	47.0	16.0	3.0	0.50	15900	5.0	8	RCKT 10 T3 M0
	127	35.0	10	40	10	**N331.32-127S40EMQ**	40.0	13.00	2	55.0	16.0	3.0	1.03	14100	5.0	10	RCKT 10 T3 M0
	162	52.5	10	40	12	**N331.32-162S40EMQ**	40.0	13.00	2	55.0	16.0	3.0	1.51	12400	5.0	12	RCKT 10 T3 M0
	202	65.5	10	50	16	**N331.32-202S50EMQ**	50.0	13.00	2	69.0	16.0	3.0	2.03	11000	5.0	16	RCKT 10 T3 M0
12.00	82	20.5	12	27	6	**N331.32-082S27FMQ**	27.0	14.00	1	39.0	16.0	3.0	0.62	18100	6.0	6	RCKT 12 04 M0
	102	26.5	12	32	8	**N331.32-102S32FMQ**	32.0	14.00	1	47.0	16.0	3.0	0.89	15900	6.0	8	RCKT 12 04 M0
	127	35.0	12	40	10	**N331.32-127S40FMQ**	40.0	14.00	2	55.0	16.0	3.0	1.15	14100	6.0	10	RCKT 12 04 M0
	162	52.5	12	40	12	**N331.32-162S40FMQ**	40.0	14.00	2	55.0	16.0	3.0	1.73	12400	6.0	12	RCKT 12 04 M0
	202	65.5	12	50	16	**N331.32-202S50FMQ**	50.0	14.00	2	69.0	16.0	3.0	3.21	11000	6.0	16	RCKT 12 04 M0
16.00	102	26.5	16	32	6	**N331.32-102S32KMQ**	32.0	17.25	1	47.0	18.5	5.0	0.96	14000	8.0	6	RCKT 16 06 M0
	127	35.0	16	40	8	**N331.32-127S40KMQ**	40.0	17.25	1	55.0	18.5	5.0	1.27	12400	8.0	8	RCKT 16 06 M0
	162	52.5	16	40	10	**N331.32-162S40KMQ**	40.0	17.25	2	55.0	18.5	5.0	1.97	10800	8.0	10	RCKT 16 06 M0
	202	65.5	16	50	12	**N331.32-202S50KMQ**	50.0	17.25	2	69.0	18.5	5.0	3.20	9600	8.0	12	RCKT 16 06 M0

		Componentes		
CW	DC	Parafuso da pastilha	Cunha	Parafuso
10.00	82.00	5513 020-09	5431 105-01	269-832
10.00	102.00-202.00	5513 020-09	5431 105-01	339-831
12.00	82.00	5513 020-09	5431 105-02	269-832
12.00	102.00-202.00	5513 020-09	5431 105-02	339-831
16.00	102.00	5513 020-07	5431 105-04	5516 010-02
16.00	127.00-202.00	5513 020-07	5431 105-04	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I103


L2



N23



N6

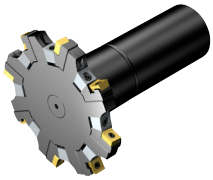
SANDVIK Coromant

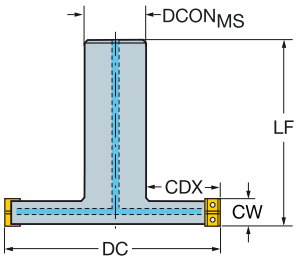
POR

Fresa de disco 3 cortes e de facear CoroMill® 331 ajustável

Haste cilíndrica - refrigeração interna

KAPR 90°





CW	CWX	DC	CDX		CZCMS	CNSC		Código para pedido	Dimensões, mm DCONMS	LF	BAR	NM	KG	RPMX	CICT	MIID
6.00	8.0	80	23.0	04	32	1	3	R331.32C-080A32CM	32.0	115.00	80	0.8	0.90	19300	6	N331.1A-04
		100	28.0	04	40	1	4	R331.32C-100A40CM	40.0	125.00	80	0.8	1.50	17100	8	N331.1A-04
8.00	10.0	80	23.0	05	32	1	3	R331.32C-080A32DM	32.0	115.00	80	1.2	1.02	15000	6	N331.1A-05
		100	28.0	05	40	1	4	R331.32C-100A40DM	40.0	125.00	80	1.2	1.65	13200	8	N331.1A-05
10.00	12.0	80	23.0	08	32	1	3	R331.32C-080A32EM	32.0	115.00	80	1.2	1.04	18100	6	N331.1A-08
		100	28.0	08	40	1	4	R331.32C-100A40EM	40.0	125.00	80	1.2	1.72	15900	8	N331.1A-08

		Componentes		
CW	DC	Parafuso da pastilha	Cunha	Parafuso
6.0	80-100	5513 020-19	5431 105-07	5516 014-06
8.0	80-100	5513 020-34	5431 105-06	5516 014-05
10.0	80-100	5513 020-24	5431 105-01	269-832

Para a lista completa de componentes, acesse www.sandvik.coromant.com

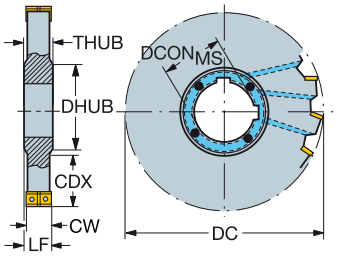
I130 L2 N23 N6

Fresa de disco 3 cortes e de facear CoroMill® 331

Furo com rasgo de chaveta - Refrigeração interna

KAPR 90°





CW	DC	CDX		CZC_{MS}	CNSC		Código para pedido	Dimensões, mm $DCON_{MS}$	LF	DRVCT	DHUB	THUB	BAR	NM	KG	RPMX	CICT	MIID
6.00	100	25.5	04	32	4	5	N331.35C-100S32CM060	32.0	7.00	2	47.0	8.0	80	0.8	0.21	17000	10	N331.1A-04
8.00	100	25.5	05	32	4	5	N331.35C-100S32DM080	32.0	9.00	2	47.0	10.0	80	1.2	0.28	13000	10	N331.1A-05
	125	34.0	05	40	4	6	N331.35C-125S40DM080	40.0	9.00	2	55.0	10.0	80	1.2	0.47	15000	12	N331.1A-05
10.00	125	34.0	08	40	4	6	N331.35C-125S40EM100	40.0	11.00	2	55.0	12.0	80	1.2	0.61	11500	12	N331.1A-08

		Componentes
CW	DC	Parafuso da pastilha
6.0	100.00	5513 020-19
8.0	100.00-125.00	5513 020-34
10.0	125.00	5513 020-24

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I130 L2 N23 N6

SANDVIK Coromant

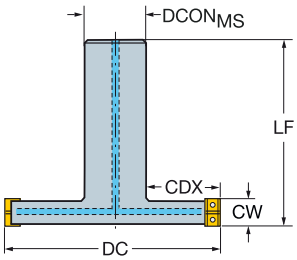
POR

Fresa de disco 3 cortes e de facear CoroMill® 331

Haste cilíndrica - refrigeração interna

KAPR 90°





CW	DC	CDX		CZC_{MS}	CNSC		Código para pedido	Dimensões, mm $DCON_{MS}$	LF	BAR	NM	KG	RPMX	CICT	MIID
6.00	40	11.0	04	16	1	2	R331.35C-040A16CM060	16.0	120.00	80	0.8	0.19	29500	4	N331.1A-04
	50	14.0	04	20	1	3	R331.35C-050A20CM060	20.0	130.00	80	0.8	0.33	25000	6	N331.1A-04
	63	18.0	04	25	1	3	R331.35C-063A25CM060	25.0	140.00	80	0.8	0.58	22000	6	N331.1A-04
	80	23.0	04	32	1	4	R331.35C-080A32CM060	32.0	150.00	80	0.8	1.03	19000	8	N331.1A-04
8.00	40	11.0	05	16	1	2	R331.35C-040A16DM080	16.0	120.00	80	1.2	0.19	22300	4	N331.1A-05
	50	14.0	05	20	1	3	R331.35C-050A20DM080	20.0	130.00	80	1.2	0.34	19500	6	N331.1A-05
	63	18.0	05	25	1	3	R331.35C-063A25DM080	25.0	140.00	80	1.2	0.60	17000	6	N331.1A-05
	80	23.0	05	32	1	4	R331.35C-080A32DM080	32.0	150.00	80	1.2	1.06	15000	8	N331.1A-05
10.00	40	11.0	08	16	1	2	R331.35C-040A16EM100	16.0	120.00	80	1.2	0.20	27000	4	N331.1A-08
	50	14.0	08	20	1	3	R331.35C-050A20EM100	20.0	130.00	80	1.2	0.42	23500	6	N331.1A-08
	63	18.0	08	25	1	3	R331.35C-063A25EM100	25.0	140.00	80	1.2	0.62	21000	6	N331.1A-08
	80	23.0	08	32	1	4	R331.35C-080A32EM100	32.0	150.00	80	1.2	1.11	18000	8	N331.1A-08

		Componentes
CW	DC	Parafuso da pastilha
6.0	40.00-80.00	5513 020-19
8.0	40.00-80.00	5513 020-34
10.0	40.00-80.00	5513 020-24

Para a lista completa de componentes, acesse www.sandvik.coromant.com

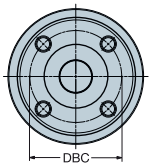
I130 L2 N23 N6

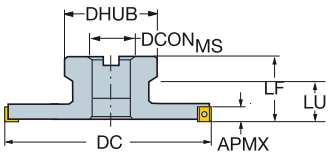
Fresa de disco 2 cortes e de facear CoroMill® 331 ajustável

Árvore

STDNO ISO6462
KAPR 90°









N331.1A

DC		CZC$_{MS}$	APMX		Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	DBC	LF	LU	DHUB	NM	KG	RPMX	CICT	MIID
80	08	27	7.6	6	**R331.52-080Q27FMR**	27.0	A		63.00	40	54.0	1.2	1.12	18100	6	N331.1A-08
80	08	27	7.6	6	**R331.52-080Q27EMR**	27.0	A		63.00	40	54.0	1.2	0.80	18100	6	N331.1A-08
100	08	27	7.6	8	**R331.52-100Q27FMR**	27.0	A		63.00		54.0	1.2	1.30	15900	8	N331.1A-08
125	08	32	7.6	10	**R331.52-125Q32FMR**	32.0	B		63.00		64.0	1.2	1.95	14100	10	N331.1A-08
125	08	32	7.6	10	**R331.52-125Q32EMR**	32.0	B		63.00		64.0	1.2	1.86	14100	10	N331.1A-08
160	08	40	7.6	12	**R331.52-160Q40EMR**	40.0	B		63.00		76.0	1.2	2.69	12400	12	N331.1A-08
100	11	27	10.6	6	**R331.52-100Q27KMR**	27.0	A		63.00	40	54.0	3.0	1.77	14000	6	N331.1A-11
125	11	32	10.6	8	**R331.52-125Q32KMR**	32.0	B		63.00		64.0	3.0	2.30	12000	8	N331.1A-11
160	11	40	10.6	10	**R331.52-160Q40KMR**	40.0	B		63.00		76.0	3.0	3.30	10800	10	N331.1A-11
200	11	40S	10.6	12	**R331.52-200Q40MMR**	40.0	C	66.7	63.00		96.0	3.0	11.50	9600	12	N331.1A-11

	Componentes		
Código para pedido	Parafuso da pastilha	Cunha	Parafuso
R331.52-080Q27EMR	5513 020-24	5431 105-01	269-832
R331.52-080Q27FMR	5513 020-24	5431 105-02	269-832
R331.52-100Q27FMR	5513 020-24	5431 105-02	5516 010-02
R331.52-125Q32EMR	5513 020-24	5431 105-01	339-831
R331.52-125Q32FMR	5513 020-24	5431 105-02	339-831
R331.52-160Q40EMR	5513 020-24	5431 105-01	339-831
R331.52-160Q40FMR	5513 020-24	5431 105-02	339-831
R331.52-100Q27KMR	5513 020-29	5431 105-04	339-831
R331.52-125Q32KMR	5513 020-29	5431 105-04	339-831
R331.52-160Q40KMR	5513 020-29	5431 105-04	339-831
R331.52-200Q40MMR	5513 020-29	5431 105-03	339-831
R331.52-250Q60MMR	5513 020-29	5431 105-03	339-831
R331.52-315Q60NMR	5513 020-29	5431 105-04	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I130


L2


M1



N23



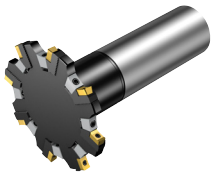
N6

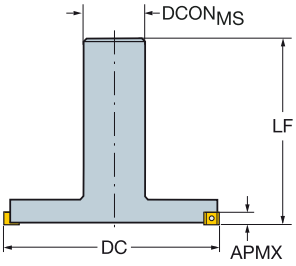
SANDVIK Coromant

Fresa de disco 2 cortes e de facear CoroMill® 331 ajustável

Haste cilíndrica

KAPR 90°







N331.1A

DC		CZCMS	APMX		Código para pedido	Dimensões, mm DCONMS	LF	NM	KG	RPMX	CICT	MIID
100	08	42	7.6	8	**R331.52-100A42EMR**	42.0	152.00	1.2	1.90	15900	8	N331.1A-08

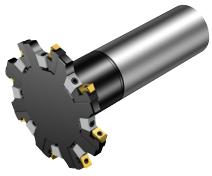
Componentes		
Parafuso da pastilha	Cunha	Parafuso
5513 020-24	5431 105-01	339-831

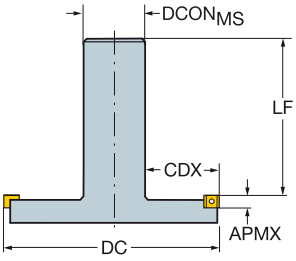
Para a lista completa de componentes, acesse www.sandvik.coromant.com

Fresa de disco 2 cortes e de faceamento reverso CoroMill® 331 ajustável

Haste cilíndrica

KAPR 90°







N331.1A

DC	CDX		CZCMS	APMX		Código para pedido	Dimensões, mm DCONMS	LF	NM	KG	RPMX	CICT	MIID
80	19.5	08	32	7.6	6	**R331.52-080A32EML**	32.0	122.00	1.2	1.19	18100	6	N331.1A-08
100	25.5	08	42	7.6	8	**R331.52-100A42EML**	42.0	142.00	1.2	1.90	15900	8	N331.1A-08

Componentes		
Parafuso da pastilha	Cunha	Parafuso
5513 020-24	5431 105-01	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I130


L2


M1



N23


N6

Fresa de disco 2 cortes e de faceamento reverso CoroMill® 331 ajustável

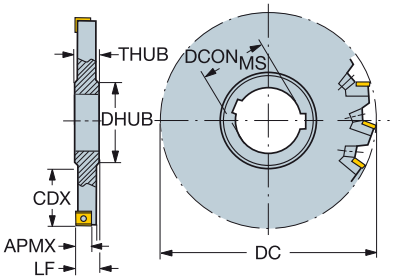
Furo com rasgo de chaveta

KAPR 90°





N331.1A



DC	CDX		CZC_{MS}	APMX		Código para pedido	Dimensões, mm $DCON_{MS}$	LF	DRVCT	DHUB	THUB	NM	KG	RPMX	CICT	MIID
80	19.5	08	27	7.6	6	**R/L331.52-080S27EM**	27.0	13.00	1	39.0	16.0	1.2	0.54	18100	6	N331.1A-08
80	19.5	08	27	7.6	6	**R/L331.52-080S27FM**	27.0	14.00	1	39.0	16.0	1.2	0.56	18100	6	N331.1A-08
100	25.5	08	32	7.6	8	**R/L331.52-100S32EM**	32.0	13.00	1	47.0	16.0	1.2	0.84	15900	8	N331.1A-08
100	25.5	08	32	7.6	8	**R/L331.52-100S32FM**	32.0	14.00	1	47.0	16.0	1.2	0.60	15900	8	N331.1A-08
125	34.0	08	40	7.6	10	**R/L331.52-125S40EM**	40.0	13.00	2	55.0	16.0	1.2	1.02	14100	10	N331.1A-08
125	34.0	08	40	7.6	10	**R/L331.52-125S40FM**	40.0	14.00	2	55.0	16.0	1.2	1.13	14100	10	N331.1A-08
160	51.5	08	40	7.6	12	**R/L331.52-160S40EM**	40.0	13.00	2	55.0	16.0	1.2	1.50	12400	12	N331.1A-08
160	51.5	08	40	7.6	12	**R/L331.52-160S40FM**	40.0	14.00	2	55.0	16.0	1.2	1.73	12400	12	N331.1A-08
100	25.5	11	32	10.6	6	**L331.52-100S32KM**	32.0	16.75	1	47.0	18.5	3.0	0.94	14000	6	N331.1A-11
125	34.0	11	40	10.6	8	**R/L331.52-125S40KM**	40.0	16.75	1	55.0	18.5	3.0	1.30	12000	8	N331.1A-11
160	51.5	11	40	10.6	10	**R/L331.52-160S40KM**	40.0	16.75	2	55.0	18.5	3.0	2.00	10000	10	N331.1A-11
200	64.5	11	50	10.6	12	**R/L331.52-200S50MM**	50.0	29.20	2	69.0	31.2	3.0	9.90	9600	12	N331.1A-11
250	89.5	11	50	10.6	16	**L331.52-250S50MM**	50.0	29.20	2	69.0	31.2	3.0	12.96	8500	16	N331.1A-11
315	114.5	11	60	10.6	20	**R/L331.52-315S60NM**	60.0	32.80	2	84.0	34.8	3.0	17.30	7600	20	N331.1A-11

	Componentes		
Código para pedido	Parafuso da pastilha	Cunha	Parafuso
R/L331.52-125S40EM	5513 020-24	5431 105-01	339-831
R/L331.52-125S40FM	5513 020-24	5431 105-02	339-831
R/L331.52-160S40EM	5513 020-24	5431 105-01	339-831
R/L331.52-160S40FM	5513 020-24	5431 105-02	339-831
R/L331.52-080S27EM	5513 020-24	5431 105-01	269-832
R/L331.52-080S27FM	5513 020-24	5431 105-02	269-832
R/L331.52-100S32EM	5513 020-24	5431 105-01	339-831
R/L331.52-100S32FM	5513 020-24	5431 105-02	339-831
R/L331.52-160S40KM	5513 020-29	5431 105-04	339-831
R/L331.52-200S50MM	5513 020-29	5431 105-03	339-831
R/L331.52-250S50MM	5513 020-29	5431 105-03	339-831
R/L331.52-315S60NM	5513 020-29	5431 105-04	339-831
R/L331.52-100S32KM	5513 020-29	5431 105-04	5516 010-02
R/L331.52-125S40KM	5513 020-29	5431 105-04	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com

I130 L2 N23 N6

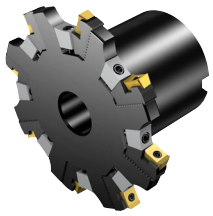
SANDVIK Coromant

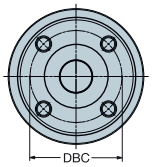
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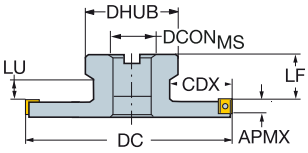
Fresa de disco 2 cortes e de faceamento reverso CoroMill® 331 ajustável

Árvore

STDNO ISO6462
KAPR 90°









N331.1A

DC	CDX		CZC$_{MS}$	APMX		Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	DBC	LF	LU	DHUB	NM	KG	RPMX	CICT	MIID
80	20.0	08	27	7.6	6	R331.52-080Q27EML	27.0	A		53.00	30	54.0	1.2	0.80	18100	6	N331.1A-08
80	20.0	08	27	7.6	6	R331.52-080Q27FML	27.0	A		51.00	28	54.0	1.2	0.98	18100	6	N331.1A-08
100	22.0	08	27	7.6	8	R331.52-100Q27EML	27.0	A		53.00		54.0	1.2	1.20	15900	8	N331.1A-08
100	22.0	08	27	7.6	8	R331.52-100Q27FML	27.0	A		51.00		54.0	1.2	1.30	15900	8	N331.1A-08
125	29.5	08	32	7.6	10	R331.52-125Q32FML	32.0	B		51.00		64.0	1.2	1.95	14100	10	N331.1A-08
125	29.5	08	32	7.6	10	R331.52-125Q32EML	32.0	B		53.00		64.0	1.2	1.81	14100	10	N331.1A-08
160	41.0	08	40	7.6	12	R331.52-160Q40FML	40.0	B		51.00		76.0	1.2	2.90	12400	12	N331.1A-08
160	41.0	08	40	7.6	12	R331.52-160Q40EML	40.0	B		53.00		76.0	1.2	2.60	12400	12	N331.1A-08
100	25.7	11	27	10.6	6	R331.52-100Q27KML	27.0	A		48.00	25	54.0	3.0	1.77	14000	6	N331.1A-11
125	29.5	11	32	10.6	8	R331.52-125Q32KML	32.0	B		48.00		64.0	3.0	2.09	12000	8	N331.1A-11
160	41.0	11	40	10.6	10	R331.52-160Q40KML	40.0	B		48.00		76.0	3.0	3.02	10800	10	N331.1A-11
200	51.0	11	40S	10.6	12	R331.52-200Q40MML	40.0	C	66.7	35.80		96.0	3.0	11.12	9600	12	N331.1A-11

	Componentes		
Código para pedido	Parafuso da pastilha	Cunha	Parafuso
R331.52-080Q27EML	5513 020-24	5431 105-01	269-832
R331.52-080Q27FML	5513 020-24	5431 105-02	269-832
R331.52-100Q27EML	5513 020-24	5431 105-01	5516 010-02
R331.52-100Q27FML	5513 020-24	5431 105-02	5516 010-02
R331.52-125Q32EML	5513 020-24	5431 105-01	339-831
R331.52-125Q32FML	5513 020-24	5431 105-02	339-831
R331.52-160Q40EML	5513 020-24	5431 105-01	339-831
R331.52-160Q40FML	5513 020-24	5431 105-02	339-831
R331.52-100Q27KML	5513 020-29	5431 105-04	339-831
R331.52-125Q32KML	5513 020-29	5431 105-04	339-831
R331.52-160Q40KML	5513 020-29	5431 105-04	339-831
R331.52-200Q40MML	5513 020-29	5431 105-03	339-831
R331.52-250Q60MML	5513 020-29	5431 105-03	339-831
R331.52-315Q60NML	5513 020-29	5431 105-04	339-831

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I130


L2

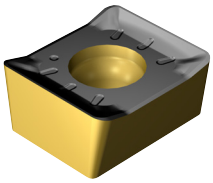

M1



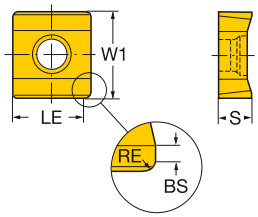
N23


N6

Pastilha CoroMill® 331 para faceamento e fresamento de disco



KRINS 90°



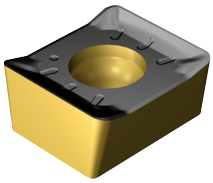
		RE	Código para pedido	P				M				K				N				S				H		Dimensões, mm			
				1130	4330	4340	530	1040	1130	2040	530	1020	3040	3220	3330	1130	530	H10	H13A	1130	2040	H13A	S30T	1130	530	W1	LE	S	BS
Leve	04	0.50	N331.1A-04 35 05E-KL									★	☆	☆	☆											9.5	4.6	3.50	0.4
		0.50	N331.1A-04 35 05H-NL	☆					☆							☆		★		☆				☆		9.5	4.6	3.50	0.2
		0.50	N331.1A-04 35 05H-PL		☆	☆																				9.5	4.6	3.50	0.4
		0.50	N331.1A-04 35 05H-WL	☆					☆							☆			☆	☆		☆		☆		9.5	4.6	3.50	0.4
		0.50	N331.1A-043505E-L30					☆		☆											☆		☆			9.5	4.6	3.49	0.4
		0.50	N331.1A-043505E-L50	★				★	☆	☆										☆	☆		★			9.5	4.6	3.49	0.4
	05	0.80	N331.1A-05 45 08E-KL									★	☆	☆	☆											9.5	5.7	4.45	1.2
		0.80	N331.1A-05 45 08H-NL	☆					☆							☆		★		☆				☆		9.5	5.7	4.45	0.8
		0.80	N331.1A-05 45 08H-PL		☆	☆																				9.5	5.7	4.45	1.2
		0.80	N331.1A-05 45 08H-WL	☆					☆							☆			☆	☆		☆		☆		9.5	5.7	4.45	1.2
		0.80	N331.1A-054508E-L30					☆		☆											☆		☆			9.5	5.7	4.49	1.2
		0.80	N331.1A-054508E-L50	★				★	☆	☆										☆	☆		★			9.5	5.7	4.49	1.2
	08	0.80	N331.1A-08 45 08E-KL									★	☆	☆	☆											9.5	7.7	4.45	1.2
		0.80	N331.1A-08 45 08H-NL	☆					☆							☆		★		☆				☆		9.5	7.7	4.45	0.9
		0.80	N331.1A-08 45 08H-PL		☆	☆																				9.5	7.7	4.45	1.2
		0.80	N331.1A-08 45 08H-WL	☆			☆		☆		☆					☆	☆		☆	☆		☆		☆	☆	9.5	7.7	4.45	1.2
		2.00	N331.1A-08 45 20E-KL									★														9.5	6.5	4.50	1.2
		2.00	N331.1A-08 45 20H-PL	★					☆							☆				☆				☆		9.5	6.5	4.50	1.2
		0.80	N331.1A-084508E-L30					☆		☆											☆		☆			9.5	7.7	4.49	1.2
		0.80	N331.1A-084508E-L50	★				★	☆	☆										☆	☆		★			9.5	7.7	4.49	1.2
	11	0.80	N331.1A-11 50 08E-KL									★	☆	☆	☆											11.5	10.7	4.95	1.2
		0.80	N331.1A-11 50 08H-NL	☆					☆							☆		★		☆				☆		11.5	10.7	4.95	1.3
		0.80	N331.1A-11 50 08H-PL		☆	☆																				11.5	10.7	4.95	1.2
		0.80	N331.1A-11 50 08H-WL	☆					☆							☆			☆	☆		☆		☆		11.5	10.7	4.95	1.2
		2.00	N331.1A-11 50 20E-KL									★														11.5	9.5	5.00	1.2
		2.00	N331.1A-11 50 20H-PL	★					☆							☆				☆				☆		11.5	9.5	5.00	1.2
		0.80	N331.1A-115008E-L30					☆		☆											☆		☆			11.5	10.7	4.99	1.2
		0.80	N331.1A-115008E-L50	★				★	☆	☆										☆	☆		★			11.5	10.7	4.99	1.2
	14	0.80	N331.1A-14 50 08E-KL									★	☆	☆	☆											11.5	13.7	4.95	1.2
		0.80	N331.1A-14 50 08H-NL	☆					☆							☆		★		☆				☆		11.5	13.7	4.95	1.1
		0.80	N331.1A-14 50 08H-PL		☆	☆																				11.5	13.7	4.95	1.2
		0.80	N331.1A-14 50 08H-WL	☆					☆							☆			☆	☆		☆		☆		11.5	13.7	4.95	1.2
		0.80	N331.1A-145008E-L30					☆		☆											☆		☆			11.5	13.7	4.98	1.2
		0.80	N331.1A-145008E-L50	★				★	☆	☆										☆	☆		★			11.5	13.7	4.98	1.2
Média	04	0.50	N331.1A-04 35 05M-KM									☆	☆	☆	☆											9.5	4.6	3.50	0.4
		0.50	N331.1A-04 35 05M-PM		☆	☆																				9.5	4.6	3.50	0.4
		0.50	N331.1A-043505E-M30	★	★							★	★											☆		9.5	4.6	3.50	0.4
	05	0.80	N331.1A-05 45 08E-KM									☆	☆	☆	☆											9.5	5.7	4.45	1.2
		0.80	N331.1A-05 45 08H-PM		☆																					9.5	5.7	4.45	1.2
		0.80	N331.1A-05 45 08M-KM									☆	☆	☆	☆											9.5	5.7	4.45	1.2
		0.80	N331.1A-05 45 08M-PM		☆	☆																				9.5	5.7	4.45	1.2
		0.80	N331.1A-054508E-M30	★	★							★	★											☆		9.5	5.7	4.50	1.2
	08	0.80	N331.1A-08 45 08E-KM									☆	☆	☆	☆											9.5	7.7	4.45	1.2
		0.80	N331.1A-08 45 08H-PM		☆																					9.5	7.7	4.45	1.2
		0.80	N331.1A-08 45 08H-WM				☆				☆						☆		☆			☆			☆	9.5	7.7	4.45	1.2
		0.80	N331.1A-08 45 08M-KM									☆	☆	☆	☆											9.5	7.7	4.45	1.2
		0.80	N331.1A-08 45 08M-PM		☆	☆																				9.5	7.7	4.45	1.2
		2.00	N331.1A-08 45 20E-KM									★	★													9.5	6.5	4.45	1.2
		2.00	N331.1A-08 45 20H-PM	★	★				☆							☆				☆				☆		9.5	6.5	4.45	1.2
		0.80	N331.1A-084508E-M30	★	★							★	★											☆		9.5	7.7	4.50	1.2

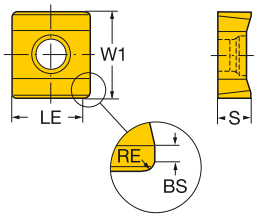
I116 I154 I175 N23 N6 N10

SANDVIK Coromant

Pastilha CoroMill® 331 para faceamento e fresamento de disco

KRINS 90°





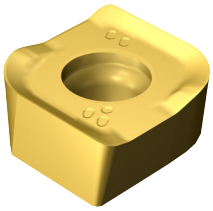
		RE	Código para pedido	P				M				K				N				S				H		Dimensões, mm			
				1130	4330	4340	530	1040	1130	2040	530	1020	3040	3220	3330	1130	530	H10	H13A	1130	2040	H13A	S30T	1130	530	W1	LE	S	BS
Medium	11	0.80	N331.1A-11 50 08E-KM									☆	☆	☆	☆											11.5	10.7	4.95	1.2
		0.80	N331.1A-11 50 08H-PM		☆																					11.5	10.7	4.95	1.2
		0.80	N331.1A-11 50 08H-WM				☆				☆						☆		☆			☆			☆	11.5	10.7	4.95	1.2
		0.80	N331.1A-11 50 08M-KM									☆	☆	☆	☆											11.5	10.7	4.95	1.2
		0.80	N331.1A-11 50 08M-PM		☆	☆																				11.5	10.7	4.95	1.2
		2.00	N331.1A-11 50 20E-KM									★	★													11.5	9.5	4.95	1.2
		2.00	N331.1A-11 50 20H-PM	★	★				☆							☆				☆				☆		11.5	9.5	4.95	1.2
		0.80	N331.1A-115008E-M30	★	★							★	★											☆		11.5	10.7	5.00	1.2
	14	0.80	N331.1A-14 50 08E-KM									☆	☆	☆	☆											11.5	13.7	4.95	1.2
		0.80	N331.1A-14 50 08H-PM		☆																					11.5	13.7	4.95	1.2
		0.80	N331.1A-14 50 08H-WM															☆			☆					11.5	13.7	4.95	1.2
		0.80	N331.1A-14 50 08M-KM									☆	☆	☆	☆											11.5	13.7	4.95	1.2
		0.80	N331.1A-14 50 08M-PM		☆	☆																				11.5	13.7	4.95	1.2
		0.80	N331.1A-145008E-M30	★	★							★	★											☆		11.5	13.7	5.00	1.2

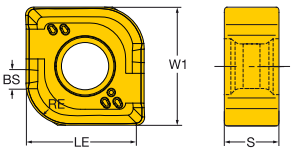
I116 I154 I175 N23 N6 N10

Pastilha CoroMill® 331 para faceamento e fresamento de disco

Corpos de fresas para pastilhas com raios, disponíveis como Tailor made.

KRINS 90°





		SSC	RE	Código para pedido	P		M				K		N	S			H	Dimensões, mm			
					1130	4330	1040	1130	2040	S30T	1020	3040	1130	1130	2040	S30T	1130	W1	LE	S	BS
Leve	L50	11	3.05	R/L331.1A-115030E-L50			★		☆	☆					☆	★		11.5	10.7	5.00	1.3
			4.00	R/L331.1A-115040E-L50			★		☆	☆					☆	★		11.5	10.7	5.00	1.4
			4.83	R/L331.1A-115048E-L50			★		☆	☆					☆	★		11.5	10.7	5.00	1.5
			6.35	R/L331.1A-115063E-L50			★		☆	☆					☆	★		11.5	10.7	5.00	1.6
Média	M30	11	1.52	R/L331.1A-115015E-M30	★	☆		☆			★	☆	☆	☆			☆	11.5	10.7	5.00	1.2
			2.29	R/L331.1A-115023E-M30	★	☆		☆			★	☆	☆	☆			☆	11.5	10.7	5.00	1.2
			3.05	R/L331.1A-115030E-M30	★	☆		☆			★	☆	☆	☆			☆	11.5	10.7	5.00	1.3
	WM	08	4.00	R/L331.1A-08 45 40H-WM	★	☆		☆			★	☆	☆	☆			☆	9.5	7.7	4.45	1.4
		11	4.00	R/L331.1A-11 50 40H-WM	★	☆		☆			★	☆	☆	☆			☆	11.5	10.7	4.95	1.4
		14	4.00	R/L331.1A-14 50 40H-WM	★	☆		☆			★	☆	☆	☆			☆	11.5	13.7	4.95	1.4

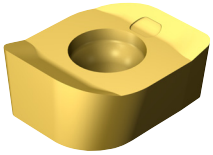
I116 I154 I175 N23 N6 N10

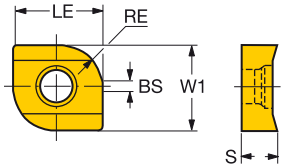
SANDVIK Coromant

Pastilha CoroMill® 331 para faceamento e fresamento de disco

Corpos de fresas para pastilhas com raios, disponíveis como Tailor made.

KRINS 90°



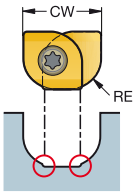


					P		M		K		N		S				H	Dimensões, mm			
			RE	Código para pedido	1130	4340	1040	1130	1025	4340	1130	H10F	1040	1130	S30T	H10F	1130	W1	LE	S	BS
Leve	WL	04	1.52	L331.1A-04 35 15H-WL	★		★	☆	☆		☆		★	☆			★	9.5	4.6	3.50	0.4
			2.29	L331.1A-04 35 23H-WL	★		★	☆	☆		☆		★	☆			★	9.5	4.6	3.50	0.4
			1.52	R331.1A-04 35 15H-WL	★		★	☆	☆		☆		★	☆			★	9.5	4.6	3.50	0.4
			2.29	R331.1A-04 35 23H-WL	★		★	☆	☆		☆		★	☆			★	9.5	4.6	3.50	0.4
		05	1.52	L331.1A-05 45 15H-WL	★		★	☆	☆		☆		★	☆			★	9.5	5.7	4.45	1.2
			2.29	L331.1A-05 45 23H-WL	★		★	☆	☆		☆	★	★	☆		☆	★	9.5	5.7	4.45	1.2
			3.05	L331.1A-05 45 30H-WL	★		★	☆	☆		☆		★	☆			★	9.5	5.7	4.45	1.3
			1.52	R331.1A-05 45 15H-WL	★		★	☆	☆		☆		★	☆			★	9.5	5.7	4.45	1.2
			2.29	R331.1A-05 45 23H-WL	★		★	☆	☆		☆	★	★	☆		☆	★	9.5	5.7	4.45	1.2
			3.05	R331.1A-05 45 30H-WL	★		★	☆	☆		☆		★	☆			★	9.5	5.7	4.45	1.3
		08	1.52	L331.1A-08 45 15H-WL	★		★	☆	☆		☆		☆	☆	★		★	9.5	7.7	4.45	1.2
			2.29	L331.1A-08 45 23H-WL	★		★	☆	☆		☆	★	☆	☆	★	☆	★	9.5	7.7	4.45	1.2
			3.05	L331.1A-08 45 30H-WL	★		★	☆	☆		☆	★	★	☆		☆	★	9.5	7.7	4.45	1.3
			1.52	R331.1A-08 45 15H-WL	★		★	☆	☆		☆		☆	☆	★		★	9.5	7.7	4.45	1.2
			2.29	R331.1A-08 45 23H-WL	★		★	☆	☆		☆	★	☆	☆	★	☆	★	9.5	7.7	4.45	1.2
			3.05	R331.1A-08 45 30H-WL	★		★	☆	☆		☆		★	☆			★	9.5	7.7	4.45	1.3
		11	1.52	L331.1A-11 50 15H-WL	★		★	☆	☆		☆		☆	☆	★		★	11.5	10.7	4.95	1.2
			2.29	L331.1A-11 50 23H-WL	★		★	☆	☆		☆	★	☆	☆	★	☆	★	11.5	10.7	4.95	1.2
			3.05	L331.1A-11 50 30H-WL	★		★	☆	☆		☆		★	☆			★	11.5	10.7	4.95	1.3
			4.83	L331.1A-11 50 48H-WL	★		★	☆	☆		☆		★	☆			★	11.5	10.7	4.95	1.5
			6.35	L331.1A-11 50 63H-WL	★		★	☆	☆		☆		★	☆			★	11.5	10.7	4.95	1.6
			1.52	R331.1A-11 50 15H-WL	★		★	☆	☆		☆		☆	☆	★		★	11.5	10.7	4.95	1.2
			2.29	R331.1A-11 50 23H-WL	★		★	☆	☆		☆	★	☆	☆	★	☆	★	11.5	10.7	4.95	1.2
			3.05	R331.1A-11 50 30H-WL	★		★	☆	☆		☆		★	☆			★	11.5	10.7	4.95	1.3
			4.83	R331.1A-11 50 48H-WL	★		★	☆	☆		☆		★	☆			★	11.5	10.7	4.95	1.5
			6.35	R331.1A-11 50 63H-WL	★		★	☆	☆		☆		★	☆			★	11.5	10.7	4.95	1.6
		14	1.52	L331.1A-14 50 15H-WL	★		★	☆	☆		☆		★	☆			★	11.5	13.7	4.95	1.2
			2.29	L331.1A-14 50 23H-WL	★		★	☆	☆		☆		★	☆			★	11.5	13.7	4.95	1.2
			3.05	L331.1A-14 50 30H-WL	★	☆	★	☆	☆	☆	☆	★	★	☆		☆	★	11.5	13.7	4.95	1.3
			4.83	L331.1A-14 50 48H-WL	★	☆	★	☆	☆	☆	☆	★	★	☆		☆	★	11.5	13.7	4.95	1.5
			6.35	L331.1A-14 50 63H-WL	★	☆	★	☆	☆	☆	☆		★	☆			★	11.5	13.7	4.95	1.6
			1.52	R331.1A-14 50 15H-WL	★		★	☆	☆		☆		★	☆			★	11.5	13.7	4.95	1.2
			2.29	R331.1A-14 50 23H-WL	★		★	☆	☆		☆		★	☆			★	11.5	13.7	4.95	1.2
			3.05	R331.1A-14 50 30H-WL	★	☆	★	☆	☆	☆	☆	★	★	☆		☆	★	11.5	13.7	4.95	1.3
			4.83	R331.1A-14 50 48H-WL	★	☆	★	☆	☆	☆	☆		★	☆			★	11.5	13.7	4.95	1.5
			6.35	R331.1A-14 50 63H-WL	★	☆	★	☆	☆	☆	☆		★	☆			★	11.5	13.7	4.95	1.6

Limitações ao usar pastilhas com raio de canto grande

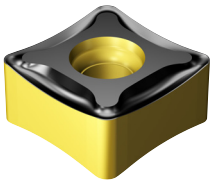
Fresamento de canais em cheio

Tamanho da pastilha	CW calculada
04	CW = RE + 4.6
05	CW = RE + 6
08	CW = RE + 8
11	CW = RE + 11

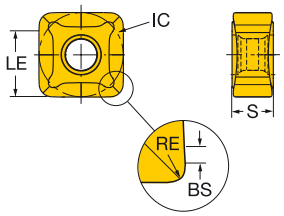


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Pastilha CoroMill® 331 para faceamento e fresamento de disco

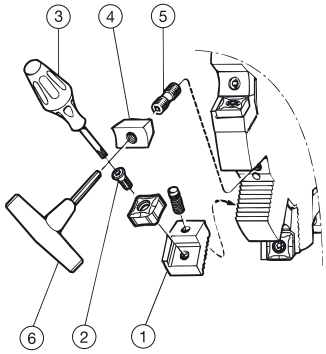


KRINS 88°



					P				M	K			N	S	H	Dimensões, mm			
			RE	Código para pedido	1130	4220	4330	4340	1130	1020	3040	3330	1130	1130	1130	IC	LE	S	BS
Média	PM	13	0.80	N331.1D-136508E-PM	☆		★	☆	☆	☆	☆	★	☆	☆	☆	13.4	11.4	6.55	1.2
			0.80	N331.1D-136508M-PM		☆	★			☆	☆	★				13.4	11.4	6.55	1.2
			1.20	N331.1D-136512M-PM		☆				☆	☆	★				13.4	11.0	6.55	1.2
			2.00	N331.1D-136520E-PM	☆	☆	★	☆	☆	☆	☆	★	☆	☆	☆	13.4	10.2	6.55	1.2
			2.00	N331.1D-136520M-PM		☆				☆	☆	★				13.4	10.2	6.55	1.2

Essas pastilhas dupla face necessitam de cassetes opcionais. Para mais informações, consulte abaixo.



Observe que o diâmetro da fresa aumenta em 3,2 mm ao utilizar cassetes para pastilhas dupla face.

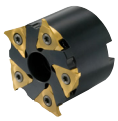
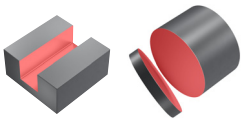
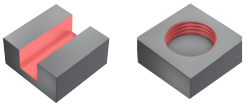
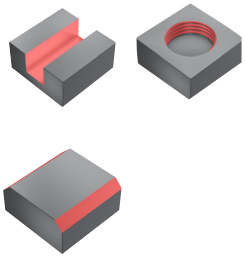
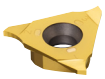
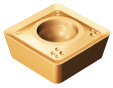
Tipo de fresa	1	1	2	3		4	5	6
	Cassete Direito	Cassete esquerdo	Parafuso	Chave (Torx Plus)	Torquímetro[1]	Cunha	Parafuso	Chave (mm)
QM (a_p 20.5–23.5 mm)	5321 260-01	5321 260-02	5513 020-25	5680 046-02 (15IP)	5680 100-06	5431 105-05	339-831	265.2-817 (3.0)
RM (a_p 23.5-26.5 mm)	5321 260-01	5321 260-02	5513 020-25	5680 046-02 (15IP)	5680 100-06	5431 105-05	339-831	265.2-817 (3.0)

1) Acessórios devem ser pedidos separadamente

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SANDVIK Coromant

Ferramentas para fresamento de roscas, canais e chanfros

	CoroMill® QD	CoroMill® 328	CoroMill® 327	CoroMill® 495
				
Página	Fresamento de canais I136	Fresamento de canais I142	Fresamento de canais I145	Fresamento de chanfros I151
		Fresamento de rosca I148	Fresamento de rosca I149	
			Fresamento de chanfros I150	
Material	P M K N S H	P M K N S	P M K N S	P M K N S
Operação principal				
D_c mm	63 - 315	39 - 80	9.7 - 34.7	12 - 63
APMX mm		6	6 - 10	3.8 - 7.7
CW mm	2 - 6.35	1.3 - 5.15	0.7 - 5.15	
CDX mm	21.0 - 117.5	3.0 - 5.0	0.5 - 10.0	
Pastilha				
Tamanhos da pastilha	E,F,G,H,J,K	13	06, 09, 12, 14	09
Acoplamentos	Árvore com parafusos de arraste Haste cilíndrica	Furo com rasgo de chaveta Weldon Árvore	Coromant Capto® Curto Weldon Pinças ER integradas	Coromant Capto® Haste cilíndrica Weldon Coromant EH
Refrigeração interna	✓	✗	✓	✓
Opções				Ângulos disponíveis: 15°, 30°, 45°, 60°

CoroMill® QD

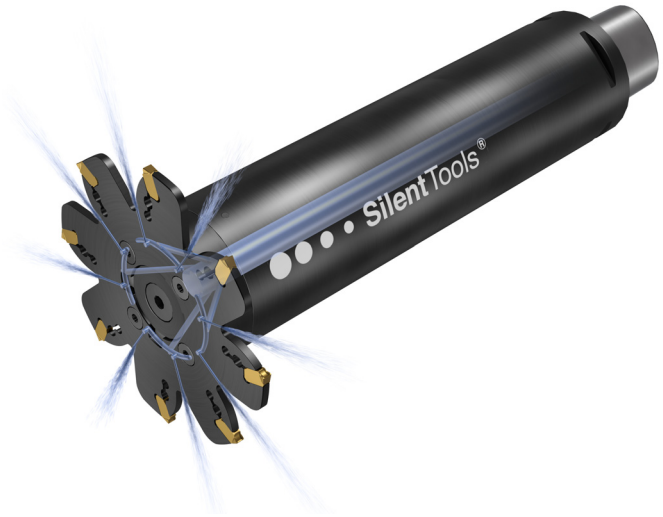
Cortes e fresamento de canais com alta segurança

Aplicação

- Usinagem de canais profundos
- Corte
- Usinagem interna e externa
- Desbaste ao acabamento

Área de aplicação ISO:

P M K N S H



Características e benefícios

- Canais de qualidade sem problemas com cavacos
- Ferramentas muito seguras com excelente confiabilidade
- Trocas de pastilhas rápidas e fáceis

www.sandvik.coromant.com/coromillqd

Acoplamentos

- Haste cilíndrica
- Árvore

Pastilhas

Pastilhas com tolerância E- e M- para uma ampla gama de materiais e larguras. Pastilhas com fase paralela extra longa disponíveis para acabamento superficial de alta qualidade. Disponível na classe GC1130 para fresamento de aços com tecnologia Zertivo™ para vida útil mais longa e previsível.

Disco de apoio

Ao usar discos de apoio para estabilidade extra, o fresamento de canais com alta relação profundidade de corte/largura (acima de 15) pode ser executado com garantia de excelente qualidade.
Discos de apoio menores podem ser usados em conjunto com adaptadores de fresa de facear em grandes centros de usinagem como uma solução com boa relação custo/benefício.



Refrigeração interna

A solução de refrigeração interna proporciona ótimo escoamento de cavacos. Se livrando de problemas com os cavacos, o acabamento superficial é aprimorado e a segurança da usinagem é garantida. A refrigeração interna também ajuda a regular o calor na zona de corte que é especialmente benéfico para materiais ISO S.



I137 I140 N6

SANDVIK Coromant

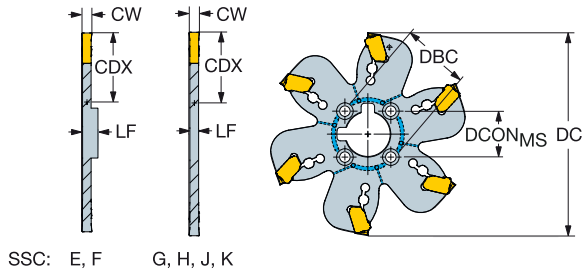
POR

Fresa intercambiável CoroMill® QD para cortes e canais

Árvore - refrigeração interna

KAPR 90°





SSC: E, F G, H, J, K

								Dimensões, mm							
CW	DC	CDX	SSC	CZC_{MS}	CNSC		Código para pedido	$DCON_{MS}$	DBC	LF	DRVCT	BAR	KG	RPMX	MIID
2.00	80	24.0	E	X10	4	5	QD-EC080X10-M	10.0	22.0	2.65	0	50	0.12	4300	QD-NE-0200-020E-PM
	100	30.0	E	X22	4	8	QD-EC100X22-M	22.0	32.0	2.65	2	50	0.14	3900	QD-NE-0200-020E-PM
	125	31.0	E	X32	4	10	QD-EC125X32-M	32.0	45.0	2.65	2	50	0.25	3500	QD-NE-0200-020E-PM
	160	40.0	E	X40	4	12	QD-EC160X40-M	40.0	63.0	2.65	2	50	0.32	3000	QD-NE-0200-020E-PM
2.50	80	24.0	F	X10	4	5	QD-FC080X10-M	10.0	22.0	2.65	0	50	0.13	5000	QD-NF-0250-020E-PM
	100	30.0	F	X22	4	8	QD-FC100X22-M	22.0	32.0	2.65	2	50	0.15	4400	QD-NF-0250-020E-PM
	125	31.0	F	X32	4	10	QD-FC125X32-M	32.0	45.0	2.65	2	50	0.28	4000	QD-NF-0250-020E-PM
	160	40.0	F	X40	4	12	QD-FC160X40-M	40.0	63.0	2.65	2	50	0.36	3500	QD-NF-0250-020E-PM
3.00	80	24.0	G	X10	4	5	QD-GC080X10-M	10.0	22.0	2.70	0	70	0.14	6100	QD-NG-0300-020E-PM
	100	30.0	G	X22	4	8	QD-GC100X22-M	22.0	32.0	2.70	2	70	0.17	5500	QD-NG-0300-020E-PM
	125	31.0	G	X32	4	10	QD-GC125X32-M	32.0	45.0	2.70	2	70	0.30	4900	QD-NG-0300-020E-PM
	160	40.0	G	X40	4	12	QD-GC160X40-M	40.0	63.0	2.70	2	70	0.40	4300	QD-NG-0300-020E-PM
4.00	80	24.0	H	X10	4	4	QD-HC080X10-M	10.0	22.0	3.65	0	70	0.14	5000	QD-NH-0400-025E-PM
	100	30.0	H	X22	4	6	QD-HC100X22-M	22.0	32.0	3.65	2	70	0.19	4400	QD-NH-0400-025E-PM
	125	31.0	H	X32	4	8	QD-HC125X32-M	32.0	45.0	3.65	2	70	0.33	4000	QD-NH-0400-025E-PM
	160	40.0	H	X40	4	12	QD-HC160X40-M	40.0	63.0	3.65	2	70	0.48	3500	QD-NH-0400-025E-PM
5.00	100	30.0	J	X22	4	6	QD-JC100X22-M	22.0	32.0	4.65	2	70	0.22	3800	QD-NJ-0500-030E-PM
	125	31.0	J	X32	4	8	QD-JC125X32-M	32.0	45.0	4.65	2	70	0.39	3400	QD-NJ-0500-030E-PM
	160	40.0	J	X40	4	10	QD-JC160X40-M	40.0	63.0	4.65	2	70	0.56	3000	QD-NJ-0500-030E-PM
6.00	100	30.0	K	X22	4	6	QD-KC100X22-M	22.0	32.0	5.65	2	70	0.24	3900	QD-NK-0600-035E-PM
	125	31.0	K	X32	4	8	QD-KC125X32-M	32.0	45.0	5.65	2	70	0.44	3500	QD-NK-0600-035E-PM
	160	40.0	K	X40	4	10	QD-KC160X40-M	40.0	63.0	5.65	2	70	0.65	3000	QD-NK-0600-035E-PM

Nota: o acoplamento X40 usa parafusos incluídos no adaptador.

	Componentes
DC	Parafuso
80.00	5513 015-11
100.00	5513 015-10
125.00	5513 015-09

Para a lista completa de componentes, acesse www.sandvik.coromant.com

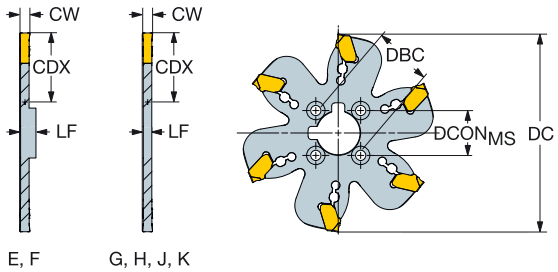
I140 L2 N23 N6 N15

Fresa intercambiável CoroMill® QD para cortes e canais

Árvore

KAPR 90°





SSC: E, F G, H, J, K

							Dimensões, mm						
CW	DC	CDX	SSC	CZC_{MS}		Código para pedido	$DCON_{MS}$	DBC	LF	DRVCT	KG	RPMX	MIID
2.00	80	24.0	E	X10	5	QD-E-080X10-M	10.0	22.0	2.65	0	0.12	4300	QD-NE-0200-020E-PM
	100	30.0	E	X22	8	QD-E-100X22-M	22.0	32.0	2.65	2	0.14	3900	QD-NE-0200-020E-PM
	125	31.0	E	X32	10	QD-E-125X32-M	32.0	45.0	2.65	2	0.25	3500	QD-NE-0200-020E-PM
	160	40.0	E	X40	12	QD-E-160X40-M	40.0	63.0	2.65	2	0.32	3000	QD-NE-0200-020E-PM
	200	60.0	E	X40	16	QD-E-200X40-M	40.0	63.0	2.65	2	0.64	2700	QD-NE-0200-020E-PM
2.50	80	24.0	F	X10	5	QD-F-080X10-M	10.0	22.0	2.65	0	0.13	5000	QD-NF-0250-020E-PM
	100	30.0	F	X22	8	QD-F-100X22-M	22.0	32.0	2.65	2	0.16	4400	QD-NF-0250-020E-PM
	125	31.0	F	X32	10	QD-F-125X32-M	32.0	45.0	2.65	2	0.28	4000	QD-NF-0250-020E-PM
	160	40.0	F	X40	12	QD-F-160X40-M	40.0	63.0	2.65	2	0.36	3500	QD-NF-0250-020E-PM
	200	60.0	F	X40	16	QD-F-200X40-M	40.0	63.0	2.65	2	0.73	3100	QD-NF-0250-020E-PM
	250	85.0	F	X40	20	QD-F-250X40-M	40.0	63.0	2.70	2	0.98	2800	QD-NF-0250-020E-PM
3.00	80	24.0	G	X10	5	QD-G-080X10-M	10.0	22.0	2.70	0	0.14	6100	QD-NG-0300-020E-PM
	100	30.0	G	X22	8	QD-G-100X22-M	22.0	32.0	2.70	2	0.17	5500	QD-NG-0300-020E-PM
	125	31.0	G	X32	10	QD-G-125X32-M	32.0	45.0	2.70	2	0.30	4900	QD-NG-0300-020E-PM
	160	40.0	G	X40	12	QD-G-160X40-M	40.0	63.0	2.70	2	0.40	4300	QD-NG-0300-020E-PM
	200	60.0	G	X40	16	QD-G-200X40-M	40.0	63.0	2.70	2	0.79	3800	QD-NG-0300-020E-PM
	250	85.0	G	X40	20	QD-G-250X40-M	40.0	63.0	2.70	2	1.09	3400	QD-NG-0300-020E-PM
	315	117.5	G	X40	24	QD-G-315X40-M	40.0	63.0	2.70	2	1.90	3100	QD-NG-0300-020E-PM
4.00	80	24.0	H	X10	4	QD-H-080X10-M	10.0	22.0	3.65	0	0.15	5000	QD-NH-0400-025E-PM
	100	30.0	H	X22	6	QD-H-100X22-M	22.0	32.0	3.65	2	0.19	4400	QD-NH-0400-025E-PM
	125	31.0	H	X32	8	QD-H-125X32-M	32.0	45.0	3.65	2	0.34	4000	QD-NH-0400-025E-PM
	160	40.0	H	X40	12	QD-H-160X40-M	40.0	63.0	3.65	2	0.48	3500	QD-NH-0400-025E-PM
	200	60.0	H	X40	14	QD-H-200X40-M	40.0	63.0	3.65	2	0.94	3100	QD-NH-0400-025E-PM
	250	85.0	H	X40	20	QD-H-250X40-M	40.0	63.0	3.65	2	1.41	2800	QD-NH-0400-025E-PM
	315	117.5	H	X40	24	QD-H-315X40-M	40.0	63.0	3.65	2	2.39	2500	QD-NH-0400-025E-PM
5.00	100	30.0	J	X22	6	QD-J-100X22-M	22.0	32.0	4.65	2	0.22	3800	QD-NJ-0500-030E-PM
	125	31.0	J	X32	8	QD-J-125X32-M	32.0	45.0	4.65	2	0.39	3400	QD-NJ-0500-030E-PM
	160	40.0	J	X40	10	QD-J-160X40-M	40.0	63.0	4.65	2	0.55	3000	QD-NJ-0500-030E-PM
	200	60.0	J	X40	14	QD-J-200X40-M	40.0	63.0	4.65	2	1.10	2700	QD-NJ-0500-030E-PM
	250	85.0	J	X40	18	QD-J-250X40-M	40.0	63.0	4.65	2	1.62	2400	QD-NJ-0500-030E-PM
	315	117.5	J	X40	24	QD-J-315X40-M	40.0	63.0	4.65	2	2.85	2100	QD-NJ-0500-030E-PM
6.00	100	30.0	K	X22	6	QD-K-100X22-M	22.0	32.0	5.65	2	0.25	3900	QD-NK-0600-035E-PM
	125	31.0	K	X32	8	QD-K-125X32-M	32.0	45.0	5.65	2	0.44	3500	QD-NK-0600-035E-PM
	160	40.0	K	X40	10	QD-K-160X40-M	40.0	63.0	5.65	2	0.65	3000	QD-NK-0600-035E-PM
	200	60.0	K	X40	14	QD-K-200X40-M	40.0	63.0	5.65	2	1.27	2700	QD-NK-0600-035E-PM
	250	85.0	K	X40	18	QD-K-250X40-M	40.0	63.0	5.65	2	1.92	2400	QD-NK-0600-035E-PM
	315	117.5	K	X40	24	QD-K-315X40-M	40.0	63.0	5.65	2	3.32	2200	QD-NK-0600-035E-PM

Nota: o acoplamento X40 usa parafusos incluídos no adaptador.

	Componentes
DC	Parafuso
80.00	5513 015-11
100.00	5513 015-10
125.00	5513 015-09

Para a lista completa de componentes, acesse www.sandvik.coromant.com

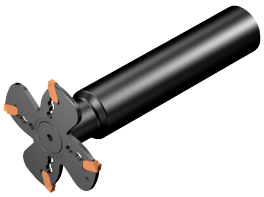
I140 L2 N23 N6

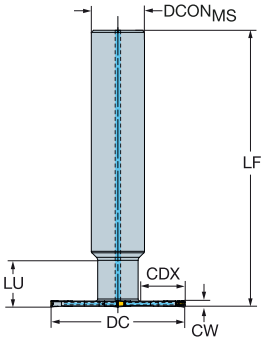
SANDVIK Coromant

Fresa intercambiável CoroMill® QD para cortes e canais

Haste cilíndrica - refrigeração interna

KAPR 90°

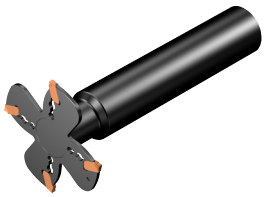


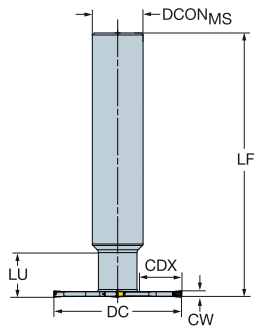


								Dimensões, mm								
CW	DC	CDX	SSC	CZC_{MS}	CNSC		Código para pedido	$DCON_{MS}$	LF	LU	BAR	KG	RPMX	BD	LB	MIID
2.00	63	21.0	E	25	4	4	QD-EC063A25-M	25.0	130.00	23	70	0.67	4900	19.0	21.8	QD-NE-0200-020E-PM
2.50	63	21.0	F	25	4	4	QD-FC063A25-M	25.0	130.00	23	70	0.68	5600	19.0	22.3	QD-NF-0250-020E-PM
3.00	63	21.0	G	25	4	4	QD-GC063A25-M	25.0	130.00	24	70	0.68	6900	19.0	22.7	QD-NG-0300-020E-PM
5.00	80	26.5	J	32	4	4	QD-JC080A32-M	32.0	130.00	26	70	1.05	4200	25.0	24.7	QD-NJ-0500-030E-PM
6.00	80	26.5	K	32	4	4	QD-KC080A32-M	32.0	130.00	27	70	1.06	4300	25.0	25.7	QD-NK-0600-035E-PM

Haste cilíndrica

KAPR 90°





							Dimensões, mm								
CW	DC	CDX	SSC	CZC_{MS}		Código para pedido	$DCON_{MS}$	LF	LU	KG	RPMX	BD	LB	MIID
2.00	63	21.0	E	25	4	QD-E-063A25-M	25.0	130.00	23	0.69	4900	19.0	21.8	QD-NE-0200-020E-PM
2.50	63	21.0	F	25	4	QD-F-063A25-M	25.0	130.00	23	0.68	5600	19.0	22.3	QD-NF-0250-020E-PM
3.00	63	21.0	G	25	4	QD-G-063A25-M	25.0	130.00	24	0.70	6900	19.0	22.7	QD-NG-0300-020E-PM
5.00	80	26.5	J	32	4	QD-J-080A32-M	32.0	130.00	26	1.08	4200	25.0	24.7	QD-NJ-0500-030E-PM
6.00	80	26.5	K	32	4	QD-K-080A32-M	32.0	130.00	27	1.07	4300	25.0	25.7	QD-NK-0600-035E-PM

Componentes
Plugue de refrigeração
5643 028-02

Para a lista completa de componentes, acesse www.sandvik.coromant.com


I140


L2



N23

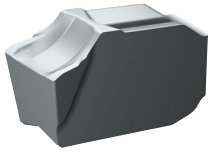


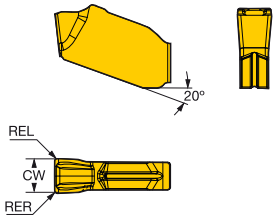
N6



N15

Pastilha CoroMill® QD para canais

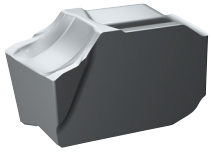


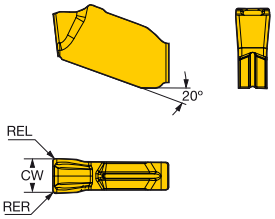


	SSC	CW	REL	RER	Código para pedido	P 1130	P 4340	M 1040	M 1130	M 2040	K 1020	K 3330	N 1130	N H13A	S 1130	S H13A	S S30T	S S40T	H 1130	Dimensões, mm AN	CWTOLL	CWTOLU
	E	2.00	0.10	0.10	QD-NE-0200-010E-NL									★		☆				7°	0.005	0.055
		2.00	0.20	0.20	QD-NE-0200-020E-KL						★	☆								7°	0.005	0.055
		2.00	0.20	0.20	QD-NE-0200-020E-ML			★		☆										7°	0.005	0.055
		2.00	0.20	0.20	QD-NE-0200-020E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		2.00	0.20	0.20	QD-NE-0200-020E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
	F	2.39	0.10	0.10	QD-NF-0239-010E-NL									★		☆				7°	0.005	0.055
		2.39	0.20	0.20	QD-NF-0239-020E-KL						★	☆								7°	0.005	0.055
		2.39	0.20	0.20	QD-NF-0239-020E-ML			★		☆										7°	0.005	0.055
		2.39	0.20	0.20	QD-NF-0239-020E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		2.39	0.20	0.20	QD-NF-0239-020E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
		2.50	0.10	0.10	QD-NF-0250-010E-NL									★		☆				7°	0.005	0.055
		2.50	0.20	0.20	QD-NF-0250-020E-KL						★	☆								7°	0.005	0.055
		2.50	0.20	0.20	QD-NF-0250-020E-ML			★		☆										7°	0.005	0.055
		2.50	0.20	0.20	QD-NF-0250-020E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		2.50	0.20	0.20	QD-NF-0250-020E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
	G	3.00	0.10	0.10	QD-NG-0300-010E-NL									★		☆				7°	0.005	0.055
		3.00	0.20	0.20	QD-NG-0300-020E-KL						★	☆								7°	0.005	0.055
		3.00	0.20	0.20	QD-NG-0300-020E-ML			★		☆										7°	0.005	0.055
		3.00	0.20	0.20	QD-NG-0300-020E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		3.00	0.20	0.20	QD-NG-0300-020E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
		3.18	0.10	0.10	QD-NG-0318-010E-NL									★		☆				7°	0.005	0.055
		3.18	0.20	0.20	QD-NG-0318-020E-KL						★	☆								7°	0.005	0.055
		3.18	0.20	0.20	QD-NG-0318-020E-ML			★		☆										7°	0.005	0.055
		3.18	0.20	0.20	QD-NG-0318-020E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		3.18	0.20	0.20	QD-NG-0318-020E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
Leve	H	4.00	0.15	0.15	QD-NH-0400-015E-NL									★		☆				7°	0.005	0.055
		4.00	0.25	0.25	QD-NH-0400-025E-KL						★	☆								7°	0.005	0.055
		4.00	0.25	0.25	QD-NH-0400-025E-ML			★		☆										7°	0.005	0.055
		4.00	0.25	0.25	QD-NH-0400-025E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		4.00	0.25	0.25	QD-NH-0400-025E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
	J	4.76	0.20	0.20	QD-NJ-0476-020E-NL									★		☆				7°	0.005	0.055
		4.76	0.30	0.30	QD-NJ-0476-030E-KL						★	☆								7°	0.005	0.055
		4.76	0.30	0.30	QD-NJ-0476-030E-ML			★		☆										7°	0.005	0.055
		4.76	0.30	0.30	QD-NJ-0476-030E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		4.76	0.30	0.30	QD-NJ-0476-030E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
		5.00	0.20	0.20	QD-NJ-0500-020E-NL									★		☆				7°	0.005	0.055
		5.00	0.30	0.30	QD-NJ-0500-030E-KL						★	☆								7°	0.005	0.055
		5.00	0.30	0.30	QD-NJ-0500-030E-ML			★		☆										7°	0.005	0.055
		5.00	0.30	0.30	QD-NJ-0500-030E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		5.00	0.30	0.30	QD-NJ-0500-030E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
	K	6.00	0.25	0.25	QD-NK-0600-025E-NL									★		☆				7°	0.005	0.055
		6.00	0.35	0.35	QD-NK-0600-035E-KL						★	☆								7°	0.005	0.055
		6.00	0.35	0.35	QD-NK-0600-035E-ML			★		☆										7°	0.005	0.055
		6.00	0.35	0.35	QD-NK-0600-035E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		6.00	0.35	0.35	QD-NK-0600-035E-SL				☆				☆		☆		★		☆	7°	0.005	0.055
		6.35	0.25	0.25	QD-NK-0635-025E-NL									★		☆				7°	0.005	0.055
		6.35	0.35	0.35	QD-NK-0635-035E-KL						★	☆								7°	0.005	0.055
		6.35	0.35	0.35	QD-NK-0635-035E-ML			★		☆										7°	0.005	0.055
		6.35	0.35	0.35	QD-NK-0635-035E-PL	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		6.35	0.35	0.35	QD-NK-0635-035E-SL				☆				☆		☆		★		☆	7°	0.005	0.055

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Pastilha CoroMill® QD para canais





	SSC	CW	REL	RER	Código para pedido	P		M			K		N		S				H	Dimensões, mm		
						1130	4340	1040	1130	2040	1020	3330	1130	H13A	1130	H13A	S30T	S40T	1130	AN	CWTOLL	CWTOLU
Média	E	2.00	0.20	0.20	QD-NE-0200-020E-MM			★		☆										7°	0.005	0.055
		2.00	0.20	0.20	QD-NE-0200-020E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		2.00	0.20	0.20	QD-NE-0200-020E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		2.00	0.20	0.20	QD-NE-0200-020M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		2.00	0.35	0.35	QD-NE-0200-035M-KM						☆	★								7°	0.005	0.105
	F	2.39	0.20	0.20	QD-NF-0239-020E-MM			★		☆										7°	0.005	0.055
		2.39	0.20	0.20	QD-NF-0239-020E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		2.39	0.20	0.20	QD-NF-0239-020E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		2.39	0.20	0.20	QD-NF-0239-020M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		2.39	0.35	0.35	QD-NF-0239-035M-KM						☆	★								7°	0.005	0.105
		2.50	0.20	0.20	QD-NF-0250-020E-MM			★		☆										7°	0.005	0.055
		2.50	0.20	0.20	QD-NF-0250-020E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		2.50	0.20	0.20	QD-NF-0250-020E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		2.50	0.20	0.20	QD-NF-0250-020M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		2.50	0.35	0.35	QD-NF-0250-035M-KM						☆	★								7°	0.005	0.105
	G	3.00	0.20	0.20	QD-NG-0300-020E-MM			★		☆										7°	0.005	0.055
		3.00	0.20	0.20	QD-NG-0300-020E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		3.00	0.20	0.20	QD-NG-0300-020E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		3.00	0.20	0.20	QD-NG-0300-020M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		3.00	0.35	0.35	QD-NG-0300-035M-KM						☆	★								7°	0.005	0.105
		3.18	0.20	0.20	QD-NG-0318-020E-MM			★		☆										7°	0.005	0.055
		3.18	0.20	0.20	QD-NG-0318-020E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		3.18	0.20	0.20	QD-NG-0318-020E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		3.18	0.20	0.20	QD-NG-0318-020M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		3.18	0.35	0.35	QD-NG-0318-035M-KM						☆	★								7°	0.005	0.105
	H	4.00	0.25	0.25	QD-NH-0400-025E-MM			★		☆										7°	0.005	0.055
		4.00	0.25	0.25	QD-NH-0400-025E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		4.00	0.25	0.25	QD-NH-0400-025E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		4.00	0.25	0.25	QD-NH-0400-025M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		4.00	0.40	0.40	QD-NH-0400-040M-KM						☆	★								7°	0.005	0.105
	J	4.76	0.30	0.30	QD-NJ-0476-030E-MM			★		☆										7°	0.005	0.055
		4.76	0.30	0.30	QD-NJ-0476-030E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		4.76	0.30	0.30	QD-NJ-0476-030E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		4.76	0.30	0.30	QD-NJ-0476-030M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		4.76	0.45	0.45	QD-NJ-0476-045M-KM						☆	★								7°	0.005	0.105
		5.00	0.30	0.30	QD-NJ-0500-030E-MM			★		☆										7°	0.005	0.055
		5.00	0.30	0.30	QD-NJ-0500-030E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		5.00	0.30	0.30	QD-NJ-0500-030E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		5.00	0.30	0.30	QD-NJ-0500-030M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		5.00	0.45	0.45	QD-NJ-0500-045M-KM						☆	★								7°	0.005	0.105
	K	6.00	0.35	0.35	QD-NK-0600-035E-MM			★		☆										7°	0.005	0.055
		6.00	0.35	0.35	QD-NK-0600-035E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		6.00	0.35	0.35	QD-NK-0600-035E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		6.00	0.35	0.35	QD-NK-0600-035M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		6.00	0.50	0.50	QD-NK-0600-050M-KM						☆	★								7°	0.005	0.105
		6.35	0.35	0.35	QD-NK-0635-035E-MM			★		☆										7°	0.005	0.055
		6.35	0.35	0.35	QD-NK-0635-035E-PM	★	☆		☆				☆		☆				☆	7°	0.005	0.055
		6.35	0.35	0.35	QD-NK-0635-035E-SM				☆				☆		☆		★	☆	☆	7°	0.005	0.055
		6.35	0.35	0.35	QD-NK-0635-035M-PM	☆	☆		☆				☆		☆				☆	7°	0.005	0.105
		6.35	0.50	0.50	QD-NK-0635-050M-KM						☆	★								7°	0.005	0.105
Pesada	E	2.00	0.35	0.35	QD-NE-0200-035M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
	F	2.39	0.35	0.35	QD-NF-0239-035M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
		2.50	0.35	0.35	QD-NF-0250-035M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
	G	3.00	0.35	0.35	QD-NG-0300-035M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
		3.18	0.35	0.35	QD-NG-0318-035M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
	H	4.00	0.40	0.40	QD-NH-0400-040M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
	J	4.76	0.45	0.45	QD-NJ-0476-045M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
		5.00	0.45	0.45	QD-NJ-0500-045M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
	K	6.00	0.50	0.50	QD-NK-0600-050M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105
		6.35	0.50	0.50	QD-NK-0635-050M-PH	☆	★		☆				☆		☆				☆	7°	0.005	0.105

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CoroMill® 328

Usinagem de canais, rosqueamento e usinagem de canais circlip

Aplicação

- Fresamento de rosca
- Canais
- Usinagem de canais circlip



Área de aplicação ISO:

P M K N S H

Características e benefícios

- Pastilhas montadas em bolsões para segurança e estabilidade
- Amplo programa de pastilhas abrangendo canais circlips, canais, roscas etc.
- Pastilha retificada de alta precisão
- São possíveis diferentes passos de rosca com uma ferramenta
- Excelente para usinagem interna e externa
- Disponível em quatro tamanhos de porta-ferramentas com o mesmo tamanho de pastilha
- Arestas de corte vivas para canais de alta qualidade sem rebarbas
- Uma classe; com cobertura de PVD GC1025 para todos os materiais
- Múltiplas arestas para usinagem econômica

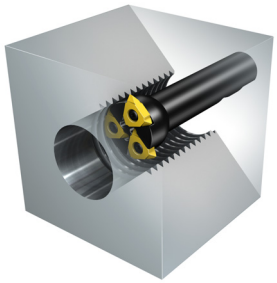
www.sandvik.coromant.com/coromill328

Acoplamentos

- Árvore
- Weldon
- Furo com rasgo de chaveta

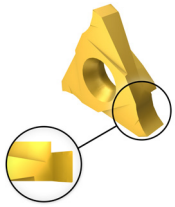
Pastilhas

- Três arestas de corte

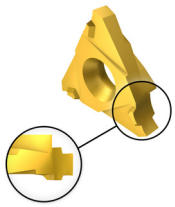


Formatos de rosca: Perfil em V 60°, M 60° e UN 60°

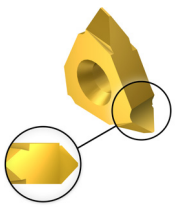
Usinagem de canais circlip



Usinagem de canais circlip com chanfro



Fresamento de rosca



I143 I144

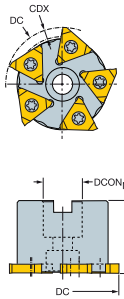
SANDVIK Coromant

Fresa CoroMill® 328 para fresamento de canais

Árvore

STDNO ISO6462
KAPR 90°



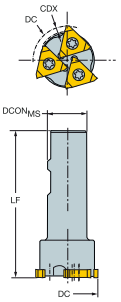


CW	DC	CDX	CZCMS	Código para pedido	DCONMS	ISO	LF	DHUB	NM	KG	RPMX	BD	LB	MIID
					Dimensões, mm									
1.30	63	5.0	13	22	5	328-063Q22-13M	22.0	A	40.00	51.0	6.5	0.84	11900	51.0	40.0	328R13-130 00-GM

Weldon

KAPR 90°



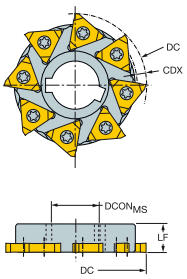


CW	DC	CDX	CZCMS	Código para pedido	DCONMS	ISO	LF	NM	KG	RPMX	BD	LB	MIID
					Dimensões, mm								
1.30	39	3.0	13	25	2	328-039B25-13M	25.0	WE	125.00	6.5	0.59	19300	32.0	69.0	328R13-130 00-GM
	44	4.0	13	25	3	328-044B25-13M	25.0	WE	125.00	6.5	0.61	17100	34.0	69.0	328R13-130 00-GM

Furo com rasgo de chaveta

KAPR 90°





CW	DC	CDX	CZCMS	Código para pedido	DCONMS	LF	DRVCT	DHUB	NM	KG	RPMX	BD	LB	MIID
					Dimensões, mm									
1.30	63	5.0	13	22	5	328-063S22-13M	22.0	14.00	1	51.0	6.5	0.22	11900	51.0	14.0	328R13-130 00-GM
	80	5.0	13	27	8	328-080S27-13M	27.0	16.00	1	68.0	6.5	0.64	9400	68.0	16.0	328R13-130 00-GM

Componentes
Parafuso da pastilha
5513 039-05

Para a lista completa de componentes, acesse www.sandvik.coromant.com

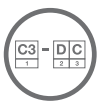

I144


L2


M1

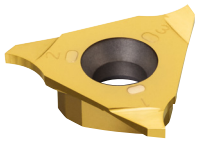


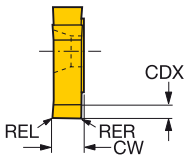
N23



N12

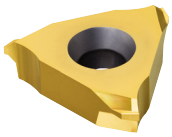
Pastilha CoroMill® 328 para fresamento de canais

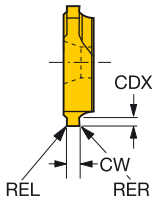




Para canais circlip

	SSC	CW	REL	RER	CDX	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	H 1025	Dimensões, mm AN	CWTOLL	CWTOLU	RETOLL	RETOLU
Média	13	1.30	0.10	0.10	5.00	328R13-130 00-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		1.60	0.10	0.10	5.00	328R13-160 00-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		1.85	0.15	0.15	5.00	328R13-185 02-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		2.15	0.15	0.15	5.00	328R13-215 02-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		2.65	0.15	0.15	5.00	328R13-265 02-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		3.15	0.15	0.15	5.00	328R13-315 02-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		4.15	0.15	0.15	5.00	328R13-415 02-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		5.15	0.15	0.15	5.00	328R13-515 02-GM	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050





Para canais circlip e chanframento

	SSC	CW	REL	RER	CDX	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	H 1025	Dimensões, mm AN	CWTOLL	CWTOLU	RETOLL	RETOLU
Média	13	1.85	0.15	0.15	1.25	328R13-185 45-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		2.15	0.15	0.15	1.50	328R13-215 45-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		2.65	0.15	0.15	1.50	328R13-265 4515-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		2.65	0.15	0.15	1.75	328R13-265 45-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		3.15	0.15	0.15	1.75	328R13-315 45-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		4.15	0.15	0.15	2.00	328R13-415 4520-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		4.15	0.15	0.15	2.50	328R13-415 45-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050
		5.15	0.15	0.15	3.00	328R13-515 45-GC	☆	☆	☆	☆	☆	☆	6°	0.090	0.110	-0.050	0.050

I143 I154 I175 N23 N12

CoroMill® 327

Fresas para rosqueamento e canais

Aplicação

- Fresamento de rosca
- Fresamento de canais
- Usinagem de canais circlip
- Chanframento



Área de aplicação ISO:

P M K N S

Características e benefícios

- Baixas forças de corte
- Arestas de corte vivas para canais de alta qualidade sem rebarbas
- Múltiplas arestas para usinagem altamente econômica e produtiva
- Amplo programa com diâmetros e comprimentos de haste diferentes
- Amplo programa de pastilhas que abrange, por exemplo, canais circlips, o-rings, canais e roscas
- Travamento seguro da pastilha
- Refrigeração interna
- São possíveis diferentes passos de rosca com uma ferramenta

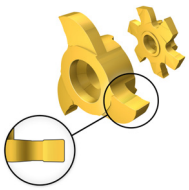
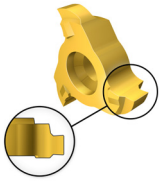
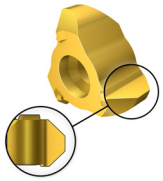
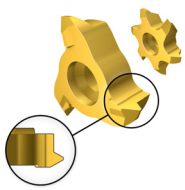
www.sandvik.coromant.com/coromill327

Acoplamentos

- Coromant Capto®
- Pinças ER integradas
- Hastes de aço Weldon ou inteiriças de metal duro

Pastilhas

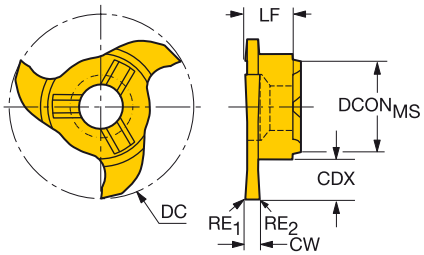
- Geometrias das pastilhas e uma classe para todos os materiais
- Pastilha retificada de alta precisão
- Três ou seis dentes
- Formatos de rosca: Perfil em V 60°, M 60°, UN 60° e Whitworth 55°

?Usinagem de canais e usinagem de canais circlip	Usinagem de canais circlip com chanfro	Usinagem de canais - raio completo	Fresamento de chanfros	Fresamento de rosca
				

I146

Cabeça CoroMill® 327 inteiriça de metal duro para canais



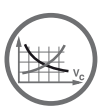


CW	RE$_1$	RE$_2$	CZC$_{MS}$	CDX	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	DCON$_{MS}$	DC	LF	CWTOLL	CWTOLU	RPMX
												Dimensões, mm					
1.00	0.00	0.00	6.0	1.5	3	327R06-10 10000-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.000	0.020	50000
1.50	0.20	0.20	6.0	1.5	3	327R06-10 15002-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.000	0.020	50000
2.00	0.20	0.20	6.0	1.5	3	327R06-10 20002-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.000	0.020	50000
2.50	0.20	0.20	6.0	1.5	3	327R06-10 25002-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.000	0.020	50000
1.50	0.10	0.10	9.0	3.5	6	327R09-18 15001-GMM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
1.50	0.20	0.20	9.0	3.5	3	327R09-18 15002-GM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
2.00	0.20	0.20	9.0	3.5	3	327R09-18 20002-GM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
2.00	0.20	0.20	9.0	3.5	6	327R09-18 20002-GMM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
2.50	0.20	0.20	9.0	3.5	3	327R09-18 25002-GM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
2.50	0.20	0.20	9.0	3.5	6	327R09-18 25002-GMM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
3.00	0.20	0.20	9.0	3.5	3	327R09-18 30002-GM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
3.00	0.20	0.20	9.0	3.5	6	327R09-18 30002-GMM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.020	50000
1.50	0.20	0.20	12.0	4.5	3	327R12-22 15002-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.000	0.020	50000
2.00	0.20	0.20	12.0	4.5	3	327R12-22 20002-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.000	0.020	50000
2.50	0.20	0.20	12.0	4.5	3	327R12-22 25002-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.000	0.020	50000
3.00	0.20	0.20	12.0	4.5	3	327R12-22 30002-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.000	0.020	50000
4.00	0.20	0.20	12.0	4.5	3	327R12-22 40002-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.000	0.020	50000
1.50	0.10	0.10	12.0	6.5	6	327R12-28 15001-GMM	☆	☆	☆	☆	☆	12.00	27.70	6.45	0.000	0.020	50000
2.00	0.20	0.20	12.0	6.4	6	327R12-28 20002-GMM	☆	☆	☆	☆	☆	12.00	27.70	6.40	0.000	0.020	50000
2.50	0.20	0.20	12.0	6.5	6	327R12-28 25002-GMM	☆	☆	☆	☆	☆	12.00	27.70	6.25	0.000	0.020	50000
3.00	0.20	0.20	12.0	6.5	6	327R12-28 30002-GMM	☆	☆	☆	☆	☆	12.00	27.70	6.25	0.000	0.020	50000
4.00	0.20	0.20	12.0	6.5	6	327R12-28 40002-GMM	☆	☆	☆	☆	☆	12.00	27.70	6.25	0.000	0.020	50000
1.50	0.00	0.00	14.0	6.5	3	327R14-28 15000-GM	☆	☆	☆	☆	☆	14.30	27.70	6.50	0.000	0.020	50000
2.00	0.20	0.20	14.0	6.5	3	327R14-28 20002-GM	☆	☆	☆	☆	☆	14.30	27.70	6.50	0.000	0.020	50000
2.50	0.20	0.20	14.0	6.5	3	327R14-28 25002-GM	☆	☆	☆	☆	☆	14.30	27.70	6.50	0.000	0.020	50000
3.00	0.20	0.20	14.0	6.5	3	327R14-28 30002-GM	☆	☆	☆	☆	☆	14.30	27.70	6.50	0.000	0.020	50000
3.50	0.20	0.20	14.0	6.5	3	327R14-28 35002-GM	☆	☆	☆	☆	☆	14.30	27.70	6.50	0.000	0.020	50000
4.00	0.20	0.20	14.0	6.5	3	327R14-28 40002-GM	☆	☆	☆	☆	☆	14.30	27.70	6.50	0.000	0.020	50000
1.50	0.10	0.10	14.0	10.0	6	327R14-35 15001-GMM	☆	☆	☆	☆	☆	14.30	34.70	6.25	0.000	0.020	50000
2.00	0.20	0.20	14.0	10.0	6	327R14-35 20002-GMM	☆	☆	☆	☆	☆	14.30	34.70	6.25	0.000	0.020	50000
2.50	0.20	0.20	14.0	10.0	6	327R14-35 25002-GMM	☆	☆	☆	☆	☆	14.30	34.70	6.25	0.000	0.020	50000
3.00	0.20	0.20	14.0	10.0	6	327R14-35 30002-GMM	☆	☆	☆	☆	☆	14.30	34.70	6.25	0.000	0.020	50000

Para canais circlip

CW	RE$_1$	RE$_2$	CZC$_{MS}$	CDX	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	DCON$_{MS}$	DC	LF	CWTOLL	CWTOLU	RPMX
												Dimensões, mm					
0.70	0.00	0.00	6.0	1.5	3	327R06-10 07000-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.050	0.070	50000
0.80	0.00	0.00	6.0	1.5	3	327R06-10 08000-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.050	0.070	50000
0.90	0.00	0.00	6.0	1.5	3	327R06-10 09000-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.050	0.070	50000
1.10	0.00	0.00	6.0	1.5	3	327R06-10 11000-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.090	0.110	50000
1.30	0.00	0.00	6.0	1.5	3	327R06-10 13000-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.090	0.110	50000
1.60	0.00	0.00	6.0	1.5	3	327R06-10 16000-GM	☆	☆	☆	☆	☆	6.00	9.70	3.50	0.090	0.110	50000
1.10	0.00	0.00	9.0	3.5	3	327R09-18 11000-GM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.090	0.110	50000
1.30	0.00	0.00	9.0	3.5	3	327R09-18 13000-GM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.090	0.110	50000
1.60	0.00	0.00	9.0	3.5	3	327R09-18 16000-GM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.090	0.110	50000
1.60	0.00	0.00	12.0	4.5	3	327R12-22 16000-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.090	0.110	50000
1.85	0.15	0.15	12.0	4.5	3	327R12-22 18502-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.090	0.110	50000
2.15	0.20	0.20	12.0	4.5	3	327R12-22 21502-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.090	0.110	50000
2.65	0.15	0.15	12.0	4.5	3	327R12-22 26502-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.090	0.110	50000
3.15	0.15	0.15	12.0	4.5	3	327R12-22 31502-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.090	0.110	50000
4.15	0.15	0.15	12.0	4.5	3	327R12-22 41502-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.090	0.110	50000
5.15	0.15	0.15	12.0	4.5	3	327R12-22 51502-GM	☆	☆	☆	☆	☆	12.00	21.70	5.70	0.090	0.110	50000


L2


I154



I175



N23

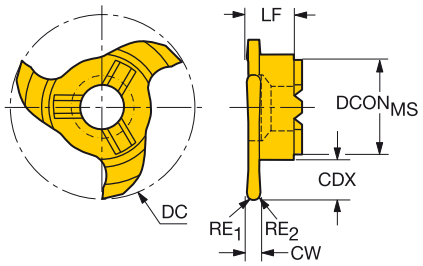


N11

SANDVIK Coromant

Cabeça CoroMill® 327 inteiriça de metal duro para canais

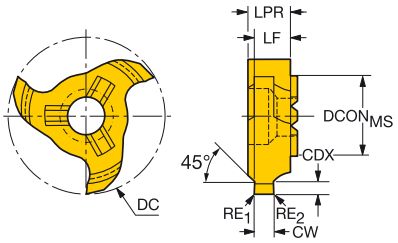




Para canais com raio completo

CW	RE1	RE2	CZCMS	CDX	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	Dimensões, mm DCONMS	DC	LF	CWTOLL	CWTOLU	RPMX
2.20	1.10	1.10	6.0	2.5	3	327R06-12 22011-RM	☆	☆	☆	☆	☆	6.00	11.70	3.50	0.000	0.030	50000
2.20	1.10	1.10	9.0	3.5	3	327R09-18 22011-RM	☆	☆	☆	☆	☆	9.00	17.70	5.75	0.000	0.030	50000
1.00	0.50	0.50	12.0	4.5	3	327R12-22 10005-RM	☆	☆	☆	☆	☆	12.00	21.70	5.75	0.000	0.030	50000
2.00	1.00	1.00	12.0	4.5	3	327R12-22 20010-RM	☆	☆	☆	☆	☆	12.00	21.70	5.75	0.000	0.030	50000
3.00	1.50	1.50	12.0	4.5	3	327R12-22 30015-RM	☆	☆	☆	☆	☆	12.00	21.70	5.75	0.000	0.030	50000
4.00	2.00	2.00	12.0	4.5	3	327R12-22 40020-RM	☆	☆	☆	☆	☆	12.00	21.70	5.75	0.000	0.030	50000





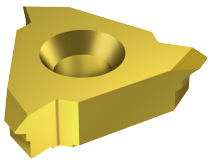
Canais Circlip com chanfro

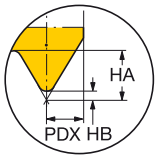
CW	RE1	RE2	CZCMS	CDX	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	Dimensões, mm DCONMS	DC	LF	LPR	CWTOLL	CWTOLU	RPMX
1.10	0.00	0.00	12.0	0.5	3	327R12-22 11045-GC	☆	☆	☆	☆	☆	12.00	21.70	5.00	5.80	0.090	0.110	50000
1.30	0.00	0.00	12.0	0.7	3	327R12-22 13045-GC	☆	☆	☆	☆	☆	12.00	21.70	5.20	5.80	0.090	0.110	50000
1.60	0.00	0.00	12.0	1.0	3	327R12-22 16045-GC	☆	☆	☆	☆	☆	12.00	21.70	5.00	5.80	0.090	0.110	50000
1.85	0.15	0.15	12.0	1.3	3	327R12-22 18545-GC	☆	☆	☆	☆	☆	12.00	21.70	5.20	5.80	0.090	0.110	50000
2.15	0.15	0.15	12.0	1.5	3	327R12-22 21545-GC	☆	☆	☆	☆	☆	12.00	21.70	5.30	5.85	0.090	0.110	50000
2.65	0.15	0.15	12.0	1.5	3	327R12-22 26545-GC	☆	☆	☆	☆	☆	12.00	21.70	5.00	5.80	0.090	0.110	50000
3.15	0.20	0.20	12.0	1.8	3	327R12-22 31545-GC	☆	☆	☆	☆	☆	12.00	21.70	5.30	5.80	0.090	0.110	50000
4.15	0.20	0.20	12.0	2.0	3	327R12-22 41545-GC	☆	☆	☆	☆	☆	12.00	21.70	5.30	5.85	0.090	0.110	50000
1.30	0.00	0.00	12.0	0.8	3	327R12-221304508-GC	☆	☆	☆	☆	☆	12.00	21.70	5.20	5.80	0.090	0.110	50000
1.60	0.00	0.00	12.0	0.8	3	327R12-221604508-GC	☆	☆	☆	☆	☆	12.00	21.70	5.00	5.80	0.090	0.110	50000
2.65	0.15	0.15	12.0	1.8	3	327R12-222654518-GC	☆	☆	☆	☆	☆	12.00	21.70	5.00	5.80	0.090	0.110	50000
4.15	0.20	0.20	12.0	2.5	3	327R12-224154525-GC	☆	☆	☆	☆	☆	12.00	21.70	5.30	5.85	0.090	0.110	50000

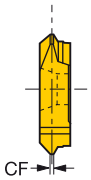
L2 I154 I175 N23 N11

Pastilha CoroMill® 328 para fresamento de roscas

Para roscas internas







Perfil completo 60° métrico

SSC	TP	NT	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	H 1025	Dimensões, mm CF	HA	HB	PDX
13	1.50	1	328R13-150 MM-TH	☆	☆	☆	☆	☆	☆	0.2	0.97	0.16	0.85
	2.00	1	328R13-200 MM-TH	☆	☆	☆	☆	☆	☆	0.3	1.30	0.22	1.05
	3.00	1	328R13-300 MM-TH	☆	☆	☆	☆	☆	☆	0.4	1.95	0.32	1.35
	3.50	1	328R13-350 MM-TH	☆	☆	☆	☆	☆	☆	0.4	2.27	0.38	1.55
	4.00	1	328R13-400 MM-TH	☆	☆	☆	☆	☆	☆	0.5	2.60	0.43	1.75
	4.50	1	328R13-450 MM-TH	☆	☆	☆	☆	☆	☆	0.6	2.92	0.49	1.95
	5.00	1	328R13-500 MM-TH	☆	☆	☆	☆	☆	☆	0.6	3.25	0.54	2.05
	5.50	1	328R13-550 MM-TH	☆	☆	☆	☆	☆	☆	0.7	3.57	0.60	2.30
	6.00	1	328R13-600 MM-TH	☆	☆	☆	☆	☆	☆	0.8	3.90	0.65	2.45

UN 60° Perfil completo

SSC	TPI	NT	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	H 1025	Dimensões, mm CF	HA	HB	PDX
13	16.0	1	328R13-16 UN-TH	☆	☆	☆	☆	☆	☆	0.2	1.02	0.16	0.80
	12.0	1	328R13-12 UN-TH	☆	☆	☆	☆	☆	☆	0.3	1.38	0.23	1.00
	8.0	1	328R13-08 UN-TH	☆	☆	☆	☆	☆	☆	0.4	2.06	0.34	1.40
	4.0	1	328R13-04 UN-TH	☆	☆	☆	☆	☆	☆	0.8	4.12	0.68	2.55

Perfil V 60°

SSC	TPN	TPX	TPIN	TPIX	NT	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	H 1025	Dimensões, mm CF	HA	HB	PDX
13	1.5	3.5	7.0	16.0	1	328R13-150 VM-TH	☆	☆	☆	☆	☆	☆	0.2	2.31	0.13	1.95
	4.0	6.0	4.0	6.0	1	328R13-400 VM-TH	☆	☆	☆	☆	☆	☆	0.5	4.06	0.41	2.60

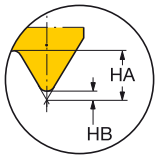
I143 I154 I175 N23 N12

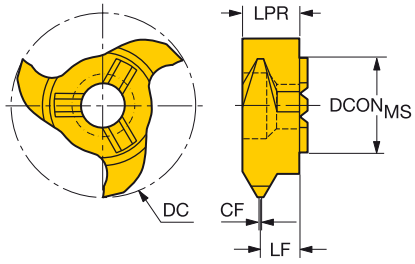
SANDVIK Coromant

Cabeça CoroMill® 327 inteiriça de metal duro para fresamento de roscas

Para roscas internas



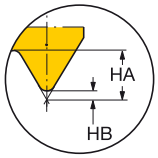


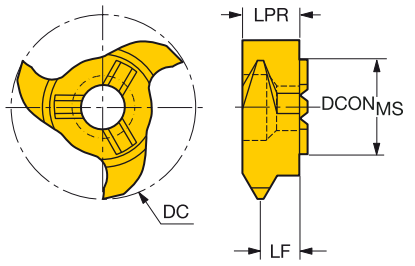


Perfil em V 60° sem formador de crista

TPN	TPX	TPIN	TPIX	DC	CZC$_{MS}$	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	Dimensões, mm DCON$_{MS}$	CF	HA	HB	LF	LPR
1.0	2.0	12.0	24.0	11.70	6.0	3	327R06-12 100VM-TH	☆	☆	☆	☆	☆	6.00	0.1	1.36	0.11	2.8	3.60
1.0	2.0	12.0	24.0	17.70	9.0	3	327R09-18 100VM-TH	☆	☆	☆	☆	☆	9.00	0.1	1.30	0.11	4.7	5.85
1.0	2.0	12.0	24.0	17.70	9.0	6	327R09-18 100VM-THM	☆	☆	☆	☆	☆	9.00	0.1	1.30	0.11	5.0	5.85
1.0	2.0	12.0	24.0	21.70	12.0	3	327R12-22 100VM-TH	☆	☆	☆	☆	☆	12.00	0.1	1.30	0.11	4.6	5.80
1.0	2.0	12.0	24.0	21.70	12.0	6	327R12-22 100VM-THM	☆	☆	☆	☆	☆	12.00	0.1	1.36	0.11	5.1	6.35
2.5	3.0	8.0	10.0	11.70	6.0	3	327R06-12 250VM-TH	☆	☆	☆	☆	☆	6.00	0.3	2.00	0.22	2.2	3.60
2.5	3.5	7.0	10.0	17.70	9.0	3	327R09-18 250VM-TH	☆	☆	☆	☆	☆	9.00	0.3	2.88	0.22	4.2	5.85
2.5	3.5	7.0	10.0	17.70	9.0	6	327R09-18 250VM-THM	☆	☆	☆	☆	☆	9.00	0.3	2.88	0.22	4.3	5.85
2.5	4.5	5.0	10.0	21.70	12.0	3	327R12-22 250VM-TH	☆	☆	☆	☆	☆	12.00	0.3	2.92	0.22	3.7	5.60
2.5	4.5	5.0	10.0	21.70	12.0	6	327R12-22 250VM-THM	☆	☆	☆	☆	☆	12.00	0.3	2.92	0.22	4.2	6.05







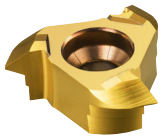
Métrica 60° Perfil completo

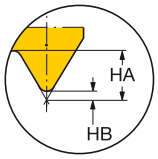
TP	DC	CZC$_{MS}$	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	Dimensões, mm DCON$_{MS}$	HA	HB	LF	LPR
1.50	17.70	9.0	3	327R09-18 150MM-TH	☆	☆	☆	☆	☆	9.00	0.97	0.16	4.8	5.85
1.50	17.70	9.0	6	327R09-18 150MM-THM	☆	☆	☆	☆	☆	9.00	0.97	0.16	5.0	5.85
2.00	17.70	9.0	3	327R09-18 200MM-TH	☆	☆	☆	☆	☆	9.00	1.30	0.22	4.6	5.85
2.00	17.70	9.0	6	327R09-18 200MM-THM	☆	☆	☆	☆	☆	9.00	1.30	0.22	4.8	5.85
3.00	17.70	9.0	3	327R09-18 300MM-TH	☆	☆	☆	☆	☆	9.00	1.95	0.32	4.3	5.85
3.00	17.70	9.0	6	327R09-18 300MM-THM	☆	☆	☆	☆	☆	9.00	1.95	0.32	4.6	5.85
3.50	17.70	9.0	3	327R09-18 350MM-TH	☆	☆	☆	☆	☆	9.00	2.27	0.38	4.0	5.85
3.50	17.70	9.0	6	327R09-18 350MM-THM	☆	☆	☆	☆	☆	9.00	2.27	0.38	4.0	5.85
1.50	21.70	12.0	3	327R12-22 150MM-TH	☆	☆	☆	☆	☆	12.00	0.97	0.16	4.8	5.80
1.75	21.70	12.0	3	327R12-22 175MM-TH	☆	☆	☆	☆	☆	12.00	1.14	0.19	4.7	5.80
2.00	21.70	12.0	3	327R12-22 200MM-TH	☆	☆	☆	☆	☆	12.00	1.30	0.22	4.6	5.80
3.00	21.70	12.0	3	327R12-22 300MM-TH	☆	☆	☆	☆	☆	12.00	1.95	0.32	4.3	5.80
3.50	21.70	12.0	3	327R12-22 350MM-TH	☆	☆	☆	☆	☆	12.00	2.27	0.38	4.0	5.80
4.00	21.70	12.0	3	327R12-22 400MM-TH	☆	☆	☆	☆	☆	12.00	2.60	0.43	3.9	5.80
4.50	21.70	12.0	3	327R12-22 450MM-TH	☆	☆	☆	☆	☆	12.00	2.92	0.49	3.7	5.70

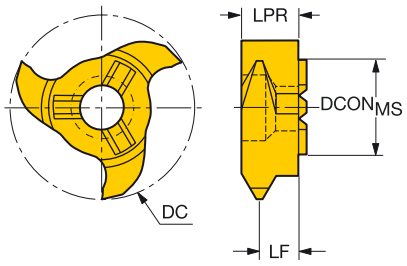
L2 I154 I175 N23 N11

Cabeça CoroMill® 327 inteiriça de metal duro para fresamento de roscas

Para roscas internas



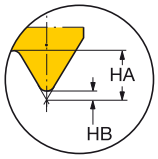


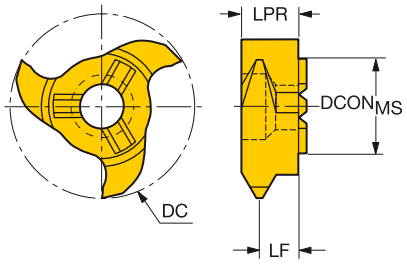


UN 60° Perfil completo

TPI	DC	CZC_{MS}	APMX	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	Dimensões, mm $DCON_{MS}$	HA	HB	LF	LPR
20	17.70	9.0	0.69	3	327R09-18 20UN-TH	☆	☆	☆	☆	☆	9.00	0.82	0.14	5.2	5.85
18	17.70	9.0	0.76	3	327R09-18 18UN-TH	☆	☆	☆	☆	☆	9.00	0.92	0.15	5.0	5.85
16	17.70	9.0	0.86	3	327R09-18 16UN-TH	☆	☆	☆	☆	☆	9.00	1.03	0.17	5.0	5.85
16	17.70	9.0	0.86	6	327R09-18 16UN-THM	☆	☆	☆	☆	☆	9.00	1.03	0.17	5.0	5.85
14	17.70	9.0	0.99	3	327R09-18 14UN-TH	☆	☆	☆	☆	☆	9.00	1.18	0.20	5.0	5.85
14	17.70	9.0	0.99	6	327R09-18 14UN-THM	☆	☆	☆	☆	☆	9.00	1.18	0.20	5.0	5.85
12	17.70	9.0	1.14	3	327R09-18 12UN-TH	☆	☆	☆	☆	☆	9.00	1.37	0.23	4.9	5.85
12	17.70	9.0	1.14	6	327R09-18 12UN-THM	☆	☆	☆	☆	☆	9.00	1.37	0.23	4.9	5.85
11	17.70	9.0	1.24	3	327R09-18 11UN-TH	☆	☆	☆	☆	☆	9.00	1.50	0.25	4.8	5.85
11	17.70	9.0	1.24	6	327R09-18 11UN-THM	☆	☆	☆	☆	☆	9.00	1.50	0.25	4.8	5.85
10	17.70	9.0	1.37	3	327R09-18 10UN-TH	☆	☆	☆	☆	☆	9.00	1.65	0.27	4.7	5.85
8	17.70	9.0	1.73	3	327R09-18 08UN-TH	☆	☆	☆	☆	☆	9.00	2.06	0.34	4.4	5.85
8	17.70	9.0	1.73	6	327R09-18 08UN-THM	☆	☆	☆	☆	☆	9.00	2.06	0.34	4.4	5.85





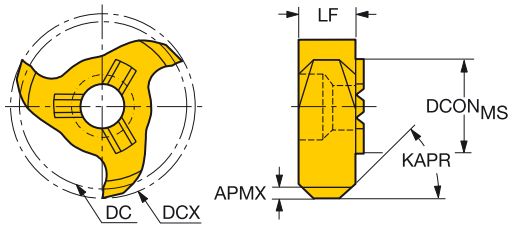


Whitworth 55° Perfil completo

TPI	DC	CZC_{MS}	ZEFP	Código para pedido	P 1025	M 1025	K 1025	N 1025	S 1025	Dimensões, mm $DCON_{MS}$	HA	HB	LF	LPR
19	11.70	6.0	3	327R06-12 19WH-TH	☆	☆	☆	☆	☆	6.00	1.07	0.21	2.5	3.60
19	17.70	9.0	3	327R09-18 19WH-TH	☆	☆	☆	☆	☆	9.00	1.07	0.21	4.9	5.85
14	11.70	6.0	3	327R06-12 14WH-TH	☆	☆	☆	☆	☆	6.00	1.45	0.29	2.3	3.60
14	17.70	9.0	3	327R09-18 14WH-TH	☆	☆	☆	☆	☆	9.00	1.45	0.29	4.6	5.85
11	11.70	6.0	3	327R06-12 11WH-TH	☆	☆	☆	☆	☆	6.00	1.85	0.37	2.0	3.60
11	17.70	9.0	3	327R09-18 11WH-TH	☆	☆	☆	☆	☆	9.00	1.85	0.37	4.4	5.85

Cabeça CoroMill® 327 inteiriça de metal duro para chanframento





KAPR	CZC_{MS}	APMX	ZEFP	Código para pedido	P 1025	M 1025	K 1025	Dimensões, mm $DCON_{MS}$	DC	DCX	LF	RPMX
45°	6.0	0.80	3	327R06-12 12045-CH	☆	☆	☆	6.00	10.10	11.7	3.60	80000
45°	12.0	1.70	3	327R12-22 20045-CH	☆	☆	☆	12.00	18.30	21.7	5.85	80000


L2


I154



I175



N23



N11

SANDVIK Coromant

CoroMill® 495

Fresa versátil para chanfros

Aplicação

- Chanframento de furos e arestas longas
- As operações típicas são chanframento, chanframento reverso, preparação para solda e rebarbamento

Área de aplicação ISO:

P M K N S H



Características e benefícios

- Ferramenta versátil para muitas operações de chanframento diferentes
- Pastilhas flexíveis capazes de usinar em vários materiais
- Alta taxa de utilização da máquina graças a poucas trocas de ferramenta
- Pastilhas intercambiáveis com quatro arestas de corte
- Corpos da fresa com alto número de pastilha em relação ao tamanho do corpo

www.sandvik.coromant.com/coromill495

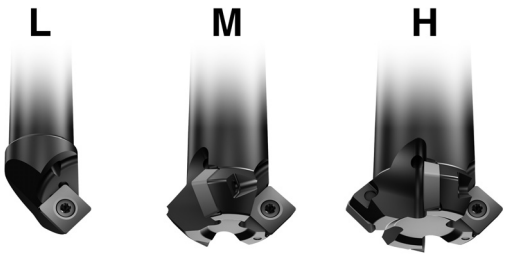
Acoplamentos

- Coromant Capto®
- Haste cilíndrica
- Coromant EH

Pastilhas

- Geometrias e classes de pastilha para todos os materiais
- Quatro arestas de corte





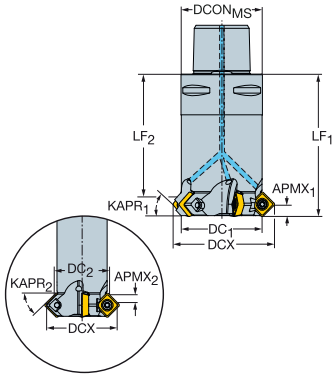
Passo largo | Passo fino | Passo extra fino

I152 I153

Fresa CoroMill® 495 para chanfros

Coromant Capto® - Refrigeração interna

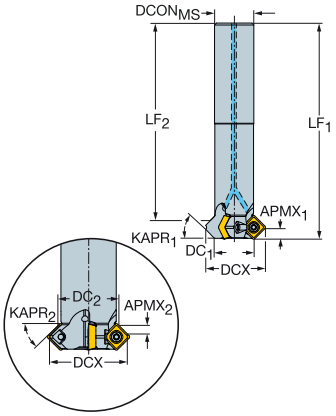




KAPR1	KAPR2		CZCMS	APMX1	APMX2	CNSC		Código para pedido	Dimensões, mm DCONMS	DC1	DC2	DCX	BD	LF1	LF2	BAR	NM	KG	RPMX	CICT	MIID
45°	45°	09	C4	5.4	5.4	3	5	495-040C4-4509H	40.0	40.5	40.5	51.9	39.7	70.0	58.4	20	1.4	0.92	6100	5	495-09T3M-XL
45°	45°	09	C5	5.4	5.4	3	6	495-050C5-4509H	50.0	50.5	50.5	61.9	49.7	75.0	63.2	20	1.4	1.58	5300	6	495-09T3M-XL
45°	45°	09	C6	5.4	5.4	3	7	495-063C6-4509H	63.0	63.5	63.5	74.9	62.7	80.0	68.2	20	1.4	2.43	4700	7	495-09T3M-XL

Haste cilíndrica - refrigeração interna





KAPR1	KAPR2		CZCMS	APMX1	APMX2	CNSC		Código para pedido	Dimensões, mm DCONMS	DC1	DC2	DCX	BD	LF1	LF2	LU	BAR	NM	KG	RPMX	CICT	MIID
30°	60°	09	16	3.8	6.5	1	1	495-012A16-3009L	16.0	12.0	18.3	26.0	17.2	100.0	88.7		20	1.4	0.23	14400	1	495-09T3M-XL
45°	45°	09	16	5.4	5.4	1	1	495-012A16-4509L	16.0	12.0	17.7	23.4	11.2	100.0	90.8	51.0	20	1.4	0.23	14400	1	495-09T3M-XL
60°	30°	09	16	6.8	3.9	1	1	495-012A16-6009L	16.0	12.0	13.5	20.1	13.5	100.0	90.3	49.0	20	1.4	0.20	14400	1	495-09T3M-XL
75°		09	16	7.7		1	1	495-012A16-7509L	16.0	12.0		16.2	13.0				20	1.4	0.20	14400	1	495-09T3M-XL
45°	45°	09	20	5.4	5.4	1	3	495-020A20-4509M	20.0	20.5	20.9	31.9	19.7	110.0	98.2	58.0	20	1.4	0.33	9500	3	495-09T3M-XL
75°		09	25	7.7		1	3	495-025A25-7509H	25.0	25.5		29.7	25.2				20	1.4	0.50	8100	3	495-09T3M-XL
30°	60°	09	25	3.8	6.5	1	4	495-025A25-3009H	25.0	25.5	31.8	39.5	30.7	120.0	108.7	59.0	20	1.4	0.54	8100	4	495-09T3M-XL
45°	45°	09	25	5.4	5.4	1	4	495-025A25-4509H	25.0	25.5	25.9	36.9	24.7	120.0	108.2		20	1.4	0.48	8100	4	495-09T3M-XL
60°	30°	09	25	6.8	3.9	1	4	495-025A25-6009H	25.0	25.5	19.9	33.6	18.7	120.0	108.4	59.0	20	1.4	0.42	8100	4	495-09T3M-XL

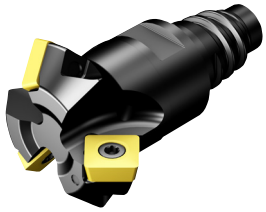
Componentes
Parafuso da pastilha
5513 020-04

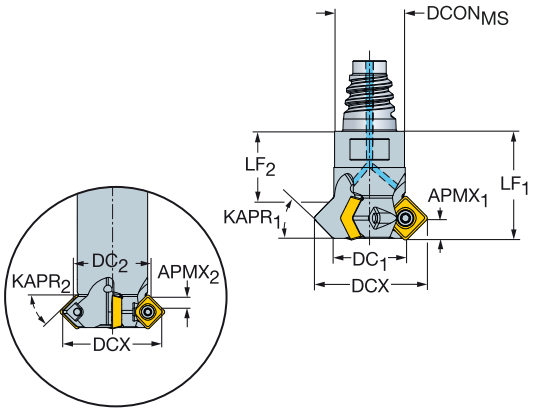
Para a lista completa de componentes, acesse www.sandvik.coromant.com

I153 L2 N23 N9 N15

Fresa CoroMill® 495 para chanfros

Coromant EH - Refrigeração interna





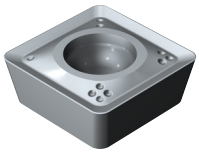
									Dimensões, mm													
$KAPR_1$	$KAPR_2$		CZC_{MS}	$APMX_1$	$APMX_2$	CNSC		Código para pedido	$DCON_{MS}$	DC_1	DC_2	DCX	BD	LF_1	LF_2	BAR	NM	KG	RPMX	CICT	MIID
45°	45°	09	E16	5.4	5.4	1	1	495-012EH16-4509L	15.5	12.0	17.7	23.4	11.2	30.0	20.8	20	1.4	0.09	14400	1	495-09T3M-XL
45°	45°	09	E20	5.4	5.4	1	3	495-020EH20-4509M	19.3	20.5	20.9	31.9	19.7	30.0	18.2	20	1.4	0.15	9500	3	495-09T3M-XL
45°	45°	09	E25	5.4	5.4	1	4	495-025EH25-4509H	24.2	25.5	25.5	36.9	24.7	35.0	23.2	20	1.4	0.18	8100	4	495-09T3M-XL

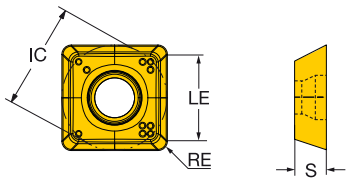
Componentes
Parafuso da pastilha
5513 020-04

Para a lista completa de componentes, acesse www.sandvik.coromant.com

Pastilha CoroMill® 495 para fresamento

KRINS 90°





						P	M		N	S	H	Dimensões, mm		
						1130	1040	1130	1130	1130	1130			
			RE	Código para pedido								IC	LE	S
Média	MM	09	0.80	495-09T3M-MM			★					9.0	7.4	3.51
	PM	09	0.80	495-09T3M-PM		★		☆	☆	☆	☆	9.0	7.4	3.51

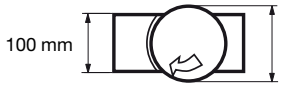
L2 I154 N23 N9 N15 N3

Fresamento com largura fresada grande

ISO P			Força de corte específica k_{c1}	Dureza Brinell		CT530	GC1010	GC1025
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.05 – 0.1 – 0.2	0.05 – 0.1 – 0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Aços						
		Sem liga						
P1.1.Z.AN	01.1	C = 0.1–0.25%	1500	125	0.25	430–390–350	-	340-310-255
P1.2.Z.AN	01.2	C = 0.25–0.55%	1600	150	0.25	385–350–315	-	305-280-230
P1.3.Z.AN	01.3	C = 0.55–0.80%	1700	170	0.25	365–330–300	-	290-260-215
P1.3.Z.AN	01.4		1800	210	0.25	315–290–260	-	250-230-185
P1.3.Z.HT	01.5		2000	300	0.25	235–210–195	-	185-170-140
		Baixa-liga (elementos de liga ≤ 5%)						
P2.1.Z.AN	02.1	Não endurecidos	1700	175	0.25	300–275–245	-	280-255-210
P2.5.Z.HT	02.2	Endurecidos e temperados	1900	300	0.25	195–180–160	-	155-140-115
		Alta-liga (elementos de liga > 5%)						
P3.0.Z.AN	03.11	Recozidos	1950	200	0.25	230–205–185	180-165-135	180-165-135
P3.1.Z.AN	03.13	Aços-ferramenta endurecidos	2150	200	0.25	190–170–155	150-135-110	150-135-110
P3.0.Z.HT	03.21		2900	300	0.25	165–150–135	130-120-100	130-120-100
P3.0.Z.HT	03.22		3100	380	0.25	105–95–85	80-75-60	80-75-60
		Fundidos						
P1.5.C.UT	06.1	Sem liga	1400	150	0.25	305–280–250	245-220-180	245-220-180
P2.6.C.UT	06.2	Baixa-liga (elementos de liga ≤ 5%)	1600	200	0.25	245–220–200	195-175-145	195-175-145
P3.0.C.UT	06.3	Alta-liga (elementos de liga > 5%)	1950	200	0.25	180–160–145	140-130-105	140-130-105

ISO M			Força de corte específica k_{c1}	Dureza Brinell		CT530	M30B	GC1130
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.1 – 0.2 – 0.4	0.05 – 0.1 – 0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Aços inoxidáveis						
		Ferríticos/martensíticos						
P5.0.Z.AN	05.11	Não endurecidos	1800	200	0.21	285 –255 –230	265 –210 –135	255 –225 –180
P5.0.Z.PH	05.12	Endurecidos PH	2850	330	0.21	205 –185 –165	175 –140 –90	180 –160 –130
P5.0.Z.HT	05.13	Endurecidos	2350	330	0.21	215 –190 –170	200 –160 –100	185 –165 –135
		Austeníticos						
M1.0.Z.AQ	05.21	Não endurecidos	1950	200	0.21	265 –240 –215	–	250 –225 –180
M1.0.Z.PH	05.22	Endurecidos PH	2850	330	0.21	200 –175 –160	–	170 –155 –125
M2.0.Z.AQ	05.23	Super austeníticos	2250	200		–	–	–
		Austeníticos-ferríticos (Duplex)						
M3.1.Z.AQ	05.51	Não-soldáveis ≥ 0.05%C	2000	230	0.21	260 –235 –210	–	205 –185 –145
M3.2.Z.AQ	05.52	Soldáveis < 0.05%C	2450	260	0.21	230 –205 –185	–	175 –155 –125
		Aços inoxidáveis – Fundidos						
		Ferríticos/martensíticos						
P5.0.C.UT	15.11	Não endurecidos	1700	200	0.25	255 –230 –205	230 –185 –120	225 –200 –160
P5.0.C.PH	15.12	Endurecidos PH	2450	330	0.25	180 –160 –145	150 –120 –80	155 –140 –115
P5.0.C.HT	15.13	Endurecidos	2150	330	0.25	195 –175 –155	180 –145 –90	170 –155 –120
M1.0.C.UT	15.21	Não endurecidos	1800	200	0.25	255 –225 –205	–	235 –210 –170
M1.0C.PH	15.22	Endurecidos PH	2450	330	0.25	180 –160 –145	–	160 –140 –115
M2.0.C.AQ	15.23	Super austeníticos	2150	200		–	–	–
		Austeníticos-ferríticos (Duplex)						
M3.1.C.AQ	15.51	Não-soldáveis ≥ 0.05%C	1800	230	0.25	245 –220 –195	–	195 –175 –140
M3.2.C.AQ	15.52	Soldáveis < 0.05%C	2250	260	0.25	215 –190 –170	–	160 –145 –115

ISO K			Força de corte específica k_{c1}	Dureza Brinell		CB50	CC6190	GC1010
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.1 – 0.2 – 0.3	0.1 – 0.2 – 0.3
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Ferros fundidos maleáveis						
	07.1	Ferríticos (cavacos curtos)	790	130	0.28	-	1300 –1050 –880	225 –185 –150
K1.1.C.NS	07.2	Perlíticos (cavacos longos)	900	230	0.28	-	1100 –890 –730	185 –155 –125
		Ferros fundidos cinzentos						
K2.1.C.UT	08.1	Baixa resistência à tensão	890	180	0.28	910 –780 –670	1600–1300–1050	245 –200 –165
K2.2.C.UT	08.2	Alta resistência à tensão	1100	245	0.28	850 –720 –620	1200–990–810	195 –160 –130
		Ferros fundidos nodulares						
K3.1.C.UT	09.1	Ferríticos	900	160	0.28	-	1000–830–680	155 –125 –105
K3.3.C.UT	09.2	Perlíticos	1350	250	0.28	495 –420 –360	840 –690 –570	145 –120 –95



Condições:
Fresa. Diâm. 125mm. Centrada na peça. Largura fresada 100mm

GC1130	GC4220	GC4330	GC4340	GC2030	GC2040	GC3040				
Espessura máxima de cavacos, h_{ex} mm										
0.05–0.1–0.2	0.1– 0.2–0.3	0.1– 0.2–0.3	0.1-0.2-0.3	0.1–0.2–0.4	0.1–0.2–0.4	0.1-0.2-0.4				
Velocidade de corte v_c, m/min										
375–340–280	490–405–330	400–330–270	340-280-230	295–240–165	295 –240 –165	390-320-260				
335–305–250	440–360–295	360–295–245	305-250-205	265–215–145	265 –215 –145	350-285-235				
320–290–235	415–340–280	340–280–230	290-235-195	250–205–135	250 –205 –135	330-270-220				
275–250–205	365–300–245	295–245–200	250-205-170	220–180–120	220 –180 –120	290-235-195				
205–185–155	270–220–180	220–180–150	185-155-125	160–130–90	160 –130 –90	215-175-145				
265–240–195	345–285–230	280–230–190	240-195-160	205–170–115	205 –170 –115	275-225-185				
170–155–130	225–185–150	185–150–125	155-130-105	135–110–75	135 –110 –75	180-145-120				
180–165–135	300–245–200	195–160–130	165-135-110	155–130–85	155 –130 –85	205-170-140				
150–135–110	215–180–145	160–130–110	135-110-90	125–105–70	125 –105 –70	170-140-115				
130–120–100	190–155–125	140–115–95	120-100-80	110-90–60	110 –90 –60	150-125-100				
80–75–60	120–95–80	85–70–60	75-60-50	70–55–38	70 –55 –38	95-75-65				
245–220–180	350–290–235	260–215–175	220-180-150	210–170–115	210 –170 –115	280-230-190				
195–175–145	280–230–190	205–170–140	175-145-120	170–140–95	170 –140 –95	220-180-150				
140–130–105	205–170–140	150–125–100	130-105-85	120–100–70	120 –100 –70	160-135-110				

GC1040	S30T	S40T	GC2030	GC2040	GC4330	GC4340	GC1010	GC1025		
Espessura máxima de cavacos, h_{ex} mm										
0.05-0.15-0.25	0.05-0.15-0.25	0.1-0.2-0.3	0.05 – 0.15 – 0.25	0.1 – 0.2 – 0.3	0.1 – 0.2 – 0.3	0.1-0.2-0.4	0.1 – 0.2 – 0.3	0.05-0.1-0.2		
Velocidade de corte v_c, m/min										
185 – 140 – 105	255 – 190 – 140	250 – 200 – 160	240 –190 –155	240 –190 –155	275 –220 –175	210 –170 –110	285-255-230	255-225-180		
130 – 100 – 70	180 – 135 – 100	170 – 135 – 110	170 –135 –110	165 –130 –105	190 –150 –120	140 –110 –70	205-185-165	180-160-130		
135 – 100 – 75	185 – 140 – 105	180 – 145 – 115	175 –140 –115	175 –140 –110	200 –160 –125	160 –125 –80	215-190-170	185-165-135		
180 – 135 – 100	250 – 185 – 140	210 – 165 – 135	235 –190 –150	200 –160 –130	-	185 –150 –95	265-240-215	250-225-180		
125 – 95 – 70	170 – 130 – 95	165 – 130 – 105	165 –130 –105	160 –125 –100	-	135 –105 –70	200-175-160	170-155-125		
125 – 90 – 70	170 – 125 – 95	145 – 115 – 95	–	–	–	–	170-125-95	–		
150 – 115 – 85	205 – 155 – 115	175 – 140 – 110	195 –155 –125	170 –135 –105	-	170 –135 –85	260-240-215	205-185-145		
125 – 95 – 70	175 – 130 – 95	140 – 115 – 90	165 –130 –105	135 –110 –85	-	135 –110 –70	230-205-185	170-155-125		
165 – 125 – 90	225 – 165 – 125	220 – 175 – 140	215 –170 –135	210 –170 –135	245 –195 –155	185 –150 –95	255-230-205	225-200-160		
115 – 85 – 65	155 – 115 – 85	150 – 120 – 95	150 –120 –95	145 –115 –90	165 –130 –105	120 –100 –65	180-160-145	155-140-115		
125 – 90 – 70	170 – 125 – 95	165 – 135 – 105	160 –130 –105	160 –130 –100	180 –145 –115	145 –115 –75	195-175-155	170-155-120		
175 – 130 – 95	235 – 175 – 130	200 – 160 – 130	225 –180 –145	190 –155 –125	-	180 –140 –90	255-225-205	235-210-170		
115 – 85 – 65	160 – 115 – 85	150 – 120 – 95	150 –120 –95	145 –115 –90	-	125 –100 –65	180-160-145	160-140-115		
110 – 85 – 60	155 – 115 – 85	130 – 105 – 85	–	–	–	–	-	–		
145 – 105 – 80	195 – 15 – 110	165 – 130 – 105	185 –150 –120	160 –125 –100	-	160 –125 –80	245-220-195	195-175-140		
115 – 85 – 65	160 – 120 – 90	135 – 105 – 85	150 –120 –95	130 –100 –80	-	125 –100 –65	215-190-170	160-145-115		

GC3220	GC3330	GC3040	K20W	GC4330	GC4340	GC1020	H13A	K20D	K20M	K15W
Espessura máxima de cavacos, h_{ex} mm										
0.1 – 0.2 – 0.3	0.1 – 0.2 – 0.4	0.1 – 0.2 – 0.4	0.1 – 0.2 – 0.3	0.1 – 0.2 – 0.3	0.1 – 0.2 – 0.3	0.1 – 0.2 – 0.3	0.1 – 0.2 – 0.4	0.1-0.2-0.3	0.1-0.2-0.3	0.1-0.2-0.3
Velocidade de corte v_c, m/min										
265–220–180	260–215–145	240–195–135	225–185–150	215 –175 –145	195–160–130	205–170–140	120–105–75	265-220-180	255-210-170	-
220–180–150	215–175–120	200–165–110	185–150–125	175 –145 –120	160–130–110	170–140–115	100– 85–65	220-180-150	210-170-140	-
290–240–195	285–235–155	260–215–145	245–200–165	230 –190 –155	215–175–145	225–185–150	130–110–85	290-240-195	275-225-185	245-200-165
235–190–155	225–185–125	210–170–115	195–160–130	185 –155 –125	170–140–115	180–145–120	105– 90–65	235-190-155	220-180-150	195-160-130
180–150–125	280–230–155	165–135–90	155–125–105	145 –120 –100	135–110–90	140–115–95	80– 70–50	180-150-125	175-140-115	-
170–140–115	225–185–125	150–125–85	140–115–95	135 –110 –90	125–100–85	130–105–90	75– 65–50	170-140-115	160-130-110	-

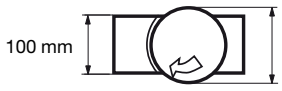
Fresamento com largura fresada grande

ISO N			Força de corte específica k_{c1}	Dureza Brinell		CD10	H10	CT530
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Ligas de alumínio						
N1.2.Z.UT	30.11	Forjadas ou forjadas e trabalhadas a frio, não-envelhecidas	400	60		1900 –1750 –1600	940 –870 –810	1050-960-890
N1.2.Z.AG	30.12	Forjadas ou forjadas e envelhecidas	650	100		1700 –1550 –1450	850 –780 –730	930-860-800
		Ligas de alumínio						
N1.3.C.UT	30.21	Fundidas, não-envelhecidas	600	75	0.25	1900 –1750 –1600	940 –870 –810	1050-960-890
N1.3.C.AG	30.22	Fundidos ou fundidos e envelhecidos	700	90	0.25	1700 –1550 –1450	850 –790 –730	930-860-800
		Ligas de alumínio						
N1.1.Z.UT	30.3	Al >99%	350	30		1900 –1750 –1600	950 –880 –810	1050-960-890
		Ligas de alumínio						
	30.41	Fundidas, 13–15% Si	700	130		760 –700 –650	380 –350 –325	415-385-355
N1.4.C.NS	30.42	Fundidas, 16–22% Si	700	130		570 –530 –485	285 –265 –245	310-290-270
		Cobre e ligas de cobre						
N3.3.U.UT	33.1	Ligas de corte livre, ≥1% Pb	550	110	0.25	940 –870 –810	470 –435 –405	520-480-445
N3.2.C.UT	33.2	Latão, bronzes com chumbo, ≤1% Pb	550	90		940 –870 –810	470 –435 –405	520-480-445
N3.1.U.UT	33.3	Bronze e cobre sem chumbo incl. cobre eletrolítico	1350	100	0.25	660 –610 –570	330 –305 –285	365-335-310

ISO S			Força de corte específica k_{c1}	Dureza Brinell		GC1025	GC1130	H13A
						Espessura máxima de cavacos, h_{ex} mm		
						0.05 – 0.15 – 0.2	0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Super ligas resistentes ao calor						
		À base de ferro						
S1.0.U.AN	20.11	Recozidas ou tratadas em solução	2400	200	0.25	60 –55 –50	60 –55 –50	60 –55 –50
S1.0.U.AG	20.12	Envelhecidas ou tratadas em solução e envelhecidas	2500	280	0.25	45 –40 –37	45 –40 –37	45 –40 –38
		À base de níquel						
S2.0.Z.AN	20.21	Recozidas ou tratadas em solução	2650	250	0.25	60 –55 –50	60 –55 –50	55-55-50
S2.0.Z.AG	20.22	Envelhecidas ou tratadas em solução e envelhecidas	2900	350	0.25	36 –33 –30	36 –33 –30	35-33-30
S2.0.C.NS	20.24	Fundidos ou fundidos e envelhecidos	3000	320	0.25	45 –40 –36	45 –40 –36	45-40-38
		Ligas à base de cobalto						
S3.0.Z.AN	20.31	Recozidas ou tratadas em solução	2700	200	0.25	25 –22 –20	25 –22 –20	23-21-18
S3.0.Z.AG	20.32	Tratadas em solução e envelhecidas	3000	300	0.25	18 –16 –14	18 –16 –14	17-15-13
S3.0.C.NS	20.33	Fundidos ou fundidos e envelhecidos	3100	320	0.25	16 –14 –13	16 –14 –13	16-14-13
		Ligas de titânio1)		Rm[2]				
S4.1.Z.UT	23.1	Comercial puro (99,5% Ti)	1300	400	0.23	125 –115 –105	125 –115 –105	125-115-110
S4.2.Z.AN	23.21	α, próximo α e ligas α + β, recozidas	1400	950	0.23	55 –50 –45	55 –50 –45	50-45-45
S4.3.Z.AG	23.22	Ligas α + β em condições envelhecidas, ligas β, recozidas ou envelhecidas	1400	1050	0.23	45 –40 –36	45 –40 –36	38-36-33

ISO H			Força de corte específica k_{c1}	Dureza Brinell		CB50	CT530	GC4220
						Espessura máxima de cavacos, h_{ex} mm		
						0.07 – 0.12 – 0.2	0.07 – 0.12 – 0.2	0.1 - 0.15 - 0.25
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Aços extra-duros						
H1.3.Z.HA	04.1	Endurecidos e temperados	4200	59 HRC	0.25	160 –140 –115	80 –75 –55	55-45-36
		Ferros fundidos coquilhados						
H2.0.C.UT	10.1	Fundidos ou fundidos e envelhecidos	2250	400	0.28	310 –270 –215	155 –140 –110	100-90-70

1) Ângulo de posição de 45-60°. Deve-se usar geometria de corte positiva e refrigeração.
2) Rm = Limite de resistência à tração medido em MPa.



Condições:
Fresa. Diâm. 125mm. Centrada na peça. Largura fresada 100mm

POR

GC1130	H10F	H13A	GC1025					
Espessura máxima de cavacos, h_{ex} mm								
0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2	0.1-0.15-0.2					
Velocidade de corte v_c, m/min								
990–910–850	940–870–810	750–700–650	990–910–850					
890–820–760	850–780–730	680–630–580	890–820–760					
990–910–850	940–870–810	750–700–650	990–910–850					
990–920–850	850–790–730	680–630–580	990–920–850					
990–920–850	950–880–810	760–700–650	990–920–850					
395–370–340	380–350–325	300–280–260	395–370–340					
300–275–255	285–265–245	225–210–195	300–275–255					
495–460–425	470–435–405	375–350–325	495–460–425					
495–460–425	470–435–405	375–350–325	495–460–425					
345–320–295	330–305–285	265–245–225	345–320–295					

H10F	S30T	S40T	GC2030	GC2040	GC1010			
Espessura máxima de cavacos, h_{ex} mm								
0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2	0.05 – 0.15 – 0.2	0.1 – 0.15 – 0.25	0.1-0.15-0.2			
Velocidade de corte v_c, m/min								
55 –50 –45	–	–	55 –50 –45	60 –55 –45	–			
40 –37 –35	–	–	40 –38 –34	45 –39 –32	–			
50 –50 –45	–	–	55 –50 –45	55 –50 –40	–			
32 –30 –27	–	–	34 –31 –28	35 –31 –26	–			
40 –37 –34	–	–	40 –37 –34	40 –38 –31	–			
22 –19 –17	–	–	23 –21 –18	23 –21 –17	–			
15 –14 –12	–	–	17 –15 –13	17 –15 –12	–			
14 –13 –12	–	–	15 –14 –12	15 –14 –11	–			
115 –105 –100	150 –135 –125	125 –115 –110	120 –105 –95	120 –110 –100	150-135-125			
45 –40 –38	65 –60 –55	45 –40 –39	50 –45 –39	45 –39 –36	65-60-55			
34 –31 –29	50 –50 –45	38 –36 –33	40 –37 –34	37 –33 –30	55-50-45			

GC3040	GC1010	GC1130	GC1025					
Espessura máxima de cavacos, h_{ex} mm								
0.1 – 0.2 – 0.25	0.07 – 0.12 – 0.2	0.07-0.12-0.2	0.07-0.12-0.2					
Velocidade de corte v_c, m/min								
45–33–29	110-95-80	40-36-29	40-36-29					
85–65–55	215-185-150	75-70-55	75-70-55					

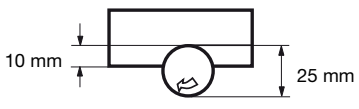
Fresamento com largura fresada pequena

ISO P			Força de corte específica k_{c1}	Dureza Brinell		CT530	GC1010	GC3040
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.05 – 0.1 – 0.2	0.1-0.15-0.3
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Aços						
		Sem liga						
P1.1.Z.AN	01.1	C = 0.1–0.25%	1500	125	0.25	500 –490 –475	-	455-445-415
P1.2.Z.AN	01.2	C = 0.25–0.55%	1600	150	0.25	450 –440 –430	-	410-400-375
P1.3.Z.AN	01.3	C = 0.55–0.80%	1700	170	0.25	425 –415 –405	-	385-375-350
P1.3.Z.AN	01.4		1800	210	0.25	370 –360 –355	-	335-330-305
P1.3.Z.HT	01.5		2000	300	0.25	275 –265 –260	-	250-245-225
		Baixa-liga (elementos de liga ≤5%)						
P2.1.Z.AN	02.1	Não endurecidos	1700	175	0.25	350 –345 –335	-	320-310-290
P2.5.Z.HT	02.2	Endurecidos e temperados	1900	300	0.25	230 –225 –220	-	205-205-190
		Alta-liga (elementos de liga >5%)						
P3.0.Z.AN	03.11	Recozidos	1950	200	0.25	265 –260 –255	195 –190 –185	240-235-220
P3.1.Z.AN	03.13	Aços-ferramenta endurecidos	2150	200	0.25	220 –215 –210	160 –160 –150	200-195-185
P3.0.Z.HT	03.21		2900	300	0.25	190 –190 –185	140 –140 –135	175-170-160
P3.0.Z.HT	03.22		3100	380	0.25	120 –120 –115	90 –85 –85	110-105-100
		Fundidos						
P1.5.C.UT	06.1	Sem liga	1400	150	0.25	355 –350 –340	265 –255 –245	325-315-295
P2.6.C.UT	06.2	Baixa-liga (elementos de liga ≤5%)	1600	200	0.25	285 –280 –275	210 –205 –195	260-255-235
P3.0.C.UT	06.3	Alta-liga (elementos de liga >5%)	1950	200	0.25	210 –205 –200	155 –150 –145	190-185-175

ISO M			Força de corte específica k_{c1}	Dureza Brinell		CT530	GC1130	GC1025
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.05 – 0.1 – 0.2	0.05-0.1-0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Aços inoxidáveis						
		Ferríticos/martensíticos						
P5.0.Z.AN	05.11	Não endurecidos	1800	200	0.21	340 –335 –325	275 –270 –255	275 –270 –255
P5.0.Z.PH	05.12	Endurecidos PH	2850	330	0.21	245 –240 –235	195 –190 –180	195 –190 –180
P5.0.Z.HT	05.13	Endurecidos	2350	330	0.21	255 –250 –240	200 –195 –190	200 –195 –190
		Austeníticos						
M1.0.Z.AQ	05.21	Não endurecidos	1950	200	0.21	320 –310 –300	270 –265 –255	270 –265 –255
M1.0.Z.PH	05.22	Endurecidos PH	2850	330	0.21	235 –230 –225	190 –185 –175	190 –185 –175
M2.0.Z.AQ	05.23	Super austeníticos	2250	200		-	-	-
		Austeníticos-ferríticos (Duplex)						
M3.1.Z.AQ	05.51	Não-soldáveis ≥ 0.05%C	2000	230	0.21	310 –300 –295	225 –220 –210	225 –220 –210
M3.2.Z.AQ	05.52	Soldáveis < 0.05%C	2450	260	0.21	275 –270 –260	190 –185 –175	190 –185 –175
		Aços inoxidáveis – Fundidos						
		Ferríticos/martensíticos						
P5.0.C.UT	15.11	Não endurecidos	1700	200	0.25	305 –295 –290	245 –240 –230	245 –240 –230
P5.0C.PH	15.12	Endurecidos PH	2450	330	0.25	215 –210 –205	170 –170 –160	170 –170 –160
P5.0.C.HT	15.13	Endurecidos	2150	330	0.25	235 –225 –220	185 –180 –175	185 –180 –175
		Austeníticos						
M1.0.C.UT	15.21	Austeníticos	1800	200	0.25	300 –295 –285	260 –250 –240	260 –250 –240
M1.0C.PH	15.22	Endurecidos PH	2450	330	0.25	215 –210 –205	170 –170 –160	170 –170 –160
M2.0.C.AQ	15.23	Super austeníticos	2150	200		-	-	-
		Austeníticos-ferríticos (Duplex)						
M3.1.C.AQ	15.51	Não-soldáveis ≥ 0.05%C	1800	230	0.25	295 –285 –280	215 –205 –195	215 –205 –195
M3.2.C.AQ	15.52	Soldáveis < 0.05%C	2250	260	0.25	255 –250 –245	175 –170 –165	175 –170 –165

ISO K			Força de corte específica k_{c1}	Dureza Brinell		CB50	CC6190	K20D
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.1 – 0.2 – 0.3	0.1-0.2-0.3
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Ferros fundidos maleáveis						
	07.1	Ferríticos (cavacos curtos)	790	130	0.28	-	1500 –1450 –1400	305-290-280
K1.1.C.NS	07.2	Perlíticos (cavacos longos)	900	230	0.28	-	1250 –1200 –1150	250-240-230
		Ferros fundidos cinzentos						
K2.1.C.UT	08.1	Baixa resistência à tensão	890	180	0.28	1150 –1100 –1100	1850 –1750 –1700	285-270-260
K2.2.C.UT	08.2	Alta resistência à tensão	1100	245	0.28	1100 –1050 –1000	1400 –1350 –1300	225-215-210
		Ferros fundidos nodulares						
K3.1.C.UT	09.1	Ferríticos	900	160	0.28	-	1200 –1150 –1100	210-205-200
K3.3.C.UT	09.2	Perlíticos	1350	250	0.28	630 –610 –590	980 –930 –890	195-195-185

1) Ângulo de posição de 45-60°. Deve-se usar geometria de corte positiva e refrigeração.



Condições:

Fresamento lateral. Diâm. da fresa. 25mm. Largura fresada 10mm.

POR

GC1025	GC1130	GC4220	GC4330	GC4340	GC2030	GC2040				
Espessura máxima de cavacos, h_{ex} mm										
0.05-0.1-0.2	0.05-0.1-0.2	0.1-0.15-0.3	0.1-0.2-0.3	0.1-0.2-0.3	0.05 – 0.15 – 0.25	0.1 – 0.2 – 0.3				
Velocidade de corte v_c, m/min										
365-360-345	405-395-380	570 –560 –520	465 –445 –425	395-380-360	340 –335 – 320	340 –325 – 315				
330-325-310	365-355-340	510 –500 –470	420 –400 –385	355-340-325	305 –300 –290	305 –295 –280				
310-305-290	345-335-320	485 –475 –445	395 –380 –360	335-320-310	290 –280 –270	290 –275 –265				
270-265-255	300-295-280	425 –415 –390	345 –330 –315	295-280-270	255 –250 –240	255 –245 –235				
200-195-190	220-220-210	310 –305 –285	255 –245 –235	220-210-200	185 –185 –175	185 –180 –170				
300-295-285	285-280-265	400 –390 –365	325 –315 –300	280-265-255	240 –235 –225	240 –230 –220				
170-165-160	185-180-175	260 –255 –240	215 –205 –195	180-175-165	155 –155 –145	155 –150 –145				
195-190-185	195-190-185	350 –340 –320	225 –215 –205	190-185-175	180 –175 –170	180 –175 –165				
160-160-150	160-160-150	250 –245 –230	185 –180 –170	160-150-145	150 –145 –140	150 –140 –135				
140-140-135	140-140-135	220 –215 –200	165 –155 –150	140-135-125	130 –125 –120	130 –125 –120				
90-85-85	90-85-85	135 –135 –125	100 –95 –95	85-85-80	80 –80 –75	80 –75 –75				
265-255-245	265-255-245	410 –400 –375	305 –290 –280	255-245-235	240 –235 –225	240 –230 –220				
210-205-195	210-205-195	325 –320 –295	240 –230 –220	205-195-190	195 –190 –185	195 –185 –180				
155-150-145	155-150-145	240 –235 –220	175 –170 –160	150-145-140	145 –140 –135	145 –135 –130				

GC1040	S30T	S40T	GC2030	GC2040	GC4330	GC4340	M30B	GC1010		
Espessura máxima de cavacos, h_{ex} mm										
0.05-0.15-0.25	0.05-0.15-0.25	0.1-0.2-0.25	0.05-0.15-0.25	0.1-0.2-0.25	0.1-0.2-0.25	0.1-0.2-0.3	0.1-0.2-0.4	0.05-0.1-0.2		
Velocidade de corte v_c, m/min										
210 –195 –185	285 –265 –250	295 –280 –275	260 –250 –235	285 –270 –265	325 –310 –305	250 –240 –225	275-270-255	340-335-325		
145 –140 –130	200 –185 –175	205 –195 –275	185 –175 –170	195 –185 –180	225 –215 –210	165 –160 –150	195-190-180	245-240-235		
155 –145 –135	210 –195 –180	215 –205 –200	195 –185 –175	205 –195 –190	235 –225 –220	190 –180 –170	200-195-190	255-250-240		
205 –190 –175	280 –260 –245	250 –235 –230	255 –245 –230	240 –225 –220	-	220 –210 –200	-	320-310-300		
140 –135 –125	190 –180 –170	195 –185 –180	180 –170 –160	190 –180 –175	-	160 –150 –145	-	235-230-225		
140 –130 –120	190 –180 –170	175 –165 –160	-	-	-	-	-	190-180-170		
170 –160 –150	230 –215 –200	205 –195 –190	215 –205 –195	200 –190 –185	-	200 –190 –180	-	310-300-295		
140 –130 –125	195 –180 –170	165 –160 –155	180 –170 –160	160 –155 –150	-	160 –155 –145	-	275-270-260		
185 –175 –165	250 –235 –220	2 –250 –235	235 –225 –210	250 –240 –235	290 –275 –270	225 –210 –200	245-240-230	305-295-290		
130 –120 –110	175 –165 –155	180 –170 –165	160 –155 –145	170 –165 –160	195 –185 –185	145 –140 –130	170-170-160	215-210-205		
185 –175 –170	190 –180 –165	200 –190 –185	175 –165 –160	190 –180 –175	215 –205 –200	175 –165 –155	185-180-175	235-225-220		
195 –180 –170	265 –250 –235	240 –225 –220	245 –230 –220	230 –215 –210	-	210 –200 –190	-	300-295-285		
130 –120 –110	175 –165 –155	180 –170 –165	160 –155 –145	170 –165 –160	-	145 –140 –130	-	215-210-205		
125 –120 –110	175 –160 –150	155 –145 –145	-	-	-	-	-	-		
160 –150 –140	220 –205 –190	195 –185 –180	205 –195 –185	190 –180 –175	-	190 –180 –170	-	295-285-280		
130 –125 –115	180 –170 –160	160 –150 –145	165 –160 –150	150 –145 –140	-	150 –140 –135	-	255-250-245		

GC3220	GC3330	GC3040	K20W	GC4330	GC4340	GC1020	H13A	GC1010	K20M	K15W
Espessura máxima de cavacos, h_{ex} mm										
0.1-0.15-0.25	0.1-0.2-0.3	0.1-0.2-0.3	0.1-0.2-0.3	0.1-0.15-0.25	0.1-0.15-0.25	0.1-0.2-0.3	0.1-0.2-0.3	0.1-0.2-0.3	0.1-0.2-0.3	0.1-0.2-0.3
Velocidade de corte v_c, m/min										
310–305–290	305–290–280	280–270–255	260–250–240	250–245–235	225–220–210	240–230–220	135-130-125	250-245-235	295-290-275	-
255–250–240	250–240–230	230–220–210	215–205–195	205–200–190	185–185–175	195–190–180	110-110-105	205-200-190	245-240-225	-
340–330–315	330–315–300	305–290–280	285–270–260	270–265–255	250–240–230	260–250–240	145-140-140	270-265-255	320-315-300	285-270-260
270–265–255	265–255–240	245–235–225	225–215–210	215–210–205	200–195–185	205–200–190	120-115-110	215-210-205	260-250-240	225-215-210
210–205–200	330–315–300	190–185–175	180–170–165	170–165–160	155–150–145	160–155–150	95-90-85	170-165-160	200-195-190	-
195–195–185	265–255–240	175–170–160	165–160–150	155–155–145	145–140–135	150–145–140	85-85-80	155-155-145	185-185-175	-

Fresamento com largura fresada pequena

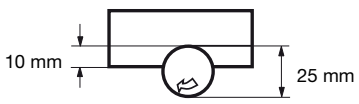
ISO N			Força de corte específica k_{c1}	Dureza Brinell		CD10	CT530	H10
						Espessura máxima de cavacos, h_{ex} mm		
						0.1 – 0.15 – 0.2	0.1 – 0.15 – 0.2	0.1-0.15-0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Ligas de alumínio						
N1.2.Z.UT	30.11	Forjadas ou forjadas e trabalhadas a frio, não-envelhecidas	400	60		2100 –2100 –2050	1150 –1150 –1100	1050-1050-1000
N1.2.Z.AG	30.12	Forjadas ou forjadas e envelhecidas	650	100		1900 –1850 –1850	1050 –1050 –1000	950-940-920
		Ligas de alumínio						
N1.3.C.UT	30.21	Fundidas, não-envelhecidas	600	75	0.25	2100 –2100 –2050	1150 –1150 –1000	1050-1050-1000
N1.3.C.AG	30.22	Fundidos ou fundidos e envelhecidos	700	90	0.25	1900 –1900 –1850	1050 –1050 –1100	950-940-920
		Ligas de alumínio						
N1.1.Z.UT	30.3	Al >99%	350	30		2150 –2100 –2050	1150 –1150 –1150	1050-1050-1050
		Ligas de alumínio						
	30.41	Fundidas, 13–15% Si	700	130		850 –840 –820	470 –460 –450	425-420-410
N1.4.C.NS	30.42	Fundidas, 16–22% Si	700	130		640 –630 –620	350 –345 –340	320-315-310
		Cobre e ligas de cobre						
N3.3.U.UT	33.1	Ligas de corte livre, ≥1% Pb	550	110	0.25	1050 –1050 –1050	580 –570 –560	530-520-510
N3.2.C.UT	33.2	Latão, bronzes com chumbo, ≤1% Pb	550	90		1050 –1050 –1000	580 –570 –560	530-520-510
N3.1.U.UT	33.3	Bronze e cobre sem chumbo incl. cobre eletrolítico	1350	100	0.25	740 –730 –720	410 –400 –395	370-365-360

ISO S			Força de corte específica k_{c1}	Dureza Brinell		GC1025	GC1130	GC1010
						Espessura máxima de cavacos, h_{ex} mm		
						0.05 – 0.15 – 0.2	0.05-0.15-0.2	0.1-0.15-0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Super ligas resistentes ao calor						
		À base de ferro						
S1.0.U.AN	20.11	Recozidas ou tratadas em solução	2400	200	0.25	70 –70 –70	70-70-70	-
S1.0.U.AG	20.12	Envelhecidas ou tratadas em solução e envelhecidas	2500	280	0.25	55 –50 –50	55-50-50	-
		À base de níquel						
S2.0.Z.AN	20.21	Recozidas ou tratadas em solução	2650	250	0.25	70 –65 –65	70-65-65	-
S2.0.Z.AG	20.22	Envelhecidas ou tratadas em solução e envelhecidas	2900	350	0.25	45 –40 –40	45-40-40	-
S2.0.C.NS	20.24	Fundidos ou fundidos e envelhecidos	3000	320	0.25	55 –50 –50	55-50-50	-
		Ligas à base de cobalto						
S3.0.Z.AN	20.31	Recozidas ou tratadas em solução	2700	200	0.25	30 –29 –28	30-29-28	-
S3.0.Z.AG	20.32	Tratadas em solução e envelhecidas	3000	300	0.25	21 –20 –20	21-20-20	-
S3.0.C.NS	20.33	Fundidos ou fundidos e envelhecidos	3100	320	0.25	20 –19 –18	20-19-18	-
		Ligas de titânio1)		**Rm**[1)]				
S4.1.Z.UT	23.1	Comercial puro (99,5% Ti)	1300	400	0.23	150 –145 –140	150-145-140	170-165-160
S4.2.Z.AN	23.21	α, próximo α e ligas α + β, recozidas	1400	950	0.23	65 –65 –65	65 –65 –65	75-75-70
S4.3.Z.AG	23.22	Ligas α + β em condições envelhecidas, ligas β, recozidas ou envelhecidas	1400	1050	0.23	55 –50 –50	55 –50 –50	65-60-66

ISO H			Força de corte específica k_{c1}	Dureza Brinell		CB50	CT530	GC1025
						Espessura máxima de cavacos, h_{ex} mm		
						0.07 – 0.12 – 0.2	0.07 – 0.1 – 0.2	0.07 – 0.12 – 0.2
N° MC	No. CMC	Material	N/mm²	HB	mc	Velocidade de corte v_c, m/min		
		Aços extra-duros						
H1.3.Z.HA	04.1	Endurecidos e temperados	4200	59 HRC	0.25	190 –180 –175	95 –90 –85	45 -45 -45
		Ferros fundidos coquilhados						
H2.0.C.UT	10.1	Fundidos ou fundidos e envelhecidos	2250	400	0.28	355 –345 –330	180 –175 –165	90 -85 -85

1) Ângulo de posição de 45-60°. Deve-se usar geometria de corte positiva e refrigeração.

2) Rm = Limite de resistência à tração medido em MPa.



Condições:

Fresamento lateral. Diâm. da fresa. 25mm. Largura fresada 10mm.

SANDVIK Coromant

POR

GC1025	GC1130	H10F	H13A							
Espessura máxima de cavacos, h_{ex} mm										
0.1-0.15-0.2	0.1-0.15-0.2	0.1-0.15-0.2	0.1-0.15-0.2							
Velocidade de corte v_c, m/min										
1100 –1100 –1050	1100 –1100 –1050	1050 –1050 –1000	850 –830 –820							
1000 –980 –970	1000 –980 –970	950 –940 –920	760 –750 –740							
1100 –1100 –1050	1100 –1100 –1050	1050 –1050 –1000	850 –830 –820							
110 –1100 –1100	1100 –1100 –1100	950 –940 –920	760 –750 –740							
1100 –1100 –1100	1100 –1100 –1100	1050 –1050 –1050	850 –840 –825							
445 –440 –430	445 –440 –430	425 –420 –410	340 –335 –330							
335 –330 –325	335 –330 –325	320 –315 –310	255 –250 –245							
560 –550 –540	560 –550 –540	530 –520 –510	425 –415 –410							
560 –550 –540	560 –550 –540	530 –520 –510	425 –415 –410							
390 –380 –375	390 –380 –375	370 –365 –360	295 –290 –285							

H13A	H10F	S30T	S40T	GC2030	GC2040					
Espessura máxima de cavacos, h_{ex} mm										
0.1-0.15-0.2	0.1-0.2-0.3	0.1-0.15-0.2	0.1-0.15-0.2	0.05-0.15-0.2	0.05-0.15-0.25					
Velocidade de corte v_c, m/min										
65-65-65	60 –60 –60	–	–	65 –65 –65	70 –65 –65					
50-50-50	45 –45 –40	–	–	50 –50 –45	50 –50 –45					
65-65-60	60 –55 –55	–	–	65 –60 –60	65 –65 –60					
40-39-38	36 –35 –33	–	–	40 –38 –38	40 –39 –38					
50-50-50	45 –45 –40	–	–	50 –45 –45	50 –50 –45					
28-27-26	26 –24 –23	–	–	28 –27 –26	28 –27 –26					
20-19-19	18 –17 –16	–	–	20 –19 –19	20 –19 –19					
19-19-18	17 –16 –16	–	–	19 –18 –17	19 –18 –17					
140-140-135	130 –125 –120	170 –165 –160	145 –145 –140	140 –135 –130	145 –140 –135					
55-55-55	50 –50 –45	75 -75 -70	55-50-50	55-55-55	50 –50 –50					
45-40-40	38 –37 –36	65 –60 –66	45-45-45	50 –45 –45	45 –40 –40					

GC4220	GC3040	GC1010	GC1130							
Espessura máxima de cavacos, h_{ex} mm										
0.1-0.12-0.25	0.1-0.2-0.25	0.07-0.12-0.2	0.07-0.12-0.2							
Velocidade de corte v_c, m/min										
65–65–60	55-50-50	130-125-120	45-45-45							
125–125–115	100-95-95	250-240-230	90-85-85							

Ferramentas para faceamento

CoroMill® 345

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
345L-1305M-PM	0.3	(0.16-0.4)	0.21	(0.11-0.28)
345R-1305E-KL	0.11	(0.07-0.2)	0.08	(0.05-0.14)
345R-1305E-KM	0.3	(0.16-0.4)	0.21	(0.11-0.28)
345R-1305E-PL	0.11	(0.07-0.2)	0.08	(0.05-0.14)
345R-1305M-KH	0.35	(0.3-0.49)	0.25	(0.21-0.35)
345R-1305M-KL	0.16	(0.07-0.23)	0.11	(0.05-0.16)
345R-1305M-KM	0.3	(0.16-0.4)	0.21	(0.11-0.28)
345R-1305M-PH	0.45	(0.35-0.55)	0.32	(0.25-0.39)
345R-1305M-PL	0.17	(0.07-0.21)	0.12	(0.05-0.15)
345R-1305M-PM	0.3	(0.16-0.4)	0.21	(0.11-0.28)
345R-13T5E-ML	0.11	(0.07-0.2)	0.08	(0.05-0.14)
345R-13T5E-MM	0.11	(0.07-0.2)	0.08	(0.05-0.14)
345R-13T5M-MM	0.25	(0.16-0.34)	0.18	(0.11-0.24)

CoroMill® 245

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
R245-12T3E	0.24	(0.1-0.28)	0.1	(0.06-0.15)
R245-12T3E-AL	0.24	(0.1-0.28)	0.17	(0.07-0.2)
R245-12T3E-KL	0.14	(0.08-0.21)	0.1	(0.06-0.15)
R245-12T3E-ML	0.14	(0.08-0.21)	0.1	(0.06-0.15)
R245-12T3E-PL	0.14	(0.08-0.21)	0.1	(0.06-0.15)
R245-12T3K-MM	0.23	(0.1-0.28)	0.16	(0.07-0.2)
R245-12T3M-KH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
R245-12T3M-KL	0.17	(0.08-0.21)	0.12	(0.06-0.15)
R245-12T3M-KM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
R245-12T3M-PH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
R245-12T3M-PL	0.17	(0.08-0.21)	0.12	(0.06-0.15)
R245-12T3M-PM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
R245-18T6M-KM	0.28	(0.16-0.49)	0.2	(0.11-0.35)
R245-18T6M-MM	0.28	(0.16-0.49)	0.2	(0.11-0.35)
R245-18T6M-PM	0.28	(0.16-0.49)	0.2	(0.11-0.35)

CoroMill® 419

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
419N-140530E-SM	0.61	(0.4-1.2)	0.2	(0.13-0.39)
419N-140530M-KH	0.98	(0.49-2)	0.32	(0.16-0.65)
419R-1405E-MM	0.71	(0.34-1.2)	0.23	(0.11-0.39)
419R-1405M-PH	0.98	(0.46-2)	0.32	(0.15-0.65)
419R-1405M-PM	0.8	(0.4-1.78)	0.26	(0.13-0.58)

CoroMill® 210

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
R210-090412M-KM	0.98	(0.4-1.5)	0.17	(0.07-0.26)
R210-090412M-MM	1.5	(0.4-2.02)	0.26	(0.07-0.35)
R210-090412M-PM	0.98	(0.4-1.5)	0.17	(0.07-0.26)
R210-090414E-KM	1.5	(0.4-2.02)	0.26	(0.07-0.35)
R210-090414E-MM	1.5	(0.4-2.02)	0.26	(0.07-0.35)
R210-090414E-PM	1.5	(0.4-2.02)	0.26	(0.07-0.35)
R210-140512M-KM	1.5	(0.4-2.02)	0.26	(0.07-0.35)
R210-140512M-MM	2.02	(0.4-2.99)	0.35	(0.07-0.52)
R210-140512M-PM	1.5	(0.4-2.02)	0.26	(0.07-0.35)
R210-140514E-KM	1.5	(0.4-2.02)	0.26	(0.07-0.35)
R210-140514E-MM	2.02	(0.4-2.99)	0.35	(0.07-0.52)
R210-140514E-PM	1.5	(0.4-2.02)	0.26	(0.07-0.35)

POR

Ferramentas para faceamento

CoroMill® 415

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
415N-050206M-M30	0.39	(0.3-0.5)	0.1	(0.08-0.13)
415N-070310M-M30	0.46	(0.35-0.55)	0.12	(0.09-0.14)
415N-070320E-M30	0.46	(0.35-0.55)	0.12	(0.09-0.14)
415N-070320M-M30	0.46	(0.35-0.55)	0.12	(0.09-0.14)
415N-050212E-M30	0.39	(0.35-0.55)	0.1	(0.08-0.13)
415N-050212M-M30	0.39	(0.35-0.55)	0.1	(0.08-0.13)

CoroMill® 425

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
425N-1707E-KLW12	0.19	(0.02-0.28)	0.08	(0.01-0.12)

CoroMill® 745

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
745L-2109E-M50	0.25	(0.18-0.42)	0.17	(0.12-0.28)
*	0.61	(0.44-1.02)	0.17	(0.12-0.28)
745R-2109E-H50	0.3	(0.21-0.45)	0.2	(0.11-0.3)
*	0.73	(0.51-1.09)	0.2	(0.14-0.30)
745R-2109E-M30	0.21	(0.15-0.3)	0.14	(0.4-0.2)
*	0.51	(0.36-0.73)	0.14	(0.10-0.20)
745R-2109E-M31	0.21	(0.15-0.3)	0.14	(0.1-0.2)
745R-2109E-M50	0.25	(0.18-0.42)	0.17	(0.12-0.28)
*	0.61	(0.44-0.90)	0.17	(0.12-0.28)

* Fresa para alto avanço

Ferramentas para fresamento de cantos a 90 graus

CoroMill® 490

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
490L-140408M-PM	0.17	(0.12-0.25)	0.17	(0.12-0.25)
490R-08T304E-ML	0.13	(0.08-0.18)	0.13	(0.08-0.18)
490R-08T304M-KL	0.12	(0.05-0.15)	0.12	(0.05-0.15)
490R-08T304M-PL	0.08	(0.05-0.12)	0.08	(0.05-0.12)
490R-08T308E-ML	0.14	(0.08-0.18)	0.14	(0.08-0.18)
490R-08T308E-MM	0.17	(0.12-0.22)	0.17	(0.12-0.22)
490R-08T308M-KH	0.24	(0.15-0.3)	0.24	(0.15-0.3)
490R-08T308M-KL	0.12	(0.05-0.15)	0.12	(0.05-0.15)
490R-08T308M-KM	0.17	(0.1-0.2)	0.17	(0.1-0.2)
490R-08T308M-MM	0.16	(0.1-0.2)	0.16	(0.1-0.2)
490R-08T308M-PH	0.2	(0.15-0.25)	0.2	(0.15-0.25)
490R-08T308M-PL	0.1	(0.05-0.15)	0.1	(0.05-0.15)
490R-08T308M-PM	0.15	(0.1-0.2)	0.15	(0.1-0.2)
490R-08T312E-MM	0.17	(0.12-0.22)	0.17	(0.12-0.22)
490R-08T312M-KM	0.17	(0.1-0.2)	0.17	(0.1-0.2)
490R-08T312M-PM	0.14	(0.08-0.18)	0.14	(0.08-0.18)
490R-08T316E-MM	0.17	(0.12-0.22)	0.17	(0.12-0.22)
490R-08T316M-KH	0.24	(0.15-0.3)	0.24	(0.15-0.3)
490R-08T316M-KM	0.17	(0.1-0.2)	0.17	(0.1-0.2)
490R-08T316M-PH	0.21	(0.15-0.25)	0.21	(0.15-0.25)
490R-08T316M-PM	0.14	(0.08-0.18)	0.14	(0.08-0.18)
490R-140408E	0.1	(0.08-0.15)	0.1	(0.08-0.15)
490R-140408E-ML	0.14	(0.08-0.18)	0.14	(0.08-0.18)
490R-140408E-MM	0.17	(0.12-0.22)	0.17	(0.12-0.22)
490R-140408M-MM	0.16	(0.12-0.2)	0.16	(0.12-0.2)
490R-140408M-PH	0.28	(0.2-0.35)	0.28	(0.2-0.35)
490R-140408M-PL	0.1	(0.05-0.15)	0.1	(0.05-0.15)
490R-140408M-PM	0.17	(0.12-0.25)	0.17	(0.12-0.25)
490R-140412E-MM	0.17	(0.12-0.22)	0.17	(0.12-0.22)
490R-140412M-PM	0.17	(0.12-0.25)	0.17	(0.12-0.25)
490R-140416E-MM	0.17	(0.12-0.22)	0.17	(0.12-0.22)
490R-140416M-PM	0.17	(0.12-0.25)	0.17	(0.12-0.25)
490R-140420E	0.1	(0.08-0.15)	0.1	(0.08-0.15)
490R-140420E-MM	0.16	(0.12-0.2)	0.17	(0.12-0.22)
490R-140420M-MM	0.16	(0.12-0.2)	0.16	(0.12-0.2)
490R-140420M-PH	0.28	(0.2-0.35)	0.28	(0.2-0.35)
490R-140420M-PM	0.17	(0.12-0.25)	0.17	(0.12-0.25)

Ferramentas para fresamento de cantos a 90 graus

CoroMill® 390

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
390R-070202E-ML	0.05	(0.02-0.07)	0.05	(0.02-0.07)
390R-070202E-NL	0.1	(0.02-0.2)	0.1	(0.02-0.2)
390R-070202E-PL	0.05	(0.02-0.07)	0.05	(0.02-0.07)
390R-070202M-MM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070202M-PM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070204E-KL	0.07	(0.03-0.1)	0.05	(0.02-0.07)
390R-070204E-ML	0.05	(0.02-0.07)	0.05	(0.02-0.07)
390R-070204E-MM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070204E-NL	0.05	(0.02-0.07)	0.1	(0.02-0.2)
390R-070204E-PL	0.05	(0.02-0.07)	0.05	(0.02-0.07)
390R-070204M-KM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070204M-MM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070204M-PM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070208E-KL	0.07	(0.03-0.1)	0.05	(0.02-0.07)
390R-070208E-ML	0.05	(0.02-0.07)	0.05	(0.02-0.07)
390R-070208E-MM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070208E-NL	0.05	(0.02-0.07)	0.1	(0.02-0.2)
390R-070208E-PL	0.05	(0.02-0.07)	0.05	(0.02-0.07)
390R-070208M-KM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070208M-MM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070208M-PM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070212E-ML	0.07	(0.03-0.1)	0.05	(0.02-0.07)
390R-070212E-PL	0.05	(0.02-0.07)	0.05	(0.02-0.07)
390R-070212M-MM	0.1	(0.02-0.2)	0.07	(0.03-0.1)
390R-070212M-PM	0.07	(0.03-0.1)	0.07	(0.03-0.1)
390R-070216E-ML	0.07	(0.03-0.1)	0.05	(0.02-0.07)
390R-070216E-PL	0.07	(0.03-0.1)	0.05	(0.02-0.07)
390R-070216M-KM	0.05	(0.02-0.07)	0.07	(0.03-0.1)
390R-070216M-MM	0.1	(0.02-0.2)	0.07	(0.03-0.1)
390R-070216M-PM	0.12	(0.08-0.2)	0.07	(0.03-0.1)
R390-11T302E-KM	0.1	(0.08-0.15)	0.1	(0.08-0.18)
R390-11T302E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T302E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T304E-PL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-11T304M-KM	0.1	(0.08-0.15)	0.1	(0.08-0.15)
R390-11T304M-PM	0.1	(0.08-0.15)	0.1	(0.08-0.15)
R390-11T308E-KL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-11T308E-ML	0.08	(0.04-0.15)	0.08	(0.04-0.15)
R390-11T308E-NL	0.18	(0.06-0.35)	0.15	(0.05-0.25)
R390-11T308E-PL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-11T308E-PLW	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T308M-KL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-11T308M-KM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T308M-MM	0.13	(0.08-0.2)	0.13	(0.08-0.2)
R390-11T308M-PL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-11T308M-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T310M-KH	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T310M-MH	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T310M-PH	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T312E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-11T312E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T312E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T316E-KM	0.15	(0.1-0.25)	0.1	(0.08-0.18)
R390-11T316E-ML	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T316E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T316E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T316M-KM	0.12	(0.08-0.2)	0.15	(0.1-0.25)
R390-11T316M-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T320E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-11T320E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T320E-NL	0.18	(0.06-0.4)	0.18	(0.06-0.35)
R390-11T320E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T324E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-11T324E-ML	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T324E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T324E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T331E-KM	0.15	(0.1-0.25)	0.1	(0.08-0.18)
R390-11T331E-ML	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T331E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T331E-NL	0.18	(0.06-0.4)	0.18	(0.06-0.4)
R390-11T331E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T331M-KM	0.12	(0.08-0.2)	0.15	(0.1-0.25)

POR

Ferramentas para fresamento de cantos a 90 graus

CoroMill® 390

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
R390-11T331M-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-11T304E-P4-NL	0.17	(0.1-0.2)	0.17	(0.1-0.2)
R390-170404E-KM	0.1	(0.08-0.15)	0.1	(0.08-0.18)
R390-170404E-MM	0.15	(0.08-0.2)	0.12	(0.08-0.2)
R390-170404E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170404M-KM	0.1	(0.08-0.15)	0.1	(0.08-0.15)
R390-170404M-PM	0.1	(0.08-0.15)	0.1	(0.08-0.15)
R390-170408E-KL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-170408E-ML	0.08	(0.04-0.15)	0.08	(0.04-0.15)
R390-170408E-NL	0.17	(0.1-0.2)	0.15	(0.08-0.25)
R390-170408E-PL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-170408M-KH	0.2	(0.15-0.35)	0.2	(0.15-0.35)
R390-170408M-KL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-170408M-KM	0.15	(0.1-0.25)	0.15	(0.1-0.25)
R390-170408M-MM	0.15	(0.08-0.2)	0.15	(0.08-0.2)
R390-170408M-PH	0.2	(0.15-0.35)	0.2	(0.15-0.35)
R390-170408M-PL	0.08	(0.05-0.15)	0.08	(0.05-0.15)
R390-170408M-PM	0.15	(0.1-0.25)	0.15	(0.1-0.25)
R390-170412E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-170412E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170412E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170416E-KM	0.15	(0.1-0.25)	0.1	(0.08-0.18)
R390-170416E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170416E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170416M-KM	0.12	(0.08-0.2)	0.15	(0.1-0.25)
R390-170416M-PH	0.2	(0.15-0.35)	0.2	(0.15-0.35)
R390-170416M-PM	0.15	(0.1-0.25)	0.15	(0.1-0.25)
R390-170420E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-170420E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170420E-NL	0.2	(0.12-0.32)	0.2	(0.1-0.3)
R390-170420E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170424E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-170424E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170424E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170431E-KM	0.15	(0.1-0.25)	0.1	(0.08-0.18)
R390-170431E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170431E-NL	0.2	(0.12-0.32)	0.2	(0.12-0.32)
R390-170431E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170431M-KM	0.12	(0.08-0.2)	0.15	(0.1-0.25)
R390-170431M-PM	0.15	(0.1-0.25)	0.15	(0.1-0.25)
R390-170440E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-170440E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170440E-NL	0.2	(0.12-0.4)	0.2	(0.12-0.32)
R390-170440E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170448E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-170448E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170448E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170450E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-170450E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170450E-NL	0.2	(0.12-0.4)	0.2	(0.12-0.4)
R390-170450E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170460E-KM	0.1	(0.08-0.18)	0.1	(0.08-0.18)
R390-170460E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170460E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170464E-KM	0.08	(0.04-0.15)	0.1	(0.08-0.18)
R390-170464E-MM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170464E-PM	0.12	(0.08-0.2)	0.12	(0.08-0.2)
R390-170408E-P6-NL	0.17	(0.1-0.2)	0.17	(0.1-0.2)
R390-180608H-KL	0.11	(0.05-0.22)	0.11	(0.05-0.22)
R390-180608H-ML	0.11	(0.05-0.22)	0.11	(0.05-0.22)
R390-180608H-PL	0.11	(0.05-0.22)	0.11	(0.05-0.22)
R390-180608M-KM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180608M-MM	0.18	(0.1-0.3)	0.18	(0.1-0.3)
R390-180608M-PM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180612H-KL	0.11	(0.05-0.22)	0.11	(0.05-0.22)
R390-180612H-ML	0.11	(0.05-0.22)	0.11	(0.05-0.22)
R390-180612H-PL	0.11	(0.05-0.22)	0.11	(0.05-0.22)
R390-180612M-KM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180612M-KMR	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180612M-MM	0.18	(0.1-0.3)	0.18	(0.1-0.3)
R390-180612M-MMR	0.18	(0.1-0.3)	0.18	(0.1-0.3)
R390-180612M-PM	0.2	(0.08-0.3)	0.2	(0.08-0.3)

Ferramentas para fresamento de cantos a 90 graus

CoroMill® 390

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
R390-180612M-PMR	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180616H-ML	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180616H-PL	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180616M-KM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180616M-MM	0.18	(0.1-0.3)	0.18	(0.1-0.3)
R390-180616M-PM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180620H-ML	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180620H-PL	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180620M-KM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180620M-MM	0.18	(0.1-0.3)	0.18	(0.1-0.3)
R390-180620M-PM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180624H-ML	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180624H-PL	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180631H-KL	0.11	(0.05-0.22)	0.11	(0.05-0.22)
R390-180631H-ML	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180631H-PL	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180631M-KM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180631M-MM	0.18	(0.1-0.3)	0.18	(0.1-0.3)
R390-180631M-PM	0.2	(0.08-0.3)	0.2	(0.08-0.3)
R390-180640H-ML	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180640H-PL	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180650H-ML	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180650H-PL	0.12	(0.05-0.22)	0.12	(0.05-0.22)
R390-180660H-ML	0.14	(0.05-0.22)	0.14	(0.05-0.22)
R390-180660H-PL	0.14	(0.05-0.22)	0.14	(0.05-0.22)
R390-180664H-ML	0.14	(0.05-0.22)	0.14	(0.05-0.22)
R390-180664H-PL	0.14	(0.05-0.22)	0.14	(0.05-0.22)

CoroMill® 690

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
690-100508M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-100510M-P-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-100512M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-100516M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-100520M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-100531M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140608M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140610M-P-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140612M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140616M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140620M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140624M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140631M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140650M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140660M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)
690-140664M-E-SL	0.1	(0.05-0.2)	0.1	(0.05-0.2)

CoroMill® Century

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
R590-110504H-NL	0.15	(0.05-0.3)	0.2	(0.1-0.4)
R590-110508H-KL	0.12	(0.07-0.2)	0.08	(0.05-0.15)
R590-110508H-PL	0.12	(0.01-0.15)	0.08	(0.05-0.15)
R590-110508H-PR2-KM	0.2	(0.1-0.4)	0.2	(0.1-0.3)
R590-1105H-PC2-NL	0.15	(0.05-0.3)	0.15	(0.05-0.3)
R590-1105H-PC5-NL	0.15	(0.05-0.3)	0.15	(0.05-0.3)
R590-1105H-PR2-NL	0.15	(0.05-0.3)	0.15	(0.05-0.3)
R590-1105H-PR5-NL	0.15	(0.05-0.3)	0.15	(0.05-0.3)
R590-1105H-PS2-NL	0.15	(0.05-0.3)	0.15	(0.05-0.3)
R590-1105H-PS5-NL	0.15	(0.05-0.3)	0.15	(0.05-0.3)
L590-1105H-ZC2-KL	0.08	(0.05-0.15)	0.2	(0.1-0.3)
R590-1105H-ZC2-KL	0.2	(0.1-0.3)	0.2	(0.1-0.3)

POR

Ferramentas para fresamento lateral

CoroMill® 331

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
L331.1A-115030E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
L331.1A-115040E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
L331.1A-115048E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
L331.1A-115063E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
L331.1A-115015E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
L331.1A-115023E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
L331.1A-115030E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
L331.1A-043515H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-043523H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-054515H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-054523H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-054530H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-084515H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-084523H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-084530H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-115015H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-115023H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-115030H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-115048H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-115063H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-145015H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-145023H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-145030H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-145048H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
L331.1A-145063H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-115030E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
R331.1A-115040E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
R331.1A-115048E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
R331.1A-115063E-L50	0.10	(0.02-0.12)	0.08	(0.02-0.10)
R331.1A-115015E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
R331.1A-115023E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
R331.1A-115030E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
R331.1A-043515H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-043523H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-054515H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-054523H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-054530H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-084515H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-084523H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-084530H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-115015H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-115023H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-115030H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-115048H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-115063H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-145015H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-145023H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-145030H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-145048H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
R331.1A-145063H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-043505E-L30	0.06	(0.01-0.08)	0.05	(0.01-0.07)
N331.1A-043505E-L50	0.10	(0.02-0.18)	0.08	(0.02-0.15)
N331.1A-043505E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
N331.1A-054508E-L30	0.06	(0.01-0.08)	0.05	(0.01-0.07)
N331.1A-054508E-L50	0.10	(0.02-0.18)	0.08	(0.02-0.15)
N331.1A-054508E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
N331.1A-084508E-L30	0.06	(0.01-0.08)	0.05	(0.01-0.07)
N331.1A-084508E-L50	0.10	(0.02-0.18)	0.08	(0.02-0.15)
N331.1A-084508E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
N331.1A-115008E-L30	0.06	(0.01-0.08)	0.05	(0.01-0.07)
N331.1A-115008E-L50	0.10	(0.02-0.18)	0.08	(0.02-0.15)
N331.1A-115008E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
N331.1A-145008E-L30	0.06	(0.01-0.08)	0.05	(0.01-0.07)
N331.1A-145008E-L50	0.10	(0.02-0.18)	0.08	(0.02-0.15)
N331.1A-145008E-M30	0.14	(0.05-0.20)	0.12	(0.04-0.17)
N331.1A-043505H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-054508H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-084508H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-115008H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-145008H-WL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-084508H-WM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-115008H-WM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-145008H-WM	0.15	(0.06-0.3)	0.13	(0.05-0.25)

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
N331.1A-043505H-ML	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-054508H-ML	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-084508H-ML	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-115008H-ML	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-145008H-ML	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-043505H-MM	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-054508H-MM	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-084508H-MM	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-115008H-MM	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-145008H-MM	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-043505H-NL	0.12	(0.01-0.18)	0.1	(0.01-0.15)
N331.1A-054508H-NL	0.12	(0.01-0.18)	0.1	(0.01-0.15)
N331.1A-084508H-NL	0.12	(0.01-0.18)	0.1	(0.01-0.15)
N331.1A-115008H-NL	0.12	(0.01-0.18)	0.1	(0.01-0.15)
N331.1A-145008H-NL	0.12	(0.01-0.18)	0.1	(0.01-0.15)
N331.1A-043505H-PL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-054508H-PL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-084508H-PL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-115008H-PL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-145008H-PL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-054508H-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-084508H-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-115008H-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-145008H-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-043505M-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-054508M-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-084508M-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-115008M-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-145008M-PM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-043505E-KL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-054508E-KL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-084508E-KL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-115008E-KL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-145008E-KL	0.12	(0.08-0.18)	0.1	(0.03-0.15)
N331.1A-054508E-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-084508E-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-115008E-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-145008E-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-043505M-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-054508M-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-084508M-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-115008M-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1A-145008M-KM	0.15	(0.06-0.3)	0.13	(0.05-0.25)
N331.1D-136508E-PM	0.20	(0.08-0.24)	0.17	(0.07-0.2)
N331.1D-136508M-PM	0.20	(0.08-0.24)	0.17	(0.07-0.2)
N331.1D-136512M-PM	0.20	(0.08-0.24)	0.17	(0.07-0.2)
N331.1D-136520E-PM	0.20	(0.08-0.24)	0.17	(0.07-0.2)
N331.1D-136520M-PM	0.20	(0.08-0.24)	0.17	(0.07-0.2)

Relação DC/AR = 12% (a mesma para todos os conceitos de 90 graus)

Ferramentas para fresamento de perfis

CoroMill® 300

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
R300-0517E-PM	0.08	(0.05-0.12)	0.08	(0.05-0.12)
R300-0720E-MM	0.1	(0.05-0.15)	0.1	(0.05-0.15)
R300-0720E-PM	0.1	(0.05-0.15)	0.1	(0.05-0.15)
R300-0724E-MM	0.1	(0.05-0.15)	0.1	(0.05-0.15)
R300-0724E-PM	0.1	(0.05-0.15)	0.1	(0.05-0.15)
R300-0828E-KL	0.13	(0.05-0.2)	0.11	(0.05-0.15)
R300-0828E-KM	0.15	(0.07-0.25)	0.13	(0.05-0.2)
R300-0828E-MM	0.13	(0.07-0.2)	0.13	(0.05-0.2)
R300-0828E-PL	0.11	(0.05-0.15)	0.11	(0.05-0.15)
R300-0828E-PM	0.13	(0.05-0.2)	0.13	(0.05-0.2)
R300-0828M-KH	0.15	(0.07-0.25)	0.15	(0.07-0.25)
R300-0828M-MH	0.13	(0.05-0.2)	0.15	(0.07-0.25)
R300-0828M-MM	0.13	(0.07-0.2)	0.13	(0.07-0.2)
R300-0828M-PH	0.15	(0.07-0.25)	0.15	(0.07-0.25)
R300-0828M-PM	0.13	(0.07-0.2)	0.13	(0.07-0.2)
R300-0932E-MM	0.15	(0.07-0.23)	0.13	(0.04-0.2)
R300-0932E-PM	0.15	(0.05-0.23)	0.13	(0.04-0.2)
R300-0932M-PH	0.17	(0.07-0.29)	0.15	(0.06-0.25)
R300-0932M-PM	0.15	(0.07-0.23)	0.13	(0.06-0.2)
R300-1032E-KL	0.21	(0.05-0.29)	0.13	(0.04-0.15)
R300-1032E-MM	0.17	(0.07-0.29)	0.18	(0.04-0.25)
R300-1032E-PL	0.15	(0.05-0.17)	0.13	(0.04-0.15)
R300-1032E-PM	0.21	(0.05-0.29)	0.18	(0.04-0.25)
R300-1032M-KH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1032M-MH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1032M-MM	0.17	(0.07-0.29)	0.15	(0.06-0.25)
R300-1032M-PH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1032M-PM	0.17	(0.07-0.29)	0.15	(0.06-0.25)
R300-1240E-KM	0.23	(0.07-0.35)	0.18	(0.04-0.25)
R300-1240E-ML	0.15	(0.05-0.23)	0.13	(0.04-0.2)
R300-1240E-MM	0.21	(0.05-0.29)	0.18	(0.04-0.25)
R300-1240E-PL	0.15	(0.05-0.23)	0.13	(0.04-0.2)
R300-1240E-PM	0.21	(0.05-0.29)	0.18	(0.04-0.25)
R300-1240M-KH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1240M-MH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1240M-MM	0.17	(0.07-0.29)	0.15	(0.06-0.25)
R300-1240M-PH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1240M-PM	0.17	(0.07-0.29)	0.15	(0.06-0.25)
R300-1340E-ML	0.15	(0.05-0.23)	0.13	(0.04-0.2)
R300-1340E-MM	0.21	(0.05-0.29)	0.18	(0.04-0.25)
R300-1340E-PL	0.15	(0.05-0.23)	0.13	(0.04-0.2)
R300-1340E-PM	0.21	(0.05-0.29)	0.18	(0.04-0.25)
R300-1340M-KH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1340M-MH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1340M-MM	0.17	(0.07-0.29)	0.15	(0.06-0.25)

POR

Ferramentas para fresamento de perfis

CoroMill® 300

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
R300-1340M-PH	0.23	(0.07-0.35)	0.2	(0.06-0.3)
R300-1340M-PM	0.17	(0.07-0.29)	0.15	(0.06-0.25)
R300-1648E-KM	0.29	(0.07-0.46)	0.2	(0.04-0.3)
R300-1648E-ML	0.17	(0.05-0.23)	0.15	(0.04-0.2)
R300-1648E-MM	0.21	(0.07-0.29)	0.2	(0.04-0.3)
R300-1648E-PL	0.17	(0.05-0.23)	0.15	(0.04-0.2)
R300-1648E-PM	0.23	(0.05-0.35)	0.2	(0.04-0.3)
R300-1648M-KH	0.29	(0.07-0.46)	0.25	(0.06-0.4)
R300-1648M-MH	0.29	(0.07-0.46)	0.25	(0.06-0.4)
R300-1648M-MM	0.21	(0.07-0.29)	0.18	(0.06-0.25)
R300-1648M-PH	0.29	(0.07-0.46)	0.25	(0.06-0.4)
R300-1648M-PM	0.21	(0.07-0.29)	0.18	(0.06-0.25)
R300-2060E-ML	0.28	(0.06-0.35)	0.2	(0.04-0.25)
R300-2060E-MM	0.35	(0.06-0.57)	0.25	(0.04-0.4)
R300-2060E-PL	0.28	(0.06-0.35)	0.2	(0.04-0.25)
R300-2060E-PM	0.35	(0.06-0.57)	0.25	(0.04-0.4)
R300-2060M-KH	0.49	(0.07-0.78)	0.35	(0.05-0.55)
R300-2060M-MH	0.49	(0.07-0.78)	0.35	(0.05-0.55)
R300-2060M-MM	0.28	(0.07-0.42)	0.2	(0.05-0.3)
R300-2060M-PH	0.49	(0.07-0.78)	0.35	(0.05-0.55)
R300-2060M-PM	0.28	(0.07-0.42)	0.2	(0.05-0.3)
R300-2570E-ML	0.31	(0.06-0.4)	0.22	(0.04-0.28)
R300-2570E-PL	0.31	(0.06-0.4)	0.22	(0.04-0.28)
R300-2570M-KH	0.57	(0.07-0.85)	0.4	(0.05-0.6)
R300-2570M-MM	0.31	(0.07-0.47)	0.22	(0.05-0.33)
R300-2570M-PH	0.57	(0.07-0.85)	0.4	(0.05-0.6)
R300-2570M-PM	0.31	(0.07-0.47)	0.22	(0.05-0.33)

CoroMill® 600

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
600-1045E-ML	0.2	(0.05-0.35)	0.2	(0.05-0.35)
600-1045M-ML	0.2	(0.05-0.35)	0.2	(0.05-0.35)
600-1252E-ML	0.25	(0.05-0.35)	0.25	(0.05-0.35)
600-1252M-ML	0.25	(0.05-0.35)	0.25	(0.05-0.35)
600R-1045M-MM	0.35	(0.15-0.55)	0.35	(0.15-0.55)
600R-1252M-MM	0.35	(0.15-0.55)	0.35	(0.15-0.55)

CoroMill® 216

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
APMT160408-M	0.35	(0.14-0.7)	0.25	(0.1-0.5)
R216-1002E-M	0.14	(0.06-0.21)	0.1	(0.04-0.15)
R216-1202E-M	0.14	(0.06-0.21)	0.1	(0.04-0.15)
R216-1202M-M	0.14	(0.08-0.21)	0.1	(0.04-0.15)
R216-1603E-M	0.14	(0.06-0.21)	0.1	(0.04-0.15)
R216-1603M-M	0.14	(0.08-0.21)	0.1	(0.06-0.15)
R216-20T3E-M	0.21	(0.06-0.25)	0.15	(0.04-0.18)
R216-20T3M-M	0.14	(0.08-0.21)	0.1	(0.06-0.15)
R216-2504E-M	0.21	(0.06-0.25)	0.15	(0.04-0.18)
R216-2504M-M	0.17	(0.08-0.21)	0.12	(0.06-0.15)
R216-3006E-M	0.24	(0.06-0.28)	0.17	(0.04-0.2)
R216-3006M-M	0.21	(0.08-0.28)	0.15	(0.06-0.2)
R216-3206E-M	0.24	(0.06-0.28)	0.17	(0.04-0.2)
R216-3206M-M	0.21	(0.08-0.28)	0.15	(0.06-0.2)
R216-4007E-M	0.28	(0.06-0.35)	0.2	(0.04-0.25)
R216-4007M-M	0.28	(0.1-0.42)	0.2	(0.07-0.3)
R216-5007E-M	0.28	(0.06-0.35)	0.2	(0.04-0.25)
R216-5007M-M	0.35	(0.1-0.7)	0.25	(0.07-0.5)

Ferramentas para fresamento de perfis

CoroMill® 200

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
RCHT09T300-ML	0.15	(0.08-0.2)	0.15	(0.08-0.2)
RCHT09T300-PL	0.1	(0.08-0.15)	0.1	(0.08-0.15)
RCHT10T3M0-KL	0.17	(0.1-0.2)	0.1	(0.08-0.15)
RCHT10T3M0-ML	0.15	(0.08-0.2)	0.15	(0.08-0.2)
RCHT10T3M0-PL	0.1	(0.08-0.15)	0.1	(0.08-0.15)
RCHT1204M0	0.21	(0.1-0.42)	0.1	(0.08-0.15)
RCHT1204M0-KL	0.24	(0.1-0.28)	0.1	(0.06-0.15)
RCHT1204M0-PL	0.14	(0.08-0.21)	0.1	(0.06-0.15)
RCHT130400-KL	0.24	(0.1-0.28)	0.1	(0.06-0.15)
RCHT130400-ML	0.21	(0.08-0.28)	0.15	(0.06-0.2)
RCHT130400-PL	0.14	(0.08-0.21)	0.1	(0.06-0.15)
RCHT1606M0-KL	0.24	(0.1-0.28)	0.1	(0.06-0.15)
RCHT1606M0-ML	0.21	(0.08-0.28)	0.15	(0.06-0.2)
RCHT1606M0-PL	0.14	(0.08-0.21)	0.1	(0.06-0.15)
RCHT190600-ML	0.21	(0.08-0.28)	0.15	(0.06-0.2)
RCHT190600-PL	0.14	(0.08-0.21)	0.1	(0.06-0.15)
RCHT2006M0-KL	0.24	(0.1-0.28)	0.1	(0.06-0.15)
RCHT2006M0-ML	0.21	(0.08-0.28)	0.15	(0.06-0.2)
RCHT2006M0-PL	0.14	(0.08-0.21)	0.1	(0.06-0.15)
RCHT1204M0-ML	0.21	(0.08-0.28)	0.15	(0.06-0.2)
RCKT09T300-KH	0.25	(0.1-0.3)	0.25	(0.1-0.3)
RCKT09T300-MM	0.2	(0.1-0.3)	0.2	(0.1-0.3)
RCKT09T300-PH	0.25	(0.1-0.3)	0.25	(0.1-0.3)
RCKT09T300-PM	0.17	(0.1-0.2)	0.17	(0.1-0.2)
RCKT10T3M0-KH	0.25	(0.1-0.3)	0.25	(0.1-0.3)
RCKT10T3M0-KM	0.17	(0.1-0.2)	0.17	(0.1-0.2)
RCKT10T3M0-MM	0.2	(0.1-0.3)	0.2	(0.1-0.3)
RCKT10T3M0-PH	0.25	(0.1-0.3)	0.25	(0.1-0.3)
RCKT10T3M0-PM	0.17	(0.1-0.2)	0.17	(0.1-0.2)
RCKT10T3M0-WM	0.17	(0.1-0.2)	0.17	(0.1-0.2)
RCKT1204M0-KH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT1204M0-KM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT1204M0-MM	0.28	(0.1-0.42)	0.2	(0.07-0.3)
RCKT1204M0-PH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT1204M0-PM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT1204M0-WM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT1204MO	0.35	(0.1-0.42)	0.15	(0.07-0.3)
RCKT130400-KH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT130400-KM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT130400-MM	0.28	(0.1-0.42)	0.2	(0.07-0.3)
RCKT130400-PH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT130400-PM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT130400-WM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT1606M0-KH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT1606M0-KM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT1606M0-MM	0.28	(0.1-0.42)	0.2	(0.07-0.3)
RCKT1606M0-PH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT1606M0-PM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT1606M0-WM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT1606MO	0.35	(0.1-0.42)	0.15	(0.07-0.3)
RCKT190600-KH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT190600-KM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT190600-MM	0.28	(0.1-0.42)	0.2	(0.07-0.3)
RCKT190600-PH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT190600-PM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT190600-WM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT2006M0-KH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT2006M0-KM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT2006M0-MM	0.28	(0.1-0.42)	0.2	(0.07-0.3)
RCKT2006M0-PH	0.35	(0.1-0.42)	0.25	(0.07-0.3)
RCKT2006M0-PM	0.24	(0.1-0.28)	0.17	(0.07-0.2)
RCKT2006M0-WM	0.24	(0.1-0.28)	0.17	(0.07-0.2)

POR

Ferramentas para fresamento de canais

CoroMill® 327

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
327R12-22 11045-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 13045-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 16045-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 18545-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 21545-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 26545-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 31545-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 41545-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-221304508-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-221604508-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-222654518-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-224154525-GC	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R06-10 10000-GM	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R06-10 15002-GM	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R06-10 20002-GM	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R06-10 25002-GM	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R09-18 15002-GM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 20002-GM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 25002-GM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 30002-GM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-22 15002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 20002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 25002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 30002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 40002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R14-28 15000-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R14-28 20002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R14-28 25002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R14-28 30002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R14-28 35002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R14-28 40002-GM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R09-18 15001-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 20002-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 25002-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 30002-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-28 15001-GMM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-28 20002-GMM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-28 25002-GMM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-28 30002-GMM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-28 40002-GMM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R14-35 15001-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R14-35 20002-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R14-35 25002-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R14-35 30002-GMM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R06-12 22011-RM	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R09-18 22011-RM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-22 10005-RM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 20010-RM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 30015-RM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 40020-RM	0.07	(0.04-0.1)	0.07	(0.04-0.1)

CoroMill® 328

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
328R13-13000-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-16000-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-18502-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-18545-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-21502-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-21545-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-26502-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-26545-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-2654515-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-31502-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-31545-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-41502-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-41545-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-4154520-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-51502-GM	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-51545-GC	0.1	(0.04-0.15)	0.07	(0.03-0.1)

Ferramentas para fresamento de canais

CoroMill® QD

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
QD-NE-0200-010E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NF-0239-010E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NF-0250-010E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NG-0300-010E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NG-0318-010E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NH-0400-015E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NJ-0476-020E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NJ-0500-020E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NK-0600-025E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NK-0635-025E-NL	0.16	(0.01-0.3)	0.13	(0.01-0.25)
QD-NE-0200-020E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NF-0239-020E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NF-0250-020E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NG-0300-020E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NG-0318-020E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NH-0400-025E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NJ-0476-030E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NJ-0500-030E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NK-0600-035E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NK-0635-035E-SL	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NE-0200-020E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NF-0239-020E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NF-0250-020E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NG-0300-020E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NG-0318-020E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NH-0400-025E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NJ-0476-030E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NJ-0500-030E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NK-0600-035E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NK-0635-035E-SM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NE-0200-020E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NF-0239-020E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NF-0250-020E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NG-0300-020E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NG-0318-020E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NH-0400-025E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NJ-0476-030E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NJ-0500-030E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NK-0600-035E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NK-0635-035E-ML	0.05	(0.01-0.08)	0.04	(0.01-0.07)
QD-NE-0200-020E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NF-0239-020E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NF-0250-020E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NG-0300-020E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NG-0318-020E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NH-0400-025E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NJ-0476-030E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NJ-0500-030E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NK-0600-035E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NK-0635-035E-MM	0.09	(0.05-0.14)	0.08	(0.04-0.12)
QD-NE-0200-020E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NF-0239-020E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NF-0250-020E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NG-0300-020E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NH-0400-025E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NG-0318-020E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NJ-0476-030E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NJ-0500-030E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NK-0600-035E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)
QD-NK-0635-035E-KL	0.13	(0.02-0.18)	0.11	(0.02-0.15)

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
QD-NE-0200-035M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NF-0239-035M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NF-0250-035M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NG-0300-035M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NG-0318-035M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NH-0400-040M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NJ-0476-045M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NJ-0500-045M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NK-0600-050M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NK-0635-050M-KM	0.13	(0.05-0.18)	0.11	(0.04-0.15)
QD-NE-0200-020E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NF-0239-020E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NF-0250-020E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NG-0300-020E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NG-0318-020E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NH-0400-025E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NJ-0476-030E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NJ-0500-030E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NK-0600-035E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NK-0635-035E-PL	0.06	(0.02-0.08)	0.05	(0.02-0.08)
QD-NE-0200-020E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NF-0239-020E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NF-0250-020E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NG-0300-020E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NG-0318-020E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NH-0400-025E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NJ-0476-030E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NJ-0500-030E-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NK-0600-035E-PM	0.2	(0.08-0.12)	0.1	(0.07-0.1)
QD-NK-0635-035E-PM	0.2	(0.08-0.12)	0.1	(0.07-0.1)
QD-NE-0200-020M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NF-0239-020M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NF-0250-020M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NG-0300-020M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NG-0318-020M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NH-0400-025M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NJ-0476-030M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NJ-0500-030M-PM	0.13	(0.08-0.18)	0.11	(0.07-0.15)
QD-NK-0600-035M-PM	0.12	(0.08-0.12)	0.1	(0.07-0.1)
QD-NK-0635-035M-PM	0.12	(0.08-0.12)	0.1	(0.07-0.1)
QD-NE-0200-035M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NF-0239-035M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NF-0250-035M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NG-0300-035M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NG-0318-035M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NH-0400-040M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NJ-0476-045M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NJ-0500-045M-PH	0.13	(0.05-0.15)	0.11	(0.04-0.13)
QD-NK-0600-050M-PH	0.12	(0.05-0.12)	0.1	(0.04-0.1)
QD-NK-0635-050M-PH	0.12	(0.05-0.12)	0.1	(0.04-0.1)

Recomendação para fresas com diâmetro 63 mm
- PL é a geometria de 1ª escolha em aplicações ISO P
- Use no máximo 70% do valor h_{ex} recomendado quando usar a geometria PM
- A geometria PH não é recomendada

POR

Ferramentas para fresamento de roscas

CoroMill® 328

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
328R13-04UN-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-06UN-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-08UN-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-10UN-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-12UN-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-14UN-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-150MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-150VM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-16UN-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-200MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-300MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-350MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-400MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-400VM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-450MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-500MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-550MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)
328R13-600MM-TH	0.1	(0.04-0.15)	0.07	(0.03-0.1)

CoroMill® 327

	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
Código para pedido	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
327R06-12 100VM-TH	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R09-18 100VM-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-22 100VM-TH	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R06-12 250VM-TH	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R09-18 250VM-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-22 250VM-TH	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R06-12 19WH-TH	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R09-18 19WH-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R06-12 14WH-TH	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R09-18 14WH-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R06-12 11WH-TH	0.05	(0.02-0.06)	0.05	(0.02-0.06)
327R09-18 11WH-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 24UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 20UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 18UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 16UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 14UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 12UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 11UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 10UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 08UN-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 150MM-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 200MM-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 300MM-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 350MM-TH	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-22 150MM-TH	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 175MM-TH	0.07	(0.04-0.1)	0.06	(0.04-0.1)
327R12-22 200MM-TH	0.07	(0.04-0.1)	0.06	(0.04-0.1)
327R12-22 300MM-TH	0.07	(0.04-0.1)	0.06	(0.04-0.1)
327R12-22 350MM-TH	0.07	(0.04-0.1)	0.06	(0.04-0.1)
327R12-22 400MM-TH	0.07	(0.04-0.1)	0.06	(0.04-0.1)
327R12-22 450MM-TH	0.07	(0.04-0.1)	0.06	(0.04-0.1)
327R09-18 100VM-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-22 100VM-THM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R09-18 250VM-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R12-22 250VM-THM	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R09-18 24UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 20UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 18UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 16UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 14UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 12UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 11UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 10UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 08UN-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 150MM-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 200MM-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 300MM-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)
327R09-18 350MM-THM	0.06	(0.03-0.08)	0.06	(0.03-0.08)

Ferramentas para fresamento de chanfros

CoroMill® 495

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
495-09T3M-MM	0.17	(0.12-0.25)	0.16	(0.12-0.2)
495-09T3M-PM	0.17	(0.12-0.25)	0.17	(0.12-0.25)

CoroMill® 327

Código para pedido	Avanço por dente, f_z mm/dente		Espessura máxima de cavacos, h_{ex} mm	
	Valor inicial	(mín. - máx.)	Valor inicial	(mín. - máx.)
327R06-12 12045-CH	0.07	(0.04-0.1)	0.07	(0.04-0.1)
327R12-22 20045-CH	0.07	(0.04-0.1)	0.07	(0.04-0.1)

Classes para fresamento

P Aços

Classes básicas



GC1130 (HC) - P30 (P15-P40)
Classe dura com cobertura PVD fina com tecnologia Zertivo™ para várias aplicações. Adequada para aplicações de desbaste ao acabamento leve com estabilidade média para usinagem com e sem refrigeração. Boa escolha para percursos complexos das ferramentas e materiais pastosos.Quando a GC1130 não estiver disponível, use a GC1030.



GC4340 (HC) - P40 (P35-P50)
Classe com cobertura CVD tenaz (cobertura média espessa) apropriada para aplicações diifíceis e exigentes de fresamento médio e em desbaste, com e sem refrigeração.



GC4330 (HC) - P30 (P10-P40)
Classe de dureza média e cobertura CVD (cobertura de espessura média) desenhada para aplicações de fresamento médio a desbaste em condições de corte médio com e sem refrigeração.



GC4220 (HC) - P20 (P10-P25)
Uma classe com cobertura CVD dura (cobertura espessa) adequada para alta velocidade de corte em aplicações de fresamento médio a desbaste, com boa estabilidade em condições sem refrigeração.

Classes complementares



GC1010 (HC) - P10 (P05-P15)
Classe muito dura com cobertura PVD (cobertura fina) para acabamento em condições muito estáveis e em materiais endurecidos, para usinagem com e sem refrigeração.



CT530 (HT) - P15 (P10-P15)
Classe de cermet com dureza média e sem cobertura para aplicações de acabamento com altas velocidades de corte para usinagem sem refrigeração.



GC2030 (HC) - P30 (P20-P40)
Classe com dureza média e cobertura PVD (cobertura fina) para materiais pastosos para usinagem com e sem refrigeração.



GC2040 (HC) - P45 (P30-P50)
Classe tenaz com cobertura CVD (cobertura de espessura média) para desbaste em aplicações difíceis e exigentes com e sem refrigeração e boa para produção de materiais mistos.



GC3040 (HC) - P20 (P10-P40)
Classe média-dura com cobertura CVD dura (espessa) que complementa a GC4330 em materiais abrasivos.



M30B (HC) - P35 (P30-P40)
Classe tenaz com cobertura CVD (cobertura fina) para usinagem de pás de turbinas em condições difíceis e exigentes com altas velocidades de corte, com e sem refrigeração.



GC1025 (HC) - P30 (P15-P30)
Classe dura com cobertura PVD (cobertura fina) para desbaste leve a acabamento em materiais pastosos para usinagem com e sem refrigeração.

Letras-símbolo especificando a designação de materiais de corte duros:

Metais duros:

HT	Metal duro sem cobertura, também chamado cermet, contendo principalmente carbonetos de titânio (TIC) ou nitretos de titânio (TIN) ou ambos.
HC	Metais duros como acima, porém com cobertura

Classes para fresamento

M Aços inoxidáveis austeníticos, martensíticos e ferríticos

Classes básicas



GC1040 (HC) - M30 (M15-M35)
Classe tenaz com cobertura PVD para acabamento a desbaste em condições instáveis a estáveis, com ou sem refrigeração. Boa escolha para os percursos complexos da ferramenta e materiais pastosos.



GC2040 (HC) - M40 (M25-M40)
Classe tenaz com cobertura CVD de espessura média projetada para aplicações difíceis e exigentes de fresamento médio ao desbaste, com estabilidade ruim e em condições sem refrigeração. Altas faixas de avanço, contatos radiais e diâmetros grandes.



S30T (HC) - M25 (M15-M35)
Classe de média dureza com cobertura PVD fina para uso como complemento à classe GC1040 quando a estabilidade for boa e houver demanda de alta velocidade de corte em condições com e sem refrigeração.



GC2030 (HC) - M25 (M15-M30)
Classe média-dura com cobertura de PVD fina para desbaste leve a acabamento. Complemento à GC1040 em boa estabilidade, para altas velocidades de corte em condições sem refrigeração.

Classes complementares



M30B (HC) - M35 (M30-M40)
Classe tenaz com cobertura de CVD fina para usinagem de pás de turbina em condições que exijam tenacidade com altas velocidades de corte. Pode ser usada em condições com e sem refrigeração.

Classes complementares



S40T (HC) - M40 (M30-M40)
Classe muito tenaz com cobertura CVD de espessura média projetada para aplicações difíceis e exigentes de fresamento médio ao desbaste, com estabilidade ruim. Pode ser usada em condições com e sem refrigeração.



GC1130 (HC) - M15 (M10-M20)
Classe dura com cobertura PVD fina e tecnologia Zertivo™ para uso complementar à GC1040 com boa estabilidade e demanda por altas velocidades de corte. Pode ser usada em condições com e sem refrigeração. Boa escolha para produção de materiais mistos ISO M/ISO P. Quando a GC1130 não estiver disponível, use a GC1030.



CT530 (HT) - M10 (M10-M15)
Classe cermet com dureza média e sem cobertura para aplicações de acabamento com altas velocidades de corte para usinagem sem refrigeração.



GC1010 (HC) - M10 (M05-M10)
Classe muito dura com cobertura PVD fina para acabamento em condições estáveis para usinagem com e sem refrigeração.



GC4330 (HC) - M30 (M25-M35)
Classe média-dura com cobertura de CVD de espessura média para fresamento médio a desbaste de aços inoxidáveis martensíticos com velocidades de corte elevadas, em condições médias e sem refrigeração.



GC4340 (HC) - M40 (M30-M40)
Classe tenaz com cobertura de CVD média a espessa para aplicações difíceis e exigentes de fresamento médio ao desbaste de aços inoxidáveis martensíticos, em condições sem refrigeração.

Letras-símbolo especificando a designação de materiais de corte duros:

Metais duros:

HT	Metal duro sem cobertura, também chamado cermet, contendo principalmente carbonetos de titânio (TIC) ou nitretos de titânio (TIN) ou ambos.
HC	Metais duros como acima, porém com cobertura

POR

Classes para fresamento

K Ferros fundidos

Classes básicas



GC3330 (HC) - K20 (K15-K35)
Classe dura com cobertura ?CVD espessa, desenhada para fresamento médio ao desbaste de todos os ferros fundidos em condições estáveis a médias, com e sem refrigeração. Primeira escolha em aplicações de ferros fundidos cinzentos e ISO-K mistas.



GC1020 (HC) - K20 (K10-K25)
Classe dura com cobertura PVD fina para desbaste leve ao acabamento de ferros fundidos nodulares em condições com e sem refrigeração e ferros fundidos cinzentos com refrigeração e condições médias a estáveis. Primeira escolha para ferros fundidos nodulares e/ou fresas com diâmetros pequenos.



GC3220 (HC) - K15 (K10-K25)
Classe dura com cobertura CVD espessa, projetada para altas velocidades de corte em aplicações de fresamento médio ao desbaste de ferros fundidos cinzentos com boa estabilidade e sem refrigeração.



GC3040 (HC) - K30 (K20-K40)
Classe com dureza média com cobertura CVD espessa para aplicações difíceis e exigentes de fresamento médio ao desbaste de ferros fundidos, em condições sem refrigeração.



K20W (HC) - K20 (K15-K30)
Classe dura com cobertura CVD fina para acabamento ao fresamento em desbaste leve de todos os ferros fundidos em condições estáveis e com refrigeração. Ideal para fresas de diâmetros grandes.



K20D (HC) - K15 (K10-K25)
Classe dura com cobertura CVD muito espessa, desenhada para altas velocidades de corte em aplicações de fresamento médio ao desbaste de ferros fundidos cinzentos, com boa estabilidade e sem refrigeração.

Letras-símbolo especificando a designação de materiais de corte duros:
Metais duros:
HW Metal duro sem cobertura contendo principalmente carboneto de tungstênio (WC)
HC Metais duros como acima, porém com cobertura
Cerâmicas:
CN Cerâmicas à base de nitreto, principalmente nitreto de silício (Si_3N_4).
Nitreto de boro:
BN Nitreto de boro policristalino[1)]
[1)] O diamante policristalino e o nitreto de boro policristalino são também chamados de materiais de corte super duros.

Classes complementares



CB50 (BN) - K10 (K01-K20)
Classe com ponta de CBN dura para desbaste leve ao acabamento de ferros fundidos cinzentos em condições estáveis e sem refrigeração. Use quando a estabilidade dimensional e a vida útil da ferramenta mais longa forem críticas.



CC6190 (CN) - K05 (K01-K15)
Classe de cerâmica dura à base de nitreto de silício para velocidades de corte muito altas para desbaste leve ao semiacabamento de ferros fundidos cinzentos em condições estáveis e sem refrigeração.



GC1010 (HC) - K05 (K01-K10)
Classe muito dura com cobertura PVD fina para acabamento em condições muito estáveis. Um complemento mais duro para a GC1020 em condições com refrigeração.



H13A (HW) - K20 (K10-K25)
Classe dura de metal duro sem cobertura para fresamento em desbaste ao acabamento com arestas de corte vivas, com velocidades baixas e médias para condições estáveis, com e sem refrigeração.



GC4340 (HC) - K40 (K30-K40)
Classe tenaz com cobertura CVD de espessura média para uso como um complemento mais tenaz à GC3040 e quando a estabilidade for ruim e em condições com e sem refrigeração.



GC4330 (HC) - K30 (K20-K35)
Classe média a dura com cobertura CVD de espessura média para aplicações de fresamento médio ao desbaste que exijam tenacidade em ferros fundidos nodulares e condições com e sem refrigeração.



K20M (HC) - K15 (K10-K25)
Classe média a dura com cobertura CVD de espessura média para fresamento médio a desbaste em vários tipos de ferros fundidos, principalmente em condições sem refrigeração.



K15W (HC) - K15 (K10-K25)
Classe dura com cobertura CVD fina para acabamento de ferros fundidos e peças bimetálicas, feitas por exemplo de ferro fundido e alumínio, em condições estáveis e com refrigeração. Para uso como complemento à classe K20W quando for necessária uma aresta viva.

Classes para fresamento

N **Metais não-ferrosos, plásticos, madeira**

Classes básicas



H13A (HW) - N15 (N10-N25)
Classe dura sem cobertura para desbaste a osemiacabamento com arestas vivas em condições estáveis a médias. Excelente acabamento superficial na usinagem com e sem refrigeração.



H10 (HW) - N10 (N05-N15)
Classe muito dura e sem cobertura para desbaste leve ao acabamento com arestas de corte vivas em condições estáveis com grande exigência quanto à qualidade de acabamento superficial, na usinagem com e sem refrigeração.



CD10 (DP) - N05 (N01-N10)
Classe com ponta de diamante policristalino (PCD) e arestas vivas para desbaste leve ao acabamento em condições estáveis. Para usinagem com e sem refrigeração e com alta exigência quanto à qualidade de acabamento superficial e estabilidade do processo. Boa escolha para materiais abrasivos.

Classes complementares



CT530 (HT) - N15 (N10-N20)
Classe de cermet média-dura sem cobertura para acabamento em condições moderadamente estáveis e velocidades de corte elevadas, em condições com e sem refrigeração.



GC1130 (HC) - N15 (N10-N25)
Classe Zertivo™ dura com cobertura PVD fina para desbaste ao semiacabamento em condições médias e com menor exigência quanto ao acabamento superficial, em condições com e sem refrigeração. *Quando a GC1130 não estiver disponível, use a GC1030.



H10F (HW) - N15 (N10-N25)
Classe dura sem cobertura para desbaste leve ao acabamento com arestas vivas em condições médias para bom acabamento superficial, em condições com e sem refrigeração.

Letras-símbolo especificando a designação de materiais de corte duros:

Metais duros:

HW Metal duro sem cobertura contendo principalmente carboneto de tungstênio (WC)

HT Metal duro sem cobertura, também chamado cermet, contendo principalmente carbonetos de titânio (TIC) ou nitretos de titânio (TIN) ou ambos.

HC Metais duros como acima, porém com cobertura

Diamante:

DP Diamante policristalino[1)]

[1)] Diamante policristalino e nitreto de boro policristalino são também denominados materiais de corte superduros.

Classes para fresamento

S **Ligas resistentes ao calor**
Ligas de titânio

Classes básicas

S30T (HC) - S25 (S15-S30)
Classe média-dura com cobertura PVD fina para aplicações de acabamento ao desbaste leve em condições relativamente estáveis. Durabilidade da aresta de corte e acabamento superficial excelentes. Pode ser usada em condições com e sem refrigeração.

S40T (HC) - S35 (S25-S45)
Uma classe muito tenaz com cobertura CVD de média espessura para desbaste em aplicações que exijam tenacidade. Pode ser usada em condições com e sem refrigeração.

GC1130 (HC) - S15 (S10-S25)
Classe Zertivo™ dura com cobertura PVD fina para uso como complemento à S30T para longo tempo em corte. Pode ser usada em condições com e sem refrigeração. *Quando a GC1130 não estiver disponível, use a GC1030.

GC1010 (HC) - S10 (S05-S10)
Uma classe muito dura com cobertura PVD fina para acabamento em condições muito estáveis, com e sem refrigeração.

Classes complementares

GC1040 (HC) - S30 (S20-S35)
Classe tenaz com cobertura PVD fina para uso como um complemento mais tenaz à S30T em aplicações levemente mais instáveis, em condições com e sem refrigeração.

GC2030 (HC) - S20 (S15-S25)
Classe média-dura com cobertura PVD fina para uso como complemento à S30T para longo tempo em corte. Pode ser usada em condições com e sem refrigeração.

GC2040 (HC) - S30 (S25-S40)
Uma classe tenaz com cobertura CVD de média espessura para desbaste em aplicações que exijam tenacidade. Use como um complemento à S40T para diâmetros grandes, ou contatos radiais maiores, em condições com e sem refrigeração.

H10F (HW) - S25 (S20-S30)
Classe dura sem cobertura para desbaste leve ao acabamento em condições estáveis com alta exigência por arestas vivas e acabamento superficial, em condições com e sem refrigeração..

H13A (HW) - S20 (S15-S25)
Classe dura sem cobertura para uso como backup da H10F em aplicações mais estáveis. Pode ser usada em condições com e sem refrigeração.

GC1025 (HC) - S15 (S10-S20)
Classe dura com cobertura PVD fina para uso como complemento à S30T em longo tempo em corte e/ou usinagem de materiais pastosos. Pode ser usada em condições com e sem refrigeração.

Letras-símbolo especificando a designação de materiais de corte duros:

Metais duros:

HW	Metal duro sem cobertura contendo principalmente carboneto de tungstênio (WC)
HC	Metais duros como acima, porém com cobertura

Classes para fresamento

H Aços endurecidos

Classes básicas



GC1010(HC) - H10 (H05-H15)
Classe dura com cobertura PVD fina para desbaste leve a acabamento de aços endurecidos com 36 HRC e superior. Para uso em condições estáveis na usinagem com e sem refrigeração.



GC4220(HC) - H25 (H15-H30)
Classe dura com cobertura CVD fina para desbaste leve ao acabamento com baixos avanços, velocidades moderadas e grande contato radial na faixa de dureza ISO H mais baixa, para usinagem com e sem refrigeração.

Classes complementares



GC1130 (HC) - H10 (H10-H20)
Classe dura com cobertura PVD fina e tecnologia Zertivo™ para desbaste leve ao acabamento com baixos avanços, velocidade moderada e contato radial pequeno na faixa de dureza ISO H mais baixa; Para usinagem com e sem refrigeração. *Quando a GC1130 não estiver disponível, use a GC1030.



CT530 (HT) - H25(H10-H25)
Classe de cermet média-dura sem cobertura para acabamento leve, em condições estáveis e sem refrigeração.



CB50 (BN) - H05 (H01-H10)
Classe dura com ponta de CBN para semiacabamento ao acabamento em condições muito estáveis e sem refrigeração. Use quando a estabilidade dimensional e a vida útil da ferramenta mais longa forem críticas.



GC3040 (HC) - H25 (H20-H30)
Classe média a dura com cobertura CVD espessa que pode ser usada como um backup da GC4220 em condições instáveis e sem refrigeração.



CC6190 (CN) - H10 (H05-H15)
Classe dura de cerâmica à base de nitreto de silício para desbaste leve ao semiacabamento de ferros fundidos coquilhados em condições estáveis e sem refrigeração.

Letras-símbolo especificando a designação de materiais de corte duros:

Metais duros:

HT Metal duro sem cobertura, também chamado cermet, contendo principalmente carbonetos de titânio (TIC) ou nitretos de titânio (TIN) ou ambos.

HC Metais duros como acima, porém com cobertura

Cerâmicas:

CN Cerâmicas à base de nitreto, principalmente nitreto de silício (Si_3N_4).

Nitreto de boro:

BN Nitreto de boro policristalino[1)]

[1)] Diamante policristalino e nitreto de boro policristalino são também denominados materiais de corte superduros.

Furação

Brocas com ponta intercambiável

CoroDrill® 870 J4

Brocas intercambiáveis

CoroDrill® DS20 J26

CoroDrill® 880 J34

Ferramenta de trepanação J44

Pastilha Coromant U para furação J47

Qual solução de furação se adequa às suas necessidades?

Na usinagem de furos pequenos e médios, há soluções diferentes de furação para escolher:

- Brocas com ponta intercambiável
- Brocas com pastilhas intercambiáveis
- Brocas inteiriças de metal duro

Ao selecionar seu tipo de broca, há muitos aspectos a serem considerados. Tolerância, profundidade e diâmetro do furo são os mais importantes. Além disso, o material e o projeto da peça, bem como o tamanho do lote e o tipo da máquina precisam ser considerados.

De modo geral, as brocas simétricas como metal duro ou de ponta intercambiável oferecerão tolerâncias do furo mais exatas e operam com taxas de avanço mais alto. Brocas com pastilha intercambiável têm muito boa relação custo/benefício quando a tolerância do furo não é essencial e por operarem com avanços mais baixos, elas apresentam forças axiais menores sobre a peça.

Selecione sua estratégia

“Geralmente, a furação é realizada no fim do processo de manufatura quando as operações anteriores já melhoraram o valor inicial da peça. Embora pareça simples, a furação é uma operação complexa e pode ter graves consequências se sua ferramenta falhar ou usinar além de sua capacidade. Por esse motivo, é importante ter uma estratégia sobre como chegar ao furo desejado.

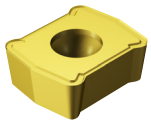
Furação profunda
- O processo de usinagem de furos profundos exige ferramentas mais longas que são mais sensíveis à deflexão
- Os cavacos percorrem uma distância longa até o respectivo escoamento
- Quando usinar furos 6-7xD com CoroDrill DS20, é necessária uma redução de avanço na entrada e na saída. O avanço de entrada deve ser 75% da faixa de avanço recomendada, o avanço de saída deve ser de 0,05 mm/rot.

Fatores importantes a considerar:
- Se for feita a furação de furos mais profundos que 6xD com CoroDrill 870 use uma operação de furo piloto
- Certifique-se de que a vazão de refrigeração seja suficiente para escoar os cavacos
- Ajuste seus dados de corte para obter cavacos satisfatórios, um processo estável e, por fim, atingir as exigências de seu furo

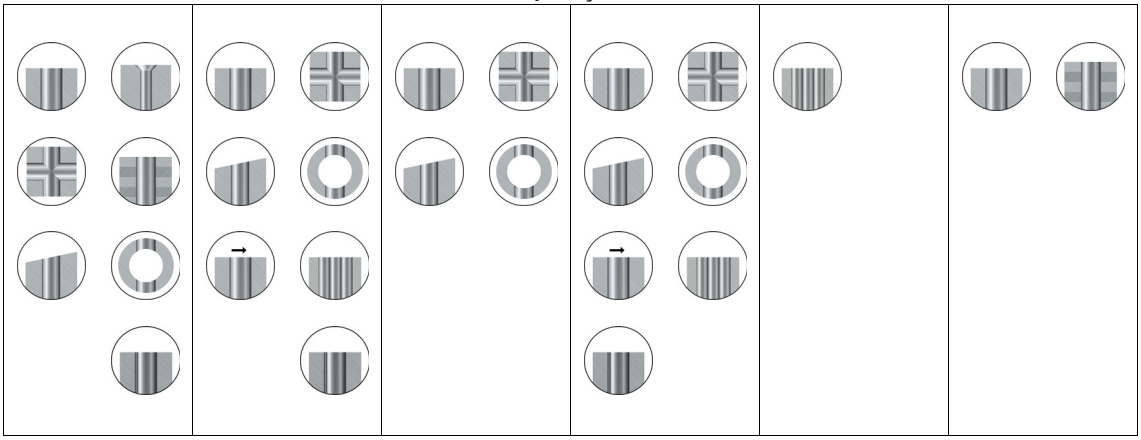
Obter um processo estável
- Obter um processo estável é o principal objetivo ao selecionar sua estratégia de furação
- Para isto, vários fatores são considerados (refrigeração, fixação, capacidade da máquina etc.)
- Além dos mencionados anteriormente, um fator que tem um grande impacto são os dados de corte

Ajuste o dados de corte para otimizar seu processo:
- Aumentar as taxas de penetração (aumentando o avanço)
- Prolongar a vida útil da ferramenta (reduzindo a velocidade)

POR

	870	DS20	880	880	R416.7	R416
						
Tipo de broca	**Broca com ponta intercambiável**	**Broca com pastilha intercambiável**	**Broca com pastilha intercambiável**	**Brocas com pastilhas intercambiáveis e diâmetros grandes**	**Ferramenta de trepanação**	**Pastilha Coromant U para furação**
D_c mm	10.00-33.00	15.00-40.00	12.00-63.50	65.00-84.00	60.00-110.00	
Área de aplicação ISO	P M K N S	P M K N S H	P M K N S H	P M K N S H	P M K N S H	P M K N S H
ULDR	3-10 x DC	4-7 x DC	2-3 x DC	3-4 x DC	2.5 x DC	
TCHA	H9-H10	IT13-IT14	H12-H13	IT13	IT13	
Com refrigeração	Interna	Interna	Interna	Interna	Externa	
Página	**J4**	**J26**	**J34**	**J34**	**J44**	**J47**

Aplicação



CoroDrill® 870

Processo de usinagem de furos seguro e previsível

Área de aplicação ISO:

P M K N S



Características e benefícios

A interface entre a ponta e a broca é simples, precisa e estável. Os canais otimizados da broca facilitam o escoamento dos cavacos e, com a possibilidade de troca da ponta enquanto a ferramenta ainda está no porta-ferramenta, você economiza seu valioso tempo. As novas classes e geometrias da aresta de corte proporcionam um processo de corte seguro com controle de cavacos otimizado, altas taxas de penetração e vida útil da ferramenta longa e confiável.

Aplicação

- Processo seguro e confiável
- Fácil manuseio e troca segura da ponta
- Controle e escoamento de cavacos otimizados
- Vida útil da ferramenta mais longa e previsível e alta produtividade
- Furo com custo mais baixo e excelente qualidade

www.sandvik.coromant.com/corodrill870

Corpos da broca

- Profundidade de furação: até 10 × o diâmetro
- Acoplamentos: haste cilíndrica (ISO 9766)
- Tolerâncias do furo: H9-H10

Pontas de broca

- Novas classes para proporcionar maior vida útil da ferramenta e desgaste previsível
- Fácil manuseio e troca segura da ponta
- Possível trocar a ponta enquanto a ferramenta ainda está na máquina para reduzir o tempo de máquina parada

Geometrias da ponta da broca

- PM otimizado para ISO-P
- MM otimizado para ISO-M
- KM otimizado para ISO-K
- Ponta piloto GP para todos os materiais

Estão disponíveis brocas Tailor Made para produzir furos escalonados ou com chanfros em uma operação.

Pressione a ponta para baixo e na direção da superfície do suporte enquanto aperta o parafuso com o torque recomendado no corpo da broca. Preferencialmente, use um torquímetro para assegurar que a ponta esteja fixamente assentada. Desenrosque o parafuso aproximadamente 1,5 volta para liberar a ponta.



Tolerância do furo (não aplicável para geometria GP)

H9 - H10

Faixa de diâmetro, mm		10.00-18.00	18.01-30.00	30.01-33.00
Tolerância do furo, mm:	3×DC-8×DC	0/+0.043	0/+0.052	0/+0.062
	10×DC	0/+0.070	0/+0.084	0/+0.100

J6 J8 N6

SANDVIK Coromant

POR

CoroDrill® 870

Visão geral da geometria

Geometria		Informações sobre geometrias
PM		A geometria -PM é considerada uma ponta de uso geral. Embora seu principal objetivo seja o uso em aços-carbono e aços baixa- liga, ela também tem bom desempenho e vida útil mais longa em aços inoxidáveis austenísticos como ferros fundidos.
MM		A geometria -MM tem a mesma micro e macrogeometria que a PM, mas tem uma aresta transversal reforçada que melhora a vida útil da ferramenta, especialmente, em aços inoxidáveis Duplex.
KM		-KM tem a mesma microgeometria que a PM. A diferença para a KM é o chanfro de canto que permite menos quebras na saída do material da peça.
GP		-GP é destinada para aplicações com furo piloto. Ela é baseada na geometria PM, mas tem um ângulo de ponta maior e uma classe de tolerância diferente.

Visão geral das classes

GC4334

- A nova cobertura de PVD espessa (AlTiN) com melhor segurança da aresta cria resistência contra aresta postiça e lascamento.
- Um substrato tenaz de finos grãos com alto teor de Cr para alta confiabilidade e resistência ao lascamento.
- Primeira escolha para ISO P

GC3334

- Nova cobertura PVD multicamadas (AlTiCrN) com melhor resistência ao desgaste.
- Um substrato duro e de finos grãos aumenta ainda mais a resistência ao desgaste.
- Primeira escolha em ISO-K

GC2334

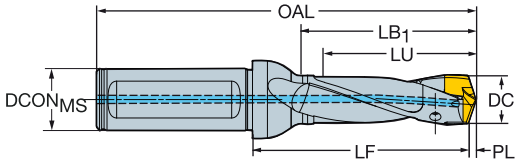
- Nova cobertura de PVD multicamadas fina (AlTiCrN) com melhor resistência ao desgaste contra escamação e lascamento na segunda aresta.
- Um substrato tenaz de finos grãos com alto teor de Cr para alta confiabilidade e resistência ao lascamento.
- Primeira escolha em ISO-M

Broca CoroDrill® 870 com ponta intercambiável

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna





							Dimensões, mm								
DCN	DCX		LU	CZC_{MS}	TCHA	Código para pedido	$DCON_{MS}$	LF	OAL	LB_1	PL	BAR	KG	RPMX	$MIID_P$
10.00	10.49	6	33.09	16	H9	870-1000-6L16-3	16.00	46.40	96.00	35.00	1.60	10	0.141	33000	870-1040-6-PM
10.00	10.49	6	54.07	16	H9	870-1000-6L16-5	16.00	67.40	117.00	56.00	1.60	10	0.148	15000	
10.00	10.49	6	85.54	16	H9	870-1000-6L16-8	16.00	99.40	149.00	88.00	1.60	15	0.157	12000	
10.00	10.49	6	106.52	16	H10	870-1000-6L16-10	16.00	120.40	170.00	109.00	1.60	30	0.161	9000	
10.50	10.99	7	34.67	16	H9	870-1050-7L16-3	16.00	47.31	97.00	36.00	1.69	10	0.143	33000	870-1090-7-PM
10.50	10.99	7	56.65	16	H9	870-1050-7L16-5	16.00	69.31	119.00	58.00	1.69	10	0.150	15000	
10.50	10.99	7	89.62	16	H9	870-1050-7L16-8	16.00	102.31	152.00	91.00	1.69	15	0.161	12000	
10.50	10.99	7	111.60	16	H10	870-1050-7L16-10	16.00	124.31	174.00	113.00	1.69	30	0.168	9000	
11.00	11.49	8	36.23	16	H9	870-1100-8L16-3	16.00	49.25	99.00	38.00	1.75	10	0.145	33000	870-1140-8-PM
11.00	11.49	8	59.21	16	H9	870-1100-8L16-5	16.00	72.25	122.00	61.00	1.75	10	0.154	15000	
11.00	11.49	8	93.68	16	H9	870-1100-8L16-8	16.00	107.25	157.00	96.00	1.75	15	0.165	12000	
11.00	11.49	8	116.66	16	H10	870-1100-8L16-10	16.00	130.25	180.00	119.00	1.75	30	0.172	9000	
11.50	11.99	9	37.82	16	H9	870-1150-9L16-3	16.00	51.17	101.00	40.00	1.83	10	0.146	33000	870-1190-9-PM
11.50	11.99	9	61.80	16	H9	870-1150-9L16-5	16.00	75.17	125.00	64.00	1.83	10	0.157	15000	
11.50	11.99	9	97.77	16	H9	870-1150-9L16-8	16.00	111.17	161.00	100.00	1.83	15	0.170	12000	
11.50	11.99	9	121.75	16	H10	870-1150-9L16-10	16.00	135.17	185.00	124.00	1.83	30	0.178	9000	
12.00	12.49	10	39.38	16	H9	870-1200-10L16-3	16.00	53.10	103.00	42.00	1.90	10	0.151	33000	870-1240-10-PM
12.00	12.49	10	64.36	16	H9	870-1200-10L16-5	16.00	77.10	127.00	66.00	1.90	10	0.164	15000	
12.00	12.49	10	101.83	16	H9	870-1200-10L16-8	16.00	116.10	166.00	105.00	1.90	15	0.180	12000	
12.00	12.49	10	126.81	16	H10	870-1200-10L16-10	16.00	141.10	191.00	130.00	1.90	30	0.187	7000	
12.50	12.99	11	40.97	16	H9	870-1250-11L16-3	16.00	54.02	104.00	43.00	1.98	10	0.154	33000	870-1290-11-PM
12.50	12.99	11	66.95	16	H9	870-1250-11L16-5	16.00	80.02	130.00	69.00	1.98	10	0.167	15000	
12.50	12.99	11	105.92	16	H9	870-1250-11L16-8	16.00	119.02	169.00	108.00	1.98	15	0.185	10000	
12.50	12.99	11	131.90	16	H10	870-1250-11L16-10	16.00	145.02	195.00	134.00	1.98	30	0.193	7000	
13.00	13.49	12	42.54	16	H9	870-1300-12L16-3	16.00	55.94	106.00	45.00	2.06	10	0.157	33000	870-1340-12-PM
13.00	13.49	12	69.52	16	H9	870-1300-12L16-5	16.00	82.94	133.00	72.00	2.06	10	0.171	15000	
13.00	13.49	12	109.99	16	H9	870-1300-12L16-8	16.00	123.94	174.00	113.00	2.06	15	0.187	9500	
13.00	13.49	12	136.97	16	H10	870-1300-12L16-10	16.00	150.94	201.00	140.00	2.06	30	0.220	6500	
13.50	13.99	13	44.13	16	H9	870-1350-13L16-3	16.00	57.86	108.00	47.00	2.14	10	0.159	33000	870-1390-13-PM
13.50	13.99	13	72.11	16	H9	870-1350-13L16-5	16.00	84.86	135.00	74.00	2.14	10	0.175	15000	
13.50	13.99	13	114.08	16	H9	870-1350-13L16-8	16.00	127.86	178.00	117.00	2.14	15	0.200	9500	
13.50	13.99	13	142.06	16	H10	870-1350-13L16-10	16.00	155.86	206.00	145.00	2.14	30	0.228	6500	
14.00	14.99	14	47.27	20	H9	870-1400-14L20-3	20.00	63.72	116.00	50.00	2.28	10	0.227	33000	870-1490-14-PM
14.00	14.99	14	77.25	20	H9	870-1400-14L20-5	20.00	93.72	146.00	80.00	2.28	10	0.246	15000	
14.00	14.99	14	122.22	20	H9	870-1400-14L20-8	20.00	138.72	191.00	125.00	2.28	15	0.269	9500	
14.00	14.99	14	152.20	20	H10	870-1400-14L20-10	20.00	168.72	221.00	155.00	2.28	30	0.308	6500	
15.00	15.99	15	50.42	20	H9	870-1500-15L20-3	20.00	66.56	119.00	53.00	2.44	10	0.233	33000	870-1590-15-PM
15.00	15.99	15	82.40	20	H9	870-1500-15L20-5	20.00	98.56	151.00	85.00	2.44	10	0.258	15000	
15.00	15.99	15	130.37	20	H9	870-1500-15L20-8	20.00	146.56	199.00	133.00	2.44	15	0.310	8000	
15.00	15.99	15	162.35	20	H10	870-1500-15L20-10	20.00	178.56	231.00	165.00	2.44	30	0.330	5000	
16.00	16.99	16	53.56	20	H9	870-1600-16L20-3	20.00	69.42	122.00	56.00	2.58	10	0.241	33000	870-1690-16-PM
16.00	16.99	16	87.54	20	H9	870-1600-16L20-5	20.00	103.42	156.00	90.00	2.58	10	0.271	15000	
16.00	16.99	16	138.51	20	H9	870-1600-16L20-8	20.00	154.42	207.00	141.00	2.58	15	0.330	8000	
16.00	16.99	16	172.49	20	H10	870-1600-16L20-10	20.00	188.42	241.00	175.00	2.58	30	0.352	5000	
17.00	17.99	17	56.71	20	H9	870-1700-17L20-3	20.00	73.27	126.00	59.00	2.73	10	0.244	30000	870-1790-17-PM
17.00	17.99	17	92.69	20	H9	870-1700-17L20-5	20.00	109.27	162.00	95.00	2.73	10	0.280	13500	
17.00	17.99	17	146.66	20	H9	870-1700-17L20-8	20.00	163.27	216.00	149.00	2.73	15	0.338	8000	
17.00	17.99	17	182.64	20	H10	870-1700-17L20-10	20.00	199.27	252.00	185.00	2.73	30	0.368	5000	
18.00	18.99	18	59.86	20	H9	870-1800-18L20-3	20.00	76.13	129.00	62.00	2.87	10	0.259	30000	870-1890-18-PM
18.00	18.99	18	97.84	20	H9	870-1800-18L20-5	20.00	113.13	166.00	100.00	2.87	10	0.300	13500	
18.00	18.99	18	154.81	20	H9	870-1800-18L20-8	20.00	171.13	224.00	157.00	2.87	15	0.369	8000	
18.00	18.99	18	192.79	20	H10	870-1800-18L20-10	20.00	209.13	262.00	195.00	2.87	30	0.420	5000	
19.00	19.99	19	63.01	25	H9	870-1900-19L25-3	25.00	82.98	142.00	66.00	3.02	10	0.413	30000	870-1990-19-PM
19.00	19.99	19	102.99	25	H9	870-1900-19L25-5	25.00	122.98	182.00	106.00	3.02	10	0.460	13500	
19.00	19.99	19	162.96	25	H9	870-1900-19L25-8	25.00	182.98	242.00	166.00	3.02	15	0.560	7000	
19.00	19.99	19	202.94	25	H10	870-1900-19L25-10	25.00	222.98	282.00	206.00	3.02	30	0.595	4500	
20.00	20.99	20	66.16	25	H9	870-2000-20L25-3	25.00	86.83	146.00	69.00	3.17	10	0.434	21500	870-2090-20-PM
20.00	20.99	20	108.14	25	H9	870-2000-20L25-5	25.00	128.83	188.00	111.00	3.17	10	0.492	12000	
20.00	20.99	20	171.11	25	H9	870-2000-20L25-8	25.00	191.83	251.00	174.00	3.17	15	0.591	7000	
20.00	20.99	20	213.09	25	H10	870-2000-20L25-10	25.00	233.83	293.00	216.00	3.17	30	0.632	4500	


J8


L2



N23



N6



N15

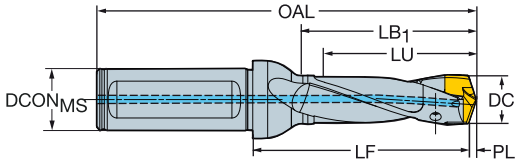
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Broca CoroDrill® 870 com ponta intercambiável

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna





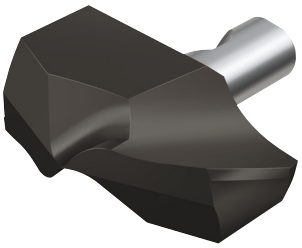
							Dimensões, mm							
DCN	DCX		LU	CZC_{MS}	TCHA	Código para pedido	$DCON_{MS}$	LF	OAL	LB_1	PL	BAR	KG	RPMX	$MIID_P$
21.00	21.99	21	69.30	25	H9	870-2100-21L25-3	25.00	89.68	149.00	72.00	3.32	10	0.450	21500	870-2190-21-PM
21.00	21.99	21	113.28	25	H9	870-2100-21L25-5	25.00	133.68	193.00	116.00	3.32	10	0.508	12000	
21.00	21.99	21	179.25	25	H9	870-2100-21L25-8	25.00	199.68	259.00	182.00	3.32	15	0.627	7000	
21.00	21.99	21	223.23	25	H10	870-2100-21L25-10	25.00	243.68	303.00	226.00	3.32	30	0.679	4500	
22.00	22.99	22	72.45	25	H9	870-2200-22L25-3	25.00	93.53	153.00	76.00	3.47	10	0.470	21500	870-2290-22-PM
22.00	22.99	22	118.43	25	H9	870-2200-22L25-5	25.00	139.53	199.00	122.00	3.47	10	0.575	12000	
22.00	22.99	22	187.40	25	H9	870-2200-22L25-8	25.00	208.53	268.00	191.00	3.47	15	0.675	7000	
22.00	22.99	22	233.38	25	H10	870-2200-22L25-10	25.00	253.53	313.00	236.00	3.47	30	0.724	4500	
23.00	23.99	23	75.59	25	H9	870-2300-23L25-3	25.00	97.39	157.00	79.00	3.61	10	0.485	21500	870-2390-23-PM
23.00	23.99	23	123.57	25	H9	870-2300-23L25-5	25.00	145.39	205.00	127.00	3.61	10	0.600	21500	
23.00	23.99	23	195.54	25	H9	870-2300-23L25-8	25.00	217.39	277.00	199.00	3.61	15	0.706	6000	
23.00	23.99	23	243.52	25	H10	870-2300-23L25-10	25.00	265.39	325.00	247.00	3.61	30	0.776	4000	
24.00	24.99	24	78.75	32	H9	870-2400-24L32-3	32.00	104.23	168.00	82.00	3.77	10	0.728	16000	870-2490-24-PM
24.00	24.99	24	128.73	32	H9	870-2400-24L32-5	32.00	155.23	219.00	132.00	3.77	10	0.898	10500	
24.00	24.99	24	203.70	32	H9	870-2400-24L32-8	32.00	229.23	293.00	207.00	3.77	15	1.033	6000	
24.00	24.99	24	253.68	32	H10	870-2400-24L32-10	32.00	275.23	339.00	257.00	3.77	30	1.073	4000	
25.00	25.99	25	81.90	32	H9	870-2500-25L32-3	32.00	107.09	171.00	85.00	3.91	10	0.818	16000	870-2590-25-PM
25.00	25.99	25	133.88	32	H9	870-2500-25L32-5	32.00	159.09	223.00	137.00	3.91	10	0.930	10500	
25.00	25.99	25	211.85	32	H9	870-2500-25L32-8	32.00	237.09	301.00	215.00	3.91	15	1.085	6000	
25.00	25.99	25	263.83	32	H10	870-2500-25L32-10	32.00	289.09	353.00	267.00	3.91	30	1.121	4000	
26.00	26.99	26	85.05	32	H9	870-2600-26L32-3	32.00	111.97	176.00	89.00	4.03	10	0.838	16000	870-2665-26-PM
26.00	26.99	26	139.03	32	H9	870-2600-26L32-5	32.00	165.97	230.00	143.00	4.03	10	0.956	10500	
26.00	26.99	26	220.00	32	H9	870-2600-26L32-8	32.00	245.97	310.00	223.00	4.03	15	1.085	6000	
26.00	26.99	26	273.98	32	H10	870-2600-26L32-10	32.00	299.97	364.00	277.00	4.03	10	1.269	3500	
27.00	27.99	27	88.21	32	H9	870-2700-27L32-3	32.00	113.86	178.00	92.00	4.14	10	0.851	16000	870-2750-27-PM
27.00	27.99	27	144.19	32	H9	870-2700-27L32-5	32.00	170.86	235.00	148.00	4.14	10	0.997	10500	
27.00	27.99	27	228.16	32	H9	870-2700-27L32-8	32.00	253.86	318.00	232.00	4.14	10	1.163	5000	
28.00	28.99	28	91.36	32	H9	870-2800-28L32-3	32.00	116.68	181.00	95.00	4.32	10	0.906	16000	870-2858-28-PM
28.00	28.99	28	149.34	32	H9	870-2800-28L32-5	32.00	174.68	239.00	153.00	4.32	10	1.056	10500	
28.00	28.99	28	236.31	32	H9	870-2800-28L32-8	32.00	261.68	326.00	240.00	4.32	10	1.249	5000	
29.00	29.99	29	94.50	32	H9	870-2900-29L32-3	32.00	119.52	184.00	98.00	4.48	10	0.922	16000	870-2965-29-PM
29.00	29.99	29	154.48	32	H9	870-2900-29L32-5	32.00	180.52	245.00	158.00	4.48	10	1.098	10500	
29.00	29.99	29	244.45	32	H9	870-2900-29L32-8	32.00	269.52	334.00	248.00	4.48	10	1.314	5000	
30.00	30.99	30	97.65	32	H9	870-3000-30L32-3	32.00	123.40	188.00	102.00	4.60	10	0.961	16000	870-3050-30-PM
30.00	30.99	30	159.63	32	H9	870-3000-30L32-5	32.00	186.40	251.00	164.00	4.60	10	1.150	9500	
30.00	30.99	30	252.60	32	H9	870-3000-30L32-8	32.00	277.40	342.00	256.00	4.60	10	1.415	4000	
31.00	33.00	31	104.09	32	H9	870-3100-31L32-3	32.00	128.92	194.00	108.00	5.08	10	1.008	16000	870-3300-31-PM
31.00	33.00	31	170.09	32	H9	870-3100-31L32-5	32.00	194.92	260.00	174.00	5.08	10	1.233	9500	
31.00	33.00	31	269.09	32	H9	870-3100-31L32-8	32.00	293.92	359.00	273.00	5.08	10	1.555	4000	

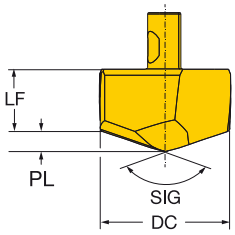
	Componentes		Componentes
	Parafuso da pastilha		Parafuso da pastilha
6	5513 031-15	19	5513 031-13
7	5513 031-15	20	5513 031-14
8	5513 031-15	21	5513 031-14
9	5513 031-15	22	5513 031-14
10	5513 031-12	23	5513 031-14
11	5513 031-12	24	5513 031-16
12	5513 031-12	25	5513 031-16
13	5513 031-12	26	5513 031-16
14	5513 031-12	27	5513 031-16
15	5513 031-12	28	5513 031-17
16	5513 031-13	29	5513 031-17
17	5513 031-13	30	5513 031-17
18	5513 031-13	31	5513 031-17

Para a lista completa de componentes, acesse www.sandvik.coromant.com

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Ponta da broca CoroDrill® 870



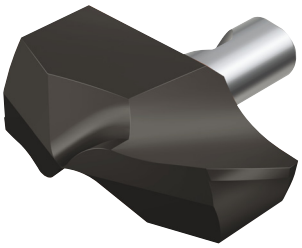


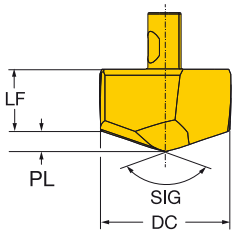
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
10.00	6	870-1000-6-PM		★		☆		☆	☆		☆	4.7	1.5	142°	H9
10.00		870-1000-6-MM			★					☆		4.7	1.5	142°	H9
10.00		870-1000-6-KM	☆				★					4.4	1.8	142°	H9
10.00		870-1000-6-GP		★		★		★	☆		☆	4.6	1.1	152°	F9
10.10		870-1010-6-PM		★		☆		☆	☆		☆	4.7	1.6	142°	H9
10.10		870-1010-6-MM			★					☆		4.7	1.6	142°	H9
10.10		870-1010-6-KM	☆				★					4.4	1.8	142°	H9
10.10		870-1010-6-GP		★		★		★	☆		☆	4.6	1.1	152°	F9
10.20		870-1020-6-PM		★		☆		☆	☆		☆	4.6	1.6	142°	H9
10.20		870-1020-6-MM			★					☆		4.6	1.6	142°	H9
10.20		870-1020-6-KM	☆				★					4.3	1.9	142°	H9
10.20		870-1020-6-GP		★		★		★	☆		☆	4.6	1.1	152°	F9
10.30		870-1030-6-PM		★		☆		☆	☆		☆	4.6	1.6	142°	H9
10.30		870-1030-6-MM			★					☆		4.6	1.6	142°	H9
10.30		870-1030-6-KM	☆				★					4.3	1.9	142°	H9
10.30		870-1030-6-GP		★		★		★	☆		☆	4.6	1.1	152°	F9
10.40		870-1040-6-PM		★		☆		☆	☆		☆	4.6	1.6	142°	H9
10.40		870-1040-6-MM			★					☆		4.6	1.6	142°	H9
10.40		870-1040-6-KM	☆				★					4.3	1.9	142°	H9
10.40		870-1040-6-GP		★		★		★	☆		☆	4.6	1.1	152°	F9
10.50	7	870-1050-7-PM		★		☆		☆	☆		☆	4.6	1.6	142°	H9
10.50		870-1050-7-MM			★					☆		4.6	1.6	142°	H9
10.50		870-1050-7-KM	☆				★					4.3	1.9	142°	H9
10.50		870-1050-7-GP		★		★		★	☆		☆	4.6	1.2	152°	F9
10.60		870-1060-7-PM		★		☆		☆	☆		☆	4.6	1.6	142°	H9
10.60		870-1060-7-MM			★					☆		4.6	1.6	142°	H9
10.60		870-1060-7-KM	☆				★					4.3	1.9	142°	H9
10.60		870-1060-7-GP		★		★		★	☆		☆	4.6	1.2	152°	F9
10.70		870-1070-7-PM		★		☆		☆	☆		☆	4.6	1.7	142°	H9
10.70		870-1070-7-MM			★					☆		4.6	1.7	142°	H9
10.70		870-1070-7-KM	☆				★					4.3	1.9	142°	H9
10.70		870-1070-7-GP		★		★		★	☆		☆	4.5	1.2	152°	F9
10.80		870-1080-7-PM		★		☆		☆	☆		☆	4.5	1.7	142°	H9
10.80		870-1080-7-MM			★					☆		4.5	1.7	142°	H9
10.80		870-1080-7-KM	☆				★					4.3	2.0	142°	H9
10.80		870-1080-7-GP		★		★		★	☆		☆	4.5	1.2	152°	F9
10.90		870-1090-7-PM		★		☆		☆	☆		☆	4.5	1.7	142°	H9
10.90		870-1090-7-MM			★					☆		4.5	1.7	142°	H9
10.90		870-1090-7-KM	☆				★					4.2	2.0	142°	H9
10.90		870-1090-7-GP		★		★		★	☆		☆	4.5	1.2	152°	F9

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POR

Ponta da broca CoroDrill® 870

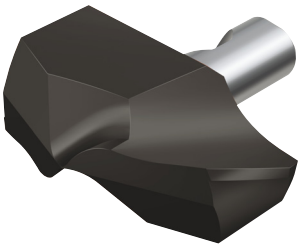


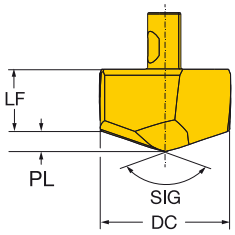


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
11.00	8	870-1100-8-PM		★		☆		☆	☆		☆	5.2	1.7	142°	H9
11.00		870-1100-8-MM			★					☆		5.2	1.7	142°	H9
11.00		870-1100-8-KM	☆				★					4.9	2.0	142°	H9
11.00		870-1100-8-GP		★		★		★	☆		☆	5.2	1.2	152°	F9
11.10		870-1110-8-PM		★		☆		☆	☆		☆	5.2	1.7	142°	H9
11.10		870-1110-8-MM			★					☆		5.2	1.7	142°	H9
11.10		870-1110-8-KM	☆				★					4.9	2.0	142°	H9
11.10		870-1110-8-GP		★		★		★	☆		☆	5.2	1.2	152°	F9
11.11		870-1111-8-PM		★		☆		☆	☆		☆	5.2	1.7	142°	H9
11.11		870-1111-8-MM			★					☆		5.2	1.7	142°	H9
11.11		870-1111-8-KM	☆				★					4.9	2.0	142°	H9
11.11		870-1111-8-GP		★		★		★	☆		☆	5.2	1.2	152°	F9
11.20		870-1120-8-PM		★		☆		☆	☆		☆	5.2	1.7	142°	H9
11.20		870-1120-8-MM			★					☆		5.2	1.7	142°	H9
11.20		870-1120-8-KM	☆				★					4.9	2.0	142°	H9
11.20		870-1120-8-GP		★		★		★	☆		☆	5.2	1.2	152°	F9
11.30		870-1130-8-PM		★		☆		☆	☆		☆	5.2	1.7	142°	H9
11.30		870-1130-8-MM			★					☆		5.2	1.7	142°	H9
11.30		870-1130-8-KM	☆				★					4.9	2.0	142°	H9
11.30		870-1130-8-GP		★		★		★	☆		☆	5.2	1.2	152°	F9
11.40		870-1140-8-PM		★		☆		☆	☆		☆	5.2	1.8	142°	H9
11.40		870-1140-8-MM			★					☆		5.2	1.8	142°	H9
11.40		870-1140-8-KM	☆				★					4.9	2.0	142°	H9
11.40		870-1140-8-GP		★		★		★	☆		☆	5.2	1.2	152°	F9
11.50	9	870-1150-9-PM		★		☆		☆	☆		☆	5.1	1.8	142°	H9
11.50		870-1150-9-MM			★					☆		5.1	1.8	142°	H9
11.50		870-1150-9-KM	☆				★					4.8	2.1	142°	H9
11.50		870-1150-9-GP		★		★		★	☆		☆	5.2	1.2	152°	F9
11.60		870-1160-9-PM		★		☆		☆	☆		☆	5.1	1.8	142°	H9
11.60		870-1160-9-MM			★					☆		5.1	1.8	142°	H9
11.60		870-1160-9-KM	☆				★					4.8	2.1	142°	H9
11.60		870-1160-9-GP		★		★		★	☆		☆	5.2	1.3	152°	F9
11.70		870-1170-9-PM		★		☆		☆	☆		☆	5.1	1.8	142°	H9
11.70		870-1170-9-MM			★					☆		5.1	1.8	142°	H9
11.70		870-1170-9-KM	☆				★					4.8	2.2	142°	H9
11.70		870-1170-9-GP		★		★		★	☆		☆	5.1	1.3	152°	F9
11.80		870-1180-9-PM		★		☆		☆	☆		☆	5.1	1.8	142°	H9
11.80		870-1180-9-MM			★					☆		5.1	1.8	142°	H9
11.80		870-1180-9-KM	☆				★					4.7	2.2	142°	H9
11.80		870-1180-9-GP		★		★		★	☆		☆	5.1	1.3	152°	F9
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11.90		870-1190-9-KM	☆				★					4.7	2.2	142°	H9
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Ponta da broca CoroDrill® 870





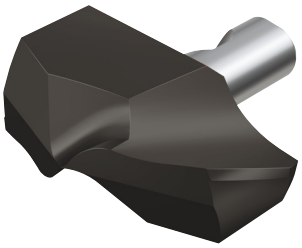
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
12.00	10	870-1200-10-PM		★		☆		☆	☆		☆	5.7	1.8	142°	H9
12.00		870-1200-10-MM			★					☆		5.7	1.8	142°	H9
12.00		870-1200-10-KM	☆				★					5.3	2.2	142°	H9
12.00		870-1200-10-GP		★		★		★	☆		☆	5.7	1.3	152°	F9
12.10		870-1210-10-PM		★		☆		☆	☆		☆	5.7	1.9	142°	H9
12.10		870-1210-10-MM			★					☆		5.7	1.9	142°	H9
12.10		870-1210-10-KM	☆				★					5.3	2.2	142°	H9
12.10		870-1210-10-GP		★		★		★	☆		☆	5.7	1.3	152°	F9
12.20		870-1220-10-PM		★		☆		☆	☆		☆	5.6	1.9	142°	H9
12.20		870-1220-10-MM			★					☆		5.6	1.9	142°	H9
12.20		870-1220-10-KM	☆				★					5.3	2.2	142°	H9
12.20		870-1220-10-GP		★		★		★	☆		☆	5.7	1.3	152°	F9
12.30		870-1230-10-PM		★		☆		☆	☆		☆	5.6	1.9	142°	H9
12.30		870-1230-10-MM			★					☆		5.6	1.9	142°	H9
12.30		870-1230-10-KM	☆				★					5.3	2.2	142°	H9
12.30		870-1230-10-GP		★		★		★	☆		☆	5.7	1.3	152°	F9
12.40		870-1240-10-PM		★		☆		☆	☆		☆	5.6	1.9	142°	H9
12.40		870-1240-10-MM			★					☆		5.6	1.9	142°	H9
12.40		870-1240-10-KM	☆				★					5.3	2.3	142°	H9
12.40		870-1240-10-GP		★		★		★	☆		☆	5.7	1.3	152°	F9
12.50	11	870-1250-11-PM		★		☆		☆	☆		☆	5.6	1.9	142°	H9
12.50		870-1250-11-MM			★					☆		5.6	1.9	142°	H9
12.50		870-1250-11-KM	☆				★					5.2	2.3	142°	H9
12.50		870-1250-11-GP		★		★		★	☆		☆	5.7	1.3	152°	F9
12.60		870-1260-11-PM		★		☆		☆	☆		☆	5.6	1.9	142°	H9
12.60		870-1260-11-MM			★					☆		5.6	1.9	142°	H9
12.60		870-1260-11-KM	☆				★					5.2	2.3	142°	H9
12.60		870-1260-11-GP		★		★		★	☆		☆	5.6	1.4	152°	F9
12.70		870-1270-11-PM		★		☆		☆	☆		☆	5.6	2.0	142°	H9
12.70		870-1270-11-MM			★					☆		5.6	2.0	142°	H9
12.70		870-1270-11-KM	☆				★					5.2	2.3	142°	H9
12.70		870-1270-11-GP		★		★		★	☆		☆	5.6	1.4	152°	F9
12.80		870-1280-11-PM		★		☆		☆	☆		☆	5.5	2.0	142°	H9
12.80		870-1280-11-MM			★					☆		5.5	2.0	142°	H9
12.80		870-1280-11-KM	☆				★					5.2	2.3	142°	H9
12.80		870-1280-11-GP		★		★		★	☆		☆	5.6	1.4	152°	F9
12.90		870-1290-11-PM		★		☆		☆	☆		☆	5.5	2.0	142°	H9
12.90		870-1290-11-MM			★					☆		5.5	2.0	142°	H9
12.90		870-1290-11-KM	☆				★					5.2	2.3	142°	H9
12.90		870-1290-11-GP		★		★		★	☆		☆	5.6	1.4	152°	F9

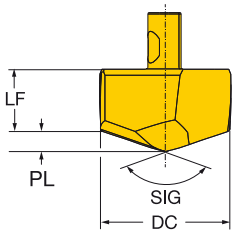
J6 J50 J5 N23 N6

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Ponta da broca CoroDrill® 870

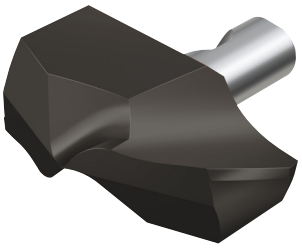


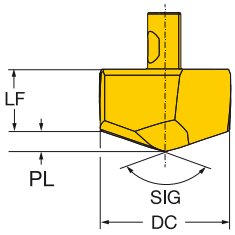


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
13.00	12	870-1300-12-PM		★		☆		☆	☆		☆	6.0	2.0	142°	H9
13.00		870-1300-12-PL		☆		★						5.4	2.6	142°	H9
13.00		870-1300-12-MM			★					☆		6.0	2.0	142°	H9
13.00		870-1300-12-KM	☆				★					5.6	2.4	142°	H9
13.00		870-1300-12-GP		★		★		★	☆		☆	6.1	1.4	152°	F9
13.10		870-1310-12-PM		★		☆		☆	☆		☆	6.0	2.0	142°	H9
13.10		870-1310-12-MM			★					☆		6.0	2.0	142°	H9
13.10		870-1310-12-KM	☆				★					5.6	2.4	142°	H9
13.10		870-1310-12-GP		★		★		★	☆		☆	6.1	1.4	152°	F9
13.20		870-1320-12-PM		★		☆		☆	☆		☆	6.0	2.0	142°	H9
13.20		870-1320-12-MM			★					☆		6.0	2.0	142°	H9
13.20		870-1320-12-KM	☆				★					5.6	2.5	142°	H9
13.20		870-1320-12-GP		★		★		★	☆		☆	6.1	1.4	152°	F9
13.30		870-1330-12-PM		★		☆		☆	☆		☆	6.0	2.0	142°	H9
13.30		870-1330-12-MM			★					☆		6.0	2.0	142°	H9
13.30		870-1330-12-KM	☆				★					5.5	2.5	142°	H9
13.30		870-1330-12-GP		★		★		★	☆		☆	6.1	1.4	152°	F9
13.40		870-1340-12-PM		★		☆		☆	☆		☆	5.9	2.1	142°	H9
13.40		870-1340-12-MM			★					☆		5.9	2.1	142°	H9
13.40		870-1340-12-KM	☆				★					5.5	2.5	142°	H9
13.40		870-1340-12-GP		★		★		★	☆		☆	6.1	1.4	152°	F9
13.50	13	870-1350-13-PM		★		☆		☆	☆		☆	5.9	2.1	142°	H9
13.50		870-1350-13-MM			★					☆		5.9	2.1	142°	H9
13.50		870-1350-13-KM	☆				★					5.5	2.5	142°	H9
13.50		870-1350-13-GP		★		★		★	☆		☆	6.1	1.5	152°	F9
13.60		870-1360-13-PM		★		☆		☆	☆		☆	5.9	2.1	142°	H9
13.60		870-1360-13-MM			★					☆		5.9	2.1	142°	H9
13.60		870-1360-13-KM	☆				★					5.5	2.5	142°	H9
13.60		870-1360-13-GP		★		★		★	☆		☆	6.0	1.5	152°	F9
13.70		870-1370-13-PM		★		☆		☆	☆		☆	5.9	2.1	142°	H9
13.70		870-1370-13-MM			★					☆		5.9	2.1	142°	H9
13.70		870-1370-13-KM	☆				★					5.5	2.5	142°	H9
13.70		870-1370-13-GP		★		★		★	☆		☆	6.0	1.5	152°	F9
13.80		870-1380-13-PM		★		☆		☆	☆		☆	5.9	2.1	142°	H9
13.80		870-1380-13-MM			★					☆		5.9	2.1	142°	H9
13.80		870-1380-13-KM	☆				★					5.5	2.6	142°	H9
13.80		870-1380-13-GP		★		★		★	☆		☆	6.0	1.5	152°	F9
13.90		870-1390-13-PM		★		☆		☆	☆		☆	5.9	2.1	142°	H9
13.90		870-1390-13-MM			★					☆		5.9	2.1	142°	H9
13.90		870-1390-13-KM	☆				★					5.4	2.6	142°	H9
13.90		870-1390-13-GP		★		★		★	☆		☆	6.0	1.5	152°	F9

J6 J50 J5 N23 N6

Ponta da broca CoroDrill® 870

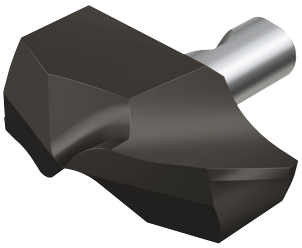


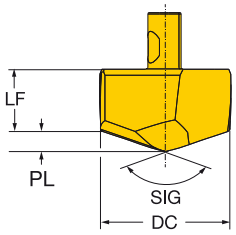


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
14.00	14	870-1400-14-PM		★		☆		☆	☆		☆	6.6	2.1	142°	H9
14.00		870-1400-14-MM			★					☆		6.6	2.1	142°	H9
14.00		870-1400-14-KM	☆				★					6.1	2.6	142°	H9
14.00		870-1400-14-GP		★		★		★	☆		☆	6.7	1.5	152°	F9
14.10		870-1410-14-PM		★		☆		☆	☆		☆	6.6	2.2	142°	H9
14.10		870-1410-14-MM			★					☆		6.6	2.2	142°	H9
14.10		870-1410-14-KM	☆				★					6.1	2.6	142°	H9
14.10		870-1410-14-GP		★		★		★	☆		☆	6.7	1.5	152°	F9
14.20		870-1420-14-PM		★		☆		☆	☆		☆	6.5	2.2	142°	H9
14.20		870-1420-14-MM			★					☆		6.5	2.2	142°	H9
14.20		870-1420-14-KM	☆				★					6.1	2.6	142°	H9
14.20		870-1420-14-GP		★		★		★	☆		☆	6.7	1.5	152°	F9
14.29		870-1429-14-PM		★		☆		☆	☆		☆	6.5	2.2	142°	H9
14.29		870-1429-14-MM			★					☆		6.5	2.2	142°	H9
14.29		870-1429-14-KM	☆				★					6.1	2.6	142°	H9
14.29		870-1429-14-GP		★		★		★	☆		☆	6.7	1.5	152°	F9
14.30		870-1430-14-PM		★		☆		☆	☆		☆	6.5	2.2	142°	H9
14.30		870-1430-14-MM			★					☆		6.5	2.2	142°	H9
14.30		870-1430-14-KM	☆				★					6.1	2.6	142°	H9
14.30		870-1430-14-GP		★		★		★	☆		☆	6.7	1.5	152°	F9
14.40		870-1440-14-PM		★		☆		☆	☆		☆	6.5	2.2	142°	H9
14.40		870-1440-14-MM			★					☆		6.5	2.2	142°	H9
14.40		870-1440-14-KM	☆				★					6.1	2.6	142°	H9
14.40		870-1440-14-GP		★		★		★	☆		☆	6.7	1.5	152°	F9
14.50		870-1450-14-PM		★		☆		☆	☆		☆	6.5	2.2	142°	H9
14.50		870-1450-14-MM			★					☆		6.5	2.2	142°	H9
14.50		870-1450-14-KM	☆				★					6.1	2.6	142°	H9
14.50		870-1450-14-GP		★		★		★	☆		☆	6.7	1.6	152°	F9
14.60		870-1460-14-PM		★		☆		☆	☆		☆	6.5	2.2	142°	H9
14.60		870-1460-14-MM			★					☆		6.5	2.2	142°	H9
14.60		870-1460-14-KM	☆				★					6.0	2.7	142°	H9
14.60		870-1460-14-GP		★		★		★	☆		☆	6.6	1.6	152°	F9
14.70		870-1470-14-PM		★		☆		☆	☆		☆	6.5	2.3	142°	H9
14.70		870-1470-14-MM			★					☆		6.5	2.3	142°	H9
14.70		870-1470-14-KM	☆				★					6.0	2.7	142°	H9
14.70		870-1470-14-GP		★		★		★	☆		☆	6.6	1.6	152°	F9
14.80		870-1480-14-PM		★		☆		☆	☆		☆	6.4	2.3	142°	H9
14.80		870-1480-14-MM			★					☆		6.4	2.3	142°	H9
14.80		870-1480-14-KM	☆				★					6.0	2.7	142°	H9
14.80		870-1480-14-GP		★		★		★	☆		☆	6.6	1.6	152°	F9
14.90		870-1490-14-PM		★		☆		☆	☆		☆	6.4	2.3	142°	H9
14.90		870-1490-14-MM			★					☆		6.4	2.3	142°	H9
14.90		870-1490-14-KM	☆				★					6.0	2.7	142°	H9
14.90		870-1490-14-GP		★		★		★	☆		☆	6.6	1.6	152°	F9

J6 J50 J5 N23 N6

Ponta da broca CoroDrill® 870

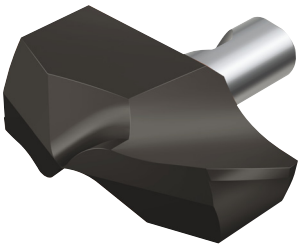


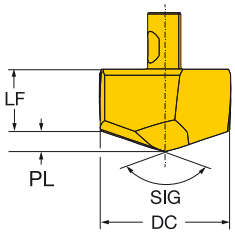


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
15.00	15	870-1500-15-PM		★		☆		☆	☆		☆	7.0	2.3	142°	H9
15.00		870-1500-15-MM			★					☆		7.0	2.3	142°	H9
15.00		870-1500-15-KM	☆				★					6.5	2.8	142°	H9
15.00		870-1500-15-GP		★		★		★	☆		☆	7.2	1.6	152°	F9
15.10		870-1510-15-PM		★		☆		☆	☆		☆	7.0	2.3	142°	H9
15.10		870-1510-15-MM			★					☆		7.0	2.3	142°	H9
15.10		870-1510-15-KM	☆				★					6.5	2.8	142°	H9
15.10		870-1510-15-GP		★		★		★	☆		☆	7.2	1.6	152°	F9
15.20		870-1520-15-PM		★		☆		☆	☆		☆	7.0	2.3	142°	H9
15.20		870-1520-15-MM			★					☆		7.0	2.3	142°	H9
15.20		870-1520-15-KM	☆				★					6.5	2.8	142°	H9
15.20		870-1520-15-GP		★		★		★	☆		☆	7.2	1.6	152°	F9
15.30		870-1530-15-PM		★		☆		☆	☆		☆	7.0	2.3	142°	H9
15.30		870-1530-15-MM			★					☆		7.0	2.3	142°	H9
15.30		870-1530-15-KM	☆				★					6.5	2.8	142°	H9
15.30		870-1530-15-GP		★		★		★	☆		☆	7.2	1.6	152°	F9
15.40		870-1540-15-PM		★		☆		☆	☆		☆	7.0	2.4	142°	H9
15.40		870-1540-15-MM			★					☆		7.0	2.4	142°	H9
15.40		870-1540-15-KM	☆				★					6.5	2.9	142°	H9
15.40		870-1540-15-GP		★		★		★	☆		☆	7.2	1.6	152°	F9
15.50		870-1550-15-PM		★		☆		☆	☆		☆	6.9	2.4	142°	H9
15.50		870-1550-15-MM			★					☆		6.9	2.4	142°	H9
15.50		870-1550-15-KM	☆				★					6.4	2.9	142°	H9
15.50		870-1550-15-GP		★		★		★	☆		☆	7.2	1.7	152°	F9
15.60		870-1560-15-PM		★		☆		☆	☆		☆	6.9	2.4	142°	H9
15.60		870-1560-15-MM			★					☆		6.9	2.4	142°	H9
15.60		870-1560-15-KM	☆				★					6.4	2.9	142°	H9
15.60		870-1560-15-GP		★		★		★	☆		☆	7.1	1.7	152°	F9
15.70		870-1570-15-PM		★		☆		☆	☆		☆	6.9	2.4	142°	H9
15.70		870-1570-15-MM			★					☆		6.9	2.4	142°	H9
15.70		870-1570-15-KM	☆				★					6.4	2.9	142°	H9
15.70		870-1570-15-GP		★		★		★	☆		☆	7.1	1.7	152°	F9
15.80		870-1580-15-PM		★		☆		☆	☆		☆	6.9	2.4	142°	H9
15.80		870-1580-15-MM			★					☆		6.9	2.4	142°	H9
15.80		870-1580-15-KM	☆				★					6.4	2.9	142°	H9
15.80		870-1580-15-GP		★		★		★	☆		☆	7.1	1.7	152°	F9
15.88		870-1588-15-PM		★		☆		☆	☆		☆	6.9	2.4	142°	H9
15.88		870-1588-15-PL		☆		★						6.0	3.3	142°	H9
15.88		870-1588-15-MM			★					☆		6.9	2.4	142°	H9
15.88		870-1588-15-KM	☆				★					6.4	2.9	142°	H9
15.88		870-1588-15-GP		★		★		★	☆		☆	7.1	1.7	152°	F9
15.90		870-1590-15-PM		★		☆		☆	☆		☆	6.9	2.4	142°	H9
15.90		870-1590-15-MM			★					☆		6.9	2.4	142°	H9
15.90		870-1590-15-KM	☆				★					6.4	2.9	142°	H9
15.90		870-1590-15-GP		★		★		★	☆		☆	7.1	1.7	152°	F9

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Ponta da broca CoroDrill® 870





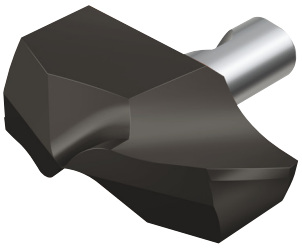
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
16.00	16	870-1600-16-PM		★		☆		☆	☆		☆	7.6	2.4	142°	H9
16.00		870-1600-16-MM			★					☆		7.6	2.4	142°	H9
16.00		870-1600-16-KM	☆				★					7.0	3.0	142°	H9
16.00		870-1600-16-GP		★		★		★	☆		☆	7.8	1.7	152°	F9
16.10		870-1610-16-PM		★		☆		☆	☆		☆	7.6	2.4	142°	H9
16.10		870-1610-16-MM			★					☆		7.6	2.4	142°	H9
16.10		870-1610-16-KM	☆				★					7.0	3.0	142°	H9
16.10		870-1610-16-GP		★		★		★	☆		☆	7.8	1.7	152°	F9
16.13		870-1613-16-PM		★		☆		☆	☆		☆	7.6	2.5	142°	H9
16.13		870-1613-16-PL		☆		★						6.7	3.3	142°	H9
16.13		870-1613-16-MM			★					☆		7.6	2.5	142°	H9
16.13		870-1613-16-KM	☆				★					7.0	3.0	142°	H9
16.13		870-1613-16-GP		★		★		★	☆		☆	7.8	1.7	152°	F9
16.20		870-1620-16-PM		★		☆		☆	☆		☆	7.5	2.5	142°	H9
16.20		870-1620-16-MM			★					☆		7.5	2.5	142°	H9
16.20		870-1620-16-KM	☆				★					7.0	3.0	142°	H9
16.20		870-1620-16-GP		★		★		★	☆		☆	7.8	1.7	152°	F9
16.30		870-1630-16-PM		★		☆		☆	☆		☆	7.5	2.5	142°	H9
16.30		870-1630-16-MM			★					☆		7.5	2.5	142°	H9
16.30		870-1630-16-KM	☆				★					7.0	3.1	142°	H9
16.30		870-1630-16-GP		★		★		★	☆		☆	7.8	1.7	152°	F9
16.40		870-1640-16-PM		★		☆		☆	☆		☆	7.5	2.5	142°	H9
16.40		870-1640-16-MM			★					☆		7.5	2.5	142°	H9
16.40		870-1640-16-KM	☆				★					6.9	3.1	142°	H9
16.40		870-1640-16-GP		★		★		★	☆		☆	7.8	1.7	152°	F9
16.50		870-1650-16-PM		★		☆		☆	☆		☆	7.5	2.5	142°	H9
16.50		870-1650-16-MM			★					☆		7.5	2.5	142°	H9
16.50		870-1650-16-KM	☆				★					6.9	3.1	142°	H9
16.50		870-1650-16-GP		★		★		★	☆		☆	7.8	1.8	152°	F9
16.60		870-1660-16-PM		★		☆		☆	☆		☆	7.5	2.5	142°	H9
16.60		870-1660-16-MM			★					☆		7.5	2.5	142°	H9
16.60		870-1660-16-KM	☆				★					6.9	3.1	142°	H9
16.60		870-1660-16-GP		★		★		★	☆		☆	7.7	1.8	152°	F9
16.70		870-1670-16-PM		★		☆		☆	☆		☆	7.5	2.5	142°	H9
16.70		870-1670-16-MM			★					☆		7.5	2.5	142°	H9
16.70		870-1670-16-KM	☆				★					6.9	3.1	142°	H9
16.70		870-1670-16-GP		★		★		★	☆		☆	7.7	1.8	152°	F9
16.80		870-1680-16-PM		★		☆		☆	☆		☆	7.4	2.6	142°	H9
16.80		870-1680-16-MM			★					☆		7.4	2.6	142°	H9
16.80		870-1680-16-KM	☆				★					6.9	3.1	142°	H9
16.80		870-1680-16-GP		★		★		★	☆		☆	7.7	1.8	152°	F9
16.90		870-1690-16-PM		★		☆		☆	☆		☆	7.4	2.6	142°	H9
16.90		870-1690-16-MM			★					☆		7.4	2.6	142°	H9
16.90		870-1690-16-KM	☆				★					6.9	3.2	142°	H9
16.90		870-1690-16-GP		★		★		★	☆		☆	7.7	1.8	152°	F9

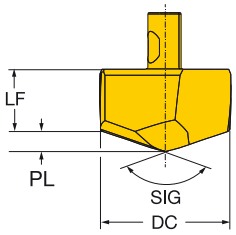
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Ponta da broca CoroDrill® 870

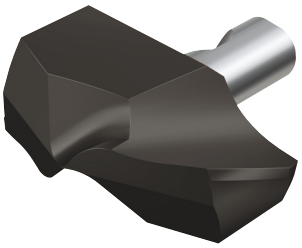


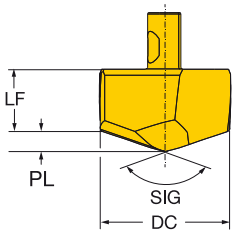


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
17.00	17	870-1700-17-PM		★		☆		☆	☆		☆	8.0	2.6	142°	H9
17.00		870-1700-17-MM			★					☆		8.0	2.6	142°	H9
17.00		870-1700-17-KM	☆				★					7.4	3.2	142°	H9
17.00		870-1700-17-GP		★		★		★	☆		☆	8.2	1.8	152°	F9
17.10		870-1710-17-PM		★		☆		☆	☆		☆	8.0	2.6	142°	H9
17.10		870-1710-17-MM			★					☆		8.0	2.6	142°	H9
17.10		870-1710-17-KM	☆				★					7.4	3.2	142°	H9
17.10		870-1710-17-GP		★		★		★	☆		☆	8.2	1.8	152°	F9
17.20		870-1720-17-PM		★		☆		☆	☆		☆	8.0	2.6	142°	H9
17.20		870-1720-17-MM			★					☆		8.0	2.6	142°	H9
17.20		870-1720-17-KM	☆				★					7.3	3.3	142°	H9
17.20		870-1720-17-GP		★		★		★	☆		☆	8.2	1.8	152°	F9
17.30		870-1730-17-PM		★		☆		☆	☆		☆	8.0	2.6	142°	H9
17.30		870-1730-17-MM			★					☆		8.0	2.6	142°	H9
17.30		870-1730-17-KM	☆				★					7.3	3.3	142°	H9
17.30		870-1730-17-GP		★		★		★	☆		☆	8.2	1.8	152°	F9
17.40		870-1740-17-PM		★		☆		☆	☆		☆	8.0	2.7	142°	H9
17.40		870-1740-17-MM			★					☆		8.0	2.7	142°	H9
17.40		870-1740-17-KM	☆				★					7.3	3.3	142°	H9
17.40		870-1740-17-GP		★		★		★	☆		☆	8.2	1.8	152°	F9
17.46		870-1746-17-PM		★		☆		☆	☆		☆	7.9	2.7	142°	H9
17.46		870-1746-17-MM			★					☆		7.9	2.7	142°	H9
17.46		870-1746-17-KM	☆				★					7.3	3.3	142°	H9
17.46		870-1746-17-GP		★		★		★	☆		☆	8.2	1.8	152°	F9
17.50		870-1750-17-PM		★		☆		☆	☆		☆	7.9	2.7	142°	H9
17.50		870-1750-17-MM			★					☆		7.9	2.7	142°	H9
17.50		870-1750-17-KM	☆				★					7.3	3.3	142°	H9
17.50		870-1750-17-GP		★		★		★	☆		☆	8.2	1.9	152°	F9
17.60		870-1760-17-PM		★		☆		☆	☆		☆	7.9	2.7	142°	H9
17.60		870-1760-17-MM			★					☆		7.9	2.7	142°	H9
17.60		870-1760-17-KM	☆				★					7.3	3.3	142°	H9
17.60		870-1760-17-GP		★		★		★	☆		☆	8.1	1.9	152°	F9
17.70		870-1770-17-PM		★		☆		☆	☆		☆	7.9	2.7	142°	H9
17.70		870-1770-17-MM			★					☆		7.9	2.7	142°	H9
17.70		870-1770-17-KM	☆				★					7.3	3.3	142°	H9
17.70		870-1770-17-GP		★		★		★	☆		☆	8.1	1.9	152°	F9
17.80		870-1780-17-PM		★		☆		☆	☆		☆	7.9	2.7	142°	H9
17.80		870-1780-17-MM			★					☆		7.9	2.7	142°	H9
17.80		870-1780-17-KM	☆				★					7.2	3.4	142°	H9
17.80		870-1780-17-GP		★		★		★	☆		☆	8.1	1.9	152°	F9
17.90		870-1790-17-PM		★		☆		☆	☆		☆	7.9	2.7	142°	H9
17.90		870-1790-17-MM			★					☆		7.9	2.7	142°	H9
17.90		870-1790-17-KM	☆				★					7.2	3.4	142°	H9
17.90		870-1790-17-GP		★		★		★	☆		☆	8.1	1.9	152°	F9

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Ponta da broca CoroDrill® 870



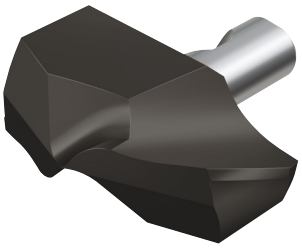


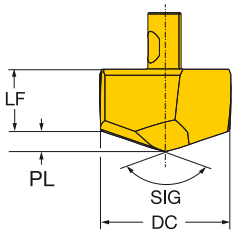
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
18.00	18	870-1800-18-PM		★		☆		☆	☆		☆	8.6	2.7	142°	H9
18.00		870-1800-18-MM			★					☆		8.6	2.7	142°	H9
18.00		870-1800-18-KM	☆				★					7.9	3.4	142°	H9
18.00		870-1800-18-GP		★		★		★	☆		☆	8.8	1.9	152°	F9
18.10		870-1810-18-PM		★		☆		☆	☆		☆	8.6	2.7	142°	H9
18.10		870-1810-18-MM			★					☆		8.6	2.7	142°	H9
18.10		870-1810-18-KM	☆				★					7.9	3.4	142°	H9
18.10		870-1810-18-GP		★		★		★	☆		☆	8.8	1.9	152°	F9
18.20		870-1820-18-PM		★		☆		☆	☆		☆	8.6	2.8	142°	H9
18.20		870-1820-18-MM			★					☆		8.6	2.8	142°	H9
18.20		870-1820-18-KM	☆				★					7.9	3.4	142°	H9
18.20		870-1820-18-GP		★		★		★	☆		☆	8.8	1.9	152°	F9
18.30		870-1830-18-PM		★		☆		☆	☆		☆	8.5	2.8	142°	H9
18.30		870-1830-18-MM			★					☆		8.5	2.8	142°	H9
18.30		870-1830-18-KM	☆				★					7.9	3.4	142°	H9
18.30		870-1830-18-GP		★		★		★	☆		☆	8.8	1.9	152°	F9
18.40		870-1840-18-PM		★		☆		☆	☆		☆	8.5	2.8	142°	H9
18.40		870-1840-18-MM			★					☆		8.5	2.8	142°	H9
18.40		870-1840-18-KM	☆				★					7.9	3.4	142°	H9
18.40		870-1840-18-GP		★		★		★	☆		☆	8.8	1.9	152°	F9
18.50		870-1850-18-PM		★		☆		☆	☆		☆	8.5	2.8	142°	H9
18.50		870-1850-18-MM			★					☆		8.5	2.8	142°	H9
18.50		870-1850-18-KM	☆				★					7.9	3.5	142°	H9
18.50		870-1850-18-GP		★		★		★	☆		☆	8.8	1.9	152°	F9
18.60		870-1860-18-PM		★		☆		☆	☆		☆	8.5	2.8	142°	H9
18.60		870-1860-18-MM			★					☆		8.5	2.8	142°	H9
18.60		870-1860-18-KM	☆				★					7.8	3.5	142°	H9
18.60		870-1860-18-GP		★		★		★	☆		☆	8.8	2.0	152°	F9
18.70		870-1870-18-PM		★		☆		☆	☆		☆	8.5	2.8	142°	H9
18.70		870-1870-18-MM			★					☆		8.5	2.8	142°	H9
18.70		870-1870-18-KM	☆				★					7.8	3.5	142°	H9
18.70		870-1870-18-GP		★		★		★	☆		☆	8.7	2.0	152°	F9
18.80		870-1880-18-PM		★		☆		☆	☆		☆	8.5	2.9	142°	H9
18.80		870-1880-18-MM			★					☆		8.5	2.9	142°	H9
18.80		870-1880-18-KM	☆				★					7.8	3.5	142°	H9
18.80		870-1880-18-GP		★		★		★	☆		☆	8.7	2.0	152°	F9
18.90		870-1890-18-PM		★		☆		☆	☆		☆	8.4	2.9	142°	H9
18.90		870-1890-18-MM			★					☆		8.4	2.9	142°	H9
18.90		870-1890-18-KM	☆				★					7.8	3.5	142°	H9
18.90		870-1890-18-GP		★		★		★	☆		☆	8.7	2.0	152°	F9

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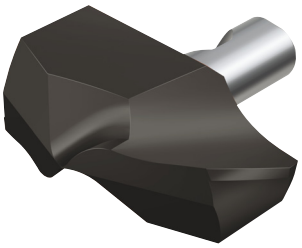


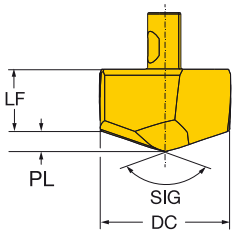


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
19.00	19	870-1900-19-PM		★		☆		☆	☆		☆	9.0	2.9	142°	H9
19.00		870-1900-19-MM			★					☆		9.0	2.9	142°	H9
19.00		870-1900-19-KM	☆				★					8.3	3.6	142°	H9
19.00		870-1900-19-GP		★		★		★	☆		☆	9.2	2.0	152°	F9
19.05		870-1905-19-PM		★		☆		☆	☆		☆	9.0	2.9	142°	H9
19.05		870-1905-19-PL		☆		★						8.0	3.8	142°	H9
19.05		870-1905-19-MM			★					☆		9.0	2.9	142°	H9
19.05		870-1905-19-KM	☆				★					8.3	3.6	142°	H9
19.05		870-1905-19-GP		★		★		★	☆		☆	9.2	2.0	152°	F9
19.10		870-1910-19-PM		★		☆		☆	☆		☆	9.0	2.9	142°	H9
19.10		870-1910-19-MM			★					☆		9.0	2.9	142°	H9
19.10		870-1910-19-KM	☆				★					8.3	3.6	142°	H9
19.10		870-1910-19-GP		★		★		★	☆		☆	9.2	2.0	152°	F9
19.20		870-1920-19-PM		★		☆		☆	☆		☆	9.0	2.9	142°	H9
19.20		870-1920-19-PL		☆		★						8.0	3.9	142°	H9
19.20		870-1920-19-MM			★					☆		9.0	2.9	142°	H9
19.20		870-1920-19-KM	☆				★					8.3	3.6	142°	H9
19.20		870-1920-19-GP		★		★		★	☆		☆	9.2	2.0	152°	F9
19.25		870-1925-19-PM		★		☆		☆	☆		☆	9.0	2.9	142°	H9
19.25		870-1925-19-PL		☆		★						8.0	3.9	142°	H9
19.25		870-1925-19-MM			★					☆		9.0	2.9	142°	H9
19.25		870-1925-19-KM	☆				★					8.3	3.6	142°	H9
19.25		870-1925-19-GP		★		★		★	☆		☆	9.2	2.0	152°	F9
19.30		870-1930-19-PM		★		☆		☆	☆		☆	9.0	2.9	142°	H9
19.30		870-1930-19-PL		☆		★						8.0	4.0	142°	H9
19.30		870-1930-19-MM			★					☆		9.0	2.9	142°	H9
19.30		870-1930-19-KM	☆				★					8.3	3.6	142°	H9
19.30		870-1930-19-GP		★		★		★	☆		☆	9.2	2.0	152°	F9
19.40		870-1940-19-PM		★		☆		☆	☆		☆	9.0	2.9	142°	H9
19.40		870-1940-19-MM			★					☆		9.0	2.9	142°	H9
19.40		870-1940-19-KM	☆				★					8.2	3.7	142°	H9
19.40		870-1940-19-GP		★		★		★	☆		☆	9.2	2.0	152°	F9
19.50		870-1950-19-PM		★		☆		☆	☆		☆	8.9	3.0	142°	H9
19.50		870-1950-19-MM			★					☆		8.9	3.0	142°	H9
19.50		870-1950-19-KM	☆				★					8.2	3.7	142°	H9
19.50		870-1950-19-GP		★		★		★	☆		☆	9.2	2.1	152°	F9
19.60		870-1960-19-PM		★		☆		☆	☆		☆	8.9	3.0	142°	H9
19.60		870-1960-19-MM			★					☆		8.9	3.0	142°	H9
19.60		870-1960-19-KM	☆				★					8.2	3.7	142°	H9
19.60		870-1960-19-GP		★		★		★	☆		☆	9.1	2.1	152°	F9
19.70		870-1970-19-PM		★		☆		☆	☆		☆	8.9	3.0	142°	H9
19.70		870-1970-19-MM			★					☆		8.9	3.0	142°	H9
19.70		870-1970-19-KM	☆				★					8.2	3.7	142°	H9
19.70		870-1970-19-GP		★		★		★	☆		☆	9.1	2.1	152°	F9
19.80		870-1980-19-PM		★		☆		☆	☆		☆	8.9	3.0	142°	H9
19.80		870-1980-19-MM			★					☆		8.9	3.0	142°	H9
19.80		870-1980-19-KM	☆				★					8.2	3.7	142°	H9
19.80		870-1980-19-GP		★		★		★	☆		☆	9.1	2.1	152°	F9
19.90		870-1990-19-PM		★		☆		☆	☆		☆	8.9	3.0	142°	H9
19.90		870-1990-19-MM			★					☆		8.9	3.0	142°	H9
19.90		870-1990-19-KM	☆				★					8.2	3.7	142°	H9
19.90		870-1990-19-GP		★		★		★	☆		☆	9.1	2.1	152°	F9

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Ponta da broca CoroDrill® 870





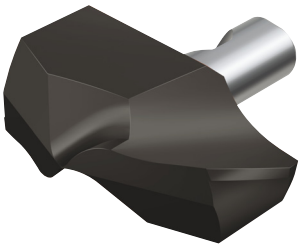
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
20.00	20	870-2000-20-PM		★		☆		☆	☆		☆	9.5	3.0	142°	H9
20.00		870-2000-20-MM			★					☆		9.5	3.0	142°	H9
20.00		870-2000-20-KM	☆				★					8.7	3.8	142°	H9
20.00		870-2000-20-GP		★		★		★	☆		☆	9.7	2.1	152°	F9
20.10		870-2010-20-PM		★		☆		☆	☆		☆	9.5	3.0	142°	H9
20.10		870-2010-20-MM			★					☆		9.5	3.0	142°	H9
20.10		870-2010-20-KM	☆				★					8.7	3.8	142°	H9
20.10		870-2010-20-GP		★		★		★	☆		☆	9.7	2.1	152°	F9
20.20		870-2020-20-PM		★		☆		☆	☆		☆	9.4	3.1	142°	H9
20.20		870-2020-20-MM			★					☆		9.4	3.1	142°	H9
20.20		870-2020-20-KM	☆				★					8.7	3.9	142°	H9
20.20		870-2020-20-GP		★		★		★	☆		☆	9.7	2.1	152°	F9
20.30		870-2030-20-PM		★		☆		☆	☆		☆	9.4	3.1	142°	H9
20.30		870-2030-20-MM			★					☆		9.4	3.1	142°	H9
20.30		870-2030-20-KM	☆				★					8.6	3.9	142°	H9
20.30		870-2030-20-GP		★		★		★	☆		☆	9.7	2.1	152°	F9
20.40		870-2040-20-PM		★		☆		☆	☆		☆	9.4	3.1	142°	H9
20.40		870-2040-20-MM			★					☆		9.4	3.1	142°	H9
20.40		870-2040-20-KM	☆				★					8.6	3.9	142°	H9
20.40		870-2040-20-GP		★		★		★	☆		☆	9.7	2.1	152°	F9
20.50		870-2050-20-PM		★		☆		☆	☆		☆	9.4	3.1	142°	H9
20.50		870-2050-20-MM			★					☆		9.4	3.1	142°	H9
20.50		870-2050-20-KM	☆				★					8.6	3.9	142°	H9
20.50		870-2050-20-GP		★		★		★	☆		☆	9.7	2.2	152°	F9
20.60		870-2060-20-PM		★		☆		☆	☆		☆	9.4	3.1	142°	H9
20.60		870-2060-20-MM			★					☆		9.4	3.1	142°	H9
20.60		870-2060-20-KM	☆				★					8.6	3.9	142°	H9
20.60		870-2060-20-GP		★		★		★	☆		☆	9.7	2.2	152°	F9
20.64		870-2064-20-PM		★		☆		☆	☆		☆	9.4	3.1	142°	H9
20.64		870-2064-20-MM			★					☆		9.4	3.1	142°	H9
20.64		870-2064-20-KM	☆				★					8.6	3.9	142°	H9
20.64		870-2064-20-GP		★		★		★	☆		☆	9.6	2.2	152°	F9
20.70		870-2070-20-PM		★		☆		☆	☆		☆	9.4	3.1	142°	H9
20.70		870-2070-20-MM			★					☆		9.4	3.1	142°	H9
20.70		870-2070-20-KM	☆				★					8.6	3.9	142°	H9
20.70		870-2070-20-GP		★		★		★	☆		☆	9.6	2.2	152°	F9
20.80		870-2080-20-PM		★		☆		☆	☆		☆	9.3	3.2	142°	H9
20.80		870-2080-20-MM			★					☆		9.3	3.2	142°	H9
20.80		870-2080-20-KM	☆				★					8.6	4.0	142°	H9
20.80		870-2080-20-GP		★		★		★	☆		☆	9.6	2.2	152°	F9
20.90		870-2090-20-PM		★		☆		☆	☆		☆	9.3	3.2	142°	H9
20.90		870-2090-20-MM			★					☆		9.3	3.2	142°	H9
20.90		870-2090-20-KM	☆				★					8.5	4.0	142°	H9
20.90		870-2090-20-GP		★		★		★	☆		☆	9.6	2.2	152°	F9

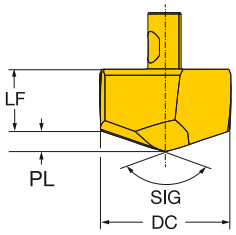
J6 J50 J5 N23 N6

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Ponta da broca CoroDrill® 870

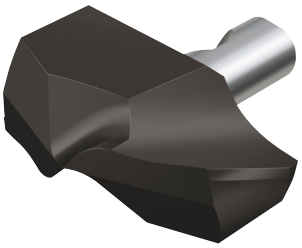


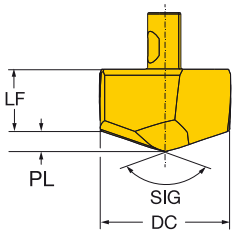


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
21.00	21	870-2100-21-PM		★		☆		☆	☆		☆	10.0	3.2	142°	H9
21.00		870-2100-21-MM			★					☆		10.0	3.2	142°	H9
21.00		870-2100-21-KM	☆				★					9.2	4.0	142°	H9
21.00		870-2100-21-GP		★		★		★	☆		☆	10.3	2.2	152°	F9
21.10		870-2110-21-PM		★		☆		☆	☆		☆	10.0	3.2	142°	H9
21.10		870-2110-21-MM			★					☆		10.0	3.2	142°	H9
21.10		870-2110-21-KM	☆				★					9.2	4.0	142°	H9
21.10		870-2110-21-GP		★		★		★	☆		☆	10.3	2.2	152°	F9
21.20		870-2120-21-PM		★		☆		☆	☆		☆	10.0	3.2	142°	H9
21.20		870-2120-21-MM			★					☆		10.0	3.2	142°	H9
21.20		870-2120-21-KM	☆				★					9.2	4.0	142°	H9
21.20		870-2120-21-GP		★		★		★	☆		☆	10.3	2.2	152°	F9
21.30		870-2130-21-PM		★		☆		☆	☆		☆	10.0	3.2	142°	H9
21.30		870-2130-21-MM			★					☆		10.0	3.2	142°	H9
21.30		870-2130-21-KM	☆				★					9.2	4.0	142°	H9
21.30		870-2130-21-GP		★		★		★	☆		☆	10.3	2.2	152°	F9
21.40		870-2140-21-PM		★		☆		☆	☆		☆	10.0	3.2	142°	H9
21.40		870-2140-21-MM			★					☆		10.0	3.2	142°	H9
21.40		870-2140-21-KM	☆				★					9.2	4.0	142°	H9
21.40		870-2140-21-GP		★		★		★	☆		☆	10.3	2.2	152°	F9
21.50		870-2150-21-PM		★		☆		☆	☆		☆	10.0	3.3	142°	H9
21.50		870-2150-21-MM			★					☆		10.0	3.3	142°	H9
21.50		870-2150-21-KM	☆				★					9.2	4.0	142°	H9
21.50		870-2150-21-GP		★		★		★	☆		☆	10.3	2.2	152°	F9
21.60		870-2160-21-PM		★		☆		☆	☆		☆	9.9	3.3	142°	H9
21.60		870-2160-21-MM			★					☆		9.9	3.3	142°	H9
21.60		870-2160-21-KM	☆				★					9.1	4.1	142°	H9
21.60		870-2160-21-GP		★		★		★	☆		☆	10.3	2.3	152°	F9
21.70		870-2170-21-PM		★		☆		☆	☆		☆	9.9	3.3	142°	H9
21.70		870-2170-21-MM			★					☆		9.9	3.3	142°	H9
21.70		870-2170-21-KM	☆				★					9.1	4.1	142°	H9
21.70		870-2170-21-GP		★		★		★	☆		☆	10.2	2.3	152°	F9
21.80		870-2180-21-PM		★		☆		☆	☆		☆	9.9	3.3	142°	H9
21.80		870-2180-21-MM			★					☆		9.9	3.3	142°	H9
21.80		870-2180-21-KM	☆				★					9.1	4.1	142°	H9
21.80		870-2180-21-GP		★		★		★	☆		☆	10.2	2.3	152°	F9
21.90		870-2190-21-PM		★		☆		☆	☆		☆	9.9	3.3	142°	H9
21.90		870-2190-21-MM			★					☆		9.9	3.3	142°	H9
21.90		870-2190-21-KM	☆				★					9.1	4.1	142°	H9
21.90		870-2190-21-GP		★		★		★	☆		☆	10.2	2.3	152°	F9

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Ponta da broca CoroDrill® 870



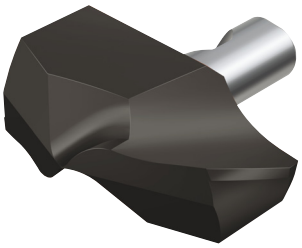


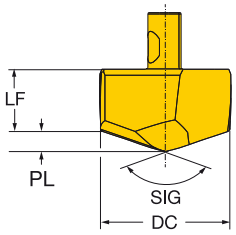
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
22.00	22	870-2200-22-PM		★		☆		☆	☆		☆	10.5	3.3	142°	H9
22.00		870-2200-22-MM			★					☆		10.5	3.3	142°	H9
22.00		870-2200-22-KM	☆				★					9.6	4.2	142°	H9
22.00		870-2200-22-GP		★		★		★	☆		☆	10.8	2.3	152°	F9
22.10		870-2210-22-PM		★		☆		☆	☆		☆	10.5	3.3	142°	H9
22.10		870-2210-22-MM			★					☆		10.5	3.3	142°	H9
22.10		870-2210-22-KM	☆				★					9.6	4.2	142°	H9
22.10		870-2210-22-GP		★		★		★	☆		☆	10.8	2.3	152°	F9
22.20		870-2220-22-PM		★		☆		☆	☆		☆	10.5	3.4	142°	H9
22.20		870-2220-22-PL		☆		★						9.3	4.5	142°	H9
22.20		870-2220-22-MM			★					☆		10.5	3.4	142°	H9
22.20		870-2220-22-KM	☆				★					9.6	4.2	142°	H9
22.20		870-2220-22-GP		★		★		★	☆		☆	10.8	2.3	152°	F9
22.23		870-2223-22-PM		★		☆		☆	☆		☆	10.5	3.4	142°	H9
22.23		870-2223-22-MM			★					☆		10.5	3.4	142°	H9
22.23		870-2223-22-KM	☆				★					9.6	4.2	142°	H9
22.23		870-2223-22-GP		★		★		★	☆		☆	10.8	2.3	152°	F9
22.30		870-2230-22-PM		★		☆		☆	☆		☆	10.4	3.4	142°	H9
22.30		870-2230-22-MM			★					☆		10.4	3.4	142°	H9
22.30		870-2230-22-KM	☆				★					9.6	4.2	142°	H9
22.30		870-2230-22-GP		★		★		★	☆		☆	10.8	2.3	152°	F9
22.40		870-2240-22-PM		★		☆		☆	☆		☆	10.4	3.4	142°	H9
22.40		870-2240-22-MM			★					☆		10.4	3.4	142°	H9
22.40		870-2240-22-KM	☆				★					9.6	4.2	142°	H9
22.40		870-2240-22-GP		★		★		★	☆		☆	10.8	2.3	152°	F9
22.50		870-2250-22-PM		★		☆		☆	☆		☆	10.4	3.4	142°	H9
22.50		870-2250-22-MM			★					☆		10.4	3.4	142°	H9
22.50		870-2250-22-KM	☆				★					9.5	4.3	142°	H9
22.50		870-2250-22-GP		★		★		★	☆		☆	10.8	2.4	152°	F9
22.60		870-2260-22-PM		★		☆		☆	☆		☆	10.4	3.4	142°	H9
22.60		870-2260-22-MM			★					☆		10.4	3.4	142°	H9
22.60		870-2260-22-KM	☆				★					9.5	4.3	142°	H9
22.60		870-2260-22-GP		★		★		★	☆		☆	10.7	2.4	152°	F9
22.70		870-2270-22-PM		★		☆		☆	☆		☆	10.4	3.4	142°	H9
22.70		870-2270-22-MM			★					☆		10.4	3.4	142°	H9
22.70		870-2270-22-KM	☆				★					9.5	4.3	142°	H9
22.70		870-2270-22-GP		★		★		★	☆		☆	10.7	2.4	152°	F9
22.80		870-2280-22-PM		★		☆		☆	☆		☆	10.4	3.5	142°	H9
22.80		870-2280-22-MM			★					☆		10.4	3.5	142°	H9
22.80		870-2280-22-KM	☆				★					9.5	4.3	142°	H9
22.80		870-2280-22-GP		★		★		★	☆		☆	10.7	2.4	152°	F9
22.90		870-2290-22-PM		★		☆		☆	☆		☆	10.3	3.5	142°	H9
22.90		870-2290-22-MM			★					☆		10.3	3.5	142°	H9
22.90		870-2290-22-KM	☆				★					9.5	4.3	142°	H9
22.90		870-2290-22-GP		★		★		★	☆		☆	10.7	2.4	152°	F9

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Ponta da broca CoroDrill® 870

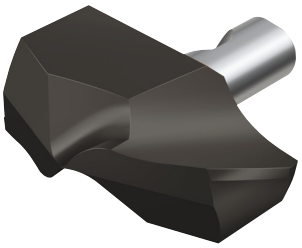


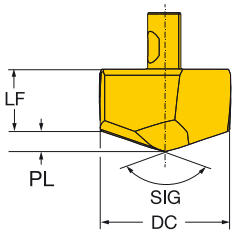


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
23.00	23	870-2300-23-PM		★		☆		☆	☆		☆	11.0	3.5	142°	H9
23.00		870-2300-23-MM			★					☆		11.0	3.5	142°	H9
23.00		870-2300-23-KM	☆				★					10.1	4.4	142°	H9
23.00		870-2300-23-GP		★		★		★	☆		☆	11.4	2.4	152°	F9
23.10		870-2310-23-PM		★		☆		☆	☆		☆	11.0	3.5	142°	H9
23.10		870-2310-23-MM			★					☆		11.0	3.5	142°	H9
23.10		870-2310-23-KM	☆				★					10.1	4.4	142°	H9
23.10		870-2310-23-GP		★		★		★	☆		☆	11.4	2.4	152°	F9
23.20		870-2320-23-PM		★		☆		☆	☆		☆	11.0	3.5	142°	H9
23.20		870-2320-23-MM			★					☆		11.0	3.5	142°	H9
23.20		870-2320-23-KM	☆				★					10.1	4.4	142°	H9
23.20		870-2320-23-GP		★		★		★	☆		☆	11.4	2.4	152°	F9
23.30		870-2330-23-PM		★		☆		☆	☆		☆	11.0	3.5	142°	H9
23.30		870-2330-23-MM			★					☆		11.0	3.5	142°	H9
23.30		870-2330-23-KM	☆				★					10.1	4.5	142°	H9
23.30		870-2330-23-GP		★		★		★	☆		☆	11.4	2.4	152°	F9
23.40		870-2340-23-PM		★		☆		☆	☆		☆	11.0	3.5	142°	H9
23.40		870-2340-23-MM			★					☆		11.0	3.5	142°	H9
23.40		870-2340-23-KM	☆				★					10.0	4.5	142°	H9
23.40		870-2340-23-GP		★		★		★	☆		☆	11.4	2.4	152°	F9
23.50		870-2350-23-PM		★		☆		☆	☆		☆	11.0	3.5	142°	H9
23.50		870-2350-23-MM			★					☆		11.0	3.5	142°	H9
23.50		870-2350-23-KM	☆				★					10.0	4.5	142°	H9
23.50		870-2350-23-GP		★		★		★	☆		☆	11.4	2.4	152°	F9
23.60		870-2360-23-PM		★		☆		☆	☆		☆	10.9	3.6	142°	H9
23.60		870-2360-23-MM			★					☆		10.9	3.6	142°	H9
23.60		870-2360-23-KM	☆				★					10.0	4.5	142°	H9
23.60		870-2360-23-GP		★		★		★	☆		☆	11.4	2.4	152°	F9
23.70		870-2370-23-PM		★		☆		☆	☆		☆	10.9	3.6	142°	H9
23.70		870-2370-23-MM			★					☆		10.9	3.6	142°	H9
23.70		870-2370-23-KM	☆				★					10.0	4.5	142°	H9
23.70		870-2370-23-GP		★		★		★	☆		☆	11.4	2.5	152°	F9
23.80		870-2380-23-PM		★		☆		☆	☆		☆	10.9	3.6	142°	H9
23.80		870-2380-23-PL		☆		★						9.7	4.8	142°	H9
23.80		870-2380-23-MM			★					☆		10.9	3.6	142°	H9
23.80		870-2380-23-KM	☆				★					10.0	4.5	142°	H9
23.80		870-2380-23-GP		★		★		★	☆		☆	11.3	2.5	152°	F9
23.81		870-2381-23-PM		★		☆		☆	☆		☆	10.9	3.6	142°	H9
23.81		870-2381-23-MM			★					☆		10.9	3.6	142°	H9
23.81		870-2381-23-KM	☆				★					10.0	4.5	142°	H9
23.81		870-2381-23-GP		★		★		★	☆		☆	11.3	2.5	152°	F9
23.90		870-2390-23-PM		★		☆		☆	☆		☆	10.9	3.6	142°	H9
23.90		870-2390-23-MM			★					☆		10.9	3.6	142°	H9
23.90		870-2390-23-KM	☆				★					10.0	4.6	142°	H9
23.90		870-2390-23-GP		★		★		★	☆		☆	11.3	2.5	152°	F9

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Ponta da broca CoroDrill® 870



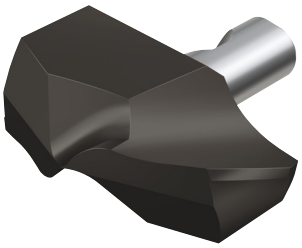


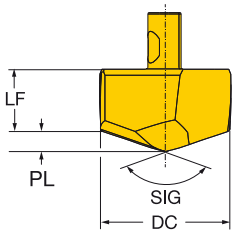
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
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24.00	24	870-2400-24-PM		★		☆		☆	☆		☆	11.4	3.6	142°	H9
24.00		870-2400-24-MM			★					☆		11.4	3.6	142°	H9
24.00		870-2400-24-KM	☆				★					10.4	4.6	142°	H9
24.00		870-2400-24-GP		★		★		★	☆		☆	11.8	2.5	152°	F9
24.10		870-2410-24-PM		★		☆		☆	☆		☆	11.4	3.6	142°	H9
24.10		870-2410-24-MM			★					☆		11.4	3.6	142°	H9
24.10		870-2410-24-KM	☆				★					10.4	4.7	142°	H9
24.10		870-2410-24-GP		★		★		★	☆		☆	11.8	2.5	152°	F9
24.20		870-2420-24-PM		★		☆		☆	☆		☆	11.4	3.7	142°	H9
24.20		870-2420-24-MM			★					☆		11.4	3.7	142°	H9
24.20		870-2420-24-KM	☆				★					10.3	4.7	142°	H9
24.20		870-2420-24-GP		★		★		★	☆		☆	11.8	2.5	152°	F9
24.30		870-2430-24-PM		★		☆		☆	☆		☆	11.3	3.7	142°	H9
24.30		870-2430-24-MM			★					☆		11.3	3.7	142°	H9
24.30		870-2430-24-KM	☆				★					10.3	4.7	142°	H9
24.30		870-2430-24-GP		★		★		★	☆		☆	11.8	2.5	152°	F9
24.40		870-2440-24-PM		★		☆		☆	☆		☆	11.3	3.7	142°	H9
24.40		870-2440-24-MM			★					☆		11.3	3.7	142°	H9
24.40		870-2440-24-KM	☆				★					10.3	4.7	142°	H9
24.40		870-2440-24-GP		★		★		★	☆		☆	11.8	2.6	152°	F9
24.50		870-2450-24-PM		★		☆		☆	☆		☆	11.3	3.7	142°	H9
24.50		870-2450-24-MM			★					☆		11.3	3.7	142°	H9
24.50		870-2450-24-KM	☆				★					10.3	4.7	142°	H9
24.50		870-2450-24-GP		★		★		★	☆		☆	11.7	2.6	152°	F9
24.60		870-2460-24-PM		★		☆		☆	☆		☆	11.3	3.7	142°	H9
24.60		870-2460-24-MM			★					☆		11.3	3.7	142°	H9
24.60		870-2460-24-KM	☆				★					10.3	4.7	142°	H9
24.60		870-2460-24-GP		★		★		★	☆		☆	11.7	2.6	152°	F9
24.70		870-2470-24-PM		★		☆		☆	☆		☆	11.3	3.7	142°	H9
24.70		870-2470-24-MM			★					☆		11.3	3.7	142°	H9
24.70		870-2470-24-KM	☆				★					10.3	4.8	142°	H9
24.70		870-2470-24-GP		★		★		★	☆		☆	11.7	2.6	152°	F9
24.80		870-2480-24-PM		★		☆		☆	☆		☆	11.3	3.8	142°	H9
24.80		870-2480-24-MM			★					☆		11.3	3.8	142°	H9
24.80		870-2480-24-KM	☆				★					10.2	4.8	142°	H9
24.80		870-2480-24-GP		★		★		★	☆		☆	11.7	2.6	152°	F9
24.90		870-2490-24-PM		★		☆		☆	☆		☆	11.2	3.8	142°	H9
24.90		870-2490-24-MM			★					☆		11.2	3.8	142°	H9
24.90		870-2490-24-KM	☆				★					10.2	4.8	142°	H9
24.90		870-2490-24-GP		★		★		★	☆		☆	11.7	2.6	152°	F9

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SANDVIK Coromant

Ponta da broca CoroDrill® 870

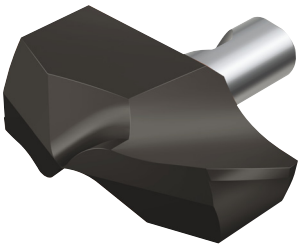


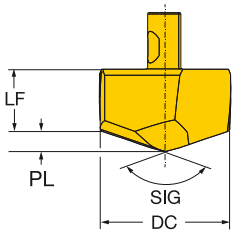


DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
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25.00	25	870-2500-25-PM		★		☆		☆	☆		☆	11.9	3.8	142°	H9
25.00		870-2500-25-MM			★					☆		11.9	3.8	142°	H9
25.00		870-2500-25-KM	☆				★					10.9	4.8	142°	H9
25.00		870-2500-25-GP		★		★		★	☆		☆	12.3	2.6	152°	F9
25.10		870-2510-25-PM		★		☆		☆	☆		☆	11.9	3.8	142°	H9
25.10		870-2510-25-MM			★					☆		11.9	3.8	142°	H9
25.10		870-2510-25-KM	☆				★					10.9	4.8	142°	H9
25.10		870-2510-25-GP		★		★		★	☆		☆	12.3	2.7	152°	F9
25.20		870-2520-25-PM		★		☆		☆	☆		☆	11.9	3.8	142°	H9
25.20		870-2520-25-MM			★					☆		11.9	3.8	142°	H9
25.20		870-2520-25-KM	☆				★					10.9	4.8	142°	H9
25.20		870-2520-25-GP		★		★		★	☆		☆	12.2	2.7	152°	F9
25.30		870-2530-25-PM		★		☆		☆	☆		☆	11.9	3.8	142°	H9
25.30		870-2530-25-MM			★					☆		11.9	3.8	142°	H9
25.30		870-2530-25-KM	☆				★					10.9	4.8	142°	H9
25.30		870-2530-25-GP		★		★		★	☆		☆	12.2	2.7	152°	F9
25.40		870-2540-25-PM		★		☆		☆	☆		☆	11.9	3.8	142°	H9
25.40		870-2540-25-MM			★					☆		11.9	3.8	142°	H9
25.40		870-2540-25-KM	☆				★					10.9	4.8	142°	H9
25.40		870-2540-25-GP		★		★		★	☆		☆	12.2	2.7	152°	F9
25.50		870-2550-25-PM		★		☆		☆	☆		☆	11.9	3.8	142°	H9
25.50		870-2550-25-MM			★					☆		11.9	3.8	142°	H9
25.50		870-2550-25-KM	☆				★					10.9	4.9	142°	H9
25.50		870-2550-25-GP		★		★		★	☆		☆	12.2	2.7	152°	F9
25.60		870-2560-25-PM		★		☆		☆	☆		☆	11.8	3.9	142°	H9
25.60		870-2560-25-MM			★					☆		11.8	3.9	142°	H9
25.60		870-2560-25-KM	☆				★					10.8	4.9	142°	H9
25.60		870-2560-25-GP		★		★		★	☆		☆	12.2	2.7	152°	F9
25.65		870-2565-25-PL		☆		★						10.5	5.2	142°	H9
25.70		870-2570-25-PM		★		☆		☆	☆		☆	11.8	3.9	142°	H9
25.70		870-2570-25-MM			★					☆		11.8	3.9	142°	H9
25.70		870-2570-25-KM	☆				★					10.8	4.9	142°	H9
25.70		870-2570-25-GP		★		★		★	☆		☆	12.2	2.7	152°	F9
25.80		870-2580-25-PM		★		☆		☆	☆		☆	11.8	3.9	142°	H9
25.80		870-2580-25-MM			★					☆		11.8	3.9	142°	H9
25.80		870-2580-25-KM	☆				★					10.8	4.9	142°	H9
25.80		870-2580-25-GP		★		★		★	☆		☆	12.1	2.8	152°	F9
25.90		870-2590-25-PM		★		☆		☆	☆		☆	11.8	3.9	142°	H9
25.90		870-2590-25-MM			★					☆		11.8	3.9	142°	H9
25.90		870-2590-25-KM	☆				★					10.8	4.9	142°	H9
25.90		870-2590-25-GP		★		★		★	☆		☆	12.1	2.8	152°	F9
26.00	26	870-2600-26-PM		★		☆		☆	☆		☆	12.5	3.9	142°	H9
26.00		870-2600-26-MM			★					☆		12.5	3.9	142°	H9
26.00		870-2600-26-KM	☆				★					11.4	5.0	142°	H9
26.00		870-2600-26-GP		★		★		★	☆		☆	12.9	2.7	152°	F9
26.50		870-2650-26-PM		★		☆		☆	☆		☆	12.4	4.0	142°	H9
26.50		870-2650-26-MM			★					☆		12.4	4.0	142°	H9
26.50		870-2650-26-KM	☆				★					11.3	5.1	142°	H9
26.50		870-2650-26-GP		★		★		★	☆		☆	12.8	2.8	152°	F9
26.65		870-2665-26-PM		★		☆		☆	☆		☆	12.4	4.0	142°	H9
26.65		870-2665-26-MM			★					☆		12.4	4.0	142°	H9
26.65		870-2665-26-KM	☆				★					11.3	5.1	142°	H9
26.65		870-2665-26-GP		★		★		★	☆		☆	12.8	2.8	152°	F9

J6 J50 J5 N23 N6

Ponta da broca CoroDrill® 870





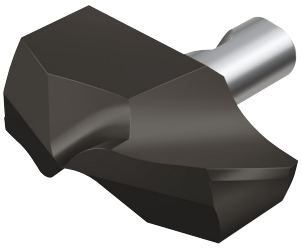
DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
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27.00	27	870-2700-27-PM		★		☆		☆	☆		☆	13.0	4.1	142°	H9
27.00		870-2700-27-MM			★					☆		13.0	4.1	142°	H9
27.00		870-2700-27-KM	☆				★					11.8	5.2	142°	H9
27.00		870-2700-27-GP		★		★		★	☆		☆	13.3	2.8	152°	F9
27.50		870-2750-27-PM		★		☆		☆	☆		☆	12.9	4.1	142°	H9
27.50		870-2750-27-MM			★					☆		12.9	4.1	142°	H9
27.50		870-2750-27-KM	☆				★					11.7	5.3	142°	H9
27.50		870-2750-27-GP		★		★		★	☆		☆	13.2	2.9	152°	F9
28.00	28	870-2800-28-PM		★		☆		☆	☆		☆	13.4	4.2	142°	H9
28.00		870-2800-28-MM			★					☆		13.4	4.2	142°	H9
28.00		870-2800-28-KM	☆				★					12.2	5.4	142°	H9
28.00		870-2800-28-GP		★		★		★	☆		☆	13.8	2.9	152°	F9
28.50		870-2850-28-PM		★		☆		☆	☆		☆	13.3	4.3	142°	H9
28.50		870-2850-28-MM			★					☆		13.3	4.3	142°	H9
28.50		870-2850-28-KM	☆				★					12.1	5.5	142°	H9
28.50		870-2850-28-GP		★		★		★	☆		☆	13.7	3.0	152°	F9
28.58		870-2858-28-PM		★		☆		☆	☆		☆	13.3	4.3	142°	H9
28.58		870-2858-28-MM			★					☆		13.3	4.3	142°	H9
28.58		870-2858-28-KM	☆				★					12.1	5.5	142°	H9
28.58		870-2858-28-GP		★		★		★	☆		☆	13.7	3.0	152°	F9
29.00	29	870-2900-29-PM		★		☆		☆	☆		☆	13.9	4.4	142°	H9
29.00		870-2900-29-MM			★					☆		13.9	4.4	142°	H9
29.00		870-2900-29-KM	☆				★					12.7	5.6	142°	H9
29.00		870-2900-29-GP		★		★		★	☆		☆	14.3	3.0	152°	F9
29.50		870-2950-29-PM		★		☆		☆	☆		☆	13.9	4.5	142°	H9
29.50		870-2950-29-MM			★					☆		13.9	4.5	142°	H9
29.50		870-2950-29-KM	☆				★					12.6	5.7	142°	H9
29.50		870-2950-29-GP		★		★		★	☆		☆	14.2	3.1	152°	F9
29.65		870-2965-29-PM		★		☆		☆	☆		☆	13.8	4.5	142°	H9
29.65		870-2965-29-MM			★					☆		13.8	4.5	142°	H9
29.65		870-2965-29-KM	☆				★					12.6	5.7	142°	H9
29.65		870-2965-29-GP		★		★		★	☆		☆	14.2	3.1	152°	F9
30.00	30	870-3000-30-PM		★		☆		☆	☆		☆	14.4	4.5	142°	H9
30.00		870-3000-30-MM			★					☆		14.4	4.5	142°	H9
30.00		870-3000-30-KM	☆				★					13.1	5.8	142°	H9
30.00		870-3000-30-GP		★		★		★	☆		☆	14.7	3.2	152°	F9
30.50		870-3050-30-PM		★		☆		☆	☆		☆	14.3	4.6	142°	H9
30.50		870-3050-30-MM			★					☆		14.3	4.6	142°	H9
30.50		870-3050-30-KM	☆				★					13.0	5.9	142°	H9
30.50		870-3050-30-GP		★		★		★	☆		☆	14.6	3.2	152°	F9

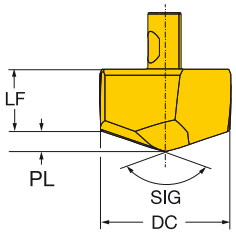
J6 J50 J5 N23 N6

SANDVIK Coromant

POR

Ponta da broca CoroDrill® 870





DC		Código para pedido	P		M		K		N	S		Dimensões, mm			
			3334	4334	2334	4334	3334	4334	4334	2334	4334	LF	PL	SIG	TCHA
31.00	31	870-3100-31-PM		★		☆		☆	☆		☆	14.8	4.8	142°	H9
31.00		870-3100-31-MM			★					☆		14.8	4.8	142°	H9
31.00		870-3100-31-KM	☆				★					13.4	6.1	142°	H9
31.00		870-3100-31-GP		★		★		★	☆		☆	15.1	3.3	152°	F9
31.50		870-3150-31-PM		★		☆		☆	☆		☆	14.7	4.8	142°	H9
31.50		870-3150-31-MM			★					☆		14.7	4.8	142°	H9
31.50		870-3150-31-KM	☆				★					13.3	6.2	142°	H9
31.50		870-3150-31-GP		★		★		★	☆		☆	15.0	3.4	152°	F9
31.75		870-3175-31-PM		★		☆		☆	☆		☆	14.6	4.9	142°	H9
31.75		870-3175-31-MM			★					☆		14.6	4.9	142°	H9
31.75		870-3175-31-KM	☆				★					13.3	6.2	142°	H9
31.75		870-3175-31-GP		★		★		★	☆		☆	15.0	3.4	152°	F9
32.00		870-3200-31-PM		★		☆		☆	☆		☆	14.6	4.9	142°	H9
32.00		870-3200-31-MM			★					☆		14.6	4.9	142°	H9
32.00		870-3200-31-KM	☆				★					13.2	6.3	142°	H9
32.00		870-3200-31-GP		★		★		★	☆		☆	15.0	3.4	152°	F9
32.15		870-3215-31-PM		★		☆		☆	☆		☆	14.6	5.0	142°	H9
32.15		870-3215-31-MM			★					☆		14.6	5.0	142°	H9
32.15		870-3215-31-KM	☆				★					13.2	6.3	142°	H9
32.15		870-3215-31-GP		★		★		★	☆		☆	14.9	3.5	152°	F9
32.50		870-3250-31-PM		★		☆		☆	☆		☆	14.5	5.0	142°	H9
32.50		870-3250-31-MM			★					☆		14.5	5.0	142°	H9
32.50		870-3250-31-KM	☆				★					13.1	6.4	142°	H9
32.50		870-3250-31-GP		★		★		★	☆		☆	14.9	3.5	152°	F9
33.00		870-3300-31-PM		★		☆		☆	☆		☆	14.4	5.1	142°	H9
33.00		870-3300-31-MM			★					☆		14.4	5.1	142°	H9
33.00		870-3300-31-KM	☆				★					13.0	6.5	142°	H9
33.00		870-3300-31-GP		★		★		★	☆		☆	14.8	3.6	152°	F9

J6 J50 J5 N23 N6

CoroDrill® DS20

Brocas com pastilhas intercambiáveis

Área de aplicação ISO

P M K N S H



Características e benefícios

- Processe de corte seguro e confiável com alta produtividade
- Broca versátil com boa formação de cavacos em uma ampla gama de dados de corte
- Escoamento e controle de cavacos otimizados
- Corte leve e forças de corte extremamente baixas
- Somente brocas com pastilhas intercambiáveis que podem usinar furos até 7 x DC

Interface de furação modular

Os adaptadores MDI estão disponíveis em Coromant Capto® e HSK e oferecem alta precisão, excelentes capacidades de centralização e pode reduzir o estoque de ferramentas. Veja página L2.

www.sandvik.coromant.com/cordrillds20

Corpos da broca

- Haste cilíndrica com plano conforme ISO 9766
- MDI (Modular Drilling Interface - interface de furação modular)

Pastilhas

- Pastilhas com geometrias otimizadas para todos os materiais

		Menor tolerância atingível (TCHAL)				Maior tolerância atingível (TCHAU)			
D_c min mm	D_c max mm	4xD	5xD	6xD	7xD	4xD	5xD	6xD	7xD
15.00	18.00	0	0	-0.1	-0.1	0.27	0.27	0.4	0.4
18.01	30.00	0	0	-0.1	-0.1	0.33	0.33	0.4	0.4
30.01	40.00	0	0	-0.1	-0.1	0.39	0.39	0.4	0.4

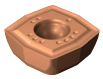
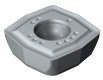
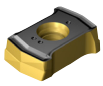
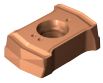
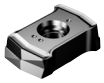
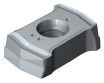
J28 J33 N6

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Pastilha - Visão geral

Pastilha central			Informações sobre geometrias
L5		P M N S H	- Materiais com cavacos longos - Aços endurecidos - Avanço baixo a médio - Corte leve
M7		P K	- Materiais de cavacos curtos - Avanço baixo a alto - Aresta robusta reforçada

Pastilha periférica			Informações sobre geometrias
M7W		P K H	- Primeira escolha para materiais com cavacos curtos - Avanço baixo a alto - Aresta robusta reforçada
L5W		P M N S	- Materiais com cavacos longos - Avanço baixo a médio - Corte leve
H5W		P M	- Complementar para materiais com cavacos longos - Avanço baixo a médio - Fase T negativa - Altas forças de cortes
S5W		M N S	- Corte vivo e extremamente leve - Baixo avanço?
L6W		P M K N S H	- Geometria de uso geral para produção mista - Primeira escolha em Inconel e aço endurecido - Avanço baixo a médio - Corte leve

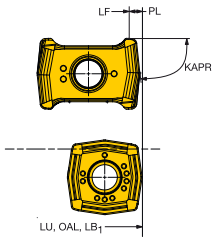
Pastilha central		Informações sobre a classe
	P K S H	**GC1344** - Cobertura PVD com tecnologia Zertivo® - Excelente resistência ao desgaste e tenacidade
	M S	**GC1144** - Classe com cobertura PVD para todos os tipos de materiais ISO M e titânio
	N S	**H13A** - Melhor classe universal, tenaz e sem cobertura para velocidades de corte baixas a moderadas - Classe complementar para ISO S
Pastilha periférica		**Informações sobre a classe**
	P M K H	**GC4334** - Condições médias a boas - A cobertura CVD com tecnologia Inveio® proporciona um alto nível de resistência ao desgaste
	M S	**GC2044** - Cobertura de óxido PVD para excelente resistência ao desgaste
	P M K N S H	**GC4344** - Cobertura PVD com tecnologia Zertivo® - Operações desafiadoras e difíceis - Oferece boas propriedades da aresta e vida útil da ferramenta confiável
	P K	**GC4324** - Cobertura MT-CVD com tecnologia Inveio® - Escolha produtiva em condições estáveis
	N S	**H13A** - Melhor classe universal, tenaz e sem cobertura para velocidades de corte baixas a moderadas - Classe complementar para ISO S

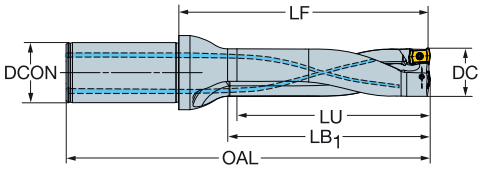
Broca com pastilha intercambiável CoroDrill®

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna







DC			LU	CZC$_{MS}$	ADJLX	TCHAL	TCHAU	Código para pedido	Dimensões, mm DCON$_{MS}$	LF	OAL	LB$_1$	PL	KAPR	BAR	KG	RPMX
15.00	01C	01P	60.00	20	1.00	0.00	0.27	DS20-D1500L20-04	20.00	80.69	131.00	63.00	0.46	81°	10	0.190	24000
			75.00	20	1.00	0.00	0.27	DS20-D1500L20-05	20.00	95.69	146.00	78.00	0.46	81°	10	0.200	15000
			90.00	20	1.00	-0.10	0.40	DS20-D1500L20-06	20.00	110.69	161.00	93.00	0.46	81°	10	0.210	11000
			105.00	20	1.00	-0.10	0.40	DS20-D1500L20-07	20.00	125.69	176.00	108.00	0.46	81°	10	0.219	8000
16.00	01C	01P	64.00	20	0.75	0.00	0.27	DS20-D1600L20-04	20.00	84.69	135.00	67.00	0.46	81°	10	0.220	22000
			80.00	20	0.75	0.00	0.27	DS20-D1600L20-05	20.00	100.69	151.00	83.00	0.46	81°	10	0.212	14000
			96.00	20	0.75	-0.10	0.40	DS20-D1600L20-06	20.00	116.69	167.00	99.00	0.46	81°	10	0.224	10000
			112.00	20	0.75	-0.10	0.40	DS20-D1600L20-07	20.00	132.69	183.00	115.00	0.46	81°	10	0.236	7000
17.00	01C	01P	68.00	20	0.50	0.00	0.27	DS20-D1700L20-04	20.00	88.69	139.00	71.00	0.46	81°	10	0.211	21000
			85.00	20	0.50	0.00	0.27	DS20-D1700L20-05	20.00	105.69	156.00	88.00	0.46	81°	10	0.226	13000
			102.00	20	0.50	-0.10	0.40	DS20-D1700L20-06	20.00	122.69	173.00	105.00	0.46	81°	10	0.240	9000
			119.00	20	0.50	-0.10	0.40	DS20-D1700L20-07	20.00	139.69	190.00	122.00	0.46	81°	10	0.255	7000
18.00	01C	01P	72.00	25	0.25	0.00	0.27	DS20-D1800L25-04	25.00	96.69	153.00	75.00	0.46	81°	10	0.348	20000
			90.00	25	0.25	0.00	0.27	DS20-D1800L25-05	25.00	114.69	171.00	93.00	0.46	81°	10	0.366	13000
			108.00	25	0.25	-0.10	0.40	DS20-D1800L25-06	25.00	132.69	189.00	111.00	0.46	81°	10	0.383	9000
			126.00	25	0.25	-0.10	0.40	DS20-D1800L25-07	25.00	150.69	207.00	129.00	0.46	81°	10	0.400	6000
19.00	02C	02P	76.00	25	1.06	0.00	0.33	DS20-D1900L25-04	25.00	100.62	157.00	79.00	0.55	81°	10	0.348	19000
			95.00	25	1.06	0.00	0.33	DS20-D1900L25-05	25.00	119.62	176.00	98.00	0.55	81°	10	0.367	12000
			114.00	25	1.06	-0.10	0.40	DS20-D1900L25-06	25.00	138.62	195.00	117.00	0.55	81°	10	0.387	8000
			133.00	25	1.06	-0.10	0.40	DS20-D1900L25-07	25.00	157.62	214.00	136.00	0.55	81°	10	0.405	6000
20.00	02C	02P	80.00	25	0.82	0.00	0.33	DS20-D2000L25-04	25.00	104.62	161.00	83.00	0.55	81°	10	0.364	18000
			100.00	25	0.82	0.00	0.33	DS20-D2000L25-05	25.00	124.62	181.00	103.00	0.55	81°	10	0.386	11000
			120.00	25	0.82	-0.10	0.40	DS20-D2000L25-06	25.00	144.62	201.00	123.00	0.55	81°	10	0.409	8000
			140.00	25	0.82	-0.10	0.40	DS20-D2000L25-07	25.00	164.62	221.00	143.00	0.55	81°	10	0.431	6000
21.00	02C	02P	84.00	25	0.58	0.00	0.33	DS20-D2100L25-04	25.00	108.62	165.00	87.00	0.55	81°	10	0.381	17000
			105.00	25	0.58	0.00	0.33	DS20-D2100L25-05	25.00	129.62	186.00	108.00	0.55	81°	10	0.407	11000
			126.00	25	0.58	-0.10	0.40	DS20-D2100L25-06	25.00	150.62	207.00	129.00	0.55	81°	10	0.434	8000
			147.00	25	0.58	-0.10	0.40	DS20-D2100L25-07	25.00	171.62	228.00	150.00	0.55	81°	10	0.460	5000
22.00	02C	02P	88.00	25	0.34	0.00	0.33	DS20-D2200L25-04	25.00	112.62	169.00	91.00	0.55	81°	10	0.401	16000
			110.00	25	0.34	0.00	0.33	DS20-D2200L25-05	25.00	134.62	191.00	113.00	0.55	81°	10	0.431	10000
			132.00	25	0.34	-0.10	0.40	DS20-D2200L25-06	25.00	156.62	213.00	135.00	0.55	81°	10	0.463	7000
			154.00	25	0.34	-0.10	0.40	DS20-D2200L25-07	25.00	178.62	235.00	157.00	0.55	81°	10	0.494	5000
23.00	03C	03P	92.00	25	1.30	0.00	0.33	DS20-D2300L25-04	25.00	117.53	174.00	96.00	0.66	81°	10	0.420	15000
			115.00	25	1.30	0.00	0.33	DS20-D2300L25-05	25.00	140.53	197.00	119.00	0.66	81°	10	0.452	10000
			138.00	25	1.30	-0.10	0.40	DS20-D2300L25-06	25.00	163.53	220.00	142.00	0.66	81°	10	0.488	7000
			161.00	25	1.30	-0.10	0.40	DS20-D2300L25-07	25.00	186.53	243.00	165.00	0.66	81°	10	0.524	5000
24.00	03C	03P	96.00	25	1.10	0.00	0.33	DS20-D2400L25-04	25.00	121.53	178.00	100.00	0.66	81°	10	0.439	15000
			120.00	25	1.10	0.00	0.33	DS20-D2400L25-05	25.00	145.53	202.00	124.00	0.66	81°	10	0.550	9000
			144.00	25	1.10	-0.10	0.40	DS20-D2400L25-06	25.00	169.53	226.00	148.00	0.66	81°	10	0.520	6000
			168.00	25	1.10	-0.10	0.40	DS20-D2400L25-07	25.00	193.53	250.00	172.00	0.66	81°	10	0.561	5000
25.00	03C	03P	100.00	25	0.90	0.00	0.33	DS20-D2500L25-04	25.00	125.53	182.00	104.00	0.66	81°	10	0.463	14000
			125.00	25	0.90	0.00	0.33	DS20-D2500L25-05	25.00	150.53	207.00	129.00	0.66	81°	10	0.510	9000
			150.00	25	0.90	-0.10	0.40	DS20-D2500L25-06	25.00	175.53	232.00	154.00	0.66	81°	10	0.557	6000
			175.00	25	0.90	-0.10	0.40	DS20-D2500L25-07	25.00	200.53	257.00	179.00	0.66	81°	10	0.603	4000

	Componentes
DC	Parafuso da pastilha
15.00-18.00	5513 020-27
18.01-22.00	5513 020-88
22.01-27.00	5513 020-58
27.01-33.00	5513 020-57
33.01-40.00	416.1-833
40.01-65.00	416.1-834

Para a lista completa de componentes, acesse www.sandvik.coromant.com

J33 N23 N15

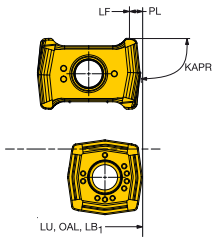
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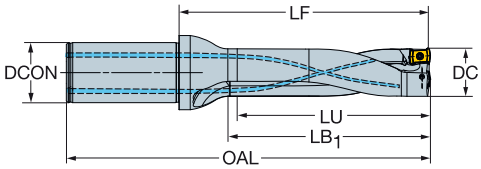
Broca com pastilha intercambiável CoroDrill®

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna







DC			LU	CZC$_{MS}$	ADJLX	TCHAL	TCHAU	Código para pedido	Dimensões, mm DCON$_{MS}$	LF	OAL	LB$_1$	PL	KAPR	BAR	KG	RPMX
26.00	03C	03P	104.00	32	0.70	0.00	0.33	DS20-D2600L32-04	32.00	133.53	194.00	108.00	0.66	81°	10	0.600	14000
			130.00	32	0.70	0.00	0.33	DS20-D2600L32-05	32.00	159.53	220.00	134.00	0.66	81°	10	0.758	9000
			156.00	32	0.70	-0.10	0.40	DS20-D2600L32-06	32.00	185.53	246.00	160.00	0.66	81°	10	0.812	6000
			182.00	32	0.70	-0.10	0.40	DS20-D2600L32-07	32.00	211.53	272.00	186.00	0.66	81°	10	0.865	4000
27.00	03C	03P	108.00	32	0.50	0.00	0.33	DS20-D2700L32-04	32.00	136.53	197.00	112.00	0.66	81°	10	0.734	13000
			135.00	32	0.50	0.00	0.33	DS20-D2700L32-05	32.00	163.53	224.00	139.00	0.66	81°	10	0.794	8000
			162.00	32	0.50	-0.10	0.40	DS20-D2700L32-06	32.00	190.53	251.00	166.00	0.66	81°	10	0.854	6000
			189.00	32	0.50	-0.10	0.40	DS20-D2700L32-07	32.00	217.53	278.00	193.00	0.66	81°	10	0.912	4000
28.00	04C	04P	112.00	32	2.12	0.00	0.33	DS20-D2800L32-04	32.00	140.16	201.00	116.00	0.83	81°	10	0.743	13000
			140.00	32	2.12	0.00	0.33	DS20-D2800L32-05	32.00	168.16	229.00	144.00	0.83	81°	10	0.809	8000
			168.00	32	2.12	-0.10	0.40	DS20-D2800L32-06	32.00	196.16	257.00	172.00	0.83	81°	10	0.874	6000
			196.00	32	2.12	-0.10	0.40	DS20-D2800L32-07	32.00	224.16	285.00	200.00	0.83	81°	10	0.939	4000
29.00	04C	04P	116.00	32	1.84	0.00	0.33	DS20-D2900L32-04	32.00	144.16	205.00	120.00	0.83	81°	10	0.773	12000
			145.00	32	1.84	0.00	0.33	DS20-D2900L32-05	32.00	173.16	234.00	149.00	0.83	81°	10	0.846	8000
			174.00	32	1.84	-0.10	0.40	DS20-D2900L32-06	32.00	202.16	263.00	178.00	0.83	81°	10	0.918	5000
			203.00	32	1.84	-0.10	0.40	DS20-D2900L32-07	32.00	231.16	292.00	207.00	0.83	81°	10	0.991	4000
30.00	04C	04P	120.00	32	1.56	0.00	0.33	DS20-D3000L32-04	32.00	148.16	209.00	124.00	0.83	81°	10	0.805	12000
			150.00	32	1.56	0.00	0.33	DS20-D3000L32-05	32.00	178.16	239.00	154.00	0.83	81°	10	0.885	8000
			180.00	32	1.56	-0.10	0.40	DS20-D3000L32-06	32.00	208.16	269.00	184.00	0.83	81°	10	0.966	5000
			210.00	32	1.56	-0.10	0.40	DS20-D3000L32-07	32.00	238.16	299.00	214.00	0.83	81°	10	1.046	4000
31.00	04C	04P	124.00	40	1.28	0.00	0.35	DS20-D3100L40-04	40.00	158.16	229.00	128.00	0.83	81°	10	1.250	12000
			155.00	40	1.28	0.00	0.35	DS20-D3100L40-05	40.00	189.16	260.00	159.00	0.83	81°	10	1.339	7000
			186.00	40	1.28	-0.10	0.40	DS20-D3100L40-06	40.00	220.16	291.00	190.00	0.83	81°	10	1.428	5000
			217.00	40	1.28	-0.10	0.40	DS20-D3100L40-07	40.00	251.16	322.00	221.00	0.83	81°	10	1.516	4000
32.00	04C	04P	128.00	40	1.00	0.00	0.35	DS20-D3200L40-04	40.00	162.16	233.00	132.00	0.83	81°	10	1.286	11000
			160.00	40	1.00	0.00	0.35	DS20-D3200L40-05	40.00	194.16	265.00	164.00	0.83	81°	10	1.384	7000
			192.00	40	1.00	-0.10	0.40	DS20-D3200L40-06	40.00	226.16	297.00	196.00	0.83	81°	10	1.481	5000
			224.00	40	1.00	-0.10	0.40	DS20-D3200L40-07	40.00	258.16	329.00	228.00	0.83	81°	10	1.579	3000
33.00	04C	04P	132.00	40	0.72	0.00	0.35	DS20-D3300L40-04	40.00	165.16	236.00	136.00	0.83	81°	10	1.313	11000
			165.00	40	0.72	0.00	0.35	DS20-D3300L40-05	40.00	198.16	269.00	169.00	0.83	81°	10	1.420	7000
			198.00	40	0.72	-0.10	0.40	DS20-D3300L40-06	40.00	231.16	302.00	202.00	0.83	81°	10	1.527	5000
			231.00	40	0.72	-0.10	0.40	DS20-D3300L40-07	40.00	264.16	335.00	235.00	0.83	81°	10	1.634	3000
34.00	05C	05P	136.00	40	2.16	0.00	0.35	DS20-D3400L40-04	40.00	169.28	240.00	140.00	1.00	81°	10	1.354	11000
			170.00	40	2.16	0.00	0.35	DS20-D3400L40-05	40.00	203.28	274.00	174.00	1.00	81°	10	1.471	7000
			204.00	40	2.16	-0.10	0.40	DS20-D3400L40-06	40.00	237.28	308.00	208.00	1.00	81°	10	1.531	4000
			238.00	40	2.16	-0.10	0.40	DS20-D3400L40-07	40.00	271.28	342.00	242.00	1.00	81°	10	1.705	3000
35.00	05C	05P	140.00	40	1.92	0.00	0.35	DS20-D3500L40-04	40.00	173.28	244.00	144.00	1.00	81°	10	1.398	10000
			175.00	40	1.92	0.00	0.35	DS20-D3500L40-05	40.00	208.28	279.00	179.00	1.00	81°	10	1.525	6000
			210.00	40	1.92	-0.10	0.40	DS20-D3500L40-06	40.00	243.28	314.00	214.00	1.00	81°	10	1.653	4000
			245.00	40	1.92	-0.10	0.40	DS20-D3500L40-07	40.00	278.28	349.00	249.00	1.00	81°	10	1.781	3000
36.00	05C	05P	144.00	40	1.68	0.00	0.35	DS20-D3600L40-04	40.00	177.28	248.00	148.00	1.00	81°	10	1.443	10000
			180.00	40	1.68	0.00	0.35	DS20-D3600L40-05	40.00	213.28	284.00	184.00	1.00	81°	10	1.582	6000
			216.00	40	1.68	-0.10	0.40	DS20-D3600L40-06	40.00	249.28	320.00	220.00	1.00	81°	10	1.721	4000
			252.00	40	1.68	-0.10	0.40	DS20-D3600L40-07	40.00	285.28	356.00	256.00	1.00	81°	10	1.860	3000

	Componentes
DC	Parafuso da pastilha
15.00-18.00	5513 020-27
18.01-22.00	5513 020-88
22.01-27.00	5513 020-58
27.01-33.00	5513 020-57
33.01-40.00	416.1-833
40.01-65.00	416.1-834

Para a lista completa de componentes, acesse www.sandvik.coromant.com

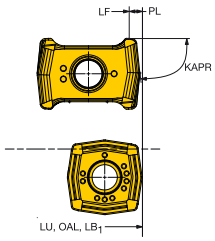
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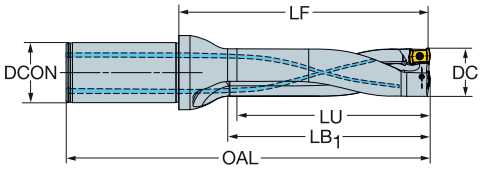
Broca com pastilha intercambiável CoroDrill®

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna







DC			LU	CZC$_{MS}$	ADJLX	TCHAL	TCHAU	Código para pedido	Dimensões, mm DCON$_{MS}$	LF	OAL	LB$_1$	PL	KAPR	BAR	KG	RPMX
37.00	05C	05P	148.00	40	1.44	0.00	0.35	**DS20-D3700L40-04**	40.00	181.28	252.00	152.00	1.00	81°	10	1.492	10000
			185.00	40	1.44	0.00	0.35	**DS20-D3700L40-05**	40.00	218.28	289.00	189.00	1.00	81°	10	1.643	6000
			222.00	40	1.44	-0.10	0.40	**DS20-D3700L40-06**	40.00	255.28	326.00	226.00	1.00	81°	10	1.794	4000
			259.00	40	1.44	-0.10	0.40	**DS20-D3700L40-07**	40.00	292.28	363.00	263.00	1.00	81°	10	1.945	3000
38.00	05C	05P	152.00	40	1.20	0.00	0.35	**DS20-D3800L40-04**	40.00	185.28	256.00	156.00	1.00	81°	10	1.543	9000
			190.00	40	1.20	0.00	0.35	**DS20-D3800L40-05**	40.00	223.28	294.00	194.00	1.00	81°	10	1.707	6000
			228.00	40	1.20	-0.10	0.40	**DS20-D3800L40-06**	40.00	261.28	332.00	232.00	1.00	81°	10	1.870	4000
			266.00	40	1.20	-0.10	0.40	**DS20-D3800L40-07**	40.00	299.28	370.00	270.00	1.00	81°	10	2.390	3000
39.00	05C	05P	156.00	40	0.96	0.00	0.35	**DS20-D3900L40-04**	40.00	189.28	260.00	160.00	1.00	81°	10	1.597	9000
			195.00	40	0.96	0.00	0.35	**DS20-D3900L40-05**	40.00	228.28	299.00	199.00	1.00	81°	10	1.774	6000
			234.00	40	0.96	-0.10	0.40	**DS20-D3900L40-06**	40.00	267.28	338.00	238.00	1.00	81°	10	1.950	4000
			273.00	40	0.96	-0.10	0.40	**DS20-D3900L40-07**	40.00	306.28	377.00	277.00	1.00	81°	10	2.127	3000
40.00	05C	05P	160.00	40	0.72	0.00	0.35	**DS20-D4000L40-04**	40.00	193.28	264.00	164.00	1.00	81°	10	1.654	9000
			200.00	40	0.72	0.00	0.35	**DS20-D4000L40-05**	40.00	233.28	304.00	204.00	1.00	81°	10	1.844	6000
			240.00	40	0.72	-0.10	0.40	**DS20-D4000L40-06**	40.00	273.28	344.00	244.00	1.00	81°	10	2.035	4000
			280.00	40	0.72	-0.10	0.40	**DS20-D4000L40-07**	40.00	313.28	384.00	284.00	1.00	81°	10	2.226	3000

	Componentes
DC	Parafuso da pastilha
15.00-18.00	5513 020-27
18.01-22.00	5513 020-88
22.01-27.00	5513 020-58
27.01-33.00	5513 020-57
33.01-40.00	416.1-833
40.01-65.00	416.1-834

Para a lista completa de componentes, acesse www.sandvik.coromant.com

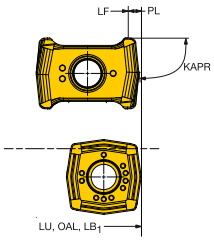
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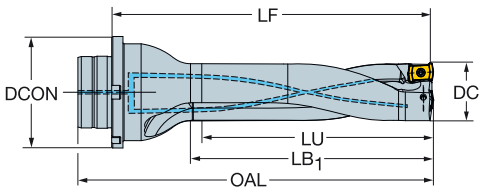
Broca com pastilha intercambiável CoroDrill®

Interface da broca modular

Refrigeração interna







								Dimensões, mm								
DC			LU	CZC_{MS}	ADJLX	TCHAL	TCHAU	**Código para pedido**	$DCON_{MS}$	LF	OAL	LB_1	PL	KAPR	BAR	KG	RPMX
15.00	01C	01P	60.00	MDI-20	1.00	0.00	0.27	**DS20-D1500DM20-04**	20.00	88.69	104.00	63.00	0.46	81°	10	0.191	24000
			105.00	MDI-20	1.00	-0.10	0.40	**DS20-D1500DM20-07**	20.00	133.69	149.00	108.00	0.46	81°	10	0.204	8000
16.00	01C	01P	64.00	MDI-20	0.75	0.00	0.27	**DS20-D1600DM20-04**	20.00	92.69	108.00	67.00	0.46	81°	10	0.199	22000
			112.00	MDI-20	0.75	-0.10	0.40	**DS20-D1600DM20-07**	20.00	140.69	156.00	115.00	0.46	81°	10	0.219	7000
17.00	01C	01P	68.00	MDI-20	0.50	0.00	0.27	**DS20-D1700DM20-04**	20.00	96.69	112.00	71.00	0.46	81°	10	0.211	21000
			119.00	MDI-20	0.50	-0.10	0.40	**DS20-D1700DM20-07**	20.00	147.69	163.00	122.00	0.46	81°	10	0.236	7000
18.00	01C	01P	72.00	MDI-25	0.25	0.00	0.27	**DS20-D1800DM25-04**	25.00	104.69	120.00	75.00	0.46	81°	10	0.317	20000
			126.00	MDI-25	0.25	-0.10	0.40	**DS20-D1800DM25-07**	25.00	158.69	174.00	129.00	0.46	81°	10	0.353	6000
19.00	02C	02P	76.00	MDI-25	1.06	0.00	0.33	**DS20-D1900DM25-04**	25.00	108.62	124.00	79.00	0.55	81°	10	0.313	19000
			133.00	MDI-25	1.06	-0.10	0.40	**DS20-D1900DM25-07**	25.00	165.62	181.00	136.00	0.55	81°	10	0.389	6000
20.00	02C	02P	80.00	MDI-25	0.82	0.00	0.33	**DS20-D2000DM25-04**	25.00	112.62	128.00	83.00	0.55	81°	10	0.340	18000
			140.00	MDI-25	0.82	-0.10	0.40	**DS20-D2000DM25-07**	25.00	172.62	188.00	143.00	0.55	81°	10	0.400	6000
21.00	02C	02P	84.00	MDI-25	0.58	0.00	0.33	**DS20-D2100DM25-04**	25.00	116.62	132.00	87.00	0.55	81°	10	0.342	17000
			147.00	MDI-25	0.58	-0.10	0.40	**DS20-D2100DM25-07**	25.00	179.62	195.00	150.00	0.55	81°	10	0.425	5000
22.00	02C	02P	88.00	MDI-25	0.34	0.00	0.33	**DS20-D2200DM25-04**	25.00	120.62	136.00	91.00	0.55	81°	10	0.381	16000
			154.00	MDI-25	0.34	-0.10	0.40	**DS20-D2200DM25-07**	25.00	186.62	202.00	157.00	0.55	81°	10	0.500	5000
23.00	03C	03P	92.00	MDI-25	1.30	0.00	0.33	**DS20-D2300DM25-04**	25.00	125.53	141.00	96.00	0.66	81°	10	0.379	15000
			161.00	MDI-25	1.30	-0.10	0.40	**DS20-D2300DM25-07**	25.00	194.53	210.00	165.00	0.66	81°	10	0.488	5000
24.00	03C	03P	96.00	MDI-25	1.10	0.00	0.33	**DS20-D2400DM25-04**	25.00	129.53	145.00	100.00	0.66	81°	10	0.400	15000
			168.00	MDI-25	1.10	-0.10	0.40	**DS20-D2400DM25-07**	25.00	201.53	217.00	172.00	0.66	81°	10	0.600	5000
25.00	03C	03P	100.00	MDI-25	0.90	0.00	0.33	**DS20-D2500DM25-04**	25.00	133.53	149.00	104.00	0.66	81°	10	0.446	14000
			175.00	MDI-25	0.90	-0.10	0.40	**DS20-D2500DM25-07**	25.00	208.53	224.00	179.00	0.66	81°	10	0.600	4000
26.00	03C	03P	104.00	MDI-32	0.70	0.00	0.33	**DS20-D2600DM32-04**	32.00	142.53	158.00	108.00	0.66	81°	10	0.700	14000
			182.00	MDI-32	0.70	-0.10	0.40	**DS20-D2600DM32-07**	32.00	220.53	236.00	186.00	0.66	81°	10	0.808	4000
27.00	03C	03P	108.00	MDI-32	0.50	0.00	0.33	**DS20-D2700DM32-04**	32.00	146.53	162.00	112.00	0.66	81°	10	0.700	13000
			189.00	MDI-32	0.50	-0.10	0.40	**DS20-D2700DM32-07**	32.00	227.53	243.00	193.00	0.66	81°	10	0.853	4000
28.00	04C	04P	112.00	MDI-32	2.12	0.00	0.33	**DS20-D2800DM32-04**	32.00	150.16	166.00	116.00	0.83	81°	10	0.705	13000
			196.00	MDI-32	2.12	-0.10	0.40	**DS20-D2800DM32-07**	32.00	234.16	250.00	200.00	0.83	81°	10	0.901	4000
29.00	04C	04P	116.00	MDI-32	1.84	0.00	0.33	**DS20-D2900DM32-04**	32.00	154.16	170.00	120.00	0.83	81°	10	0.734	12000
			203.00	MDI-32	1.84	-0.10	0.40	**DS20-D2900DM32-07**	32.00	241.16	257.00	207.00	0.83	81°	10	0.952	4000
30.00	04C	04P	120.00	MDI-32	1.56	0.00	0.33	**DS20-D3000DM32-04**	32.00	158.16	174.00	124.00	0.83	81°	10	0.766	12000
			210.00	MDI-32	1.56	-0.10	0.40	**DS20-D3000DM32-07**	32.00	248.16	264.00	214.00	0.83	81°	10	1.008	4000
31.00	04C	04P	124.00	MDI-32	1.28	0.00	0.35	**DS20-D3100DM32-04**	32.00	164.16	180.00	128.00	0.83	81°	10	0.818	12000
			217.00	MDI-32	1.28	-0.10	0.40	**DS20-D3100DM32-07**	32.00	256.16	272.00	221.00	0.83	81°	10	1.075	4000
32.00	04C	04P	128.00	MDI-40	1.00	0.00	0.35	**DS20-D3200DM40-04**	40.00	175.16	191.00	132.00	0.83	81°	10	1.260	11000
			224.00	MDI-40	1.00	-0.10	0.40	**DS20-D3200DM40-07**	40.00	271.16	287.00	228.00	0.83	81°	10	1.553	3000
33.00	04C	04P	132.00	MDI-40	0.72	0.00	0.35	**DS20-D3300DM40-04**	40.00	179.16	195.00	136.00	0.83	81°	10	1.299	11000
			231.00	MDI-40	0.72	-0.10	0.40	**DS20-D3300DM40-07**	40.00	278.16	294.00	235.00	0.83	81°	10	1.620	3000

	Componentes
DC	Parafuso da pastilha
15.00-18.00	5513 020-27
18.01-22.00	5513 020-88
22.01-27.00	5513 020-58
27.01-33.00	5513 020-57
33.01-40.00	416.1-833
40.01-59.00	416.1-834

Para a lista completa de componentes, acesse www.sandvik.coromant.com

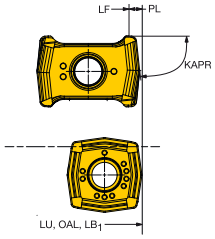
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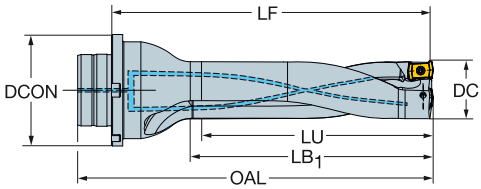
Broca com pastilha intercambiável CoroDrill®

Interface da broca modular

Refrigeração interna







									Dimensões, mm								
DC			LU	CZC$_{MS}$	ADJLX	TCHAL	TCHAU	**Código para pedido**	DCON$_{MS}$	LF	OAL	LB$_1$	PL	KAPR	BAR	KG	RPMX
34.00	05P	05P	136.00	MDI-40	2.16	0.00	0.35	**DS20-D3400DM40-04**	40.00	183.28	199.00	140.00	1.00	81°	10	1.340	11000
			238.00	MDI-40	2.16	-0.10	0.40	**DS20-D3400DM40-07**	40.00	285.28	301.00	242.00	1.00	81°	10	1.691	3000
35.00	05C	05C	140.00	MDI-40	1.92	0.00	0.35	**DS20-D3500DM40-04**	40.00	187.28	203.00	144.00	1.00	81°	10	1.383	10000
			245.00	MDI-40	1.92	-0.10	0.40	**DS20-D3500DM40-07**	40.00	292.28	308.00	249.00	1.00	81°	10	1.766	3000
36.00	05C	05C	144.00	MDI-40	1.68	0.00	0.35	**DS20-D3600DM40-04**	40.00	191.28	207.00	148.00	1.00	81°	10	1.429	10000
			252.00	MDI-40	1.68	-0.10	0.40	**DS20-D3600DM40-07**	40.00	299.28	315.00	256.00	1.00	81°	10	1.846	3000
37.00	05P	05P	148.00	MDI-40	1.44	0.00	0.35	**DS20-D3700DM40-04**	40.00	195.28	211.00	152.00	1.00	81°	10	1.477	10000
			259.00	MDI-40	1.44	-0.10	0.40	**DS20-D3700DM40-07**	40.00	306.28	322.00	263.00	1.00	81°	10	1.930	3000
38.00	05P	05P	152.00	MDI-40	1.20	0.00	0.35	**DS20-D3800DM40-04**	40.00	199.28	215.00	156.00	1.00	81°	10	1.529	9000
			266.00	MDI-40	1.20	-0.10	0.40	**DS20-D3800DM40-07**	40.00	313.28	329.00	270.00	1.00	81°	10	2.019	3000
39.00	05C	05C	156.00	MDI-40	0.96	0.00	0.35	**DS20-D3900DM40-04**	40.00	203.28	219.00	160.00	1.00	81°	10	1.582	9000
			273.00	MDI-40	0.96	-0.10	0.40	**DS20-D3900DM40-07**	40.00	320.28	336.00	277.00	1.00	81°	10	2.113	3000
40.00	05C	05P	160.00	MDI-40	0.72	0.00	0.35	**DS20-D4000DM40-04**	40.00	206.28	222.00	164.00	1.00	81°	10	1.624	9000
			280.00	MDI-40	0.72	-0.10	0.40	**DS20-D4000DM40-07**	40.00	326.28	342.00	284.00	1.00	81°	10	2.196	3000

	Componentes
DC	Parafuso da pastilha
15.00-18.00	5513 020-27
18.01-22.00	5513 020-88
22.01-27.00	5513 020-58
27.01-33.00	5513 020-57
33.01-40.00	416.1-833
40.01-59.00	416.1-834

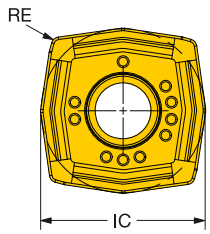
Para a lista completa de componentes, acesse www.sandvik.coromant.com

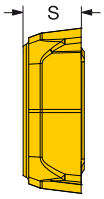
J33 N23 N15

Pastilha CoroDrill® DS20 para furação

Pastilha central

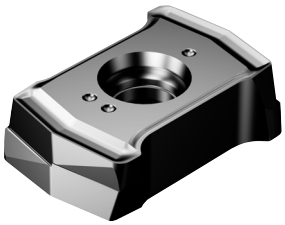


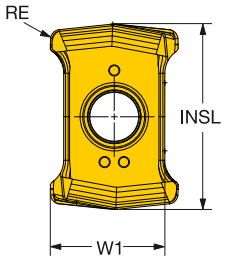


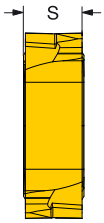


	INSUC	Código para pedido	P			M			K			N		S			H		Dimensões, mm		
			1344	1144	1344	H13A	1344	1344	H13A	1344									S	RE	IC
01C	C	DS20-0104-C-L5	★	★		★	☆	★	☆	★									2.30	0.35	6.0
01C	C	DS20-0104-C-M7	★		★					☆									2.30	0.35	6.0
02C	C	DS20-0205-C-L5	★	★		★	☆	★	☆	★									2.60	0.35	7.3
02C	C	DS20-0205-C-M7	★		★					☆									2.60	0.35	7.3
03C	C	DS20-0306-C-L5	★	★		★	☆	★	☆	★									3.00	0.35	8.9
03C	C	DS20-0306-C-M7	★		★					☆									3.00	0.35	8.9
04C	C	DS20-0407-C-L5	★	★		★	☆	★	☆	★									3.20	0.35	11.1
04C	C	DS20-0407-C-M7	★		★					☆									3.20	0.35	11.1
05C	C	DS20-0508-C-L5	★	★		★	☆	★	☆	★									3.50	0.35	13.4
05C	C	DS20-0508-C-M7	★		★					☆									3.50	0.35	13.4

Pastilha periférica







	INSUC	Código para pedido	P			M			K			N		S			H		Dimensões, mm		
			4324	4334	4344	2044	4334	4344	4324	4334	4344	4344	H13A	2044	4344	H13A	4334	4344	S	RE	W1
01P	P	DS20-0104-P-H5W		☆	☆	☆	☆	☆											2.73	0.40	5.0
01P	P	DS20-0104-P-L5W	☆	★	☆	★	☆	☆				☆		☆	☆				2.73	0.40	5.0
01P	P	DS20-0104-P-L6W			☆			☆			☆	☆			★			★	2.73	0.40	5.0
01P	P	DS20-0104-P-M7W	☆	★	☆				☆	★	☆						☆	☆	2.73	0.40	5.0
01P	P	DS20-0104-P-S5W						☆				☆	★		★	☆			2.73	0.40	5.0
02P	P	DS20-0205-P-H5W		☆	☆	☆	☆	☆											3.10	0.50	6.1
02P	P	DS20-0205-P-L5W	☆	★	☆	★	☆	☆				☆		☆	☆				3.10	0.50	6.1
02P	P	DS20-0205-P-L6W			☆			☆			☆	☆			★			★	3.10	0.50	6.1
02P	P	DS20-0205-P-M7W	☆	★	☆				☆	★	☆						☆	☆	3.10	0.50	6.1
02P	P	DS20-0205-P-S5W						☆				☆	★		★	☆			3.10	0.50	6.1
03P	P	DS20-0306-P-H5W		☆	☆	☆	☆	☆											3.53	0.60	7.3
03P	P	DS20-0306-P-L5W	☆	★	☆	★	☆	☆				☆		☆	☆				3.53	0.60	7.3
03P	P	DS20-0306-P-L6W			☆			☆			☆	☆			★			★	3.53	0.60	7.3
03P	P	DS20-0306-P-M7W	☆	★	☆				☆	★	☆						☆	☆	3.53	0.60	7.3
03P	P	DS20-0306-P-S5W						☆				☆	★		★	☆			3.53	0.60	7.3
04P	P	DS20-0407-P-H5W		☆	☆	☆	☆	☆											4.25	0.70	9.2
04P	P	DS20-0407-P-L5W	☆	★	☆	★	☆	☆				☆		☆	☆				4.25	0.70	9.2
04P	P	DS20-0407-P-L6W			☆			☆			☆	☆			★			★	4.25	0.70	9.2
04P	P	DS20-0407-P-M7W	☆	★	☆				☆	★	☆						☆	☆	4.25	0.70	9.2
04P	P	DS20-0407-P-S5W						☆				☆	★		★	☆			4.25	0.70	9.2
05P	P	DS20-0508-P-H5W		☆	☆	☆	☆	☆											4.75	0.80	11.2
05P	P	DS20-0508-P-L5W	☆	★	☆	★	☆	☆				☆		☆	☆				4.75	0.80	11.2
05P	P	DS20-0508-P-L6W			☆			☆			☆	☆			★			★	4.75	0.80	11.2
05P	P	DS20-0508-P-M7W	☆	★	☆				☆	★	☆						☆	☆	4.75	0.80	11.2
05P	P	DS20-0508-P-S5W						☆				☆	★		★	☆			4.75	0.80	11.2

J28 J54 N23

CoroDrill® 880

Brocas com pastilhas intercambiáveis

Área de aplicação ISO

P M K N S H



Benefícios e características para furos com diâmetros de 12,00–63,50 mm

- Aumento até 100% da produtividade
- Tolerância do furo estreita e acabamento superficial melhorado
- Quatro arestas de corte efetivas com tecnologia Wiper
- O corpo robusto da broca com pastilhas centrais e periféricas apresenta a exclusiva Step Technology™ para o perfeito equilíbrio das forças de corte
- Excelente escoamento de cavacos



Benefícios e características para furos com diâmetros de 65,00–84,00 mm

- Furação segura e confiável devido ao corpo robusto da broca com interface rígida da cápsula
- Excelente controle e escoamento de cavacos
- Excelente flexibilidade – um corpo de broca abrange cinco dimensões de diâmetro devido ao sistema de cápsulas fixas substituíveis
- Solução econômica e fácil de usar com cápsulas e pastilhas intercambiáveis

www.sandvik.coromant.com/corodrill880

Corpos da broca

Acoplamentos:
- Coromant Capto®
- Haste cilíndrica
- Acoplamento VL

Pastilhas

- Pastilhas com geometrias otimizadas para todos os materiais

2 – 3 x DC

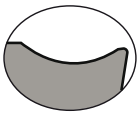
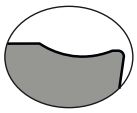
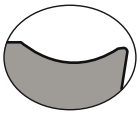
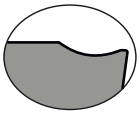
Faixa de diâmetro, mm	12.00-43.99	44.00-52.99	53.00-63.50
Tolerância do furo, mm:	0/+0.25	0/+0.28	0/+0.30

J36 J42 N6

SANDVIK Coromant

CoroDrill® 880

Visão geral da geometria

Geometria		Informações sobre geometrias
LM		- Primeira escolha em aço baixo-carbono - Uma geometria versátil com quebra-cavacos completo - Opera melhor em baixo a médio avanço - Proporciona forças de corte baixas
GR		- Primeira escolha pra aços-liga e ferros fundidos - Trabalha melhor com médio a alto avanço
MS		- Primeira escolha para materiais em aço inoxidável e não-ferrosos - Aresta viva permite baixas forças de corte
GM		- Baixas forças de corte - Avanço baixo a médio

Visão geral das classes

4334

- Primeira escolha em condições normais em ISO P e K
- Escolha complementar em aplicações ISO M estáveis

4324

- Escolha resistente ao desgaste para ISO P e K

4344

- Classe segura que funciona com todos os tipos de materiais

2044

- Primeira escolha em ISO-M
- Escolha complementar em ISO S

N124

- Com cobertura de diamante
- Primeira escolha em ISO N

H13A

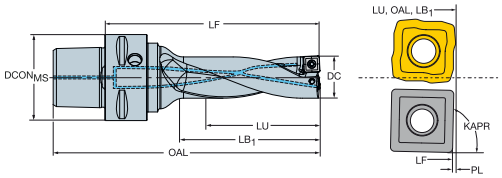
- Classe sem cobertura

Broca CoroDrill® 880 com pastilha intercambiável

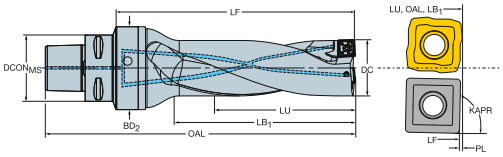
Coromant Capto®



DSGN 1



2



DC			LU	CZC_{MS}	ADJLX	TCHAL	TCHAU	DSGN	Código para pedido	$DCON_{MS}$	LF	OAL	LB_1	BD2	PL	KAPR	BAR	KG	RPMX
										Dimensões, mm									
12.00	01C	01P	36.00	C4	0.25	0.00	0.25	1	880-D1200C4-03	40.00	70.61	95.00	39.00		0.38	79°	10	0.343	33000
12.50	01C	01P	38.00	C4	0.25	0.00	0.25	1	880-D1250C4-03	40.00	72.61	97.00	40.00		0.38	79°	10	0.320	33000
12.70	01C	01P	38.00	C4	0.25	0.00	0.25	1	880-D1270C4-03	40.00	73.61	98.00	41.00		0.38	79°	10	0.352	33000
			38.00	C5	0.25	0.00	0.25	1	880-D1270C5-03	50.00	73.61	104.00	41.00		0.38	79°	10	0.570	33000
			38.00	C6	0.25	0.00	0.25	1	880-D1270C6-03	63.00	75.61	114.00	41.00		0.38	79°	10	0.900	33000
13.00	01C	01P	39.00	C4	0.25	0.00	0.25	1	880-D1300C4-03	40.00	74.61	99.00	42.00		0.38	79°	10	0.345	33000
			39.00	C5	0.25	0.00	0.25	1	880-D1300C5-03	50.00	74.61	105.00	42.00		0.38	79°	10	0.570	33000
13.50	01C	01P	41.00	C4	0.25	0.00	0.25	1	880-D1350C4-03	40.00	76.61	101.00	44.00		0.38	79°	10	0.355	33000
			41.00	C6	0.25	0.00	0.25	1	880-D1350C6-03	63.00	78.61	117.00	44.00		0.38	79°	10	0.900	33000
14.00	02C	02P	42.00	C4	0.50	0.00	0.25	1	880-D1400C4-03	40.00	77.67	102.00	45.00		0.32	88°	10	0.351	33000
			42.00	C5	0.50	0.00	0.25	1	880-D1400C5-03	50.00	77.67	108.00	45.00		0.32	88°	10	0.572	33000
			42.00	C6	0.50	0.00	0.25	1	880-D1400C6-03	63.00	79.67	118.00	45.00		0.32	88°	10	0.900	33000
14.50	02C	02P	44.00	C4	0.45	0.00	0.25	1	880-D1450C4-03	40.00	79.67	104.00	46.00		0.32	88°	10	0.356	33000
15.00	02C	02P	45.00	C4	0.40	0.00	0.25	1	880-D1500C4-03	40.00	81.67	106.00	48.00		0.32	88°	10	0.358	33000
			45.00	C5	0.40	0.00	0.25	1	880-D1500C5-03	50.00	81.67	112.00	48.00		0.32	88°	10	0.579	33000
			45.00	C6	0.40	0.00	0.25	1	880-D1500C6-03	63.00	83.67	122.00	48.00		0.32	88°	10	0.900	33000
15.50	02C	02P	47.00	C4	0.30	0.00	0.25	1	880-D1550C4-03	40.00	83.66	108.00	50.00		0.33	88°	10	0.363	33000
			47.00	C5	0.30	0.00	0.25	1	880-D1550C5-03	50.00	83.66	114.00	50.00		0.33	88°	10	0.584	33000
			47.00	C6	0.30	0.00	0.25	1	880-D1550C6-03	63.00	85.66	124.00	50.00		0.33	88°	10	0.900	33000
16.00	02C	02P	48.00	C4	0.30	0.00	0.25	1	880-D1600C4-03	40.00	85.66	110.00	51.00		0.33	88°	10	0.369	33000
			48.00	C5	0.30	0.00	0.25	1	880-D1600C5-03	50.00	85.66	116.00	51.00		0.33	88°	10	0.590	33000
			48.00	C6	0.30	0.00	0.25	1	880-D1600C6-03	63.00	87.66	126.00	51.00		0.33	88°	10	0.909	33000
16.50	03C	03P	50.00	C4	0.60	0.00	0.25	1	880-D1650C4-03	40.00	87.63	112.00	53.00		0.36	88°	10	0.377	30000
			50.00	C5	0.60	0.00	0.25	1	880-D1650C5-03	50.00	87.63	118.00	53.00		0.36	88°	10	0.596	30000
17.00	03C	03P	51.00	C4	0.60	0.00	0.25	1	880-D1700C4-03	40.00	88.63	113.00	54.00		0.36	88°	10	0.379	30000
			51.00	C5	0.60	0.00	0.25	1	880-D1700C5-03	50.00	88.63	119.00	54.00		0.36	88°	10	0.601	30000
			51.00	C6	0.60	0.00	0.25	1	880-D1700C6-03	63.00	90.63	129.00	54.00		0.36	88°	10	0.919	30000
17.50	03C	03P	53.00	C4	0.50	0.00	0.25	1	880-D1750C4-03	40.00	91.62	116.00	56.00		0.37	88°	10	0.411	30000
			53.00	C5	0.50	0.00	0.25	1	880-D1750C5-03	50.00	91.62	122.00	56.00		0.37	88°	10	0.638	30000
			53.00	C6	0.50	0.00	0.25	1	880-D1750C6-03	63.00	93.62	132.00	56.00		0.37	88°	10	0.976	30000
18.00	03C	03P	54.00	C4	0.40	0.00	0.25	1	880-D1800C4-03	40.00	92.62	117.00	57.00		0.37	88°	10	0.416	30000
			54.00	C5	0.40	0.00	0.25	1	880-D1800C5-03	50.00	92.62	123.00	57.00		0.37	88°	10	0.642	30000
			54.00	C6	0.40	0.00	0.25	1	880-D1800C6-03	63.00	94.62	133.00	57.00		0.37	88°	10	1.000	30000
18.50	03C	03P	56.00	C4	0.40	0.00	0.25	1	880-D1850C4-03	40.00	94.62	119.00	59.00		0.37	88°	10	0.419	30000
			56.00	C5	0.40	0.00	0.25	1	880-D1850C5-03	50.00	94.62	125.00	59.00		0.37	88°	10	0.646	30000
19.00	03C	03P	57.00	C4	0.30	0.00	0.25	1	880-D1900C4-03	40.00	95.61	120.00	60.00		0.38	88°	10	0.424	30000
			57.00	C5	0.30	0.00	0.25	1	880-D1900C5-03	50.00	95.61	126.00	60.00		0.38	88°	10	0.651	30000
			57.00	C6	0.30	0.00	0.25	1	880-D1900C6-03	63.00	97.61	136.00	60.00		0.38	88°	10	1.000	30000
19.50	03C	03P	59.00	C4	0.30	0.00	0.25	1	880-D1950C4-03	40.00	98.61	123.00	62.00		0.38	88°	10	0.436	30000
			59.00	C5	0.30	0.00	0.25	1	880-D1950C5-03	50.00	98.61	129.00	62.00		0.38	88°	10	0.658	30000
20.00	04C	04P	60.00	C4	0.90	0.00	0.25	1	880-D2000C4-03	40.00	100.56	125.00	64.00		0.43	88°	10	0.437	21500
			60.00	C5	0.90	0.00	0.25	1	880-D2000C5-03	50.00	100.56	131.00	64.00		0.43	88°	10	0.662	21500
			60.00	C6	0.90	0.00	0.25	1	880-D2000C6-03	63.00	102.56	141.00	64.00		0.43	88°	10	1.000	21500
21.00	04C	04P	63.00	C4	0.80	0.00	0.25	1	880-D2100C4-03	40.00	103.56	128.00	66.00		0.43	88°	10	0.400	21500
			63.00	C5	0.80	0.00	0.25	1	880-D2100C5-03	50.00	103.56	134.00	66.00		0.43	88°	10	0.673	21500
			63.00	C6	0.80	0.00	0.25	1	880-D2100C6-03	63.00	105.56	144.00	66.00		0.43	88°	10	1.012	21500
22.00	04C	04P	66.00	C4	0.60	0.00	0.25	1	880-D2200C4-03	40.00	106.55	131.00	69.00		0.44	88°	10	0.438	21500
			66.00	C5	0.60	0.00	0.25	1	880-D2200C5-03	50.00	106.55	137.00	69.00		0.44	88°	10	0.688	21500
			66.00	C6	0.60	0.00	0.25	1	880-D2200C6-03	63.00	108.55	147.00	69.00		0.44	88°	10	1.029	21500
23.00	04C	04P	69.00	C4	0.50	0.00	0.25	1	880-D2300C4-03	40.00	110.54	135.00	72.00		0.45	88°	10	0.480	21500
			69.00	C5	0.50	0.00	0.25	1	880-D2300C5-03	50.00	110.54	141.00	72.00		0.45	88°	10	0.711	21500
			69.00	C6	0.50	0.00	0.25	1	880-D2300C6-03	63.00	112.54	151.00	72.00		0.45	88°	10	1.048	21500
24.00	05C	05P	72.00	C4	1.10	0.00	0.25	1	880-D2400C4-03	40.00	114.49	139.00	76.00		0.50	88°	10	0.505	16000
			72.00	C5	1.10	0.00	0.25	1	880-D2400C5-03	50.00	114.49	145.00	76.00		0.50	88°	10	0.730	16000
			72.00	C6	1.10	0.00	0.25	1	880-D2400C6-03	63.00	116.49	155.00	76.00		0.50	88°	10	1.070	16000

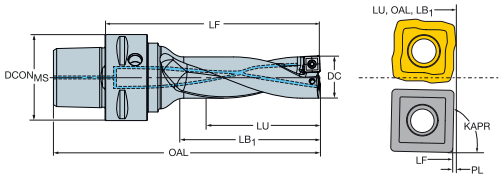
J42 L2 J62 J35 N23 N6 N15

Broca CoroDrill® 880 com pastilha intercambiável

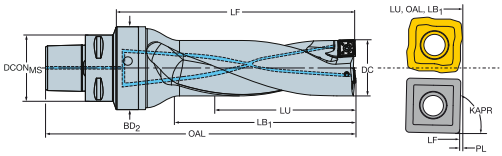
Coromant Capto®



DSGN 1



DSGN 2



DC			LU	CZC$_{MS}$	ADJLX	TCHAL	TCHAU	DSGN	Código para pedido	Dimensões, mm DCON$_{MS}$	LF	OAL	LB$_1$	BD2	PL	KAPR	BAR	KG	RPMX
25.00	05C	05P	75.00	C4	1.00	0.00	0.25	1	880-D2500C4-03	40.00	118.48	143.00	79.00		0.51	88°	10	0.526	16000
			75.00	C5	1.00	0.00	0.25	1	880-D2500C5-03	50.00	118.48	149.00	79.00		0.51	88°	10	0.760	16000
			75.00	C6	1.00	0.00	0.25	1	880-D2500C6-03	63.00	120.48	159.00	79.00		0.51	88°	10	1.099	16000
26.00	05C	05P	78.00	C4	0.90	0.00	0.25	1	880-D2600C4-03	40.00	121.47	146.00	81.00		0.52	88°	10	0.596	16000
			78.00	C5	0.90	0.00	0.25	1	880-D2600C5-03	50.00	121.47	152.00	81.00		0.52	88°	10	0.822	16000
			78.00	C6	0.90	0.00	0.25	1	880-D2600C6-03	63.00	123.47	162.00	81.00		0.52	88°	10	1.165	16000
27.00	05C	05P	81.00	C4	0.70	0.00	0.25	1	880-D2700C4-03	40.00	124.46	149.00	84.00		0.53	88°	10	0.623	16000
			81.00	C5	0.70	0.00	0.25	1	880-D2700C5-03	50.00	124.46	155.00	84.00		0.53	88°	10	0.851	16000
			81.00	C6	0.70	0.00	0.25	1	880-D2700C6-03	63.00	126.46	165.00	84.00		0.53	88°	10	1.188	16000
28.00	05C	05P	84.00	C4	0.60	0.00	0.25	1	880-D2800C4-03	40.00	128.46	153.00	87.00		0.53	88°	10	0.665	16000
			84.00	C5	0.60	0.00	0.25	1	880-D2800C5-03	50.00	128.46	159.00	87.00		0.53	88°	10	0.897	16000
			84.00	C6	0.60	0.00	0.25	1	880-D2800C6-03	63.00	130.46	169.00	87.00		0.53	88°	10	1.229	16000
29.00	05C	05P	87.00	C4	0.50	0.00	0.25	1	880-D2900C4-03	40.00	131.45	156.00	90.00		0.54	88°	10	0.696	16000
			87.00	C5	0.50	0.00	0.25	1	880-D2900C5-03	50.00	131.45	162.00	90.00		0.54	88°	10	0.930	16000
			87.00	C6	0.50	0.00	0.25	1	880-D2900C6-03	63.00	133.45	172.00	90.00		0.54	88°	10	1.264	16000
30.00	06C	06P	90.00	C4	1.12	0.00	0.25	1	880-D3000C4-03	40.00	136.41	161.00	94.00		0.58	88°	10	0.679	16000
			90.00	C5	1.12	0.00	0.25	1	880-D3000C5-03	50.00	136.41	167.00	94.00		0.58	88°	10	0.920	16000
			90.00	C6	1.12	0.00	0.25	1	880-D3000C6-03	63.00	138.41	177.00	94.00		0.58	88°	10	1.220	16000
31.00	06C	06P	93.00	C5	0.99	0.00	0.25	1	880-D3100C5-03	50.00	140.40	171.00	97.00		0.59	88°	10	0.998	16000
			93.00	C6	0.99	0.00	0.25	1	880-D3100C6-03	63.00	142.40	181.00	97.00		0.59	88°	10	1.350	16000
32.00	06C	06P	96.00	C5	0.87	0.00	0.25	1	880-D3200C5-03	50.00	143.39	174.00	100.00		0.60	88°	10	1.020	16000
			96.00	C6	0.87	0.00	0.25	1	880-D3200C6-03	63.00	145.39	184.00	100.00		0.60	88°	10	1.360	16000
33.00	06C	06P	99.00	C5	0.75	0.00	0.25	1	880-D3300C5-03	50.00	147.38	178.00	103.00		0.61	88°	10	1.040	16000
			99.00	C6	0.75	0.00	0.25	1	880-D3300C6-03	63.00	149.38	188.00	103.00		0.61	88°	10	1.429	16000
34.00	06C	06P	102.00	C5	0.62	0.00	0.25	1	880-D3400C5-03	50.00	150.37	181.00	106.00		0.62	88°	10	1.060	16000
			102.00	C6	0.62	0.00	0.25	1	880-D3400C6-03	63.00	152.37	191.00	106.00		0.62	88°	10	1.465	16000
35.00	06C	06P	105.00	C5	0.50	0.00	0.25	1	880-D3500C5-03	50.00	154.37	185.00	109.00		0.62	88°	10	1.160	16000
			105.00	C6	0.50	0.00	0.25	1	880-D3500C6-03	63.00	156.37	195.00	109.00		0.62	88°	10	1.519	16000
36.00	07C	07P	108.00	C5	1.38	0.00	0.25	1	880-D3600C5-03	50.00	158.32	189.00	112.00		0.67	88°	10	1.175	16000
			108.00	C6	1.38	0.00	0.25	1	880-D3600C6-03	63.00	160.32	199.00	112.00		0.67	88°	10	1.516	16000
37.00	07C	07P	111.00	C5	1.25	0.00	0.25	1	880-D3700C5-03	50.00	161.31	192.00	115.00		0.68	88°	10	1.213	16000
			111.00	C6	1.25	0.00	0.25	1	880-D3700C6-03	63.00	163.31	202.00	115.00		0.68	88°	10	1.560	16000
38.00	07C	07P	114.00	C5	1.13	0.00	0.25	1	880-D3800C5-03	50.00	165.31	196.00	118.00		0.68	88°	10	1.240	16000
			114.00	C6	1.13	0.00	0.25	1	880-D3800C6-03	63.00	167.31	206.00	118.00		0.68	88°	10	1.630	16000
39.00	07C	07P	117.00	C5	1.00	0.00	0.25	1	880-D3900C5-03	50.00	168.30	199.00	121.00		0.69	88°	10	1.305	16000
			117.00	C6	1.00	0.00	0.25	1	880-D3900C6-03	63.00	170.30	209.00	121.00		0.69	88°	10	1.643	16000
40.00	07C	07P	120.00	C5	0.88	0.00	0.25	1	880-D4000C5-03	50.00	172.29	203.00	124.00		0.70	88°	10	1.370	16000
			120.00	C6	0.88	0.00	0.25	1	880-D4000C6-03	63.00	174.29	213.00	124.00		0.70	88°	10	1.716	16000
41.00	07C	07P	123.00	C5	0.75	0.00	0.25	1	880-D4100C5-03	50.00	176.28	207.00	127.00		0.71	88°	10	1.448	16000
			123.00	C6	0.75	0.00	0.25	1	880-D4100C6-03	63.00	178.28	217.00	127.00		0.71	88°	10	1.800	16000
42.00	07C	07P	126.00	C5	0.63	0.00	0.25	2	880-D4200C5-03M1	50.00	199.27	230.00	130.00	62.50	0.72	88°	10	2.110	16000
			126.00	C6	0.63	0.00	0.25	1	880-D4200C6-03M1	63.00	199.27	238.00	130.00		0.72	88°	10	2.418	16000
43.00	07C	07P	129.00	C5	0.50	0.00	0.25	2	880-D4300C5-03M1	50.00	203.30	234.00	133.00	62.50	0.69	88°	10	2.139	16000
			129.00	C6	0.50	0.00	0.25	1	880-D4300C6-03M1	63.00	203.30	242.00	133.00		0.69	88°	10	2.458	16000

DC		Componentes Parafuso da pastilha
12.70-16.00	01-02	5513 020-28
16.50-19.50	03	5513 020-33
20.00-23.00	04	5513 020-58
24.00-29.00	05	5513 020-57
30.00-42.00	06-07	416.1-833

Para a lista completa de componentes, acesse www.sandvik.coromant.com

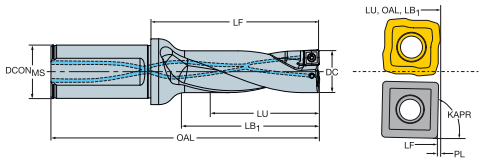
J42 L2 J62 J35 N23 N6 N15

Broca CoroDrill® 880 com pastilha intercambiável

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna





DC			LU	CZC_{MS}	ADJLX	TCHAL	TCHAU	Código para pedido	Dimensões, mm								
									$DCON_{MS}$	LF	OAL	LB_1	PL	KAPR	BAR	KG	RPMX
12.00	01C	01P	24.00	20	0.25	0.00	0.25	880-D1200L20-02	20.00	38.61	89.00	27.00	0.38	79°	10	0.189	33000
			36.00	20	0.25	0.00	0.25	880-D1200L20-03	20.00	50.61	101.00	39.00	0.38	79°	10	0.200	33000
12.50	01C	01P	25.00	20	0.25	0.00	0.25	880-D1250L20-02	20.00	40.61	91.00	28.00	0.38	79°	10	0.200	33000
			38.00	20	0.25	0.00	0.25	880-D1250L20-03	20.00	52.61	103.00	40.00	0.38	79°	10	0.198	33000
12.70	01C	01P	25.00	20	0.25	0.00	0.25	880-D1270L20-02	20.00	40.61	91.00	28.00	0.38	79°	10	0.200	33000
			38.00	20	0.25	0.00	0.25	880-D1270L20-03	20.00	53.61	104.00	41.00	0.38	79°	10	0.200	33000
13.00	01C	01P	26.00	20	0.25	0.00	0.25	880-D1300L20-02	20.00	41.61	92.00	29.00	0.38	79°	10	0.194	33000
			39.00	20	0.25	0.00	0.25	880-D1300L20-03	20.00	54.61	105.00	42.00	0.38	79°	10	0.202	33000
13.50	01C	01P	27.00	20	0.25	0.00	0.25	880-D1350L20-02	20.00	42.61	93.00	30.00	0.38	79°	10	0.200	33000
			41.00	20	0.25	0.00	0.25	880-D1350L20-03	20.00	55.61	106.00	43.00	0.38	79°	10	0.204	33000
14.00	02C	02P	28.00	20	0.50	0.00	0.25	880-D1400L20-02	20.00	43.67	94.00	31.00	0.32	88°	10	0.200	33000
			42.00	20	0.50	0.00	0.25	880-D1400L20-03	20.00	57.67	108.00	45.00	0.32	88°	10	0.211	33000
14.50	02C	02P	29.00	20	0.45	0.00	0.25	880-D1450L20-02	20.00	45.67	96.00	32.00	0.32	88°	10	0.210	33000
			44.00	20	0.45	0.00	0.25	880-D1450L20-03	20.00	59.67	110.00	46.00	0.32	88°	10	0.217	33000
15.00	02C	02P	30.00	20	0.40	0.00	0.25	880-D1500L20-02	20.00	46.67	97.00	33.00	0.32	88°	10	0.212	33000
			45.00	20	0.40	0.00	0.25	880-D1500L20-03	20.00	61.67	112.00	48.00	0.32	88°	10	0.210	33000
15.50	02C	02P	31.00	20	0.30	0.00	0.25	880-D1550L20-02	20.00	48.66	99.00	35.00	0.33	88°	10	0.208	33000
			47.00	20	0.30	0.00	0.25	880-D1550L20-03	20.00	63.66	114.00	50.00	0.33	88°	10	0.225	33000
16.00	02C	02P	32.00	20	0.30	0.00	0.25	880-D1600L20-02	20.00	50.66	101.00	36.00	0.33	88°	10	0.215	33000
			48.00	20	0.30	0.00	0.25	880-D1600L20-03	20.00	65.66	116.00	51.00	0.33	88°	10	0.229	33000
16.50	03C	03P	33.00	20	0.60	0.00	0.25	880-D1650L20-02	20.00	51.63	102.00	37.00	0.36	88°	10	0.224	33000
			50.00	20	0.60	0.00	0.25	880-D1650L20-03	20.00	67.63	118.00	53.00	0.36	88°	10	0.235	30000
17.00	03C	03P	34.00	20	0.60	0.00	0.25	880-D1700L20-02	20.00	52.63	103.00	38.00	0.36	88°	10	0.225	33000
			51.00	20	0.60	0.00	0.25	880-D1700L20-03	20.00	68.63	119.00	54.00	0.36	88°	10	0.232	30000
17.50	03C	03P	35.00	25	0.50	0.00	0.25	880-D1750L25-02	25.00	54.62	111.00	39.00	0.37	88°	10	0.347	33000
			53.00	25	0.50	0.00	0.25	880-D1750L25-03	25.00	71.62	128.00	56.00	0.37	88°	10	0.362	30000
18.00	03C	03P	36.00	25	0.40	0.00	0.25	880-D1800L25-02	25.00	55.62	112.00	40.00	0.37	88°	10	0.352	33000
			54.00	25	0.40	0.00	0.25	880-D1800L25-03	25.00	72.62	129.00	57.00	0.37	88°	10	0.363	30000
18.50	03C	03P	37.00	25	0.40	0.00	0.25	880-D1850L25-02	25.00	56.62	113.00	41.00	0.37	88°	10	0.354	33000
			56.00	25	0.40	0.00	0.25	880-D1850L25-03	25.00	74.62	131.00	59.00	0.37	88°	10	0.369	30000
19.00	03C	03P	38.00	25	0.30	0.00	0.25	880-D1900L25-02	25.00	57.61	114.00	42.00	0.38	88°	10	0.359	33000
			57.00	25	0.30	0.00	0.25	880-D1900L25-03	25.00	75.61	132.00	60.00	0.38	88°	10	0.375	30000
19.50	03C	03P	39.00	25	0.30	0.00	0.25	880-D1950L25-02	25.00	59.61	116.00	43.00	0.38	88°	10	0.371	33000
			59.00	25	0.30	0.00	0.25	880-D1950L25-03	25.00	78.61	135.00	62.00	0.38	88°	10	0.387	30000
20.00	04C	04P	40.00	25	0.90	0.00	0.25	880-D2000L25-02	25.00	60.56	117.00	44.00	0.43	88°	10	0.367	21500
			60.00	25	0.90	0.00	0.25	880-D2000L25-03	25.00	80.56	137.00	64.00	0.43	88°	10	0.340	21500
20.50	04C	04P	62.00	25	0.80	0.00	0.25	880-D2050L25-03	25.00	81.56	138.00	65.00	0.43	88°	10	0.392	21500
20.90	04C	04P	63.00	25	0.80	0.00	0.25	880-D2090L25-03	25.00	83.56	140.00	66.00	0.43	88°	10	0.412	21500
21.00	04C	04P	42.00	25	0.80	0.00	0.25	880-D2100L25-02	25.00	63.56	120.00	46.00	0.43	88°	10	0.382	21500
			63.00	25	0.80	0.00	0.25	880-D2100L25-03	25.00	83.56	140.00	66.00	0.43	88°	10	0.396	21500
21.50	04C	04P	65.00	25	0.70	0.00	0.25	880-D2150L25-03	25.00	85.55	142.00	68.00	0.44	88°	10	0.404	21500
22.00	04C	04P	44.00	25	0.60	0.00	0.25	880-D2200L25-02	25.00	65.55	122.00	48.00	0.44	88°	10	0.367	21500
			66.00	25	0.60	0.00	0.25	880-D2200L25-03	25.00	86.55	143.00	69.00	0.44	88°	10	0.423	21500
22.50	04C	04P	68.00	25	0.50	0.00	0.25	880-D2250L25-03	25.00	89.54	146.00	71.00	0.45	88°	10	0.432	21500
23.00	04C	04P	46.00	25	0.50	0.00	0.25	880-D2300L25-02	25.00	68.54	125.00	50.00	0.45	88°	10	0.403	21500
			69.00	25	0.50	0.00	0.25	880-D2300L25-03	25.00	90.54	147.00	72.00	0.45	88°	10	0.448	21500
23.50	04C	04P	71.00	25	0.40	0.00	0.25	880-D2350L25-03	25.00	92.54	149.00	74.00	0.45	88°	10	0.443	21500
23.90	04C	04P	72.00	25	0.30	0.00	0.25	880-D2390L25-03	25.00	94.53	151.00	76.00	0.46	88°	10	0.465	21500
24.00	05C	05P	48.00	25	1.10	0.00	0.25	880-D2400L25-02	25.00	70.49	127.00	52.00	0.50	88°	10	0.340	16000
			72.00	25	1.10	0.00	0.25	880-D2400L25-03	25.00	94.49	151.00	76.00	0.50	88°	10	0.400	16000
24.50	05C	05P	74.00	25	1.00	0.00	0.25	880-D2450L25-03	25.00	96.49	153.00	77.00	0.50	88°	10	0.480	16000
25.00	05C	05P	50.00	25	1.00	0.00	0.25	880-D2500L25-02	25.00	73.48	130.00	54.00	0.51	88°	10	0.400	16000
			75.00	25	1.00	0.00	0.25	880-D2500L25-03	25.00	98.48	155.00	79.00	0.51	88°	10	0.460	16000


J42


L2


J62


J35



N23



N6



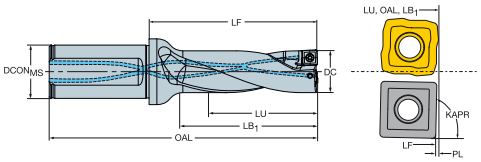
N15

Broca CoroDrill® 880 com pastilha intercambiável

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna





DC			LU	CZC$_{MS}$	ADJLX	TCHAL	TCHAU	Código para pedido	Dimensões, mm DCON$_{MS}$	LF	OAL	LB$_1$	PL	KAPR	BAR	KG	RPMX
25.50	05C	05P	77.00	25	0.90	0.00	0.25	880-D2550L25-03	25.00	99.48	156.00	80.00	0.51	88°	10	0.501	16000
26.00	05C	05P	52.00	32	0.90	0.00	0.25	880-D2600L32-02	32.00	76.47	137.00	56.00	0.52	88°	10	0.650	16000
			78.00	32	0.90	0.00	0.25	880-D2600L32-03	32.00	101.47	162.00	81.00	0.52	88°	10	0.700	16000
26.40	05C	05P	79.00	32	0.80	0.00	0.25	880-D2640L32-03	32.00	103.47	164.00	83.00	0.52	88°	10	0.707	16000
26.50	05C	05P	80.00	32	0.80	0.00	0.25	880-D2650L32-03	32.00	103.47	164.00	83.00	0.52	88°	10	0.717	16000
27.00	05C	05P	54.00	32	0.70	0.00	0.25	880-D2700L32-02	32.00	78.46	139.00	58.00	0.53	88°	10	0.669	16000
			81.00	32	0.70	0.00	0.25	880-D2700L32-03	32.00	104.46	165.00	84.00	0.53	88°	10	0.724	16000
27.50	05C	05P	83.00	32	0.60	0.00	0.25	880-D2750L32-03	32.00	107.46	168.00	86.00	0.53	88°	10	0.761	16000
28.00	05C	05P	56.00	32	0.60	0.00	0.25	880-D2800L32-02	32.00	81.46	142.00	60.00	0.53	88°	10	0.693	16000
			84.00	32	0.60	0.00	0.25	880-D2800L32-03	32.00	108.46	169.00	87.00	0.53	88°	10	0.755	16000
28.50	05C	05P	86.00	32	0.50	0.00	0.25	880-D2850L32-03	32.00	110.45	171.00	89.00	0.54	88°	10	0.770	16000
29.00	05C	05P	58.00	32	0.50	0.00	0.25	880-D2900L32-02	32.00	83.45	144.00	62.00	0.54	88°	10	0.710	16000
			87.00	32	0.50	0.00	0.25	880-D2900L32-03	32.00	111.45	172.00	90.00	0.54	88°	10	0.784	16000
29.40	05C	05P	88.00	32	0.40	0.00	0.25	880-D2940L32-03	32.00	114.44	175.00	92.00	0.55	88°	10	0.845	16000
29.50	05C	05P	89.00	32	0.40	0.00	0.25	880-D2950L32-03	32.00	114.44	175.00	92.00	0.55	88°	10	0.809	16000
30.00	06C	06P	60.00	32	1.12	0.00	0.25	880-D3000L32-02	32.00	86.41	147.00	64.00	0.58	88°	10	0.699	16000
			90.00	32	1.12	0.00	0.25	880-D3000L32-03	32.00	116.41	177.00	94.00	0.58	88°	10	0.790	16000
30.50	06C	06P	92.00	32	1.05	0.00	0.25	880-D3050L32-03	32.00	117.40	178.00	95.00	0.59	88°	10	0.800	16000
31.00	06C	06P	62.00	40	0.99	0.00	0.25	880-D3100L40-02	40.00	89.40	160.00	66.00	0.59	88°	10	1.136	16000
			93.00	40	0.99	0.00	0.25	880-D3100L40-03	40.00	120.40	191.00	97.00	0.59	88°	10	1.210	16000
31.50	06C	06P	95.00	40	0.93	0.00	0.25	880-D3150L40-03	40.00	121.39	192.00	98.00	0.60	88°	10	1.230	16000
32.00	06C	06P	64.00	40	0.87	0.00	0.25	880-D3200L40-02	40.00	91.39	162.00	68.00	0.60	88°	10	1.156	16000
			96.00	40	0.87	0.00	0.25	880-D3200L40-03	40.00	123.39	194.00	100.00	0.60	88°	10	1.252	16000
32.50	06C	06P	98.00	40	0.81	0.00	0.25	880-D3250L40-03	40.00	125.39	196.00	101.00	0.60	88°	10	1.278	16000
33.00	06C	06P	66.00	40	0.75	0.00	0.25	880-D3300L40-02	40.00	94.38	165.00	70.00	0.61	88°	10	1.200	16000
			99.00	40	0.75	0.00	0.25	880-D3300L40-03	40.00	127.38	198.00	103.00	0.61	88°	10	1.303	16000
33.50	06C	06P	101.00	40	0.68	0.00	0.25	880-D3350L40-03	40.00	129.38	200.00	105.00	0.61	88°	10	1.317	16000
34.00	06C	06P	68.00	40	0.62	0.00	0.25	880-D3400L40-02	40.00	97.37	168.00	73.00	0.62	88°	10	1.227	16000
			102.00	40	0.62	0.00	0.25	880-D3400L40-03	40.00	130.37	201.00	106.00	0.62	88°	10	1.340	16000
34.50	06C	06P	104.00	40	0.56	0.00	0.25	880-D3450L40-03	40.00	133.37	204.00	108.00	0.62	88°	10	1.380	16000
35.00	06C	06P	70.00	40	0.50	0.00	0.25	880-D3500L40-02	40.00	100.37	171.00	75.00	0.62	88°	10	1.270	16000
			105.00	40	0.50	0.00	0.25	880-D3500L40-03	40.00	134.37	205.00	109.00	0.62	88°	10	1.400	16000
35.50	06C	06P	107.00	40	0.44	0.00	0.25	880-D3550L40-03	40.00	136.36	207.00	111.00	0.63	88°	10	1.415	16000
36.00	07C	07P	72.00	40	1.38	0.00	0.25	880-D3600L40-02	40.00	103.32	174.00	77.00	0.67	88°	10	1.280	16000
			108.00	40	1.38	0.00	0.25	880-D3600L40-03	40.00	138.32	209.00	112.00	0.67	88°	10	1.397	16000
37.00	07C	07P	74.00	40	1.25	0.00	0.25	880-D3700L40-02	40.00	104.31	175.00	78.00	0.68	88°	10	1.300	16000
			111.00	40	1.25	0.00	0.25	880-D3700L40-03	40.00	141.31	212.00	115.00	0.68	88°	10	1.446	16000
38.00	07C	07P	76.00	40	1.13	0.00	0.25	880-D3800L40-02	40.00	107.31	178.00	80.00	0.68	88°	10	1.349	16000
			114.00	40	1.13	0.00	0.25	880-D3800L40-03	40.00	145.31	216.00	118.00	0.68	88°	10	1.480	16000
39.00	07C	07P	78.00	40	1.00	0.00	0.25	880-D3900L40-02	40.00	109.30	180.00	82.00	0.69	88°	10	1.366	16000
			117.00	40	1.00	0.00	0.25	880-D3900L40-03	40.00	148.30	219.00	121.00	0.69	88°	10	1.535	16000
40.00	07C	07P	80.00	40	0.88	0.00	0.25	880-D4000L40-02	40.00	112.29	183.00	84.00	0.70	88°	10	1.413	16000
			120.00	40	0.88	0.00	0.25	880-D4000L40-03	40.00	152.29	223.00	124.00	0.70	88°	10	1.603	16000
41.00	07C	07P	82.00	40	0.75	0.00	0.25	880-D4100L40-02	40.00	116.28	187.00	87.00	0.71	88°	10	1.480	16000
			123.00	40	0.75	0.00	0.25	880-D4100L40-03	40.00	156.28	227.00	127.00	0.71	88°	10	1.690	16000
42.00	07C	07P	84.00	40	0.63	0.00	0.25	880-D4200L40-02	40.00	118.27	189.00	89.00	0.72	88°	10	1.505	16000
			126.00	40	0.63	0.00	0.25	880-D4200L40-03	40.00	159.27	230.00	130.00	0.72	88°	10	1.740	16000
43.00	07C	07P	86.00	40	0.50	0.00	0.25	880-D4300L40-02	40.00	121.26	192.00	91.00	0.73	88°	10	1.510	16000
			129.00	40	0.50	0.00	0.25	880-D4300L40-03	40.00	163.26	234.00	133.00	0.73	88°	10	1.730	16000
44.00	08C	08P	88.00	40	1.50	0.00	0.28	880-D4400L40-02	40.00	123.23	194.00	93.00	0.76	88°	10	1.510	15000
			132.00	40	1.50	0.00	0.28	880-D4400L40-03	40.00	166.23	237.00	136.00	0.76	88°	10	1.720	15000
45.00	08C	08P	90.00	40	1.40	0.00	0.28	880-D4500L40-02	40.00	126.22	197.00	95.00	0.77	88°	10	1.560	15000
			135.00	40	1.40	0.00	0.28	880-D4500L40-03	40.00	171.22	242.00	140.00	0.77	88°	10	1.800	15000

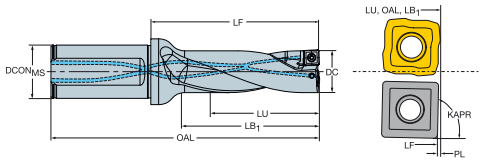
J42 L2 J62 J35 N23 N6 N15

Broca CoroDrill® 880 com pastilha intercambiável

Haste cilíndrica com plano conforme ISO 9766

Refrigeração interna





DC			LU	CZC$_{MS}$	ADJLX	TCHAL	TCHAU	Código para pedido	Dimensões, mm DCON$_{MS}$	LF	OAL	LB$_1$	PL	KAPR	BAR	KG	RPMX
46.00	08C	08P	92.00	40	1.30	0.00	0.28	880-D4600L40-02	40.00	129.22	200.00	97.00	0.78	88°	10	1.610	15000
			138.00	40	1.30	0.00	0.28	880-D4600L40-03	40.00	175.22	246.00	143.00	0.78	88°	10	1.881	15000
47.00	08C	08P	94.00	40	1.10	0.00	0.28	880-D4700L40-02	40.00	131.21	202.00	99.00	0.78	88°	10	1.800	15000
			141.00	40	1.10	0.00	0.28	880-D4700L40-03	40.00	178.21	249.00	146.00	0.78	88°	10	2.140	15000
48.00	08C	08P	96.00	40	1.00	0.00	0.28	880-D4800L40-02	40.00	134.20	205.00	101.00	0.79	88°	10	1.925	15000
			144.00	40	1.00	0.00	0.28	880-D4800L40-03	40.00	182.20	253.00	149.00	0.79	88°	10	2.235	15000
49.00	08C	08P	98.00	40	0.90	0.00	0.28	880-D4900L40-02	40.00	136.19	207.00	103.00	0.80	88°	10	1.970	15000
			147.00	40	0.90	0.00	0.28	880-D4900L40-03	40.00	185.19	256.00	152.00	0.80	88°	10	2.275	15000
50.00	08C	08P	100.00	40	0.80	0.00	0.28	880-D5000L40-02	40.00	139.18	210.00	105.00	0.81	88°	10	2.031	15000
			150.00	40	0.80	0.00	0.28	880-D5000L40-03	40.00	189.18	260.00	155.00	0.81	88°	10	2.430	15000
51.00	08C	08P	102.00	40	0.60	0.00	0.28	880-D5100L40-02	40.00	143.18	214.00	108.00	0.82	88°	10	2.110	15000
			153.00	40	0.60	0.00	0.28	880-D5100L40-03	40.00	193.18	264.00	158.00	0.82	88°	10	2.480	15000
52.00	08C	08P	104.00	40	0.50	0.00	0.28	880-D5200L40-02	40.00	145.17	216.00	110.00	0.82	88°	10	2.180	15000
			156.00	40	0.50	0.00	0.28	880-D5200L40-03	40.00	196.17	267.00	161.00	0.82	88°	10	2.595	15000
53.00	09C	09P	106.00	40	2.00	0.00	0.30	880-D5300L40-02	40.00	148.12	219.00	112.00	0.87	88°	10	2.307	5000
			159.00	40	2.00	0.00	0.30	880-D5300L40-03	40.00	200.12	271.00	164.00	0.87	88°	10	2.600	5000
54.00	09C	09P	108.00	40	1.90	0.00	0.30	880-D5400L40-02	40.00	150.11	221.00	114.00	0.88	88°	10	2.380	5000
			162.00	40	1.90	0.00	0.30	880-D5400L40-03	40.00	203.11	274.00	167.00	0.88	88°	10	2.714	5000
55.00	09C	09P	110.00	40	1.70	0.00	0.30	880-D5500L40-02	40.00	153.10	224.00	116.00	0.89	88°	10	2.349	5000
			165.00	40	1.70	0.00	0.30	880-D5500L40-03	40.00	208.10	279.00	171.00	0.89	88°	10	2.850	5000
56.00	09C	09P	112.00	40	1.60	0.00	0.30	880-D5600L40-02	40.00	156.10	227.00	118.00	0.89	88°	10	2.451	5000
			168.00	40	1.60	0.00	0.30	880-D5600L40-03	40.00	212.10	283.00	174.00	0.89	88°	10	2.977	5000
57.00	09C	09P	114.00	40	1.50	0.00	0.30	880-D5700L40-02	40.00	158.09	229.00	120.00	0.90	88°	10	2.530	5000
			171.00	40	1.50	0.00	0.30	880-D5700L40-03	40.00	215.09	286.00	177.00	0.90	88°	10	3.120	5000
58.00	09C	09P	116.00	40	1.40	0.00	0.30	880-D5800L40-02	40.00	161.08	232.00	122.00	0.91	88°	10	2.650	5000
			174.00	40	1.40	0.00	0.30	880-D5800L40-03	40.00	219.08	290.00	180.00	0.91	88°	10	3.593	5000
59.00	09C	09P	118.00	40	1.20	0.00	0.30	880-D5900L40-02	40.00	163.07	234.00	124.00	0.92	88°	10	2.703	5000
			177.00	40	1.20	0.00	0.30	880-D5900L40-03	40.00	222.07	293.00	183.00	0.92	88°	10	3.346	5000
60.00	09C	09P	120.00	40	1.10	0.00	0.30	880-D6000L40-02	40.00	166.06	237.00	126.00	0.93	88°	10	2.820	5000
			180.00	40	1.10	0.00	0.30	880-D6000L40-03	40.00	226.06	297.00	186.00	0.93	88°	10	3.570	5000
61.00	09C	09P	122.00	40	1.00	0.00	0.30	880-D6100L40-02	40.00	170.06	241.00	129.00	0.93	88°	10	3.032	5000
			183.00	40	1.00	0.00	0.30	880-D6100L40-03	40.00	231.06	302.00	190.00	0.93	88°	10	4.039	5000
62.00	09C	09P	124.00	40	0.80	0.00	0.30	880-D6200L40-02	40.00	172.05	243.00	131.00	0.94	88°	10	3.020	5000
			186.00	40	0.80	0.00	0.30	880-D6200L40-03	40.00	234.05	305.00	193.00	0.94	88°	10	4.115	5000
63.00	09C	09P	126.00	40	0.70	0.00	0.30	880-D6300L40-02	40.00	175.04	246.00	133.00	0.95	88°	10	3.173	5000
			189.00	40	0.70	0.00	0.30	880-D6300L40-03	40.00	238.04	309.00	196.00	0.95	88°	10	4.300	5000

DC		Componentes Parafuso da pastilha
12.00-16.00	01-02	5513 020-28
16.50-19.50	03	5513 020-33
20.00-23.90	04	5513 020-58
24.00-28.50	05	5513 020-57
30.00-41.00	06-07	416.1-833
44.00-63.00	08-09	416.1-834

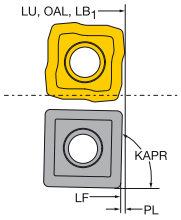
Para a lista completa de componentes, acesse www.sandvik.coromant.com

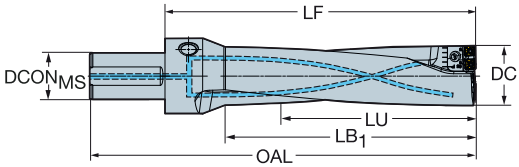
J42 L2 J62 J35 N23 N6 N15

Broca CoroDrill® 880 com pastilha intercambiável

Refrigeração interna



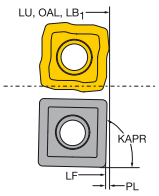


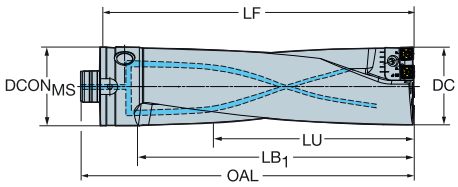


Haste cilíndrica com plano conforme ISO 9766

DC	C	I	I	P	LU	CZC_{MS}	TCHAL	TCHAU	Código para pedido	Dimensões, mm								
										$DCON_{MS}$	LF	OAL	LB_1	PL	KAPR	BAR	KG	RPMX
65.00	06C	06P	06P	06P	207.00	50	-0.30	0.30	880-D0650L50-03	50.00	275.70	357.00	212.77	1.30	88°	10	8.495	5000
					276.00	50	-0.30	0.30	880-D0650L50-04	50.00	344.70	426.00	281.77	1.30	88°	10	10.125	5000
66.00	06C	06P	06P	06P	207.00	50	-0.30	0.30	880-D0660L50-03	50.00	275.70	357.00	212.77	1.30	88°	10	8.470	5000
					276.00	50	-0.30	0.30	880-D0660L50-04	50.00	344.70	426.00	281.77	1.30	88°	10	7.900	5000
67.00	06C	06P	06P	06P	207.00	50	-0.30	0.30	880-D0670L50-03	50.00	275.70	357.00	212.77	1.30	88°	10	7.105	5000
					276.00	50	-0.30	0.30	880-D0670L50-04	50.00	344.70	426.00	281.77	1.30	88°	10	7.900	5000
68.00	06C	06P	06P	06P	207.00	50	-0.30	0.30	880-D0680L50-03	50.00	275.70	357.00	212.77	1.30	88°	10	8.460	5000
					276.00	50	-0.30	0.30	880-D0680L50-04	50.00	344.70	426.00	281.77	1.30	88°	10	7.900	5000
69.00	06C	06P	06P	06P	207.00	50	-0.30	0.30	880-D0690L50-03	50.00	275.70	357.00	212.77	1.30	88°	10	8.460	5000
					276.00	50	-0.30	0.30	880-D0690L50-04	50.00	344.70	426.00	281.77	1.30	88°	10	7.900	5000
70.00	06C	06P	06P	06P	222.00	50	-0.30	0.30	880-D0700L50-03	50.00	300.60	382.00	249.63	1.40	88°	10	9.485	5000
					296.00	50	-0.30	0.30	880-D0700L50-04	50.00	374.60	456.00	323.63	1.40	88°	10	10.980	5000
71.00	06C	06P	06P	06P	222.00	50	-0.30	0.30	880-D0710L50-03	50.00	300.60	382.00	249.63	1.40	88°	10	9.450	5000
					296.00	50	-0.30	0.30	880-D0710L50-04	50.00	374.60	456.00	323.63	1.40	88°	10	11.217	5000
72.00	06C	06P	06P	06P	222.00	50	-0.30	0.30	880-D0720L50-03	50.00	300.60	382.00	249.63	1.40	88°	10	9.515	5000
					296.00	50	-0.30	0.30	880-D0720L50-04	50.00	374.60	456.00	323.63	1.40	88°	10	11.320	5000
73.00	06C	06P	06P	06P	222.00	50	-0.30	0.30	880-D0730L50-03	50.00	300.60	382.00	249.63	1.40	88°	10	9.400	5000
					296.00	50	-0.30	0.30	880-D0730L50-04	50.00	374.60	456.00	323.63	1.40	88°	10	11.370	5000
74.00	06C	06P	07P	07P	222.00	50	-0.30	0.30	880-D0740L50-03	50.00	300.60	382.00	249.63	1.40	88°	10	9.350	5000
					296.00	50	-0.30	0.30	880-D0740L50-04	50.00	374.60	456.00	323.63	1.40	88°	10	11.275	5000
75.00	07C	07P	07P	07P	237.00	50	-0.30	0.30	880-D0750L50-03	50.00	305.60	387.00	255.15	1.40	88°	10	10.250	5000
					316.00	50	-0.30	0.30	880-D0750L50-04	50.00	384.60	466.00	334.15	1.40	88°	10	12.325	5000
76.00	07C	07P	07P	07P	237.00	50	-0.30	0.30	880-D0760L50-03	50.00	305.60	387.00	255.15	1.40	88°	10	10.700	5000
					316.00	50	-0.30	0.30	880-D0760L50-04	50.00	384.60	466.00	334.15	1.40	88°	10	12.250	5000
77.00	07C	07P	07P	07P	237.00	50	-0.30	0.30	880-D0770L50-03	50.00	305.60	387.00	255.15	1.40	88°	10	10.700	5000
					316.00	50	-0.30	0.30	880-D0770L50-04	50.00	384.60	466.00	334.15	1.40	88°	10	12.268	5000
78.00	07C	07P	07P	07P	237.00	50	-0.30	0.30	880-D0780L50-03	50.00	305.60	387.00	255.15	1.40	88°	10	10.700	5000
					316.00	50	-0.30	0.30	880-D0780L50-04	50.00	384.60	466.00	334.15	1.40	88°	10	12.385	5000
79.00	07C	07P	07P	07P	237.00	50	-0.30	0.30	880-D0790L50-03	50.00	305.60	387.00	255.15	1.40	88°	10	10.700	5000
					316.00	50	-0.30	0.30	880-D0790L50-04	50.00	384.60	466.00	334.15	1.40	88°	10	12.230	5000







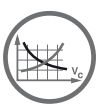
Acoplamento VL

DC	C	I	I	P	LU	CZC_{MS}	TCHAL	TCHAU	Código para pedido	Dimensões, mm								
										DCON	LF	OAL	LB_1	PL	KAPR	BAR	KG	RPMX
80.00	07C	07P	07P	07P	252.00	80	-0.30	0.30	880-D0800V80-03	80.00	330.50	350.00	287.61	1.50	88°	10	10.500	5000
					336.00	80	-0.30	0.30	880-D0800V80-04	80.00	414.50	434.00	371.61	1.50	88°	10	13.300	5000
81.00	07C	07P	07P	07P	252.00	80	-0.30	0.30	880-D0810V80-03	80.00	330.50	350.00	287.61	1.50	88°	10	12.700	5000
					336.00	80	-0.30	0.30	880-D0810V80-04	80.00	414.50	434.00	371.61	1.50	88°	10	13.125	5000
82.00	07C	07P	07P	07P	252.00	80	-0.30	0.30	880-D0820V80-03	80.00	330.50	350.00	287.61	1.50	88°	10	12.700	5000
					336.00	80	-0.30	0.30	880-D0820V80-04	80.00	414.50	434.00	371.61	1.50	88°	10	13.205	5000
83.00	07C	07P	07P	07P	252.00	80	-0.30	0.30	880-D0830V80-03	80.00	330.50	350.00	287.61	1.50	88°	10	12.700	5000
					336.00	80	-0.30	0.30	880-D0830V80-04	80.00	414.50	434.00	371.61	1.50	88°	10	15.100	5000
84.00	07C	07P	07P	07P	252.00	80	-0.30	0.30	880-D0840V80-03	80.00	330.50	350.00	287.61	1.50	88°	10	12.700	5000
					336.00	80	-0.30	0.30	880-D0840V80-04	80.00	414.50	434.00	371.61	1.50	88°	10	13.300	5000

As cápsulas estão incluídas, as pastilhas são vendidas separadamente


J42


L2


J62


J35



N23



N6

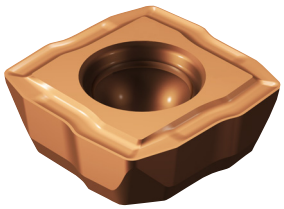


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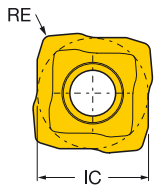

J48

Pastilhas CoroDrill® 880 para furação

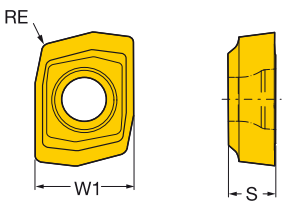
Pastilha central



880..C



880-01..C



		INSUC	Código para pedido	P	M		K	N			S			H	Dimensões, mm			
				1044	1044	1144	1044	1044	H13A	N134	1044	1144	H13A	1044	S	RE	IC	W1
Médio avanço	01C	C	880-01 02 03H-C-LM	★	☆	★	★	☆		★	★	☆	☆	☆	2.20	0.30		4.8
	02C	C	880-02 02 04H-C-GM	☆	☆		☆	☆			☆			★	2.40	0.40	4.9	
		C	880-02 02 04H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	2.40	0.40	4.9	
	03C	C	880-03 03 05H-C-GM	☆	☆		☆	☆			☆			★	2.60	0.50	5.7	
		C	880-03 03 05H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	2.60	0.50	5.7	
	04C	C	880-04 03 05H-C-GM	☆	☆		☆	☆			☆			★	2.80	0.50	6.8	
		C	880-04 03 05H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	2.80	0.50	6.8	
	05C	C	880-05 03 05H-C-GM	☆	☆		☆	☆			☆			★	3.00	0.50	8.4	
		C	880-05 03 05H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	3.00	0.50	8.4	
	06C	C	880-06 04 06H-C-GM	☆	☆		☆	☆			☆			★	3.50	0.60	10.2	
		C	880-06 04 06H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	3.50	0.60	10.2	
	07C	C	880-07 04 06H-C-GM	☆	☆		☆	☆			☆			★	4.00	0.60	12.4	
		C	880-07 04 06H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	4.00	0.60	12.4	
	08C	C	880-08 05 08H-C-GM	☆	☆		☆	☆			☆			★	4.50	0.80	14.9	
		C	880-08 05 08H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	4.50	0.80	14.9	
	09C	C	880-09 06 08H-C-GM	☆	☆		☆	☆			☆			★	5.50	0.80	17.9	
		C	880-09 06 08H-C-LM	★	☆	★	★	☆	☆	★	★	☆	☆	☆	5.50	0.80	17.9	
Alto avanço	01C	C	880-01 02 03H-C-GR	★			★	☆			☆			★	2.20	0.30		4.8
	02C	C	880-02 02 04H-C-GR	★	☆		★	☆			☆			☆	2.40	0.40	4.9	
	03C	C	880-03 03 05H-C-GR	★	☆		★	☆			☆			☆	2.60	0.50	5.7	
	04C	C	880-04 03 05H-C-GR	★	☆		★	☆			☆			☆	2.80	0.50	6.8	
	05C	C	880-05 03 05H-C-GR	★	☆		★	☆			☆			☆	3.00	0.50	8.4	
	06C	C	880-06 04 06H-C-GR	★	☆		★	☆			☆			☆	3.50	0.60	10.2	
	07C	C	880-07 04 06H-C-GR	★	☆		★	☆			☆			☆	4.00	0.60	12.4	
	08C	C	880-08 05 08H-C-GR	★	☆		★	☆			☆			☆	4.50	0.80	14.9	
	09C	C	880-09 06 08H-C-GR	★	☆		★	☆			☆			☆	5.50	0.80	17.9	

J36 J62 J35 J35 N23

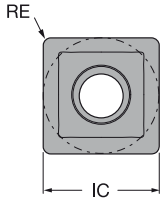
SANDVIK Coromant

Pastilhas CoroDrill® 880 para furação

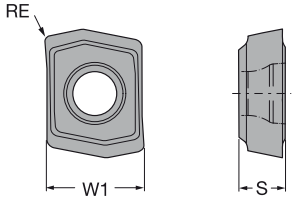
Pastilha periférica



880..P



880-01..P



		INSUC	Código para pedido	P			M			K			N			S			H		Dimensões, mm			
				4324	4334	4344	2044	4334	4344	4324	4334	4344	4344	H13A	N124	2044	4344	H13A	4334	4344	S	RE	IC	W1
Médio avanço	01P	P	880-01 02 W04H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆				★		☆	☆	2.20	0.40		4.8
		P	880-01 02 W04H-P-MS				★								★	★					2.20	0.40		4.8
	02P	P	880-02 02 W04H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	2.40	0.40	5.1	
		P	880-02 02 W05H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆				★		☆	☆	2.40	0.50	5.1	
		P	880-02 02 W05H-P-MS				★								★	★					2.40	0.50	5.1	
	03P	P	880-03 03 W05H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	2.60	0.50	6.0	
		P	880-03 03 W06H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆	☆			★	☆	☆	☆	2.60	0.60	6.0	
		P	880-03 03 W06H-P-MS				★								★	★					2.60	0.60	6.0	
	04P	P	880-04 03 W05H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	2.80	0.50	7.4	
		P	880-04 03 W07H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆	☆			★	☆	☆	☆	2.80	0.70	7.4	
		P	880-04 03 W07H-P-MS				★								★	★					2.80	0.70	7.4	
	05P	P	880-05 03 W05H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	3.00	0.50	8.9	
		P	880-05 03 W08H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆	☆			★	☆	☆	☆	3.00	0.80	8.9	
		P	880-05 03 W08H-P-MS				★								★	★					3.00	0.80	8.9	
	06P	P	880-06 04 W06H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	3.50	0.60	10.7	
		P	880-06 04 W08H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆	☆			★	☆	☆	☆	3.50	0.80	10.7	
		P	880-06 04 W08H-P-MS				★								★	★					3.50	0.80	10.7	
	07P	P	880-07 04 W06H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	4.00	0.60	12.7	
		P	880-07 04 W10H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆	☆			★	☆	☆	☆	4.00	1.00	12.7	
		P	880-07 04 W10H-P-MS				★								★	★					4.00	1.00	12.7	
	08P	P	880-08 05 W08H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	4.50	0.80	15.5	
		P	880-08 05 W10H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆	☆			★	☆	☆	☆	4.50	1.00	15.5	
		P	880-08 05 W10H-P-MS				★								★	★					4.50	1.00	15.5	
	09P	P	880-09 06 W08H-P-GM	☆	☆	☆		☆	☆	☆	★	☆	☆				☆		☆	★	5.50	0.80	18.6	
		P	880-09 06 W10H-P-LM	☆	★	☆		☆	☆	☆	★	☆	☆	☆			★	☆	☆	☆	5.50	1.00	18.6	
		P	880-09 06 W10H-P-MS				★								★	★					5.50	1.00	18.6	
Alto avanço	01P	P	880-01 02 W04H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	★	2.20	0.40		4.8
	02P	P	880-02 02 W05H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	2.40	0.50	5.1	
		P	880-02 02 W05H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	2.40	0.50	5.1	
	03P	P	880-03 03 W06H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	2.60	0.60	6.0	
		P	880-03 03 W06H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	2.60	0.60	6.0	
	04P	P	880-04 03 W07H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	2.80	0.70	7.4	
		P	880-04 03 W07H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	2.80	0.70	7.4	
	05P	P	880-05 03 W08H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	3.00	0.80	8.9	
		P	880-05 03 W08H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	3.00	0.80	8.9	
	06P	P	880-06 04 W10H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	3.50	1.00	10.7	
		P	880-06 04 W10H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	3.50	1.00	10.7	
	07P	P	880-07 04 W12H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	4.00	1.20	12.7	
		P	880-07 04 W12H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	4.00	1.20	12.7	
	08P	P	880-08 05 W12H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	4.50	1.20	15.5	
		P	880-08 05 W12H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	4.50	1.20	15.5	
	09P	P	880-09 06 W12H-P-GR	☆	★	☆		☆	☆	☆	★	☆	☆				☆		☆	☆	5.50	1.20	18.6	
		P	880-09 06 W12H-P-GT	☆	☆	☆		☆	☆	☆	☆	☆	☆				☆		☆	☆	5.50	1.20	18.6	

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Ferramenta de trepanação

Conceito comprovado para furação do núcleo

Aplicações

- Trepanação
- Aplicações em furos passantes
- Furação de pacotes



Área de aplicação ISO:

P M K N S

Características e benefícios

- Excelente confiabilidade em aplicações instáveis e de torno
- Refrigeração interna
- Cápsulas disponíveis para furação de pacotes

Corpos da broca

- Acoplamento VL

Pastilhas

- Geometrias e classes para a maioria dos materiais

Set up vertical

O núcleo cairá quando a broca atravessar a peça o que, normalmente, não causa qualquer problema.

Set up horizontal

Os núcleos longos e pesados podem precisar de um suporte para evitar que o núcleo caia e cause lascamento na pastilha central.

J45 J46

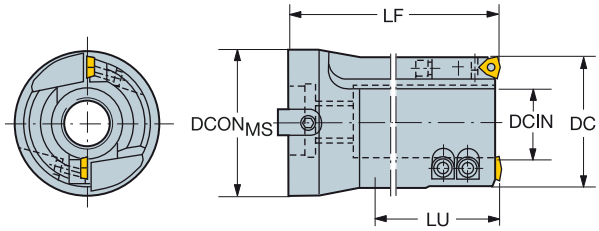
POR

Ferramenta de trepanação

Acoplamento VL

Refrigeração interna





DC	DCIN		LU	CZC$_{MS}$	TCHAL	TCHAU	Código para pedido	Dimensões, mm DCON$_{MS}$	LF	KAPR	BAR	KG
60.00	24.00	06	150.00	80	-0.20	0.20	**R416.7-0600-25-01**	80.00	195.00	85°	20	3.160
65.00	29.00	06	165.00	80	-0.20	0.20	**R416.7-0650-25-01**	80.00	210.00	85°	20	3.853
70.00	34.00	06	175.00	80	-0.20	0.20	**R416.7-0700-25-01**	80.00	220.00	85°	20	4.080
75.00	39.00	06	190.00	80	-0.20	0.20	**R416.7-0750-25-01**	80.00	235.00	85°	20	4.757
80.00	44.00	06	200.00	80	-0.20	0.20	**R416.7-0800-25-01**	80.00	245.00	85°	20	5.524
85.00	49.00	06	215.00	80	-0.20	0.20	**R416.7-0850-25-01**	80.00	260.00	85°	20	6.040
90.00	54.00	06	225.00	80	-0.20	0.20	**R416.7-0900-25-01**	80.00	270.00	85°	20	6.700
95.00	59.00	06	240.00	80	-0.20	0.20	**R416.7-0950-25-01**	80.00	285.00	85°	20	7.700
100.00	64.00	06	250.00	80	-0.20	0.20	**R416.7-1000-25-01**	80.00	295.00	85°	20	8.634
110.00	74.00	06	275.00	80	-0.20	0.20	**R416.7-1100-25-01**	80.00	320.00	85°	20	10.080

Para informações sobre montagem, consulte a página M28

Componentes		
Chaveta	Parafuso	Parafuso
5631 010-03	3212 010-360	430.21-825

Para a lista completa de componentes, acesse www.sandvik.coromant.com

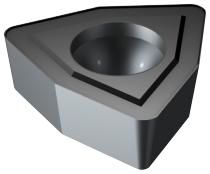
Acessórios

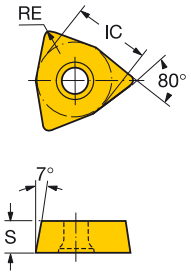
Cápsula para ferramenta de trepanação			
Interna	**Pastilha**	**Periférica**	**Pastilha**
L430.23-1117-06	WCMX 06	R430.26-1114-06	WCMX 06
Cápsula para furação em pacote com ferramenta de trepanação			
Interna	**Pastilha**	**Periférica**	**Pastilha**
L430.23-1117-06SD	WCMX 06	R430.26-1114-06SD	WCMX 06

Os acessórios devem ser pedidos separadamente.

J46 L2 N23 N15

Pastilhas para trepanação

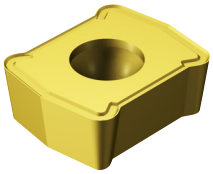


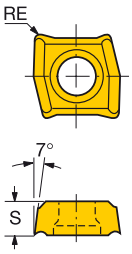


		INSUC	Código para pedido	P				M				K				N		S		Dimensões, mm		
				1020	235	3040	4235	1020	235	3040	4235	1020	1125	3040	4235	1020	H13A	1020	H13A	S	RE	IC
Médio avanço	06	P	WCMX 06 T3 08 R-51		☆				☆								☆		☆	3.97	0.80	9.5
		P	WCMX 06 T3 08 R-53	☆	☆	★		☆	☆	★		☆		★		☆	★	☆	☆	3.97	0.80	9.5
		P	WCMX 06 T3 08-56		☆				☆											3.97	0.80	9.5
		P	WCMX 06 T3 08-58		☆	★			★	☆										3.97	0.80	9.5
		P	WCMX 06 T3 08-GM				☆				☆		☆		☆					3.97	0.80	9.5

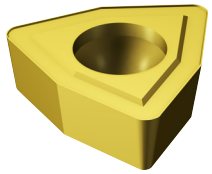
J45 J67 N23

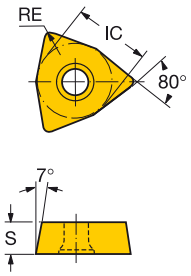
Pastilha Coromant U para furação





		INSUC	Código para pedido	P				M				K			N			S			H			Dimensões, mm	
				1020	1120	235	3040	1020	1120	235	3040	1020	1120	3040	1020	1120	H13A	1020	1120	H13A	1020	1120	3040	S	RE
Médio avanço	02	C	LCMX 02 02 04C-53	★				★				★			★			★			★			2.38	0.40
		P	LCMX 02 02 04P-53		☆		★		☆		★		☆	★		★			★			☆	★	2.38	0.40
		C	LCMX 02 02 04TC-53	☆								☆									☆			2.38	0.40
	03	P	LCMX 03 03 04-58			☆	☆			☆	☆													3.18	0.40
		P	LCMX 03 03 04R-WM	☆			☆					☆		☆										3.18	0.45
		P+C	LCMX 03 03 08-53	★		☆	★	★		☆	★	★		★	☆		★	★		☆	★		★	3.18	0.80
		P+C	LCMX 03 03 08T-53	☆								☆									☆			3.18	0.80
	04	P	LCMX 04 03 04-58			☆	☆			☆	☆													3.18	0.40
		P	LCMX 04 03 04R-WM	☆			☆					☆		☆										3.18	0.40
		P+C	LCMX 04 03 08-53	★		☆	★	★		☆	★	★		★	☆		★	★		☆	★		★	3.18	0.80
		P+C	LCMX 04 03 08T-53	☆								☆									☆			3.18	0.80





		INSUC	Código para pedido	P					M				K				N		S		H		Dimensões, mm		
				1020	1125	235	3040	4235	1020	235	3040	4235	1020	1125	235	3040	4235	1020	H13A	1020	H13A	1020	3040	S	RE	IC
Médio avanço	05	P	WCMX 05 03 04R-WM	☆			☆						☆			☆								3.18	0.40	7.9
		P	WCMX 05 03 08 R-51			☆				☆														3.18	0.80	7.9
		P+C	WCMX 05 03 08 R-53	★		☆	★		★	☆	★		★			★		☆	★	★	☆	★	★	3.18	0.80	7.9
		P+C	WCMX 05 03 08 T-53	☆									☆											3.18	0.80	7.9
		P	WCMX 05 03 08-56			☆				☆														3.18	0.80	7.9
		P	WCMX 05 03 08-58			☆	☆			☆	☆													3.18	0.80	7.9
		C	WCMX 05 03 S R-54			☆									☆									3.18	0.40	7.9
	06	P	WCMX 06 T3 04R-WM	☆			☆						☆			☆								3.97	0.40	9.5
		P	WCMX 06 T3 08 R-51			☆				☆									☆		☆			3.97	0.80	9.5
		P+C	WCMX 06 T3 08 R-53	★		☆	★		★	☆	★		★			★		☆	★	★	☆	★	★	3.97	0.80	9.5
		P+C	WCMX 06 T3 08 T-53	☆									☆											3.97	0.80	9.5
		P	WCMX 06 T3 08-56			☆				☆														3.97	0.80	9.5
		P	WCMX 06 T3 08-58			☆	☆			☆	☆													3.97	0.80	9.5
		P+C	WCMX 06 T3 08-GM		☆			☆				☆		☆			☆							3.97	0.80	9.5
		C	WCMX 06 T3 S R-56			☆				☆														3.97	0.80	9.5
	08	P	WCMX 08 04 12 R-51			☆				☆									☆		☆			4.76	1.20	12.7
		P+C	WCMX 08 04 12 R-53	★		☆	★		★	☆	★		★			★		☆	★	★	☆	★	★	4.76	1.20	12.7
		P+C	WCMX 08 04 12 T-53	☆									☆											4.76	1.20	12.7
		P	WCMX 08 04 12-56			☆				☆														4.76	1.20	12.7
		P	WCMX 08 04 12-58			☆	☆			☆	☆													4.76	1.20	12.7
		P+C	WCMX 08 04 12-GM		☆			☆				☆		☆			☆							4.76	1.20	12.7
		C	WCMX 08 04 S R-56			☆				☆														4.76	0.40	12.7

J68 N23

Broca CoroDrill® 880 com diâmetro grande

Correlação entre pastilha e cápsula

	Cápsula central		Cápsula periférica	
Faixa de diâmetro, mm	Pastilha	Qtd.	Pastilha	Qtd.
65-69	880-06...C 880-06...P	1 1	880-06...P	2
70-73	880-06...C 880-06...P	1 1	880-06...P	2
74	880-06...C 880-06...P	1 1	880-07...P	2
75-79	880-07...C 880-07...P	1 1	880-07...P	2
80-84	880-07...C 880-07...P	1 1	880-07...P	2

		Componentes incluídos			
		Corpo da broca		Cápsula	
D_c	**Código para pedido**	3xD	4xD	Central	Periférica
65	880-D0650xxx-xx				880-D0650-P
66	880-D0660xxx-xx	880-D065-069L50-3	880-D065-069L50-4		880-D0660-P
67	880-D0670xxx-xx	880-D065-069LX50-3	880-D065-069LX50-4	880-D0650-C	880-D0670-P
68	880-D0680xxx-xx	880-D065-069V80-3	880-D065-069V80-4		880-D0680-P
69	880-D0690xxx-xx				880-D0690-P
70	880-D0700xxx-xx				880-D0700-P
71	880-D0710xxx-xx	880-D070-074L50-3	880-D070-074L50-4		880-D0710-P
72	880-D0720xxx-xx	880-D070-074LX50-3	880-D070-074LX50-4	880-D0700-C	880-D0720-P
73	880-D0730xxx-xx	880-D070-074V80-3	880-D070-074V80-4		880-D0730-P
74	880-D0740xxx-xx				880-D0740-P
75	880-D0750xxx-xx				880-D0750-P
76	880-D0760xxx-xx	880-D075-079L50-3	880-D075-079L50-4		880-D0760-P
77	880-D0770xxx-xx	880-D075-079LX50-3	880-D075-079LX50-4	880-D0750-C	880-D0770-P
78	880-D0780xxx-xx	880-D075-079V80-3	880-D075-079V80-4		880-D0780-P
79	880-D0790xxx-xx				880-D0790-P
80	880-D0800xxx-xx				880-D0800-P
81	880-D0810xxx-xx				880-D0810-P
82	880-D0820xxx-xx	880-D080-084LX63-3 880-D080-084V80-3	880-D080-084LX63-4 880-D080-084V80-4	880-D0800-C	880-D0820-P
83	880-D0830xxx-xx				880-D0830-P
84	880-D0840xxx-xx				880-D0840-P

POR

Selecione seus dados de corte

A formação e o escoamento de cavacos são questões críticas em furação e dependem do material da peça, da escolha da broca/geometria da pastilha, pressão/volume da refrigeração, dados de corte. O entupimento de cavacos pode causar movimento radial da broca e, consequentemente, afetar a qualidade do furo, vida útil e confiabilidade da broca ou causar quebra da broca/pastilhas.

A formação dos cavacos é aceitável quando os cavacos podem ser expulsos da broca sem problemas. A melhor maneira de identificar isso é ouvir a furação. Um som consistente indica um bom escoamento de cavacos, mas sons interrompidos indicam entupimento de cavacos. Verifique a força de avanço ou monitore a potência. Se ocorrerem irregularidades, o entupimento de cavacos pode ser a razão. Verifique os cavacos: Se eles forem longos e tortos, não enrolados, ocorreu entupimento de cavacos. Verifique o furo: Se houver entupimento por cavaco, você verá a superfície irregular

Efeitos da velocidade de corte – v_c

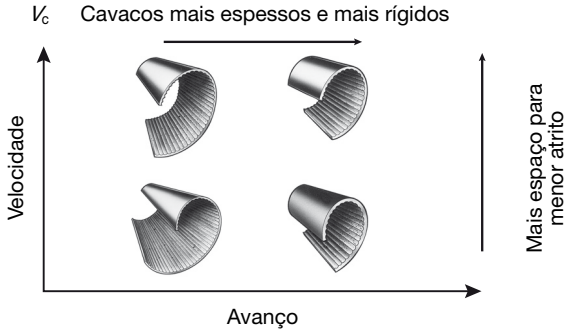
Velocidade de corte muito alta:
Rápido desgaste do flanco
Deformação plástica
Tolerância e qualidade do furo insatisfatórias

Velocidade de corte muito baixa:
Aresta postiça.
Escoamento de cavacos ruim
Tempo em corte mais longo

Efeitos do avanço – f_n

Alta faixa de avanço:
Quebra de cavacos mais difícil
Menos tempo em corte
Menos desgaste da ferramenta, porém maior risco de quebra da broca
Qualidade reduzida do furo

Baixa faixa de avanço:
Recomendado para materiais com cavacos longos
Melhor qualidade
Desgaste de ferramenta acelerado
Tempo em corte mais longo



Obtendo uma boa qualidade do furo

Escoamento de cavacos
Certifique-se de que o escoamento dos cavacos seja satisfatório. O entupimento de cavacos afeta a qualidade do furo e a confiabilidade/vida útil da ferramenta. A geometria da broca/pastilha e os dados de corte são cruciais.

Estabilidade, set-up da ferramenta
Use a broca o mais curta possível. Use um porta-ferramenta rígido e preciso com batimento radial mínimo. Certifique-se de que o fuso da máquina esteja em boas condições e bem alinhado. Certifique-se de que a peça esteja firme e estável. Estabeleça as faixas de avanço corretas para superfícies irregulares, angulares e furos cruzados.

Vida útil
Verifique o desgaste da pastilha e estabeleça um programa de vida útil pré-determinada da ferramenta. A maneira mais eficiente de supervisionar a furação é usar um monitor de força da avanço.

Manutenção
Troque o parafuso de fixação da pastilha regularmente. Limpe o tip seat antes de trocar a pastilha e certifique-se de usar um torquímetro. Não ultrapasse o desgaste máximo antes de reafiar as brocas inteiriças de metal duro.

Usinagem de furos profundos com CoroDrill® DS20
Se for necessária qualidade máxima do furo ao usinar furos de 6-7xD com CoroDrill DS20, é importante utilizar uma faixa de avanço reduzida na entrada (primeiro 1-2 mm) e na saída (último 5 mm).

CoroDrill® 870

< 6 x DC

ISO	N° MC	No. CMC	Material	Dureza Brinell (HB)	Velocidade de corte (V_c) m/min relacionada ao diâmetro da broca					
					10.00-20.99 mm			21.00-33.00 mm		
					Mínima	Rec.	Máx	Mínima	Rec.	Máx
P			**Aços sem liga**				**Classe 4334**			
	P1.1.Z.AN	01.1	C=0.10-0.25%	125	80	120	160	80	120	160
	P1.2.Z.AN	01.2	C=0.25-0.55%	190	80	120	160	80	120	160
	P1.3.Z.AN	01.3	C=0.55-0.80%	190	70	100	130	70	100	130
	P1.5.C.UT	06.1	Fundido - sem tratamento	150	80	110	140	80	110	140
			Aços baixa-liga				**Classe 4334 e 3334**			
	P2.1.Z.AN	02.1	Recozidos	175	80	110	140	80	110	140
	P2.2.Z.AN	02.1	Recozidos	240	80	110	140	80	110	140
	P2.4.Z.AN	02.1	Recozidos	225	80	110	140	80	110	140
	P2.5.Z.HT	02.2	Endurecidos e temperados	330	70	100	130	50	75	100
	P2.6.C.UT	06.2	Fundido - sem tratamento	200	70	100	130	70	100	130
			Aços alta-liga							
	P3.0.Z.AN	03.11	Recozidos	200	60	80	100	60	80	100
	P3.0.Z.HT	03.21	Endurecidos e temperados	380	40	60	80	40	60	80
M			**Aços inoxidáveis ferríticos/martensíticos**				**Classe 4334 e 2334**			
	P5.0.Z.AN	05.11	Recozidos	200	30	40	50	30	40	50
	P5.0.Z.HT	05.13	Endurecidos e temperados	330	70	90	110	60	75	90
			Aços inoxidáveis austenísticos				**Classe 2334 e 4334**			
	M1.0.Z.AQ	05.21	Recozidos/coquilhados	200	40	50	60	40	50	60
	M1.0.C.UT	15.21	Fundidos+não tratados	200	50	60	70	50	60	70
	M1.1.Z.AQ	05.21	Usinabilidade melhorada	200	60	75	90	60	75	90
			Aços inoxidáveis superaustenísticos (Ni≥20%)							
	M2.0.Z.AQ	05.23	Recozidos/coquilhados	200	20	40	60	20	40	60
	M2.0.C.AQ	15.23	Fundidos+recozidos/coquilhados	200	20	40	60	20	40	60
			Aços inoxidáveis Duplex (austenísticos/ferríticos)							
	M3.1.Z.AQ	05.51	> 60% ferrita (N<0,10%)	230	40	55	70	40	55	70
	M3.2.Z.AQ	05.52	< 60% ferrita (N≥0,10%)	260	20	40	60	20	40	60
K			**Ferros fundidos maleáveis**				**Classe 3334 e 4334**			
	K1.1.C.NS	07.1	Ferríticos (cavacos curtos)	130	100	145	190	100	145	190
	K1.1.C.NS	07.2	Perlíticos (cavacos longos)	200	90	125	160	90	125	160
			Ferros fundidos cinzentos							
	K2.1.C.UT	08.1	Baixa resistência à tensão	180	100	150	200	100	150	200
	K2.2.C.UT	08.2	Alta resistência à tensão	245	90	130	170	90	130	170
			Ferros fundidos nodulares							
	K3.1.C.UT	09.1	Ferríticos	155	100	145	190	100	145	190
	K3.3.C.UT	09.2	Perlíticos	265	90	125	160	90	125	160
N			**Ligas à base de alumínio**				**Classe 4334**			
	N1.2.Z.AG	30.12	Ligas AlSi, Si ≤ 1%	100	150	200	250	150	200	250
	N1.3.C.AG	30.22	Ligas fundidas AlSi, Si > 1% e < 13%	80	150	200	250	150	200	250
S			**Super ligas resistentes ao calor**				**Classe 2334 e 4334**			
	S2.0.Z.AG	20.22	À base de Ni	350	18	20	30	18	20	30
	S4.3.Z.AN	23.21	À base de titânio	330	25	40	60	25	40	60

SANDVIK Coromant

POR

CoroDrill® 870

< 6 x DC

Avanço (f_n) mm/r relacionado ao diâmetro da broca																	
10.00-11.99 mm			12.00-13.99 mm			14.00-15.99 mm			16.00-20.99 mm			21.00-25.99 mm			26.00-33.00 mm		
Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.
Geometria -PM e -GP																	
0.12	0.18	0.28	0.14	0.20	0.35	0.16	0.25	0.41	0.20	0.32	0.45	0.20	0.34	0.45	0.20	0.34	0.45
0.12	0.18	0.28	0.14	0.20	0.35	0.16	0.25	0.41	0.20	0.32	0.45	0.20	0.34	0.45	0.20	0.34	0.45
0.12	0.18	0.28	0.14	0.20	0.35	0.16	0.25	0.41	0.20	0.32	0.45	0.20	0.34	0.45	0.20	0.34	0.45
0.12	0.18	0.28	0.14	0.20	0.35	0.16	0.25	0.41	0.20	0.32	0.45	0.20	0.34	0.45	0.20	0.34	0.45
Geometria -PM. -KM e -GP																	
0.12	0.18	0.30	0.14	0.20	0.37	0.16	0.25	0.45	0.20	0.32	0.48	0.20	0.36	0.50	0.20	0.40	0.52
0.12	0.18	0.30	0.14	0.20	0.37	0.16	0.25	0.45	0.20	0.32	0.48	0.20	0.36	0.50	0.20	0.40	0.52
0.12	0.18	0.30	0.14	0.20	0.37	0.16	0.25	0.45	0.20	0.32	0.48	0.20	0.36	0.50	0.20	0.40	0.52
0.12	0.18	0.30	0.14	0.20	0.37	0.16	0.25	0.45	0.20	0.32	0.48	0.20	0.36	0.50	0.20	0.40	0.52
0.12	0.18	0.30	0.14	0.20	0.37	0.16	0.25	0.45	0.20	0.32	0.48	0.20	0.36	0.50	0.20	0.40	0.52
0.10	0.16	0.24	0.12	0.19	0.33	0.14	0.22	0.38	0.18	0.25	0.40	0.18	0.30	0.45	0.18	0.30	0.45
0.10	0.16	0.24	0.12	0.19	0.33	0.14	0.22	0.38	0.18	0.25	0.40	0.18	0.30	0.45	0.18	0.30	0.45
Geometria -PM, -MM e -GP																	
0.12	0.14	0.19	0.14	0.16	0.22	0.14	0.18	0.24	0.18	0.24	0.30	0.22	0.28	0.34	0.22	0.28	0.34
0.10	0.12	0.16	0.10	0.12	0.16	0.12	0.14	0.18	0.14	0.18	0.22	0.16	0.22	0.26	0.16	0.22	0.26
Geometria -MM, PM e -GP																	
0.10	0.12	0.14	0.10	0.12	0.14	0.12	0.14	0.16	0.12	0.16	0.2	0.14	0.18	0.22	0.14	0.18	0.22
0.10	0.12	0.14	0.10	0.12	0.14	0.12	0.14	0.16	0.12	0.16	0.2	0.14	0.18	0.22	0.14	0.18	0.22
0.10	0.12	0.16	0.10	0.12	0.16	0.12	0.14	0.18	0.14	0.16	0.22	0.14	0.18	0.24	0.14	0.18	0.24
0.10	0.12	0.14	0.10	0.12	0.16	0.10	0.12	0.16	0.10	0.14	0.16	0.12	0.14	0.18	0.12	0.14	0.18
0.10	0.12	0.14	0.10	0.12	0.16	0.10	0.12	0.16	0.10	0.14	0.16	0.12	0.14	0.18	0.12	0.14	0.18
Geometria -MM e -GP																	
0.10	0.12	0.16	0.10	0.12	0.16	0.12	0.14	0.18	0.14	0.16	0.22	0.14	0.16	0.22	0.14	0.16	0.22
0.10	0.12	0.14	0.10	0.12	0.14	0.12	0.14	0.16	0.12	0.16	0.2	0.12	0.16	0.2	0.12	0.16	0.2
Geometria -KM, PM e -GP																	
0.16	0.25	0.36	0.18	0.30	0.42	0.21	0.37	0.48	0.25	0.44	0.55	0.30	0.48	0.60	0.30	0.50	0.60
0.16	0.25	0.36	0.18	0.30	0.42	0.21	0.37	0.48	0.25	0.44	0.55	0.30	0.48	0.60	0.30	0.50	0.60
0.16	0.25	0.36	0.18	0.30	0.42	0.21	0.37	0.48	0.25	0.44	0.55	0.30	0.48	0.60	0.30	0.50	0.60
0.16	0.25	0.36	0.18	0.30	0.42	0.21	0.37	0.48	0.25	0.44	0.55	0.30	0.48	0.60	0.30	0.50	0.60
0.16	0.25	0.36	0.18	0.30	0.42	0.21	0.37	0.48	0.25	0.44	0.55	0.30	0.48	0.60	0.30	0.50	0.60
0.16	0.25	0.36	0.18	0.30	0.42	0.21	0.37	0.48	0.25	0.44	0.55	0.30	0.48	0.60	0.30	0.50	0.60
Geometria -PM e -GP																	
0.20	0.25	0.30	0.22	0.32	0.40	0.26	0.34	0.42	0.30	0.36	0.44	0.32	0.38	0.50	0.32	0.38	0.50
0.20	0.25	0.30	0.22	0.32	0.40	0.26	0.34	0.42	0.30	0.36	0.44	0.32	0.38	0.50	0.32	0.38	0.50
Geometria -MM, PM e -GP																	
0.08	0.10	0.14	0.08	0.11	0.14	0.10	0.12	0.14	0.11	0.13	0.16	0.12	0.15	0.20	0.12	0.15	0.20
0.09	0.12	0.15	0.10	0.14	0.16	0.12	0.16	0.20	0.14	0.18	0.22	0.16	0.20	0.25	0.18	0.22	0.27

CoroDrill® 870

≥ 6 x DC

ISO	N° MC	No. CMC	Material	Dureza Brinell (HB)	Velocidade de corte (V_c) m/min relacionada ao diâmetro da broca					
					10.00-20.99mm			21.00-33.00mm		
					Mínima	Rec.	Máx	Mínima	Rec.	Máx
P			**Aços sem liga**				**Classe 4334**			
	P1.1.Z.AN	01.1	C=0.10-0.25%	125	80	120	160	80	120	160
	P1.2.Z.AN	01.2	C=0.25-0.55%	190	80	120	160	80	120	160
	P1.3.Z.AN	01.3	C=0.55-0.80%	190	70	100	130	70	100	130
	P1.5.C.UT	06.1	Fundido - sem tratamento	150	80	110	140	80	110	140
			Aços baixa-liga				**Classe 4334 e 3334**			
	P2.1.Z.AN	02.1	Recozidos	175	80	110	140	80	110	140
	P2.2.Z.AN	02.1	Recozidos	240	80	110	140	80	110	140
	P2.4.Z.AN	02.1	Recozidos	225	80	110	140	80	110	140
	P2.5.Z.HT	02.2	Endurecidos e temperados	330	70	100	130	50	75	100
	P2.6.C.UT	06.2	Fundido - sem tratamento	200	70	100	130	70	100	130
			Aços alta-liga							
	P3.0.Z.AN	03.11	Recozidos	200	60	80	100	60	80	100
	P3.0.Z.HT	03.21	Endurecidos e temperados	380	40	60	80	40	60	80
M			**Aços inoxidáveis ferríticos/martensíticos**				**Classe 4334 e 2334**			
	P5.0.Z.AN	05.11	Recozidos	200	30	40	50	30	40	50
	P5.0.Z.HT	05.13	Endurecidos e temperados	330	70	90	110	60	75	90
			Aços inoxidáveis austenísticos				**Classe 2334 e 4334**			
	M1.0.Z.AQ	05.21	Recozidos/coquilhados	200	40	50	60	40	50	60
	M1.0.C.UT	15.21	Fundidos+não tratados	200	50	60	70	50	60	70
	M1.1.Z.AQ	05.21	Usinabilidade melhorada	200	60	75	90	60	75	90
			Aços inoxidáveis superaustenísticos (Ni≥20%)							
	M2.0.Z.AQ	05.23	Recozidos/coquilhados	200	20	40	60	20	40	60
	M2.0.C.AQ	15.23	Fundidos+recozidos/coquilhados	200	20	40	60	20	40	60
			Aços inoxidáveis Duplex (austenísticos/ferríticos)				**Classe 2334**			
	M3.1.Z.AQ	05.51	> 60% ferrita (N<0,10%)	230	40	55	70	40	55	70
	M3.2.Z.AQ	05.52	< 60% ferrita (N≥0,10%)	260	20	40	60	20	40	60
K			**Ferros fundidos maleáveis**				**Classe 3334 e 4334**			
	K1.1.C.NS	07.1	Ferríticos (cavacos curtos)	130	100	130	170	100	130	170
	K1.1.C.NS	07.2	Perlíticos (cavacos longos)	200	90	115	145	90	115	145
			Ferros fundidos cinzentos							
	K2.1.C.UT	08.1	Baixa resistência à tensão	180	100	135	180	100	135	180
	K2.2.C.UT	08.2	Alta resistência à tensão	245	90	120	155	90	120	155
			Ferros fundidos nodulares							
	K3.1.C.UT	09.1	Ferríticos	155	100	130	170	100	130	170
	K3.3.C.UT	09.2	Perlíticos	265	90	115	145	90	115	145
N			**Ligas à base de alumínio**				**Classe 4334**			
	N1.2.Z.AG	30.12	Ligas AlSi, Si ≤ 1%	100	150	200	250	150	200	250
	N1.3.C.AG	30.22	Ligas fundidas AlSi, Si > 1% e < 13%	80	150	200	250	150	200	250
S			**Super ligas resistentes ao calor**				**Classe 2334 e 4334**			
	S2.0.Z.AG	20.22	À base de Ni	350	18	20	30	18	20	30
	S4.3.Z.AN	23.21	À base de titânio	330	25	40	60	25	40	60

SANDVIK Coromant

POR

CoroDrill® 870

≥ 6 x DC

Avanço (f_n) mm/r relacionado ao diâmetro da broca																	
10.00-11.99 mm			12.00-13.99 mm			14.00-15.99 mm			16.00-20.99 mm			21.00-25.99 mm			26.00-33.00 mm		
Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.	Min.	Rec.	Máx.
Geometria -PM																	
0.12	0.14	0.22	0.14	0.16	0.28	0.16	0.20	0.33	0.20	0.26	0.36	0.20	0.27	0.36	0.20	0.27	0.36
0.12	0.14	0.22	0.14	0.16	0.28	0.16	0.20	0.33	0.20	0.26	0.36	0.20	0.27	0.36	0.20	0.27	0.36
0.12	0.14	0.22	0.14	0.16	0.28	0.16	0.20	0.33	0.20	0.26	0.36	0.20	0.27	0.36	0.20	0.27	0.36
0.12	0.14	0.22	0.14	0.16	0.28	0.16	0.20	0.33	0.20	0.26	0.36	0.20	0.27	0.36	0.20	0.27	0.36
Geometria -PM e -KM																	
0.12	0.14	0.24	0.14	0.16	0.30	0.16	0.20	0.36	0.20	0.26	0.38	0.20	0.29	0.40	0.20	0.32	0.42
0.12	0.14	0.24	0.14	0.16	0.30	0.16	0.20	0.36	0.20	0.26	0.38	0.20	0.29	0.40	0.20	0.32	0.42
0.12	0.14	0.24	0.14	0.16	0.30	0.16	0.20	0.36	0.20	0.26	0.38	0.20	0.29	0.40	0.20	0.32	0.42
0.12	0.13	0.21	0.14	0.15	0.26	0.16	0.18	0.32	0.20	0.22	0.34	0.20	0.25	0.35	0.20	0.28	0.36
0.12	0.14	0.24	0.14	0.16	0.30	0.16	0.20	0.36	0.20	0.26	0.38	0.20	0.29	0.40	0.20	0.32	0.42
0.10	0.13	0.19	0.12	0.15	0.26	0.14	0.18	0.30	0.18	0.20	0.32	0.18	0.24	0.36	0.18	0.24	0.36
0.10	0.11	0.17	0.12	0.13	0.23	0.14	0.15	0.27	0.18	0.19	0.28	0.18	0.21	0.32	0.18	0.21	0.32
Geometria -PM e -MM																	
0.12	0.13	0.15	0.14	0.15	0.18	0.14	0.15	0.19	0.18	0.19	0.24	0.22	0.23	0.27	0.22	0.23	0.27
0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.18	0.16	0.17	0.18
Geometria -MM e -PM																	
0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.13	0.14	0.12	0.13	0.16	0.14	0.15	0.18	0.14	0.15	0.18
0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.13	0.14	0.12	0.13	0.16	0.14	0.15	0.18	0.14	0.15	0.18
0.10	0.11	0.13	0.10	0.11	0.13	0.12	0.13	0.14	0.14	0.15	0.18	0.14	0.15	0.19	0.14	0.15	0.19
0.10	0.11	0.12	0.10	0.11	0.13	0.10	0.11	0.13	0.10	0.11	0.13	0.12	0.13	0.14	0.12	0.13	0.14
0.10	0.11	0.12	0.10	0.11	0.13	0.10	0.11	0.13	0.10	0.11	0.13	0.12	0.13	0.14	0.12	0.13	0.14
Geometria -MM																	
0.10	0.11	0.13	0.10	0.11	0.13	0.12	0.13	0.14	0.14	0.15	0.18	0.14	0.15	0.18	0.14	0.15	0.18
0.10	0.11	0.12	0.10	0.11	0.13	0.12	0.13	0.14	0.12	0.13	0.16	0.12	0.13	0.16	0.12	0.13	0.16
Geometria -KM e -PM																	
0.16	0.20	0.29	0.18	0.24	0.34	0.21	0.30	0.38	0.25	0.35	0.44	0.30	0.38	0.48	0.30	0.40	0.48
0.16	0.20	0.29	0.18	0.24	0.34	0.21	0.30	0.38	0.25	0.35	0.44	0.30	0.38	0.48	0.30	0.40	0.48
0.16	0.20	0.29	0.18	0.24	0.34	0.21	0.30	0.38	0.25	0.35	0.44	0.30	0.38	0.48	0.30	0.40	0.48
0.16	0.20	0.29	0.18	0.24	0.34	0.21	0.30	0.38	0.25	0.35	0.44	0.30	0.38	0.48	0.30	0.40	0.48
0.16	0.20	0.29	0.18	0.24	0.34	0.21	0.30	0.38	0.25	0.35	0.44	0.30	0.38	0.48	0.30	0.40	0.48
0.16	0.20	0.29	0.18	0.24	0.34	0.21	0.30	0.38	0.25	0.35	0.44	0.30	0.38	0.48	0.30	0.40	0.48
Geometria -PM																	
0.20	0.22	0.28	0.22	0.24	0.35	0.26	0.28	0.38	0.30	0.32	0.40	0.32	0.34	0.45	0.32	0.34	0.45
0.20	0.22	0.28	0.22	0.24	0.35	0.26	0.28	0.38	0.30	0.32	0.40	0.32	0.34	0.45	0.32	0.34	0.45
Geometria -MM e -PM																	
0.08	0.10	0.14	0.08	0.11	0.14	0.10	0.12	0.14	0.11	0.13	0.16	0.12	0.15	0.20	0.12	0.15	0.20
0.09	0.11	0.14	0.10	0.12	0.15	0.12	0.14	0.18	0.14	0.16	0.20	0.16	0.18	0.22	0.18	0.20	0.25

CoroDrill® DS20

4 – 5 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 4-5xD Mínima	Rec.	Máx	Diâmetro da broca	Comprimento da broca 4xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 5xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
									f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot
P	P1.0.Z.AN	Aços sem liga C=0.05-0.10%	110	4324	230	340	400	15.00-18.00	0.04-0.08	**0.04-0.08**	0.04-0.08	-	0.04-0.1	0.04-0.07	**0.04-0.07**	0.04-0.07	-	0.04-0.09
				4334	210	285	325	18.01-22.00	0.04-0.09	**0.04-0.09**	0.04-0.09	-	0.04-0.11	0.04-0.08	**0.04-0.08**	0.04-0.08	-	0.04-0.1
				4344	190	225	245	22.01-27.00	0.04-0.1	**0.04-0.1**	0.04-0.1	-	0.04-0.12	0.04-0.09	**0.04-0.09**	0.04-0.09	-	0.04-0.11
								27.01-33.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.13	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.12
								33.01-40.00	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.16	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.14
								40.01-52.00	0.06-0.12	**0.06-0.12**	0.06-0.12	-	0.06-0.16	0.06-0.11	**0.06-0.11**	0.06-0.11	-	0.06-0.14
								52.01-65.00	0.06-0.12	**0.06-0.12**	0.06-0.12	-	0.06-0.16	0.06-0.11	**0.06-0.11**	0.06-0.11	-	0.06-0.14
	P1.1.Z.AN	Aços sem liga C=0.05-0.25%	125	4324	230	320	370	15.00-18.00	0.04-0.1	**0.04-0.1**	0.04-0.1	-	0.04-0.1	0.04-0.09	**0.04-0.09**	0.04-0.09	-	0.04-0.09
				4334	200	270	305	18.01-22.00	0.04-0.11	**0.04-0.11**	0.04-0.11	-	0.04-0.11	0.04-0.1	**0.04-0.1**	0.04-0.1	-	0.04-0.1
				4344	170	210	235	22.01-27.00	0.04-0.12	**0.04-0.12**	0.04-0.12	-	0.04-0.12	0.04-0.11	**0.04-0.11**	0.04-0.11	-	0.04-0.11
								27.01-33.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.13	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.12
								33.01-40.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.16	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.14
								40.01-52.00	0.06-0.14	**0.06-0.14**	0.06-0.14	-	0.06-0.16	0.06-0.13	**0.06-0.13**	0.06-0.13	-	0.06-0.14
								52.01-65.00	0.06-0.14	**0.06-0.14**	0.06-0.14	-	0.06-0.16	0.06-0.13	**0.06-0.13**	0.06-0.13	-	0.06-0.14
	P1.2.Z.AN	Aços sem liga C=0.25-0.55%	190	4324	190	265	305	15.00-18.00	-	0.05-0.12	0.06-0.14	**0.06-0.16**	-	-	0.05-0.1	0.06-0.12	**0.06-0.14**	-
				4334	155	215	250	18.01-22.00	-	0.05-0.14	0.06-0.16	**0.06-0.18**	-	-	0.05-0.12	0.06-0.14	**0.06-0.15**	-
				4344	120	165	190	22.01-27.00	-	0.05-0.18	0.06-0.2	**0.06-0.22**	-	-	0.05-0.15	0.06-0.17	**0.06-0.19**	-
								27.01-33.00	-	0.07-0.22	0.08-0.24	**0.08-0.26**	-	-	0.07-0.19	0.08-0.2	**0.08-0.22**	-
								33.01-40.00	-	0.07-0.24	0.08-0.26	**0.08-0.28**	-	-	0.07-0.2	0.08-0.22	**0.08-0.24**	-
								40.01-52.00	-	0.09-0.24	0.1-0.26	**0.1-0.28**	-	-	0.09-0.2	0.1-0.22	**0.1-0.24**	-
								52.01-65.00	-	0.09-0.24	0.1-0.26	**0.1-0.28**	-	-	0.09-0.2	0.1-0.22	**0.1-0.24**	-
	P1.3.Z.AN	Aços sem liga C=0.55-0.80%	190	4324	170	250	290	15.00-18.00	-	0.05-0.12	0.06-0.14	**0.06-0.16**	-	-	0.05-0.1	0.06-0.12	**0.06-0.14**	-
				4334	140	205	240	18.01-22.00	-	0.05-0.14	0.06-0.16	**0.06-0.18**	-	-	0.05-0.12	0.06-0.14	**0.06-0.15**	-
				4344	105	155	185	22.01-27.00	-	0.05-0.18	0.06-0.2	**0.06-0.22**	-	-	0.05-0.15	0.06-0.17	**0.06-0.19**	-
								27.01-33.00	-	0.07-0.22	0.08-0.24	**0.08-0.26**	-	-	0.07-0.19	0.08-0.2	**0.08-0.22**	-
								33.01-40.00	-	0.07-0.24	0.08-0.26	**0.08-0.28**	-	-	0.07-0.2	0.08-0.22	**0.08-0.24**	-
								40.01-52.00	-	0.09-0.24	0.1-0.26	**0.1-0.28**	-	-	0.09-0.2	0.1-0.22	**0.1-0.24**	-
								52.01-65.00	-	0.09-0.24	0.1-0.26	**0.1-0.28**	-	-	0.09-0.2	0.1-0.22	**0.1-0.24**	-
	P1.5.C.UT	Aços sem liga Fundido - sem tratamento	150	4324	140	260	325	15.00-18.00	-	0.04-0.12	0.04-0.12	**0.04-0.12**	-	-	0.04-0.1	0.04-0.1	**0.04-0.1**	-
				4334	135	220	265	18.01-22.00	-	0.04-0.13	0.04-0.13	**0.04-0.13**	-	-	0.04-0.11	0.04-0.11	**0.04-0.11**	-
				4344	125	175	200	22.01-27.00	-	0.04-0.14	0.04-0.14	**0.04-0.14**	-	-	0.04-0.12	0.04-0.12	**0.04-0.12**	-
								27.01-33.00	-	0.05-0.15	0.05-0.15	**0.05-0.15**	-	-	0.05-0.13	0.05-0.13	**0.05-0.13**	-
								33.01-40.00	-	0.05-0.16	0.05-0.16	**0.05-0.16**	-	-	0.05-0.14	0.05-0.14	**0.05-0.14**	-
								40.01-52.00	-	0.06-0.16	0.06-0.16	**0.06-0.16**	-	-	0.06-0.14	0.06-0.14	**0.06-0.14**	-
								52.01-65.00	-	0.06-0.16	0.06-0.16	**0.06-0.16**	-	-	0.06-0.14	0.06-0.14	**0.06-0.14**	-
	P2.1.Z.AN	Aços baixa-liga Recozidos	175	4324	180	260	305	15.00-18.00	-	-	0.06-0.14	**0.06-0.16**	-	-	-	0.06-0.12	**0.06-0.14**	-
				4334	150	215	250	18.01-22.00	-	-	0.06-0.16	**0.06-0.18**	-	-	-	0.06-0.14	**0.06-0.15**	-
				4344	115	165	190	22.01-27.00	-	-	0.06-0.2	**0.06-0.22**	-	-	-	0.06-0.17	**0.06-0.19**	-
								27.01-33.00	-	-	0.08-0.24	**0.08-0.26**	-	-	-	0.08-0.2	**0.08-0.22**	-
								33.01-40.00	-	-	0.08-0.26	**0.08-0.28**	-	-	-	0.08-0.22	**0.08-0.24**	-
								40.01-52.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
								52.01-65.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
	P2.2.Z.AN	Aços baixa-liga Recozidos	240	4324	180	250	290	15.00-18.00	-	-	0.06-0.14	**0.06-0.16**	-	-	-	0.06-0.12	**0.06-0.14**	-
				4334	150	200	225	18.01-22.00	-	-	0.06-0.16	**0.06-0.18**	-	-	-	0.06-0.14	**0.06-0.15**	-
				4344	115	175	205	22.01-27.00	-	-	0.06-0.2	**0.06-0.22**	-	-	-	0.06-0.17	**0.06-0.19**	-
								27.01-33.00	-	-	0.08-0.24	**0.08-0.26**	-	-	-	0.08-0.2	**0.08-0.22**	-
								33.01-40.00	-	-	0.08-0.26	**0.08-0.28**	-	-	-	0.08-0.22	**0.08-0.24**	-
								40.01-52.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
								52.01-65.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
	P2.5.Z.HT	Aços baixa-liga Endurecidos e temperados	330	4324	90	190	245	15.00-18.00	-	-	0.06-0.14	**0.06-0.16**	-	-	-	0.06-0.12	**0.06-0.14**	-
				4334	85	155	195	18.01-22.00	-	-	0.06-0.16	**0.06-0.18**	-	-	-	0.06-0.14	**0.06-0.15**	-
				4344	75	125	150	22.01-27.00	-	-	0.06-0.2	**0.06-0.22**	-	-	-	0.06-0.17	**0.06-0.19**	-
								27.01-33.00	-	-	0.08-0.24	**0.08-0.26**	-	-	-	0.08-0.2	**0.08-0.22**	-
								33.01-40.00	-	-	0.08-0.26	**0.08-0.28**	-	-	-	0.08-0.22	**0.08-0.24**	-
								40.01-52.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
								52.01-65.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
	P2.6.C.UT	Aços baixa-liga Fundido - sem tratamento	200	4324	110	210	265	15.00-18.00	-	-	0.06-0.16	**0.06-0.18**	-	-	-	0.06-0.14	**0.06-0.15**	-
				4334	105	175	210	18.01-22.00	-	-	0.06-0.18	**0.06-0.2**	-	-	-	0.06-0.15	**0.06-0.17**	-
				4344	100	140	160	22.01-27.00	-	-	0.06-0.22	**0.06-0.24**	-	-	-	0.06-0.19	**0.06-0.2**	-
								27.01-33.00	-	-	0.08-0.26	**0.08-0.28**	-	-	-	0.08-0.22	**0.08-0.24**	-
								33.01-40.00	-	-	0.08-0.28	**0.08-0.3**	-	-	-	0.08-0.24	**0.08-0.26**	-
								40.01-52.00	-	-	0.1-0.28	**0.1-0.3**	-	-	-	0.1-0.24	**0.1-0.26**	-
								52.01-65.00	-	-	0.1-0.28	**0.1-0.3**	-	-	-	0.1-0.24	**0.1-0.26**	-
	P3.0.Z.AN	Aços alta-liga Recozidos	200	4324	160	245	290	15.00-18.00	-	-	0.06-0.14	**0.06-0.16**	-	-	-	0.06-0.12	**0.06-0.14**	-
				4334	130	200	240	18.01-22.00	-	-	0.06-0.16	**0.06-0.18**	-	-	-	0.06-0.14	**0.06-0.15**	-
				4344	100	150	180	22.01-27.00	-	-	0.06-0.2	**0.06-0.22**	-	-	-	0.06-0.17	**0.06-0.19**	-
								27.01-33.00	-	-	0.08-0.24	**0.08-0.26**	-	-	-	0.08-0.2	**0.08-0.22**	-
								33.01-40.00	-	-	0.08-0.26	**0.08-0.28**	-	-	-	0.08-0.22	**0.08-0.24**	-
								40.01-52.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
								52.01-65.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-

CoroDrill® DS20

4 – 5 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 4-5xD			Diâmetro da broca	Comprimento da broca 4xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 5xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
P	P3.0.Z.HT	Aços alta-liga	380	4324	80	165	210	15.00-18.00	-	-	0.06-0.14	**0.06-0.16**	-	-	-	0.06-0.12	**0.06-0.14**	-
		Endurecidos e		4334	75	140	175	18.01-22.00	-	-	0.06-0.16	**0.06-0.18**	-	-	-	0.06-0.14	**0.06-0.15**	-
		temperados		4344	70	110	130	22.01-27.00	-	-	0.06-0.2	**0.06-0.22**	-	-	-	0.06-0.17	**0.06-0.19**	-
								27.01-33.00	-	-	0.08-0.24	**0.08-0.26**	-	-	-	0.08-0.2	**0.08-0.22**	-
								33.01-40.00	-	-	0.08-0.26	**0.08-0.28**	-	-	-	0.08-0.22	**0.08-0.24**	-
								40.01-52.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
								52.01-65.00	-	-	0.1-0.26	**0.1-0.28**	-	-	-	0.1-0.22	**0.1-0.24**	-
	P5.0.Z.AN	Aços inoxidáveis	200	4334	115	185	225	15.00-18.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1
		ferríticos/martensíticos		4344	115	155	175	18.01-22.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.13	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11
		Recozidos		2044	115	150	165	22.01-27.00	0.05-0.15	**0.05-0.15**	0.05-0.15	-	0.05-0.14	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12
								27.01-33.00	0.07-0.16	**0.07-0.16**	0.07-0.16	-	0.07-0.15	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.13
								33.01-40.00	0.07-0.18	**0.07-0.18**	0.07-0.18	-	0.07-0.16	0.07-0.15	**0.07-0.15**	0.07-0.15	-	0.07-0.14
								40.01-52.00	0.09-0.18	**0.09-0.18**	0.09-0.18	-	0.09-0.16	0.09-0.15	**0.09-0.15**	0.09-0.15	-	0.09-0.14
								52.01-65.00	0.09-0.18	**0.09-0.18**	0.09-0.18	-	0.09-0.16	0.09-0.15	**0.09-0.15**	0.09-0.15	-	0.09-0.14
	P5.0.Z.HT	Aços inoxidáveis	330	4334	75	135	170	15.00-18.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1
		ferríticos/martensíticos		4344	70	115	140	18.01-22.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.13	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11
		Endurecidos e temperados		2044	70	115	140	22.01-27.00	0.05-0.15	**0.05-0.15**	0.05-0.15	-	0.05-0.14	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12
								27.01-33.00	0.07-0.16	**0.07-0.16**	0.07-0.16	-	0.07-0.15	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.13
								33.01-40.00	0.07-0.18	**0.07-0.18**	0.07-0.18	-	0.07-0.16	0.07-0.15	**0.07-0.15**	0.07-0.15	-	0.07-0.14
								40.01-52.00	0.09-0.18	**0.09-0.18**	0.09-0.18	-	0.09-0.16	0.09-0.15	**0.09-0.15**	0.09-0.15	-	0.09-0.14
								52.01-65.00	0.09-0.18	**0.09-0.18**	0.09-0.18	-	0.09-0.16	0.09-0.15	**0.09-0.15**	0.09-0.15	-	0.09-0.14
M	M1.0.Z.AQ	Aços inoxidáveis	200	4334	115	185	225	15.00-18.00	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1
		austeníticos		4344	115	165	190	18.01-22.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11
		Recozidos/coquilhados		2044	115	155	180	22.01-27.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.13	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12
								27.01-33.00	0.07-0.15	**0.07-0.15**	0.07-0.15	-	0.07-0.14	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.13
								33.01-40.00	0.07-0.16	**0.07-0.16**	0.07-0.16	-	0.07-0.15	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.14
								40.01-52.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
								52.01-65.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
	M1.1.Z.AQ	Aços inoxidáveis	200	4334	115	195	240	15.00-18.00	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1
		austeníticos		4344	115	175	210	18.01-22.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11
		Usinabilidade melhorada		2044	115	170	200	22.01-27.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.13	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12
								27.01-33.00	0.07-0.15	**0.07-0.15**	0.07-0.15	-	0.07-0.14	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.13
								33.01-40.00	0.07-0.16	**0.07-0.16**	0.07-0.16	-	0.07-0.15	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.14
								40.01-52.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
								52.01-65.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
	M2.0.Z.AQ	Aços inoxidáveis	200	4334	80	125	150	15.00-18.00	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1
		superaustenísticos		4344	80	110	125	18.01-22.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11
		(Ni²20%)		2044	80	110	125	22.01-27.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.13	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12
		Recozidos/coquilhados						27.01-33.00	0.07-0.15	**0.07-0.15**	0.07-0.15	-	0.07-0.14	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.13
								33.01-40.00	0.07-0.16	**0.07-0.16**	0.07-0.16	-	0.07-0.15	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.14
								40.01-52.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
								52.01-65.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
	M3.1.Z.AQ	Aços inoxidáveis duplex	230	4334	85	125	145	15.00-18.00	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1
				4344	85	115	130	18.01-22.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11
		> 60% ferrita (N<0,10%)		2044	85	110	125	22.01-27.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.13	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12
								27.01-33.00	0.07-0.15	**0.07-0.15**	0.07-0.15	-	0.07-0.14	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.13
								33.01-40.00	0.07-0.16	**0.07-0.16**	0.07-0.16	-	0.07-0.15	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.14
								40.01-52.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
								52.01-65.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
	M3.2.Z.AQ	Aços inoxidáveis duplex	260	4334	75	105	120	15.00-18.00	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1
				4344	75	100	115	18.01-22.00	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12	0.05-0.12	**0.05-0.12**	0.05-0.12	-	0.05-0.11
		<60% ferrita (N>0.10%)		2044	75	100	115	22.01-27.00	0.05-0.14	**0.05-0.14**	0.05-0.14	-	0.05-0.13	0.05-0.13	**0.05-0.13**	0.05-0.13	-	0.05-0.12
								27.01-33.00	0.07-0.15	**0.07-0.15**	0.07-0.15	-	0.07-0.14	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.13
								33.01-40.00	0.07-0.16	**0.07-0.16**	0.07-0.16	-	0.07-0.15	0.07-0.14	**0.07-0.14**	0.07-0.14	-	0.07-0.14
								40.01-52.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
								52.01-65.00	0.09-0.16	**0.09-0.16**	0.09-0.16	-	0.09-0.15	0.09-0.14	**0.09-0.14**	0.09-0.14	-	0.09-0.14
S	S2.0.Z.AN	Super ligas resistentes ao calor	350	4334	20	40	50	15.00-18.00	0.04-0.08	**0.04-0.08**	0.04-0.08	-	-	0.04-0.07	**0.04-0.07**	0.04-0.07	-	-
	S2.0.Z.AG	À base de Ni		4344	20	40	50	18.01-22.00	0.04-0.09	**0.04-0.09**	0.04-0.09	-	-	0.04-0.08	**0.04-0.08**	0.04-0.08	-	-
	S2.0.Z.NS			2044	20	40	50	22.01-27.00	0.04-0.1	**0.04-0.1**	0.04-0.1	-	-	0.04-0.09	**0.04-0.09**	0.04-0.09	-	-
								27.01-33.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	-	0.05-0.1	**0.05-0.1**	0.05-0.1	-	-
								33.01-40.00	0.05-0.12	**0.05-0.12**	0.05-0.12	-	-	0.05-0.11	**0.05-0.11**	0.05-0.11	-	-
								40.01-52.00	0.06-0.12	**0.06-0.12**	0.06-0.12	-	-	0.06-0.11	**0.06-0.11**	0.06-0.11	-	-
								52.01-65.00	0.06-0.12	**0.06-0.12**	0.06-0.12	-	-	0.06-0.11	**0.06-0.11**	0.06-0.11	-	-
	S4.2.Z.AN	Super ligas resistentes ao calor	330	H13A	40	90	120	15.00-18.00	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-
	S4.3.Z.AG	À base de Ti		4344	40	90	120	18.01-22.00	**0.06-0.15**	0.06-0.15	0.06-0.15	-	-	**0.06-0.13**	0.06-0.13	0.06-0.13	-	-
				2044	40	90	120	22.01-27.00	**0.06-0.16**	0.06-0.16	0.06-0.16	-	-	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-
								27.01-33.00	**0.08-0.17**	0.08-0.17	0.08-0.17	-	-	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-
								33.01-40.00	**0.08-0.18**	0.08-0.18	0.08-0.18	-	-	**0.08-0.15**	0.08-0.15	0.08-0.15	-	-
								40.01-52.00	**0.1-0.18**	0.1-0.18	0.1-0.18	-	-	**0.1-0.15**	0.1-0.15	0.1-0.15	-	-
								52.01-65.00	**0.1-0.18**	0.1-0.18	0.1-0.18	-	-	**0.1-0.15**	0.1-0.15	0.1-0.15	-	-

CoroDrill® DS20

4 – 5 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 4-5xD			Diâmetro da broca	Comprimento da broca 4xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 5xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
K	K1.1.C.NS	Ferros fundidos maleáveis	200	4324	140	210	245	15.00-18.00	-	0.08-0.15	0.08-0.15	**0.08-0.2**	-	-	0.08-0.13	0.08-0.13	**0.08-0.17**	-
		Baixa resistência à tensão		4334	110	170	200	18.01-22.00	-	0.08-0.18	0.08-0.18	**0.08-0.23**	-	-	0.08-0.15	0.08-0.15	**0.08-0.2**	-
				4344	180	165	155	22.01-27.00	-	0.08-0.21	0.08-0.21	**0.08-0.26**	-	-	0.08-0.18	0.08-0.18	**0.08-0.22**	-
								27.01-33.00	-	0.1-0.24	0.1-0.24	**0.1-0.29**	-	-	0.1-0.2	0.1-0.2	**0.1-0.25**	-
								33.01-40.00	-	0.1-0.27	0.1-0.27	**0.1-0.32**	-	-	0.1-0.23	0.1-0.23	**0.1-0.27**	-
								40.01-52.00	-	0.12-0.27	0.12-0.27	**0.12-0.32**	-	-	0.12-0.23	0.12-0.23	**0.12-0.27**	-
								52.01-65.00	-	0.12-0.27	0.12-0.27	**0.12-0.32**	-	-	0.12-0.23	0.12-0.23	**0.12-0.27**	-
	K2.1.C.UT	Ferros fundidos cinzentos	180	4324	210	285	325	15.00-18.00	-	0.08-0.15	0.08-0.15	**0.08-0.2**	-	-	0.08-0.13	0.08-0.13	**0.08-0.17**	-
		Baixa resistência à tensão		4334	170	235	270	18.01-22.00	-	0.08-0.18	0.08-0.18	**0.08-0.23**	-	-	0.08-0.15	0.08-0.15	**0.08-0.2**	-
				4344	130	180	205	22.01-27.00	-	0.08-0.21	0.08-0.21	**0.08-0.26**	-	-	0.08-0.18	0.08-0.18	**0.08-0.22**	-
								27.01-33.00	-	0.1-0.24	0.1-0.24	**0.1-0.29**	-	-	0.1-0.2	0.1-0.2	**0.1-0.25**	-
								33.01-40.00	-	0.1-0.27	0.1-0.27	**0.1-0.32**	-	-	0.1-0.23	0.1-0.23	**0.1-0.27**	-
								40.01-52.00	-	0.12-0.27	0.12-0.27	**0.12-0.32**	-	-	0.12-0.23	0.12-0.23	**0.12-0.27**	-
								52.01-65.00	-	0.12-0.27	0.12-0.27	**0.12-0.32**	-	-	0.12-0.23	0.12-0.23	**0.12-0.27**	-
	K2.2.C.UT	Ferros fundidos cinzentos	245	4324	125	205	245	15.00-18.00	-	0.08-0.13	0.08-0.13	**0.08-0.18**	-	-	0.08-0.11	0.08-0.11	**0.08-0.15**	-
		Alta resistência à tensão		4334	100	160	195	18.01-22.00	-	0.08-0.16	0.08-0.16	**0.08-0.21**	-	-	0.08-0.14	0.08-0.14	**0.08-0.18**	-
				4344	75	125	150	22.01-27.00	-	0.08-0.19	0.08-0.19	**0.08-0.24**	-	-	0.08-0.16	0.08-0.16	**0.08-0.2**	-
								27.01-33.00	-	0.1-0.22	0.1-0.22	**0.1-0.27**	-	-	0.1-0.19	0.1-0.19	**0.1-0.23**	-
								33.01-40.00	-	0.1-0.25	0.1-0.25	**0.1-0.3**	-	-	0.1-0.21	0.1-0.21	**0.1-0.26**	-
								40.01-52.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
								52.01-65.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
	K3.1.C.UT	Ferros fundidos nodulares	155	4324	125	190	225	15.00-18.00	-	0.08-0.13	0.08-0.13	**0.08-0.18**	-	-	0.08-0.11	0.08-0.11	**0.08-0.15**	-
		Ferritic		4334	100	155	185	18.01-22.00	-	0.08-0.16	0.08-0.16	**0.08-0.21**	-	-	0.08-0.14	0.08-0.14	**0.08-0.18**	-
				4344	80	120	145	22.01-27.00	-	0.08-0.19	0.08-0.19	**0.08-0.24**	-	-	0.08-0.16	0.08-0.16	**0.08-0.2**	-
								27.01-33.00	-	0.1-0.22	0.1-0.22	**0.1-0.27**	-	-	0.1-0.19	0.1-0.19	**0.1-0.23**	-
								33.01-40.00	-	0.1-0.25	0.1-0.25	**0.1-0.3**	-	-	0.1-0.21	0.1-0.21	**0.1-0.26**	-
								40.01-52.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
								52.01-65.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
	K3.3.C.UT	Ferros fundidos nodulares	265	4324	110	175	210	15.00-18.00	-	0.08-0.13	0.08-0.13	**0.08-0.18**	-	-	0.08-0.11	0.08-0.11	**0.08-0.15**	-
		Pearlitic		4334	90	145	175	18.01-22.00	-	0.08-0.16	0.08-0.16	**0.08-0.21**	-	-	0.08-0.14	0.08-0.14	**0.08-0.18**	-
				4344	70	110	130	22.01-27.00	-	0.08-0.19	0.08-0.19	**0.08-0.24**	-	-	0.08-0.16	0.08-0.16	**0.08-0.2**	-
								27.01-33.00	-	0.1-0.22	0.1-0.22	**0.1-0.27**	-	-	0.1-0.19	0.1-0.19	**0.1-0.23**	-
								33.01-40.00	-	0.1-0.25	0.1-0.25	**0.1-0.3**	-	-	0.1-0.21	0.1-0.21	**0.1-0.26**	-
								40.01-52.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
								52.01-65.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
	K4.2.C.UT	Ferro vermicular	230	4324	130	210	250	15.00-18.00	-	0.08-0.13	0.08-0.13	**0.08-0.18**	-	-	0.08-0.11	0.08-0.11	**0.08-0.15**	-
		Alta resistência à tensão (Pearlite>90%)		4334	110	170	200	18.01-22.00	-	0.08-0.16	0.08-0.16	**0.08-0.21**	-	-	0.08-0.14	0.08-0.14	**0.08-0.18**	-
				4344	85	125	150	22.01-27.00	-	0.08-0.19	0.08-0.19	**0.08-0.24**	-	-	0.08-0.16	0.08-0.16	**0.08-0.2**	-
								27.01-33.00	-	0.1-0.22	0.1-0.22	**0.1-0.27**	-	-	0.1-0.19	0.1-0.19	**0.1-0.23**	-
								33.01-40.00	-	0.1-0.25	0.1-0.25	**0.1-0.3**	-	-	0.1-0.21	0.1-0.21	**0.1-0.26**	-
								40.01-52.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
								52.01-65.00	-	0.12-0.25	0.12-0.25	**0.12-0.3**	-	-	0.12-0.21	0.12-0.21	**0.12-0.26**	-
H	H1.3.Z.HA	Aços extra-duros	60 (HRC)	4324	30	65	85	15.00-18.00	-	0.06-0.13	**0.06-0.13**	0.06-0.13	-	-	0.06-0.11	**0.06-0.11**	0.06-0.11	-
		Endurecidos e temperados		4334	30	65	85	18.01-22.00	-	0.06-0.14	**0.06-0.14**	0.06-0.14	-	-	0.06-0.12	**0.06-0.12**	0.06-0.12	-
				4344	30	65	85	22.01-27.00	-	0.06-0.15	**0.06-0.15**	0.06-0.15	-	-	0.06-0.13	**0.06-0.13**	0.06-0.13	-
								27.01-33.00	-	0.08-0.16	**0.08-0.16**	0.08-0.16	-	-	0.08-0.14	**0.08-0.14**	0.08-0.14	-
								33.01-40.00	-	0.08-0.18	**0.08-0.18**	0.08-0.18	-	-	0.08-0.15	**0.08-0.15**	0.08-0.15	-
								40.01-52.00	-	0.1-0.18	**0.1-0.18**	0.1-0.18	-	-	0.1-0.15	**0.1-0.15**	0.1-0.15	-
								52.01-65.00	-	0.1-0.18	**0.1-0.18**	0.1-0.18	-	-	0.1-0.15	**0.1-0.15**	0.1-0.15	-

CoroDrill® DS20

4 – 5 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 4-5xD			Diâmetro da broca	Comprimento da broca 4xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 5xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
N	N1.2.Z.AG	Ligas à base de alumínio Ligas AlSi, Si ≤ 1%	100	H13A	300	365	400	15.00-18.00	**0.06-0.16**	0.06-0.16	0.06-0.16	-	-	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-
				4344	300	365	400	18.01-22.00	**0.06-0.18**	0.06-0.18	0.06-0.18	-	-	**0.06-0.15**	0.06-0.15	0.06-0.15	-	-
								22.01-27.00	**0.06-0.2**	0.06-0.2	0.06-0.2	-	-	**0.06-0.17**	0.06-0.17	0.06-0.17	-	-
								27.01-33.00	**0.08-0.22**	0.08-0.22	0.08-0.22	-	-	**0.08-0.19**	0.08-0.19	0.08-0.19	-	-
								33.01-40.00	**0.08-0.25**	0.08-0.25	0.08-0.25	-	-	**0.08-0.21**	0.08-0.21	0.08-0.21	-	-
								40.01-52.00	**0.1-0.25**	0.1-0.25	0.1-0.25	-	-	**0.1-0.21**	0.1-0.21	0.1-0.21	-	-
								52.01-65.00	**0.1-0.25**	0.1-0.25	0.1-0.25	-	-	**0.1-0.21**	0.1-0.21	0.1-0.21	-	-
	N1.3.C.UT	Ligas à base de alumínio Ligas fundidas AlSi, Si < 1% e > 13%	75	H13A	250	350	400	15.00-18.00	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-
				4344	250	350	400	18.01-22.00	**0.06-0.16**	0.06-0.16	0.06-0.16	-	-	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-
								22.01-27.00	**0.06-0.18**	0.06-0.18	0.06-0.18	-	-	**0.06-0.15**	0.06-0.15	0.06-0.15	-	-
								27.01-33.00	**0.08-0.2**	0.08-0.2	0.08-0.2	-	-	**0.08-0.17**	0.08-0.17	0.08-0.17	-	-
								33.01-40.00	**0.08-0.22**	0.08-0.22	0.08-0.22	-	-	**0.08-0.19**	0.08-0.19	0.08-0.19	-	-
								40.01-52.00	**0.1-0.22**	0.1-0.22	0.1-0.22	-	-	**0.1-0.19**	0.1-0.19	0.1-0.19	-	-
								52.01-65.00	**0.1-0.22**	0.1-0.22	0.1-0.22	-	-	**0.1-0.19**	0.1-0.19	0.1-0.19	-	-
	N1.3.C.AG	Ligas à base de alumínio AlSi cast and aged alloys (1%< Si >13%)	90	H13A	250	315	350	15.00-18.00	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-
				4344	250	315	350	18.01-22.00	**0.06-0.16**	0.06-0.16	0.06-0.16	-	-	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-
								22.01-27.00	**0.06-0.18**	0.06-0.18	0.06-0.18	-	-	**0.06-0.15**	0.06-0.15	0.06-0.15	-	-
								27.01-33.00	**0.08-0.2**	0.08-0.2	0.08-0.2	-	-	**0.08-0.17**	0.08-0.17	0.08-0.17	-	-
								33.01-40.00	**0.08-0.22**	0.08-0.22	0.08-0.22	-	-	**0.08-0.19**	0.08-0.19	0.08-0.19	-	-
								40.01-52.00	**0.1-0.22**	0.1-0.22	0.1-0.22	-	-	**0.1-0.19**	0.1-0.19	0.1-0.19	-	-
								52.01-65.00	**0.1-0.22**	0.1-0.22	0.1-0.22	-	-	**0.1-0.19**	0.1-0.19	0.1-0.19	-	-
	N3.3.U.UT	Ligas à base de cobre Ligas à base de cobre de corte livre	110	H13A	250	350	400	15.00-18.00	**0.06-0.16**	0.06-0.16	0.06-0.16	-	-	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-
				4344	250	350	400	18.01-22.00	**0.06-0.18**	0.06-0.18	0.06-0.18	-	-	**0.06-0.15**	0.06-0.15	0.06-0.15	-	-
								22.01-27.00	**0.06-0.2**	0.06-0.2	0.06-0.2	-	-	**0.06-0.17**	0.06-0.17	0.06-0.17	-	-
								27.01-33.00	**0.08-0.22**	0.08-0.22	0.08-0.22	-	-	**0.08-0.19**	0.08-0.19	0.08-0.19	-	-
								33.01-40.00	**0.08-0.25**	0.08-0.25	0.08-0.25	-	-	**0.08-0.21**	0.08-0.21	0.08-0.21	-	-
								40.01-52.00	**0.1-0.25**	0.1-0.25	0.1-0.25	-	-	**0.1-0.21**	0.1-0.21	0.1-0.21	-	-
								52.01-65.00	**0.1-0.25**	0.1-0.25	0.1-0.25	-	-	**0.1-0.21**	0.1-0.21	0.1-0.21	-	-
	N3.2.C.UT	Ligas à base de cobre Latão com chumbo & bronzes (Pb < 1%)	90	H13A	180	220	240	15.00-18.00	**0.06-0.16**	0.06-0.16	0.06-0.16	-	-	**0.06-0.14**	0.06-0.14	0.06-0.14	-	-
				4344	180	220	240	18.01-22.00	**0.06-0.18**	0.06-0.18	0.06-0.18	-	-	**0.06-0.15**	0.06-0.15	0.06-0.15	-	-
								22.01-27.00	**0.06-0.2**	0.06-0.2	0.06-0.2	-	-	**0.06-0.17**	0.06-0.17	0.06-0.17	-	-
								27.01-33.00	**0.08-0.22**	0.08-0.22	0.08-0.22	-	-	**0.08-0.19**	0.08-0.19	0.08-0.19	-	-
								33.01-40.00	**0.08-0.25**	0.08-0.25	0.08-0.25	-	-	**0.08-0.21**	0.08-0.21	0.08-0.21	-	-
								40.01-52.00	**0.1-0.25**	0.1-0.25	0.1-0.25	-	-	**0.1-0.21**	0.1-0.21	0.1-0.21	-	-
								52.01-65.00	**0.1-0.25**	0.1-0.25	0.1-0.25	-	-	**0.1-0.21**	0.1-0.21	0.1-0.21	-	-

CoroDrill® DS20

6 – 7 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 6-7xD Mínima	Rec.	Máx	Diâmetro da broca	Comprimento da broca 6xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 7xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
									f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot	f_n mm/rot
P	P1.0.Z.AN	Aços sem liga C=0.05-0.10%	110	4324	230	305	360	15.00-18.00	0.04-0.06	**0.04-0.06**	0.04-0.06	-	0.04-0.08	0.04-0.05	**0.04-0.05**	0.04-0.05	-	0.04-0.07
				4334	210	255	295	18.01-22.00	0.04-0.07	**0.04-0.07**	0.04-0.07	-	0.04-0.09	0.04-0.06	**0.04-0.06**	0.04-0.06	-	0.04-0.07
				4344	190	205	220	22.01-27.00	0.04-0.08	**0.04-0.08**	0.04-0.08	-	0.04-0.1	0.04-0.07	**0.04-0.07**	0.04-0.07	-	0.04-0.08
								27.01-33.00	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.1	0.05-0.07	**0.05-0.07**	0.05-0.07	-	0.05-0.08
								33.01-40.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.13	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.1
								40.01-52.00	0.06-0.1	**0.06-0.1**	0.06-0.1	-	0.06-0.13	0.06-0.08	**0.06-0.08**	0.06-0.08	-	0.06-0.1
								52.01-65.00	0.06-0.1	**0.06-0.1**	0.06-0.1	-	0.06-0.13	0.06-0.08	**0.06-0.08**	0.06-0.08	-	0.06-0.1
	P1.1.Z.AN	Aços sem liga C=0.05-0.25%	125	4324	230	290	335	15.00-18.00	0.04-0.08	**0.04-0.08**	0.04-0.08	-	0.04-0.08	0.04-0.07	**0.04-0.07**	0.04-0.07	-	0.04-0.07
				4334	200	245	275	18.01-22.00	0.04-0.09	**0.04-0.09**	0.04-0.09	-	0.04-0.09	0.04-0.07	**0.04-0.07**	0.04-0.07	-	0.04-0.07
				4344	170	190	210	22.01-27.00	0.04-0.1	**0.04-0.1**	0.04-0.1	-	0.04-0.1	0.04-0.08	**0.04-0.08**	0.04-0.08	-	0.04-0.08
								27.01-33.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.1	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
								33.01-40.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.13	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.1
								40.01-52.00	0.06-0.11	**0.06-0.11**	0.06-0.11	-	0.06-0.13	0.06-0.09	**0.06-0.09**	0.06-0.09	-	0.06-0.1
								52.01-65.00	0.06-0.11	**0.06-0.11**	0.06-0.11	-	0.06-0.13	0.06-0.09	**0.06-0.09**	0.06-0.09	-	0.06-0.1
	P1.2.Z.AN	Aços sem liga C=0.25-0.55%	190	4324	190	240	275	15.00-18.00	-	0.05-0.08	0.06-0.09	**0.06-0.1**	-	-	0.05-0.07	0.06-0.08	**0.06-0.09**	-
				4334	155	195	225	18.01-22.00	-	0.05-0.09	0.06-0.1	**0.06-0.12**	-	-	0.05-0.08	0.06-0.09	**0.06-0.1**	-
				4344	120	150	170	22.01-27.00	-	0.05-0.12	0.06-0.13	**0.06-0.14**	-	-	0.05-0.1	0.06-0.11	**0.06-0.12**	-
								27.01-33.00	-	0.07-0.14	0.08-0.16	**0.08-0.17**	-	-	0.07-0.12	0.08-0.13	**0.08-0.14**	-
								33.01-40.00	-	0.07-0.16	0.08-0.17	**0.08-0.18**	-	-	0.07-0.13	0.08-0.14	**0.08-0.15**	-
								40.01-52.00	-	0.09-0.16	0.1-0.17	**0.1-0.18**	-	-	0.09-0.13	0.1-0.14	**0.1-0.15**	-
								52.01-65.00	-	0.09-0.16	0.1-0.17	**0.1-0.18**	-	-	0.09-0.13	0.1-0.14	**0.1-0.15**	-
	P1.3.Z.AN	Aços sem liga C=0.55-0.80%	190	4324	170	225	260	15.00-18.00	-	0.05-0.08	0.06-0.09	**0.06-0.1**	-	-	0.05-0.07	0.06-0.08	**0.06-0.09**	-
				4334	140	185	215	18.01-22.00	-	0.05-0.09	0.06-0.1	**0.06-0.12**	-	-	0.05-0.08	0.06-0.09	**0.06-0.1**	-
				4344	105	140	165	22.01-27.00	-	0.05-0.12	0.06-0.13	**0.06-0.14**	-	-	0.05-0.1	0.06-0.11	**0.06-0.12**	-
								27.01-33.00	-	0.07-0.14	0.08-0.16	**0.08-0.17**	-	-	0.07-0.12	0.08-0.13	**0.08-0.14**	-
								33.01-40.00	-	0.07-0.16	0.08-0.17	**0.08-0.18**	-	-	0.07-0.13	0.08-0.14	**0.08-0.15**	-
								40.01-52.00	-	0.09-0.16	0.1-0.17	**0.1-0.18**	-	-	0.09-0.13	0.1-0.14	**0.1-0.15**	-
								52.01-65.00	-	0.09-0.16	0.1-0.17	**0.1-0.18**	-	-	0.09-0.13	0.1-0.14	**0.1-0.15**	-
	P1.5.C.UT	Aços sem liga Fundido - sem tratamento	150	4324	140	235	295	15.00-18.00	-	0.04-0.08	0.04-0.08	**0.04-0.08**	-	-	0.04-0.07	0.04-0.07	**0.04-0.07**	-
				4334	135	200	240	18.01-22.00	-	0.04-0.08	0.04-0.08	**0.04-0.08**	-	-	0.04-0.07	0.04-0.07	**0.04-0.07**	-
				4344	125	160	180	22.01-27.00	-	0.04-0.09	0.04-0.09	**0.04-0.09**	-	-	0.04-0.08	0.04-0.08	**0.04-0.08**	-
								27.01-33.00	-	0.05-0.1	0.05-0.1	**0.05-0.1**	-	-	0.05-0.08	0.05-0.08	**0.05-0.08**	-
								33.01-40.00	-	0.05-0.1	0.05-0.1	**0.05-0.1**	-	-	0.05-0.09	0.05-0.09	**0.05-0.09**	-
								40.01-52.00	-	0.06-0.1	0.06-0.1	**0.06-0.1**	-	-	0.06-0.09	0.06-0.09	**0.06-0.09**	-
								52.01-65.00	-	0.06-0.1	0.06-0.1	**0.06-0.1**	-	-	0.06-0.09	0.06-0.09	**0.06-0.09**	-
	P2.1.Z.AN	Aços baixa-liga Recozidos	175	4324	180	235	275	15.00-18.00	-	-	0.06-0.09	**0.06-0.1**	-	-	-	0.06-0.08	**0.06-0.09**	-
				4334	150	195	225	18.01-22.00	-	-	0.06-0.1	**0.06-0.12**	-	-	-	0.06-0.09	**0.06-0.1**	-
				4344	115	150	170	22.01-27.00	-	-	0.06-0.13	**0.06-0.14**	-	-	-	0.06-0.11	**0.06-0.12**	-
								27.01-33.00	-	-	0.08-0.16	**0.08-0.17**	-	-	-	0.08-0.13	**0.08-0.14**	-
								33.01-40.00	-	-	0.08-0.17	**0.08-0.18**	-	-	-	0.08-0.14	**0.08-0.15**	-
								40.01-52.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
								52.01-65.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
	P2.2.Z.AN	Aços baixa-liga Recozidos	240	4324	180	225	260	15.00-18.00	-	-	0.06-0.09	**0.06-0.1**	-	-	-	0.06-0.08	**0.06-0.09**	-
				4334	150	180	205	18.01-22.00	-	-	0.06-0.1	**0.06-0.12**	-	-	-	0.06-0.09	**0.06-0.1**	-
				4344	115	160	185	22.01-27.00	-	-	0.06-0.13	**0.06-0.14**	-	-	-	0.06-0.11	**0.06-0.12**	-
								27.01-33.00	-	-	0.08-0.16	**0.08-0.17**	-	-	-	0.08-0.13	**0.08-0.14**	-
								33.01-40.00	-	-	0.08-0.17	**0.08-0.18**	-	-	-	0.08-0.14	**0.08-0.15**	-
								40.01-52.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
								52.01-65.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
	P2.5.Z.HT	Aços baixa-liga Endurecidos e temperados	330	4324	90	170	220	15.00-18.00	-	-	0.06-0.09	**0.06-0.1**	-	-	-	0.06-0.08	**0.06-0.09**	-
				4334	85	140	175	18.01-22.00	-	-	0.06-0.1	**0.06-0.12**	-	-	-	0.06-0.09	**0.06-0.1**	-
				4344	75	115	135	22.01-27.00	-	-	0.06-0.13	**0.06-0.14**	-	-	-	0.06-0.11	**0.06-0.12**	-
								27.01-33.00	-	-	0.08-0.16	**0.08-0.17**	-	-	-	0.08-0.13	**0.08-0.14**	-
								33.01-40.00	-	-	0.08-0.17	**0.08-0.18**	-	-	-	0.08-0.14	**0.08-0.15**	-
								40.01-52.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
								52.01-65.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
	P2.6.C.UT	Aços baixa-liga Fundido - sem tratamento	200	4324	110	190	240	15.00-18.00	-	-	0.06-0.1	**0.06-0.12**	-	-	-	0.06-0.09	**0.06-0.1**	-
				4334	105	160	190	18.01-22.00	-	-	0.06-0.12	**0.06-0.13**	-	-	-	0.06-0.1	**0.06-0.11**	-
				4344	100	125	145	22.01-27.00	-	-	0.06-0.14	**0.06-0.16**	-	-	-	0.06-0.12	**0.06-0.13**	-
								27.01-33.00	-	-	0.08-0.17	**0.08-0.18**	-	-	-	0.08-0.14	**0.08-0.15**	-
								33.01-40.00	-	-	0.08-0.18	**0.08-0.2**	-	-	-	0.08-0.15	**0.08-0.17**	-
								40.01-52.00	-	-	0.1-0.18	**0.1-0.2**	-	-	-	0.1-0.15	**0.1-0.17**	-
								52.01-65.00	-	-	0.1-0.18	**0.1-0.2**	-	-	-	0.1-0.15	**0.1-0.17**	-
	P3.0.Z.AN	Aços alta-liga Recozidos	200	4324	160	220	260	15.00-18.00	-	-	0.06-0.09	**0.06-0.1**	-	-	-	0.06-0.08	**0.06-0.09**	-
				4334	130	180	215	18.01-22.00	-	-	0.06-0.1	**0.06-0.12**	-	-	-	0.06-0.09	**0.06-0.1**	-
				4344	100	135	160	22.01-27.00	-	-	0.06-0.13	**0.06-0.14**	-	-	-	0.06-0.11	**0.06-0.12**	-
								27.01-33.00	-	-	0.08-0.16	**0.08-0.17**	-	-	-	0.08-0.13	**0.08-0.14**	-
								33.01-40.00	-	-	0.08-0.17	**0.08-0.18**	-	-	-	0.08-0.14	**0.08-0.15**	-
								40.01-52.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
								52.01-65.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-

SANDVIK Coromant

POR

CoroDrill® DS20

6 – 7 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 6-7xD			Diâmetro da broca	Comprimento da broca 6xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 7xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
P	P3.0.Z.HT	Aços alta-liga	380	4324	80	150	190	15.00-18.00	-	-	0.06-0.09	**0.06-0.1**	-	-	-	0.06-0.08	**0.06-0.09**	-
				4334	75	125	160	18.01-22.00	-	-	0.06-0.1	**0.06-0.12**	-	-	-	0.06-0.09	**0.06-0.1**	-
		Endurecidos e temperados		4344	70	100	115	22.01-27.00	-	-	0.06-0.13	**0.06-0.14**	-	-	-	0.06-0.11	**0.06-0.12**	-
								27.01-33.00	-	-	0.08-0.16	**0.08-0.17**	-	-	-	0.08-0.13	**0.08-0.14**	-
								33.01-40.00	-	-	0.08-0.17	**0.08-0.18**	-	-	-	0.08-0.14	**0.08-0.15**	-
								40.01-52.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
								52.01-65.00	-	-	0.1-0.17	**0.1-0.18**	-	-	-	0.1-0.14	**0.1-0.15**	-
	P5.0.Z.AN	Aços inoxidáveis ferríticos/martensíticos	200	4334	115	165	205	15.00-18.00	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08	0.05-0.07	**0.05-0.07**	0.05-0.07	-	0.05-0.07
				4344	115	140	160	18.01-22.00	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.08	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.07
		Recozidos		2044	115	135	150	22.01-27.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.09	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
								27.01-33.00	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.1	0.07-0.09	**0.07-0.09**	0.07-0.09	-	0.07-0.08
								33.01-40.00	0.07-0.12	**0.07-0.12**	0.07-0.12	-	0.07-0.1	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.09
								40.01-52.00	0.09-0.12	**0.09-0.12**	0.09-0.12	-	0.09-0.1	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.09
								52.01-65.00	0.09-0.12	**0.09-0.12**	0.09-0.12	-	0.09-0.1	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.09
	P5.0.Z.HT	Aços inoxidáveis ferríticos/martensíticos	330	4334	75	120	155	15.00-18.00	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08	0.05-0.07	**0.05-0.07**	0.05-0.07	-	0.05-0.07
				4344	70	105	125	18.01-22.00	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.08	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.07
		Endurecidos e temperados		2044	70	105	125	22.01-27.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.09	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
								27.01-33.00	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.1	0.07-0.09	**0.07-0.09**	0.07-0.09	-	0.07-0.08
								33.01-40.00	0.07-0.12	**0.07-0.12**	0.07-0.12	-	0.07-0.1	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.09
								40.01-52.00	0.09-0.12	**0.09-0.12**	0.09-0.12	-	0.09-0.1	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.09
								52.01-65.00	0.09-0.12	**0.09-0.12**	0.09-0.12	-	0.09-0.1	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.09
M	M1.0.Z.AQ	Aços inoxidáveis austeníticos	200	4334	115	165	205	15.00-18.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.09	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.07
				4344	115	150	170	18.01-22.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.1	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
		Recozidos/coquilhados		2044	115	140	160	22.01-27.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.08
								27.01-33.00	0.07-0.12	**0.07-0.12**	0.07-0.12	-	0.07-0.11	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.09
								33.01-40.00	0.07-0.13	**0.07-0.13**	0.07-0.13	-	0.07-0.12	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.1
								40.01-52.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
								52.01-65.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
	M1.1.Z.AQ	Aços inoxidáveis austeníticos	200	4334	115	175	215	15.00-18.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.09	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.07
				4344	115	160	190	18.01-22.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.1	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
		Usinabilidade melhorada		2044	115	155	180	22.01-27.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.08
								27.01-33.00	0.07-0.12	**0.07-0.12**	0.07-0.12	-	0.07-0.11	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.09
								33.01-40.00	0.07-0.13	**0.07-0.13**	0.07-0.13	-	0.07-0.12	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.1
								40.01-52.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
								52.01-65.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
	M2.0.Z.AQ	Aços inoxidáveis super austeníticos (Ni>20%)	200	4334	80	115	135	15.00-18.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.09	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.07
				4344	80	100	115	18.01-22.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.1	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
				2044	80	100	115	22.01-27.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.08
		Recozidos/coquilhados						27.01-33.00	0.07-0.12	**0.07-0.12**	0.07-0.12	-	0.07-0.11	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.09
								33.01-40.00	0.07-0.13	**0.07-0.13**	0.07-0.13	-	0.07-0.12	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.1
								40.01-52.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
								52.01-65.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
	M3.1.Z.AQ	Aços inoxidáveis duplex	230	4334	85	115	130	15.00-18.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.09	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.07
				4344	85	105	115	18.01-22.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.1	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
		> 60% ferrita (N<0,10%)		2044	85	100	115	22.01-27.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.08
								27.01-33.00	0.07-0.12	**0.07-0.12**	0.07-0.12	-	0.07-0.11	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.09
								33.01-40.00	0.07-0.13	**0.07-0.13**	0.07-0.13	-	0.07-0.12	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.1
								40.01-52.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
								52.01-65.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
	M3.2.Z.AQ	Aços inoxidáveis duplex	260	4334	75	95	110	15.00-18.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.09	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.07
				4344	75	90	105	18.01-22.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	0.05-0.1	0.05-0.08	**0.05-0.08**	0.05-0.08	-	0.05-0.08
		< 60% ferrita (N≥0,10%)		2044	75	90	105	22.01-27.00	0.05-0.11	**0.05-0.11**	0.05-0.11	-	0.05-0.1	0.05-0.09	**0.05-0.09**	0.05-0.09	-	0.05-0.08
								27.01-33.00	0.07-0.12	**0.07-0.12**	0.07-0.12	-	0.07-0.11	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.09
								33.01-40.00	0.07-0.13	**0.07-0.13**	0.07-0.13	-	0.07-0.12	0.07-0.1	**0.07-0.1**	0.07-0.1	-	0.07-0.1
								40.01-52.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
								52.01-65.00	0.09-0.13	**0.09-0.13**	0.09-0.13	-	0.09-0.12	0.09-0.1	**0.09-0.1**	0.09-0.1	-	0.09-0.1
S	S2.0.Z.AN	Super ligas resistentes ao calor	350	4334	20	35	45	15.00-18.00	0.04-0.06	**0.04-0.06**	0.04-0.06	-	-	0.04-0.05	**0.04-0.05**	0.04-0.05	-	-
	S2.0.Z.AG	À base de Ni		4344	20	35	45	18.01-22.00	0.04-0.07	**0.04-0.07**	0.04-0.07	-	-	0.04-0.06	**0.04-0.06**	0.04-0.06	-	-
	S2.0.Z.NS			2044	20	35	45	22.01-27.00	0.04-0.08	**0.04-0.08**	0.04-0.08	-	-	0.04-0.07	**0.04-0.07**	0.04-0.07	-	-
								27.01-33.00	0.05-0.09	**0.05-0.09**	0.05-0.09	-	-	0.05-0.07	**0.05-0.07**	0.05-0.07	-	-
								33.01-40.00	0.05-0.1	**0.05-0.1**	0.05-0.1	-	-	0.05-0.08	**0.05-0.08**	0.05-0.08	-	-
								40.01-52.00	0.06-0.1	**0.06-0.1**	0.06-0.1	-	-	0.06-0.08	**0.06-0.08**	0.06-0.08	-	-
								52.01-65.00	0.06-0.1	**0.06-0.1**	0.06-0.1	-	-	0.06-0.08	**0.06-0.08**	0.06-0.08	-	-
	S4.2.Z.AN	Super ligas resistentes ao calor	330	H13A	40	80	110	15.00-18.00	**0.06-0.11**	0.06-0.11	0.06-0.11	-	-	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-
	S4.3.Z.AG	À base de Ti		4344	40	80	110	18.01-22.00	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-
				2044	40	80	110	22.01-27.00	0.06-0.13	0.06-0.13	0.06-0.13	-	-	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-
								27.01-33.00	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-	**0.08-0.11**	0.08-0.11	0.08-0.11	-	-
								33.01-40.00	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-	**0.08-0.12**	0.08-0.12	0.08-0.12	-	-
								40.01-52.00	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-	**0.1-0.12**	0.1-0.12	0.1-0.12	-	-
								52.01-65.00	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-	**0.1-0.12**	0.1-0.12	0.1-0.12	-	-

Avanço na entrada do furo deve ser 75% da faixa de avanço recomendada. Avanço na saída do furo, use 0,05 mm/rot.

CoroDrill® DS20

6 – 7 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 6-7xD			Diâmetro da broca	Comprimento da broca 6xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 7xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
K	K1.1.C.NS	Ferros fundidos maleáveis	200	4324	140	190	220	15.00-18.00	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-	-	0.08-0.08	0.08-0.08	**0.08-0.11**	-
				4334	110	155	180	18.01-22.00	-	0.08-0.12	0.08-0.12	**0.08-0.15**	-	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-
		Baixa resistência à tensão		4344	180	150	140	22.01-27.00	-	0.08-0.14	0.08-0.14	**0.08-0.17**	-	-	0.08-0.12	0.08-0.12	**0.08-0.14**	-
								27.01-33.00	-	0.1-0.16	0.1-0.16	**0.1-0.19**	-	-	0.1-0.13	0.1-0.13	**0.1-0.16**	-
								33.01-40.00	-	0.1-0.18	0.1-0.18	**0.1-0.21**	-	-	0.1-0.15	0.1-0.15	**0.1-0.18**	-
								40.01-52.00	-	0.12-0.18	0.12-0.18	**0.12-0.21**	-	-	0.12-0.15	0.12-0.15	**0.12-0.18**	-
								52.01-65.00	-	0.12-0.18	0.12-0.18	**0.12-0.21**	-	-	0.12-0.15	0.12-0.15	**0.12-0.18**	-
	K2.1.C.UT	Ferros fundidos cinzentos	180	4324	210	255	295	15.00-18.00	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-	-	0.08-0.08	0.08-0.08	**0.08-0.11**	-
				4334	170	210	245	18.01-22.00	-	0.08-0.12	0.08-0.12	**0.08-0.15**	-	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-
		Baixa resistência à tensão		4344	130	160	185	22.01-27.00	-	0.08-0.14	0.08-0.14	**0.08-0.17**	-	-	0.08-0.12	0.08-0.12	**0.08-0.14**	-
								27.01-33.00	-	0.1-0.16	0.1-0.16	**0.1-0.19**	-	-	0.1-0.13	0.1-0.13	**0.1-0.16**	-
								33.01-40.00	-	0.1-0.18	0.1-0.18	**0.1-0.21**	-	-	0.1-0.15	0.1-0.15	**0.1-0.18**	-
								40.01-52.00	-	0.12-0.18	0.12-0.18	**0.12-0.21**	-	-	0.12-0.15	0.12-0.15	**0.12-0.18**	-
								52.01-65.00	-	0.12-0.18	0.12-0.18	**0.12-0.21**	-	-	0.12-0.15	0.12-0.15	**0.12-0.18**	-
	K2.2.C.UT	Ferros fundidos cinzentos	245	4324	125	185	220	15.00-18.00	-	0.08-0.08	0.08-0.08	**0.08-0.12**	-	-	0.08-0.07	0.08-0.07	**0.08-0.1**	-
				4334	100	145	175	18.01-22.00	-	0.08-0.1	0.08-0.1	**0.08-0.14**	-	-	0.08-0.09	0.08-0.09	**0.08-0.12**	-
		Alta resistência à tensão		4344	75	115	135	22.01-27.00	-	0.08-0.12	0.08-0.12	**0.08-0.16**	-	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-
								27.01-33.00	-	0.1-0.14	0.1-0.14	**0.1-0.18**	-	-	0.1-0.12	0.1-0.12	**0.1-0.15**	-
								33.01-40.00	-	0.1-0.16	0.1-0.16	**0.1-0.2**	-	-	0.1-0.14	0.1-0.14	**0.1-0.17**	-
								40.01-52.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
								52.01-65.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
	K3.1.C.UT	Ferros fundidos nodulares	155	4324	125	170	205	15.00-18.00	-	0.08-0.08	0.08-0.08	**0.08-0.12**	-	-	0.08-0.07	0.08-0.07	**0.08-0.1**	-
		Ferríticos		4334	100	140	165	18.01-22.00	-	0.08-0.1	0.08-0.1	**0.08-0.14**	-	-	0.08-0.09	0.08-0.09	**0.08-0.12**	-
				4344	80	110	130	22.01-27.00	-	0.08-0.12	0.08-0.12	**0.08-0.16**	-	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-
								27.01-33.00	-	0.1-0.14	0.1-0.14	**0.1-0.18**	-	-	0.1-0.12	0.1-0.12	**0.1-0.15**	-
								33.01-40.00	-	0.1-0.16	0.1-0.16	**0.1-0.2**	-	-	0.1-0.14	0.1-0.14	**0.1-0.17**	-
								40.01-52.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
								52.01-65.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
	K3.3.C.UT	Ferros fundidos nodulares	265	4324	110	160	190	15.00-18.00	-	0.08-0.08	0.08-0.08	**0.08-0.12**	-	-	0.08-0.07	0.08-0.07	**0.08-0.1**	-
		Perlíticos		4334	90	130	160	18.01-22.00	-	0.08-0.1	0.08-0.1	**0.08-0.14**	-	-	0.08-0.09	0.08-0.09	**0.08-0.12**	-
				4344	70	100	115	22.01-27.00	-	0.08-0.12	0.08-0.12	**0.08-0.16**	-	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-
								27.01-33.00	-	0.1-0.14	0.1-0.14	**0.1-0.18**	-	-	0.1-0.12	0.1-0.12	**0.1-0.15**	-
								33.01-40.00	-	0.1-0.16	0.1-0.16	**0.1-0.2**	-	-	0.1-0.14	0.1-0.14	**0.1-0.17**	-
								40.01-52.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
								52.01-65.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
	K4.2.C.UT	Ferro vermicular	230	4324	130	190	225	15.00-18.00	-	0.08-0.08	0.08-0.08	**0.08-0.12**	-	-	0.08-0.07	0.08-0.07	**0.08-0.1**	-
				4334	110	155	180	18.01-22.00	-	0.08-0.1	0.08-0.1	**0.08-0.14**	-	-	0.08-0.09	0.08-0.09	**0.08-0.12**	-
		Alta resistência à tensão		4344	85	115	135	22.01-27.00	-	0.08-0.12	0.08-0.12	**0.08-0.16**	-	-	0.08-0.1	0.08-0.1	**0.08-0.13**	-
								27.01-33.00	-	0.1-0.14	0.1-0.14	**0.1-0.18**	-	-	0.1-0.12	0.1-0.12	**0.1-0.15**	-
								33.01-40.00	-	0.1-0.16	0.1-0.16	**0.1-0.2**	-	-	0.1-0.14	0.1-0.14	**0.1-0.17**	-
								40.01-52.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
								52.01-65.00	-	0.12-0.16	0.12-0.16	**0.12-0.2**	-	-	0.12-0.14	0.12-0.14	**0.12-0.17**	-
H	H1.3.Z.HA	Aços extra-duros	60	4324	30	60	75	15.00-18.00	-	0.06-0.08	0.06-0.08	**0.06-0.08**	-	-	0.06-0.07	0.06-0.07	**0.06-0.07**	-
		Endurecidos e temperados	(HRC)	4334	30	60	75	18.01-22.00	-	0.06-0.09	0.06-0.09	**0.06-0.09**	-	-	0.06-0.08	0.06-0.08	**0.06-0.08**	-
				4344	30	60	75	22.01-27.00	-	0.06-0.1	0.06-0.1	**0.06-0.1**	-	-	0.06-0.08	0.06-0.08	**0.06-0.08**	-
								27.01-33.00	-	0.08-0.1	0.08-0.1	**0.08-0.1**	-	-	0.08-0.09	0.08-0.09	**0.08-0.09**	-
								33.01-40.00	-	0.08-0.12	0.08-0.12	**0.08-0.12**	-	-	0.08-0.1	0.08-0.1	**0.08-0.1**	-
								40.01-52.00	-	0.1-0.12	0.1-0.12	**0.1-0.12**	-	-	0.1-0.1	0.1-0.1	**0.1-0.1**	-
								52.01-65.00	-	0.1-0.12	0.1-0.12	**0.1-0.12**	-	-	0.1-0.1	0.1-0.1	**0.1-0.1**	-

CoroDrill® DS20

6 – 7 × DC

ISO	N° MC	Material	HB	Classe	Recomendações de velocidade de corte 6-7xD			Diâmetro da broca	Comprimento da broca 6xD -S5W	-L5W	-L6W	-M7W	-H5W	Comprimento da broca 7xD -S5W	-L5W	-L6W	-M7W	-H5W
									Valor inicial recomendado no meio da faixa de avanço									
N	N1.2.Z.AG	Ligas à base de alumínio Ligas AlSi, Si ≤ 1%	100	H13A	300	330	360	15.00-18.00	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-
				4344	300	330	360	18.01-22.00	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-
								22.01-27.00	**0.06-0.13**	0.06-0.13	0.06-0.13	-	-	**0.06-0.11**	0.06-0.11	0.06-0.11	-	-
								27.01-33.00	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-	**0.08-0.12**	0.08-0.12	0.08-0.12	-	-
								33.01-40.00	**0.08-0.16**	0.08-0.16	0.08-0.16	-	-	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-
								40.01-52.00	**0.1-0.16**	0.1-0.16	0.1-0.16	-	-	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-
								52.01-65.00	**0.1-0.16**	0.1-0.16	0.1-0.16	-	-	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-
	N1.3.C.UT	Ligas à base de alumínio Ligas fundidas AlSi, Si < 1% e > 13%	75	H13A	250	315	360	15.00-18.00	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-	**0.06-0.08**	0.06-0.08	0.06-0.08	-	-
				4344	250	315	360	18.01-22.00	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-
								22.01-27.00	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-
								27.01-33.00	**0.08-0.13**	0.08-0.13	0.08-0.13	-	-	**0.08-0.11**	0.08-0.11	0.08-0.11	-	-
								33.01-40.00	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-	**0.08-0.12**	0.08-0.12	0.08-0.12	-	-
								40.01-52.00	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-	**0.1-0.12**	0.1-0.12	0.1-0.12	-	-
								52.01-65.00	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-	**0.1-0.12**	0.1-0.12	0.1-0.12	-	-
	N1.3.C.AG	Ligas à base de alumínio Ligas fundidas AlSi, Si < 1% e > 13%	90	H13A	250	285	315	15.00-18.00	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-	**0.06-0.08**	0.06-0.08	0.06-0.08	-	-
				4344	250	285	315	18.01-22.00	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-
								22.01-27.00	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-
								27.01-33.00	**0.08-0.13**	0.08-0.13	0.08-0.13	-	-	**0.08-0.11**	0.08-0.11	0.08-0.11	-	-
								33.01-40.00	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-	**0.08-0.12**	0.08-0.12	0.08-0.12	-	-
								40.01-52.00	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-	**0.1-0.12**	0.1-0.12	0.1-0.12	-	-
								52.01-65.00	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-	**0.1-0.12**	0.1-0.12	0.1-0.12	-	-
	N3.3.U.UT	Ligas à base de cobre Ligas à base de cobre de corte livre	110	H13A	250	315	360	15.00-18.00	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-
				4344	250	315	360	18.01-22.00	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-
								22.01-27.00	**0.06-0.13**	0.06-0.13	0.06-0.13	-	-	**0.06-0.11**	0.06-0.11	0.06-0.11	-	-
								27.01-33.00	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-	**0.08-0.12**	0.08-0.12	0.08-0.12	-	-
								33.01-40.00	**0.08-0.16**	0.08-0.16	0.08-0.16	-	-	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-
								40.01-52.00	**0.1-0.16**	0.1-0.16	0.1-0.16	-	-	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-
								52.01-65.00	**0.1-0.16**	0.1-0.16	0.1-0.16	-	-	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-
	N3.2.C.UT	Ligas à base de cobre Latão com chumbo & bronzes (Pb ≤ 1%)	90	H13A	180	200	215	15.00-18.00	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-	**0.06-0.09**	0.06-0.09	0.06-0.09	-	-
				4344	180	200	215	18.01-22.00	**0.06-0.12**	0.06-0.12	0.06-0.12	-	-	**0.06-0.1**	0.06-0.1	0.06-0.1	-	-
								22.01-27.00	**0.06-0.13**	0.06-0.13	0.06-0.13	-	-	**0.06-0.11**	0.06-0.11	0.06-0.11	-	-
								27.01-33.00	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-	**0.08-0.12**	0.08-0.12	0.08-0.12	-	-
								33.01-40.00	**0.08-0.16**	0.08-0.16	0.08-0.16	-	-	**0.08-0.14**	0.08-0.14	0.08-0.14	-	-
								40.01-52.00	**0.1-0.16**	0.1-0.16	0.1-0.16	-	-	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-
								52.01-65.00	**0.1-0.16**	0.1-0.16	0.1-0.16	-	-	**0.1-0.14**	0.1-0.14	0.1-0.14	-	-

Avanço na entrada do furo deve ser 75% da faixa de avanço recomendada. Avanço na saída do furo, use 0,05 mm/rot.

CoroDrill® 880

2 – 3 x DC

ISO	N° MC	Material	Dureza Brinell HB	Classe	Velocidade de corte (m/min)	Diâmetro da broca D_c mm	Geometria / Avanço Comprimento da broca 2-3xD -LM f_n mm/rot	-GM f_n mm/rot	-GR f_n mm/rot	-GT f_n mm/rot
P	P1.0.Z.AN (01.0)	**Aços sem liga** Não endurecidos 0.05-0.10% C	90-200	4324 4334 4344	230-400 210-325 190-245	12.00-13.99	**0.04-0.08**			
						14.00-16.49	**0.04-0.08**	0.04-0.06	0.04-0.06	0.04-0.06
						16.50-19.99	**0.04-0.10**	0.04-0.06	0.04-0.06	0.04-0.06
						20.00-23.99	**0.04-0.12**	0.04-0.08	0.04-0.08	0.04-0.08
						24.00-29.99	**0.04-0.12**	0.04-0.08	0.04-0.08	0.04-0.08
						30.00-35.99	**0.06-0.14**	0.06-0.10	0.06-0.10	0.06-0.10
						36.00-43.99	**0.06-0.16**	0.06-0.10	0.06-0.10	0.06-0.10
						44.00-52.99	**0.08-0.16**	0.08-0.12	0.08-0.12	0.08-0.12
						53.00-63.50	**0.08-0.16**	0.08-0.12	0.08-0.12	0.08-0.12
	P1.1.Z.AN (01.1)	Não endurecidos 0.05-0.25% C	90-200	4324 4334 4344	230-370 200-305 170-235	12.00-13.99	**0.04-0.10**			
						14.00-16.49	**0.04-0.10**	0.04-0.06	0.04-0.06	0.04-0.06
						16.50-19.99	**0.04-0.12**	0.04-0.06	0.04-0.06	0.04-0.06
						20.00-23.99	**0.04-0.14**	0.04-0.10	0.04-0.10	0.04-0.10
						24.00-29.99	**0.04-0.14**	0.04-0.10	0.04-0.10	0.04-0.10
						30.00-35.99	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.12
						36.00-43.99	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.12
						44.00-52.99	**0.08-0.16**	0.08-0.12	0.08-0.12	0.08-0.12
						53.00-63.50	**0.08-0.16**	0.08-0.12	0.08-0.12	0.08-0.12
	P1.2.Z.AN (01.2)	Não endurecidos 0.25-0.55% C	125-225	4324 4334 4344	190-305 155-250 120-190	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						30.00-35.99	0.06-0.22	0.06-0.22	**0.06-0.22**	0.06-0.22
						36.00-43.99	0.06-0.24	0.06-0.24	**0.06-0.24**	0.06-0.24
						44.00-52.99	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
						53.00-63.50	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
	P1.3.Z.AN (01.3)	Não endurecidos 0.55-0.80% C	150-250	4324 4334 4344	170-290 140-240 105-185	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.08-0.18	**0.08-0.18**	0.08-0.18
						30.00-35.99	0.06-0.24	0.08-0.24	**0.08-0.24**	0.08-0.24
						36.00-43.99	0.06-0.24	0.08-0.24	**0.08-0.24**	0.08-0.24
						44.00-52.99	0.06-0.24	0.08-0.24	**0.08-0.24**	0.08-0.24
						53.00-63.50	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
	P1.3.Z.AN (01.4)	Aços-ferramenta alto carbono e carbono	180-275	4324 4334 4344	200-290 155-240 105-180	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.08-0.18	**0.08-0.18**	0.08-0.18
						30.00-35.99	0.06-0.24	0.08-0.24	**0.08-0.24**	0.08-0.24
						36.00-43.99	0.06-0.24	0.08-0.24	**0.08-0.24**	0.08-0.24
						44.00-52.99	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
						53.00-63.50	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
	P2.1.Z.AN (02.1)	Aços baixa-liga (Não endurecidos)	150-260	4324 4334 4344	180-305 150-250 115-190	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.08-0.18	**0.08-0.18**	0.08-0.18
						30.00-35.99	0.06-0.24	0.06-0.24	**0.06-0.24**	0.06-0.24
						36.00-43.99	0.06-0.24	0.06-0.24	**0.06-0.24**	0.06-0.24
						44.00-52.99	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
						53.00-63.50	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
	P2.5.Z.HT (02.2)	Aços endurecidos	220-450	4324 4334 4344	90-245 85-195 75-150	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.08-0.18	**0.08-0.18**	0.08-0.18
						30.00-35.99	0.06-0.24	0.06-0.24	**0.06-0.24**	0.06-0.24
						36.00-43.99	0.06-0.24	0.06-0.24	**0.06-0.24**	0.06-0.24
						44.00-52.99	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
						53.00-63.50	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24

Nota: texto em negrito significa geometria recomendada
A classe da pastilha central é sempre 1044.

POR

CoroDrill® 880

2 – 3 x DC

ISO	N° MC	Material	Dureza Brinell HB	Classe	Velocidade de corte (m/min)	Diâmetro da broca D_c mm	Geometria / Avanço — Comprimento da broca 2-3xD -LM f_n mm/rot	-GM f_n mm/rot	-GR f_n mm/rot	-GT f_n mm/rot
P	P3.0.Z.AN (03.11)	Aços alta-liga (Recozidos)	150-250	4324 4334 4044	160-280 130-240 100-170	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.08-0.18	**0.08-0.18**	0.08-0.18
						30.00-35.99	0.06-0.24	0.06-0.24	**0.06-0.24**	0.06-0.24
						36.00-43.99	0.06-0.24	0.06-0.24	**0.06-0.24**	0.06-0.24
						44.00-52.99	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
						53.00-63.50	0.10-0.24	0.10-0.24	**0.10-0.24**	0.10-0.24
	P3.0.Z.HT (03.21)	Aços endurecidos	250-350	4324 4334 4044	80-210 75-175 70-125	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.08-0.18	**0.08-0.18**	0.08-0.18
						30.00-35.99	0.06-0.20	0.06-0.20	**0.06-0.20**	0.06-0.20
						36.00-43.99	0.06-0.22	0.06-0.22	**0.06-0.22**	0.06-0.22
						44.00-52.99	0.10-0.22	0.10-0.22	**0.10-0.22**	0.10-0.22
						53.00-63.50	0.10-0.22	0.10-0.22	**0.10-0.22**	0.10-0.22
	06.1	Aços fundidos (Sem liga)	90-225	4324 4334 4044	140-365 135-265 125-190	12.00-13.99	0.04-0.08			
						14.00-16.49	0.04-0.08	0.04-0.08	**0.04-0.08**	0.04-0.08
						16.50-19.99	0.04-0.08	0.04-0.08	**0.04-0.08**	0.04-0.08
						20.00-23.99	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						24.00-29.99	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						30.00-35.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						36.00-43.99	0.06-0.14	0.06-0.14	**0.06-0.14**	0.06-0.14
						44.00-52.99	0.08-0.14	0.08-0.14	**0.08-0.14**	0.08-0.14
						53.00-63.50	0.08-0.14	0.08-0.14	**0.08-0.14**	0.08-0.14
	P1.5.C.UT (06.2)	Baixa-liga (elementos de liga menores que 5%)	150-250	4324 4334 4044	110-265 105-210 100-150	12.00-13.99	0.04-0.10			
						14.00-16.49	0.04-0.10	0.04-0.10	**0.04-0.10**	0.04-0.10
						16.50-19.99	0.04-0.14	0.04-0.14	**0.04-0.14**	0.04-0.14
						20.00-23.99	0.06-0.18	0.06-0.18	**0.06-0.18**	0.06-0.18
						24.00-29.99	0.06-0.18	0.08-0.18	**0.08-0.18**	0.08-0.18
						30.00-35.99	0.06-0.20	0.06-0.20	**0.06-0.20**	0.06-0.20
						36.00-43.99	0.06-0.22	0.06-0.22	**0.06-0.22**	0.06-0.22
						44.00-52.99	0.10-0.22	0.10-0.22	**0.10-0.22**	0.10-0.22
						53.00-63.50	0.10-0.22	0.10-0.22	**0.10-0.22**	0.10-0.22

Nota: texto em Negrito significa geometria recomendada
A classe da pastilha central é sempre 1044.

CoroDrill® 880

2 – 3 x DC

ISO	N° MC	Material	Dureza Brinell HB	Classe	Velocidade de corte (m/min)	Diâmetro da broca D_c mm	Geometria/avanço (fn mm/rot.) Comprimento da broca 2-3xD -LM	-MS[1)]	-GM	-GR	-GT
M	P5.0.Z.AN (05.11)	Aços inoxidáveis ferríticos/ martensíticos 13-25% Cr	150-270	4324	120-280	12.00-13.99	0.04-0.12	**0.04-0.12**		0.04-0.08	
				4334	115-225	14.00-16.49	0.04-0.14	**0.04-0.14**	0.04-0.08	0.04-0.08	0.04-0.14
				4344	115-175	16.50-19.99	0.06-0.16	**0.06-0.16**	0.04-0.08	0.04-0.08	0.06-0.16
				2044	115-165	20.00-23.99	0.06-0.18	**0.06-0.18**	0.06-0.14	0.06-0.14	0.06-0.18
						24.00-29.99	0.06-0.18	**0.06-0.18**	0.06-0.14	0.06-0.14	0.06-0.18
						30.00-35.99	0.06-0.20	**0.06-0.20**	0.06-0.16	0.06-0.16	0.06-0.20
						36.00-43.99	0.06-0.20	**0.06-0.20**	0.06-0.16	0.06-0.16	0.10-0.24
						44.00-52.99	0.10-0.24	**0.10-0.24**	0.10-0.18	0.10-0.18	0.10-0.24
						53.00-63.50	0.10-0.24	**0.10-0.24**	0.10-0.18	0.10-0.18	0.10-0.24
	M1.0.Z.AQ (05.21)	Austeníticos Ni > 8%, 13-25% Cr	150-275	4324	120-265	12.00-13.99	0.04-0.12	**0.04-0.12**		0.04-0.08	
				4334	115-225	14.00-16.49	0.04-0.14	**0.04-0.14**	0.04-0.08	0.04-0.08	0.04-0.14
				4344	115-190	16.50-19.99	0.06-0.14	**0.06-0.14**	0.04-0.08	0.04-0.08	0.06-0.14
				2044	115-180	20.00-23.99	0.06-0.16	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.16
						24.00-29.99	0.06-0.16	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.16
						30.00-35.99	0.06-0.18	**0.06-0.18**	0.06-0.16	0.06-0.16	0.06-0.20
						36.00-43.99	0.06-0.20	**0.06-0.20**	0.06-0.16	0.06-0.16	0.06-0.20
						44.00-52.99	0.10-0.20	**0.10-0.20**	0.10-0.16	0.10-0.16	0.10-0.20
						53.00-63.50	0.10-0.20	**0.10-0.20**	0.10-0.16	0.10-0.16	0.10-0.20
	M3.1.Z.AQ (05.51) M3.2.Z.AQ (05.52)	Austeníticos/Ferríticos (Duplex)	200-320	4324	90-155	12.00-13.99	0.04-0.12	**0.04-0.12**		0.04-0.08	
				4334	85-145	14.00-16.49	0.04-0.14	**0.04-0.14**	0.04-0.08	0.04-0.08	0.04-0.14
				4344	85-130	16.50-19.99	0.06-0.14	**0.06-0.14**	0.04-0.08	0.04-0.08	0.06-0.14
				2044	85-125	20.00-23.99	0.06-0.16	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.16
						24.00-29.99	0.06-0.16	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.16
						30.00-35.99	0.06-0.18	**0.06-0.18**	0.06-0.16	0.06-0.16	0.06-0.18
						36.00-43.99	0.06-0.20	**0.06-0.20**	0.06-0.16	0.06-0.16	0.06-0.20
						44.00-52.99	0.10-0.20	**0.10-0.20**	0.10-0.16	0.10-0.16	0.10-0.20
						53.00-63.50	0.10-0.20	**0.10-0.20**	0.10-0.16	0.10-0.16	0.10-0.20
	M1.0.C.UT (15.21)	Austeníticos fundidos	150-250	4324	150-210	12.00-13.99	0.04-0.12	**0.04-0.12**		0.04-0.08	
				4334	115-185	14.00-16.49	0.04-0.12	**0.04-0.12**	0.04-0.08	0.04-0.08	0.04-0.12
				4344	80-165	16.50-19.99	0.06-0.14	**0.06-0.14**	0.04-0.08	0.04-0.08	0.06-0.14
				2044	80-155	20.00-23.99	0.06-0.16	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.16
						24.00-29.99	0.06-0.16	**0.06-0.16**	0.06-0.12	0.06-0.12	0.06-0.16
						30.00-35.99	0.06-0.18	**0.06-0.18**	0.06-0.16	0.06-0.16	0.06-0.18
						36.00-43.99	0.06-0.20	**0.06-0.20**	0.06-0.16	0.06-0.16	0.06-0.20
						44.00-52.99	0.10-0.20	**0.10-0.20**	0.10-0.16	0.10-0.16	0.10-0.20
						53.00-63.50	0.10-0.20	**0.10-0.20**	0.10-0.16	0.10-0.16	0.10-0.20
S	S2.0.Z.AN (20.21) S2.0.Z.AG (20.22) S2.0.C.NS (20.24)	Ligas resistentes ao calor. À base de Ni	140-425	4344	20-95	12.00-13.99	**0.04-0.08**	0.04-0.08		0.04-0.08	
				H13A	15-90	14.00-16.49	**0.04-0.08**	0.04-0.08	0.04-0.10	0.04-0.08	0.04-0.08
				2044	20-90	16.50-19.99	**0.05-0.08**	0.05-0.08	0.05-0.10	0.05-0.08	0.05-0.08
						20.00-23.99	**0.05-0.08**	0.05-0.08	0.05-0.10	0.05-0.08	0.05-0.08
						24.00-29.99	**0.06-0.10**	0.06-0.10	0.06-0.12	0.06-0.08	0.05-0.08
						30.00-35.99	**0.06-0.12**	0.06-0.12	0.06-0.12	0.06-0.12	0.06-0.12
						36.00-43.99	**0.06-0.12**	0.06-0.12	0.06-0.12	0.06-0.12	0.06-0.12
						44.00-52.99	**0.06-0.12**	0.06-0.12	0.06-0.12	0.06-0.12	0.06-0.12
						53.00-63.50	**0.08-0.14**	0.08-0.14	0.06-0.14	0.08-0.12	0.08-0.14
	S4.2.Z.AN (23.21) S4.3.Z.AG (23.22)	Titânio: Ligas Alfa- , próximo ligas Alfa- e Alfa + Beta em condições recozidas Titânio: Alfa + ligas Beta em condições envelhecidas, ligas Beta recozidas ou em condições de envelhecidas	Rm (Mpa) 600-1500	4344	40-145	12.00-13.99	**0.04-0.14**	0.04-0.14		0.04-0.10	
				H13A	40-135	14.00-16.49	**0.06-0.14**	0.06-0.14	0.06-0.12	0.06-0.10	0.06-0.10
				2044	40-135	16.50-19.99	**0.08-0.16**	0.08-0.16	0.08-0.14	0.08-0.12	0.08-0.12
						20.00-23.99	**0.08-0.16**	0.08-0.16	0.08-0.14	0.08-0.12	0.08-0.12
						24.00-29.99	**0.12-0.18**	0.12-0.18	0.10-0.16	0.10-0.14	0.10-0.14
						30.00-35.99	**0.12-0.18**	0.12-0.18	0.10-0.18	0.10-0.16	0.12-0.18
						36.00-43.99	**0.12-0.18**	0.12-0.18	0.10-0.18	0.10-0.16	0.12-0.18
						44.00-52.99	**0.12-0.18**	0.12-0.18	0.10-0.18	0.10-0.16	0.12-0.18
						53.00-63.50	**0.14-0.20**	0.14-0.20	0.14-0.20	0.12-0.16	0.14-0.20

Nota: texto em negrito significa geometria recomendada

1) A geometria -MS está disponível na classe GC2044

A GC1044 é a classe da pastilha central universal, para todos os materiais

A GC1144 é a classe da pastilha central otimizada para materiais ISO M

SANDVIK Coromant

POR

CoroDrill® 880

2 – 3 x DC

ISO	N° MC	Material	Dureza Brinell HB	Classe	Velocidade de corte (m/min)	Diâmetro da broca D_c mm	Geometria / Avanço — Comprimento da broca 2-3xD -LM f_n mm/rot.	-GM f_n mm/rot.	-GR f_n mm/rot.	-GT f_n mm/rot.
K	K1.1.C.NS (07.1)	Ferros fundidos ferríticos maleáveis (Cavacos curtos)	110-145	4324 4334 4344	140-245 110-200 80-155	12.00-13.99 14.00-16.49 16.50-19.99 20.00-23.99 24.00-29.99 30.00-35.99 36.00-43.99 44.00-52.99 53.00-63.50	0.06-0.10 0.06-0.12 0.08-0.14 0.08-0.14 0.10-0.16 0.10-0.16 0.12-0.18	0.06-0.12 0.08-0.14 0.10-0.18 0.10-0.20 0.10-0.20 0.10-0.20 0.12-0.22	**0.06-0.20** **0.08-0.22** **0.14-0.28** **0.16-0.32** **0.10-0.32** **0.10-0.34** **0.12-0.34**	0.08 - 0.22 0.10 - 0.26
	K1.1.C.NS (07.2)	Perlíticos (cavacos longos)	150-270	4324 4334 4344	105-180 85-150 65-110	12.00-13.99 14.00-16.49 16.50-19.99 20.00-23.99 24.00-29.99 30.00-35.99 36.00-43.99 44.00-52.99 53.00-63.50	0.06-0.10 0.06-0.12 0.08-0.14 0.08-0.14 0.10-0.16 0.10-0.16 0.10-0.16	0.06-0.12 0.08-0.14 0.10-0.16 0.10-0.18 0.10-0.20 0.10-0.20 0.10-0.20	**0.06-0.16** **0.08-0.18** **0.10-0.24** **0.10-0.28** **0.10-0.30** **0.10-0.32** **0.10-0.32**	0.08 - 0.18 0.10 - 0.24
	K2.1.C.UT (08.1)	Ferros fundidos cinzentos: Baixa resistência à tensão	150-220	4324 4334 4344	210-325 170-270 130-205	12.00-13.99 14.00-16.49 16.50-19.99 20.00-23.99 24.00-29.99 30.00-35.99 36.00-43.99 44.00-52.99 53.00-63.50	0.06-0.10 0.06-0.12 0.08-0.14 0.08-0.14 0.10-0.16 0.10-0.16 0.12-0.18	0.06-0.12 0.08-0.14 0.10-0.18 0.10-0.20 0.10-0.20 0.10-0.20 0.12-0.22	**0.06-0.20** **0.08-0.22** **0.10-0.28** **0.10-0.32** **0.10-0.32** **0.10-0.34** **0.12-0.34**	0.08 - 0.22 0.10 - 0.28
	K2.2.C.UT (08.2)	Alta resistência à tensão	200-330	4324 4334 4344	125-245 100-195 75-150	12.00-13.99 14.00-16.49 16.50-19.99 20.00-23.99 24.00-29.99 30.00-35.99 36.00-43.99 44.00-52.99 53.00-63.50	0.06-0.10 0.06-0.12 0.08-0.14 0.08-0.14 0.10-0.16 0.10-0.16 0.10-0.16	0.06-0.12 0.08-0.14 0.10-0.16 0.10-0.18 0.10-0.20 0.10-0.20 0.10-0.20	**0.06-0.16** **0.08-0.18** **0.10-0.24** **0.10-0.28** **0.10-0.30** **0.10-0.32** **0.10-0.32**	0.08 - 0.18 0.10 - 0.24
	K3.1.C.UT (09.1)	Ferros fundidos nodulares (Ferríticos)	150-230	4324 4334 4344	125-225 100-185 80-145	12.00-13.99 14.00-16.49 16.50-19.99 20.00-23.99 24.00-29.99 30.00-35.99 36.00-43.99 44.00-52.99 53.00-63.50	0.06-0.10 0.06-0.12 0.08-0.14 0.08-0.14 0.10-0.16 0.10-0.16 0.10-0.16	0.06-0.12 0.08-0.14 0.10-0.16 0.10-0.18 0.10-0.20 0.10-0.20 0.10-0.20	**0.08-0.16** **0.10-0.18** **0.12-0.24** **0.14-0.28** **0.10-0.30** **0.10-0.32** **0.10-0.32**	0.08 - 0.18 0.10 - 0.24
	K3.3.C.UT (09.2)	Perlíticos	200-330	4324 4334 4344	110-210 90-175 70-130	12.00-13.99 14.00-16.49 16.50-19.99 20.00-23.99 24.00-29.99 30.00-35.99 36.00-43.99 44.00-52.99 53.00-63.50	0.06-0.10 0.06-0.12 0.08-0.14 0.08-0.14 0.10-0.16 0.10-0.16 0.10-0.16	0.06-0.12 0.08-0.14 0.10-0.16 0.10-0.18 0.10-0.20 0.10-0.20 0.10-0.20	**0.08-0.16** **0.10-0.18** **0.12-0.24** **0.14-0.28** **0.10-0.30** **0.10-0.32** **0.10-0.32**	0.08 - 0.18 0.10 - 0.24

Nota: texto em negrito significa geometria recomendada
A classe da pastilha central é sempre 1044.

CoroDrill® 880

2 – 3 x DC

ISO	N° MC	Material	Dureza Brinell HB	Classe	Velocidade de corte (m/min)	Diâmetro da broca D_c mm	Geometria / Avanço — Comprimento da broca 2-3xD -LM f_n mm/rot.	-GM f_n mm/rot.	-GR f_n mm/rot.	-GT f_n mm/rot.
H	H1.3.Z.HA (04.1)	Endurecidos e temperados	47-65 (HRC)	4324 4334 4344	30-85 30-85 30-85	12.00-13.99	0.10-0.16	0.10-0.20	**0.10-0.32**	
						14.00-16.49	0.04-0.08	**0.04-0.12**	0.04-0.08	0.04 - 0.08
						16.50-19.99	0.05-0.12	**0.06-0.14**	0.05-0.12	0.05 - 0.12
						20.00-23.99	0.05-0.14	**0.06-0.18**	0.05-0.14	0.05 - 0.14
						24.00-29.99	0.05-0.14	**0.06-0.18**	0.05-0.14	0.05 - 0.14
						30.00-35.99	0.06-0.16	**0.06-0.20**	0.06-0.16	
						36.00-43.99	0.06-0.16	**0.06-0.20**	0.06-0.16	
						44.00-52.99	0.10-0.16	**0.10-0.20**	0.10-0.16	
						53.00-63.50				
N	N1.2.Z.AG (30.12)	Ligas de alumínio forjadas ou forjadas e envelhecidas	30-150	4344 H13A	300-405 300-400	12.00-13.99	0.04-0.08		0.04-0.08	
						14.00-16.49	**0.04-0.14**	0.04-0.12	0.04-0.12	0.04-0.12
						16.50-19.99	**0.04-0.16**	0.04-0.14	0.04-0.14	0.04 - 0.14
						20.00-23.99	**0.06-0.18**	0.06-0.16	0.06-0.16	0.06 - 0.16
						24.00-29.99	**0.10-0.20**	0.10-0.18	0.10-0.18	0.10-0.18
						30.00-35.99	**0.10-0.25**	0.10-0.20	0.10-0.20	
						36.00-43.99	**0.10-0.25**	0.10-0.20	0.10-0.20	
						44.00-52.99	**0.12-0.28**	0.12-0.22	0.12-0.22	
						53.00-63.50	0.12-0.28	0.12-0.22	0.12-0.22	
	N1.3.C.UT (30.21)	Fundidas, não envelhecidas	40-100	4344 H13A	300-405 300-400	12.00-13.99	0.04-0.12		0.04-0.12	
						14.00-16.49	**0.04-0.12**	0.04-0.14	0.04-0.12	0.04-0.12
						16.50-19.99	**0.04-0.14**	0.04-0.16	0.04-0.14	0.04 - 0.14
						20.00-23.99	**0.06-0.16**	0.06-0.18	0.06-0.16	0.06 - 0.16
						24.00-29.99	**0.10-0.18**	0.10-0.20	0.10-0.18	0.10-0.18
						30.00-35.99	**0.10-0.20**	0.10-0.22	0.10-0.20	
						36.00-43.99	**0.10-0.20**	0.10-0.24	0.10-0.20	
						44.00-52.99	**0.12-0.22**	0.12-0.26	0.12-0.22	
						53.00-63.50	0.12-0.22	0.12-0.26	0.12-0.22	
	N1.3.C.AG (30.22)	Fundidos ou fundidos e envelhecidos	70-140	4344 H13A	250-350 250-350	12.00-13.99	0.04-0.12		0.04-0.12	
						14.00-16.49	**0.04-0.12**	0.04-0.14	0.04-0.12	0.04-0.12
						16.50-19.99	**0.04-0.14**	0.04-0.16	0.04-0.14	0.04 - 0.14
						20.00-23.99	**0.06-0.16**	0.06-0.18	0.06-0.16	0.06 - 0.16
						24.00-29.99	**0.10-0.18**	0.10-0.20	0.10-0.18	0.10-0.18
						30.00-35.99	**0.10-0.20**	0.10-0.22	0.10-0.20	
						36.00-43.99	**0.10-0.20**	0.10-0.24	0.10-0.20	
						44.00-52.99	**0.12-0.22**	0.12-0.26	0.12-0.22	
						53.00-63.50	0.12-0.22	0.12-0.26	0.12-0.22	
	N3.3.U.UT (33.1)	Cobre e ligas de cobre	70-160	4344 H13A	250-400 250-400	12.00-13.99	0.04-0.14		0.04-0.12	
						14.00-16.49	**0.04-0.14**	0.04-0.12	0.04-0.12	0.04-0.12
						16.50-19.99	**0.04-0.16**	0.04-0.14	0.04-0.14	0.04 - 0.14
						20.00-23.99	**0.06-0.18**	0.06-0.16	0.06-0.16	0.06 - 0.16
						24.00-29.99	**0.10-0.20**	0.10-0.18	0.10-0.18	0.10-0.18
						30.00-35.99	**0.10-0.25**	0.10-0.20	0.10-0.20	
						36.00-43.99	**0.10-0.25**	0.10-0.20	0.10-0.20	
						44.00-52.99	**0.12-0.28**	0.12-0.22	0.12-0.22	
						53.00-63.50	0.12-0.28	0.12-0.22	0.12-0.22	
	N3.2.C.UT (33.2)	Ligas de latão e com chumbo (Pb < 1%)	50-200	4344 H13A	180-240 180-240	12.00-13.99	0.04-0.14		0.04-0.12	
						14.00-16.49	**0.04-0.14**	0.04-0.12	0.04-0.12	0.04-0.12
						16.50-19.99	**0.04-0.16**	0.04-0.14	0.04-0.14	0.04 - 0.14
						20.00-23.99	**0.06-0.18**	0.06-0.16	0.06-0.16	0.06 - 0.16
						24.00-29.99	**0.10-0.20**	0.10-0.18	0.10-0.18	0.10-0.18
						30.00-35.99	**0.10-0.25**	0.10-0.20	0.10-0.20	
						36.00-43.99	**0.10-0.25**	0.10-0.20	0.10-0.20	
						44.00-52.99	**0.12-0.28**	0.12-0.22	0.12-0.22	
						53.00-63.50	0.12-0.28	0.12-0.22	0.12-0.22	

Nota: texto em negrito significa geometria recomendada
A classe da pastilha central é sempre 1044.

SANDVIK Coromant

POR

Ferramenta de trepanação

ISO	No. CMC	Material	Dureza Brinell HB	Diâm. da broca D_c mm	Avanço f_n mm/r	Velocidade *vc* m/min	Geometria/ Classe
P		**Aços sem liga**					
	01.0	Não endurecidos 0,05-0,10% C	80-170		0.07–0.10	250-345	-58/3040
	01.1	Não endurecidos 0,05–0,25% C	90–200		0.07–0.12	225-315	-58/3040
	01.2	Não endurecidos 0,25–0,55% C	125–225				
	01.3	Não endurecidos 0,55–0,80% C	150–250	60-110	0.10-0.20	130-210	-53/3040
	01.4	Aços-ferramenta alto carbono e carbono	180–275				
		Aços baixa-liga					
	02.1	Não endurecidos	150–260	60-110	0.11-0.18	145-210	-53/3040
	02.2	Endurecidos	220–400		0.10–0.20	100-165	
		Aços alta-liga					
	03.11	Recozidos	50–250		0.10–0.20	125-200	
	03.13	Recozidos HSS		60-110			-53/3040
	03.21	Aços-ferramenta endurecidos	250–450		0.11–0.18	90-145	
	03.22	Aços endurecidos					
		Aços fundidos					
	06.1	Sem liga	90–225	60-110	0.06–0.12	195-280	-58/3040
	06.2	Baixa-liga (elementos de liga ≤ 5%)	150–250		0.11–0.18	120-175	-53/3040
M		**Aços inoxidáveis**					
	05.1	Ferríticos, martensíticos 13–25% Cr	150–270	60-110	0.10–0.20	170-240	-58/3040
	05.2	Austeníticos Ni > 8% 13–25% Cr	150–270	60-110	0.10–0.16	100-140	-58/235
K		**Maleáveis**					
	07.1	Ferríticos (cavacos curtos)	110–145	60-110	0.16-0.26	140-210	-53/3040
	07.2	Perlíticos (cavacos longos)	150–270		0.14-0.20	105-155	
		Ferros fundidos cinzentos					
	08.1	Baixa tensão	150–220	60-110	0.16-0.26	210-280	-53/3040
	08.2	Alta tensão	200-300		0.14-0.20	125-210	
		Ferros fundidos nodulares					
	09.1	Ferríticos	125-230	60-110	0.14-0.20	125-195	-53/3040
	09.2	Ferríticos	200-300		0.14-0.20	100-180	
N		**Ligas de alumínio**					
	30.12	Forjadas ou forjadas e envelhecidas	75-150				
	30.21	Forjada	40-100	60-110	0.12-0.22	250-400	-53/H13A
	30.22	Fundidas, tratadas em solução e envelhecidas	70-125				
		Cobre e ligas de cobre					
	33.1	Ligas de corte livre, (Pb ≥ 1%)	50-160	60-110	0.12-0.22	180-350	-53/H13A
	33.2	Latão e bronze com chumbo (Pb ≤ 1%)					

Broca com pastilhas intercambiáveis Coromant U para mergulho

ISO	No. CMC	Material	Dureza Brinell HB	Diâmetro da broca D_c mm	Avanço f_n mm/r	Velocidade vc m/min	Geometria/Classe PRIMEIRA ESCOLHA Alta produtividade P	C	Complementar P	C
P		**Aços sem liga**		12.7–17.0	0.04–0.08	290 (230–380)	-53/3040	-53/1020	-53/1120	-53/1020
	01.0	Não endurecidos 0,05-0,10% C	80-170	17.5–25.4	0.04–0.08		-53/3040		-53/1020	T-53/1020
				26.0–30.0	0.05–0.08		-53/3040		-53/1020	
				31.0–41.3	0.07–0.10		-53/3040		-53/1020	
				42.0–80.0	0.08–0.12		-53/3040		-53/1020	
	01.1	Não endurecidos 0,05–0,25% C	90–200	12.7–17.0	0.04–0.08	270 (225–345)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.04–0.08		-53/3040		-53/1020	T-53/1020
				26.0–30.0	0.05–0.10		-53/3040		-53/1020	
				31.0–41.3	0.07–0.12		-53/3040		-53/1020	
				42.0–80.0	0.08–0.14		-53/3040		-53/1020	
	01.2	Não endurecidos 0,25–0,55% C	125–225	12.7–17.0	0.04–0.10	230 (190–290)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.04–0.14				-53/1020	T-53/1020
				26.0–30.0	0.08–0.18				-53/1020	
				31.0–41.3	0.10–0.20				-53/1020	
				42.0–80.0	0.12–0.24				-53/1020	
	01.3	Não endurecidos 0,55–0,80% C	150–225	12.7–17.0	0.04–0.10	210 (170–275)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.14				-53/1020	T-53/1020
				26.0–30.0	0.08–0.18				-53/1020	
				31.0–41.3	0.10–0.20				-53/1020	
				42.0–80.0	0.12–0.24				-53/1020	
	01.4	Aços-ferramenta alto carbono e carbono	180–275	12.7–17.0	0.04–0.10	210 (200–275)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.14				-53/1020	T-53/1020
				26.0–30.0	0.08–0.18				-53/1020	
				31.0–41.3	0.10–0.20				-53/1020	
				42.0–80.0	0.12–0.24				-53/1020	
		Aços baixa-liga		12.7–17.0	0.04–0.10	220 (180–290)	-53/3040	-53/1020	-53/1120	-53/1020
	02.1	Não endurecidos	150–260	17.5–25.4	0.06–0.12				-53/1020	T-53/1020
				26.0–30.0	0.10–0.16				-53/1020	
				31.0–41.3	0.11–0.18				-53/1020	
				42.0-80.0	0.12–0.22				-53/1020	
	02.2	Endurecidos	220–450	12.7–17.0	0.04–0.10	170 (90–230)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.14				-53/1020	T-53/1020
				26.0–30.0	0.10–0.18				-53/1020	
				31.0–41.3	0.10–0.20				-53/1020	
				42.0–80.0	0.12–0.24				-53/1020	
		Aços alta-liga		12.7–17.0	0.04–0.08	180 (160–275)	-53/3040	-53/1020	-53/1120	-53/1020
	03.11	Recozidos	50–250	17.5–25.4	0.04–0.14				-53/1020	T-53/1020
				26.0–30.0	0.08–0.18				-53/1020	
				31.0–41.3	0.10–0.20				-53/1020	
				42.0–80.0	0.12–0.24				-53/1020	
	03.21	Aços endurecidos	250–450	12.7–17.0	0.04–0.10	130 (80–200)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.12				-53/1020	T-53/1020
				26.0–30.0	0.10–0.16				-53/1020	
				31.0–41.3	0.11–0.18				-53/1020	
				42.0–80.0	0.12–0.22				-53/1020	
		Aços fundidos		12.7–17.0	0.04–0.08	200 (140–310)	-53/3040	-53/1020	-53/1120	-53/1020
	06.1	Sem liga	90–225	17.5–25.4	0.04–0.08		-53/3040		-53/1020	T-53/1020
				26.0–30.0	0.05–0.10		-53/3040		-53/1020	
				31.0–41.3	0.06–0.12		-53/3040		-53/1020	
				42.0–80.0	0.07–0.14		-53/3040		-53/1020	
	06.2	Baixa-liga (elementos de liga ≤ 5%)	150–250	12.7–17.0	0.04–0.10	160 (110–250)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.12				-53/1020	T-53/1020
				26.0–30.0	0.10–0.16				-53/1020	
				31.0–41.3	0.11–0.18				-53/1020	
				42.0–80.0	0.12–0.22				-53/1020	
M		**Aços inoxidáveis**		12.7–17.0	0.04–0.10	170 (120–265)	53/3040	53/1020	53/1120	53/1020
	05.11	Ferríticos, martensíticos 13–25% Cr	150–270	17.5–25.4	0.04–0.14		53/3040		53/1020	
				26.0–30.0	0.08–0.18		53/3040		53/1020	
				31.0–41.3	0.10–0.20		53/3040		53/1020	
				42.0–80.0	12–0.24		53/3040		53/1020	
	05.21	Austeníticos Ni > 8% 13–25% Cr	150–275	12.7–17.0	0.04–0.10	150 (120–250)	53/3040	53/1020	53/1120	53/1020
				17.5–25.4	0.04–0.12		53/3040		53/1020	
				26.0–30.0	0.08–0.14		53/3040		53/1020	
				31.0–41.3	0.10–0.16		53/3040		53/1020	
				42.0–80.0	0.11–0.18		53/3040		53/1020	
	05.51 05.52	Austeníticos Ferríticos (duplex)	180–320	12.7–17.0	0.04–0.10	110 (90–145)	53/3040	53/1020	53/1120	53/1020
				17.5–25.4	0.04–0.12		53/3040		53/1020	
				26.0–30.0	0.08–0.14		53/3040		53/1020	
				31.0–41.3	0.10–0.16		53/3040		53/1020	
				42.0–80.0	0.11–0.18		53/3040		53/1020	

Posicionamento da pastilha C = Central
P = Periférica

Wiper TECHNOLOGY Geometria -WM para usinagem de aços e ferros fundidos com dureza < 200 HB em condições estáveis, aumento do avanço (fn) em 50%. Para aços inoxidáveis fáceis de usinar em condições estáveis, aumento do avanço (fn) em 25%.

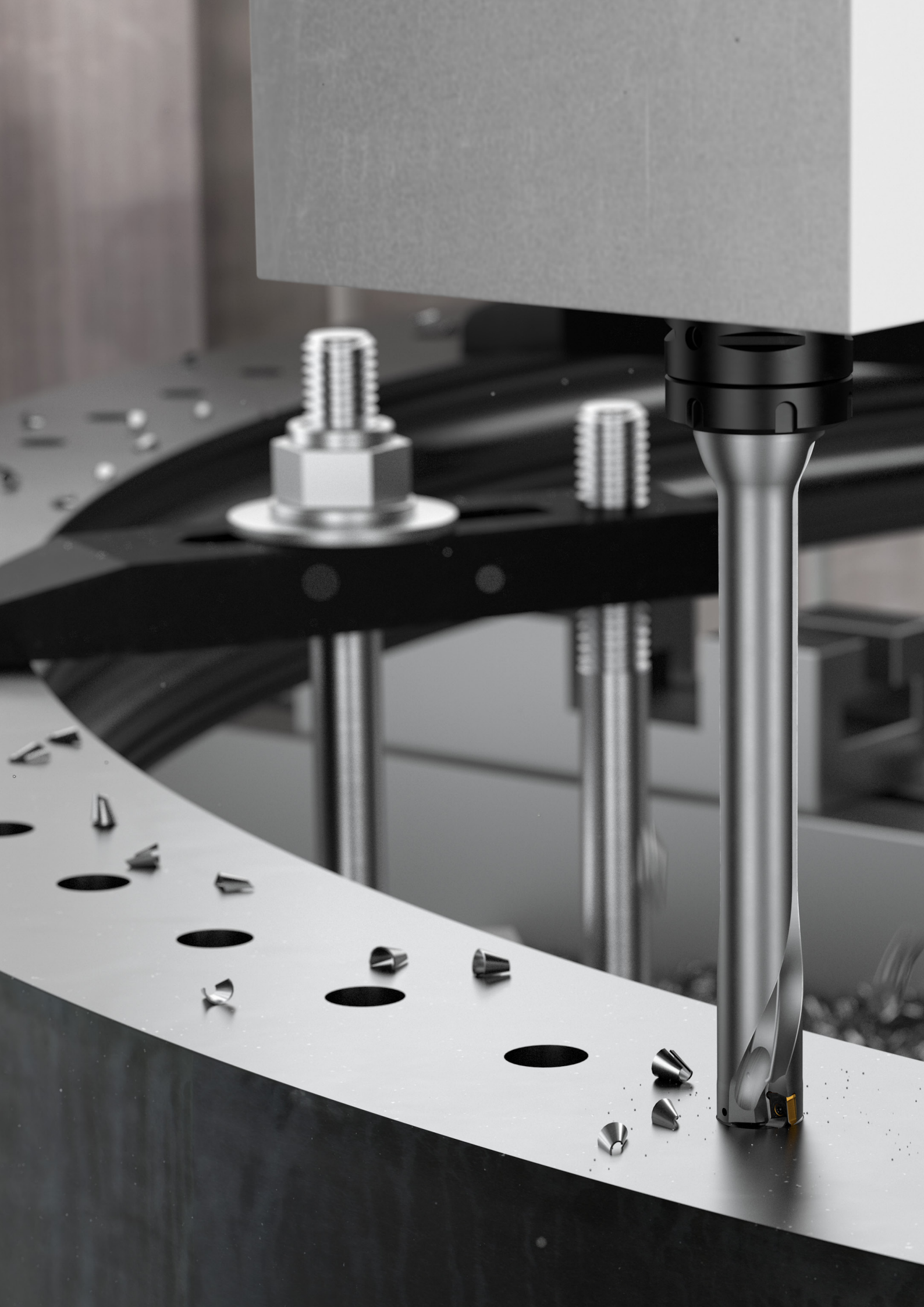
SANDVIK Coromant

POR

Broca com pastilhas intercambiáveis Coromant U para mergulho

ISO	No. CMC	Material	Dureza Brinell HB	Diâmetro da broca D_c mm	Avanço f_n mm/r	Velocidade vc m/min	Geometria/Classe PRIMEIRA ESCOLHA Alta produtividade P	Geometria/Classe PRIMEIRA ESCOLHA Alta produtividade C	Geometria/Classe Complementar P	Geometria/Classe Complementar C
M		**Aços inoxidáveis**		12.7–17.0	0.04–0.08		-53/1120		-53/1120	-53/1020
	15.21	Austeníticos fundidos	150–250	17.5–25.4	0.04–0.12			-53/1020	-53/1020	
				26.0–30.0	0.05–0.12	110 (80–155)	-53/1020	-53/1020	-53/1020	
				31.0–41.3	0.06–0.14			-53/1020	-53/1020	
				42.0–80.0	0.06–0.14			-53/1020	-53/1020	
S		**Ligas resistentes ao calor**		12.7–17.0	0.03–0.08		-53/1120		-53/1120	-53/1020
	20.21	À base de Ni	140–425	17.5–25.4	0.04–0.08			-53/1020	-53/1020	
	20.22			26.0–30.0	0.06–0.10	50 (20– 88)	-53/1020	-53/1020	-53/1020	
	20.24			31.0–41.3	0.08–0.12			-53/1020	-53/1020	
				42.0–80.0	0.09–0.14			-53/1020	-53/1020	
		Ligas de titânio		12.7–17.0	0.04–0.10		-53/1120	-53/1020	-53/1120	-53/1020
	23.21	α, α próximo e ligas α+β. Ligas em	600–1500	17.5–25.4	0.08–0.14		-53/H13A	-53/H13A	-53/H13A	-53/H13A
	23.22	condições recozidas ou envelhecidas		26.0–30.0	0.12–0.16	60 (40–132)	-53/H13A	-53/H13A	-53/H13A	-53/H13A
				31.0–41.3	0.14–0.18		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				42.0–80.0	0.16–0.20		-53/H13A	-53/H13A	-53/H13A	-53/H13A
K		**Ferros fundidos maleáveis**		12.7–17.0	0.04–0.14	170 (140–230)	-53/3040	-53/1020	-53/1120	-53/1020
	07.1	Ferríticos (cavacos curtos)	110–145	17.5–25.4	0.10–0.18				-53/1020	T-53/1020
				26.0–30.0	0.14–0.20				-53/1020	
				31.0–41.3	0.16–0.26				-53/1020	
				42.0–80.0	0.18–0.28				-53/1020	
	07.2	Perlíticos (cavacos longos)	150–270	12.7–17.0	0.04–0.10	140 (105–170)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.08–0.14				-53/1020	T-53/1020
				26.0–30.0	0.12–0.18				-53/1020	
				31.0–41.3	0.14–0.20				-53/1020	
				42.0–80.0	0.15–0.22				-53/1020	
		Ferros fundidos cinzentos		12.7–17.0	0.04–0.14	250 (210–310)	-53/3040	-53/1020	-53/1120	-53/1020
	08.1	Baixa resistência à tensão	150–220	17.5–25.4	0.10–0.18				-53/1020	T-53/1020
				26.0–30.0	0.14–0.20				-53/1020	
				31.0–41.3	0.16–0.26				-53/1020	
				42.0–80.0	0.18–0.28				-53/1020	
	08.2	Alta resistência à tensão	200–330	12.7–17.0	0.04–0.10	170 (125–230)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.08–0.14				-53/1020	T-53/1020
				26.0–30.0	0.12–0.18				-53/1020	
				31.0–41.3	0.14–0.20				-53/1020	
				42.0–80.0	0.15–0.22				-53/1020	
		Ferros fundidos nodulares		12.7–17.0	0.04–0.10	170 (125–215)	-53/3040	-53/1020	-53/1120	-53/1020
	09.1	Ferríticos	125–230	17.5–25.4	0.08–0.14				-53/1020	T-53/1020
				26.0–30.0	0.12–0.18				-53/1020	
				31.0–41.3	0.14–0.20				-53/1020	
				42.0–80.0	0.15–0.22				-53/1020	
	09.2	Perlíticos	200–300	12.7–17.0	0.04–0.10	150 (110–200)	-53/3040	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.08–0.14				-53/1020	
				26.0–30.0	0.12–0.18				-53/1020	
				31.0–41.3	0.14–0.20				-53/1020	
				42.0–80.0	0.15–0.22				-53/1020	
H		**Aços extra-duros**		12.7–17.0	0.05-0.08					
	04.1	Endurecidos e temperados	450	17.5–25.4	0.07-0.15					
				26.0–30.0	0.07-0.15	40 (30-80)	-53/3040	-53/1020	-53/1020	-53/1020
				31.0–41.3	0.10-0.15				-53/1120	
				42.0–80.0	0.10-0.15					
N		**Ligas de alumínio**		12.7–17.0	0.04–0.12	350 (300–440)	-53/1120	-53/1020	-53/1120	-53/1020
	30.12	Forjadas ou forjadas e envelhecidas	30–150	17.5–25.4	0.06–0.16		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				26.0–30.0	0.10–0.18		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				31.0–41.3	0.12–0.22		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				42.0–80.0	0.14–0.26		-53/H13A	-53/H13A	-53/H13A	-53/H13A
	30.21	Fundidas, não envelhecidas	40–100	12.7–17.0	0.04–0.12	150 (30–440)	-53/1120	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.16		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				26.0–30.0	0.10–0.18		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				31.0–41.3	0.12–0.22		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				42.0–80.0	0.14–0.26		-53/H13A	-53/H13A	-53/H13A	-53/H13A
	30.22	Fundidos ou fundidos e envelhecidos	70–140	12.7–17.0	0.04–0.12	300 (250–385)	-53/1120	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.16		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				26.0–30.0	0.10–0.18		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				31.0–41.3	0.12–0.22		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				42.0–80.0	0.14–0.26		-53/H13A	-53/H13A	-53/H13A	-53/H13A
		Cobre e ligas de cobre		12.7–17.0	0.04–0.12	300 (250–385)	-53/1120	-53/1020	-53/1120	-53/1020
	33.1	Ligas de corte livre (Pb ≥ 1%)	50–160	17.5–25.4	0.06–0.16		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				26.0–30.0	0.10–0.18		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				31.0–41.3	0.12–0.22		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				42.0–80.0	0.14–0.26		-53/H13A	-53/H13A	-53/H13A	-53/H13A
	33.2	Ligas de bronze e latão (Pb ≤ 1%)	50–160	12.7–17.0	0.04–0.12	230 (180–265)	-53/1120	-53/1020	-53/1120	-53/1020
				17.5–25.4	0.06–0.16		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				26.0–30.0	0.10–0.18		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				31.0–41.3	0.12–0.22		-53/H13A	-53/H13A	-53/H13A	-53/H13A
				42.0–80.0	0.14–0.26		-53/H13A	-53/H13A	-53/H13A	-53/H13A

Posicionamento da pastilha C = Central P = Periférica



Mandrilamento

Mandrilamento em desbaste K3

CoroBore® BR10 K4

CoroBore® BR20 K6

CoroBore® BR30 K17

CoroBore® 820 XL K23

Mandrilamento de precisão K34

Cabeças para mandrilamento de precisão e barras de mandrilar 391.37A/B K38

CoroBore® 824 K35

CoroBore® 825 K43

CoroBore® 826 K44

CoroBore® 825 XL K53

CoroBore® 826 XL K53

Canais frontais K66

Adaptador CoroCut® MB K67

CoroBore® 825 SL K68

SpiroGrooving™ K71

Torneamento por interpolação K74

Adaptadores K76

Cápsulas CoroBore® XL para mandrilamento K78

Como escolher a ferramenta para mandrilamento

Identifique os conceitos da ferramenta

1

- Defina o tipo de aplicação.
- Identifique o tipo de sua aplicação: desbaste, acabamento ou usinagem de canais frontais. Observe as características do furo a ser usinado, as limitações, o material e a máquina.
- Selecione o sistema de mandrilamento.
- Identifique o tipo de sua operação: mandrilamento multiarestas, mandrilamento de aresta única, mandrilamento escalonado, mandrilamento reverso ou mandrilamento externo para encontrar as faixas de diâmetro disponíveis e os acessórios necessários.

Nota: Sempre tente usar o maior acoplamento possível. Lembre-se de calcular o consumo de potência e o torque da aplicação.

Selecione a pastilha

2

- Escolha as pastilhas de acordo com as especificações do furo: defina o ângulo de posição e o tipo da pastilha. As pastilhas esepcíficas para mandrilamento podem ser encontradas aqui no capítulo sobre mandrilamento. As pastilhas ISO são encontradas no capítulo sobre torneamento geral do catálogo de Ferramentas para torneamento.
- Para informações sobre as recomendações iniciais e de pastilhas para operações de mandrilamento, veja a página K91.

Seleção de componentes do sistema de fixação

3

- Se necessário, encontre a seleção completa de adaptadores de interface da máquina, extensões e reduções para sua montagem modular, veja a página L2.
- Sempre tente manter as ferramentas o mais curtas possível.

Componentes da ferramenta de mandrilar

- As peças inclusas e componentes adicionais podem ser encontrados em www.sandvik.coromant.com

Acessórios e componentes

- Acessórios e componentes para todas as famílias de ferramentas de mandrilar podem ser encontrados em www.sandvik.coromant.com

Como escolher uma ferramenta para usinagem de canais frontais

Selecione sua ferramenta

1

- A montagem da ferramenta sem cabeça SL e pastilha é escolhida de acordo com suas necessidades de diâmetro e acoplamento do lado da máquina.

Escolha de cabeças SL

2

- Identifique as cabeças SL para usinagem de canais frontais:
- O diâmetro do primeiro corte da cabeça SL precisa corresponder ao diâmetro da aplicação de usinagem de canais frontais.
- A largura do canal influenciará na escolha das cabeças SL e das pastilhas.
- Use somente as cabeças SL com interface lateral da máquina SL32, versão esquerda, com curva A.
- A dimensão da cabeça SL LF=18 mm permite diâmetro máximo de acordo com o código do kit de ferramentas. LF=14 mm reduz a faixa de diâmetro da ferramenta para usinagem de canais frontais com 8 mm.
- Veja CoroCut 1-2 no catálogo de Ferramentas para torneamento para o programa de cabeças SL.

Seleção de pastilhas

3

- Escolha entre as pastilhas do sistema CoroCut 1-2. Veja o catálogo de Ferramentas para Torneamento.

POR

Mandrilamento em desbaste

	Conceito de ferramentas	Faixa de diâmetro, mm	Tolerância do furo	Arestas de corte	Operação	Escolha da pastilha	Interface do lado da máquina	Página
CoroBore® BR10 	Convencional	32-170	IT9	1	- Mandrilamento reverso com aresta única	- CoroTurn® 107	- Coromant Capto® - Coromant EH	K4-K5
CoroBore® BR20 	Convencional	23-150	IT9	2	- Mandrilamento reverso com aresta única - Mandrilamento - Mandrilamento escalonado - Mandrilamento com aresta única	- CoroTurn® 107 - T-Max® P - CoroBore® 111	- Coromant Capto® - Coromant EH	K6-K10
	Antivibratória	23-150	IT9	2	- Mandrilamento - Mandrilamento escalonado - Mandrilamento com aresta única	- CoroTurn® 107 - CoroBore® 111	- Coromant Capto®	K14
CoroBore® BR30 	Convencional	35-214	IT9	3	- Mandrilamento - Mandrilamento escalonado - Mandrilamento com aresta única	- CoroTurn® 107 - T-Max® P - CoroBore® 111	- Coromant Capto®	K17-K21
Mandrilamento de cavidades 	Convencional	85-205	IT9	4,6,8	- Mandrilamento - Mandrilamento escalonado	- CoroTurn® 107* - CoroBore® 111	- Coromant Capto®	K22
CoroBore® 820 XL 	Convencional	148-300 (350**) 298-1260	IT9	2	- Mandrilamento - Mandrilamento escalonado - Mandrilamento com aresta única	- CoroTurn® 107 - T-Max® P - CoroBore® 111	- Coromant Capto® - 40X com 4 parafusos	K24-K25 K28-K31
	Light Weight	148-300	IT9	2	- Mandrilamento - Mandrilamento escalonado - Mandrilamento com aresta única	- CoroTurn® 107 - CoroBore® 111	- 40S com 4 parafusos	K26
	Antivibratório	148-300	IT9	2	- Mandrilamento - Mandrilamento escalonado - Mandrilamento com aresta única	- CoroTurn® 107 - CoroBore® 111	- Adaptador antivibratório A33	K27

*Não incluído no kit, as peças devem ser pedidas separadamente

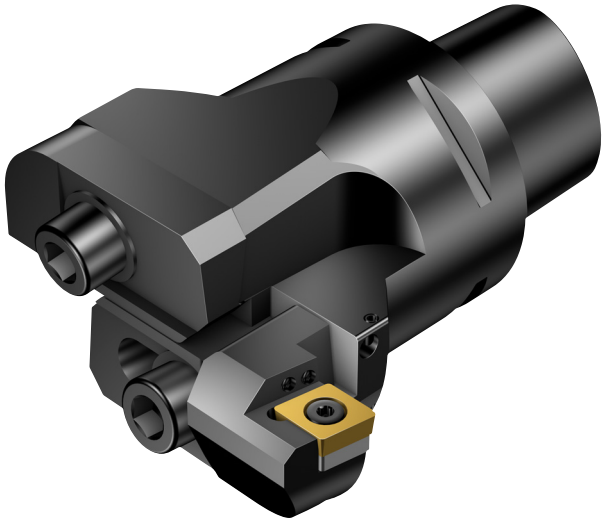
**As peças devem ser pedidas separadamente

CoroBore® BR10

Mandrilamento reverso com aresta única

Aplicação

- Mandrilamento em desbaste
- Mandrilamento reverso



Área de aplicação ISO:

P M K N S H

Características e benefícios

- Escala marcada a laser no adaptador para facilitar o uso durante o ajuste do diâmetro
- Pode ser facilmente montada como uma ferramenta de mandrilamento de aresta dupla, usando os cassetes BR20
- Olhais de refrigeração com alta precisão incorporados ao cassete para direcionamento preciso da refrigeração
- Fluido de corte através da ferramenta para bom escoamento de cavacos
- Modularidade com Coromant Capto® e Coromant EH

www.sandvik.coromant.com/coroborebr10

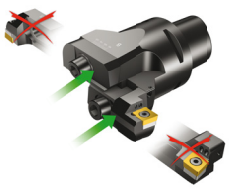
Ferramentas

Acoplamentos:
- Coromant Capto®
- Coromant EH

Pastilhas

- Pastilhas CoroTurn® 107 standard com uma ampla seleção de classes e geometrias para todos os materiais.

A ferramenta para mandrilamento reverso é baseada no adaptador CoroBore® BR20 com cassete e capa exclusivos para mandrilamento reverso.



Disponível como kit de montagem completo para mandrilamento reverso ou capa e cassete para mandrilamento reverso, separados como itens adicionais.

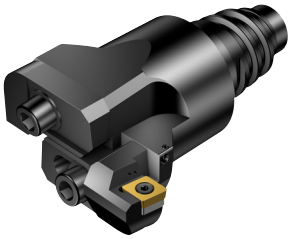


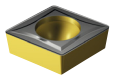
POR

CoroBore® BR10 para mandrilamento reverso e em desbaste

Coromant EH - Refrigeração interna

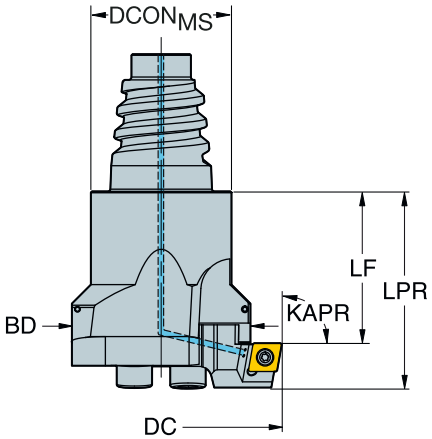
KAPR 90°





CCMT, CCGT
CCGX, CCET

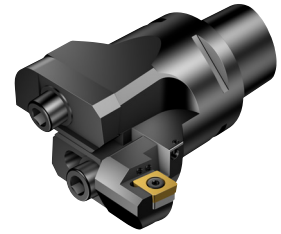
CCMW

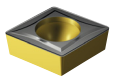


DCN	DCX		CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	LPR	BD_1	BAR	KG	CICT	MIID
32.00	38.00	06	E20	1	BR10-38CC06F-EH20	19.30	3.00	15.00	25.00	20.00	70	0.070	1	CCMT 06 02 04
37.00	45.00	06	E25	1	BR10-45CC06F-EH25	24.20	4.00	14.00	24.00	24.00	70	0.110	1	CCMT 06 02 04

Coromant Capto® - Refrigeração interna

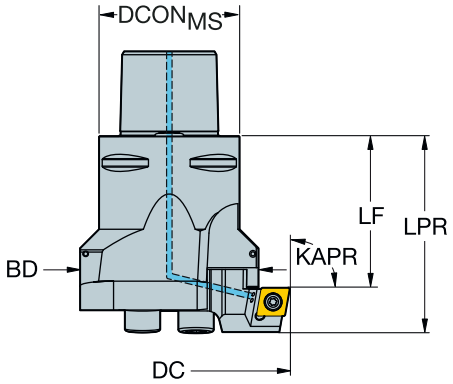
KAPR 90°





CCMT, CCGT
CCGX, CCET

CCMW



DCN	DCX		CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	LPR	BD_1	BAR	KG	CICT	MIID
44.00	54.00	06	C3	3	BR10-54CC06F-C3	32.00	5.00	35.00	45.00	30.00	70	0.560	1	CCMT 06 02 04
53.00	65.00	06	C4	3	BR10-65CC06F-C4	40.00	6.00	43.00	53.00	39.00	70	0.560	1	CCMT 06 02 04
64.00	76.00	09	C4	3	BR10-76CC09F-C4	40.00	6.00	43.00	58.00	39.00	70	0.560	1	CCMT 09 T3 08
75.00	91.00	12	C5	3	BR10-91CC12F-C5	50.00	8.00	48.00	68.00	50.00	70	0.860	1	CCMT 12 04 08
90.00	110.00	12	C5	3	BR10-110CC12F-C5	50.00	10.00	50.00	70.00	63.00	70	1.230	1	CCMT 12 04 08
109.00	136.00	12	C6	3	BR10-136CC12F-C6	63.00	13.50	68.00	88.00	82.00	70	2.080	1	CCMT 12 04 08
135.00	170.00	12	C6	3	BR10-170CC12F-C6	63.00	17.50	78.00	98.00	108.00	70	2.380	1	CCMT 12 04 08

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento


L2


M1



N23



N15

CoroBore® BR20

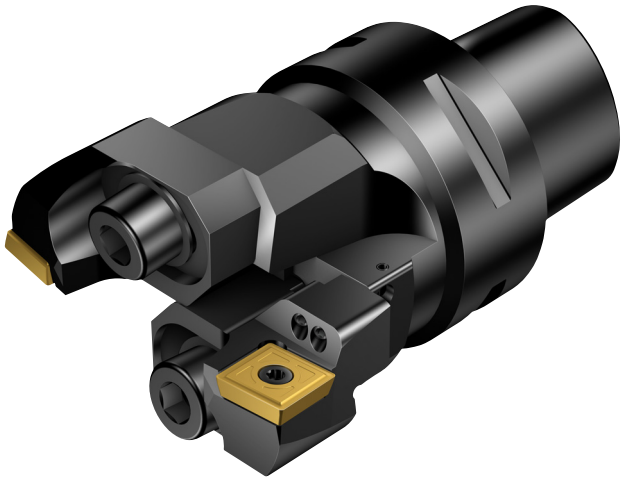
Ferramentas para mandrilamento em desbaste com aresta dupla para mandrilamento flexível

Aplicação

- Mandrilamento em desbaste
- Mandrilamento com aresta dupla
- Mandrilamento escalonado
- Mandrilamento reverso
- Mandrilamento com aresta única

Área de aplicação ISO:

P M K N S H



Características e benefícios

- Escala marcada a laser no adaptador para facilitar o uso durante o ajuste do diâmetro
- Fácil de montar como uma ferramenta para mandrilamento reverso, usando cobertura e cassete exclusivos
- Funcionalidade de mandrilamento escalonado incorporada sem necessidade de calço extra
- O passo diferencial reduz a tendência à vibração - as ferramentas podem ser usadas com balanços mais longos e profundidade de corte maior
- Pastilhas especiais com quatro arestas e classes otimizadas para mandrilamento em desbaste
- Olhais de refrigeração com alta precisão incorporados ao cassete para direcionamento preciso da refrigeração.
- Fluido de corte através da ferramenta para bom escoamento de cavacos
- Também disponível como programa de ferramentas para mandrilar antivibratória

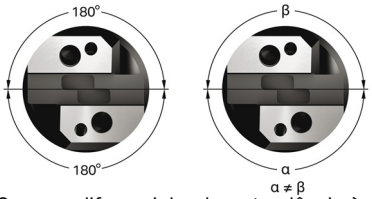
www.sandvik.coromant.com/coroborebr20

Ferramentas

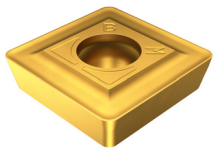
Acoplamentos:
- Coromant Capto®
- Coromant EH

Pastilhas

Pastilhas standard com classes e geometrias especiais para todos os materiais:
- CoroBore® 111
- CoroTurn® 107



O passo diferencial reduz a tendência à vibração – as ferramentas podem ser usadas com balanços mais longos e profundidades de corte maiores.



Pastilhas CoroBore® 111 especiais para mandrilamento em desbaste. Com excelente quebra de cavacos e vida útil mais longa.



O solucionador de problemas em aplicações com longos balanços.
Ao usar o mecanismo antivibratório Silent Tools™, você tem a oportunidade de dobrar a profundidade de corte e ainda manter o mandrilamento produtivo.

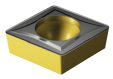
POR

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla

Coromant EH - Refrigeração interna

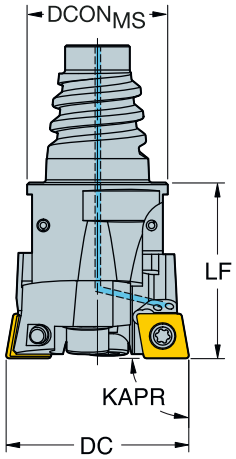
KAPR 90°





CCMT, CCGT
CCGX, CCET

CCMW



DCN	DCX		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	ADJLXRDL	LF	BAR	KG	CICT	MIID
23.00	29.00	06	E20	1	**BR20-29CC06F-EH20**	19.30	3.00	25.00	70	0.070	2	CCMT 06 02 04
28.00	36.00	06	E25	1	**BR20-36CC06F-EH25**	24.20	4.00	25.00	70	0.110	2	CCMT 06 02 04

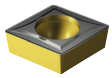
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento

L2 M1 N23 N15 K85

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla

Coromant Capto® - Refrigeração interna

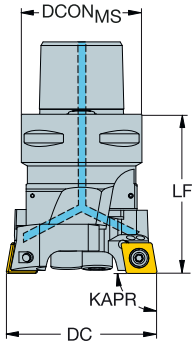


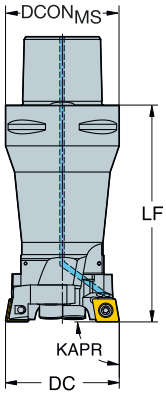


CCMT, CCGT
CCGX, CCET

CCMW

KAPR	90°	90°
DSGN	1	2





							Dimensões, mm								
DCN	DCX		CZC_{MS}	CNSC	DSGN	**Código para pedido**	$DCON_{MS}$	$ADJLX_{RDL}$	ULDR	LF	BD_1	BAR	KG	CICT	MIID
23.00	29.00	06	C3	3	2	**BR20-29CC06F-C3**	32.00	3.00	2.00	76.00	20.00	70	0.260	2	CCMT 06 02 04
28.00	36.00	06	C3	3	2	**BR20-36CC06F-C3**	32.00	4.00	2.00	83.00	24.00	70	0.360	2	CCMT 06 02 04
35.00	45.00	09	C3	3	1	**BR20-45CC09F-C3**	32.00	5.00		48.00		70	0.270	2	CCMT 09 T3 08
35.00	45.00	09	C4	3	2	**BR20-45CC09F-C4**	40.00	5.00	1.50	83.00	30.00	70	0.560	2	CCMT 09 T3 08
44.00	56.00	09	C4	3	1	**BR20-56CC09F-C4**	40.00	6.00		56.00		70	0.480	2	CCMT 09 T3 08
44.00	56.00	09	C5	3	2	**BR20-56CC09F-C5**	50.00	6.00	1.50	98.00	39.00	70	1.030	2	CCMT 09 T3 08
55.00	71.00	12	C5	3	1	**BR20-71CC12F-C5**	50.00	8.00		66.00		70	0.860	2	CCMT 12 04 08
55.00	71.00	12	C6	3	2	**BR20-71CC12F-C6**	63.00	8.00	1.50	120.00	50.00	70	1.940	2	CCMT 12 04 08
70.00	90.00	12	C5	3	1	**BR20-90CC12F-C5**	50.00	10.00		70.00		70	1.230	2	CCMT 12 04 08
70.00	90.00	12	C6	3	1	**BR20-90CC12F-C6**	63.00	10.00		78.00		70	1.580	2	CCMT 12 04 08
89.00	116.00	12	C6	3	1	**BR20-116CC12F-C6**	63.00	13.50		90.00		70	2.080	2	CCMT 12 04 08
89.00	116.00	12	C8	3	1	**BR20-116CC12F-C8**	80.00	13.50		94.00		70	2.990	2	CCMT 12 04 08
115.00	150.00	12	C6	3	1	**BR20-150CC12F-C6**	63.00	17.50		90.00		70	2.380	2	CCMT 12 04 08
115.00	150.00	12	C8	3	1	**BR20-150CC12F-C8**	80.00	17.50		100.00		70	3.630	2	CCMT 12 04 08

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento
Para todos DSGN 2; LU = DC*ULDR

POR

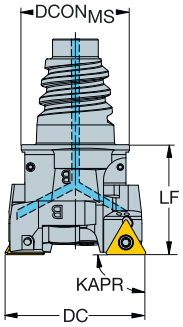
CoroBore® BR20 para mandrilamento em desbaste com aresta dupla

Coromant EH - Refrigeração interna

KAPR 90°







TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BAR	KG	CICT	MIID
28.00	36.00	09	E25	1	**BR20-36TC09F-EH25**	24.20	4.00	25.00	70	0.130	2	TCMT 09 02 04

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento

L2 M1 N23 N15 K85

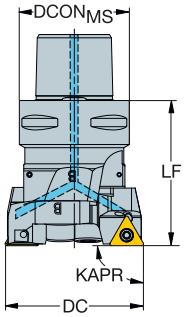
CoroBore® BR20 para mandrilamento em desbaste com aresta dupla

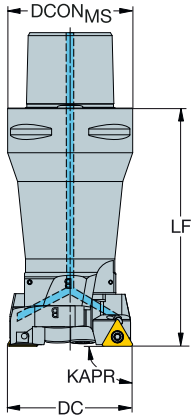
Coromant Capto® - Refrigeração interna

KAPR	90°	90°
DSGN	1	2









TCMT, TCMX, TCGT, TCGX TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	DSGN	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	ULDR	LF	BD$_1$	BAR	KG	CICT	MIID
28.00	36.00	09	C3	3	2	**BR20-36TC09F-C3**	32.00	4.00	2.00	83.00	24.00	70	0.380	2	TCMT 09 02 04
35.00	45.00	11	C3	3	1	**BR20-45TC11F-C3**	32.00	5.00		48.00		70	0.270	2	TCMT 11 03 04
44.00	56.00	11	C4	3	1	**BR20-56TC11F-C4**	40.00	6.00		56.00		70	0.500	2	TCMT 11 03 04
55.00	71.00	16	C5	3	1	**BR20-71TC16F-C5**	50.00	8.00		66.00		70	0.860	2	TCMT 16 T3 08
70.00	90.00	16	C5	3	1	**BR20-90TC16F-C5**	50.00	10.00		70.00		70	1.250	2	TCMT 16 T3 08
70.00	90.00	16	C6	3	1	**BR20-90TC16F-C6**	63.00	10.00		78.00		70	1.600	2	TCMT 16 T3 08
89.00	116.00	16	C6	3	1	**BR20-116TC16F-C6**	63.00	13.50		90.00		70	2.100	2	TCMT 16 T3 08
115.00	150.00	16	C8	3	1	**BR20-150TC16F-C8**	80.00	17.50		100.00		70	3.650	2	TCMT 16 T3 08

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento

Para todos DSGN 2; LU = DC*ULDR

L2 M1 N23 N15 K85

POR

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla

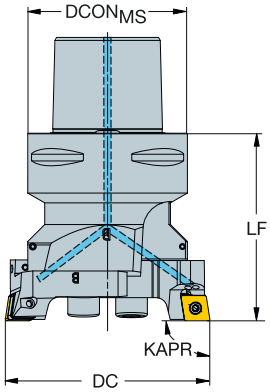
Coromant Capto® - Refrigeração interna

KAPR 90°





CNMU



DCN	DCX		CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	BAR	KG	CICT	MIID
70.00	90.00	12	C6	3	**BR20-90CN12F-C6**	63.00	10.00	78.00	70	2.200	2	CNMU 12 04 12
89.00	116.00	12	C8	3	**BR20-116CN12F-C8**	80.00	13.50	94.00	70	2.900	2	CNMU 12 04 12
115.00	150.00	12	C8	3	**BR20-150CN12F-C8**	80.00	17.50	100.00	70	3.690	2	CNMU 12 04 12

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

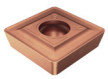
Para pastilhas, consulte o catálogo de Ferramentas para torneamento

L2 M1 N23 N15 K85

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla

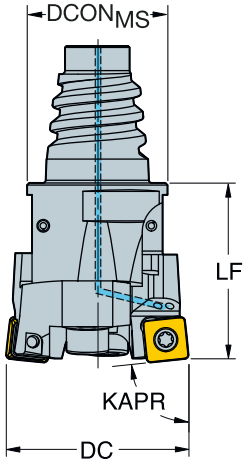
Coromant EH - Refrigeração interna





SPMT

KAPR 84°



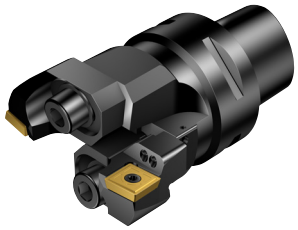
DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BAR	KG	CICT	MIID
23.00	29.00	06	E20	1	BR20-29SP06Y-EH20	19.30	3.00	25.00	70	0.070	2	SPMT 0606-BM
28.00	36.00	06	E25	1	BR20-36SP06Y-EH25	24.20	4.00	25.00	70	0.110	2	SPMT 0606-BM

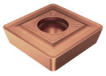
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

K32 L2 M1 N23 N15 K85

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla

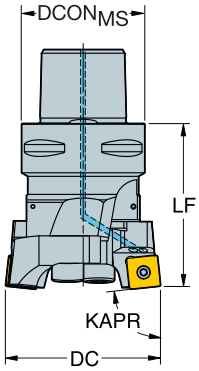
Coromant Capto® - Refrigeração interna

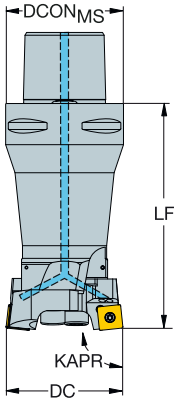




SPMT

KAPR	84°	84°
DSGN	1	2





							Dimensões, mm								
DCN	DCX	↔	CZC_{MS}	CNSC	DSGN	**Código para pedido**	$DCON_{MS}$	$ADJLX_{RDL}$	ULDR	LF	BD_1	BAR	KG	CICT	MIID
23.00	29.00	06	C3	3	2	**BR20-29SP06Y-C3**	32.00	3.00	2.00	76.00	20.00	70	0.260	2	SPMT 0606-BM
28.00	36.00	06	C3	3	2	**BR20-36SP06Y-C3**	32.00	4.00	2.00	83.00	24.00	70	0.360	2	SPMT 0606-BM
35.00	45.00	08	C3	3	1	**BR20-45SP08Y-C3**	32.00	5.00		48.00		70	0.270	2	SPMT 0808-BM
35.00	45.00	08	C4	3	2	**BR20-45SP08Y-C4**	40.00	5.00	1.50	83.00	30.00	70	0.560	2	SPMT 0808-BM
44.00	56.00	08	C4	3	1	**BR20-56SP08Y-C4**	40.00	6.00		56.00		70	0.480	2	SPMT 0808-BM
44.00	56.00	08	C5	3	2	**BR20-56SP08Y-C5**	50.00	6.00	1.50	98.00	39.00	70	1.030	2	SPMT 0808-BM
55.00	71.00	12	C5	3	1	**BR20-71SP12Y-C5**	50.00	8.00		66.00		70	0.860	2	SPMT 1210-BM
55.00	71.00	12	C6	3	2	**BR20-71SP12Y-C6**	63.00	8.00	1.50	120.00	50.00	70	1.940	2	SPMT 1210-BM
70.00	90.00	12	C5	3	1	**BR20-90SP12Y-C5**	50.00	10.00		70.00		70	1.230	2	SPMT 1210-BM
70.00	90.00	12	C6	3	1	**BR20-90SP12Y-C6**	63.00	10.00		78.00		70	1.580	2	SPMT 1210-BM
89.00	116.00	12	C6	3	1	**BR20-116SP12Y-C6**	63.00	13.50		90.00		70	2.080	2	SPMT 1210-BM
89.00	116.00	12	C8	3	1	**BR20-116SP12Y-C8**	80.00	13.50		94.00		70	2.990	2	SPMT 1210-BM
115.00	150.00	12	C6	3	1	**BR20-150SP12Y-C6**	63.00	17.50		90.00		70	2.380	2	SPMT 1210-BM
115.00	150.00	12	C8	3	1	**BR20-150SP12Y-C8**	80.00	17.50		100.00		70	3.630	2	SPMT 1210-BM

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para todos DSGN 2; LU = DC*ULDR

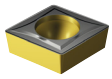
K32 L2 M1 N23 N15 K85

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla e mecanismo antivibratório

Coromant Capto® - Refrigeração interna

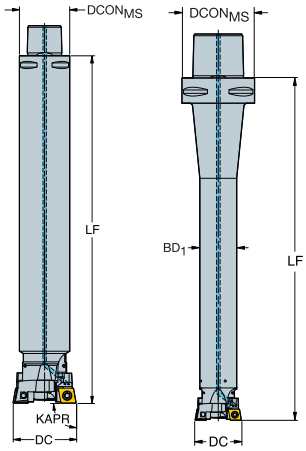


SilentTools®



CCMT, CCGT
CCGX, CCET
CCMW

KAPR	90°	90°
DSGN	1	2



DCN	DCX	ap	CZCMS	CNSC	DSGN	Código para pedido	Dimensões, mm DCONMS	ADJLXRDL	ULDR	LF	BD1	BAR	KG	CICT	MIID
23.00	29.00	06	C4	3	2	BR20D-29CC06F-C4L	40.00	3.00	6.00	199.00	20.00	70	0.740	2	CCMT 06 02 04
28.00	36.00	06	C3	3	2	BR20D-36CC06F-C3L	32.00	4.00	6.00	216.00	25.00	70	1.030	2	CCMT 06 02 04
35.00	45.00	09	C3	3	1	BR20D-45CC09F-C3L	32.00	5.00		221.00		70	1.540	2	CCMT 09 T3 08
35.00	45.00	09	C4	3	2	BR20D-45CC09F-C4L	40.00	5.00	6.00	270.00	32.00	70	1.980	2	CCMT 09 T3 08
35.00	45.00	09	C6	3	2	BR20D-45CC09F-C6L	63.00	5.00	6.00	297.00	32.00	70	2.620	2	CCMT 09 T3 08
44.00	56.00	09	C4	3	1	BR20D-56CC09F-C4L	40.00	6.00		220.00		70	2.380	2	CCMT 09 T3 08
44.00	56.00	09	C5	3	2	BR20D-56CC09F-C5L	50.00	6.00	6.00	336.00	40.00	70	3.720	2	CCMT 09 T3 08
44.00	56.00	09	C6	3	2	BR20D-56CC09F-C6L	63.00	6.00	6.00	363.00	40.00	70	4.350	2	CCMT 09 T3 08
55.00	71.00	12	C5	3	1	BR20D-71CC12F-C5M	50.00	8.00		300.00		70	5.080	2	CCMT 12 04 08
55.00	71.00	12	C6	3	2	BR20D-71CC12F-C6M	63.00	8.00	5.60	400.00	50.00	70	6.940	2	CCMT 12 04 08
70.00	90.00	12	C6	3	1	BR20D-90CC12F-C6M	63.00	10.00		400.00		70	9.910	2	CCMT 12 04 08
70.00	90.00	12	C8	3	2	BR20D-90CC12F-C8M	80.00	10.00	5.60	500.00	63.00	70	12.660	2	CCMT 12 04 08
89.00	116.00	12	C8	3	1	BR20D-116CC12F-C8M	80.00	13.50		500.00		70	18.490	2	CCMT 12 04 08
89.00	116.00	12	C8	3	1	BR20D-116CC12F-C8S	80.00	13.50		410.00		70	16.140	2	CCMT 12 04 08
115.00	150.00	12	C8	3	1	BR20D-150CC12F-C8M	80.00	17.50		500.00		70	18.620	2	CCMT 12 04 08

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento
Para todos DSGN 2; LU = DC*ULDR

L2 M1 N23 N15 K85

POR

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla e mecanismo antivibratório

Coromant Capto® - Refrigeração interna

KAPR	90°	90°
DSGN	1	2

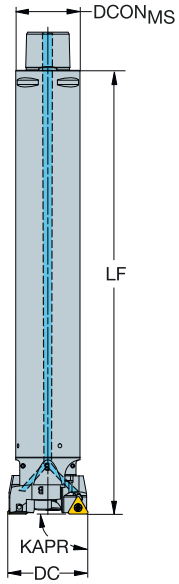
SilentTools®

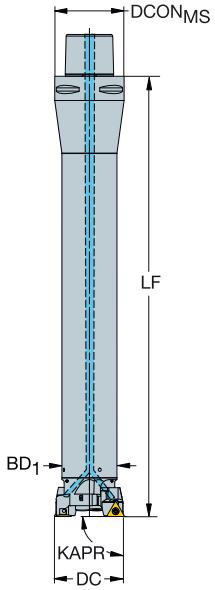




TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW





DCN	DCX	↔	CZC$_{MS}$	CNSC	DSGN	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	ULDR	LF	BD$_1$	BAR	KG	CICT	MIID
28.00	36.00	09	C3	3	2	**BR20D-36TC09F-C3L**	32.00	4.00	6.00	216.00	25.00	70	1.718	2	TCMT 09 02 04
35.00	45.00	11	C3	3	1	**BR20D-45TC11F-C3L**	32.00	5.00		221.00		70	2.330	2	TCMT 11 03 04
35.00	45.00	11	C4	3	2	**BR20D-45TC11F-C4L**	40.00	5.00	6.00	270.00	32.00	70	1.980	2	TCMT 11 03 04
44.00	56.00	11	C4	3	1	**BR20D-56TC11F-C4L**	40.00	6.00		220.00		70	2.400	2	TCMT 11 03 04
44.00	56.00	11	C5	3	2	**BR20D-56TC11F-C5L**	50.00	6.00	6.00	336.00	40.00	70	5.740	2	TCMT 11 03 04
55.00	71.00	16	C5	3	1	**BR20D-71TC16F-C5M**	50.00	8.00		300.00		70	5.080	2	TCMT 16 T3 08
70.00	90.00	16	C6	3	1	**BR20D-90TC16F-C6M**	63.00	10.00		400.00		70	9.930	2	TCMT 16 T3 08
89.00	116.00	16	C8	3	1	**BR20D-116TC16F-C8M**	80.00	13.50		500.00		70	22.085	2	TCMT 16 T3 08
89.00	116.00	16	C8	3	1	**BR20D-116TC16F-C8S**	80.00	13.50		410.00		70	16.160	2	TCMT 16 T3 08
115.00	150.00	16	C8	3	1	**BR20D-150TC16F-C8M**	80.00	17.50		500.00		70	23.200	2	TCMT 16 T3 08

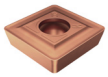
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Para todos DSGN 2; LU = DC*ULDR

L2 M1 N23 N15 K85

CoroBore® BR20 para mandrilamento em desbaste com aresta dupla e mecanismo antivibratório

Coromant Capto® - Refrigeração interna

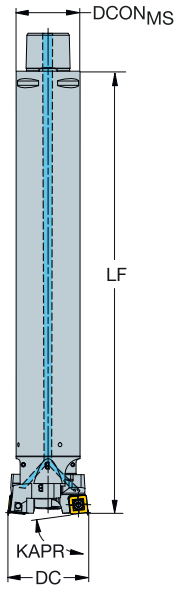


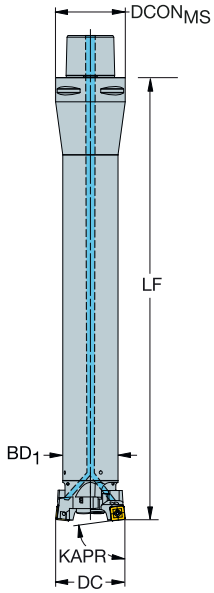


SPMT

SilentTools®

KAPR	84°	84°
DSGN	1	2





DCN	DCX		CZC_{MS}	CNSC	DSGN	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	ULDR	LF	BD_1	BAR	KG	CICT	MIID
23.00	29.00	06	C4	3	2	BR20D-29SP06Y-C4L	40.00	3.00	6.00	199.00	20.00	70	0.740	2	SPMT 0606-BM
28.00	36.00	06	C3	3	2	BR20D-36SP06Y-C3L	32.00	4.00	6.00	216.00	25.00	70	1.030	2	SPMT 0606-BM
35.00	45.00	08	C3	3	1	BR20D-45SP08Y-C3L	32.00	5.00		221.00		70	2.330	2	SPMT 0808-BM
35.00	45.00	08	C4	3	2	BR20D-45SP08Y-C4L	40.00	5.00	6.00	270.00	32.00	70	4.500	2	SPMT 0808-BM
35.00	45.00	08	C6	3	2	BR20D-45SP08Y-C6L	63.00	5.00	6.00	297.00	32.00	70	2.630	2	SPMT 0808-BM
44.00	56.00	08	C4	3	1	BR20D-56SP08Y-C4L	40.00	6.00		220.00		70	5.120	2	SPMT 0808-BM
44.00	56.00	08	C5	3	2	BR20D-56SP08Y-C5L	50.00	6.00	6.00	336.00	40.00	70	3.720	2	SPMT 0808-BM
44.00	56.00	08	C6	3	1	BR20D-56SP08Y-C6L	63.00	6.00	6.00	363.00	40.00	70	4.350	2	SPMT 0808-BM
55.00	71.00	12	C5	3	1	BR20D-71SP12Y-C5M	50.00	8.00		300.00		70	7.672	2	SPMT 1210-BM
55.00	71.00	12	C6	3	2	BR20D-71SP12Y-C6M	63.00	8.00	5.60	400.00	50.00	70	6.940	2	SPMT 1210-BM
70.00	90.00	12	C6	3	1	BR20D-90SP12Y-C6M	63.00	10.00		400.00		70	12.000	2	SPMT 1210-BM
70.00	90.00	12	C8	3	2	BR20D-90SP12Y-C8M	80.00	10.00	5.60	500.00	63.00	70	16.183	2	SPMT 1210-BM
89.00	116.00	12	C8	3	1	BR20D-116SP12Y-C8M	80.00	13.50		500.00		70	22.125	2	SPMT 1210-BM
89.00	116.00	12	C8	3	1	BR20D-116SP12Y-C8S	80.00	13.50		410.00		70	16.140	2	SPMT 1210-BM
115.00	150.00	12	C8	3	1	BR20D-150SP12Y-C8M	80.00	17.50		500.00		70	18.620	2	SPMT 1210-BM

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para todos DSGN 2; LU = DC*ULDR


L2


M1



N23



N15


K85

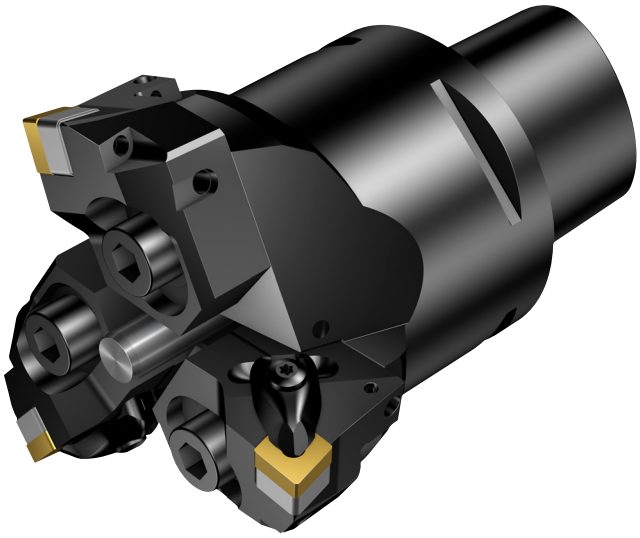
SANDVIK Coromant

CoroBore® BR30

Ferramentas para mandrilamento em desbaste multiarestas para produtividade máxima

Aplicação

- Mandrilamento em desbaste
- Mandrilamento com multiarestas
- Mandrilamento escalonado
- Mandrilamento com aresta única



Área de aplicação ISO

P M K N S H

Características e benefícios

- Ferramenta multiarestas altamente produtiva para taxa máxima de remoção de metal
- Escala marcada a laser no adaptador para facilitar o uso durante o ajuste do diâmetro
- Modularidade com Coromant Capto®
- Adaptador com refrigeração interna de alta pressão
- Mandrilamento escalonado: Calços adicionais disponíveis, que devem ser pedidos separadamente
- Curto, rígido e compacto propiciando máxima estabilidade

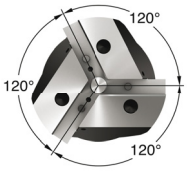
www.sandvik.coromant.com/coroborebr30

Ferramentas

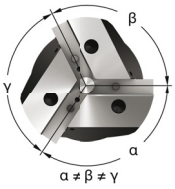
Acoplamentos:
- Coromant Capto®

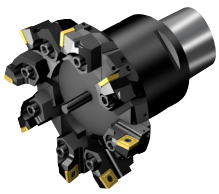
Pastilhas

Pastilhas standard com classes e geometrias especiais para todos os materiais:
- CoroBore® 111
- CoroTurn® 107
- T-max® P



O passo diferencial reduz a tendência à vibração – as ferramentas podem ser usadas com balanços mais longos e profundidades de corte maiores.





Do diâmetro 85 a 205 mm, o CoroBore® BR30 está disponível com até 8 arestas de corte para taxa de remoção de metal máxima.



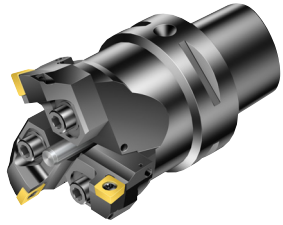
Se não houver pre-setter disponível, ajuste o diâmetro do CoroBore BR30 medindo a distância do pino até a pastilha e subtraia metade do diâmetro do pino. Multiplique por dois para o diâmetro real de mandrilamento.

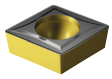


Pastilhas CoroBore® 111 especiais para mandrilamento em desbaste. Com excelente quebra de cavacos e vida útil mais longa.

CoroBore® BR30 para mandrilamento em desbaste com aresta tripla

Coromant Capto® - Refrigeração interna

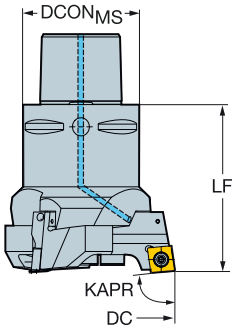


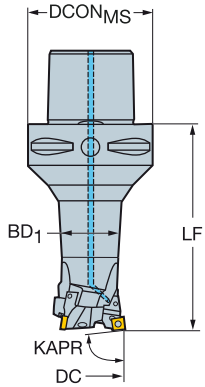


CCMT, CCGT
CCGX, CCET

CCMW

KAPR 90° 90°
DSGN 1 2





							Dimensões, mm								
DCN	DCX	↔	CZC_{MS}	CNSC	DSGN	**Código para pedido**	$DCON_{MS}$	$ADJLX_{RDL}$	ULDR	LF	BD_1	BAR	KG	CICT	MIID
35.00	40.50	06	C3	3	1	BR30-41CC06F-C3	32.00	2.75		48.00		70	0.250	3	CCMT 06 02 04
35.00	40.50	06	C4	3	2	BR30-41CC06F-C4	40.00	2.75	1.50	83.00	31.50	70	0.640	3	CCMT 06 02 04
39.50	45.00	06	C3	3	1	BR30-45CC06F-C3	32.00	2.75		48.00		70	0.280	3	CCMT 06 02 04
39.50	45.00	06	C4	3	2	BR30-45CC06F-C4	40.00	2.75	1.50	83.00	31.50	70	0.670	3	CCMT 06 02 04
44.00	50.50	06	C4	3	1	BR30-51CC06F-C4	40.00	3.25		56.00		70	0.620	3	CCMT 06 02 04
44.00	50.50	06	C5	3	2	BR30-51CC06F-C5	50.00	3.25	1.50	98.00	39.60	70	1.180	3	CCMT 06 02 04
49.50	56.00	06	C4	3	1	BR30-56CC06F-C4	40.00	3.25		56.00		70	0.650	3	CCMT 06 02 04
49.50	56.00	09	C4	3	1	BR30-56CC09F-C4	40.00	3.25		58.00		70	0.641	3	CCMT 09 T3 08
49.50	56.00	06	C5	3	2	BR30-56CC06F-C5	50.00	3.25	1.50	98.00	39.60	70	1.210	3	CCMT 06 02 04
49.50	56.00	09	C5	3	2	BR30-56CC09F-C5	50.00	3.25	1.50	100.00	39.60	70	1.240	3	CCMT 09 T3 08
55.00	63.00	09	C5	3	1	BR30-63CC09F-C5	50.00	4.00		66.00		70	0.890	3	CCMT 09 T3 08
55.00	63.00	09	C6	3	2	BR30-63CC09F-C6	63.00	4.00	1.50	120.00	49.50	70	1.980	3	CCMT 09 T3 08
62.00	70.00	09	C5	3	1	BR30-70CC09F-C5	50.00	4.00		66.00		70	0.920	3	CCMT 09 T3 08
62.00	70.00	12	C5	3	1	BR30-70CC12F-C5	50.00	4.00		68.00		70	0.980	3	CCMT 12 04 08
62.00	70.00	09	C6	3	2	BR30-70CC09F-C6	63.00	4.00	1.50	120.00	49.50	70	2.312	3	CCMT 09 T3 08
62.00	70.00	12	C6	3	2	BR30-70CC12F-C6	63.00	4.00	1.50	122.00	49.50	70	2.070	3	CCMT 12 04 08
69.00	78.50	12	C5	3	1	BR30-79CC12F-C5	50.00	4.75		70.00		70	1.180	3	CCMT 12 04 08
69.00	78.50	12	C6	3	1	BR30-79CC12F-C6	63.00	4.75		78.00		70	2.130	3	CCMT 12 04 08
77.50	87.00	12	C5	3	1	BR30-87CC12F-C5	50.00	4.75		70.00		70	1.210	3	CCMT 12 04 08
77.50	87.00	12	C6	3	1	BR30-87CC12F-C6	63.00	4.75		78.00		70	1.967	3	CCMT 12 04 08
86.00	97.00	12	C6	3	1	BR30-97CC12F-C6	63.00	5.50		90.00		70	2.280	3	CCMT 12 04 08
86.00	97.00	12	C8	3	1	BR30-97CC12F-C8	80.00	5.50		94.00		70	3.300	3	CCMT 12 04 08
96.00	107.00	12	C6	3	1	BR30-107CC12F-C6	63.00	5.50		90.00		70	2.340	3	CCMT 12 04 08
96.00	107.00	12	C8	3	1	BR30-107CC12F-C8	80.00	5.50		94.00		70	3.360	3	CCMT 12 04 08
106.00	122.00	12	C8	3	1	BR30-122CC12F-C8	80.00	8.00		100.00		70	4.100	3	CCMT 12 04 08
121.00	137.00	12	C8	3	1	BR30-137CC12F-C8	80.00	8.00		100.00		70	4.250	3	CCMT 12 04 08
136.00	152.00	12	C8	3	1	BR30-152CC12F-C8	80.00	8.00		100.00		70	4.760	3	CCMT 12 04 08
151.00	167.00	12	C8	3	1	BR30-167CC12F-C8	80.00	8.00		100.00		70	4.880	3	CCMT 12 04 08
166.00	191.00	12	C8	3	1	BR30-191CC12F-C8	80.00	12.50		115.00		70	6.860	3	CCMT 12 04 08
189.00	214.00	12	C8	3	1	BR30-214CC12F-C8	80.00	12.50		115.00		70	7.130	3	CCMT 12 04 08

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento
Para todos DSGN 2; LU = DC*ULDR

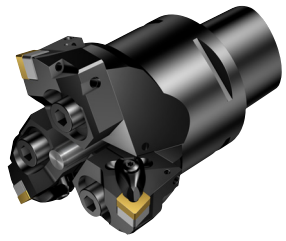
L2 M1 N23 N15 K86

POR

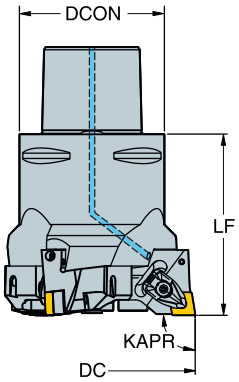
CoroBore® BR30 para mandrilamento em desbaste com aresta tripla

Coromant Capto® - Refrigeração interna

KAPR 90°







CNMM
CNMG
CNMA, CNGA

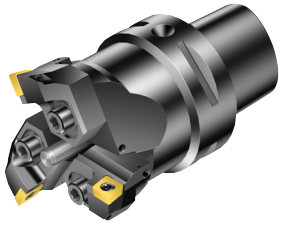
DCN	DCX		CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	BAR	KG	CICT	MIID
106.00	122.00	12	C8	3	**BR30-122CN12F-C8**	80.00	8.00	100.00	70	4.190	3	CNMG 12 04 08
121.00	137.00	12	C8	3	**BR30-137CN12F-C8**	80.00	8.00	100.00	70	4.340	3	CNMG 12 04 08
136.00	152.00	12	C8	3	**BR30-152CN12F-C8**	80.00	8.00	100.00	70	4.820	3	CNMG 12 04 08
151.00	167.00	12	C8	3	**BR30-167CN12F-C8**	80.00	8.00	100.00	70	4.970	3	CNMG 12 04 08
166.00	191.00	16	C8	3	**BR30-191CN16F-C8**	80.00	12.50	119.00	70	7.430	3	CNMG 16 06 12
189.00	214.00	16	C8	3	**BR30-214CN16F-C8**	80.00	12.50	119.00	70	22.400	3	CNMG 16 06 12

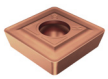
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento

L2 M1 N23 N15 K86

CoroBore® BR30 para mandrilamento em desbaste com aresta tripla

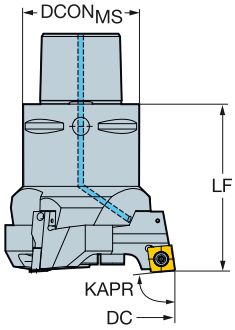
Coromant Capto® - Refrigeração interna





SPMT

KAPR 84°



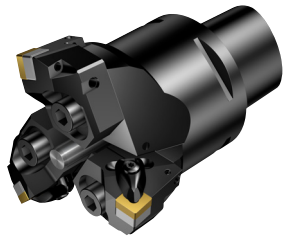
DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BAR	KG	CICT	MIID
35.00	40.50	06	C3	3	**BR30-41SP06Y-C3**	32.00	2.75	48.00	70	0.250	3	SPMT 0606-BM
39.50	45.00	06	C3	3	**BR30-45SP06Y-C3**	32.00	2.75	48.00	70	0.280	3	SPMT 0606-BM
44.00	50.50	06	C4	3	**BR30-51SP06Y-C4**	40.00	3.25	56.00	70	0.620	3	SPMT 0606-BM
49.50	56.00	08	C4	3	**BR30-56SP08Y-C4**	40.00	3.25	58.00	70	0.640	3	SPMT 0808-BM
55.00	63.00	08	C5	3	**BR30-63SP08Y-C5**	50.00	4.00	66.00	70	0.890	3	SPMT 0808-BM
62.00	70.00	12	C5	3	**BR30-70SP12Y-C5**	50.00	4.00	68.00	70	0.980	3	SPMT 1210-BM
69.00	78.50	12	C6	3	**BR30-79SP12Y-C6**	63.00	4.75	78.00	70	1.922	3	SPMT 1210-BM
77.50	87.00	12	C6	3	**BR30-87SP12Y-C6**	63.00	4.75	78.00	70	2.190	3	SPMT 1210-BM
86.00	97.00	12	C8	3	**BR30-97SP12Y-C8**	80.00	5.50	94.00	70	3.300	3	SPMT 1210-BM
96.00	107.00	12	C8	3	**BR30-107SP12Y-C8**	80.00	5.50	94.00	70	3.360	3	SPMT 1210-BM
106.00	122.00	12	C8	3	**BR30-122SP12Y-C8**	80.00	8.00	100.00	70	4.100	3	SPMT 1210-BM
121.00	137.00	12	C8	3	**BR30-137SP12Y-C8**	80.00	8.00	100.00	70	4.250	3	SPMT 1210-BM
136.00	152.00	12	C8	3	**BR30-152SP12Y-C8**	80.00	8.00	100.00	70	4.760	3	SPMT 1210-BM
151.00	167.00	12	C8	3	**BR30-167SP12Y-C8**	80.00	8.00	100.00	70	4.880	3	SPMT 1210-BM
166.00	191.00	12	C8	3	**BR30-191SP12Y-C8**	80.00	12.50	115.00	70	6.860	3	SPMT 1210-BM
189.00	214.00	12	C8	3	**BR30-214SP12Y-C8**	80.00	12.50	115.00	70	7.130	3	SPMT 1210-BM

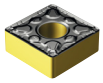
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

K32 L2 M1 N23 N15 K86

CoroBore® BR30 para mandrilamento em desbaste com aresta tripla

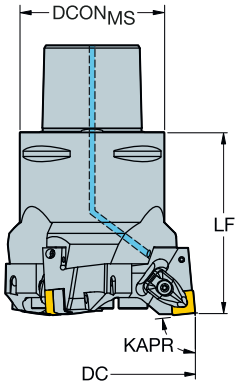
Coromant Capto® - Refrigeração interna





SNMM
SNMG
SNMA, SNGA

KAPR 84°



DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BAR	KG	CICT	MIID
106.00	122.00	12	C8	3	**BR30-122SN12Y-C8**	80.00	8.00	100.00	70	4.190	3	SNMG 12 04 08
121.00	137.00	12	C8	3	**BR30-137SN12Y-C8**	80.00	8.00	100.00	70	4.340	3	SNMG 12 04 08
136.00	152.00	12	C8	3	**BR30-152SN12Y-C8**	80.00	8.00	100.00	70	4.820	3	SNMG 12 04 08
151.00	167.00	12	C8	3	**BR30-167SN12Y-C8**	80.00	8.00	100.00	70	4.970	3	SNMG 12 04 08
166.00	191.00	15	C8	3	**BR30-191SN15Y-C8**	80.00	12.50	119.00	70	7.480	3	SNMG 15 06 12
189.00	214.00	15	C8	3	**BR30-214SN15Y-C8**	80.00	12.50	119.00	70	7.790	3	SNMG 15 06 12

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento

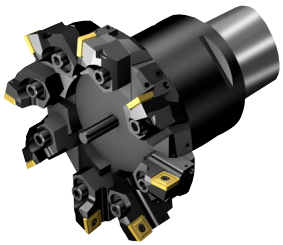
L2 M1 N23 N15 K86

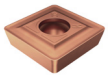
Ferramenta de mandrilar em desbaste multiarestas CoroBore® BR30

Coromant Capto® - Refrigeração interna

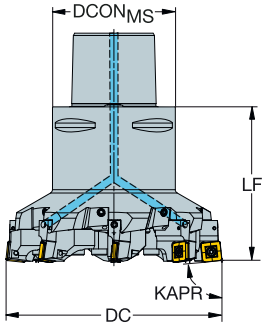
Especial para operações de mandrilamento de cavidades

KAPR 84°





SPMT



DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BAR	KG	CICT	MIID
85.00	94.50	12	C6	3	BR30-095-4-SP12Y-C6	63.00	4.75	80.00	70	2.050	4	SPMT 1210-BM
93.50	103.00	12	C6	3	BR30-103-4-SP12Y-C6	63.00	4.75	80.00	70	2.130	4	SPMT 1210-BM
102.00	111.50	12	C8	3	BR30-112-6-SP12Y-C8	80.00	4.75	100.00	70	4.110	6	SPMT 1210-BM
110.50	120.00	12	C8	3	BR30-120-6-SP12Y-C8	80.00	4.75	100.00	70	4.230	6	SPMT 1210-BM
119.00	128.50	12	C8	3	BR30-129-8-SP12Y-C8	80.00	4.75	100.00	70	4.510	8	SPMT 1210-BM
127.50	137.00	12	C8	3	BR30-137-8-SP12Y-C8	80.00	4.75	100.00	70	4.670	8	SPMT 1210-BM
136.00	145.50	12	C8	3	BR30-146-8-SP12Y-C8	80.00	4.75	100.00	70	4.900	8	SPMT 1210-BM
144.50	154.00	12	C8	3	BR30-154-8-SP12Y-C8	80.00	4.75	100.00	70	6.300	8	SPMT 1210-BM
153.00	162.50	12	C8	3	BR30-163-6-SP12Y-C8	80.00	4.75	100.00	70	5.150	6	SPMT 1210-BM
161.50	171.00	12	C8	3	BR30-171-6-SP12Y-C8	80.00	4.75	100.00	70	5.270	6	SPMT 1210-BM
170.00	179.50	12	C8	3	BR30-180-6-SP12Y-C8	80.00	4.75	100.00	70	5.730	6	SPMT 1210-BM
178.50	188.00	12	C8	3	BR30-188-6-SP12Y-C8	80.00	4.75	100.00	70	5.850	6	SPMT 1210-BM
187.00	196.50	12	C8	3	BR30-197-6-SP12Y-C8	80.00	4.75	100.00	70	6.470	6	SPMT 1210-BM
195.50	205.00	12	C8	3	BR30-205-6-SP12Y-C8	80.00	4.75	100.00	70	6.590	6	SPMT 1210-BM

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

K32 L2 M1 N23 N15 K86

POR

CoroBore® 820 XL

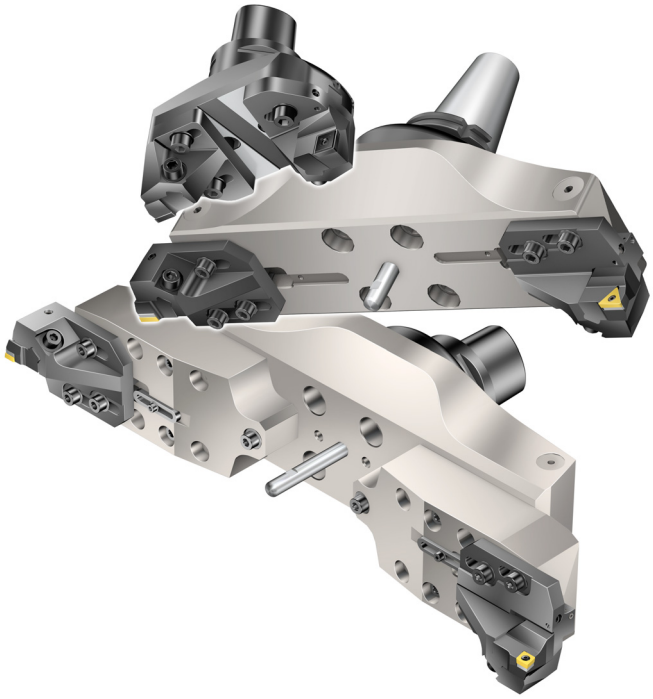
Ferramenta de mandrilamento em desbaste para grandes diâmetros

Aplicação

- Mandrilamento em desbaste
- Mandrilamento com aresta dupla
- Mandrilamento escalonado
- Mandrilamento com aresta única

Área de aplicação ISO

P M K N S H



Características e benefícios

- Curto, rígido e compacto propiciando máxima estabilidade no mandrilamento de desbaste de grandes diâmetros
- Ajustável radial e axial
- Fluido de corte através da ferramenta para bom escoamento de cavacos
- Base modular robusta para construção de montagens em diferentes aplicações (mandrilamento em desbaste, mandrilamento de precisão, usinagem de canais frontais, SpiroGrooving e torneamento por interpolação)

www.sandvik.coromant.com/corobore820

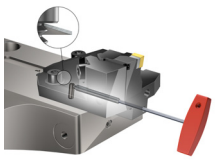
SilentTools®

Ferramentas

Acoplamentos:
- Coromant Capto®
- Árvore

Pastilhas

Pastilhas standard com classes e geometrias especiais para todos os materiais:
- CoroBore® 111
- CoroTurn® 107
- T-max® P



Para fácil ajuste radial de cassetes, aperte os parafusos levemente e ajuste o diâmetro com a chaveta. As cápsulas podem ser ajustadas na direção axial, para mandrilamento escalonado.



Use o mesmo braço/extensão de braço para desbaste, acabamento e usinagem de canais frontais de 148 mm (pol.) (contrapeso necessário para acabamento).



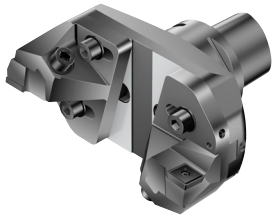
Fure grandes diâmetros sem aumentar o peso da ferramenta.

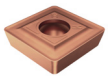


Pastilhas CoroBore® 111 especiais para mandrilamento em desbaste. Com excelente quebra de cavacos e vida útil mais longa.

Ferramenta CoroBore® 820 XL para mandrilamento em desbaste

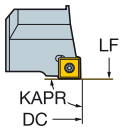
Coromant Capto® - Refrigeração interna



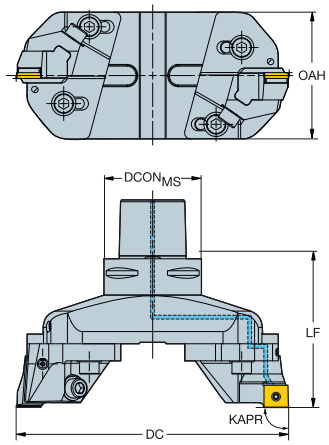


SPMT

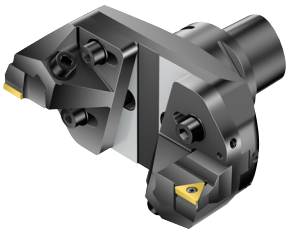
KAPR



90°



DCN	DCX		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	ADJLXAXL	ADJLXRDL	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	18	C8	3	820-200SP18-C8	80.00	1.50	26.00	122.00	104.00	70	6.900	2	SPMT 1810-BM
148.00	200.00	18	C10	3	820-200SP18-C10	100.00	1.50	26.00	128.00	104.00	70	9.900	2	SPMT 1810-BM
198.00	250.00	18	C8	3	820-250SP18-C8	80.00	1.50	26.00	122.00	104.00	70	8.700	2	SPMT 1810-BM
198.00	250.00	18	C10	3	820-250SP18-C10	100.00	1.50	26.00	128.00	104.00	70	11.308	2	SPMT 1810-BM
248.00	300.00	18	C8	3	820-300SP18-C8	80.00	1.50	26.00	122.00	104.00	70	10.620	2	SPMT 1810-BM
248.00	300.00	18	C10	3	820-300SP18-C10	100.00	1.50	26.00	128.00	104.00	70	12.640	2	SPMT 1810-BM

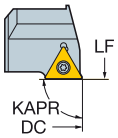




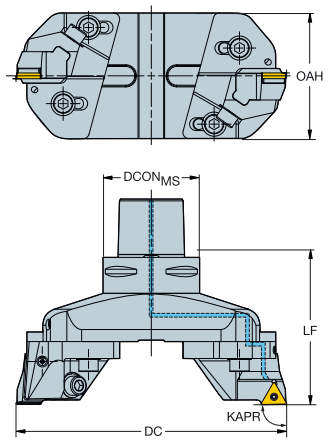
TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR



90°



DCN	DCX		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	ADJLXAXL	ADJLXRDL	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	22	C8	3	820-200TC22-C8	80.00	1.50	26.00	122.00	104.00	70	8.390	2	TCMT 22 04 08
148.00	200.00	22	C10	3	820-200TC22-C10	100.00	1.50	26.00	128.00	104.00	70	10.170	2	TCMT 22 04 08
198.00	250.00	22	C8	3	820-250TC22-C8	80.00	1.50	26.00	122.00	104.00	70	8.800	2	TCMT 22 04 08
198.00	250.00	22	C10	3	820-250TC22-C10	100.00	1.50	26.00	128.00	104.00	70	11.400	2	TCMT 22 04 08
248.00	300.00	22	C8	3	820-300TC22-C8	80.00	1.50	26.00	122.00	104.00	70	10.600	2	TCMT 22 04 08
248.00	300.00	22	C10	3	820-300TC22-C10	100.00	1.50	26.00	128.00	104.00	70	12.660	2	TCMT 22 04 08

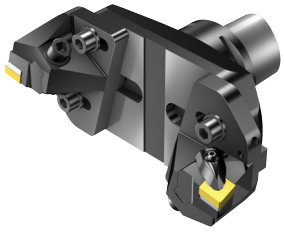
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento

K32 L2 M1 N23 N15 K87

Ferramenta CoroBore® 820 XL para mandrilamento em desbaste

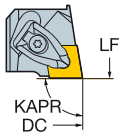
Coromant Capto® - Refrigeração interna



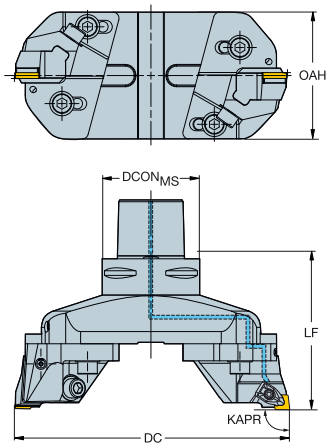


CNMM
CNMG
CNMA, CNGA

KAPR

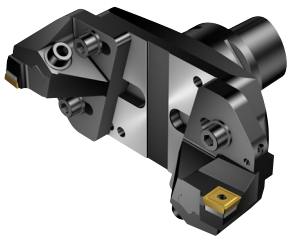


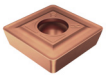
90°



DCN	DCX		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	ADJLXAXL	ADJLXRDL	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	19	C8	3	820-200CN19-C8	80.00	1.50	26.00	122.00	104.00	70	8.240	2	CNMG 19 06 12
148.00	200.00	19	C10	3	820-200CN19-C10	100.00	1.50	26.00	128.00	104.00	70	10.100	2	CNMG 19 06 12
198.00	250.00	19	C8	3	820-250CN19-C8	80.00	1.50	26.00	122.00	104.00	70	9.620	2	CNMG 19 06 12
198.00	250.00	19	C10	3	820-250CN19-C10	100.00	1.50	26.00	128.00	104.00	70	11.520	2	CNMG 19 06 12
248.00	300.00	19	C8	3	820-300CN19-C8	80.00	1.50	26.00	122.00	104.00	70	10.000	2	CNMG 19 06 12
248.00	300.00	19	C10	3	820-300CN19-C10	100.00	1.50	26.00	128.00	104.00	70	12.685	2	CNMG 19 06 12

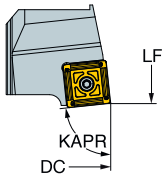
Para pastilhas, consulte o catálogo de Ferramentas para torneamento



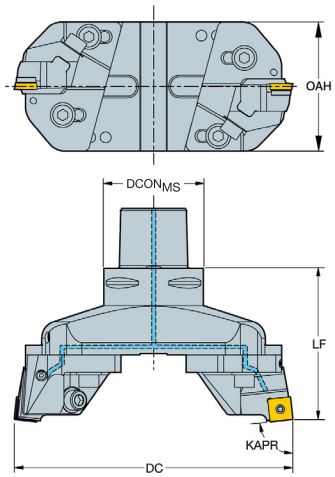


SPMT

KAPR



84°



DCN	DCX		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	ADJLXAXL	ADJLXRDL	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	18	C8	3	820-200SP18Y-C8	80.00	1.50	26.00	122.00	104.00	70	7.030	2	SPMT 1810-BM
148.00	200.00	18	C10	3	820-200SP18Y-C10	100.00	1.50	26.00	128.00	104.00	70	8.940	2	SPMT 1810-BM
198.00	250.00	18	C8	3	820-250SP18Y-C8	80.00	1.50	26.00	122.00	104.00	70	8.260	2	SPMT 1810-BM
198.00	250.00	18	C10	3	820-250SP18Y-C10	100.00	1.50	26.00	128.00	104.00	70	10.190	2	SPMT 1810-BM
248.00	300.00	18	C8	3	820-300SP18Y-C8	80.00	1.50	26.00	122.00	104.00	70	9.460	2	SPMT 1810-BM
248.00	300.00	18	C10	3	820-300SP18Y-C10	100.00	1.50	26.00	128.00	104.00	70	11.510	2	SPMT 1810-BM

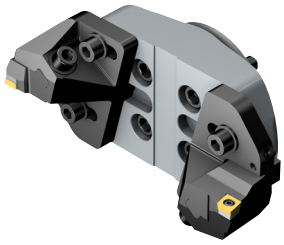
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

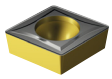
K32 L2 M1 N23 N15 K87

Ferramenta CoroBore® 820 XL Lightweight para mandrilamento em desbaste

Árvore - refrigeração interna

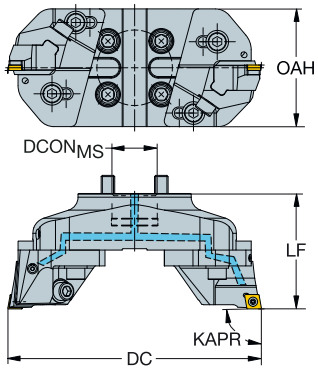
KAPR 90°





CCMT, CCGT
CCGX, CCET

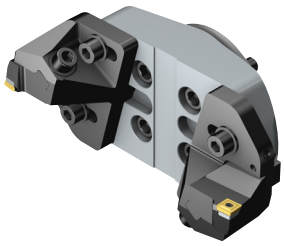
CCMW

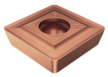


DCN	DCX		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	ADJLXAXL	ADJLXRDL	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	12	40S	1	**820L-200CC12F**	40.00	1.50	26.00	102.00	104.00	70	3.860	2	CCMT 12 04 08
198.00	250.00	12	40S	1	**820L-250CC12F**	40.00	1.50	26.00	102.00	104.00	70	4.390	2	CCMT 12 04 08
248.00	300.00	12	40S	1	**820L-300CC12F**	40.00	1.50	26.00	102.00	104.00	70	4.870	2	CCMT 12 04 08

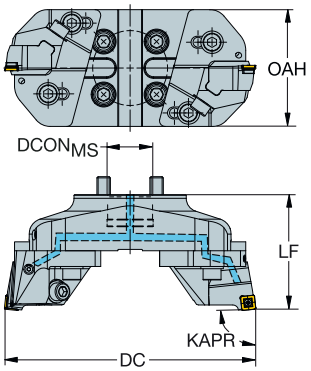
Para pastilhas, consulte o catálogo de Ferramentas para torneamento

KAPR 84°





SPMT



DCN	DCX		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	ADJLXAXL	ADJLXRDL	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	12	40S	1	**820L-200SP12Y**	40.00	1.50	26.00	102.00	104.00	70	3.860	2	SPMT 1210-BM
198.00	250.00	12	40S	1	**820L-250SP12Y**	40.00	1.50	26.00	102.00	104.00	70	4.390	2	SPMT 1210-BM
248.00	300.00	12	40S	1	**820L-300SP12Y**	40.00	1.50	26.00	102.00	104.00	70	4.870	2	SPMT 1210-BM

Use com suportes para faceamento 40S, exemplo C8-391.05-40 060M. Devem ser pedidos separadamente.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

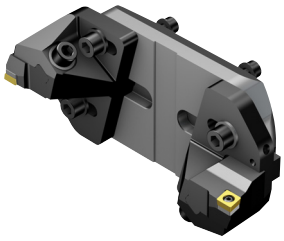
K32 L2 N23 N15 K87

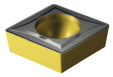
SANDVIK Coromant

Ferramenta CoroBore® 820 XL para mandrilamento em desbaste

Árvore - refrigeração interna

Dedicadas para ferramentas Silent Tools para mandrilamento

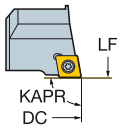




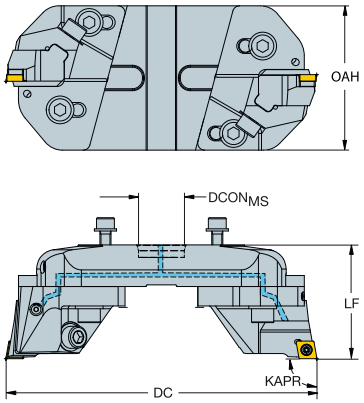
CCMT, CCGT
CCGX, CCET

CCMW

KAPR

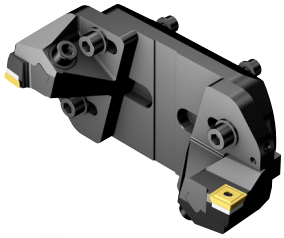


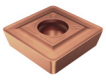
90°



DCN	DCX	↔	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{AXL}$	$ADJLX_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	12	33	1	**820D-200CC12**	33.00	1.50	26.00	82.00	104.00	70	3.350	2	CCMT 12 04 08
198.00	250.00	12	33	1	**820D-250CC12**	33.00	1.50	26.00	82.00	104.00	70	3.670	2	CCMT 12 04 08
248.00	300.00	12	33	1	**820D-300CC12**	33.00	1.50	26.00	82.00	104.00	70	4.030	2	CCMT 12 04 08

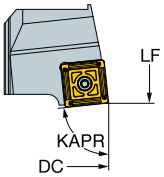
Para pastilhas, consulte o catálogo de Ferramentas para torneamento



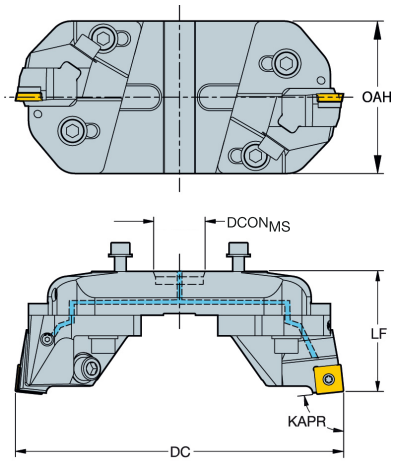


SPMT

KAPR



84°



DCN	DCX	↔	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{AXL}$	$ADJLX_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
148.00	200.00	12	33	1	**820D-200SP12Y**	33.00	1.50	26.00	82.00	104.00	70	3.350	2	SPMT 1210-BM
198.00	250.00	12	33	1	**820D-250SP12Y**	33.00	1.50	26.00	82.00	104.00	70	3.670	2	SPMT 1210-BM
248.00	300.00	12	33	1	**820D-300SP12Y**	33.00	1.50	26.00	82.00	104.00	70	4.030	2	SPMT 1210-BM

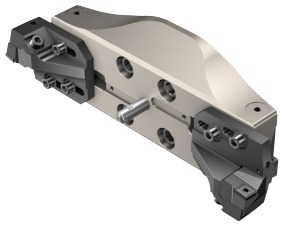
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

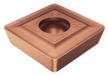
Essas montagens leves são dedicadas para uso com adaptadores de mandrilamento antivibratório. Adaptadores antivibratórios são comprados separadamente, veja a página K77.

K32 N23 N15 K87

Ferramenta CoroBore® 820 XL para mandrilamento em desbaste

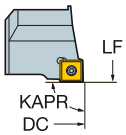
Árvore - refrigeração interna



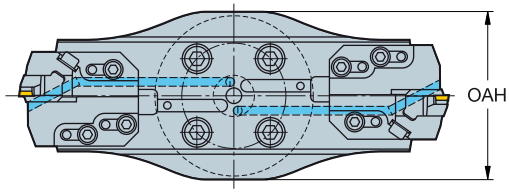


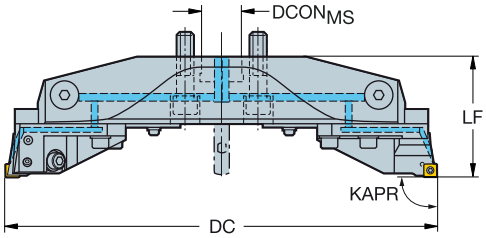
SPMT

KAPR

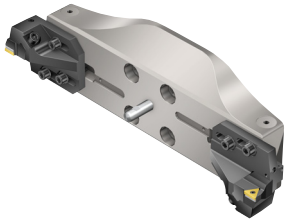


90°





DCN	DCX	⟷	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{AXL}$	$ADJLX_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
298.00	380.00	18	40X	1	**820-380SP18**	40.00	1.50	41.00	114.00	164.00	70	10.000	2	SPMT 1810-BM
378.00	460.00	18	40X	1	**820-460SP18**	40.00	1.50	41.00	119.00	164.00	70	13.131	2	SPMT 1810-BM
458.00	540.00	18	40X	1	**820-540SP18**	40.00	1.50	41.00	124.00	164.00	70	16.741	2	SPMT 1810-BM

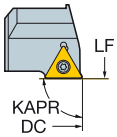




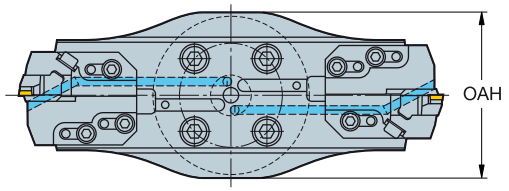
TCMT, TCMX,
TCGT, TCGX
TCEX

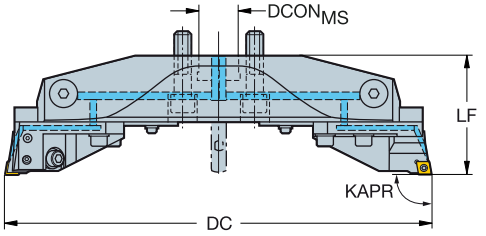
TCMW

KAPR



90°





DCN	DCX	⟷	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{AXL}$	$ADJLX_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
298.00	380.00	22	40X	1	**820-380TC22**	40.00	1.50	41.00	114.00	164.00	70	10.980	2	TCMT 22 04 08
378.00	460.00	22	40X	1	**820-460TC22**	40.00	1.50	41.00	119.00	164.00	70	12.720	2	TCMT 22 04 08
458.00	540.00	22	40X	1	**820-540TC22**	40.00	1.50	41.00	124.00	164.00	70	16.580	2	TCMT 22 04 08

Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.
No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77

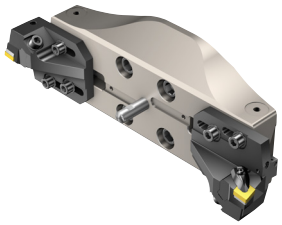
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento

K32 K76 N23 N15 K87

SANDVIK Coromant

Ferramenta CoroBore® 820 XL para mandrilamento em desbaste

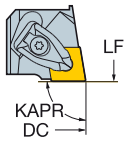
Árvore - refrigeração interna



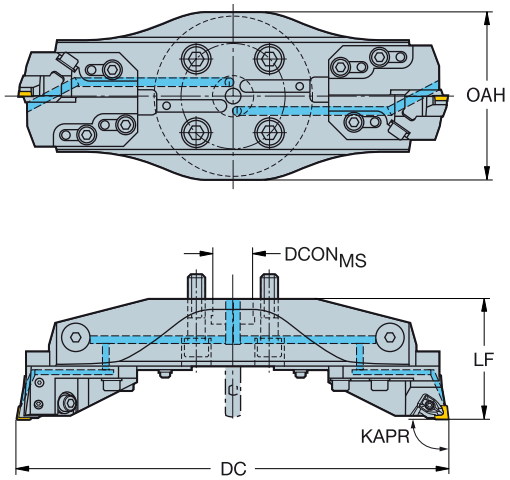


CNMM
CNMG
CNMA, CNGA

KAPR

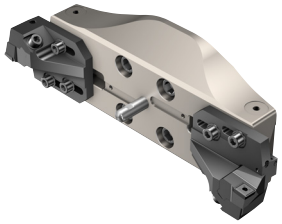


90°



						Dimensões, mm								
DCN	DCX		CZC_{MS}	CNSC	Código para pedido	$DCON_{MS}$	$ADJLX_{AXL}$	$ADJLX_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
298.00	380.00	19	40X	1	820-380CN19	40.00	1.50	41.00	114.00	164.00	70	10.815	2	CNMG 19 06 12
378.00	460.00	19	40X	1	820-460CN19	40.00	1.50	41.00	119.00	164.00	70	12.685	2	CNMG 19 06 12
458.00	540.00	19	40X	1	820-540CN19	40.00	1.50	41.00	124.00	164.00	70	16.780	2	CNMG 19 06 12

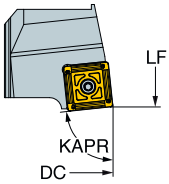
Para pastilhas, consulte o catálogo de Ferramentas para torneamento



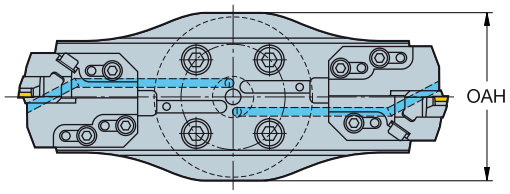


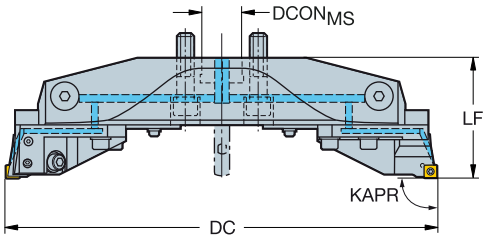
SPMT

KAPR



84°





						Dimensões, mm								
DCN	DCX		CZC_{MS}	CNSC	Código para pedido	$DCON_{MS}$	$ADJLX_{AXL}$	$ADJLX_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
298.00	380.00	18	40X	1	820-380SP18Y	40.00	1.50	41.00	114.00	164.00	70	9.050	2	SPMT 1810-BM
378.00	460.00	18	40X	1	820-460SP18Y	40.00	1.50	41.00	119.00	164.00	70	10.810	2	SPMT 1810-BM
458.00	540.00	18	40X	1	820-540SP18Y	40.00	1.50	41.00	124.00	164.00	70	12.740	2	SPMT 1810-BM

Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.
No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.

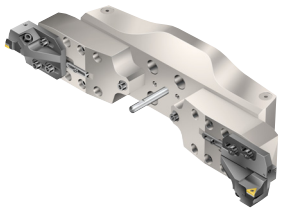
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

K32 K76 N23 N15 K87

Ferramenta CoroBore® 820 XL para mandrilamento em desbaste

Árvore - refrigeração interna

Com extensão do braço

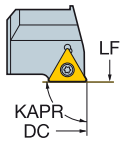




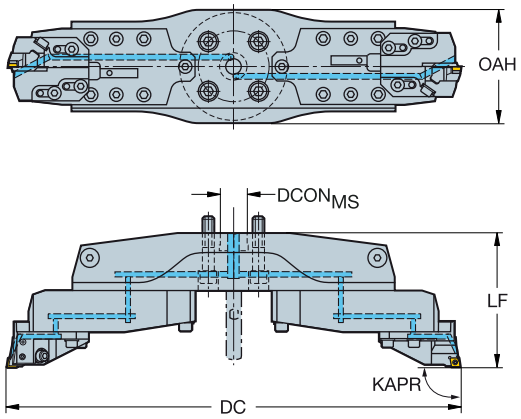
TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR

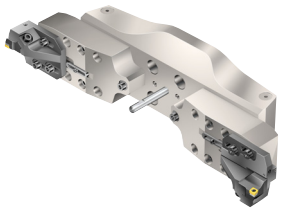


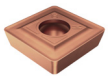
90°



DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{AXL}$	ADJLX$_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
538.00	780.00	22	40X	1	**820-780TC22**	40.00	1.50	121.00	198.00	164.00	70	28.000	2	TCMT 22 04 08
778.00	1020.00	22	40X	1	**820-1020TC22**	40.00	1.50	121.00	218.00	164.00	70	48.000	2	TCMT 22 04 08
1018.00	1260.00	22	40X	1	**820-1260TC22**	40.00	1.50	121.00	218.00	164.00	70	43.730	2	TCMT 22 04 08

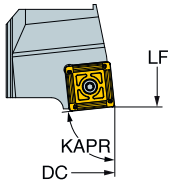
Para pastilhas, consulte o catálogo de Ferramentas para torneamento



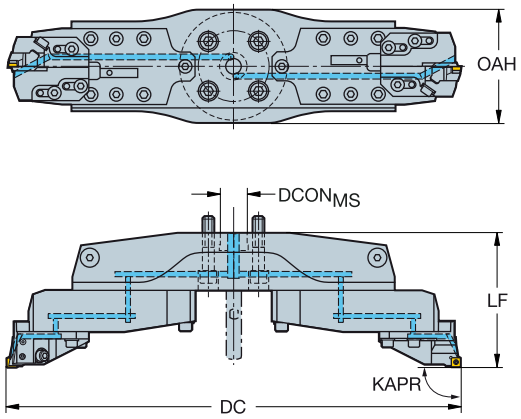


SPMT

KAPR



84°



DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{AXL}$	ADJLX$_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
538.00	780.00	18	40X	1	**820-780SP18Y**	40.00	1.50	121.00	198.00	164.00	70	25.190	2	SPMT 1810-BM
778.00	1020.00	18	40X	1	**820-1020SP18Y**	40.00	1.50	121.00	218.00	164.00	70	36.380	2	SPMT 1810-BM
1018.00	1260.00	18	40X	1	**820-1260SP18Y**	40.00	1.50	121.00	218.00	164.00	70	43.810	2	SPMT 1810-BM

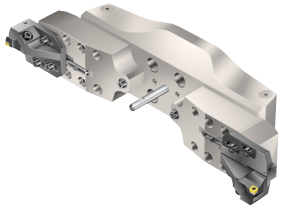
Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.
No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

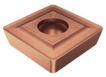
K32 K76 N23 N15 K87

Ferramenta CoroBore® 820 XL para mandrilamento em desbaste

Árvore - refrigeração interna

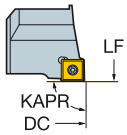
Com extensão do braço



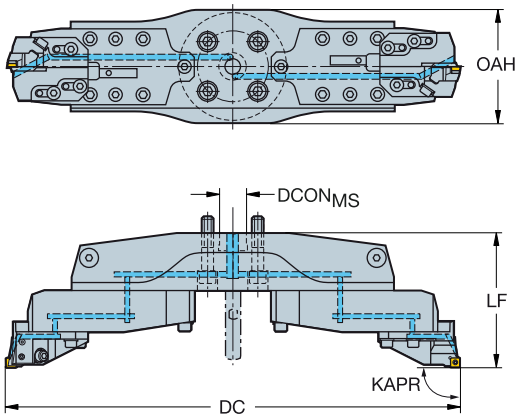


SPMT

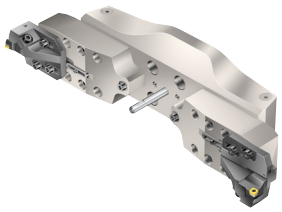
KAPR



90°



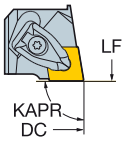
DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{AXL}$	ADJLX$_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
538.00	780.00	18	40X	1	**820-780SP18**	40.00	1.50	121.00	198.00	164.00	70	39.000	2	SPMT 1810-BM
778.00	1020.00	18	40X	1	**820-1020SP18**	40.00	1.50	121.00	218.00	164.00	70	36.380	2	SPMT 1810-BM
1018.00	1260.00	18	40X	1	**820-1260SP18**	40.00	1.50	121.00	218.00	164.00	70	43.810	2	SPMT 1810-BM



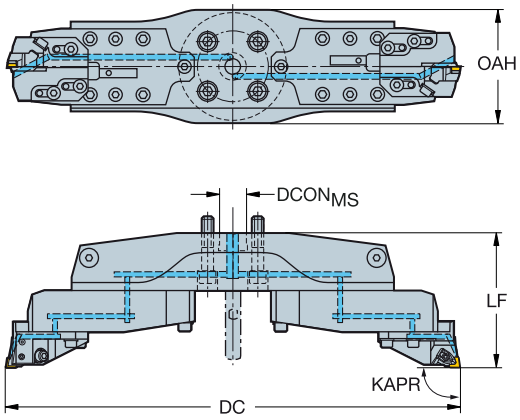


CNMM
CNMG
CNMA, CNGA

KAPR



90°



DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{AXL}$	ADJLX$_{RDL}$	LF	OAH	BAR	KG	CICT	MIID
538.00	780.00	19	40X	1	**820-780CN19**	40.00	1.50	121.00	198.00	164.00	70	34.000	2	CNMG 19 06 12
778.00	1020.00	19	40X	1	**820-1020CN19**	40.00	1.50	121.00	218.00	164.00	70	43.000	2	CNMG 19 06 12
1018.00	1260.00	19	40X	1	**820-1260CN19**	40.00	1.50	121.00	218.00	164.00	70	43.830	2	CNMG 19 06 12

Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.

No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.

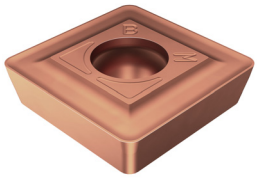
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

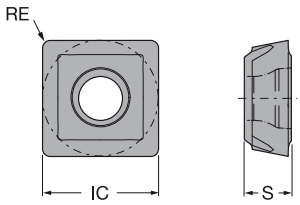
Para pastilhas, consulte o catálogo de Ferramentas para torneamento

K32 K76 N23 N15 K87

Pastilhas CoroBore® 111 para madrilamento em desbaste

Pastilha tipo S (quadrada)



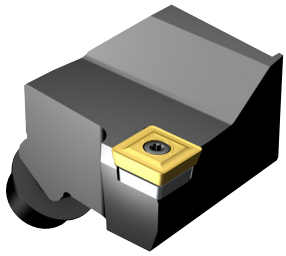


		IC	S	RE	CÓDIGO ISO	P 4325	M 2025	K 3210	S 1145
Média	BM	06	6.0	2.60	0.60	SPMT0606-BM		☆		☆
		08	8.9	3.00	0.80	SPMT0808-BM		☆		☆
		12	12.65	4.00	1.00	SPMT1210-BM		☆		☆
		18	18.6	5.50	1.00	SPMT1810-BM		☆		☆
Desbaste	BR	06	6.0	2.60	0.60	SPMT0606-BR	☆		☆	
		08	8.9	3.00	0.80	SPMT0808-BR	☆		☆	
		12	12.65	4.00	1.20	SPMT1212-BR	☆		☆	
		18	18.6	5.50	1.20	SPMT1812-BR	☆		☆	

K91 N23

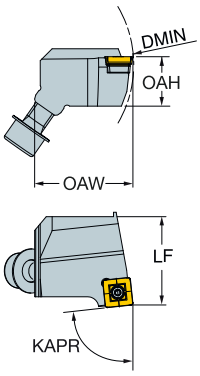
Cápsula para CoroBore® XL

KAPR 84°



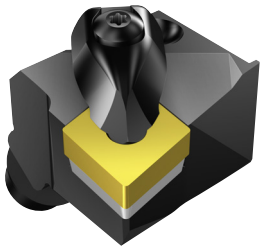


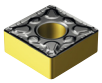
SPMT



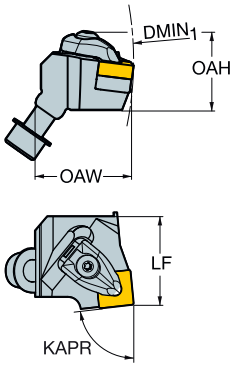
DMIN1		CZCMS	Código para pedido	Dimensões, mm LF	HF	WF	OAH	OAL	KG	CICT	MIID
148.0	12	S12	S12-R820XLR40SSYP12	40.00	22.40	42.00	30.16	43.30	0.250	1	SPMT 1210-BM

KAPR 84°





SNMM
SNMG
SNMA, SNGA

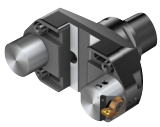
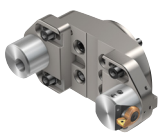
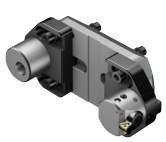


DMIN1		CZCMS	Código para pedido	Dimensões, mm LF	LPR	HF	WF	OAH	OAL	KG	CICT	MIID
148.0	15	S12	S12-R820XLR40DSYN15	40.00	41.80	20.00	42.00	39.70	43.80	0.310	1	SNMG 15 06 08

Para pastilhas, consulte o catálogo de Ferramentas para torneamento
Para componentes, visite www.sandvik.coromant.com

K32 N23 N15

Mandrilamento de precisão

	Conceito de ferramentas	Faixa de diâmetro, mm	Tolerância do furo	Aresta de corte	Operação	Escolha da pastilha	Interface do lado da máquina	Página
CoroBore® 824 	Convencional	1-20	IT6	- Barras de metal duro - Barras de metal duro intercambiáveis	- Mandrilamento com aresta única	- CoroTurn® 107 - CoroTurn® XS	- Coromant Capto® - Coromant EH	K35-K37
391.37A/B 	Convencional	3-36	IT6	- Barras de metal duro - Barras de metal duro intercambiáveis - Barras de aço intercambiáveis	- Mandrilamento com aresta única	- CoroTurn® 107 - Barras inteiriças com geometria retificada	- Coromant Capto® - HSK	K38-K40
CoroBore® 826 HP 	Convencional	35-154	IT6	- Cápsulas intercambiáveis	- Mandrilamento com aresta única	- CoroTurn® 107	- Coromant Capto®	K48-K50
CoroBore® 825 	Convencional	19-167	IT6	- Cápsulas intercambiáveis	- Mandrilamento com aresta única - Mandrilamento reverso	- CoroTurn® 107	- Coromant Capto® - Haste cilíndrica - Coromant EH	K43-K50
	Light Weight	69-167	IT6	- Cápsulas intercambiáveis	- Mandrilamento com aresta única - Mandrilamento reverso	- CoroTurn® 107	- Coromant Capto®	K51
	Antivibratório	19-167	IT6	- Cápsulas intercambiáveis	- Mandrilamento com aresta única - Mandrilamento reverso	- CoroTurn® 107	- Coromant Capto®	K52
CoroBore® 825 XL/CoroBore® 826 XL 	Convencional	148-315 298-1275	IT6	- Cápsulas intercambiáveis	- Mandrilamento com aresta única Mandrilamento reverso Mandrilamento externo	- CoroTurn® 107	- Coromant Capto® - 40X com 4 parafusos	K53-K61 K62-K65
	Light Weight	148-315	IT6	- Cápsulas intercambiáveis	- Mandrilamento com aresta única - Mandrilamento reverso - Mandrilamento externo	- CoroTurn® 107	- Coromant Capto® - 40S com 4 círculos de parafusos	K56-K59
	Antivibratória	148-315	IT6	- Cápsulas intercambiáveis	- Mandrilamento com aresta única - Mandrilamento reverso - Mandrilamento externo	- CoroTurn® 107	- Adaptador antivibratório A33	K60-K61

CoroBore® 824

Mandrilamento de precisão com diâmetros pequenos

Aplicação

- Mandrilamento de precisão
- Mandrilamento com aresta única



Área de aplicação ISO

P M K N S H

Características e benefícios

- Ampla faixa de diâmetro, de 1 a 20 mm
- Maior acessibilidade com Coromant Capto e interfaces modulares Coromant EH em diâmetros pequenos
- Ferramenta para mandrilamento de precisão com ajuste do diâmetro com precisão de 2 mícrons (nônio) para obter tolerâncias estreitas de IT6
- Pastilhas CoroTurn® XS devem ser usadas com diâmetro a partir de 1 mm
- Barras de mandrilar inteiriças de metal duro com pastilhas intercambiáveis CoroTurn® 107 standard, disponíveis a partir de 6 mm de diâmetro
- Melhor acessibilidade com cabeças de mandrilar de diâmetro pequeno, possibilitando mandrilar áreas de difícil acesso
- Sistema rígido para estabilidade máxima com refrigeração interna

www.sandvik.coromant.com/corobore824

Ferramentas

Acoplamentos:
- Coromant Capto®
- Coromant EH

Pastilhas e ferramentas de corte

Pastilhas standard com classes e geometrias especiais para todos os materiais
- CoroTurn® XS
- CoroTurn® 107

$DCON_{WS}$	RPMX	ADJRG (mm)
4	28000	1
6	20000	1
8	14000	1
10	10000	1.5



- CoroTurn® XS para furos de diâmetros pequenos. Para o programa, consulte o catálogo Torneamento.



Ajusta do diâmetro 0,002 mm com uma escala nônio. Uma volta de 360° muda o diâmetro em 0,5 mm.

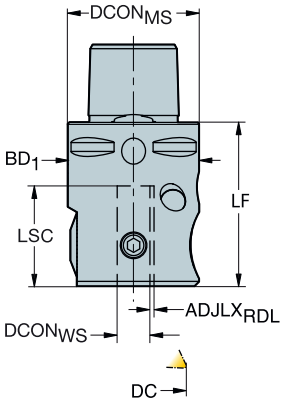
Coromant Capto® para adaptador CoroTurn® XS

CoroBore® 824 XS

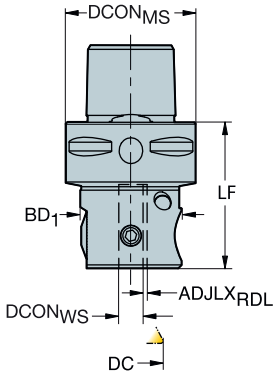
Refrigeração interna



DSGN 1



2



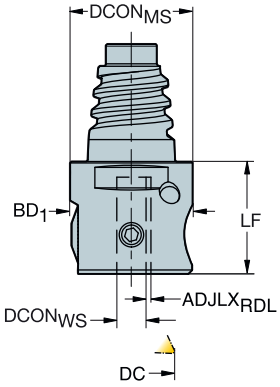
DCN	DCX	CZC_{MS}	CZC_{WS}	CNSC	DSGN	Código para pedido	Dimensões, mm $DCON_{MS}$	$DCON_{WS}$	$ADJLX_{RDL}$	LF	BAR	KG
1.00	6.00	C3	4	3	2	C3-R824XS04-021	32.00	4.00	1.00	36.00	20	0.213
6.00	10.00	C3	6	3	2	C3-R824XS06-016	32.00	6.00	1.00	36.00	20	0.210
10.00	14.00	C3	8	3	1	C3-R824XS08-015	32.00	8.00	1.00	40.00	20	0.269
14.00	20.00	C4	10	3	1	C4-R824XS10-017	40.00	10.00	1.50	42.00	20	0.451

Coromant EH para adaptador CoroTurn® XS

CoroBore® 824 XS

Refrigeração interna





DCN	DCX	CZC_{MS}	CZC_{WS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$DCON_{WS}$	$ADJLX_{RDL}$	LF	BAR	KG
1.00	6.00	E25	4	1	EH25-R824XS04-008	24.20	4.00	1.00	23.00	20	0.174
6.00	10.00	E25	6	1	EH25-R824XS06-003	24.20	6.00	1.00	23.00	20	0.172
10.00	14.00	E25	8	1	EH25-R824XS08-013	24.20	8.00	1.00	38.00	20	0.285
14.00	20.00	E25	10	1	EH25-R824XS10-013	24.20	10.00	1.50	38.00	20	0.368

Nota:

Para uso com barra de mandrilar CoroTurn®

Para componentes, visite www.sandvik.coromant.com


L2



N23



N15

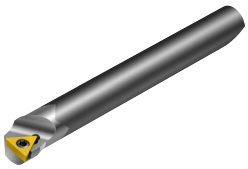
SANDVIK Coromant

POR

Barra de mandrilar CoroTurn® para mandrilamento

Conexão CXS - refrigeração interna

Barra sólida de metal duro intercambiável

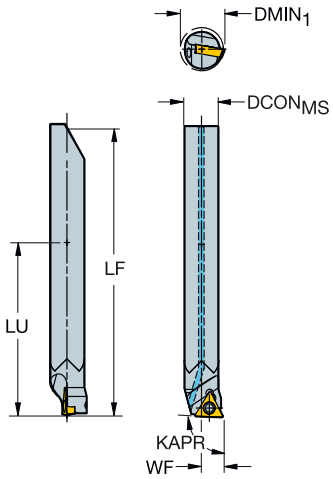




TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR 92°



DMIN1		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	LU	LF	WF	BAR	KG	CICT	MIID
6.0	05	6	1	CXS-06-06 030TC05	6.00	30.00	49.90	3.00	20	0.028	1	TCEX 05 01 00L-F
8.0	05	6	1	CXS-06-08 030TC05	6.00	30.00	49.90	4.00	20	0.031	1	TCEX 05 01 00L-F
10.0	06	8	1	CXS-08-10 040TC06	8.00	40.00	64.04	5.00	20	0.050	1	TCMT 06 T1 02
12.0	06	8	1	CXS-08-12 040TC06	8.00	40.00	64.04	6.00	20	0.050	1	TCMT 06 T1 02
14.0	09	10	1	CXS-10-14 050TC09	10.00	50.00	73.17	7.00	20	0.104	1	TCMT 09 02 02
17.0	09	10	1	CXS-10-17 050TC09	10.00	50.00	73.17	8.50	20	0.106	1	TCMT 09 02 02

Adaptadores recomendados: CoroBore 824XS

Para componentes, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento

K36 N23 N15

Cabeça para mandrilamento de precisão 391.37A/B

Usinagem de canais frontais e mandrilamento de diâmetros pequenos

Aplicação

- Mandrilamento de precisão
- Usinagem de canais frontais



Características e benefícios

- Barras de mandrilar com maior desempenho em relação à razão comprimento/diâmetro
- Solução flexível para uma ampla gama de diâmetros (3-36 mm)
- Excelente para pequenos canais de O-ring
- A cabeça para mandrilamento de precisão em alta velocidade 391.37B com rotação de 20.000 rot/min
- Escolha entre cabeça para mandrilamento de precisão convencional (.37A) e de alta velocidade (.37B):
- Refrigeração interna
- Ajuste de diâmetro: 0,002 mm

Ferramentas

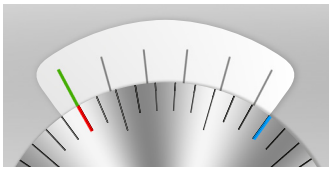
Acoplamentos:
- Coromant Capto®
- Coromant EH

Pastilhas

Pastilhas standard com classes e geometrias especiais para todos os materiais:
- CoroTurn® XS
- CoroTurn® 107
- CoroCut® MB - 09FA

Cabeça para mandrilamento de precisão 391.37A/B

$DCON_{WS}$	Rotação máxima da velocidade: RPMX	Faixa de diâmetro ADJRG (mm)
12	7000	3
16	5000	3
20	3500	5

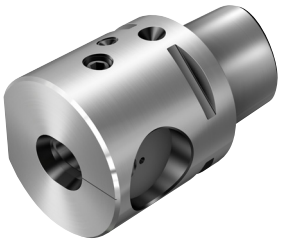


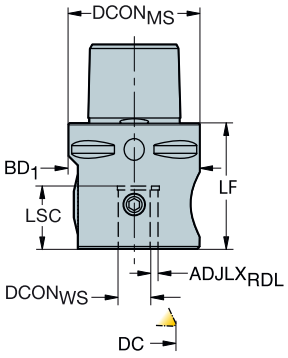
Ajusta do diâmetro 0,002 mm com uma escala nônio. Uma volta de 360° muda o diâmetro em 0,5 mm.

POR

Coromant Capto® para adaptador de cabeça para mandrilamento de precisão

Refrigeração interna

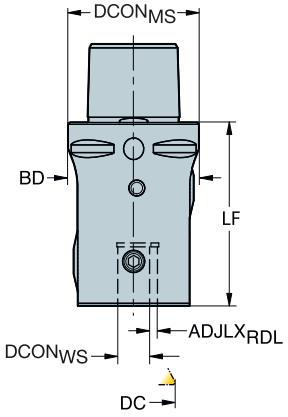




Adaptador 391.37A

DCN	DCX	CZC$_{MS}$	CZC$_{WS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	ADJLX$_{RDL}$	LF	BAR	KG
3.00	26.00	C4	12	3	**C4-391.37A-12 055B**	40.00	12.00	3.00	55.00	20	0.714
3.00	26.00	C5	12	3	**C5-391.37A-12 048B**	50.00	12.00	3.00	48.00	20	0.799
3.00	32.00	C5	16	3	**C5-391.37A-16 070A**	50.00	16.00	3.00	70.00	20	1.450
3.00	32.00	C6	16	3	**C6-391.37A-16 075A**	63.00	16.00	3.00	75.00	20	1.896
17.00	36.00	C5	20	3	**C5-391.37A-20 085A**	50.00	20.00	5.00	85.00	20	1.616
17.00	36.00	C6	20	3	**C6-391.37A-20 085A**	63.00	20.00	5.00	85.00	20	2.886





Adaptador 391.37B com contrapeso ajustável

DCN	DCX	CZC$_{MS}$	CZC$_{WS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	ADJLX$_{RDL}$	LF	BAR	KG
3.00	26.00	C5	12	3	**C5-391.37B-12 070B**	50.00	12.00	3.00	70.00	20	1.090

Deve ser usado com barras de mandrilar R429U/R429.90

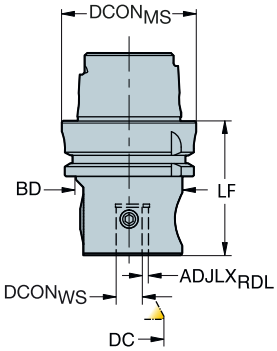
Para componentes, visite www.sandvik.coromant.com

L2 M26 N23 N15

HSK para adaptador de cabeça para mandrilamento de precisão

Refrigeração interna

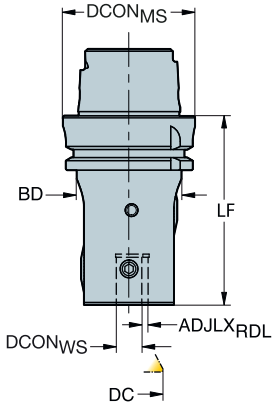




Adaptador 391.37A

						Dimensões, mm							
DCN	DCX	CZC_{MS}	CZC_{WS}	CNSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	ISO	$ADJLX_{RDL}$	LF	BD_1	BAR	KG
3.00	26.00	63	12	1	**392.41037A-6312063B**	63.00	12.00	A	3.00	63.00	50.00	20	1.181
3.00	26.00	100	12	1	**392.41037A-10012076B**	100.00	12.00	A	3.00	76.00	50.00	20	2.700
3.00	32.00	63	16	1	**392.41037A-6316085A**	63.00	16.00	A	3.00	85.00	63.00	20	1.770
17.00	36.00	63	20	1	**392.41037A-63 20 100A**	63.00	20.00	A	5.00	100.00	80.00	20	2.788





Adaptador 391.37B com contrapeso ajustável

						Dimensões, mm							
DCN	DCX	CZC_{MS}	CZC_{WS}	CNSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	ISO	$ADJLX_{RDL}$	LF	BD_1	BAR	KG
3.00	26.00	63	12	1	**392.41037B-6312090B**	63.00	12.00	A	3.00	90.00	50.00	20	1.502

Deve ser usado com barras de mandrilar R429U/R429.90

Para componentes, visite www.sandvik.coromant.com

L2 M26 N23 N15

POR

Barra de mandrilar com pastilha intercambiável para cabeças de mandrilamento de precisão

Haste cilíndrica - refrigeração interna

Barra de aço

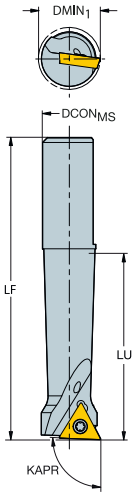




TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR 92°



DMIN1		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	LU	LF	WF	BAR	KG	CICT	MIID
8.0	06	12	1	R429U-A12-08028TC06	12.00	28.00	54.00	4.00	20	0.036	1	TCMT 06 T1 02
8.0	06	12	1	R429U-A12-08040TC06	12.00	40.00	66.00	4.00	20	0.040	1	TCMT 06 T1 02
11.0	06	12	1	R429U-A12-11039TC06	12.00	39.00	65.00	5.50	20	0.048	1	TCMT 06 T1 02
11.0	06	12	1	R429U-A12-11055TC06	12.00	55.00	81.00	5.50	20	0.053	1	TCMT 06 T1 02
14.0	09	12	1	R429U-A12-14042TC09	12.00	42.00	68.00	7.00	20	0.060	1	TCMT 09 02 02
14.0	09	12	1	R429U-A12-14060TC09	12.00	60.00	86.00	7.00	20	0.070	1	TCMT 09 02 02
17.0	09	12	1	R429U-A12-17042TC09	12.00	42.00	68.00	8.50	20	0.060	1	TCMT 09 02 02
17.0	09	12	1	R429U-A12-17060TC09	12.00	60.00	86.00	8.50	20	0.071	1	TCMT 09 02 02
20.0	09	12	1	R429U-A12-20042TC09	12.00	42.00	68.00	10.00	20	0.063	1	TCMT 09 02 02
20.0	09	12	1	R429U-A12-20060TC09	12.00	60.00	86.00	10.00	20	0.072	1	TCMT 09 02 02
8.0	06	16	1	R429U-A16-08028 TC06A	16.00	28.00	89.00	4.00	20	0.114	1	TCMT 06 T1 02
8.0	06	16	1	R429U-A16-08040TC06	16.00	40.00	101.00	4.00	20	0.103	1	TCMT 06 T1 02
11.0	06	16	1	R429U-A16-11039 TC06A	16.00	39.00	100.00	5.50	20	0.124	1	TCMT 06 T1 02
11.0	06	16	1	R429U-A16-11055TC06	16.00	55.00	116.00	5.50	20	0.120	1	TCMT 06 T1 02
14.0	09	16	1	R429U-A16-14049 TC09A	16.00	49.00	110.00	1.50	20	0.148	1	TCMT 09 02 02
14.0	09	16	1	R429U-A16-14070TC09	16.00	70.00	131.00	7.00	20	0.156	1	TCMT 09 02 02
17.0	09	16	1	R429U-A16-17056 TC09A	16.00	56.00	117.00	8.50	20	0.165	1	TCMT 09 02 02
17.0	09	16	1	R429U-A16-17080TC09	16.00	80.00	141.00	8.50	20	0.193	1	TCMT 09 02 02
20.0	09	16	1	R429U-A16-20056 TC09A	16.00	56.00	117.00	10.00	20	7.400	1	TCMT 09 02 02
20.0	09	16	1	R429U-A16-20080TC09	16.00	80.00	141.00	10.00	20	0.195	1	TCMT 09 02 02
23.0	09	16	1	R429U-A16-23056 TC09A	16.00	56.00	117.00	11.50	20	0.160	1	TCMT 09 02 02
23.0	09	16	1	R429U-A16-23080TC09	16.00	80.00	141.00	11.50	20	0.192	1	TCMT 09 02 02
26.0	09	16	1	R429U-A16-26056 TC09A	16.00	56.00	117.00	13.00	20	0.160	1	TCMT 09 02 02
26.0	09	16	1	R429U-A16-26080TC09	16.00	80.00	141.00	13.00	20	0.194	1	TCMT 09 02 02
17.0	09	20	1	R429U-A20-17060 TC09A	20.00	60.00	134.00	8.50	20	0.260	1	TCMT 09 02 02
20.0	09	20	1	R429U-A20-20070 TC09A	20.00	70.00	144.00	10.00	20	0.270	1	TCMT 09 02 02
23.0	09	20	1	R429U-A20-23070 TC09A	20.00	70.00	144.00	11.50	20	0.290	1	TCMT 09 02 02
26.0	09	20	1	R429U-A20-26070 TC09A	20.00	70.00	144.00	13.00	20	0.290	1	TCMT 09 02 02

Adaptadores recomendados:
A12: 391.37A/B
A16 e A20: 391.37A

Para componentes, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento


K39


M26



N23

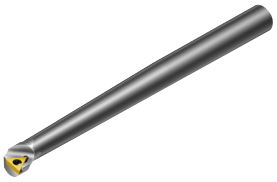


N15

Barra de mandrilar com pastilha intercambiável para cabeças de mandrilamento de precisão

Haste cilíndrica - refrigeração interna

Barra de metal duro com cabeça de aço soldada

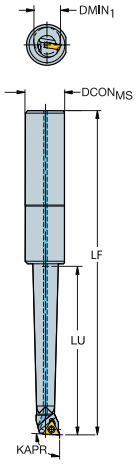




TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR 92°

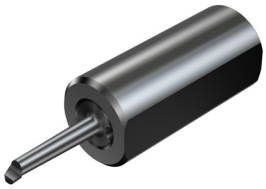


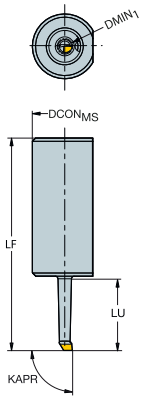
DMIN1		CZCMS	CNSC	Código para pedido	Dimensões, mm DCONMS	LU	LF	WF	BAR	KG	CICT	MIID
8.0	06	16	1	R429U-E16-08048TC06	16.00	48.00	109.00	4.00	20	0.130	1	TCMT 06 T1 02
11.0	06	16	1	R429U-E16-11066TC06	16.00	66.00	127.00	5.50	20	0.170	1	TCMT 06 T1 02
14.0	09	16	1	R429U-E16-14084TC09	16.00	84.00	145.00	7.00	20	0.275	1	TCMT 09 02 02
17.0	09	16	1	R429U-E16-17096TC09	16.00	96.00	157.00	8.50	20	0.391	1	TCMT 09 02 02
20.0	09	16	1	R429U-E16-20096TC09	16.00	96.00	157.00	10.00	20	0.394	1	TCMT 09 02 02
23.0	09	16	1	R429U-E16-23096TC09	16.00	96.00	157.00	11.50	20	0.395	1	TCMT 09 02 02
26.0	09	16	1	R429U-E16-26096TC09	16.00	96.00	157.00	13.00	20	0.395	1	TCMT 09 02 02

Para pastilhas, consulte o catálogo de Ferramentas para torneamento

Barra de mandrilar inteiriça para cabeça de mandrilamento de precisão

KAPR 90°





DMIN1	CZCMS	CNSC	Código para pedido	P H10F	M H10F	K H10F	N H10F	S H10F	Dimensões, mm DCONMS	LU	LF	WF	BAR	KG
3.0	12	1	R429.90-03-013-01-CB	★	★	★	★	★	12.00	13.50	40.00	1.50	20	0.039
5.0	12	1	R429.90-05-021-02-CB	★	★	★	★	★	12.00	21.00	48.00	2.50	20	0.042

DMIN1	CZCMS	CNSC	Código para pedido	Dimensões, mm DCON	LU	LF	WF	BAR	KG
3.0	16	1	R429U-E16-0301501A	16.00	15.00	76.00	1.50	20	0.102
5.0	16	1	R429U-E16-0502502A	16.00	25.00	86.00	2.50	20	0.100

Adaptadores recomendados:
A12: A391.37A/B
A16: A391.37A

K39 M26 N23 N15

CoroBore® 825

Ferramenta de mandrilamento de alta precisão

Aplicação

- Mandrilamento de precisão convencional
- Mandrilamento reverso

Área de aplicação ISO

P M K N S H

Características e benefícios

- Soluções flexíveis que podem ser conectadas a qualquer interface de máquina; escolha entre as interfaces modulares EH e Coromant Capto
- Alcance o balanço necessário mesmo em diâmetros pequenos com o sistema modular EH
- Sistema confiável com interfaces rígidas entre a cabeça e a cápsula para mandrilamento estável e sem vibrações
- O CoroBore 825 ajusta precisamente a aresta de corte manualmente com uma resolução de 0,01 mm no diâmetro
- Furos com tolerâncias estreitas de IT6
- Disponível como uma ferramenta antivibratória para mandrilamento sem vibrações até mesmo com longos balanços
- Ferramenta com refrigeração



www.sandvik.coromant.com/corobore825

Ferramentas

Acoplamentos:
- Coromant Capto®
- Coromant EH
- Haste cilíndrica

Pastilhas

Pastilhas standard com classes e geometrias especiais para todos os materiais:
- CoroTurn® 107
- CoroTurn® 111 (não disponível como kits)



Ajusta do diâmetro 0,002 mm com uma escala nônio. Uma volta de 360° muda o diâmetro em 0,5 mm.



Com um mecanismo antivibratório Silent Tools™ próximo à aresta de corte e uma cabeça de mandrilamento de precisão em alumínio com comprimento reduzido, é possível aumentar o desempenho e a produtividade.



Também disponíveis como ferramentas Lightweight. Furos com diâmetros grandes com maior estabilidade sem aumentar o peso da ferramenta.

CoroBore® 826

Ferramenta de mandrilamento de alta precisão

Aplicação

- Mandrilamento de alta precisão

Área de aplicação ISO

P M K N S H

Características e benefícios

- Refrigeração de alta precisão direcionada para a aresta de corte para um excelente controle de cavacos até 70 bars
- Cápsula e ferramenta com refrigeração
- Função de clique gradual para ajuste fácil da ferramenta
- Sistema confiável com interfaces rígidas entre a cabeça e a cápsula para mandrilamento estável e sem vibrações
- Furos com tolerâncias estreitas até IT6
- O CoroBore® 826 de alta precisão ajusta a aresta de corte com uma resolução de 2 micrômetros no diâmetro



www.sandvik.coromant.com/corobore826

Ferramentas

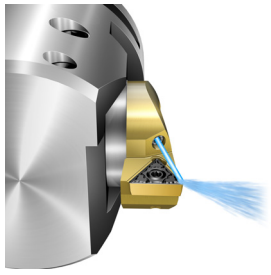
Acoplamentos:
- Coromant Capto®

Pastilhas

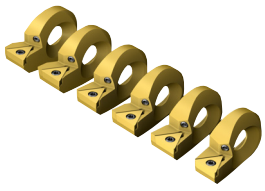
Pastilhas standard com geometrias e classes dedicadas para todos os materiais:
- CoroTurn® 107



Cada clique ajusta o diâmetro em 0,002 mm. Uma volta de 360° muda o diâmetro em 0,1 mm. Diâmetro total alterado na cabeça de mandrilamento de precisão 1,1-1,3 mm.



Olhal de refrigeração de alta precisão para fluxo de refrigeração preciso na aresta de corte



Ampla faixa de diâmetro usando kits de cápsulas! Veja página K84

Ferramenta CoroBore® 825 para mandrilamento de precisão

Coromant Capto® - Refrigeração interna

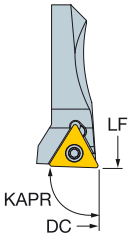


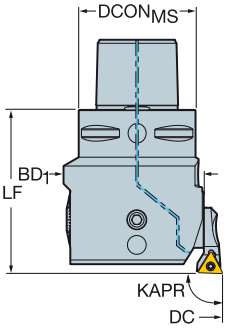


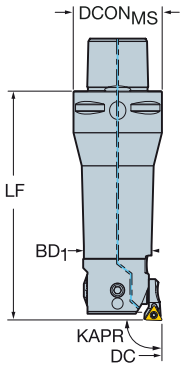
TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR 92° 92°
DSGN 1 2







DCN	DCX	◀▶	CZC$_{MS}$	CNSC	DSGN	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	ULDR	LF	BD$_1$	BAR	KG	CICT	MIID
19.00	23.00	06	C3	3	2	**825-23TC06-C3**	32.00	2.00	3.00	89.00	18.00	70	0.430	1	TCMT 06 T1 02
23.00	29.00	06	C3	3	2	**825-29TC06-C3**	32.00	3.00	2.00	76.00	20.00	70	0.414	1	TCMT 06 T1 02
23.00	29.00	06	C4	3	2	**825-29TC06-C4**	40.00	3.00	2.00	85.00	20.00	70	0.897	1	TCMT 06 T1 02
28.00	36.00	06	C3	3	2	**825-36TC06-C3**	32.00	4.00	2.00	83.00	25.00	70	0.692	1	TCMT 06 T1 02
28.00	36.00	06	C4	3	2	**825-36TC06-C4**	40.00	4.00	2.00	95.00	25.00	70	0.992	1	TCMT 06 T1 02
35.00	45.00	09	C3	3	1	**825-45TC09-C3**	32.00	5.00		48.00	32.00	70	0.641	1	TCMT 09 02 04
35.00	45.00	09	C4	3	2	**825-45TC09-C4**	40.00	5.00	1.50	83.00	32.00	70	1.007	1	TCMT 09 02 04
44.00	56.00	09	C4	3	1	**825-56TC09-C4**	40.00	6.00		56.00	40.00	70	0.874	1	TCMT 09 02 04
44.00	56.00	09	C5	3	2	**825-56TC09-C5**	50.00	6.00	1.50	98.00	40.00	70	1.600	1	TCMT 09 02 04
55.00	70.00	11	C5	3	1	**825-70TC11-C5**	50.00	7.50		66.00	50.00	70	1.430	1	TCMT 11 03 04
55.00	70.00	11	C6	3	2	**825-70TC11-C6**	63.00	7.50	1.50	120.00	50.00	70	2.620	1	TCMT 11 03 04
69.00	87.00	11	C5	3	1	**825-87TC11-C5**	50.00	9.00		70.00	63.00	70	1.930	1	TCMT 11 03 04
69.00	87.00	11	C6	3	1	**825-87TC11-C6**	63.00	9.00		78.00	63.00	70	2.360	1	TCMT 11 03 04
86.00	107.00	11	C5	3	1	**825-107TC11-C5**	50.00	10.50		76.00	80.00	70	2.240	1	TCMT 11 03 04
86.00	107.00	11	C6	3	1	**825-107TC11-C6**	63.00	10.50		90.00	80.00	70	3.180	1	TCMT 11 03 04
106.00	137.00	11	C6	3	1	**825-137TC11-C6**	63.00	15.50		90.00	100.00	70	3.792	1	TCMT 11 03 04
106.00	137.00	11	C8	3	1	**825-137TC11-C8**	80.00	15.50		100.00	100.00	70	5.045	1	TCMT 11 03 04
136.00	167.00	11	C6	3	1	**825-167TC11-C6**	63.00	15.50		90.00	130.00	70	4.430	1	TCMT 11 03 04
136.00	167.00	11	C8	3	1	**825-167TC11-C8**	80.00	15.50		100.00	130.00	70	5.570	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.
Para mais informações sobre o mandrilamento reverso, veja página K92.
Para mais informações sobre o uso de cassete de extensão, veja página K89.
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.
Para todos DSGN 2; LU = DC*ULDR

L2 N23 N15 K89

Ferramenta CoroBore® 825 para mandrilamento de precisão

Haste cilíndrica - refrigeração interna

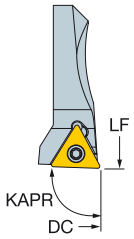




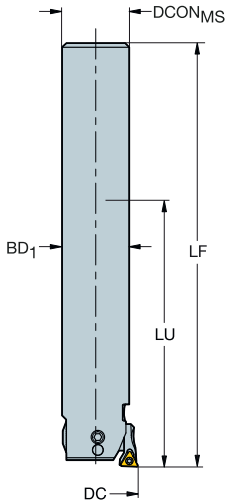
TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR



92°



DCN	DCX		CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LU	LF	BD_1	BAR	KG	CICT	MIID
19.00	23.00	06	18	1	**825-23TC06-A18**	18.00	2.00	77.00	128.00	18.00	70	0.731	1	TCMT 06 T1 02
23.00	29.00	06	20	1	**825-29TC06-A20**	20.00	3.00	81.00	132.00	20.00	70	0.606	1	TCMT 06 T1 02
28.00	36.00	06	25	1	**825-36TC06-A25**	25.00	4.00	101.00	158.00	25.00	70	0.951	1	TCMT 06 T1 02

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento reverso, veja página K92.

Para mais informações sobre o uso de cassete de extensão, veja página K89.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

L2 N23 N15 K89

POR

Ferramenta CoroBore® 825 para mandrilamento de precisão

Acoplamento Coromant EH - refrigeração interna





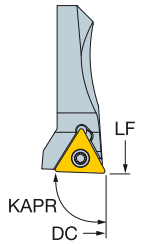


TCMT, TCMX,
TCGT, TCGX
TCEX

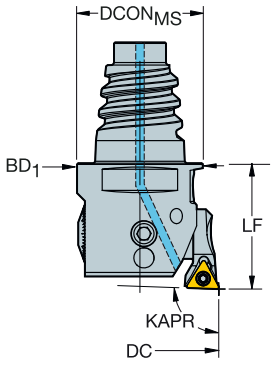


TCMW

KAPR



92°



DCN	DCX	◀▶	CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BD$_1$	BAR	KG	CICT	MIID
19.00	23.00	06	E16	1	**825-23TC06-EH16**	15.50	2.00	25.00	18.00	70	0.500	1	TCMT 06 T1 02
23.00	29.00	06	E20	1	**825-29TC06-EH20**	19.30	3.00	25.00	20.00	70	0.600	1	TCMT 06 T1 02
28.00	36.00	06	E25	1	**825-36TC06-EH25**	24.20	4.00	25.00	25.00	70	0.687	1	TCMT 06 T1 02

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento reverso, veja página K92.
Para mais informações sobre o uso de cassete de extensão, veja página K89.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.


L2



N23



N15


K89

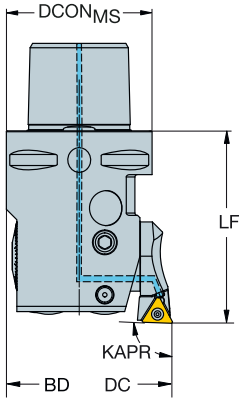
Ferramenta CoroBore® 826 para mandrilamento de precisão

Coromant Capto® - Refrigeração de precisão

KAPR 92°







TCMT, TCMX, TCGT, TCGX TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BD$_1$	BAR	KG	CICT	MIID
35.45	36.55	09	C3	3	826-36TC09-C3HP	32.00	0.55	48.00	32.00	70	0.566	1	TCMT 09 02 04
36.45	37.55	09	C3	3	826-37TC09-C3HP	32.00	0.55	48.00	32.00	70	0.565	1	TCMT 09 02 04
37.45	38.55	09	C3	3	826-38TC09-C3HP	32.00	0.55	48.00	32.00	70	0.631	1	TCMT 09 02 04
38.45	39.55	09	C3	3	826-39TC09-C3HP	32.00	0.55	48.00	32.00	70	0.640	1	TCMT 09 02 04
39.45	40.55	09	C3	3	826-40TC09-C3HP	32.00	0.55	48.00	32.00	70	0.647	1	TCMT 09 02 04
40.45	41.55	09	C3	3	826-41TC09-C3HP	32.00	0.55	48.00	32.00	70	0.290	1	TCMT 09 02 04
41.45	42.55	09	C3	3	826-42TC09-C3HP	32.00	0.55	48.00	32.00	70	0.290	1	TCMT 09 02 04
42.45	43.55	09	C3	3	826-43TC09-C3HP	32.00	0.55	48.00	32.00	70	0.290	1	TCMT 09 02 04
43.45	44.55	09	C3	3	826-44TC09-C3HP	32.00	0.55	48.00	32.00	70	0.290	1	TCMT 09 02 04
44.45	45.55	09	C4	3	826-45TC09-C4HP	40.00	0.55	56.00	40.00	70	0.591	1	TCMT 09 02 04
45.45	46.55	09	C4	3	826-46TC09-C4HP	40.00	0.55	56.00	40.00	70	0.570	1	TCMT 09 02 04
46.45	47.55	09	C4	3	826-47TC09-C4HP	40.00	0.55	56.00	40.00	70	1.104	1	TCMT 09 02 04
47.45	48.55	09	C4	3	826-48TC09-C4HP	40.00	0.55	56.00	40.00	70	0.570	1	TCMT 09 02 04
48.45	49.55	09	C4	3	826-49TC09-C4HP	40.00	0.55	56.00	40.00	70	0.570	1	TCMT 09 02 04
49.45	50.55	09	C4	3	826-50TC09-C4HP	40.00	0.55	56.00	40.00	70	0.918	1	TCMT 09 02 04
50.45	51.55	09	C4	3	826-51TC09-C4HP	40.00	0.55	56.00	40.00	70	0.570	1	TCMT 09 02 04
51.45	52.55	09	C4	3	826-52TC09-C4HP	40.00	0.55	56.00	40.00	70	0.940	1	TCMT 09 02 04
52.45	53.55	09	C4	3	826-53TC09-C4HP	40.00	0.55	56.00	40.00	70	0.570	1	TCMT 09 02 04
53.45	54.55	09	C4	3	826-54TC09-C4HP	40.00	0.55	56.00	40.00	70	0.570	1	TCMT 09 02 04
54.45	55.55	09	C4	3	826-55TC09-C4HP	40.00	0.55	56.00	40.00	70	0.570	1	TCMT 09 02 04
55.35	56.65	11	C5	3	826-56TC11-C5HP	50.00	0.65	66.00	50.00	70	1.397	1	TCMT 11 03 04
56.35	57.65	11	C5	3	826-57TC11-C5HP	50.00	0.65	66.00	50.00	70	1.455	1	TCMT 11 03 04
57.35	58.65	11	C5	3	826-58TC11-C5HP	50.00	0.65	66.00	50.00	70	1.414	1	TCMT 11 03 04
58.35	59.65	11	C5	3	826-59TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
59.35	60.65	11	C5	3	826-60TC11-C5HP	50.00	0.65	66.00	50.00	70	1.466	1	TCMT 11 03 04
60.35	61.65	11	C5	3	826-61TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
61.35	62.65	11	C5	3	826-62TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
62.35	63.65	11	C5	3	826-63TC11-C5HP	50.00	0.65	66.00	50.00	70	1.426	1	TCMT 11 03 04
63.35	64.65	11	C5	3	826-64TC11-C5HP	50.00	0.65	66.00	50.00	70	1.503	1	TCMT 11 03 04
64.35	65.65	11	C5	3	826-65TC11-C5HP	50.00	0.65	66.00	50.00	70	1.520	1	TCMT 11 03 04
65.35	66.65	11	C5	3	826-66TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
66.35	67.65	11	C5	3	826-67TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
67.35	68.65	11	C5	3	826-68TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
68.35	69.65	11	C5	3	826-69TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
69.35	70.65	11	C5	3	826-70TC11-C5HP	50.00	0.65	66.00	50.00	70	1.455	1	TCMT 11 03 04
70.35	71.65	11	C5	3	826-71TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
71.35	72.65	11	C5	3	826-72TC11-C5HP	50.00	0.65	66.00	50.00	70	1.070	1	TCMT 11 03 04
72.35	73.65	11	C5	3	826-73TC11-C5HP	50.00	0.65	66.00	50.00	70	1.557	1	TCMT 11 03 04
73.35	74.65	11	C6	3	826-74TC11-C6HP	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
74.35	75.65	11	C6	3	826-75TC11-C6HP	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
75.35	76.65	11	C6	3	826-76TC11-C6HP	63.00	0.65	78.00	63.00	70	2.400	1	TCMT 11 03 04
76.35	77.65	11	C6	3	826-77TC11-C6HP	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
77.35	78.65	11	C6	3	826-78TC11-C6HP	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
78.35	79.65	11	C6	3	826-79TC11-C6HP	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

L2 N23 N15 K89

SANDVIK Coromant

POR

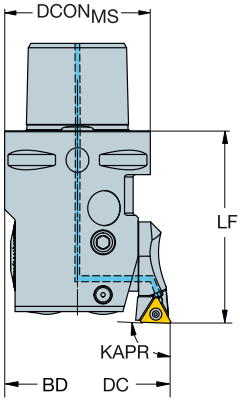
Ferramenta CoroBore® 826 para mandrilamento de precisão

Coromant Capto® - Refrigeração de precisão

KAPR 92°







TCMT, TCMX, TCGT, TCGX TCEX

TCMW

DCN	DCX	⟷	CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	BD$_1$	BAR	KG	CICT	MIID
79.35	80.65	11	C6	3	**826-80TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
80.35	81.65	11	C6	3	**826-81TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
81.35	82.65	11	C6	3	**826-82TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
82.35	83.65	11	C6	3	**826-83TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
83.35	84.65	11	C6	3	**826-84TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
84.35	85.65	11	C6	3	**826-85TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
85.35	86.65	11	C6	3	**826-86TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
86.35	87.65	11	C6	3	**826-87TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
87.35	88.65	11	C6	3	**826-88TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
88.35	89.65	11	C6	3	**826-89TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
89.35	90.65	11	C6	3	**826-90TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04
90.35	91.65	11	C6	3	**826-91TC11-C6HP**	63.00	0.65	78.00	63.00	70	1.940	1	TCMT 11 03 04

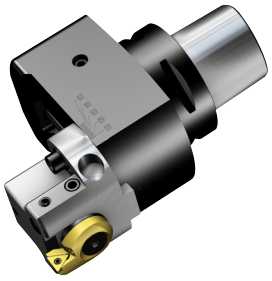
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

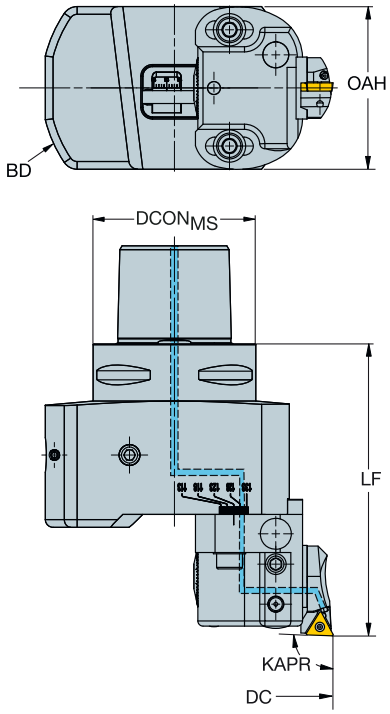
L2 N23 N15 K89

Ferramenta CoroBore® 826 para mandrilamento de precisão

Coromant Capto® - Refrigeração interna

KAPR 92°







TCMT, TCMX, TCGT, TCGX TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
91.35	112.65	11	C6	3	**826-112TC11-C6HP**	63.00	10.65	113.00	63.00	85.00	70	3.215	1	TCMT 11 03 04
112.35	133.65	11	C6	3	**826-133TC11-C6HP**	63.00	10.65	113.00	63.00	105.00	70	3.645	1	TCMT 11 03 04
133.35	154.65	11	C6	3	**826-154TC11-C6HP**	63.00	10.65	113.00	63.00	125.00	70	3.940	1	TCMT 11 03 04

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

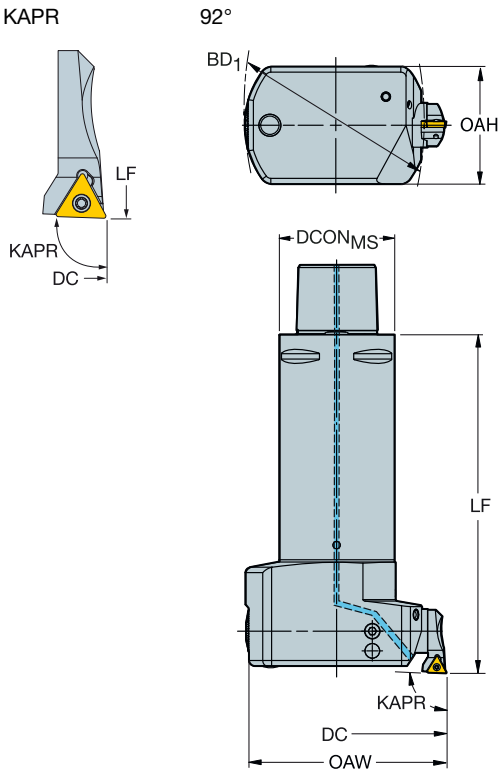
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

L2 N23 N15 K89

Ferramenta CoroBore® 825 Lightweight para mandrilamento de precisão

Coromant Capto® - Refrigeração interna







TCMT, TCMX, TCGT, TCGX TCEX

TCMW

DCN	DCX	↔	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	OAH	BD_1	BAR	KG	CICT	MIID
69.00	87.00	11	C5	3	**825L-87TC11-C5**	50.00	9.00	150.00	51.00	63.00	70	2.150	1	TCMT 11 03 04
86.00	107.00	11	C5	3	**825L-107TC11-C5**	50.00	10.50	156.00	51.00	80.00	70	2.230	1	TCMT 11 03 04
106.00	137.00	11	C6	3	**825L-137TC11-C6**	63.00	15.50	190.00	64.00	100.00	70	3.970	1	TCMT 11 03 04
106.00	137.00	11	C8	3	**825L-137TC11-C8**	80.00	15.50	200.00	80.00	100.00	70	4.885	1	TCMT 11 03 04
136.00	167.00	11	C8	3	**825L-167TC11-C8**	80.00	15.50	200.00	80.00	130.00	70	5.160	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento reverso, veja página K92.

Para mais informações sobre o uso de cassete de extensão, veja página K89.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

L2 N23 N15 K89

Ferramenta CoroBore® 825 antivibratória para mandrilamento de precisão

Coromant Capto® - Refrigeração interna

SilentTools®

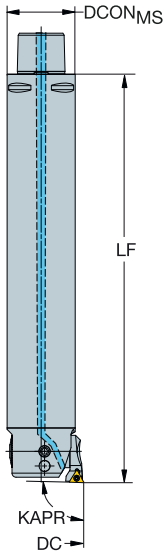


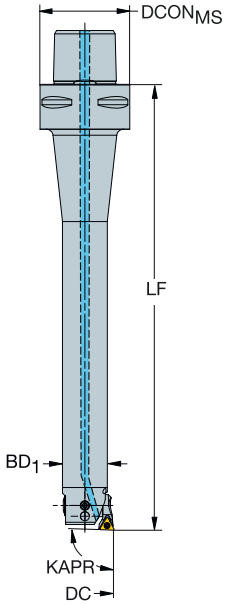


TCMT, TCMX, TCGT, TCGX TCEX

TCMW

KAPR	92°	92°
DSGN	1	2





							Dimensões, mm									
DCN	DCX	⟷	CZC_{MS}	CNSC	DSGN	**Código para pedido**	$DCON_{MS}$	$ADJLX_{RDL}$	ULDR	LF	OAH	BD_1	BAR	KG	CICT	MIID
19.00	23.00	06	C4	3	2	**825D-23TC06U-C4L**	40.00	2.00	6.00	163.00		18.00	70	0.568	1	TCMT 06 T1 02
23.00	29.00	06	C4	3	2	**825D-29TC06U-C4L**	40.00	3.00	6.00	199.00		20.00	70	0.728	1	TCMT 06 T1 02
28.00	36.00	06	C3	3	2	**825D-36TC06U-C3L**	32.00	4.00	6.00	216.00		25.00	70	0.968	1	TCMT 06 T1 02
35.00	45.00	09	C3	3	1	**825D-45TC09U-C3L**	32.00	5.00		221.00		32.00	70	1.484	1	TCMT 09 02 04
35.00	45.00	09	C4	3	2	**825D-45TC09U-C4L**	40.00	5.00	6.00	270.00		32.00	70	1.924	1	TCMT 09 02 04
35.00	45.00	09	C6	3	2	**825D-45TC09U-C6L**	63.00	5.00	6.00	297.00		32.00	70	2.574	1	TCMT 09 02 04
44.00	56.00	09	C4	3	1	**825D-56TC09U-C4L**	40.00	6.00		220.00		40.00	70	2.124	1	TCMT 09 02 04
44.00	56.00	09	C5	3	2	**825D-56TC09U-C5L**	50.00	6.00	6.00	336.00		40.00	70	3.744	1	TCMT 09 02 04
44.00	56.00	09	C6	3	2	**825D-56TC09U-C6L**	63.00	6.00	6.00	363.00		40.00	70	4.384	1	TCMT 09 02 04
55.00	70.00	11	C5	3	1	**825D-70TC11U-C5M**	50.00	7.50		300.00		50.00	70	4.940	1	TCMT 11 03 04
55.00	70.00	11	C6	3	2	**825D-70TC11U-C6M**	63.00	7.50	5.60	400.00		50.00	70	6.789	1	TCMT 11 03 04
69.00	87.00	11	C6	3	1	**825D-87TC11U-C6M**	63.00	9.00		400.00		63.00	70	9.659	1	TCMT 11 03 04
69.00	87.00	11	C8	3	2	**825D-87TC11U-C8S**	80.00	9.00	5.60	500.00		63.00	70	12.869	1	TCMT 11 03 04
86.00	107.00	11	C6	3	1	**825D-107TC11U-C6M**	63.00	10.50		400.00	64.00	80.00	70	9.729	1	TCMT 11 03 04
86.00	107.00	11	C8	3	1	**825D-107TC11U-C8M**	80.00	10.50		500.00		80.00	70	18.089	1	TCMT 11 03 04
86.00	107.00	11	C8	3	1	**825D-107TC11U-C8S**	80.00	10.50		410.00		80.00	70	15.669	1	TCMT 11 03 04
106.00	137.00	11	C6	3	1	**825D-137TC11U-C6M**	63.00	15.50		400.00	64.00	100.00	70	9.809	1	TCMT 11 03 04
106.00	137.00	11	C8	3	1	**825D-137TC11U-C8M**	80.00	15.50		500.00	81.00	100.00	70	18.199	1	TCMT 11 03 04
106.00	137.00	11	C8	3	1	**825D-137TC11U-C8S**	80.00	15.50		400.00	81.00	100.00	70	15.759	1	TCMT 11 03 04
136.00	167.00	11	C8	3	1	**825D-167TC11U-C8S**	80.00	15.50		500.00	81.00	130.00	70	18.359	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento reverso, veja página K92.
Para mais informações sobre o uso de cassete de extensão, veja página K89.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

L2 N23 N15 K89

CoroBore® 825 XL/CoroBore® 826 XL

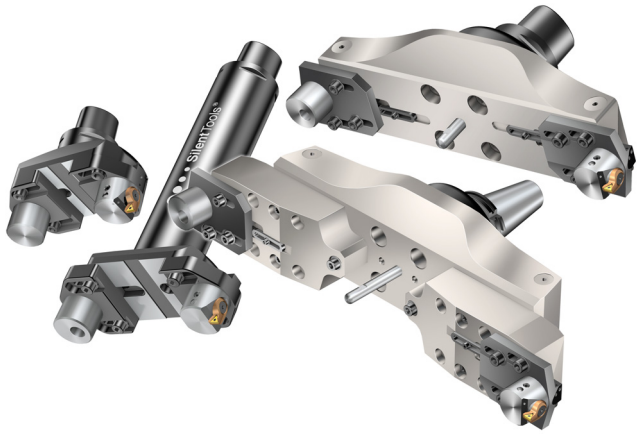
Ferramentas de mandrilamento de precisão para diâmetros grandes

Aplicação

- Mandrilamento de precisão
- Mandrilamento reverso
- Operações externas

Área de aplicação ISO

P M K N S H



Características e benefícios

- Sistema confiável com interfaces rígidas entre a cabeça e a cápsula para mandrilamento estável e sem vibrações
- Porta-ferramentas especiais e otimizados para mandrilamento de diâmetros grandes
- Furos com tolerâncias estreitas (até IT5 para CoroBore 826)
- Cápsula desenhada para maior estabilidade
- Fluido de corte através da ferramenta
- O diâmetro 298-1275 mm é feito de alumínio altamente resistente, o que reduz o peso da montagem
- Com cobertura dura para proteção da superfície
- Use extensões de cassete para ajuste radial e mandrilamento reverso
- Base modular robusta para construção de montagens em diferentes aplicações (mandrilamento em desbaste, mandrilamento de precisão, usinagem de canais frontais, SpiroGrooving e torneamento por interpolação)

www.sandvik.coromant.com/corobore825

SilentTools®

Ferramentas

Acoplamentos:
- Coromant Capto®
- Árvore

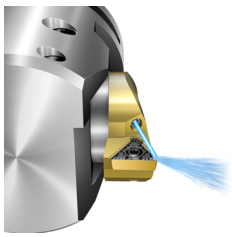
Pastilhas

Pastilhas standard com geometrias e classes dedicadas para todos os materiais:
- CoroTurn® 107

Ajuste de diâmetro:

825 - Ajusta do diâmetro 0,002 mm com uma escala nônio. Uma volta de 360° muda o diâmetro em 0,5 mm.

826 - Cada click ajusta o diâmetro em 0,002 mm. Uma volta de 360° muda o diâmetro em 0,1 mm. Diâmetro total alterado na cabeça de mandrilamento de precisão 1.1-1.3 mm.



Olhal de refrigeração de alta precisão para fluxo de refrigeração preciso na aresta de corte

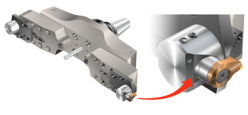
Disponíveis como ferramentas Lightweight (peso leve). Usina grandes diâmetros sem aumentar o peso da ferramenta.



Use o mesmo braço/extensão de braço para desbaste, acabamento e usinagem de canais frontais de 150 mm. (contrapeso necessário para acabamento).

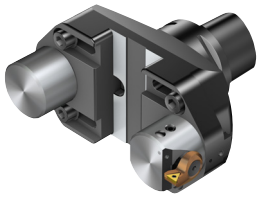


Use cassetes de extensão para ajuste radial e mandrilamento reverso.

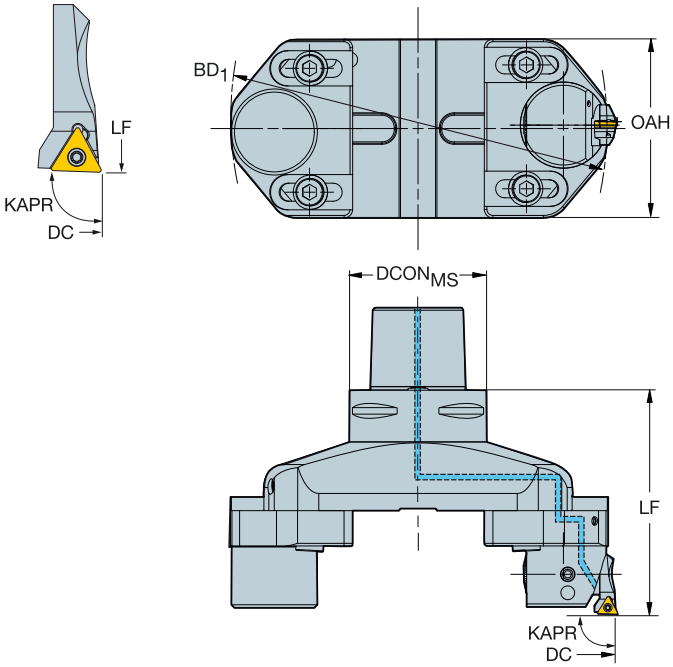


Ferramenta CoroBore® 825 XL para mandrilamento de precisão

Coromant Capto® - Refrigeração interna



KAPR 92°





TCMT, TCMX, TCGT, TCGX TCEX

TCMW

DCN	DCX	⟷	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	OAH	BD_1	BAR	KG	CICT	MIID
148.00	215.00	11	C6	3	**825-215TC11-C6**	63.00	33.50	118.00	104.00	145.00	70	4.534	1	TCMT 11 03 04
148.00	215.00	11	C8	3	**825-215TC11-C8**	80.00	33.50	130.00	104.00	145.00	70	7.500	1	TCMT 11 03 04
148.00	215.00	11	C10	3	**825-215TC11-C10**	100.00	33.50	136.00	104.00	145.00	70	9.460	1	TCMT 11 03 04
198.00	265.00	11	C6	3	**825-265TC11-C6**	63.00	33.50	118.00	104.00	195.00	70	4.750	1	TCMT 11 03 04
198.00	265.00	11	C8	3	**825-265TC11-C8**	80.00	33.50	130.00	104.00	195.00	70	9.100	1	TCMT 11 03 04
198.00	265.00	11	C10	3	**825-265TC11-C10**	100.00	33.50	136.00	104.00	195.00	70	10.850	1	TCMT 11 03 04
248.00	315.00	11	C6	3	**825-315TC11-C6**	63.00	33.50	118.00	104.00	245.00	70	5.400	1	TCMT 11 03 04
248.00	315.00	11	C8	3	**825-315TC11-C8**	80.00	33.50	130.00	104.00	245.00	70	10.350	1	TCMT 11 03 04
248.00	315.00	11	C10	3	**825-315TC11-C10**	100.00	33.50	136.00	104.00	245.00	70	12.570	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento externo, veja página K94.
Para mais informações sobre o mandrilamento reverso, veja página K92.
Para mais informações sobre o uso de cassete de extensão, veja página K90.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

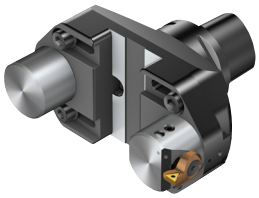
L2 N23 N15 K90

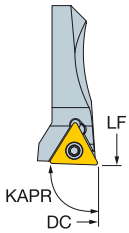
Ferramenta CoroBore® 826 XL para mandrilamento de precisão

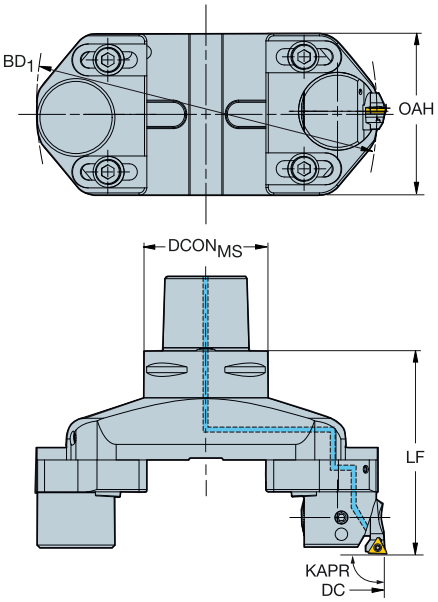
Coromant Capto® - Refrigeração interna

KAPR
STDNO

92°
ISO26623-1









TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

DCN	DCX		IC	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	OAH	BD_1	BAR PSI	KG	CICT	MIID
154.35	207.65	11	1/4	C6	3	**826-207TC11-C6HP**	63.00	26.65	125.00	104.00	145.00	70	3.560	1	TCMT 11 03 04
154.35	207.65	11	1/4	C8	3	**826-207TC11-C8HP**	80.00	26.65	137.00	104.00	145.00	70	6.430	1	TCMT 11 03 04
204.35	257.65	11	1/4	C6	3	**826-257TC11-C6HP**	63.00	26.65	125.00	104.00	195.00	70	3.880	1	TCMT 11 03 04
204.35	257.65	11	1/4	C8	3	**826-257TC11-C8HP**	80.00	26.65	137.00	104.00	195.00	70	7.630	1	TCMT 11 03 04
254.35	307.65	11	1/4	C6	3	**826-307TC11-C6HP**	63.00	26.65	125.00	104.00	245.00	70	4.240	1	TCMT 11 03 04
254.35	307.65	11	1/4	C8	3	**826-307TC11-C8HP**	80.00	26.65	137.00	104.00	245.00	70	8.720	1	TCMT 11 03 04

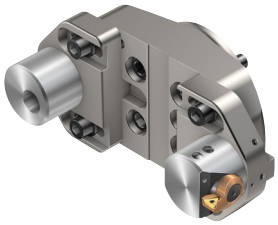
Os diâmetros são válidos no mandrilamento frontal.
O mandrilamento reverso não é recomendado com CoroBore® 826.
Para mais informações sobre o uso de cassete de extensão, veja página K92.
Para mais informações sobre o mandrilamento externo, veja página K94.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

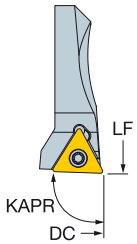
L2 N23 N15 K90

Ferramenta CoroBore® 825 XL Lightweight para mandrilamento de precisão

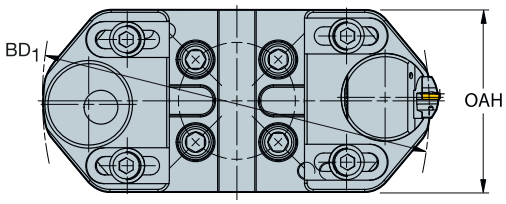
Árvore - refrigeração interna

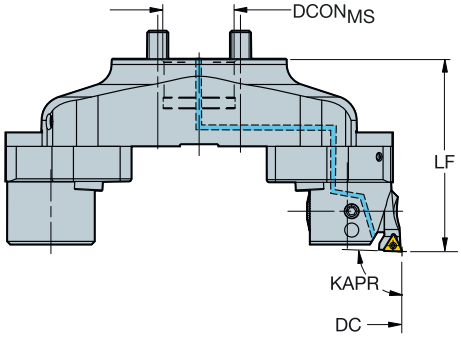


KAPR



92°









TCMT, TCMX,
TCGT, TCGX
TCEX



TCMW

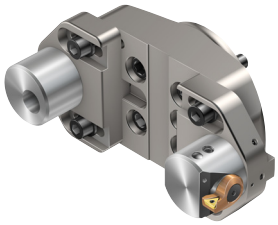
DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
148.00	215.00	11	40S	1	**825L-215TC11**	40.00	33.50	110.00	104.00	145.00	70	4.450	1	TCMT 11 03 04
198.00	265.00	11	40S	1	**825L-265TC11**	40.00	33.50	110.00	104.00	195.00	70	4.920	1	TCMT 11 03 04
248.00	315.00	11	40S	1	**825L-315TC11**	40.00	33.50	110.00	104.00	245.00	70	5.370	1	TCMT 11 03 04

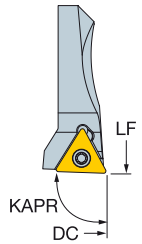
Use com suportes para faceamento 40S, exemplo C8-391.05-40 060M. Devem ser pedidos separadamente.
Os diâmetros são válidos no mandrilamento frontal.
Para mais informações sobre o mandrilamento reverso, veja página K92.
Para mais informações sobre o uso de cassete de extensão, veja página K90.
Para mais informações sobre o mandrilamento externo, veja página K94.
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

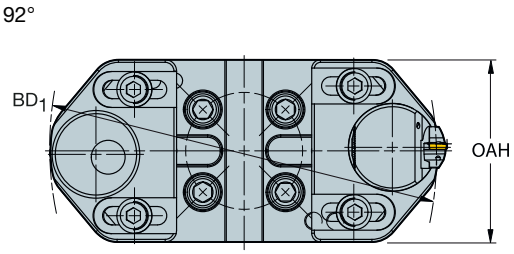
L2 N23 N15 K90

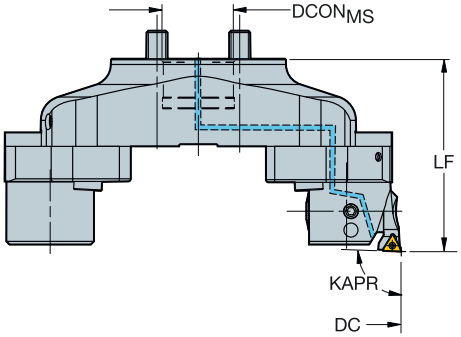
Ferramenta CoroBore® 826 XL Lightweight para mandrilamento de precisão

Árvore - refrigeração interna











TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ISO	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
154.35	207.65	11	40S	1	**826L-207TC11HP**	40.00	C	26.65	117.00	104.00	145.00	70	3.310	1	TCMT 11 03 04
204.35	257.65	11	40S	1	**826L-257TC11HP**	40.00	C	26.65	117.00	104.00	195.00	70	3.650	1	TCMT 11 03 04
254.35	307.65	11	40S	1	**826L-307TC11HP**	40.00	C	26.65	117.00	104.00	245.00	70	4.320	1	TCMT 11 03 04

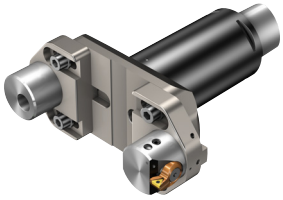
Use com suportes para faceamento 40S, exemplo C8-391.05-40 060M. Devem ser pedidos separadamente.
O mandrilamento reverso não é recomendado com CoroBore® 826.
Para mais informações sobre o mandrilamento externo, veja página K94.
Para mais informações sobre o uso de cassete de extensão, veja página K90.
Os diâmetros são válidos no mandrilamento frontal.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

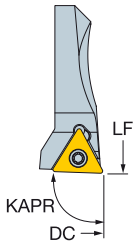
L2 N23 N15 K90

Ferramenta CoroBore® 825 XL Lightweight para mandrilamento de precisão

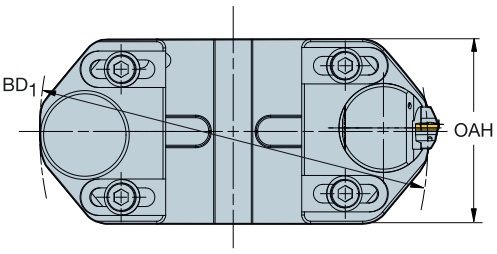
Coromant Capto® - Refrigeração interna

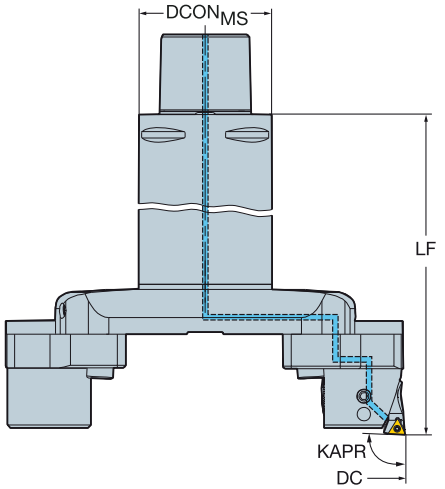


KAPR



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TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
148.00	215.00	11	C8	3	**825L-215TC11-C8**	80.00	33.50	230.00	104.00	145.00	70	7.640	1	TCMT 11 03 04
198.00	265.00	11	C8	3	**825L-265TC11-C8**	80.00	33.50	230.00	104.00	195.00	70	8.320	1	TCMT 11 03 04
248.00	315.00	11	C8	3	**825L-315TC11-C8**	80.00	33.50	230.00	104.00	245.00	70	8.680	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento externo, veja página K94.
Para mais informações sobre o mandrilamento reverso, veja página K92.
Para mais informações sobre o uso de cassete de extensão, veja página K90.

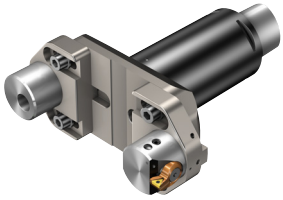
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

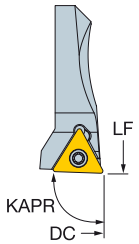
L2 N23 N15 K90

Ferramenta CoroBore® 826 XL Lightweight para mandrilamento de precisão

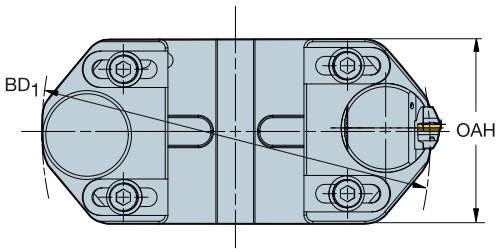
Coromant Capto® - Refrigeração interna

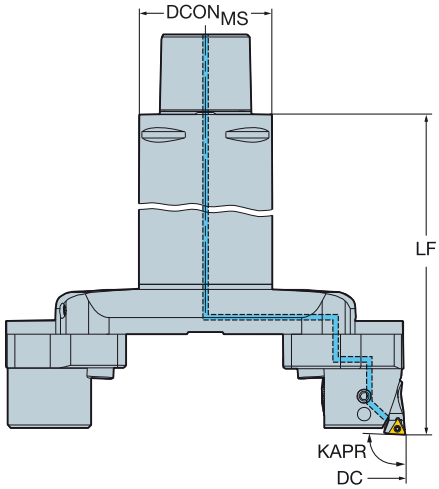


KAPR



92°







TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
154.35	207.65	11	C8	3	**826L-207TC11-C8HP**	80.00	26.65	237.00	104.00	145.00	70	6.300	1	TCMT 11 03 04
204.35	257.65	11	C8	3	**826L-257TC11-C8HP**	80.00	26.65	237.00	104.00	195.00	70	6.660	1	TCMT 11 03 04
254.35	307.65	11	C8	3	**826L-307TC11-C8HP**	80.00	26.65	237.00	104.00	245.00	70	7.030	1	TCMT 11 03 04

O mandrilamento reverso não é recomendado com CoroBore® 826.

Para mais informações sobre o mandrilamento externo, veja página K94.
Para mais informações sobre o uso de cassete de extensão, veja página K90.

Os diâmetros são válidos no mandrilamento frontal.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

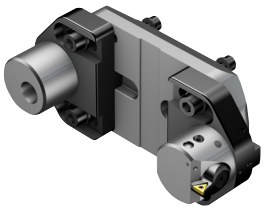
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

L2 N23 N15 K90

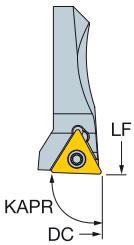
Ferramenta CoroBore® 825 XL para mandrilamento de precisão

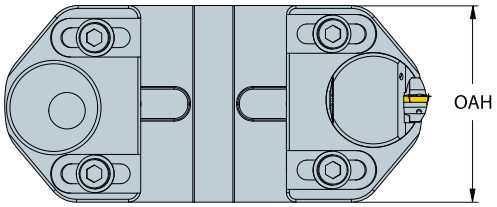
Árvore - refrigeração interna

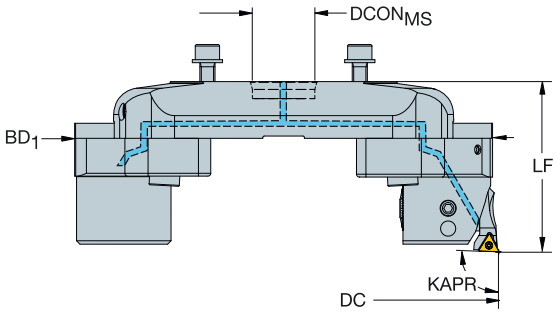
Dedicadas para ferramentas Silent Tools para mandrilamento



KAPR 92°









TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
148.00	215.00	11	33	1	**825D-215TC11**	33.00	33.50	90.00	104.00	145.00	70	2.620	1	TCMT 11 03 04
198.00	265.00	11	33	1	**825D-265TC11**	33.00	33.50	90.00	104.00	195.00	70	2.940	1	TCMT 11 03 04
248.00	315.00	11	33	1	**825D-315TC11**	33.00	33.50	90.00	104.00	245.00	70	4.190	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento externo, veja página K94.

Para mais informações sobre o mandrilamento reverso, veja página K92.

Para mais informações sobre o uso de cassete de extensão, veja página K90.

Essas montagens leves são dedicadas para uso com adaptadores de mandrilamento antivibratório. Adaptadores antivibratórios são comprados separadamente, veja a página K77.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

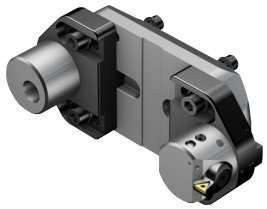
K77 N23 N15 K90

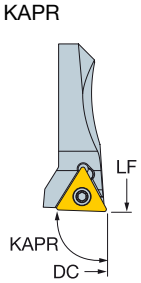
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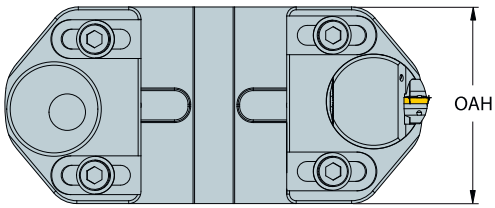
Ferramenta CoroBore® 826 XL para mandrilamento de precisão

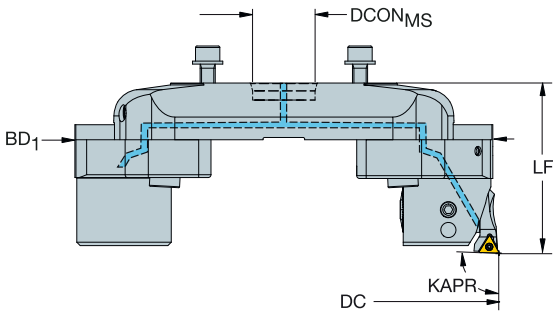
Árvore - refrigeração interna

Dedicadas para ferramentas Silent Tools para mandrilamento











TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

DCN	DCX		CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	OAH	BD_1	BAR	KG	CICT	MIID
154.35	207.65	11	33	1	**826D-207TC11HP**	33.00	26.65	97.00	104.00	145.00	70	2.770	1	TCMT 11 03 04
204.35	257.65	11	33	1	**826D-257TC11HP**	33.00	26.65	97.00	104.00	195.00	70	3.110	1	TCMT 11 03 04
254.35	307.65	11	33	1	**826D-307TC11HP**	33.00	26.65	97.00	104.00	245.00	70	3.470	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

O mandrilamento reverso não é recomendado com CoroBore® 826.

Para mais informações sobre o mandrilamento externo, veja página K94.

Para mais informações sobre o uso de cassete de extensão, veja página K90.

Essas montagens leves são dedicadas para uso com adaptadores de mandrilamento antivibratório. Adaptadores antivibratórios são comprados separadamente, veja a página K77.

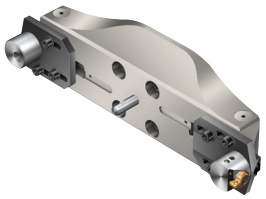
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

K77 N23 N15 K90

Ferramenta CoroBore® 825 XL para mandrilamento de precisão

Árvore - refrigeração interna

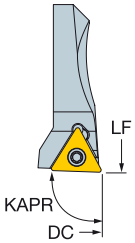




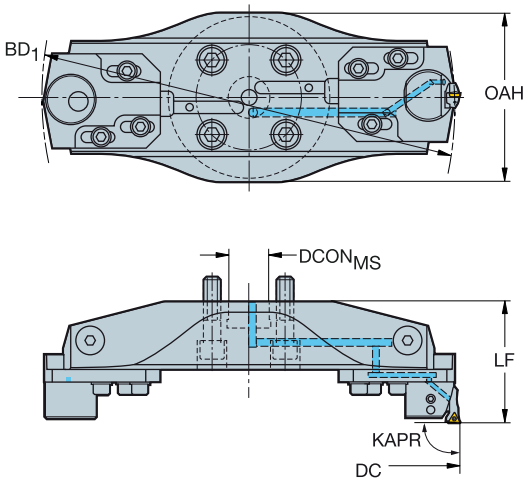
TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR



92°



DCN	DCX	⟷	CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
298.00	395.00	11	40X	1	**825-395TC11**	40.00	48.50	114.00	164.00	295.00	70	10.385	1	TCMT 11 03 04
378.00	475.00	11	40X	1	**825-475TC11**	40.00	48.50	119.00	164.00	375.00	70	12.280	1	TCMT 11 03 04
458.00	555.00	11	40X	1	**825-555TC11**	40.00	48.50	124.00	164.00	455.00	70	16.400	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento externo, veja página K94.
Para mais informações sobre o mandrilamento reverso, veja página K92.
Para mais informações sobre o uso de cassete de extensão, veja página K90.

Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.

No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

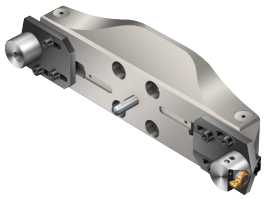
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

K76 N23 N15 K90

POR

Ferramenta CoroBore® 826 XL para mandrilamento de precisão

Árvore - refrigeração interna

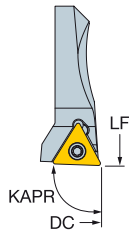




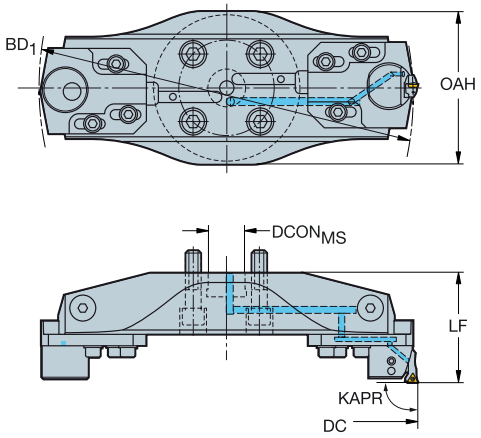
TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR



92°



DCN	DCX	↔	IC	CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	OAH	BD_1	BAR PSI	KG	CICT	MIID
304.35	387.65	11	1/4	40X	1	**826-387TC11HP**	40.00	41.65	121.00	164.00	295.00	70	8.870	1	TCMT 11 03 04
384.35	467.65	11	1/4	40X	1	**826-467TC11HP**	40.00	41.65	126.00	164.00	375.00	70	10.400	1	TCMT 11 03 04
464.35	547.65	11	1/4	40X	1	**826-547TC11HP**	40.00	41.65	131.00	164.00	455.00	70	12.340	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.
O mandrilamento reverso não é recomendado com CoroBore® 826.
Para mais informações sobre o mandrilamento externo, veja página K94.
Para mais informações sobre o uso de cassete de extensão, veja página K90.
Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.
No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

K76 N23 N15 K90

Ferramenta CoroBore® 825 XL para mandrilamento de precisão

Árvore - refrigeração interna

Com extensão do braço

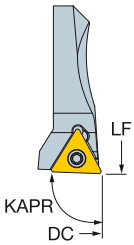




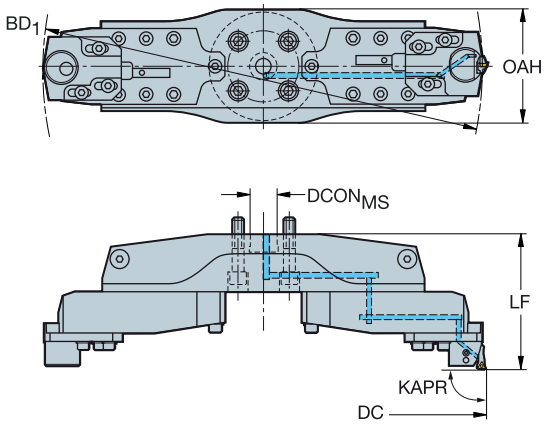
TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW

KAPR



92°



DCN	DCX		CZC_{MS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$ADJLX_{RDL}$	LF	OAH	BD_1	BAR	KG	CICT	MIID
538.00	795.00	11	40X	1	**825-795TC11**	40.00	128.50	198.00	164.00	535.00	70	25.640	1	TCMT 11 03 04
778.00	1035.00	11	40X	1	**825-1035TC11**	40.00	128.50	218.00	164.00	775.00	70	36.830	1	TCMT 11 03 04
1018.00	1275.00	11	40X	1	**825-1275TC11**	40.00	128.50	218.00	164.00	1015.00	70	44.260	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

Para mais informações sobre o mandrilamento externo, veja página K94.

Para mais informações sobre o mandrilamento reverso, veja página K92.

Para mais informações sobre o uso de cassete de extensão, veja página K90.

Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.

No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

K76 N23 N15 K90

Ferramenta CoroBore® 826 XL para mandrilamento de precisão

Árvore - refrigeração interna

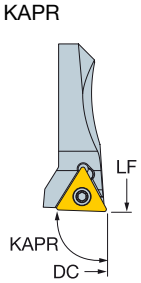
Com extensão do braço

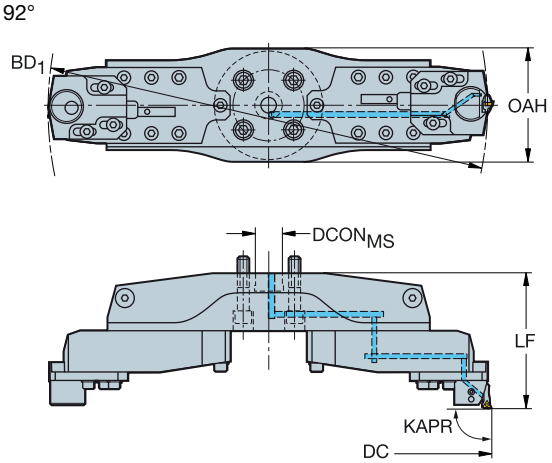




TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW





DCN	DCX	◁▷	CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LF	OAH	BD$_1$	BAR	KG	CICT	MIID
544.35	787.65	11	40X	1	**826-787TC11HP**	40.00	121.65	205.00	164.00	535.00	70	24.430	1	TCMT 11 03 04
784.35	1027.65	11	40X	1	**826-1027TC11HP**	40.00	121.65	225.00	164.00	775.00	70	35.060	1	TCMT 11 03 04
1024.35	1267.65	11	40X	1	**826-1267TC11HP**	40.00	121.65	225.00	164.00	1015.00	70	44.110	1	TCMT 11 03 04

Os diâmetros são válidos no mandrilamento frontal.

O mandrilamento reverso não é recomendado com CoroBore® 826.

Para mais informações sobre o mandrilamento externo, veja página K94.

Para mais informações sobre o uso de cassete de extensão, veja página K90.

Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.

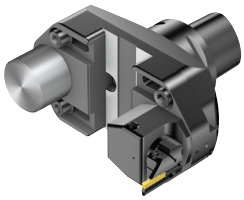
No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

K76 N23 N15 K90

Canais frontais

	Faixa de diâmetro, mm	Tolerância do furo	Arestas de corte	Operação	Escolha da pastilha	Interface do lado da máquina	Página
CoroCut® MB 	14-50	IT7	1	- Canais frontais	- CoroCut® MB	- Coromant Capto®	K67
CoroBore® 825 SL 	47-150	IT7	1	- Canais frontais	- CoroCut®	- Coromant Capto®	K68-K69
CoroBore® 825 SL XL 	148-1275	IT7	1	- Canais frontais	- CoroCut®	- Coromant Capto® - 40X com 4 círculos de parafusos	K70
SpiroGrooving™ 	30-289		1 (externo e interno)	- Spirogrooving	- CoroTurn® 107	- Coromant Capto®	K71-K73

Haste cilíndrica para adaptador CoroCut® MB

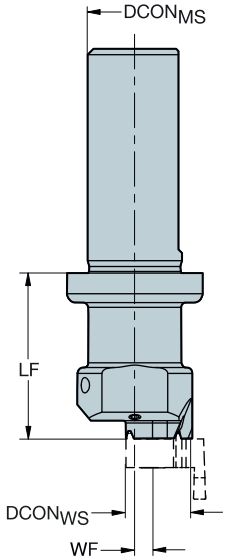
Para usinagem de canais frontais

Refrigeração interna





MB...FA



CZC_{MS}	CZC_{WS}	CNSC	Código para pedido	Dimensões, mm $DCON_{MS}$	$DCON_{WS}$	LF	WF	BAR	KG
16	09	1	R429U-A16-14032MB09	16.00	9.00	32.00	-2.00	20	0.115
16	09	1	R429U-A16-19030MB09	16.00	9.00	30.00	0.50	20	0.114
16	09	1	R429U-A16-24028MB09	16.00	9.00	28.00	3.00	20	0.120
16	09	1	R429U-A16-29026MB09	16.00	9.00	26.00	5.50	20	0.120
16	09	1	R429U-A16-34024MB09	16.00	9.00	24.00	8.00	20	0.129
16	09	1	R429U-A16-39022MB09	16.00	9.00	22.00	10.50	20	0.145
16	09	1	R429U-A16-44020MB09	16.00	9.00	20.00	13.00	20	0.153

Para ferramentas de corte CoroCut® MB, consulte o catálogo de Ferramentas de torneamento.

Para componentes, visite www.sandvik.coromant.com

Adaptadores recomendados:

A16: 391.37A

L2 N23 N15

CoroBore® 825 SL

Canais frontais

J

Aplicação

- Canais frontais
- Usinagem de canais axiais



Área de aplicação ISO

P M K N S H

K

Características e benefícios

- Maior produtividade se comparada ao fresamento
- Excelente controle de cavacos devido à refrigeração interna direcionada para a aresta de corte
- Compõe nosso amplo programa de cabeças CoroTurn® SL standard e sistema CoroCut com 1-2 pastilhas. (Tipo esquerdo, curva A)
- Cabeças para usinagem de canais frontais com ajuste radial de precisão para pré-setting
- Desenho rígido com ferramentas dedicadas para usinagem de canais frontais em diâmetros grandes e pequenos
- Refrigeração interna

L

Ferramentas

Acoplamentos:
- Coromant Capto®
- Árvore

Pastilhas

- Sistema de pastilhas CoroCut® 1-2
- Geometrias e classes dedicadas para todos os materiais

A cabeça CoroTurn® SL e as pastilhas devem ser pedidas separadamente.

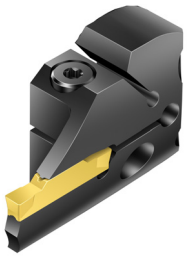
M

825 - Ajusta do diâmetro 0,002 mm com uma escala nônio. Uma volta de 360° muda o diâmetro em 0,5 mm.



Primeira escolha em geometrias: -CM ou -TF dependendo do raio de ponta escolhido. Valor inicial recomendado para avanço: 0,15 mm/rot.

Se os canais com maior tolerância de largura forem necessários, escolha a geometria -GF. Valor inicial recomendado para avanço: 0,10 mm/rot.

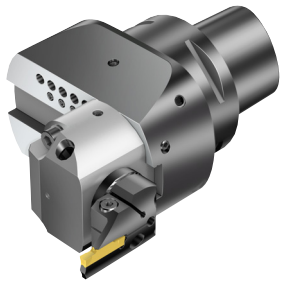


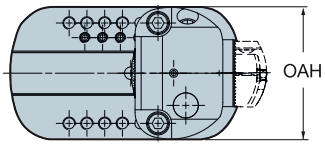
Cabeças para usinagem de canais frontais com ajuste radial de precisão, para pre-setting com a mesma interface que a cabeça para mandrilamento de precisão CoroBore 825

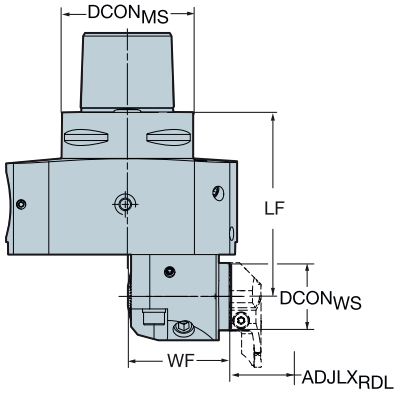
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Coromant Capto® para adaptador CoroTurn® SL ajustável

Coromant Capto® - Refrigeração interna

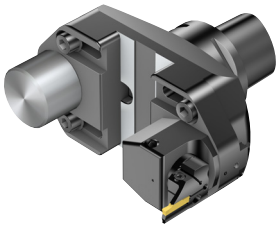


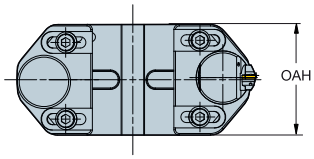


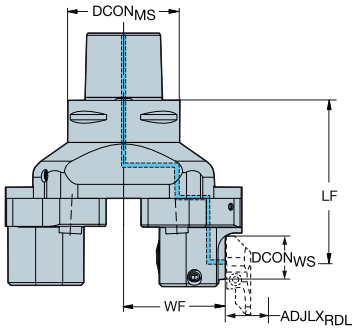


Ajuste de precisão CoroBore® 825

				Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	$ADJLX_{RDL}$	LF	LPR	WF	OAH	OAW	BAR	KG
C6	32	3	825-150SL32-C6	63.00	32.00	51.50	88.00	109.00	5.50	63.40	106.00	20	4.320
C8	32	3	825-150SL32-C8	80.00	32.00	51.50	96.00	117.00	5.50	80.40	106.00	20	5.470







CoroBore® 825 XL

				Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	$ADJLX_{RDL}$	LF	LPR	WF	OAH	OAW	BAR	KG
C8	32	3	825-215SL32-C8	80.00	32.00	33.50	112.00	133.00	56.00	104.00	130.00	20	8.040
C8	32	3	825-265SL32-C8	80.00	32.00	33.50	112.00	133.00	81.00	104.00	180.00	20	9.120
C8	32	3	825-315SL32-C8	80.00	32.00	33.50	112.00	133.00	106.00	104.00	230.00	20	10.750

O diâmetro da cabeça CoroTurn® SL e a faixa de diâmetro da ferramenta devem corresponder à especificação da peça. Para mais informações sobre as cabeças CoroTurn® SL, consulte o catálogo de Ferramentas para torneamento.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com


L2



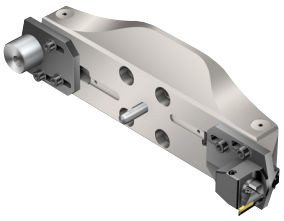
N23

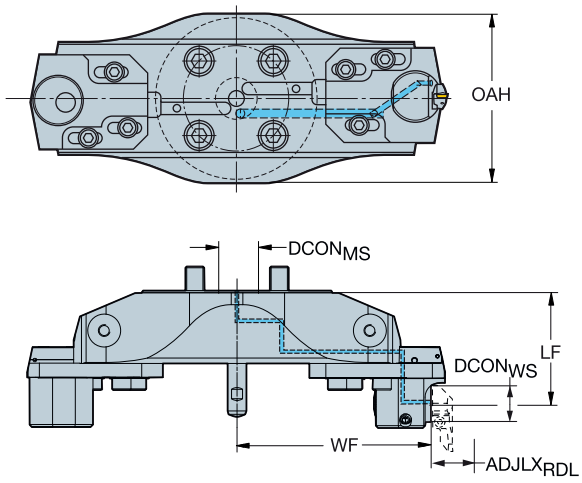


N15

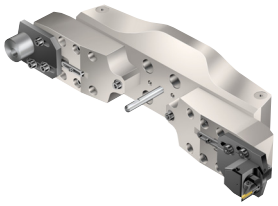
Árvore para adaptador CoroTurn® SL ajustável

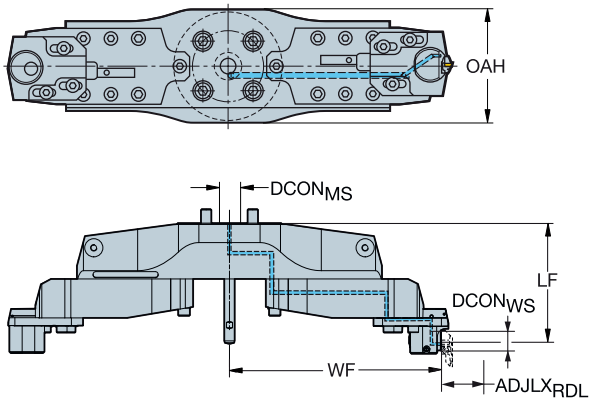
Árvore - refrigeração interna





CZCMS	CZCWS	CNSC	Código para pedido	Dimensões, mm DCONMS	DCONWS	ADJLXRDL	LF	LPR	WF	OAH	OAW	BAR	KG
40X	32	1	825-395SL32	40.00	32.00	48.50	96.00	117.00	131.00	164.00	334.00	20	8.980
40X	32	1	825-475SL32	40.00	32.00	48.50	101.00	122.00	171.00	164.00	414.00	20	12.830
40X	32	1	825-555SL32	40.00	32.00	48.50	106.00	127.00	211.00	104.00	494.00	20	12.670





Com extensão do braço

CZCMS	CZCWS	CNSC	Código para pedido	Dimensões, mm DCONMS	DCONWS	ADJLXRDL	LF	LPR	WF	OAH	OAW	BAR	KG
40X	32	1	825-1035SL32	40.00	32.00	128.50	200.00	221.00	371.00	164.00	838.00	20	36.310
40X	32	1	825-1275SL32	40.00	32.00	128.50	200.00	221.00	491.00	164.00	1078.00	20	43.740
40X	32	1	825-795SL32	40.00	32.00	128.50	180.00	201.00	251.00	164.00	598.00	20	25.120

O diâmetro da cabeça CoroTurn® SL e a faixa de diâmetro da ferramenta devem corresponder à especificação da peça. Para mais informações sobre as cabeças CoroTurn® SL, consulte o catálogo de Ferramentas para torneamento.

Use com suportes 40X CoroBore XL somente. Devem ser pedidos separadamente. Veja página K76.

No caso de flange direto com o fuso da máquina, use o plugue de centralização, consulte a página K77.

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

K76 N23 N15

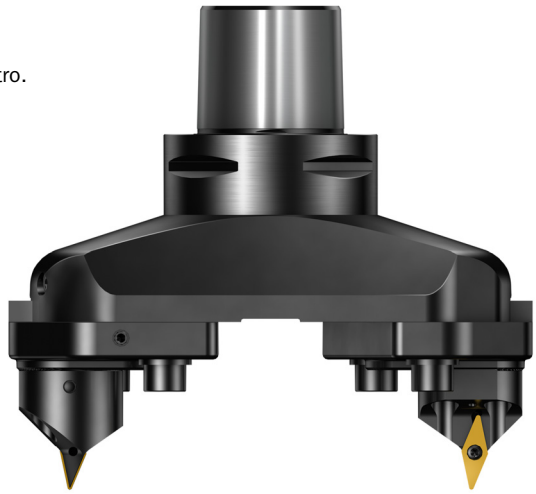
POR

SpiroGrooving™

Máxima produtividade na usinagem de canais em anéis de vedação

Aplicação

- Todos os canais BX, R-RX e 23°
- Não deve ser usado para chanfros a 45° no flanco externo nos canais BX
- O software SpiroGrooving™ é necessário
- Recomendado para programar tolerâncias "médias" para profundidade& e diâmetro.
- Transfira o código NC gerado para o controlador da máquina



Área de aplicação ISO:

P M K N S H

Características e benefícios

Segurança do processo
- Quebra de cavacos controlada com o percurso da ferramenta SpiroGrooving™
- Refrigeração interna
- Sem vibração

Alta produtividade
- Maior utilização da máquina devido ao bom controle de cavacos
- Método de usinagem altamente eficiente
- Tempo de corte reduzido devido aos dados de corte mais altos

Programação rápida e fácil
- Calculadora SpiroGrooving™ para geração de código NC
- Base modular robusta para construção de montagens em diferentes aplicações (mandrilamento em desbaste, mandrilamento de precisão, usinagem de canais frontais, SpiroGrooving e torneamento por interpolação)

www.sandvik.coromant.com/spirogrooving

Ferramentas

- Coromant Capto®
- CoroBore® XL incorporado - sistema rígido e confiável para estabilidade máxima
- Cápsulas disponíveis com ajuste axial e radial



Pastilhas

- Pastilhas CoroTurn 107 (VCMT) para tamanho 30–75 mm
- Pastilhas CoroTurn 107 (VCMT) para tamanho 48-289 mm

SpiroGrooving usa uma ferramenta com movimento espirográfico em um cone. Isso reduz a espessura dos cavacos, permitindo ação de corte leve e maior avanço. Partes da aresta de corte da pastilha têm um comportamento de corte interrompido, evitando que os cavacos longos se enrosquem na ferramenta e no fuso.

SpiroGrooving™ é uma solução exclusiva para usinagem segura e produtiva de canais em anéis de vedação em peças não rotativas. Obtenha o pacote completo para esse método de usinagem exclusivo com ferramentas e gerador de código NC.

Imaginando como programar?

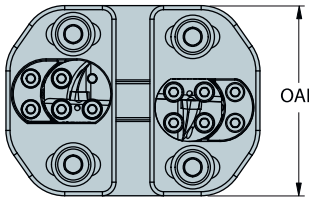
Com o gerador de código NC do SpiroGrooving, você pode obter seu código NC em poucas etapas rápidas. Gerador de código NC - Insira a geometria do canal e os parâmetros de corte e receba um código NC.

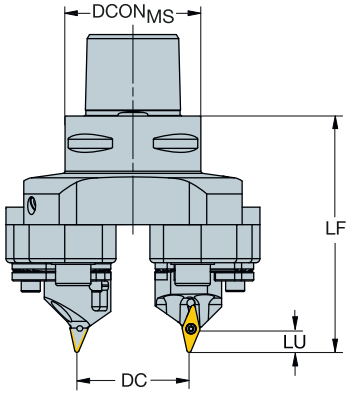
Ferramenta ajustável CoroBore® XL para SpiroGrooving™

Coromant Capto® - Refrigeração interna

KAPR 67°









VCMT

Ajustável radial e axialmente

DCN	DCX		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm DCON$_{MS}$	ADJLX$_{RDL}$	LU	LF	OAH	BAR	KG	CICT	MIID
30.00	75.60	11	C5	1	**820-75VC11X-C5**	50.00	22.80	9.00	87.00	70.00	80	2.655	1	VBMT 11 03 04

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

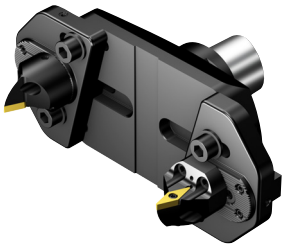
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

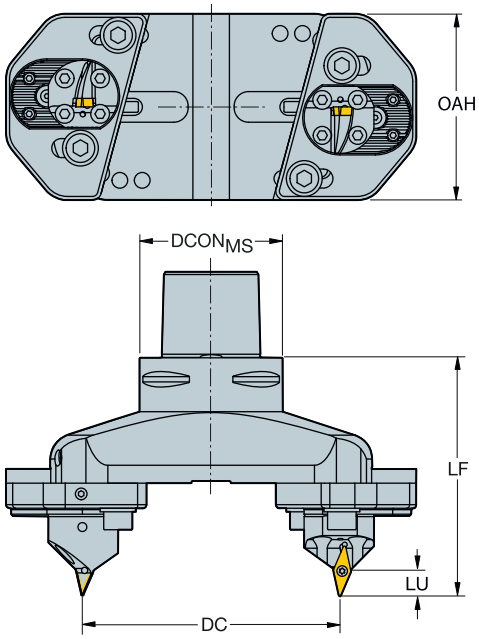
L2 N23 N15

Ferramenta ajustável CoroBore® XL para SpiroGrooving™

Coromant Capto® - Refrigeração interna

KAPR 67°







VBMT

Ajustável radial e axialmente

DCN	DCX	↔	CZCMS	CNSC	Código para pedido	DCONMS	ADJLXRDL	LU	LF	OAH	BAR	KG	CICT	MIID
						Dimensões, mm								
48.00	139.60	16	C6	1	**820-139VB16X-C6**	63.00	45.80	15.00	121.00	104.00	80	5.060	1	VBMT 16 04 08
48.00	139.60	16	C8	1	**820-139VB16X-C8**	80.00	45.80	15.00	133.00	104.00	80	6.390	1	VBMT 16 04 08
98.00	189.60	16	C6	1	**820-189VB16X-C6**	63.00	45.80	15.00	121.00	104.00	80	6.210	1	VBMT 16 04 08
98.00	189.60	16	C8	1	**820-189VB16X-C8**	80.00	45.80	15.00	133.00	104.00	80	7.620	1	VBMT 16 04 08
148.00	239.60	16	C8	1	**820-239VB16X-C8**	80.00	45.80	15.00	133.00	104.00	80	8.820	1	VBMT 16 04 08
198.00	289.60	16	C8	1	**820-289VB16X-C8**	80.00	45.80	15.00	133.00	104.00	80	9.860	1	VBMT 16 04 08

Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

L2 N23 N15

Torneamento por interpolação

Torneando o intorneável

Aplicação

O torneamento por interpolação é um novo método de torneamento flexível desenvolvido para centros de usinagem avançados e máquinas multitarefas com eixo B.

Área de aplicação ISO

P M K N S H



Características e benefícios

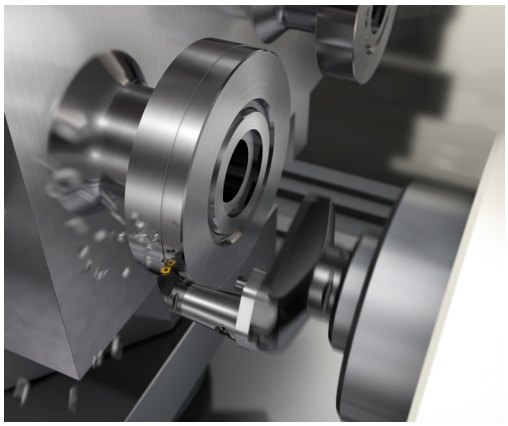
- Solução flexível que possibilita o uso de centros de usinagem com set-ups de ferramentas modulares em vez de máquinas de mandrilamento dedicadas com cabeças para faceamento (eixo W ou U)
- A peça pode ser inteiramente usinada sem ser movimentada - uma enorme vantagem para peças grandes não simétricas
- Custo de investimento em ferramenta reduzido
- Integrada a CoroBore® XL - sistema rígido e confiável para máxima estabilidade para construir montagens em diferentes aplicações (mandrilamento em desbaste, mandrilamento de precisão, usinagem de canais frontais, SpiroGrooving e torneamento por interpolação)

Ferramentas

- Coromant Capto®

Pastilhas

- CoroTurn® 107

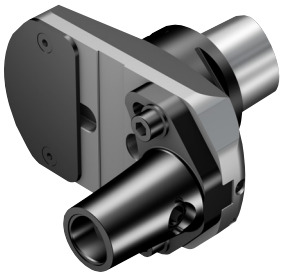


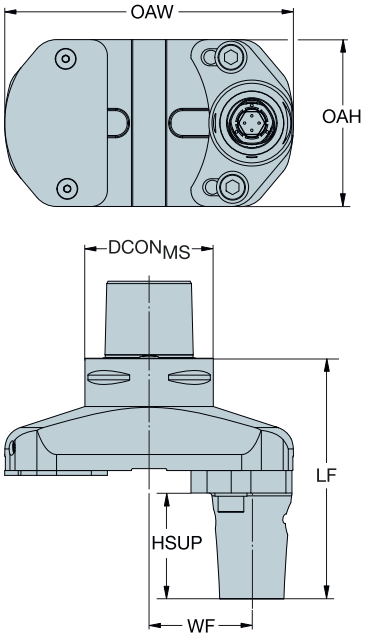
A peça pode ser inteiramente usinada sem ser movimentada - uma enorme vantagem para peças grandes não simétricas.

Adaptador Coromant Capto® ajustável com troca rápida

Para torneamento por interpolação

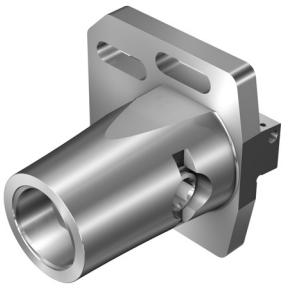
Refrigeração interna

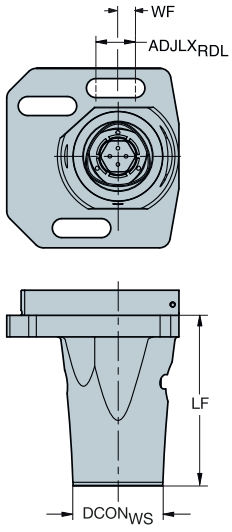




				Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	$ADJLX_{RDL}$	LF	WF	OAH	OAW	BAR	KG
C8	C4	3	**820-100C4-QC-C8**	80.00	40.00	26.00	150.00	51.00	104.00	180.00	70	7.090
C8	C4	3	**820-150C4-QC-C8**	80.00	40.00	51.00	150.00	51.00	104.00	230.00	70	9.430
C8	C4	3	**820-50C4-QC-C8**	80.00	40.00	13.50	150.00	38.50	104.00	130.00	70	5.860

Cassete para CoroBore® XL





				Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	**Código para pedido**	$DCON_{WS}$	$ADJLX_{RDL}$	LF	WF	OAH	OAW	BAR	KG
S24R	C5	4	**S24-R820XLC5QC-095**	50.00	22.00	95.00	9.75	100.00	96.00	70	2.350

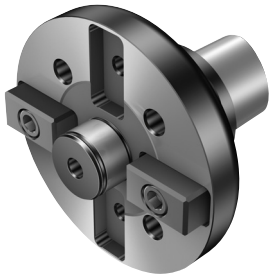
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

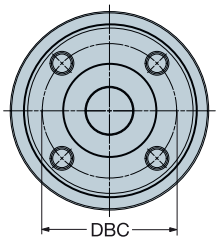
Para cabeças de corte e pastilhas, consulte o catálogo Ferramentas de torneamento.

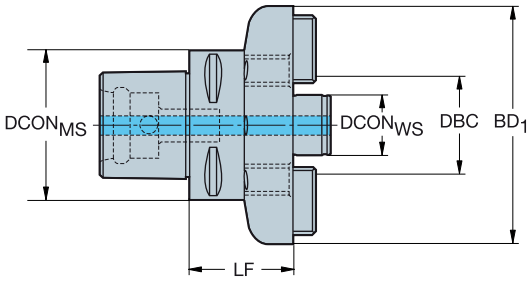
L2 N23 N15

Coromant Capto® para adaptador CoroBore® XL

Refrigeração interna



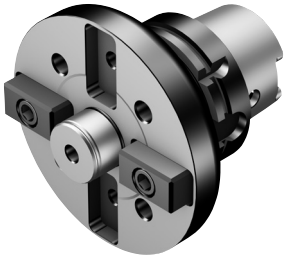


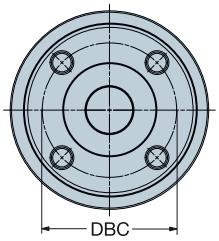


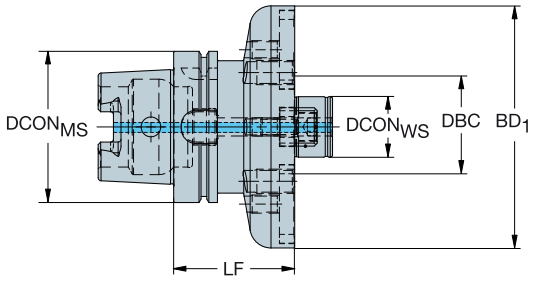
					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LF	BD_1	BAR	KG
C8	40X	1	1	**C8-391.XL-40 065**	80.0	101.6	40.0	65.0	160.0	80	7.09
C10	40X	1	1	**C10-391.XL-40 070**	100.0	101.6	40.0	70.0	160.0	80	8.67

HSK para adaptador CoroBore® XL

Refrigeração interna





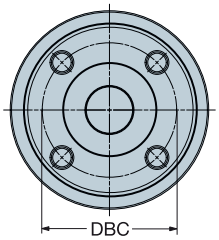


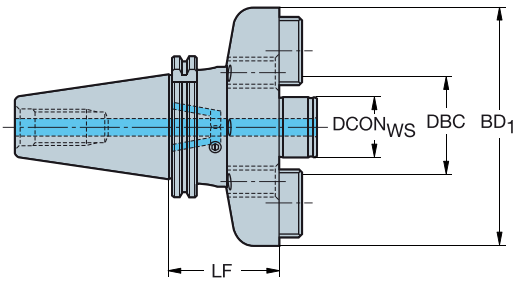
						Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LF	BD_1	BAR	KG
100	40X	1	1	1	**392.410XL-10040 080**	100.0	101.6	40.0	80.0	160.0	80	8.16

ISO 7388-1 para adaptador CoroBore® XL

Refrigeração interna







ISO7388.1/MAS-BT 403

						Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	DBC	$DCON_{WS}$	LF	LB_1	BD_1	BAR	KG
50	40X	7	1	1	**392.644XL-5040 075**	101.6	40.0	75.0	75.0	160.0	80	8.46
	40X	7	1	1	**392.646XL-5040 080**	101.6	40.0	80.0	80.0	160.0	80	8.46

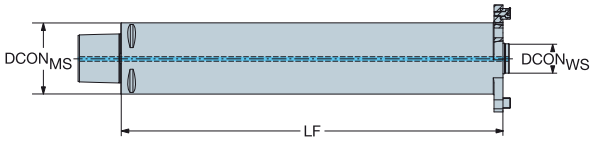
Todos os suportes sólidos CoroBore XL têm a parte traseira retificada da flange e roscas para a opção de montar um calço para aumentar a estabilidade, se necessário. Os calços precisam ser pedidos separadamente e retificados para ajustarem-se à máquina e ao suporte, veja a página de acessórios M12.

N23 N15

Coromant Capto® para corpo da ferramenta CoroBore® XL antivibratória

Refrigeração interna





SilentTools®

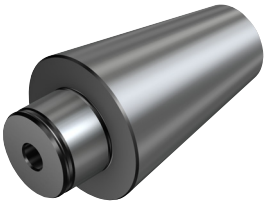
				Dimensões, mm				
							BAR	KG
CZC_{MS}	CZC_{WS}	CNSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF		
C8	33	3	**C8-R822XLA33-F410**	80.00	33.00	410.00	70	17.800
C10	33	3	**C10-R822XLA33-F560**	100.00	33.00	560.00	70	26.400

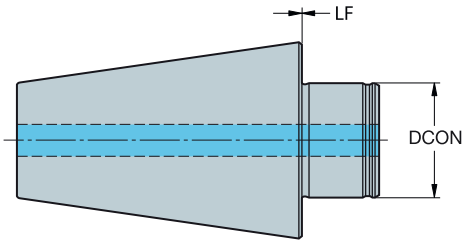
Para componentes de ferramentas de mandrilar e acessórios, visite www.sandvik.coromant.com

Consulte a página K27 para kit de ferramentas para mandrilar que deve ser usado com esse adaptador.

Plugue de centralização

Refrigeração interna





ISO7388.1/MAS-BT 403

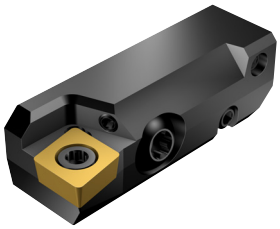
					Dimensões, mm			
						BAR	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	LF			
50	40 plug	1	1	**392.647XL-5040**	0.0	80	8.93	

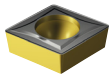
L2 N23 N15

Capsula intercambiável para mandrilamento

Ajuste axial e radial

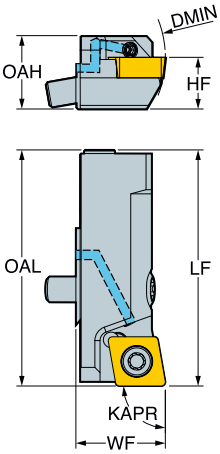
KAPR 90°





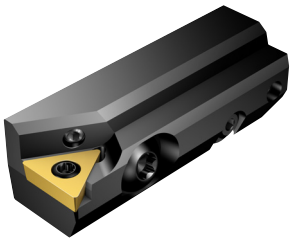
CCMT, CCGT
CCGX, CCET

CCMW



DMIN$_1$		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm ADJLX$_{AXL}$	ADJLX$_{RDL}$	LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
25.0	06	08CB	2	**SCFCR08CBX06**	0.50	0.20	40.00	8.00	13.50	12.20	40.00	70	0.050	1	CCMT 06 02 04
40.0	09	10CB	2	**SCFCR10CBX09**	0.50	0.20	45.00	10.00	16.50	14.20	45.00	70	0.070	1	CCMT 09 T3 08
50.0	12	12CB	2	**SCFCR12CBX12**	0.50	0.20	50.00	12.00	19.00	16.20	50.00	70	0.100	1	CCMT 12 04 08

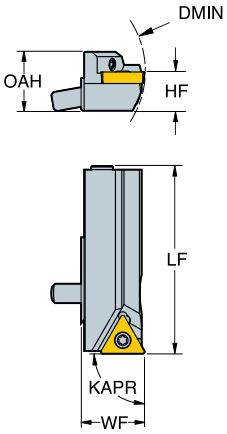
KAPR 90°





TCMT, TCMX,
TCGT, TCGX
TCEX

TCMW



DMIN$_1$		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm ADJLX$_{AXL}$	ADJLX$_{RDL}$	LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
25.0	09	08CB	2	**STFCR08CBX09**	0.50	0.20	40.00	8.00	13.50	12.20	40.00	70	0.050	1	TCMT 09 02 04
40.0	11	10CB	2	**STFCR10CBX11**	0.50	0.20	45.00	10.00	16.50	14.20	45.00	70	0.070	1	TCMT 11 03 04
50.0	16	12CB	2	**STFCR12CBX16**	0.50	0.20	50.00	12.00	19.00	16.20	50.00	70	0.100	1	TCMT 16 T3 08

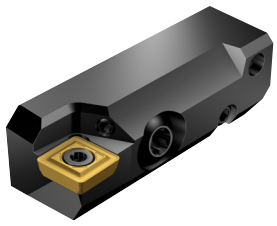
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

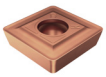
N23 N15

Capsula intercambiável para mandrilamento

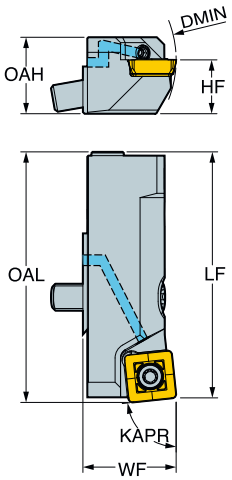
Ajuste axial e radial

KAPR 84°





SPMT



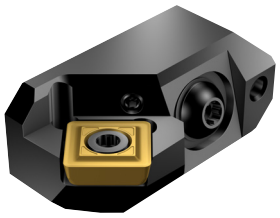
DMIN$_1$		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm ADJLX$_{AXL}$	ADJLX$_{RDL}$	LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
25.0	06	08CB	2	**SSYPR08CBX06**	0.50	0.20	40.00	8.00	13.50	12.20	40.60	70	0.050	1	SPMT 0606-BM
40.0	08	10CB	2	**SSYPR10CBX08**	0.50	0.20	45.00	10.00	16.50	14.20	45.80	70	0.070	1	SPMT 0808-BM
50.0	12	12CB	2	**SSYPR12CBX12**	0.50	0.20	50.00	12.00	19.00	16.20	51.20	70	0.100	1	SPMT 1210-BM

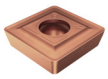
K32 N23 N15

Capsula intercambiável para mandrilamento

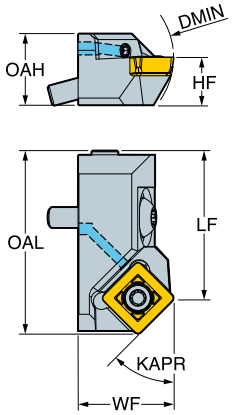
Ajuste axial

KAPR 45°



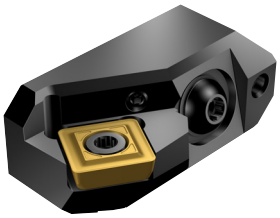


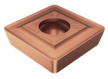
SPMT



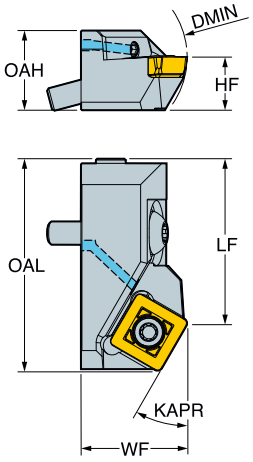
DMIN1		CZCMS	CNSC	Código para pedido	Dimensões, mm ADJLXAXL	LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
20.0	06	06CC	2	**SSSPR06CCX06**	0.50	21.00	6.00	11.00	10.20	24.80	70	0.020	1	SPMT 0606-BM
25.0	08	08CC	2	**SSSPR08CCX08**	0.50	25.00	8.00	16.00	12.20	30.70	70	0.040	1	SPMT 0808-BM
40.0	12	10CC	2	**SSSPR10CCX12**	0.50	32.00	10.00	21.00	14.00	40.20	70	0.070	1	SPMT 1210-BM

KAPR 30°





SPMT



DMIN1		CZCMS	CNSC	Código para pedido	Dimensões, mm ADJLXAXL	LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
20.0	06	06CC	2	**SSTPR06CCX06**	0.50	21.00	6.00	11.00	10.20	25.60	70	0.020	1	SPMT 0606-BM
25.0	08	08CC	2	**SSTPR08CCX08**	0.50	25.00	8.00	16.00	12.20	31.90	70	0.040	1	SPMT 0808-BM
40.0	12	10CC	2	**SSTPR10CCX12**	0.50	32.00	10.00	21.00	14.20	42.00	70	0.080	1	SPMT 1210-BM

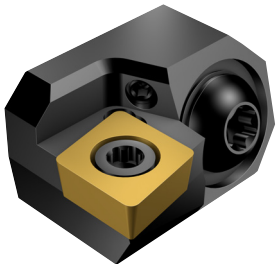
Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

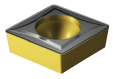
K32 N23 N15

Capsula intercambiável para mandrilamento

Sem ajuste

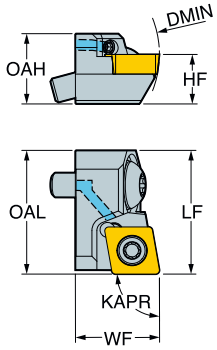
KAPR 90°





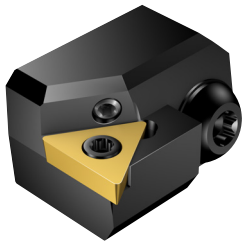

CCMT, CCGT
CCGX, CCET


CCMW



DMIN$_1$		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
20.0	06	06CD	2	**SCFCR06CDX06**	16.00	6.00	11.00	10.20	16.00	70	0.020	1	CCMT 06 02 04
25.0	06	08CD	2	**SCFCR08CDX06**	20.00	8.00	14.00	12.00	20.00	70	0.030	1	CCMT 06 02 04
40.0	09	10CD	2	**SCFCR10CDX09**	25.00	10.00	17.00	14.20	25.00	70	0.050	1	CCMT 09 T3 08
50.0	12	12CD	2	**SCFCR12CDX12**	30.00	12.00	20.00	16.20	30.00	70	0.070	1	CCMT 12 04 08

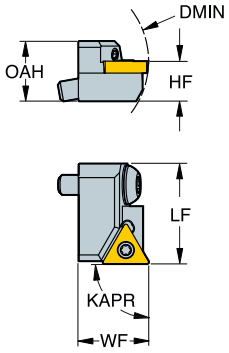
KAPR 90°






TCMT, TCMX,
TCGT, TCGX
TCEX


TCMW



DMIN$_1$		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
20.0	06	06CD	2	**STFCR06CDX06**	16.00	6.00	11.00	10.20	16.00	70	0.020	1	TCMT 06 T1 02
25.0	09	08CD	2	**STFCR08CDX09**	20.00	8.00	14.00	12.20	20.00	70	0.030	1	TCMT 09 02 04
40.0	11	10CD	2	**STFCR10CDX11**	25.00	10.00	17.00	14.20	25.00	70	0.050	1	TCMT 11 03 04
50.0	16	12CD	2	**STFCR12CDX16**	30.00	12.00	20.00	16.20	30.00	70	0.070	1	TCMT 16 T3 08

Para pastilhas, consulte o catálogo de Ferramentas para torneamento.

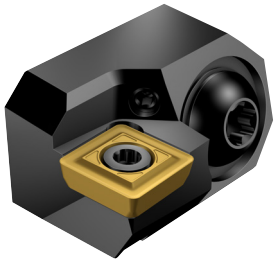

N23

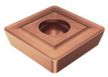

N15

Capsula intercambiável para mandrilamento

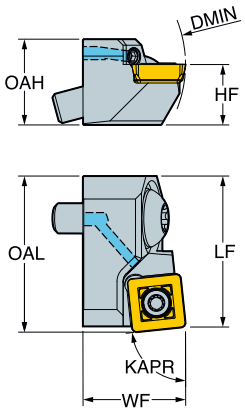
Sem ajuste

KAPR 84°





SPMT

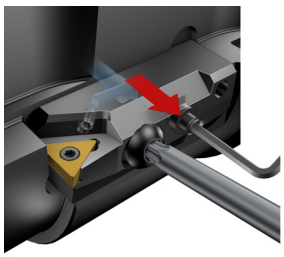


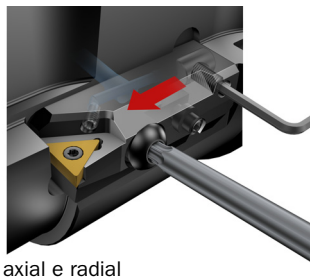
DMIN$_1$		CZC$_{MS}$	CNSC	Código para pedido	Dimensões, mm LF	HF	WF	OAH	OAL	BAR	KG	CICT	MIID
20.0	06	06CD	2	**SSYPR06CDX06**	16.00	6.00	11.00	10.20	16.60	70	0.020	1	SPMT 0606-BM
25.0	08	08CD	2	**SSYPR08CDX08**	20.00	8.00	14.00	12.20	20.80	70	0.030	1	SPMT 0808-BM
40.0	08	10CD	2	**SSYPR10CDX08**	25.00	10.00	17.00	14.00	25.80	70	0.050	1	SPMT 0808-BM
50.0	12	12CD	2	**SSYPR12CDX12**	30.00	12.00	20.00	16.20	31.20	70	0.070	1	SPMT 1210-BM

K32 N23 N15

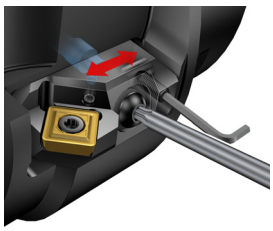
CoroBore®

Cápsulas integradas - CB, CC e CD

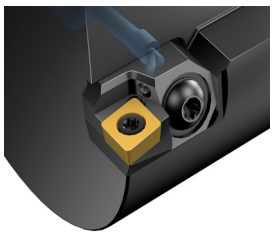




CB - Mandrilamento com ajuste axial e radial

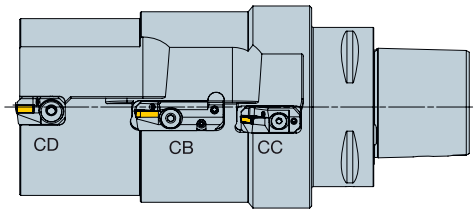


CC - Ajuste axial de chanfro



CD - Fixo, sem ajuste

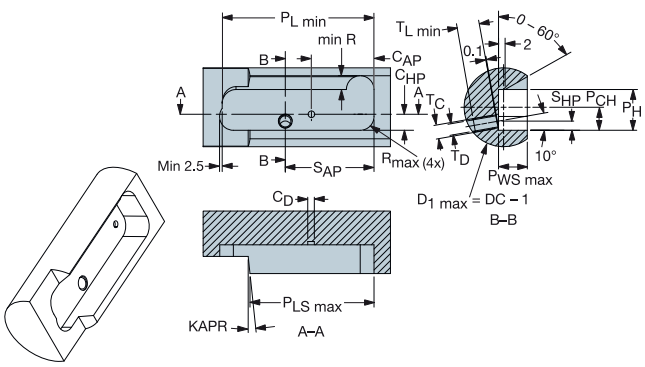




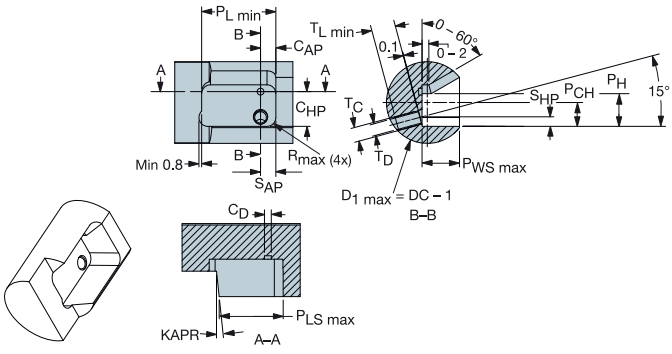
Tamanho/tipo	Conjunto de fixação	Torque de fixação (Nm)	Tamanho da chaveta
06CB	5519 201-01	4.8	15IP
10CB	5519 201-02	9.0	20IP
12CB	5519 201-03	16.0	25IP
06CC	5519 202-01	3.2	10IP
08CC	5519 202-02	4.8	15IP
10CC	5519 202-04	16.0	25IP
06CD	5519 202-01	3.2	10IP
08CD	5519 202-02	4.8	15IP
10CD	5519 202-03	16.0	25IP
12CD	5519 202-04	16.0	25IP

Parâmetros	Descrição
P_L min	Comprimento do bolsão mín.
P_{CH}	Altura de centro do bolsão
P_H	Altura do bolsão
P_{LS} max	Suporte máx. do comprimento do bolsão
KAPR	Ângulo da aresta de corte da ferramenta
P_{WS} max	Suporte máx. da largura do bolsão
R_{max}	Raio máx.
S_{AP}	Posição axial do parafuso
S_{HP}	Posição da altura do parafuso
T_D	Tamanho da rosca
T_C	Diâm. de alargamento da rosca
T_L min	Comprimento mín. da rosca
C_{AP}	Posição axial da refrigeração
C_{HP}	Posição da altura de refrigeração
C_D	Diâm. do furo de refrigeração

Tipo CB

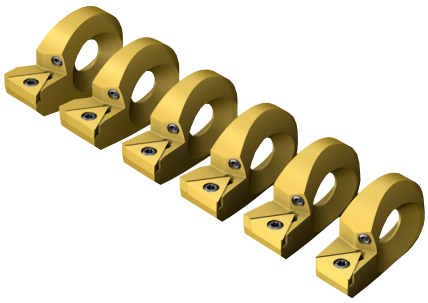


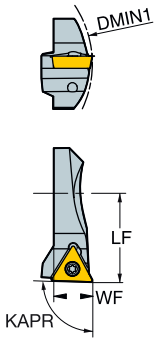
Tipo CC e CD



CoroBore® 826 HP

Jogo de cápsulas





	Código para pedido	Cápsulas incluídas	WF
Conjunto de tamanho B	826B-4-TC09U	R826B-AF17STUC09HP	7.0
		R826B-BF17STUC09HP	7.5
		R826B-CF17STUC09HP	8.0
		R826B-DF17STUC09HP	8.5
Conjunto de tamanho C	826C-6-TC11U	R826C-AF23STUC11HP	10.0
		R826C-BF23STUC11HP	10.5
		R826C-CF23STUC11HP	11.0
		R826C-DF23STUC11HP	11.5
		R826C-EF23STUC11HP	12.0
		R826C-FF23STUC11HP	12.5

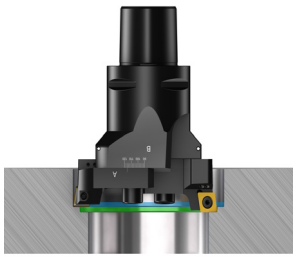
POR

CoroBore® BR20

Operações



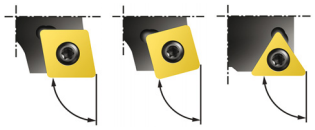
1



2

1. Mandrilamento com aresta dupla
   - Faixa de avanço maior pode ser aplicada.
2. Mandrilamento escalonado com aresta dupla
   - A alta profundidade de corte é aplicável.
   - Funcionalidade embutida no cassete.

Escolha da pastilha





Ângulo de posição	90°	84°	90°	84°
Ângulo de ataque	0°	6°	0°	6°

CoroTurn® 107 com fixação por parafuso

Para aplicações que precisem de forças de corte mais baixas

CoroBore® 111 fixação por parafuso

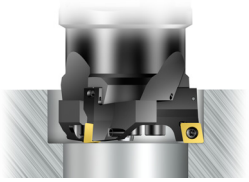
Pastilhas para mandrilamento em desbaste específicas com seleção de classe otimizada para P, M, K, S

Velocidade de corte máx., V_c máx:

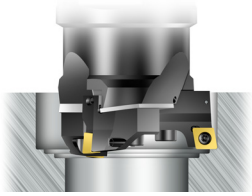
BR20: 1200 m/min
BR20 antivibratório: 900 m/min

CoroBore® BR30

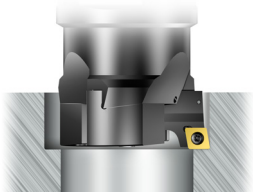
Operações



1



2



3

1. Mandrilamento com multiarestas
   - Faixa de avanço maior pode ser aplicada.

2. Mandrilamento escalonado com multiarestas
   - Alta profundidade de corte pode ser aplicada.
   - O conjunto de calços é necessário e deve ser pedido separadamente. Quando usar o conjunto de calços, a dimensão LF aumenta 1-2 mm.
   - Cassetes de R820x-AR... e R820x-BR... com kappa de 90 graus podem ser combinados.

3. Mandrilamento com aresta única:
   - Duas coberturas são necessárias e devem ser pedidas separadamente.

Capa e conjunto de calços - CoroBore® BR30

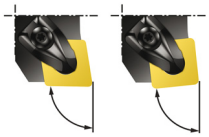
Tamanho do adaptador	Conjunto de calços	Espessura mm	Capa
A	R820A-AS00B	0.5+1	R820A-AC10B
B	R820B-AS00B	0.5+1	R820B-AC11B
C	R820C-AS00B	0.5+1	R820C-AC15B
D	R820D-AS00B	0.5+1	R820D-AC17A
E	R820E-AS00B	0.8+1.6	R820E-AC20A
F	R820F-AS00B	0.8+1.6	R820F-AC22A
G	R820G-AS00B	0.8+1.6	R820G-AC22A
H	R820H-AS00B	1+2	R820H-BC24A

Velocidade de corte máx., Vc máx: Convencional: Vc 1200 m/min

Escolha da pastilha







Ângulo de posição	90°	84°	90° 84°
Ângulo de ataque	0°	6°	0° 6°

CoroTurn® 107 com fixação por parafuso

Para aplicações que precisem de forças de corte mais baixas

CoroBore® 111 fixação por parafuso

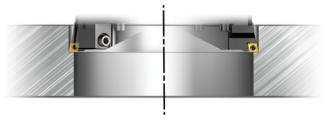
Pastilhas para mandrilamento em desbaste específicas com seleção de classe otimizada para P, M, K, S

T-Max® P, CoroTurn® RC fixação rígida

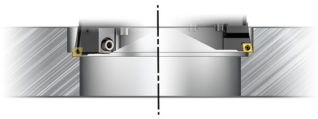
Para aplicações que precisem de pastilhas robustas em condições estáveis

CoroBore® 820 XL

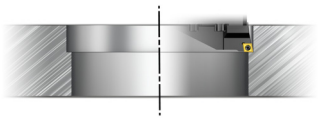
Operações



1



2



3

1. Mandrilamento com aresta dupla
   - Faixa de avanço maior pode ser aplicada.

2. Mandrilamento escalonado com aresta dupla
   - A alta profundidade de corte é aplicável.
   - Cápsulas ajustáveis axialmente +1,5 mm.
   - Cápsulas com ângulo de posição Kappa 90° (0°) (ângulo de avanço) devem ser usadas durante o mandrilamento escalonado.

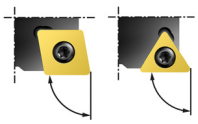
3. Mandrilamento com aresta única:
   - Ajuste a aresta de corte não usada para um diâmetro menor e use-a como um contrapeso.

Suportes para CoroBore XL, diâmetro 150–1.275 mm

Devem ser comprados separadamente. Interfaces disponíveis: C8,C10, HSK-A 100, HSK-A 125, CAT-V 50, ISO 7388/1 50, MAS BT 50

Velocidade de corte máx., V_c máx: Convencional: 1200 m/min, Leve: 600 m/min

Escolha da pastilha



Ângulo de posição	90°	90°
Ângulo de ataque	0°	0°

CoroTurn® 107 com fixação por parafuso

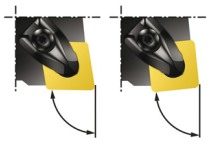
- Para aplicações que precisem de forças de corte mais baixas



90°	84°
0°	6°

CoroBore® 111 fixação por parafuso

- Pastilhas para mandrilamento em desbaste específicas com seleção de classe otimizada para P,M,K,S



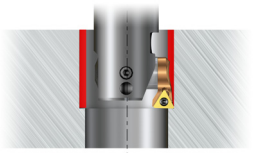
90°	84°
0°	6°

T-Max® P, CoroTurn® RC fixação rígida

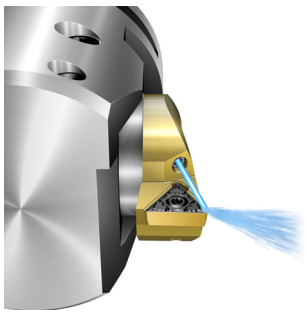
- Para aplicações que precisem de pastilhas robustas em condições estáveis

CoroBore® 826 HP

Operações



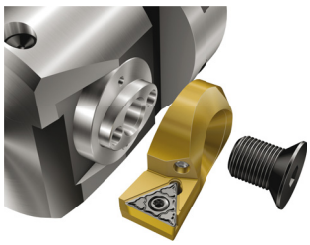
Mandrilamento



- Use a refrigeração de alta precisão para melhor quebra de cavacos



- Sinta os mícrons! Cada incremento do diâmetro de 0,002 mm pode ser sentido com um clique

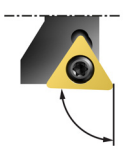


- A cápsula CB826 gira em 90 graus se comparada com a cápsula CB825!

Velocidade de corte máx., V_c máx: V_c 1200 m/min

Escolha da pastilha

Pastilhas CoroTurn® 107



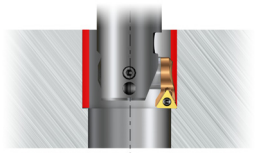
Ângulo de posição 92°
Ângulo de ataque -2°



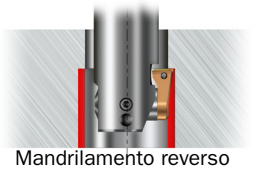
CoroTurn® 107:
TC.. 1103

CoroBore® 825

Operações



Mandrilamento



Mandrilamento reverso

Convencional:

A restrição geométrica (LU) é válida somente quando o diâmetro de mandrilamento (DC) for menos que o diâmetro de acoplamento ($DCON_{MS}$). Profundidade do furo máxima recomendada (para mandrilamento para frente) quando o diâmetro de mandrilamento (DC) for maior que o diâmetro do acoplamento ($DCON_{MS}$).

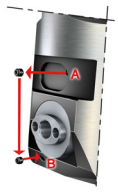
CoroBore® 825 EH:

A posição de aresta de corte simples será corrigida quando usar suportes EH cônicos ou cilíndricos (disponível em aços, metais duros, metais pesados), pois é possível girar a montagem no mandril (usando um CoroChuck 930, fixação térmica, mandril com pinça) para encontrar a posição de corte da aresta simples.

Mandrilamento reverso com CoroBore® 825 (convencional)

1. Remove o parafuso sem cabeça do duto de refrigeração A e parafuse-o no duto de refrigeração B.
2. Trave A (se usado) + B + C com o torque correto.
3. Mude a direção do fuso no sentido anti-horário (M04).

1.



2.



Diâmetro mm	Cassete de extensão	Espessura mm	Extensão do diâmetro mm
19-36	825A-030A	3	+6
35-56	825B-036A	3.6	+7.2
55-1275	825C-048A	4.8	+9.6

Mandrilamento reverso para CoroBore® 825D (antivibratório)



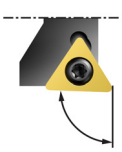
Faixa de diâmetro, mandrilamento para frente, mm	Faixa de diâmetro, mandrilamento reverso, mm	Kit de cápsula para mandrilamento reverso (cápsula 1 pcs, extensão do cassete 1 pcs)	Cápsula para mandrilamento reverso	Cassete de extensão
19-36	31-48	825A-TC06U-BW	L825A-AF11STUC06T1	825A-030A
35-56	48-69	825B-TC06U-BW	L825B-AF15STUC06T1	825B-036A
55-167	69-181	825C-TC09U-BW	L825C-AF20STUC0902	825C-048A

Todos os kits para mandrilamento reverso incluem 1 extensão de cassete e 1 cápsula para mandrilamento reverso. Tenha em mente que os diâmetros de mandrilamento reverso são diferentes do mandrilamento para frente. Consulte a tabela de informações para as faixas de diâmetro corretas.

Velocidade de corte máx., V_c máx**: Convencional:** V_c 1200 m/min, **Leve:** Vc 600 m/min **Antivibratório:** V_c 900m/min

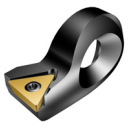
Escolha da pastilha

Pastilhas CoroTurn® 107

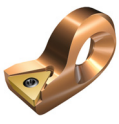




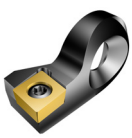
Ângulo de posição	92°	95°
Ângulo de ataque	-2°	-5°



CoroTurn® 107:
TC.. 06, 09
(TC.. 1,2, 1,8)



CoroTurn® 107:
TC.. 1103



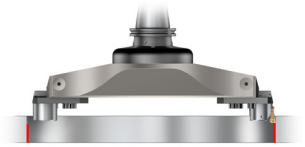
CoroTurn® 107:
CCMT 09
(CCMT3 (2.5))



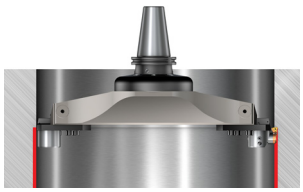
CoroTurn® 111

CoroBore® 825 XL/CoroBore® 826 XL

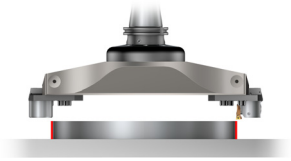
Operações



Mandrilamento



Mandrilamento reverso



Operações externas

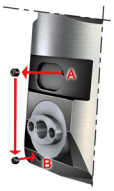
Suportes para CoroBore XL

Devem ser comprados separadamente. Interfaces disponíveis: C8,C10, HSK-A 100, HSK-A 125, CAT-V 50, ISO 7388/1 50, MAS BT 50

Mandrilamento reverso (não para CoroBore® 826HP e 825 SL)

1. Remove o parafuso sem cabeça do duto de refrigeração A e parafuse-o no duto de refrigeração B.
2. Trave A (se usado) + B + C com o torque correto.
3. Mude a direção do fuso no sentido anti-horário (M04).

1.



2.



Diâmetro mm	Cassete de extensão (A)	Espessura mm	Extensão do diâmetro mm
55-1275	825C-048A	+4.8	+9.6

Velocidade de corte máx., V_c máx:

Convencional: V_c 1.200 m/min, Light Weight: Vc 600 m/min, Antivibratória: V_c 600 m/min

Escolha da pastilha

Pastilhas CoroTurn® 107





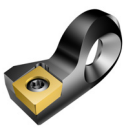
Ângulo de posição	92°	95°
Ângulo de ataque	-2°	-5°



CoroTurn® 107
TCMT1103
(TCMT 22)



CoroTurn® 107:
TC.. 1103



CoroTurn® 107:
CCMT 09
(CCMT3 (2.5))

Recomendações iniciais

- A velocidade de corte deve ser reduzida ao trabalhar com longos balanços. As Silent Tools podem ser usadas para alcançar velocidades de corte mais altas em determinados balanços.

Mandrilamento em desbaste

- O valor inicial máximo recomendado para a velocidade de corte é de 200 m/min para mandrilamento em desbaste, a fim de assegurar o escoamento de cavacos apropriado e um processo estável.

CoroBore® 111		Avanço (f_n) mm/r			Profundidade de corte (a_p), mm			Velocidade de corte (V_c) m/min		
Classe	Código para pedido	Mín.	Max	Rec	Mín.	Max	Rec	Mín.	Max	Rec
4325	SPMT0606-BR	0.10	0.25	0.20	0.6	4.5	2.0	365	460	395
	SPMT0808-BR	0.15	0.35	0.20	0.8	6.5	2.5	325	425	395
	SPMT1212-BR	0.15	0.40	0.25	1.2	9.0	3.0	305	425	365
	SPMT1812-BR	0.20	0.40	0.30	1.2	12.0	3.8	305	395	345
2025	SPMT0606-BM	0.10	0.15	0.10	0.6	4.5	1.8	260	265	265
	SPMT0808-BM	0.10	0.25	0.20	0.8	6.5	2.2	225	265	240
	SPMT1210-BM	0.10	0.30	0.20	1.0	9.0	2.5	205	265	240
	SPMT1810-BM	0.20	0.30	0.25	1.0	12.0	3.0	205	240	225
3210	SPMT0606-BR	0.15	0.30	0.25	0.6	4.5	2.0	285	330	300
	SPMT0808-BR	0.20	0.50	0.30	0.8	6.5	2.5	235	315	285
	SPMT1212-BR	0.20	0.50	0.30	1.2	9.0	3.0	235	315	285
	SPMT1812-BR	0.25	0.50	0.30	1.2	12.0	3.8	235	300	285
1145	SPMT0606-BM	0.10	0.15	0.10	0.6	4.5	1.8	15	20	20
	SPMT0808-BM	0.10	0.15	0.10	0.8	6.5	2.2	15	20	20
	SPMT1210-BM	0.10	0.20	0.15	1.0	9.0	2.5	10	20	15
	SPMT1810-BM	0.10	0.20	0.15	1.0	12.0	3.0	10	20	15

Mandrilamento de precisão

- O valor inicial máximo recomendado para a velocidade de corte é de 240 m/min para mandrilamento de precisão, a fim de assegurar o escoamento de cavacos apropriado e um processo estável.
- O valor inicial recomentado de velocidade de corte para a cabeça de mandrilamento de precisão 391.37A com barras de aço ou metal duro com pastilha é de 90-120 m/min (use valores mais baixos para barras de aço longas). O valor inicial recomendado para as barras de metal duro retificadas é de 60 m/min.
- Veja a matriz abaixo para seleção da geometria e da classe de acordo com sua aplicação de mandrilamento de precisão.
- A profundidade de corte máxima recomendada para o mandrilamento de precisão é de 0,5 mm. Se a ferramenta for ajustada ao menor diâmetro possível, o escoamento de cavacos será mais crítico e pode ser necessário reduzir a profundidade de corte.
- O avanço máximo no mandrilamento de precisão é limitado pelo acabamento superficial desejado. Portanto, a possibilidade de influenciar o formato do cavaco é limitada. Ao usar uma pastilha Wiper, o acabamento superficial pode ser mantido em avanços mais altos. Porém, as pastilhas Wiper exercem maior pressão radial, aumentando o risco de um processo instável.

Essas recomendações iniciais são gerais. Para mais informações detalhadas, visite CoroPlus ToolGuide em www.sandvik.coromant.com

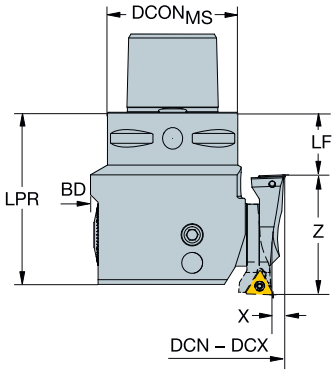
Mandrilamento de precisão												
AP	Raio de ponta	Avanço máx. para acabamento superficial desejado		Material								
		Ra 1.6	Ra 0.8	P		M		K	N	S (níquel)		S (titânio)
0.1-0.15	02	0.08	0.05	PF 5015	L-K 1515	MF-1115	L-K 1515	PF 1515	AL H10	MF 1115	L-K 1115	AL H10
0.15-0.3	04	0.12	0.07	PF 5015	L-K 1515	MF 2015	L-K 1515	PF 4215	AL H10	MF 1115	L-K 1115	AL H10
0.3-0.5	08	0.15	0.10	PF 5015		MF 2015		PF 4215	AL H10	MF 1115	L-K 1115	AL H10

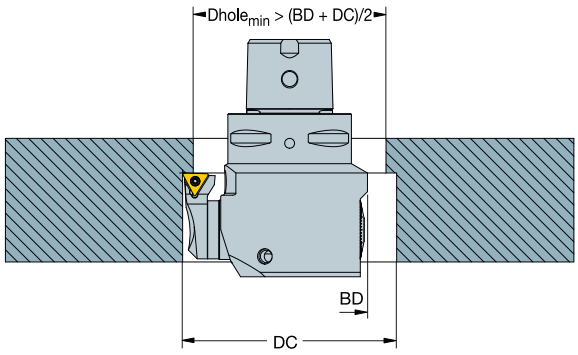
Canais frontais

A primeira escolha é a pastilha do sistema CoroCut 2.
Use a geometria -TF para baixo avanço, geometria -CM para avanço médio e geometria -RM para usinagem de fundo de canais frontais radiais.
As geometrias -TF e -CM têm geometrias positivas que eliminam o risco de arestas postiças. A geometria -TF propicia bom controle de cavacos e gera excelente acabamento superficial devido ao ?desenho Wiper. A -GF permite a seleção de larguras mais amplas.
Dependendo do raio de ponta escolhido:
- Escolha -CM para raios de ponta menores (0,2)
- Escolha -TF para raios de ponta maiores (>0,3)
- Avanço inicial recomendado: 0,15 mm/rot.
- Se precisar de canais com tolerâncias mais estreitas, escolha -GF
- Avanço inicial recomendado: 0,10 mm/rot

Para melhorar o controle de cavacos:
- faixa de avanço mais alta
- velocidade de corte mais alta

Mandrilamento reverso com CoroBore® 825 (convencional)





Tamanho da cápsula	Z (mm)	X (mm)
A	22	3.0
B	34	3.6
C	46	4.8

Mandrilamento reverso para CoroBore® 825

No caso de mandrilamento reverso, LF será reduzido em duas vezes o LF da cápsula. Isso significa que:
- LF – 22 mm para tamanho A (ex. R825A-AF**11**STUC06T1A)
- LF - 34 mm para tamanho B (ex. R825B-AF**17**STUC0902A)
- LF - 46 mm para tamanho C (ex. R825C-AF**23**STUC1103A)
- Atenção ao trocar a direção da rotação -> versão esquerda!

DC aumentará em duas vezes o WF da extensão do cassete. Isso significa que:
- 2 x 3,0 = 6,0 mm para tamanho A (825A-**030**A)
- 2 x 3,6 = 7,2 mm para tamanho B (825B-**036**A)
- 2 x 4,8 = 9,6 mm para tamanho C (825C-**048**A)
- Cálculo do menor diâmetro do furo possível: $Dfuro_{mín.}$ = (BD+DC)/2+1

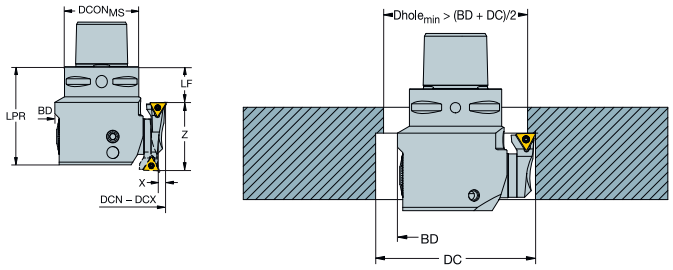
Mandrilamento reverso para CoroBore® 825XL

No caso de mandrilamento reverso, LF será reduzido em duas vezes o LF da cápsula. Isso significa que:
- LF - 46 mm para tamanho C (ex. R825C-AF**23**STUC1103A)
- Atenção ao trocar a direção da rotação -> versão esquerda!

DC aumentará em duas vezes o WF da extensão do cassete. Isso significa que:
- 2 x 4,8 = 9,6 mm para tamanho C (825C-**048**A)
- Cálculo do menor diâmetro do furo possível: $Dfuro_{mín.}$>(DC+DC-26)/2

Adicionalmente, é necessário ajustar a cabeça de mandrilamento de precisão A34 ao máximo.
Exemplo: Faixa de diâmetro para 825-215TC11-C6
- **DCN (mandrilamento reverso)** = (DCN(para frente))+(2x A34-R825 curso)+ (2x cassete de extensão) = 148 mm + 15 mm + 9,6 mm = **172,6 mm**
- **DCX (mandrilamento reverso)**= (DCX(para frente))+ (2x cassete de extensão) = 215 mm +9,6 mm = **224,6 mm**

Mandrilamento reverso para CoroBore® 825D (antivibratório)



	Cápsula				Cassete de extensão		
Tamanho	LF Para frente	WF Para frente	LF Para trás	WF Para trás	WF	X	Z
A	11	5	11	8.0	3.0	6.0	22
B	17	7	15	9.9	3.6	6.5	32
C	23	10	20	12.2	4.8	7.0	43

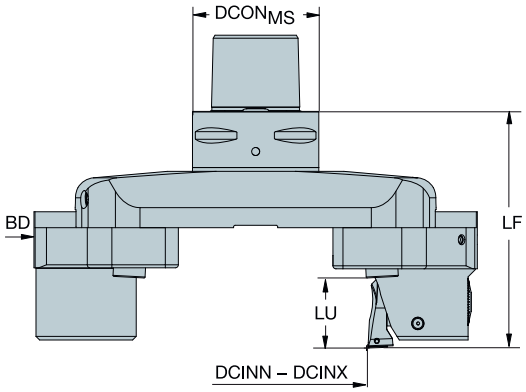
Mandrilamento reverso para CoroBore® 825D

No caso de mandrilamento reverso, LF será reduzido em o LF para frente + LF para trás. Isso significa que:
- LF – 22 mm para tamanho A
- LF – 32 mm para tamanho B
- LF – 43 mm para tamanho C
- Atenção: a direção da rotação continuará para a direita!

DC aumentará em duas vezes o WF da extensão do cassete - WF para frente + WF para trás. Isso significa que:
- DC + 2 x (3,0 - 5,0 + 8,0) = 12,0 mm para tamanho A
- DC + 2 x (3,6 - 7,0 + 9,9) = 13,0 mm para tamanho B
- DC + 2 x (4,8 - 10,0 + 12,2) = 14,0 mm para tamanho C
- Cálculo do menor diâmetro do furo possível: $Dfuro_{mín.}$ = (BD+DC)/2+1

Nota! O mandrilamento reverso é valido somente para CoroBore® 825D e não CoroBore® 825D XL ou CoroBore® 825

Mandrilamento externo



Mandrilamento externo para CoroBore® 825XL

No caso de mandrilamento externo, LF permanecerá o mesmo.
Exemplo: Faixa de diâmetro para 825-215TC11-C6

- **DCN (externo)** = DCN(para frente)-(2x DMIN A34-R825)-(2x A34-R825 curso) = 148 mm-110 mm-15 mm = **23 mm**
- **DCX (externo)** = DCX(para frente)-(2x DMIN A34-R825)-(2x A34-R825 curso) = 215 mm- 110 mm -15 mm = **90 mm**
- Atenção ao trocar a direção da rotação -> versão esquerda!

O comprimento útil para mandrilamento externo no diâmetro de 23 mm até 190 mm (mandrilamento para frente: 148 mm a 315 mm) é 34 mm.
O comprimento útil para mandrilamento externo no diâmetro 173 mm a 1150 mm (mandrilamento para frente: 298 mm a 1275 mm) é 28 mm.

Mandrilamento externo para CoroBore® 826XL

No caso de mandrilamento externo, LF permanecerá o mesmo.
Exemplo: Faixa de diâmetro para 826-200TC11-C6

- **DCN (externo)**= DCN(para frente)-(2xDMIN A34-R825) = 148 mm-110 mm = **38 mm**
- **DCX (externo)** = DCX(para frente)-(2xDMIN A34-R825) = 200 mm- 110 mm = **90 mm**
- Atenção ao trocar a direção da rotação -> versão esquerda!

O comprimento útil para mandrilamento externo no diâmetro de 38 mm até 190 mm (mandrilamento para frente: 148 mm a 300 mm) é 34 mm.
O comprimento útil para mandrilamento externo no diâmetro 188 mm a 1150 mm (mandrilamento para frente: 298 mm a 1260 mm) é 28 mm.

Torque

Coromant Capto®

Tamanho Coromant Capto®	NM
C3	40-50
C4	50-60
C5	90-100
C6-C8	160-180
C10	380

Acoplamento EH Coromant

Tamanho	NM
16	30
20	50
25	65

Parafuso da pastilha

Pastilha	NM
TC05 / TC06 / TP06	0.6
TC09 / TP09 / SP06	0.8
TC1103 / TP1103 / CC06	0.9
SP08	1.7
SP12	2
CC09 / CC12 / SC09 / SC12 / TC16 / TC22 / SP18	3
CN12 / SN12	3.9
CN16 / SN15	6.4

CoroBore® BR10

			Torque para cassete	
Tamanho	DCN mm	DCX mm	NM	Tamanho do parafuso
A	32	38	4.8	M4
B	37	45	4.8	M4
C	44	54	9	M5
D	53	65	16	M6
DX	64	76	16	M6
E	75	91	38	M8
F	90	110	75	M10
G	109	136	75	M10
H	135	170	75	M10

CoroBore® BR20

			Torque para cassete	
Tamanho	DCN mm	DCX mm	NM	Tamanho do parafuso
A	23	29	4.8	M4
B	28	36	4.8	M4
C	35	45	9	M5
D	44	56	16	M6
E	55	71	38	M8
F	70	90	75	M10
G	89	116	75	M10
H	115	150	75	M10

CoroBore® BR30

			Torque para cassete	
Tamanho	DCN mm	DCX mm	NM	Tamanho do parafuso
A	35	45	4.8	M4
B	44	56	9	M5
C	55	70	16	M6
D	69	87	16	M6
E	86	107	38	M8
F	106	137	75	M10
G	136	167	75	M10
H	166	214	75; 120	M10; M12

Torque

CoroBore® 820 XL / 820L XL

Faixa de diâmetro, mm 148-300	NM	Tamanho do parafuso
Braço	100	M12
Cassete	60	M10
Cápsula	60	M10

CoroBore® 820 XL

Faixa de diâmetro, mm 298-1260	NM	Tamanho do parafuso
Braço	200	M16
Extensão do braço	100	M12
Cassete	60	M10
Cápsula	60	M10

CoroBore® 825 XL / 826 XL / 825D XL / 826D XL / 825L XL / 826L XL

Faixa de diâmetro, mm 825: 148-315 826: 148-300	NM	Tamanho do parafuso
Braço	100	M12
Cassete	60	M10
Contrapeso	60	M10
Cabeça para mandrilamento de precisão	14	M6
Parafuso de travamento CB825	6	M8
Parafuso de travamento CB826HP	8	M8
Parafuso da cápsula	6	M8

CoroBore® 825 XL / 826 XL

Faixa de diâmetro, mm 825: 298-1275 826: 298-1260	NM	Tamanho do parafuso
Braço	200	M16
Extensão do braço	100	M12
Cassete	60	M10
Contrapeso	60	M10
Cabeça para mandrilamento de precisão	14	M6
Parafuso de travamento CB825	6	M8
Parafuso de travamento CB826HP	8	M8
Parafuso da cápsula	6	M8

CoroBore® 825, 825D e 826HP

	NM	Tamanho do parafuso
Parafuso da cápsula		
R825A...	1.2	M3.5
R825B..., R826B...	3.0	M5
R825C..., R826C...	6.0	M8
Parafuso de trava		
...R825A-xA18/...R825A-xAA	0.9	M4
...R825A-xAB	1.2	M5
...R825B...;...R826B	3.0; 4.0	M6
...R825C...;...R826C	6.0; 8.0	M8

CoroBore® 824 XS

Faixa de diâmetro, mm
1-20
Parafuso de trava/Barra de mandrilar (Pastilha) parafuso

Tamanho	NM	Tamanho do parafuso
XS04	1.2	M5
XS06	1.2	M5
XS08	3	M6
XS10	3	M6

CoroBore® 825 SL

Faixa de diâmetro, mm 47-150	NM	Tamanho do parafuso
Cabeças para usinagem de canais frontais (S20)	14	M6
Parafuso de trava	8	M10
Contrapeso	8	M10
Lâmina	9	M5

CoroBore® 825 SL XL

Faixa de diâmetro, mm 150-1275	NM	Tamanho do parafuso
Cabeças para usinagem de canais frontais (A34)	14	M6
Parafuso de trava	12	M10
Lâmina	9	M5

Outros componentes, veja CoroBore® 825XL

Cabeça para mandrilamento de precisão, 391.37A / 391.37B / Barras de mandrilar

Diâmetro mm	NM	Tamanho do parafuso
Parafuso para barras de mandrilar:		
12	10	M8
16	10	M8
20	18	M10
Parafuso de trava:		
12	8	M8
16	8	M8
20	12	M10

Adaptadores para ferramentas rotativas

Adaptadores

Coromant Capto® L4-L26

HSK L27-L41

ISO BIG-PLUS® L42-L50

MAS BT BIG-PLUS® L51-L59

ISO 7388-1 L60-L72

MAS-BT L73-L85

DIN 2080 L86-L88

DIN 2079 L89-L90

Haste cilíndrica L91-L98

Haste Weldon L99-L100

Bridgeport L101-L102

Coromant EH L103-L104

ER L105-L107

Indutor de refrigeração L108

Adaptadores antivibratórios

L109

Coromant Capto® L110-L111

HSK L112

Adaptadores

		Lado da máquina					
		Coromant Capto®	**HSK**	**ISO BIG-PLUS®**	**MAS BT BIG-PLUS®**	**ISO 7388-1**	**MAS-BT**
Lado da peça	**Coromant Capto®**	-Extensão -Extensão com troca rápida -Redução L4-L7 Indutor de refrigeração L108	-Adaptador -Troca rápida L28-L30	-Adaptador -Troca rápida L43	-Adaptador -Troca rápida L52-L53	-Adaptador -Troca rápida L61	-Adaptador -Troca rápida L74-L75
	Coromant EH	-Adaptador L8-L9	-Adaptador L31			-Adaptador L62	-Adaptador L76
	Árvore	-Adaptador -Com parafusos de apoio -Para fresa de facear e de disco L10-L12	-Adaptador -Com parafusos de arraste L32-L33	-Adaptador L44	-Adaptador L54	-Adaptador -Com parafusos de apoio -Para fresa de facear e de disco L63-L64	-Adaptador -Com parafusos de apoio -Para fresa de facear e de disco L77-L78
	VL	-Adaptador L13	-Adaptador L33	-Adaptador L45	-Adaptador L55	-Adaptador L65	-Adaptador L80
	Weldon	-Adaptador L14	-Adaptador L34			-Adaptador L66	-Adaptador L79
	MDI	-Adaptador L15	-Adaptador L35				
	ISO 9766	-Adaptador L16 Indutor de refrigeração L108	-Adaptador L36			-Adaptador -Adaptador ajustável L67-L68	-Adaptador -Adaptador ajustável L81
	Weldon/ ISO 9766	-Adaptador L17		-Adaptador L46	-Adaptador L55		
	CoroMill® 327	-Adaptador L17					
	CoroChuck™ 930	-Adaptador L18-L22	-Adaptador L37-L39	-Adaptador L47	-Adaptador L56	-Adaptador L69	-Adaptador L82-L83
	Mandril com fixação por contração	-Adaptador L23	-Adaptador L40				
	ER	-Mandril porta-pinça -Mandril porta-broca L24-L25	Mandril porta-pinça L40	Mandril porta-pinça L49	Mandril porta-pinça L58	Mandril porta-pinça L71	Mandril porta-pinça L84
	CoroChuck™ 970	-Adaptador L26	-Adaptador L41	-Adaptador L50	-Adaptador L59	-Adaptador L72	-Adaptador L85

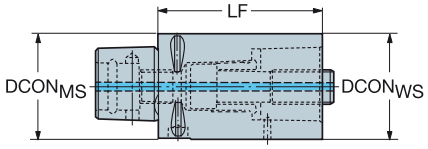
Adaptadores antivibratórios

		Lado da máquina	
		Coromant Capto®	**HSK**
Lado da peça	**Coromant EH**	-Adaptador L110	
	Árvore	-Adaptador -Com parafusos de arraste L111	-Adaptador L112

DIN 2080	DIN 2079	Haste cilíndrica	Haste Weldon	Bridgeport	Coromant EH	ER
-Adaptador L87	-Adaptador -Troca rápida L90					
		-Adaptador L92-L95				-Adaptador L106
		-Com parafusos de arraste L96		-Adaptador L102		
			-Adaptador L100		-Adaptador L104	-Adaptador L107
		Mandril porta-pinça L98			-Adaptador L104	
		-Adaptador L98	-Adaptador L100		-Adaptador L104	

Adaptador de extensão Coromant Capto®





					Dimensões, mm					
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	BAR	NM	KG
C3	C3	3	1	**C3-391.01-32 060A**	32.0	32.0	60.0	80	45.00	0.36
	C3	3	1	**C3-391.01-32 080A**	32.0	32.0	80.0	80	45.00	0.47
	C3	3	1	**C3-391.01-32 095**	32.0	32.0	95.0	80	45.00	0.56
C4	C4	3	1	**C4-391.01-40 060A**	40.0	40.0	60.0	80	55.00	0.57
	C4	3	1	**C4-391.01-40 080A**	40.0	40.0	80.0	80	55.00	0.70
	C4	3	1	**C4-391.01-40 120**	40.0	40.0	120.0	80	55.00	1.11
C5	C5	3	1	**C5-391.01-50 080A**	50.0	50.0	80.0	80	95.00	1.15
	C5	3	1	**C5-391.01-50 100A**	50.0	50.0	100.0	80	95.00	1.38
	C5	3	1	**C5-391.01-50 150**	50.0	50.0	150.0	80	95.00	2.17
C6	C6	3	1	**C6-391.01-63 100A**	63.0	63.0	100.0	80	170.00	2.26
	C6	3	1	**C6-391.01-63 140A**	63.0	63.0	140.0	80	170.00	3.17
	C6	3	1	**C6-391.01-63 185**	63.0	63.0	185.0	80	170.00	4.19
C8	C8	3	1	**C8-391.01-80 100A**	80.0	80.0	100.0	80	170.00	3.70
	C8	3	1	**C8-391.01-80 125A**	80.0	80.0	125.0	80	170.00	4.64
	C8	3	1	**C8-391.01-80 200**	80.0	80.0	200.0	80	170.00	7.47
C10	C10	3	1	**C10-391.01-100 140**	100.0	100.0	140.0	80	380.00	7.93
	C10	3	1	**C10-391.01-100 200**	100.0	100.0	200.0	80	380.00	11.49

Desenho curto, somente para fixação segmentada

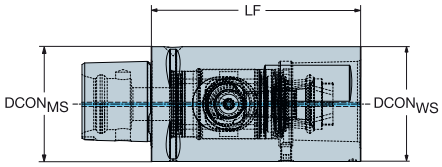
					Dimensões, mm					
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	BAR	NM	KG
C3	C3	3	1	**C3-391.01-32 035**	32.0	32.0	35.0	80	45.00	0.22
C4	C4	3	1	**C4-391.01-40 040**	40.0	40.0	40.0	80	55.00	0.40
C5	C5	3	1	**C5-391.01-50 050**	50.0	50.0	50.0	80	95.00	0.73
C6	C6	3	1	**C6-391.01-63 060**	63.0	63.0	60.0	80	170.00	1.36
C8	C8	3	1	**C8-391.01-80 065**	80.0	80.0	65.0	80	170.00	2.41

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15

Adaptador de extensão Coromant Capto® com troca rápida

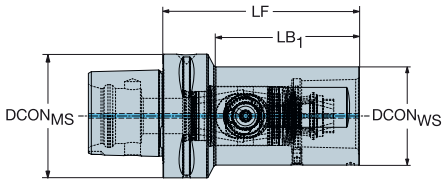




CZCMS	CZCWS	CNSC	CXSC	Código para pedido	Dimensões, mm DCONMS	DCONWS	LF	BAR	NM	KG	RPMX
C4	C4	3	1	C4-QC-C4-085	40.0	40.0	85.0	150	50.00	0.75	39000
C5	C5	3	1	C5-QC-C5-100	50.0	50.0	100.0	150	70.00	1.39	28000
C6	C6	3	1	C6-QC-C6-115	63.0	63.0	115.0	150	90.00	2.53	20000
C8	C8	3	1	C8-QC-C8-145	80.0	80.0	145.0	150	130.00	5.16	14000

Adaptador de redução Coromant Capto® com troca rápida





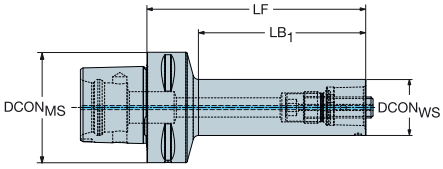
CZCMS	CZCWS	CNSC	CXSC	Código para pedido	Dimensões, mm DCONMS	DCONWS	LF	LB1	BAR	NM	KG	RPMX
C5	C4	3	1	C5-QC-C4-085	50.0	40.0	85.0	60.5	150	50.00	0.95	28000
C6	C5	3	1	C6-QC-C5-100	63.0	50.0	100.0	73.0	150	70.00	1.75	20000
C8	C6	3	1	C8-QC-C6-120	80.0	63.0	120.0	84.5	150	90.00	3.48	14000
C10	C8	3	1	C10-QC-C8-150	100.0	80.0	150.0	108.0	150	130.00	6.83	10000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15

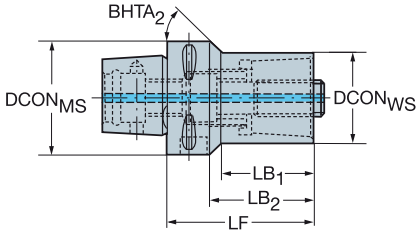
Adaptador de redução Coromant Capto®





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BAR	NM	KG	
C4	C3	3	1	C4-391.02-32 055A	40.0	32.0	55.0	31.0	80	45.00	0.49	
	C3	3	1	C4-391.02-32 120	40.0	32.0	120.0	95.7	80	45.00	0.81	
C5	C3	3	1	C5-391.02-32 060A	50.0	32.0	60.0	34.8	80	45.00	0.68	
	C3	3	1	C5-391.02-32 120	50.0	32.0	120.0	94.4	80	45.00	0.99	
	C4	3	1	C5-391.02-40 065A	50.0	40.0	65.0	40.0	80	55.00	0.80	
	C4	3	1	C5-391.02-40 140	50.0	40.0	140.0	115.5	80	55.00	1.46	
C6	C3	3	1	C6-391.02-32 070A	63.0	32.0	70.0	39.0	80	45.00	1.12	
	C3	3	1	C6-391.02-32 125	63.0	32.0	125.0	95.6	80	45.00	1.43	
	C4	3	1	C6-391.02-40 080A	63.0	40.0	80.0	51.4	80	55.00	1.32	
	C4	3	1	C6-391.02-40 145	63.0	40.0	145.0	116.7	80	55.00	1.86	
	C5	3	1	C6-391.02-50 080A	63.0	50.0	80.0	51.5	80	95.00	1.53	
	C5	3	1	C6-391.02-50 175	63.0	50.0	175.0	148.1	80	95.00	2.79	
C8	C3	3	1	C8-391.02-32 060B	80.0	32.0	60.0	20.7	80	45.00	2.07	
	C3	3	1	C8-391.02-32 135	80.0	32.0	135.0	95.7	80	45.00	2.53	
	C4	3	1	C8-391.02-40 070B	80.0	40.0	70.0	31.4	80	55.00	2.20	
	C4	3	1	C8-391.02-40 155	80.0	40.0	155.0	116.4	80	55.00	2.97	
	C5	3	1	C8-391.02-50 080B	80.0	50.0	80.0	42.8	80	95.00	2.43	
	C5	3	1	C8-391.02-50 185	80.0	50.0	185.0	147.8	80	95.00	3.88	
	C6	3	1	C8-391.02-63 080B	80.0	63.0	80.0	44.5	80	170.00	2.65	
	C6	3	1	C8-391.02-63 200	80.0	63.0	200.0	164.5	80	170.00	5.37	
C10	C6	3	1	C10-391.02-63 200	100.0	63.0	200.0	155.8	80	170.00	6.92	
	C8	3	1	C10-391.02-80 200	100.0	80.0	200.0	158.1	80	170.00	8.92	





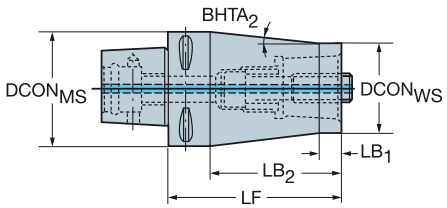
					Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	$BHTA_2$	BAR	NM	KG	
C8	C6	3	1	C8-391.02-63 120A	80.0	63.0	120.0	10.0	89.2	6°	80	170.00	4.10	
C10	C3	3	1	C10-391.02-32 085	100.0	32.0	85.0	36.7	48.2	71°	80	45.00	4.15	
	C4	3	1	C10-391.02-40 090	100.0	40.0	90.0	42.7	53.2	71°	80	55.00	4.25	
	C5	3	1	C10-391.02-50 095	100.0	50.0	95.0	49.1	58.2	70°	80	95.00	4.42	
	C6	3	1	C10-391.02-63 095	100.0	63.0	95.0	50.8	58.2	68°	80	170.00	4.68	
	C8	3	1	C10-391.02-80 100	100.0	80.0	100.0	58.1	63.2	63°	80	170.00	5.25	

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15

Adaptador de redução Coromant Capto®



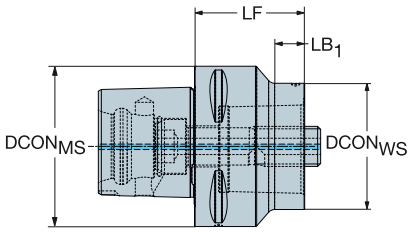


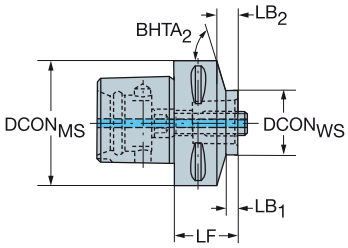
					Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	$BHTA_2$	BAR	NM	KG
C4	C3	3	1	C4-391.02-32 070A	40.0	32.0	70.0	10.0	59.2	6°	80	45.00	0.59
C5	C3	3	1	C5-391.02-32 150	50.0	32.0	150.0	5.0	129.2	4°	80	45.00	1.65
	C4	3	1	C5-391.02-40 085A	50.0	40.0	85.0	10.0	64.2	5°	80	45.00	1.10
C6	C3	3	1	C6-391.02-32 185	63.0	32.0	185.0	5.0	162.2	6°	80	45.00	2.99
	C4	3	1	C6-391.02-40 185	63.0	40.0	185.0	5.0	162.2	4°	80	55.00	3.23
	C5	3	1	C6-391.02-50 110A	63.0	50.0	110.0	10.0	87.2	5°	80	95.00	2.23
C8	C4	3	1	C8-391.02-40 200	80.0	40.0	200.0	5.0	169.2	7°	80	55.00	5.42
	C5	3	1	C8-391.02-50 200	80.0	50.0	200.0	5.0	169.2	5°	80	95.00	5.84

Desenho curto, somente para fixação segmentada

DSGN 2 7







						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_2	BD_3	$BHTA_2$	BAR	NM	KG
C5	C3	3	1	2	C5-391.02-32 033A	50.0	32.0	33.0	5.0	33.0		50.0		0°	80	45.00	0.54
	C4	3	1	2	C5-391.02-40 040A	50.0	40.0	40.0	15.0	40.0		50.0		0°	80	55.00	0.59
C6	C3	3	1	2	C6-391.02-32 032	63.0	32.0	32.0	6.0	32.0		63.0		0°	80	45.00	0.91
	C4	3	1	2	C6-391.02-40 040	63.0	40.0	40.0	11.0	40.0		63.0		0°	80	55.00	0.98
	C5	3	1	2	C6-391.02-50 050A	63.0	50.0	50.0	20.0	50.0		63.0		0°	80	95.00	1.11
C8	C5	3	1	2	C8-391.02-50 045A	80.0	50.0	45.0	5.0	45.0		80.0		0°	80	95.00	2.00
	C6	3	1	2	C8-391.02-63 055A	80.0	63.0	55.0	15.0	55.0		80.0		0°	80	170.00	2.15
C10	C6	3	1	7	C10-391.02-63 055	100.0	63.0	55.0	14.0	19.0	55.0	63.0	100.0	75°	80	170.00	3.70
	C8	3	1	7	C10-391.02-80 065	100.0	80.0	65.0	25.4	29.0	65.0	80.0	100.0	70°	80	170.00	3.92

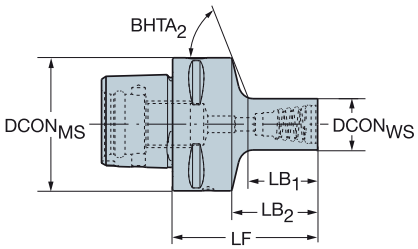
Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15

Coromant Capto® para adaptador Coromant EH

Desenho curto

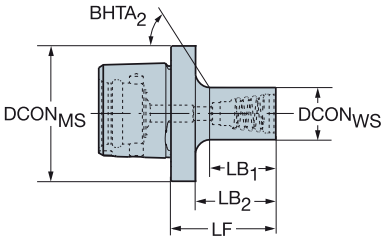




CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	LF	LB$_1$	LB$_2$	BHTA$_2$	BAR	NM	KG	RPMX
C3	E10	3	1	C3-391.EH-10 035	32.0	9.6	35.0	13.2	20.0	58°	150	12.00	0.19	40000
	E12	3	1	C3-391.EH-12 038	32.0	11.6	38.0	16.4	23.0	57°	150	15.00	0.21	40000
	E16	3	1	C3-391.EH-16 043	32.0	15.4	43.0	21.9	28.0	53°	150	30.00	0.26	40000
C4	E10	3	1	C4-391.EH-10 041	40.0	9.6	41.0	13.1	21.0	62°	150	12.00	0.35	39000
	E12	3	1	C4-391.EH-12 044	40.0	11.6	44.0	16.4	24.0	61°	150	15.00	0.36	39000
	E16	3	1	C4-391.EH-16 049	40.0	15.4	49.0	21.9	29.0	59°	150	30.00	0.42	39000
	E20	3	1	C4-391.EH-20 046	40.0	19.2	46.0	19.4	26.0	57°	150	50.00	0.43	39000
	E25	3	1	C4-391.EH-25 051	40.0	24.1	51.0	25.0	31.0	53°	150	65.00	0.50	39000
C5	E10	3	1	C5-391.EH-10 042	50.0	9.6	42.0	12.8	22.0	65°	150	12.00	0.56	28000
	E12	3	1	C5-391.EH-12 045	50.0	11.6	45.0	16.0	25.0	64°	150	15.00	0.57	28000
	E16	3	1	C5-391.EH-16 050	50.0	15.4	50.0	21.5	30.0	63°	150	30.00	0.63	28000
	E20	3	1	C5-391.EH-20 047	50.0	19.2	47.0	19.0	27.0	62°	150	50.00	0.64	28000
	E25	3	1	C5-391.EH-25 052	50.0	24.1	52.0	24.7	32.0	60°	150	65.00	0.70	28000
C6	E10	3	1	C6-391.EH-10 046	63.0	9.6	46.0	13.0	24.0	67°	150	12.00	0.94	20000
	E12	3	1	C6-391.EH-12 049	63.0	11.6	49.0	16.3	27.0	67°	150	15.00	0.95	20000
	E16	3	1	C6-391.EH-16 054	63.0	15.4	54.0	21.8	32.0	66°	150	30.00	1.01	20000
	E20	3	1	C6-391.EH-20 051	63.0	19.2	51.0	19.3	29.0	66°	150	50.00	1.02	20000
	E25	3	1	C6-391.EH-25 056	63.0	24.1	56.0	25.0	34.0	65°	150	65.00	1.08	20000

Desenho curto, somente para fixação segmentada





CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	LF	LB$_1$	LB$_2$	BHTA$_2$	BAR	NM	KG	RPMX
C3	E10	3	1	C3-391.EH-10 026	32.0	9.6	26.0	13.0	18.0	45°	150	12.00	0.15	40000
	E12	3	1	C3-391.EH-12 029	32.0	11.6	29.0	16.0	21.0	45°	150	15.00	0.17	40000
	E16	3	1	C3-391.EH-16 027	32.0	15.4	27.0	14.0	19.0	45°	150	30.00	0.24	55000
	E20	3	1	C3-391.EH-20 031	32.0	19.2	31.0	18.0	23.0	45°	150	50.00	0.27	55000
C4	E10	3	1	C4-391.EH-10 026	40.0	9.6	26.0	13.0	18.0	45°	150	12.00	0.24	39000
	E12	3	1	C4-391.EH-12 029	40.0	11.6	29.0	16.0	21.0	45°	150	15.00	0.26	39000
	E16	3	1	C4-391.EH-16 035	40.0	15.4	35.0	22.0	27.0	45°	150	30.00	0.31	39000
	E20	3	1	C4-391.EH-20 031	40.0	19.2	31.0	18.0	23.0	45°	150	50.00	0.34	39000
	E25	3	1	C4-391.EH-25 038	40.0	24.1	38.0	25.0	30.0	45°	150	65.00	0.28	39000
C5	E10	3	1	C5-391.EH-10 026	50.0	9.6	26.0	13.0	18.0	45°	150	12.00	0.38	28000
	E12	3	1	C5-391.EH-12 029	50.0	11.6	29.0	16.0	21.0	45°	150	15.00	0.40	28000
	E16	3	1	C5-391.EH-16 035	50.0	15.4	35.0	22.0	27.0	45°	150	30.00	0.45	28000
	E20	3	1	C5-391.EH-20 031	50.0	19.2	31.0	18.0	23.0	45°	150	50.00	0.47	28000
	E25	3	1	C5-391.EH-25 038	50.0	24.1	38.0	25.0	30.0	45°	150	65.00	0.53	28000

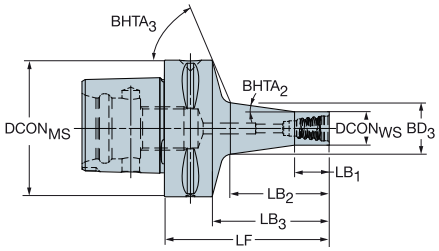
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M1 N23 N15 N3

Coromant Capto® para adaptador Coromant EH

Desenho longo

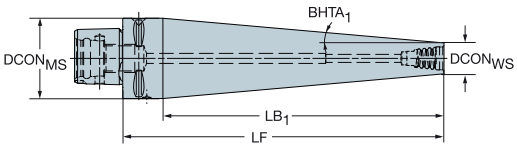




					Dimensões, mm												
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_3	$BHTA_2$	$BHTA_3$	BAR	NM	KG	RPMX
C3	E10	3	1	C3-391.EH-10 049	32.0	9.6	49.0	10.0	28.5	34.0	14.8	8°	57°	150	12.00	0.20	40000
	E12	3	1	C3-391.EH-12 054	32.0	11.6	54.0	12.0	33.9	39.0	17.8	8°	54°	150	15.00	0.25	40000
	E16	3	1	C3-391.EH-16 065	32.0	15.4	65.0	16.0	45.7	50.0	23.8	8°	44°	150	30.00	0.32	40000
C4	E10	3	1	C4-391.EH-10 055	40.0	9.6	55.0	10.0	28.5	32.6	22.1	8°	62°	150	12.00	0.37	39000
	E12	3	1	C4-391.EH-12 060	40.0	11.6	60.0	12.0	33.9	40.0	17.7	8°	61°	150	15.00	0.39	39000
	E16	3	1	C4-391.EH-16 071	40.0	15.4	71.0	16.0	45.7	51.0	23.7	8°	56°	150	30.00	0.48	39000
	E20	3	1	C4-391.EH-20 084	40.0	19.2	84.0	20.0	59.6	64.0	30.3	8°	47°	150	50.00	0.59	39000
	E25	3	1	C4-391.EH-25 074	40.0	24.1	74.0	25.0	49.6	54.0	31.0	8°	45°	150	65.00	0.61	39000
C5	E10	3	1	C5-391.EH-10 056	50.0	9.6	56.0	10.0	28.1	36.0	14.7	8°	65°	150	12.00	0.57	28000
	E12	3	1	C5-391.EH-12 061	50.0	11.6	61.0	12.0	33.5	41.0	17.6	8°	65°	150	15.00	0.60	28000
	E16	3	1	C5-391.EH-16 072	50.0	15.4	72.0	16.0	45.3	52.0	23.6	8°	63°	150	30.00	0.69	28000
	E20	3	1	C5-391.EH-20 085	50.0	19.2	85.0	20.0	59.2	65.0	30.2	8°	59°	150	50.00	0.79	28000
	E25	3	1	C5-391.EH-25 100	50.0	24.1	100.0	25.0	75.3	80.0	38.2	8°	51°	150	65.00	1.01	28000
C6	E10	3	1	C6-391.EH-10 060	63.0	9.6	60.0	10.0	28.4	38.0	14.8	8°	68°	150	12.00	0.95	20000
	E12	3	1	C6-391.EH-12 065	63.0	11.6	65.0	12.0	33.8	43.0	17.7	8°	67°	150	15.00	0.97	20000
	E16	3	1	C6-391.EH-16 076	63.0	15.4	76.0	16.0	45.6	54.0	23.7	8°	66°	150	30.00	1.07	20000
	E20	3	1	C6-391.EH-20 088	63.0	19.2	88.0	20.0	58.4	66.0	30.0	8°	65°	150	50.00	1.16	20000
	E25	3	1	C6-391.EH-25 103	63.0	24.1	103.0	25.0	74.5	81.0	38.0	8°	62°	150	65.00	1.37	20000
C8	E20	3	1	C8-391.EH-20 100	80.0	19.2	100.0	20.0	60.2	70.0	30.5	8°	68°	150	50.00	2.25	14000
	E25	3	1	C8-391.EH-25 114	80.0	24.1	114.0	25.0	75.3	84.0	38.2	8°	68°	150	65.00	2.45	14000

Desenho cônico longo





					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	$BHTA_1$	BAR	NM	KG	RPMX
C3	E10	3	1	C3-391.EH-10 143	32.0	9.6	143.0	128.0	5°	150	12.00	0.55	40000
	E12	3	1	C3-391.EH-12 132	32.0	11.6	132.0	117.0	5°	150	15.00	0.56	40000
	E16	3	1	C3-391.EH-16 110	32.0	15.4	110.0	95.0	5°	150	30.00	0.57	40000
C4	E10	3	1	C4-391.EH-10 128	40.0	9.6	128.0	108.0	8°	150	12.00	0.78	39000
	E12	3	1	C4-391.EH-12 121	40.0	11.6	121.0	101.0	8°	150	15.00	0.78	39000
	E16	3	1	C4-391.EH-16 160	40.0	15.4	160.0	140.0	5°	150	30.00	1.06	39000
	E20	3	1	C4-391.EH-20 139	40.0	19.2	139.0	119.0	5°	150	50.00	1.03	39000
C5	E16	3	1	C5-391.EH-16 143	50.0	15.4	143.0	123.0	8°	150	30.00	1.43	28000
	E20	3	1	C5-391.EH-20 130	50.0	19.2	130.0	110.0	8°	150	50.00	1.40	28000

Para componentes, visite www.sandvik.coromant.com


M1



N23



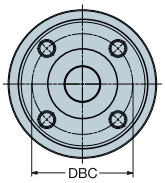
N15


N3

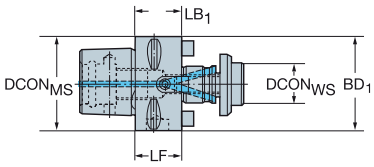
Coromant Capto® para adaptador tipo árvore



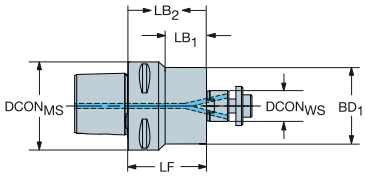
DSGN



1

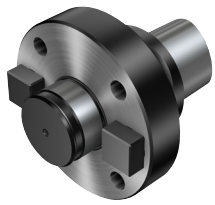


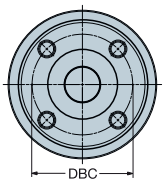
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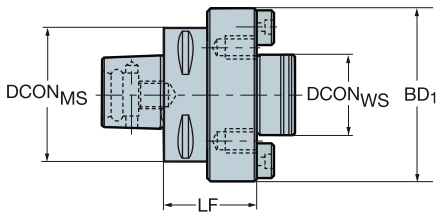


Refrigeração pela flange

						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
C3	16	3	4	1	**C3-391.05C-16 030**	32.0		16.0	30.0	30.0		32.0		80	22.00	0.25	20000
C4	16	3	4	2	**C4-391.05C-16 032**	40.0		16.0	32.0	10.0	32.0	32.0	40.0	80	22.00	0.38	20000
	16	3	4	2	**C4-391.05C-16 055**	40.0		16.0	55.0	33.0	55.0	32.0	40.0	80	22.00	0.40	20000
	22	3	4	1	**C4-391.05C-22 025**	40.0		22.0	25.0	25.0		40.0		80	45.00	0.40	16000
	22	3	4	1	**C4-391.05C-22 055**	40.0		22.0	55.0	55.0		40.0		80	45.00	0.60	16000
C5	16	3	4	2	**C5-391.05C-16 035**	50.0		16.0	35.0	10.0	35.0	32.0	50.0	80	22.00	0.60	20000
	16	3	4	2	**C5-391.05C-16 070**	50.0		16.0	70.0	44.8	70.0	32.0	50.0	80	22.00	0.70	20000
	22	3	4	1	**C5-391.05C-22 025M**	50.0		22.0	25.0	25.0		50.0		80	45.00	0.62	16000
	22	3	4	2	**C5-391.05C-22 070**	50.0		22.0	70.0	47.0	70.0	40.0	50.0	80	45.00	0.90	16000
	27	3	4	1	**C5-391.05C-27 025M**	50.0		27.0	25.0	25.0		56.0		80	80.00	0.68	17000
	32	3	4	1	**C5-391.05C-32 040**	50.0		32.0	40.0	40.0		63.0		80	180.00	1.14	16000
C6	16	3	4	2	**C6-391.05C-16 040**	63.0		16.0	40.0	10.0	40.0	32.0	63.0	80	22.00	1.00	20000
	22	3	4	1	**C6-391.05C-22 025M**	63.0		22.0	25.0	25.0		63.0		80	45.00	0.96	16000
	22	3	4	2	**C6-391.05C-22 080**	63.0		22.0	80.0	40.0	80.0	40.0	63.0	80	45.00	1.40	16000
	27	3	4	1	**C6-391.05C-27 025M**	63.0		27.0	25.0	25.0		63.0		80	80.00	1.01	17000
	27	3	4	2	**C6-391.05C-27 080**	63.0		27.0	80.0	55.0	80.0	50.0	63.0	80	80.00	1.60	17000
	32	3	4	1	**C6-391.05C-32 025M**	63.0		32.0	25.0	25.0		65.0		80	180.00	1.09	16000
	40S	3	4	1	**C6-391.05C-40 050M**	63.0	66.7	40.0	50.0	50.0		87.0		80	300.00	2.40	17000
C8	16	3	4	2	**C8-391.05C-16 050**	80.0		16.0	50.0	10.0	50.0	32.0	80.0	80	22.00	2.10	14000
	22	3	4	1	**C8-391.05C-22 030M**	80.0		22.0	30.0	30.0		80.0		80	45.00	1.86	14000
	22	3	4	2	**C8-391.05C-22 090**	80.0		22.0	90.0	45.0	90.0	40.0	80.0	80	45.00	2.40	14000
	27	3	4	1	**C8-391.05C-27 030M**	80.0		27.0	30.0	30.0		80.0		80	80.00	1.91	14000
	27	3	4	2	**C8-391.05C-27 090**	80.0		27.0	90.0	50.0	90.0	50.0	80.0	80	80.00	2.70	14000
	32	3	4	1	**C8-391.05C-32 030M**	80.0		32.0	30.0	30.0		80.0		80	180.00	2.02	14000
	40S	3	4	1	**C8-391.05C-40 060M**	80.0	66.7	40.0	60.0	60.0		87.0		80	300.00	3.47	14000
C10	27	3	4	2	**C10-391.05C-27 075**	100.0		27.0	75.0	29.0	75.0	60.0	100.0	80	80.00	4.52	10000
	32	3	4	2	**C10-391.05C-32 075**	100.0		32.0	75.0	33.0	75.0	78.0	100.0	80	180.00	5.04	10000
	40S	3	4	1	**C10-391.05C-40 040M**	100.0	66.7	40.0	40.0	40.0		100.0		80	300.00	3.95	10000







			Dimensões, mm							
CZC_{MS}	CZC_{WS}	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LF	BD_1	NM	KG	RPMX
C8	60	**C8-391.05-60 060**	80.0	101.6	60.0	60.0	130.0	180.00	6.03	14000
C10	60	**C10-391.05-60 075**	100.0	101.6	60.0	75.0	130.0	180.00	8.50	10000

Para componentes, visite www.sandvik.coromant.com

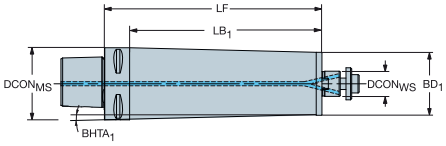
M1 N23 N15

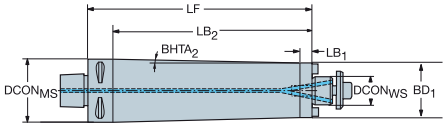
POR

Coromant Capto® para adaptador tipo árvore

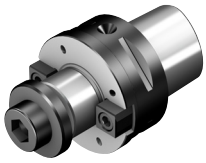
DSGN 3 7

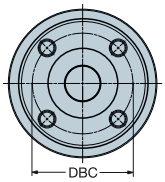


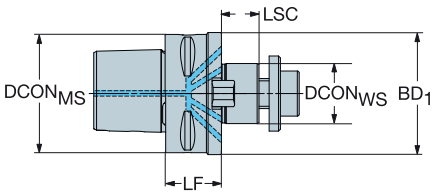




						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	$BHTA_2$	BAR	NM	KG	RPMX
C4	16	3	4	7	**C4-391.05C-16 120**	40.0	16.0	120.0	22.0	100.0	120.0	32.0	32.0	40.0	0°	2°	80	22.00	0.99	18000
C5	22	3	4	7	**C5-391.05C-22 150**	50.0	22.0	150.0	12.0	130.0	150.0	40.0	40.0	50.0	0°	2°	80	45.00	2.04	16000
C6	22	3	4	3	**C6-391.05C-22 120**	63.0	22.0	120.0	98.0	120.0		55.0	63.0		2°	0°	80	45.00	2.82	16000
	22	3	4	3	**C6-391.05C-22 190**	63.0	22.0	190.0	168.0	190.0		55.0	63.0		1°	0°	80	45.00	4.25	14000
C8	27	3	4	3	**C8-391.05C-27 150**	80.0	27.0	150.0	120.0	150.0		65.0	80.0		3°	0°	80	80.00	5.62	12000
	27	3	4	3	**C8-391.05C-27 240**	80.0	27.0	240.0	210.0	240.0		65.0	80.0		2°	0°	80	80.00	8.42	10000







					Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LSC	LF	BD_1	BAR	NM	KG	RPMX
C6	32	3	3	**C6-391.07C-32 030**	63.0		32.0	20	25.0	65.0	80	180.00	1.23	12000
C8	40S	3	3	**C8-391.07C-40 060**	80.0	66.7	40.0	23	60.0	87.0	80	300.00	3.48	10000

Refrigeração para CoroMill QD com discos de apoio. Para discos de apoio, consulte a página M27.

Para componentes, visite www.sandvik.coromant.com

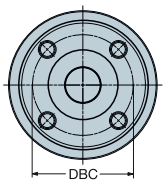
M1 N23 N15

Coromant Capto® para adaptador tipo árvore com adaptador com parafusos de acionamento

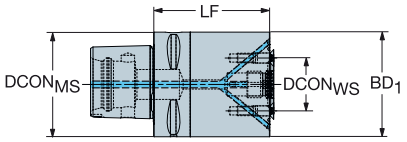
Para CoroMill® QD com refrigeração interna



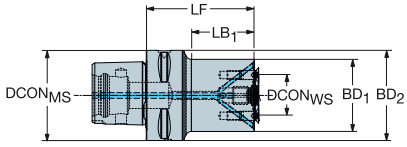
DSGN



1



2



						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
C3	X10	3	3	1	**C3-X10-032-040**	32.0	22.0	10.0	2	40.0	40.0		32.0		80	6.40	0.28	12000
C4	X10	3	3	2	**C4-X10-032-050**	40.0	22.0	10.0	2	50.0	25.5	50.0	32.0	40.0	80	6.40	0.46	12000
	X22	3	3	1	**C4-X22-040-050**	40.0	32.0	22.0	2	50.0	50.0		40.0		80	3.90	0.56	11000
C5	X22	3	3	2	**C5-X22-040-060**	50.0	32.0	22.0	2	60.0	35.0	60.0	40.0	50.0	80	3.90	0.85	11000
	X32	3	3	1	**C5-X32-063-070**	50.0	45.0	32.0	2	70.0	70.0		63.0		80	6.40	1.64	10000
C6	X32	3	3	1	**C6-X32-063-070**	63.0	45.0	32.0	2	70.0	70.0		63.0		80	6.40	1.93	10000
	X40	3	3	1	**C6-X40-080-090**	63.0	63.0	40.0	2	90.0	90.0		80.0		80	70.00	3.46	8000
C8	X40	3	3	1	**C8-X40-080-095**	80.0	63.0	40.0	2	95.0	95.0		80.0		80	70.00	4.34	8000

Para componentes, visite www.sandvik.coromant.com



M1



N23

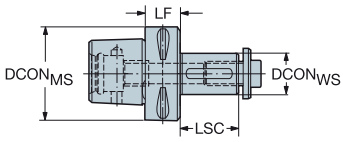


N15

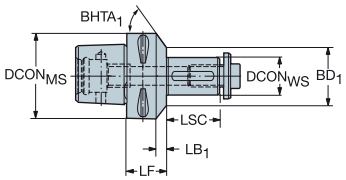
Coromant Capto® para adaptador tipo árvore para fresa de facear e de disco



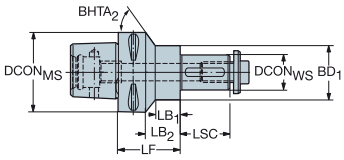
DSGN 1



3

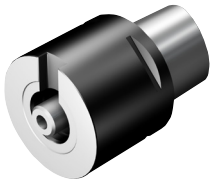


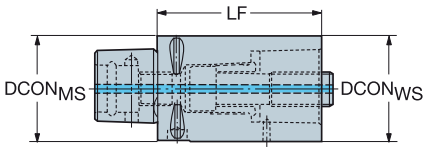
7



						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	$BHTA_2$	BAR	NM	KG	RPMX
C3	16	3	1	3	**C3-391.10-16 020**	32.0	16.0	30	20.0	5.0	20.0		28.0	32.0		21°	0°	80	22.00	0.22	8000
C4	16	3	1	3	**C4-391.10-16 025**	40.0	16.0	30	25.0	5.0	25.0		28.0	40.0		50°	0°	80	22.00	0.37	8000
	22	3	1	3	**C4-391.10-22 025**	40.0	22.0	40	25.0	5.0	25.0		36.0	40.0		22°	0°	80	45.00	0.46	8000
	27	3	1	1	**C4-391.10-27 025**	40.0	27.0	60	25.0	25.0			40.0					80	80.00	0.62	7000
C5	22	3	1	3	**C5-391.10-22 025**	50.0	22.0	40	25.0	5.1	25.0		36.0	50.0		54°	0°	80	45.00	0.72	8000
	27	3	1	3	**C5-391.10-27 025**	50.0	27.0	60	25.0	5.0	25.0		43.0	50.0		35°	0°	80	80.00	0.83	7000
	32	3	1	1	**C5-391.10-32 025**	50.0	32.0	60	25.0	25.0			50.0					80	180.00	0.96	6000
C6	16	3	1	3	**C6-391.10-16 030**	63.0	16.0	30	30.0	7.8	30.0		28.0	63.0		66°	0°	80	22.00	0.97	10000
	22	3	1	3	**C6-391.10-22 030**	63.0	22.0	40	30.0	7.9	30.0		36.0	63.0		59°	0°	80	45.00	1.10	8000
	27	3	1	3	**C6-391.10-27 030**	63.0	27.0	60	30.0	7.8	30.0		43.0	63.0		52°	0°	80	80.00	1.25	7000
	32	3	1	3	**C6-391.10-32 025**	63.0	32.0	60	25.0	3.0	25.0		48.0	63.0		68°	0°	80	180.00	1.30	6000
	40	3	1	3	**C6-391.10-40 025**	63.0	40.0	60	25.0	3.0	25.0		56.0	63.0		49°	0°	80	300.00	1.57	5000
C8	22	3	1	3	**C8-391.10-22 040**	80.0	22.0	40	40.0	10.2	40.0		36.0	80.0		65°	0°	80	45.00	2.26	8000
	27	3	1	3	**C8-391.10-27 030**	80.0	27.0	60	30.0	7.8	30.0		43.0	80.0		67°	0°	80	80.00	2.00	7000
	32	3	1	3	**C8-391.10-32 030**	80.0	32.0	60	30.0	7.6	30.0		48.0	80.0		64°	0°	80	180.00	2.12	6000
	40	3	1	3	**C8-391.10-40 030**	80.0	40.0	60	30.0	7.9	30.0		56.0	80.0		56°	0°	80	300.00	2.38	5000
	50	3	1	3	**C8-391.10-50 030**	80.0	50.0	60	30.0	3.0	30.0		70.0	80.0		58°	0°	80	120.00	2.90	4500
	60	3	1	1	**C8-391.10-60 030**	80.0	60.0	60	30.0	30.0			80.0					80	180.00	3.51	4000
C10	32	3	1	7	**C10-391.10-32 065**	100.0	32.0	60	65.0	20.0	29.0	65.0	48.0	48.0	100.0	0°	71°	80	180.00	4.43	6000
	40	3	1	7	**C10-391.10-40 070**	100.0	40.0	60	70.0	25.0	34.0	70.0	56.0	56.0	100.0	0°	67°	80	300.00	4.87	5000
	50	3	1	7	**C10-391.10-50 055**	100.0	50.0	80	55.0	10.0	19.0	55.0	70.0	70.0	100.0	0°	59°	80	120.00	5.44	4500
	60	3	1	3	**C10-391.10-60 040**	100.0	60.0	90	40.0	4.0	40.0		84.0	100.0		63°	0°	80	180.00	5.93	4000

Coromant Capto® para adaptador VL





					Dimensões, mm					
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	BAR	NM	KG
C8	80	3	1	**C8-391.01-V80 065**	80.0	80.0	65.0	80	170.00	3.05

Para componentes, visite www.sandvik.coromant.com

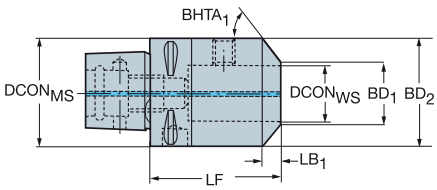
M1 N23 N15

Coromant Capto® para adaptador Weldon

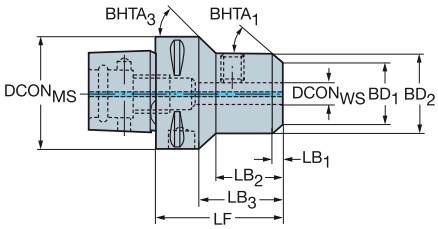
Interface do lado da peça DIN 6535-HB e DIN 1835-B



DSGN 3



DSGN 14



						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_1$	$BHTA_3$	BAR	NM	KG	RPMX
C3	6	3	1	14	**C3-391.20-06 045A**	32.0	6.0	46.0	4.0	27.5	29.5	46.0	17.0	25.0	25.0	32.0	45°	60°	20	3.00	0.24	32000
	8	3	1	14	**C3-391.20-08 045A**	32.0	8.0	46.0	4.0	29.0	31.0	46.0	20.0	28.0	28.0	32.0	45°	45°	20	7.00	0.26	32000
	10	3	1	3	**C3-391.20-10 050**	32.0	10.0	50.0	4.0	50.0			27.0	35.0			45°		20	10.00	0.40	32000
	12	3	1	3	**C3-391.20-12 055**	32.0	12.0	55.0	5.0	55.0			32.0	42.0			45°		20	12.00	0.51	32000
C4	6	3	1	14	**C4-391.20-06 050**	40.0	6.0	50.0	4.0	25.5	29.8	50.0	17.0	25.0	25.0	40.0	45°	60°	20	3.00	0.40	30000
	8	3	1	14	**C4-391.20-08 050**	40.0	8.0	50.0	4.0	26.5	32.5	50.0	20.0	28.0	28.0	40.0	45°	45°	20	7.00	0.40	30000
	10	3	1	14	**C4-391.20-10 050A**	40.0	10.0	51.0	4.0	29.6	31.0	51.0	27.0	35.0	35.0	40.0	45°	60°	20	10.00	0.50	30000
	12	3	1	3	**C4-391.20-12 055A**	40.0	12.0	56.0	5.0	56.0			32.0	42.0			45°		20	12.00	0.61	30000
	14	3	1	3	**C4-391.20-14 055**	40.0	14.0	55.0	5.0	55.0			34.0	44.0			45°		20	12.00	0.62	30000
	16	3	1	3	**C4-391.20-16 055**	40.0	16.0	55.0	5.0	55.0			38.0	48.0			45°		20	15.00	0.70	30000
C5	6	3	1	14	**C5-391.20-06 050**	50.0	6.0	50.0	4.0	25.5	30.0	50.0	17.0	25.0	25.0	50.0	45°	70°	20	3.00	0.62	28000
	8	3	1	14	**C5-391.20-08 050**	50.0	8.0	50.0	4.0	26.0	30.0	50.0	20.0	28.0	28.0	50.0	45°	70°	20	7.00	0.60	28000
	10	3	1	14	**C5-391.20-10 055**	50.0	10.0	55.0	4.0	27.5	35.0	55.0	27.0	35.0	35.0	50.0	45°	45°	20	10.00	0.72	28000
	12	3	1	14	**C5-391.20-12 060**	50.0	12.0	60.0	5.0	36.0	40.0	60.0	32.0	42.0	42.0	50.0	45°	45°	20	12.00	0.90	28000
	14	3	1	14	**C5-391.20-14 060**	50.0	14.0	60.0	5.0	37.0	40.0	60.0	34.0	44.0	44.0	50.0	45°	45°	20	12.00	0.90	28000
	16	3	1	14	**C5-391.20-16 060**	50.0	16.0	60.0	5.0	39.0	40.0	60.0	38.0	48.0	48.0	50.0	45°	45°	20	15.00	1.00	28000
	18	3	1	3	**C5-391.20-18 060**	50.0	18.0	60.0	5.0	60.0			40.0	50.0			45°		20	15.00	0.95	28000
	20	3	1	3	**C5-391.20-20 060**	50.0	20.0	60.0	5.0	60.0			42.0	52.0			45°		20	20.00	1.00	28000
	25	3	1	3	**C5-391.20-25 080**	50.0	25.0	80.0	8.0	80.0			49.0	65.0			45°		20	25.00	1.68	28000
C6	6	3	1	14	**C6-391.20-06 055**	63.0	6.0	55.0	4.0	25.0	32.7	55.0	17.0	25.0	25.0	63.0	45°	68°	20	3.00	0.99	20000
	8	3	1	14	**C6-391.20-08 055**	63.0	8.0	55.0	4.0	26.0	33.1	55.0	20.0	28.0	28.0	63.0	45°	68°	20	7.00	1.00	20000
	10	3	1	14	**C6-391.20-10 060**	63.0	10.0	60.0	4.0	30.0	38.1	60.0	27.0	35.0	35.0	63.0	45°	60°	20	10.00	1.12	20000
	12	3	1	14	**C6-391.20-12 060**	63.0	12.0	60.0	5.0	33.0	37.9	60.0	32.0	42.0	42.0	63.0	45°	65°	20	12.00	1.20	20000
	14	3	1	14	**C6-391.20-14 060**	63.0	14.0	60.0	5.0	33.5	37.9	60.0	34.0	44.0	44.0	63.0	45°	65°	20	12.00	1.20	20000
	16	3	1	14	**C6-391.20-16 065**	63.0	16.0	65.0	5.0	35.5	43.0	65.0	38.0	48.0	48.0	63.0	45°	45°	20	15.00	1.36	20000
	18	3	1	14	**C6-391.20-18 065**	63.0	18.0	65.0	5.0	39.0	42.7	65.0	40.0	50.0	50.0	63.0	45°	60°	20	15.00	1.38	20000
	20	3	1	14	**C6-391.20-20 065**	63.0	20.0	65.0	5.0	37.5	43.0	65.0	42.0	52.0	52.0	63.0	45°	45°	20	20.00	1.30	20000
	25	3	1	3	**C6-391.20-25 080**	63.0	25.0	80.0	8.0	80.0			49.0	65.0			45°		20	25.00	2.00	20000
	32	3	1	3	**C6-391.20-32 090**	63.0	32.0	90.0	8.0	90.0			56.0	72.0			45°		20	45.00	2.48	20000
	40	3	1	3	**C6-391.20-40 100**	63.0	40.0	100.0	8.0	100.0			74.0	90.0			45°		20	45.00	3.88	20000
C8	6	3	1	14	**C8-391.20-06 070**	80.0	6.0	70.0	4.0	27.0	40.0	70.0	17.0	25.0	25.0	80.0	45°	65°	20	3.00	2.18	14000
	8	3	1	14	**C8-391.20-08 070**	80.0	8.0	70.0	4.0	28.0	40.0	70.0	20.0	28.0	28.0	80.0	45°	65°	20	7.00	2.18	14000
	10	3	1	14	**C8-391.20-10 070**	80.0	10.0	70.0	4.0	29.5	40.0	70.0	27.0	35.0	35.0	80.0	45°	65°	20	10.00	2.22	14000
	12	3	1	14	**C8-391.20-12 070**	80.0	12.0	70.0	5.0	31.0	40.0	70.0	32.0	42.0	42.0	80.0	45°	65°	20	12.00	2.31	14000
	14	3	1	14	**C8-391.20-14 070**	80.0	14.0	70.0	5.0	31.6	40.0	70.0	34.0	44.0	44.0	80.0	45°	65°	20	12.00	2.38	14000
	16	3	1	14	**C8-391.20-16 070**	80.0	16.0	70.0	5.0	33.0	40.0	70.0	38.0	48.0	48.0	80.0	45°	65°	20	15.00	2.38	14000
	18	3	1	14	**C8-391.20-18 070**	80.0	18.0	70.0	5.0	33.0	40.0	70.0	40.0	50.0	50.0	80.0	45°	65°	20	15.00	2.40	14000
	20	3	1	14	**C8-391.20-20 070**	80.0	20.0	70.0	5.0	35.5	40.0	70.0	42.0	52.0	52.0	80.0	45°	70°	20	20.00	2.39	14000
	25	3	1	14	**C8-391.20-25 080**	80.0	25.0	80.0	8.0	53.7	58.0	80.0	49.0	65.0	65.0	80.0	45°	60°	20	25.00	2.73	14000
	32	3	1	14	**C8-391.20-32 080**	80.0	32.0	80.0	8.0	55.7	58.0	80.0	56.0	72.0	72.0	80.0	45°	60°	20	45.00	2.88	14000
	40	3	1	3	**C8-391.20-40 110**	80.0	40.0	110.0	8.0	110.0			74.0	90.0			45°		20	45.00	5.05	14000
	50	3	1	3	**C8-391.20-50 120**	80.0	50.0	120.0	8.0	120.0			84.0	100.0			45°		20	60.00	5.91	14000

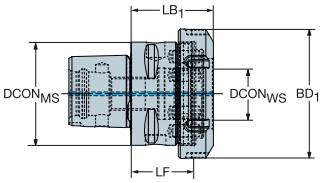
Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

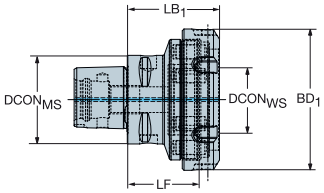
Coromant Capto® para adaptador MDI



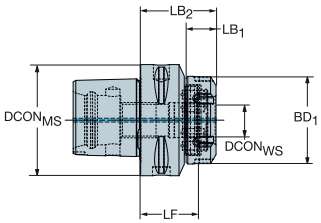
DSGN 1



1



2



						Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
C3	MDI-20	3	1	1	**C3-DM20-N-032**	32.0	20.0	32.0	42.0		49.7		80	135.00	0.31	55000
C4	MDI-20	3	1	1	**C4-DM20-N-028**	40.0	20.0	28.0	38.0		49.7		80	135.00	0.40	39000
	MDI-25	3	1	1	**C4-DM25-N-035**	40.0	25.0	35.0	45.0		62.7		80	170.00	0.58	39000
	MDI-32	3	1	1	**C4-DM32-N-042**	40.0	32.0	42.0	52.0		67.7		80	200.00	0.71	39000
C5	MDI-20	3	1	2	**C5-DM20-N-028**	50.0	20.0	28.0	18.0	38.0	49.7	50.0	80	135.00	0.57	28000
	MDI-25	3	1	1	**C5-DM25-N-030**	50.0	25.0	30.0	40.0		62.7		80	170.00	0.67	28000
	MDI-32	3	1	1	**C5-DM32-N-035**	50.0	32.0	35.0	45.0		67.7		80	200.00	0.77	28000
	MDI-40	3	1	1	**C5-DM40-N-040**	50.0	40.0	40.0	52.0		79.7		80	230.00	1.00	28000
C6	MDI-20	3	1	2	**C6-DM20-N-033**	63.0	20.0	33.0	18.0	43.0	49.7	63.0	80	135.00	0.96	20000
	MDI-25	3	1	2	**C6-DM25-N-030**	63.0	25.0	30.0	18.0	40.0	62.7	63.0	80	170.00	1.00	20000
	MDI-32	3	1	1	**C6-DM32-N-030**	63.0	32.0	30.0	40.0		67.7		80	200.00	0.99	20000
	MDI-40	3	1	1	**C6-DM40-N-040**	63.0	40.0	40.0	52.0		79.7		80	230.00	1.34	20000
C8	MDI-32	3	1	2	**C8-DM32-N-040**	80.0	32.0	40.0	18.0	50.0	67.7	80.0	80	200.00	2.01	14000
	MDI-40	3	1	2	**C8-DM40-N-040**	80.0	40.0	40.0	22.0	52.0	79.7	80.0	80	230.00	2.09	14000

Para componentes, visite www.sandvik.coromant.com


M1



N23

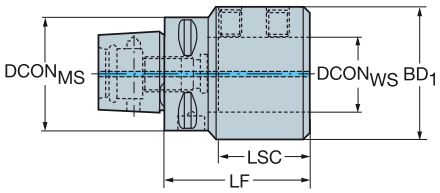


N15

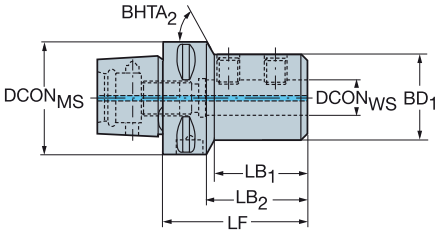
Coromant Capto® para adaptador ISO 9766



DSGN 1



7



						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_2$	BAR	NM	KG	RPMX
C3	16	3	1	1	**C3-391.27-16 056**	32.0	16.0	49	56.0	56.0			36.0				20	10.00	0.40	32000
	20	3	1	1	**C3-391.27-20 060**	32.0	20.0	51	60.0	60.0			40.0				20	12.00	0.46	32000
	25	3	1	1	**C3-391.27-25 080**	32.0	25.0	57	80.0	80.0			45.0				20	20.00	0.70	32000
C4	16	3	1	7	**C4-391.27-16 056**	40.0	16.0	49	56.0	32.5	36.0	56.0	36.0	36.0	40.0	30°	20	10.00	0.49	30000
	20	3	1	1	**C4-391.27-20 060**	40.0	20.0	51	60.0	60.0			40.0				20	12.00	0.55	30000
	25	3	1	1	**C4-391.27-25 077**	40.0	25.0	57	77.0	77.0			45.0				20	20.00	0.75	30000
	32	3	1	1	**C4-391.27-32 088**	40.0	32.0	61	88.0	88.0			52.0				20	30.00	0.99	30000
C5	16	3	1	7	**C5-391.27-16 065**	50.0	16.0	49	65.0	41.7	45.0	65.0	36.0	36.0	50.0	65°	20	10.00	0.75	28000
	20	3	1	7	**C5-391.27-20 060**	50.0	20.0	51	60.0	37.7	40.0	60.0	40.0	40.0	50.0	65°	20	12.00	0.74	28000
	25	3	1	7	**C5-391.27-25 071**	50.0	25.0	57	71.0	46.7	51.0	71.0	45.0	45.0	50.0	30°	20	20.00	0.46	28000
	32	3	1	1	**C5-391.27-32 075**	50.0	32.0	61	75.0	75.0			52.0				20	30.00	0.97	28000
	40	3	1	1	**C5-391.27-40 100**	50.0	40.0	71	100.0	100.0			65.0				20	40.00	1.79	28000
C6	16	3	1	7	**C6-391.27-16 070**	63.0	16.0	49	70.0	43.0	47.9	70.0	36.0	36.0	63.0	70°	20	10.00	1.14	20000
	20	3	1	7	**C6-391.27-20 070**	63.0	20.0	51	70.0	43.8	48.0	70.0	40.0	40.0	63.0	70°	20	12.00	1.18	20000
	25	3	1	7	**C6-391.27-25 070A**	63.0	25.0	57	72.0	45.8	50.0	72.0	45.0	45.0	63.0	65°	20	20.00	1.23	20000
	32	3	1	7	**C6-391.27-32 075**	63.0	32.0	61	75.0	49.8	53.0	75.0	52.0	52.0	63.0	60°	20	30.00	1.30	20000
	40	3	1	1	**C6-391.27-40 085**	63.0	40.0	71	85.0	85.0			65.0				20	40.00	1.74	20000
	50	3	1	1	**C6-391.27-50 115**	63.0	50.0	81	115.0	115.0			75.0				20	45.00	2.70	20000
C8	16	3	1	7	**C8-391.27-16 080**	80.0	16.0	49	80.0	42.0	50.0	80.0	36.0	36.0	80.0	70°	20	10.00	2.25	14000
	20	3	1	7	**C8-391.27-20 080**	80.0	20.0	51	80.0	43.8	49.9	80.0	40.0	40.0	80.0	73°	20	12.00	2.26	14000
	25	3	1	7	**C8-391.27-25 085**	80.0	25.0	57	85.0	49.8	55.1	85.0	45.0	45.0	80.0	73°	20	20.00	2.32	14000
	32	3	1	7	**C8-391.27-32 090**	80.0	32.0	61	90.0	53.8	60.0	90.0	52.0	52.0	80.0	66°	20	30.00	2.46	14000
	40	3	1	7	**C8-391.27-40 095**	80.0	40.0	71	95.0	62.8	65.1	95.0	65.0	65.0	80.0	73°	20	40.00	2.78	14000
	50	3	1	7	**C8-391.27-50 100**	80.0	50.0	81	100.0	68.6	70.0	100.0	75.0	75.0	80.0	61°	20	45.00	2.94	14000

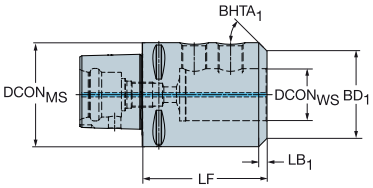
Para componentes, visite www.sandvik.coromant.com

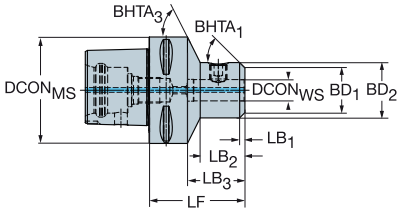
M1 N23 N15

Coromant Capto® para adaptador Weldon / ISO 9766

DSGN 3 14





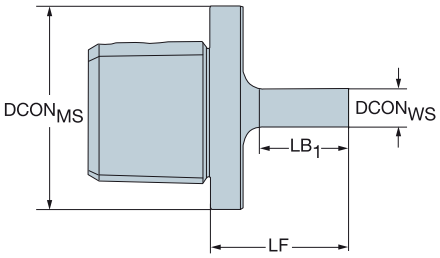


						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_1$	$BHTA_3$	BAR	NM	KG	RPMX
C10	20	3	1	14	**C10-391.23-20 090**	100.0	20.0	90.0	5.0	42.0	54.0	90.0	42.0	52.0	52.0	100.0	45°	63°	20	20.00	4.00	10000
	25	3	1	14	**C10-391.23-25 105**	100.0	25.0	105.0	8.0	61.0	69.0	105.0	49.0	65.0	65.0	100.0	45°	65°	20	25.00	5.09	10000
	32	3	1	14	**C10-391.23-32 110**	100.0	32.0	110.0	8.0	66.0	74.0	110.0	56.0	72.0	72.0	100.0	45°	60°	20	45.00	5.41	10000
	40	3	1	14	**C10-391.23-40 115**	100.0	40.0	115.0	8.0	76.0	79.0	115.0	74.0	90.0	90.0	100.0	45°	59°	20	45.00	6.58	10000
	50	3	1	3	**C10-391.23-50 120**	100.0	50.0	120.0	8.0	120.0			84.0	100.0			45°		20	60.00	7.20	10000

Coromant Capto® para adaptador CoroMill® 327

Desenho curto, somente para fixação segmentada





			Dimensões, mm						
CZC_{MS}	CZC_{WS}	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	NM	KG	RPMX
C3	09	**C3-391.327-09 035**	32.0	9.0	35.0	22.0	4.30	0.14	55000
C4	09	**C4-391.327-09 035**	40.0	9.0	35.0	22.0	4.30	0.21	39000
	12	**C4-391.327-12 043**	40.0	12.0	43.0	30.0	6.50	0.29	39000
C5	12	**C5-391.327-12 043**	50.0	12.0	43.0	30.0	6.50	0.41	28000
	14	**C5-391.327-14 048**	50.0	14.3	48.0	35.0	6.50	0.43	28000

Para componentes, visite www.sandvik.coromant.com


M1



N23



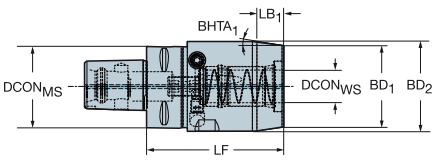
N15

Coromant Capto® para CoroChuck™ 930

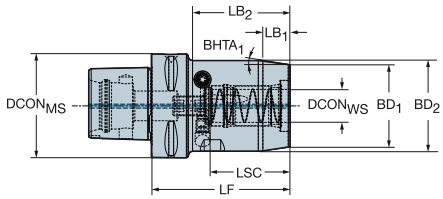
Desenho para usinagem pesada



DSGN 3



6



						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
C4	20	3	1	3	**930-C4-HD-20-084**	40.0	20.0	51	84.0	17.8	84.0		50.0	55.0		8°	80	10.00	1.25	39000
C5	20	3	1	3	**930-C5-HD-20-082**	50.0	20.0	51	82.0	17.8	82.0		50.0	55.0		8°	80	10.00	1.40	28000
	25	3	1	3	**930-C5-HD-25-088**	50.0	25.0	57	88.0	18.8	88.0		57.0	65.0		12°	80	10.00	1.86	28000
C6	20	3	1	6	**930-C6-HD-20-084**	63.0	20.0	51	84.0	17.8	59.0	84.0	50.0	55.0	63.0	8°	80	10.00	1.76	20000
	25	3	1	3	**930-C6-HD-25-087**	63.0	25.0	57	87.0	18.8	87.0		57.0	65.0		12°	80	10.00	2.16	20000
	25	3	1	3	**930-C6-HD-25-150**	63.0	25.0	57	150.0	18.8	150.0		57.0	65.0		12°	80	10.00	3.63	20000
	32	3	1	3	**930-C6-HD-32-091**	63.0	32.0	61	91.0	18.8	91.0		68.0	76.0		12°	80	10.00	2.75	20000
C8	20	3	1	6	**930-C8-HD-20-097**	80.0	20.0	51	97.0	17.8	62.0	97.0	50.0	55.0	80.0	8°	80	10.00	2.88	14000
	25	3	1	6	**930-C8-HD-25-097**	80.0	25.0	57	97.0	18.8	63.0	97.0	57.0	65.0	80.0	12°	80	10.00	3.22	14000
	32	3	1	6	**930-C8-HD-32-085**	80.0	32.0	61	85.0	18.8	53.3	85.0	67.8	76.0	80.0	12°	80	10.00	3.25	14000
	32	3	1	6	**930-C8-HD-32-180**	80.0	32.0	61	180.0	18.8	148.0	180.0	68.0	76.0	80.0	12°	80	10.00	6.54	14000
C10	20	3	1	6	**930-C10-HD-20-102**	100.0	20.0	51	102.0	17.8	59.0	102.0	50.0	55.0	100.0	8°	80	10.00	4.49	10000
	25	3	1	6	**930-C10-HD-25-105**	100.0	25.0	57	105.0	18.8	63.0	105.0	57.0	65.0	100.0	12°	80	10.00	4.89	10000
	32	3	1	6	**930-C10-HD-32-098**	100.0	32.0	61	98.0	18.8	56.2	98.0	67.8	76.0	100.0	12°	80	10.00	5.14	10000

Para componentes, visite www.sandvik.coromant.com

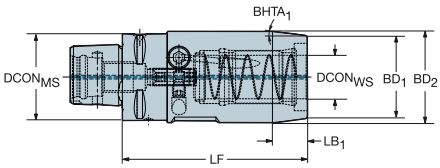
M1 N23 N6 N15 N4

Coromant Capto® para CoroChuck™ 930

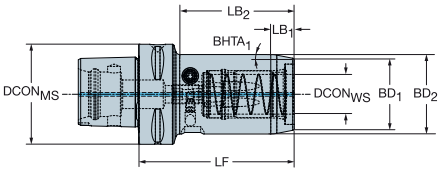
Desenho delgado

DSGN 3





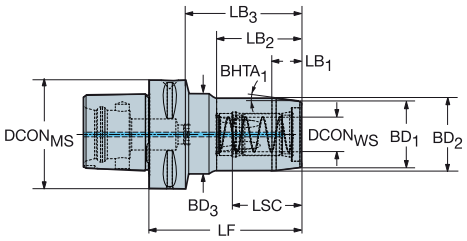
6



						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
C3	6	3	1	6	930-C3-S-06-064	32.0	6.0	37	64.0	11.3	33.2	64.0	22.0	26.0	32.0	10°	80	8.00	0.32	55000
	8	3	1	6	930-C3-S-08-065	32.0	8.0	37	65.0	11.3	35.3	65.0	24.0	28.0	32.0	10°	80	8.00	0.36	55000
	10	3	1	6	930-C3-S-10-070	32.0	10.0	41	70.0	11.3	39.6	70.0	26.0	30.0	32.0	10°	80	8.00	0.38	55000
	12	3	1	3	930-C3-S-12-074	32.0	12.0	46	74.0	11.3	74.0		28.0	32.0		10°	80	8.00	0.45	55000
C4	6	3	1	6	930-C4-S-06-066	40.0	6.0	37	66.0	11.3	30.2	66.0	22.0	26.0	40.0	10°	80	8.00	0.48	39000
	8	3	1	6	930-C4-S-08-066	40.0	8.0	37	66.0	11.3	30.2	66.0	24.0	28.0	40.0	10°	80	8.00	0.50	39000
	10	3	1	6	930-C4-S-10-072	40.0	10.0	41	72.0	11.3	34.2	72.0	26.0	30.0	40.0	10°	80	8.00	0.55	39000
	12	3	1	6	930-C4-S-12-080A	40.0	12.0	46	80.0	11.3	40.0	80.0	28.0	32.0	40.0	15°	80	8.00	0.65	39000
	20	3	1	3	930-C4-S-20-090A	40.0	20.0	51	90.0	16.0	90.0		38.0	42.0		7°	80	8.00	0.85	39000
C5	6	3	1	6	930-C5-S-06-068	50.0	6.0	37	68.0	11.3	30.2	68.0	22.0	26.0	50.0	10°	80	8.00	0.75	28000
	8	3	1	6	930-C5-S-08-070	50.0	8.0	37	70.0	11.3	32.2	70.0	24.0	28.0	50.0	10°	80	8.00	0.77	28000
	10	3	1	6	930-C5-S-10-072	50.0	10.0	41	72.0	11.3	34.2	72.0	26.0	30.0	50.0	10°	80	8.00	0.80	20000
	12	3	1	6	930-C5-S-12-075	50.0	12.0	46	75.0	11.3	38.2	75.0	28.0	32.0	50.0	10°	80	8.00	0.85	28000
	20	3	1	6	930-C5-S-20-085	50.0	20.0	51	85.0	16.0	49.2	85.0	38.0	42.0	50.0	7°	80	8.00	1.04	28000
	20	3	1	6	930-C5-S-20-125	50.0	20.0	51	125.0	16.0	49.2	125.0	38.0	42.0	50.0	7°	80	8.00	1.63	28000
	25	3	1	3	930-C5-S-25-091	50.0	25.0	57	91.0	12.9	91.0		45.0	50.0		11°	80	8.00	1.28	28000
C6	25	3	1	6	930-C6-S-25-098	63.0	25.0	57	98.0	12.9	72.1	98.0	45.0	50.0	63.0	11°	80	8.00	1.70	20000
C8	25	3	1	6	930-C8-S-25-108	80.0	25.0	57	108.0	12.9	72.0	108.0	45.0	50.0	80.0	11°	80	8.00	2.74	14000

DSGN 10





						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
C6	6	3	1	10	930-C6-S-06-074	63.0	6.0	37	74.0	11.3	30.2	48.1	22.0	26.0	50.0	10°	80	8.00	1.15	20000
	8	3	1	10	930-C6-S-08-076	63.0	8.0	37	76.0	11.3	32.2	50.1	24.0	28.0	50.0	10°	80	8.00	1.17	20000
	10	3	1	10	930-C6-S-10-078	63.0	10.0	41	78.0	11.3	34.2	52.1	26.0	30.0	50.0	10°	80	8.00	1.20	20000
	12	3	1	10	930-C6-S-12-082	63.0	12.0	46	82.0	11.3	38.2	56.0	28.0	32.0	50.0	10°	80	8.00	1.26	20000
	20	3	1	10	930-C6-S-20-091	63.0	20.0	51	91.0	16.0	49.2	65.1	38.0	42.0	50.0	7°	80	8.00	1.45	20000
	20	3	1	10	930-C6-S-20-150	63.0	20.0	51	150.0	16.0	49.2	66.8	38.0	42.0	50.0	7°	80	8.00	2.55	20000
C8	12	3	1	10	930-C8-S-12-094	80.0	12.0	46	94.0	11.3	38.2	59.0	28.0	32.0	50.0	10°	80	8.00	2.36	14000
	20	3	1	10	930-C8-S-20-103	80.0	20.0	51	103.0	16.0	49.2	68.0	38.0	42.0	50.0	7°	80	8.00	2.54	14000
	20	3	1	10	930-C8-S-20-175	80.0	20.0	51	175.0	16.0	49.2	70.0	38.0	42.0	50.0	7°	80	8.00	4.39	14000

Para componentes, visite www.sandvik.coromant.com

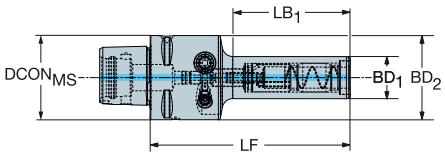
M1 N23 N6 N15 N4

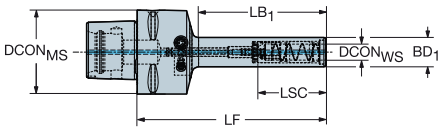
Coromant Capto® para CoroChuck™ 930

Desenho tipo lápis

DSGN 2 5

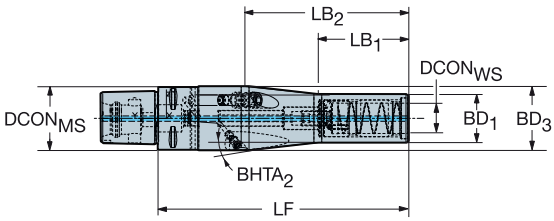






						Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	NM	KG	RPMX
C4	6	3	1	2	**930-C4-P-06-085**	40.0	6.0	37	85.0	45.8	85.0		14.5	40.0		80	8.00	0.42	39000
	8	3	1	2	**930-C4-P-08-085**	40.0	8.0	37	85.0	45.8	85.0		17.5	40.0		80	8.00	0.45	39000
	10	3	1	2	**930-C4-P-10-095**	40.0	10.0	41	95.0	55.8	95.0		20.0	40.0		80	8.00	0.50	39000
	10	3	1	2	**930-C4-P-10-135**	40.0	10.0	41	135.0	95.8	135.0		20.0	40.0		80	8.00	0.59	39000
	12	3	1	2	**930-C4-P-12-100**	40.0	12.0	46	100.0	60.8	100.0		22.0	40.0		80	8.00	0.56	39000
	12	3	1	2	**930-C4-P-12-135**	40.0	12.0	46	135.0	95.8	135.0		22.0	40.0		80	8.00	0.66	39000
C5	6	3	1	5	**930-C5-P-06-088**	50.0	6.0	37	88.0	47.9	65.0	88.0	14.5	40.0	50.0	80	8.00	0.67	28000
	8	3	1	5	**930-C5-P-08-088**	50.0	8.0	37	88.0	45.8	64.9	88.0	17.5	40.0	50.0	80	8.00	0.65	28000
	10	3	1	5	**930-C5-P-10-098**	50.0	10.0	41	98.0	55.8	74.9	98.0	20.0	40.0	50.0	80	8.00	0.70	28000
	10	3	1	5	**930-C5-P-10-138**	50.0	10.0	41	138.0	95.8	114.9	138.0	20.0	40.0	50.0	80	8.00	0.80	28000
	12	3	1	5	**930-C5-P-12-103**	50.0	12.0	46	103.0	60.8	80.0	103.0	22.0	40.0	50.0	80	8.00	0.78	28000
	12	3	1	5	**930-C5-P-12-138**	50.0	12.0	46	138.0	95.8	115.0	138.0	22.0	40.0	50.0	80	8.00	0.88	28000
C6	6	3	1	5	**930-C6-P-06-091**	63.0	6.0	37	91.0	47.9	64.9	91.0	14.5	40.0	63.0	80	8.00	1.03	20000
	8	3	1	5	**930-C6-P-08-091**	63.0	8.0	37	91.0	45.8	64.9	91.0	17.5	40.0	63.0	80	8.00	1.00	20000
	10	3	1	5	**930-C6-P-10-102**	63.0	10.0	41	102.0	55.8	75.0	102.0	20.0	40.0	63.0	80	8.00	1.07	20000
	10	3	1	5	**930-C6-P-10-142**	63.0	10.0	41	142.0	95.8	115.0	142.0	20.0	40.0	63.0	80	8.00	1.16	20000
	12	3	1	5	**930-C6-P-12-107**	63.0	12.0	46	107.0	60.8	80.0	107.0	22.0	40.0	63.0	80	8.00	1.14	20000
	12	3	1	5	**930-C6-P-12-142**	63.0	12.0	46	142.0	95.8	115.0	142.0	22.0	40.0	63.0	80	8.00	1.25	20000
C8	12	3	1	5	**930-C8-P-12-120**	80.0	12.0	46	120.0	60.8	83.0	120.0	22.0	40.0	80.0	80	8.00	2.23	14000
	12	3	1	5	**930-C8-P-12-155**	80.0	12.0	46	155.0	95.8	118.0	155.0	22.0	40.0	80.0	80	8.00	2.38	14000





					Dimensões, mm												
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_3	$BHTA_2$	BAR	NM	KG	RPMX
C4	20	3	1	**930-C4-P-20-160**	40.0	20.0	51	160.0	60.0	108.0	32.0	42.0	5°	80	8.00	1.22	39000

Para componentes, visite www.sandvik.coromant.com

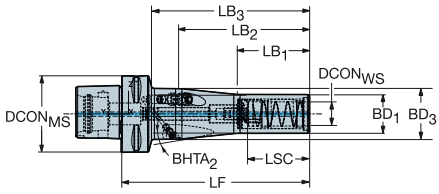
M1 N23 N6 N15 N4

Coromant Capto® para CoroChuck™ 930

Desenho tipo lápis

DSGN 11

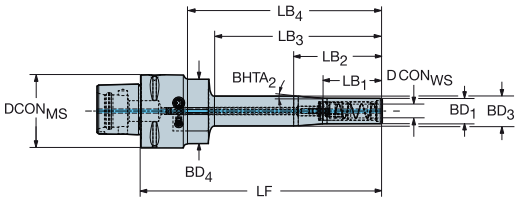




						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_3	$BHTA_2$	BAR	NM	KG	RPMX
C4	12	3	1	11	**930-C4-P-12-185**	40.0	12.0	46	185.0	50.0	75.0	145.8	22.0	26.0	4°	80	8.00	0.94	39000
C5	20	3	1	11	**930-C5-P-20-151**	50.0	20.0	51	151.0	60.0	108.0	128.0	32.0	42.0	6°	80	8.00	1.32	28000
	20	3	1	11	**930-C5-P-20-231**	50.0	20.0	51	231.0	60.0	188.0	208.0	32.0	42.0	2°	80	8.00	2.00	28000
C6	20	3	1	11	**930-C6-P-20-155**	63.0	20.0	51	155.0	60.0	108.0	128.1	32.0	42.0	6°	80	8.00	1.68	20000
	20	3	1	11	**930-C6-P-20-235**	63.0	20.0	51	235.0	60.0	188.0	208.1	32.0	42.0	2°	80	8.00	2.38	20000
C8	20	3	1	11	**930-C8-P-20-165**	80.0	20.0	51	165.0	60.0	108.0	128.1	32.0	42.0	6°	80	8.00	2.80	14000
	20	3	1	11	**930-C8-P-20-245**	80.0	20.0	51	245.0	60.0	188.0	208.1	32.0	42.0	2°	80	8.00	3.44	14000

DSGN 17





						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_3	BD_4	$BHTA_2$	BAR	NM	KG	RPMX
C5	12	3	1	17	**930-C5-P-12-188**	50.0	12.0	46	188.0	50.0	75.0	145.8	167.0	22.0	26.0	40.0	4°	80	8.00	1.18	28000
C6	12	3	1	17	**930-C6-P-12-192**	63.0	12.0	46	192.0	50.0	75.0	145.8	167.0	22.0	26.0	40.0	4°	80	8.00	1.57	20000
C8	12	3	1	17	**930-C8-P-12-205**	80.0	12.0	46	205.0	50.0	75.0	145.8	170.0	22.0	26.0	40.0	4°	80	8.00	2.63	14000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15 N4

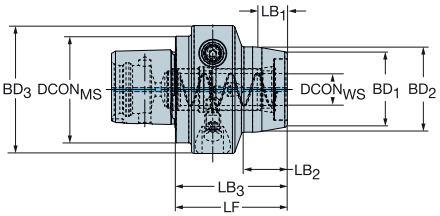
Coromant Capto® para CoroChuck™ 930

Para porta-ferramentas acionados

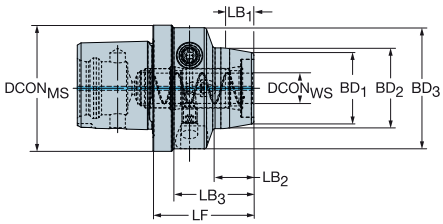
Fixação segmentada e troca manual da ferramenta somente



DSGN 6



10



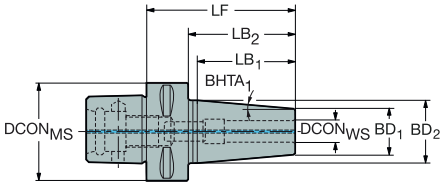
						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_1$	BAR	KG	RPMX
C3	12	3	1	6	**930-C3-T-12-046**	32.0	12.0	46	46.0	11.3	22.8	46.0		28.0	32.0	48.0		10°	80	0.39	10000
C4	12	3	1	6	**930-C4-T-12-042**	40.0	12.0	46	42.0	11.3	17.0	42.0		28.0	32.0	48.0		10°	80	0.46	10000
	20	3	1	6	**930-C4-T-20-058**	40.0	20.0	51	58.0	16.0	34.3	58.0		38.1	42.0	57.0		7°	80	0.70	10000
C5	12	3	1	10	**930-C5-T-12-040**	50.0	12.0	46	40.0	11.3	16.1	32.0	40.0	28.0	32.0	48.0	50.0	10°	80	0.56	10000
	20	3	1	6	**930-C5-T-20-046**	50.0	20.0	51	46.0	11.3	22.1	46.0		38.1	42.0	57.0		10°	80	0.68	10000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15 N4

Coromant Capto® para mandril com fixação térmica

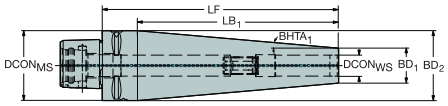




Desenho curto

					Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	$BHTA_1$	BAR	KG	RPMX
C4	6	3	1	C4-391.19-06 075	40.0	6.0	75.0	44.1	55.0	20.0	27.0	4°	80	0.43	39000
	8	3	1	C4-391.19-08 075	40.0	8.0	75.0	44.1	55.0	20.0	27.0	4°	80	0.45	39000
	10	3	1	C4-391.19-10 075	40.0	10.0	75.0	50.5	55.0	24.0	32.0	4°	80	0.52	39000
	12	3	1	C4-391.19-12 075	40.0	12.0	75.0	50.5	55.0	24.0	32.0	4°	80	0.50	39000
	14	3	1	C4-391.19-14 080	40.0	14.0	80.0	44.1	60.0	27.0	34.0	4°	80	0.58	39000
	16	3	1	C4-391.19-16 080	40.0	16.0	80.0	44.1	60.0	27.0	34.0	4°	80	0.56	39000
C5	6	3	1	C5-391.19-06 075	50.0	6.0	75.0	44.1	55.0	20.0	27.0	4°	80	0.64	28000
	8	3	1	C5-391.19-08 075	50.0	8.0	75.0	43.9	55.0	20.0	27.0	4°	80	0.63	28000
	10	3	1	C5-391.19-10 075	50.0	10.0	75.0	50.2	55.0	24.0	32.0	4°	80	0.70	28000
	12	3	1	C5-391.19-12 075	50.0	12.0	75.0	50.2	55.0	24.0	32.0	4°	80	0.68	28000
	14	3	1	C5-391.19-14 080	50.0	14.0	80.0	44.1	60.0	27.0	34.0	4°	80	0.76	28000
	16	3	1	C5-391.19-16 080	50.0	16.0	80.0	44.1	60.0	27.0	34.0	4°	80	0.73	28000
	18	3	1	C5-391.19-18 080	50.0	18.0	80.0	56.9	60.0	33.0	42.0	4°	80	0.90	28000
	20	3	1	C5-391.19-20 085	50.0	20.0	85.0	56.9	65.0	33.0	42.0	4°	80	0.90	28000
C6	6	3	1	C6-391.19-06 080	63.0	6.0	80.0	44.1	58.0	20.0	27.0	4°	80	0.99	20000
	8	3	1	C6-391.19-08 080	63.0	8.0	80.0	44.1	58.0	20.0	27.0	4°	80	0.99	20000
	10	3	1	C6-391.19-10 080	63.0	10.0	80.0	50.5	58.0	24.0	32.0	4°	80	1.05	20000
	12	3	1	C6-391.19-12 080	63.0	12.0	80.0	50.5	58.0	24.0	32.0	4°	80	1.05	20000
	14	3	1	C6-391.19-14 085	63.0	14.0	85.0	44.1	63.0	27.0	34.0	4°	80	1.11	20000
	16	3	1	C6-391.19-16 085	63.0	16.0	85.0	44.1	63.0	27.0	34.0	4°	80	1.10	20000
	18	3	1	C6-391.19-18 085	63.0	18.0	85.0	56.9	63.0	33.0	42.0	4°	80	1.27	20000
	20	3	1	C6-391.19-20 085	63.0	20.0	85.0	56.9	63.0	33.0	42.0	4°	80	1.24	20000
	25	3	1	C6-391.19-25 090	63.0	25.0	90.0	56.9	68.0	44.0	53.0	4°	80	1.60	20000
	32	3	1	C6-391.19-32 095	63.0	32.0	95.0	56.9	73.0	44.0	53.0	4°	80	1.51	20000
C8	10	3	1	C8-391.19-10 090	80.0	10.0	90.0	50.2	60.0	24.0	32.0	4°	80	2.07	14000
	12	3	1	C8-391.19-12 090	80.0	12.0	90.0	50.2	60.0	24.0	32.0	4°	80	2.06	14000
	16	3	1	C8-391.19-16 095	80.0	16.0	95.0	43.8	65.0	27.0	34.0	4°	80	2.09	14000
	20	3	1	C8-391.19-20 095	80.0	20.0	95.0	56.5	65.0	33.0	42.0	4°	80	2.21	14000
	25	3	1	C8-391.19-25 100	80.0	25.0	100.0	56.5	70.0	44.0	53.0	4°	80	2.58	14000
C10	12	3	1	C10-391.19-12 095	100.0	12.0	95.0	50.5	59.0	24.0	32.0	4°	80	3.65	10000
	16	3	1	C10-391.19-16 100	100.0	16.0	100.0	44.1	64.0	27.0	34.0	4°	80	3.72	10000
	20	3	1	C10-391.19-20 100	100.0	20.0	100.0	56.9	64.0	33.0	42.0	4°	80	3.83	10000
	25	3	1	C10-391.19-25 110	100.0	25.0	110.0	56.9	74.0	44.0	53.0	4°	80	4.31	10000





Desenho cônico longo

					Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BD_1	BD_2	$BHTA_1$	BAR	KG	RPMX
C3	6	3	1	C3-391.19-06 118	32.0	6.0	118.0	103.0	14.0	32.0	5°	80	0.45	55000
	8	3	1	C3-391.19-08 107	32.0	8.0	107.0	92.0	16.0	32.0	5°	80	0.44	55000
	10	3	1	C3-391.19-10 095	32.0	10.0	95.0	80.0	18.0	32.0	5°	80	0.40	55000
	12	3	1	C3-391.19-12 084	32.0	12.0	84.0	69.0	20.0	32.0	5°	80	0.38	55000
C4	12	3	1	C4-391.19-12 135	40.0	12.0	135.0	115.0	20.0	40.0	5°	80	0.84	39000
	16	3	1	C4-391.19-16 112	40.0	16.0	112.0	92.0	24.0	40.0	5°	80	0.77	39000
	18	3	1	C4-391.19-18 080	40.0	18.0	80.0	56.9	33.0	42.0	4°	80	0.69	39000
	20	3	1	C4-391.19-20 085	40.0	20.0	85.0	56.9	33.0	42.0	4°	80	0.71	39000
C5	20	3	1	C5-391.19-20 146	50.0	20.0	146.0	126.0	28.0	50.0	5°	80	1.45	28000
	25	3	1	C5-391.19-25 090	50.0	25.0	90.0	56.9	44.0	53.0	4°	80	1.26	28000
	25	3	1	C5-391.19-25 118	50.0	25.0	118.0	98.0	33.0	50.0	5°	80	1.25	28000

Para componentes, visite www.sandvik.coromant.com

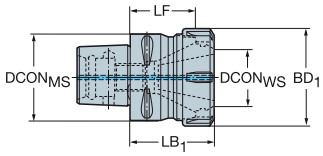
M1 N23 N15

Coromant Capto® para mandril porta-pinça ER

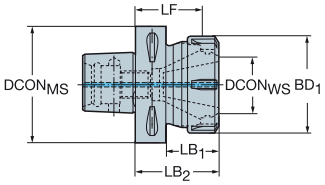
Interface do lado da peça DIN 6499-B



DSGN 1

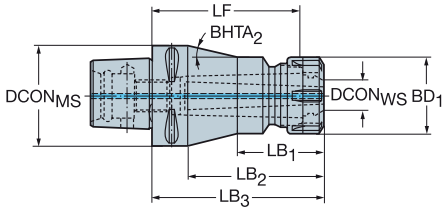


2



						Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	KG	RPMX
C3	ER16	3	1	2	**C3-391.14-16 045**	32.0	17.0	34.4	29.0	45.0	28.0	32.0	80	0.20	55000
	ER20	3	1	1	**C3-391.14-20 045**	32.0	21.0	33.5	45.0		33.7		80	0.22	55000
C4	ER20	3	1	2	**C4-391.14-20 052**	40.0	21.0	40.5	30.8	52.0	33.7	40.0	80	0.37	39000
	ER25	3	1	1	**C4-391.14-25 052**	40.0	26.0	40.0	52.0		42.0		80	0.42	39000
	ER32	3	1	1	**C4-391.14-32 054**	40.0	33.0	41.0	54.0		50.0		80	0.46	39000
C5	ER20	3	1	2	**C5-391.14-20 055**	50.0	21.0	43.5	31.1	55.0	33.7	50.0	80	0.62	28000
	ER25	3	1	2	**C5-391.14-25 055**	50.0	26.0	43.0	33.0	55.0	42.0	50.0	80	0.63	28000
	ER32	3	1	1	**C5-391.14-32 057**	50.0	33.0	44.0	57.0		50.0		80	0.68	28000
	ER32	3	1	1	**C5-391.14-32 100**	50.0	33.0	87.0	100.0		50.0		80	1.28	28000
	ER40	3	1	1	**C5-391.14-40 060**	50.0	41.0	45.0	60.0		63.0		80	0.81	28000
C6	ER25	3	1	2	**C6-391.14-25 060**	63.0	26.0	48.0	32.9	60.0	42.0	63.0	80	1.04	20000
	ER25	3	1	2	**C6-391.14-25 100**	63.0	26.0	88.0	75.0	100.0	42.0	63.0	80	1.44	20000
	ER32	3	1	2	**C6-391.14-32 060**	63.0	33.0	47.0	35.3	60.0	50.0	63.0	80	1.06	20000
	ER32	3	1	2	**C6-391.14-32 100**	63.0	33.0	87.0	75.0	100.0	50.0	63.0	80	1.60	20000
	ER40	3	1	1	**C6-391.14-40 065**	63.0	41.0	50.0	65.0		63.0		80	1.22	20000
	ER40	3	1	1	**C6-391.14-40 130**	63.0	41.0	115.0	130.0		63.0		80	2.77	20000
C8	ER20	3	1	2	**C8-391.14-20 065**	80.0	21.0	53.5	29.9	65.0	35.0	80.0	80	2.02	14000
	ER25	3	1	2	**C8-391.14-25 070**	80.0	26.0	58.0	32.4	70.0	42.0	80.0	80	2.10	14000
	ER32	3	1	2	**C8-391.14-32 070**	80.0	33.0	57.0	35.0	70.0	50.0	80.0	80	2.13	14000
	ER40	3	1	2	**C8-391.14-40 070**	80.0	41.0	55.0	38.0	70.0	63.0	80.0	80	2.19	14000
	ER50	3	1	2	**C8-391.14-50 080**	80.0	52.0	59.0	50.0	80.0	78.0	80.0	80	2.46	14000





					Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	$BHTA_2$	BAR	KG	RPMX
C4	ER16	3	1	**C4-391.14-16 070**	40.0	17.0	59.4	44.0	50.0	70.0	28.0	45°	80	0.42	39000
C5	ER16	3	1	**C5-391.14-16 100**	50.0	17.0	89.4	60.0	80.0	100.0	28.0	29°	80	0.90	28000
	ER20	3	1	**C5-391.14-20 100**	50.0	21.0	88.5	55.0	80.0	100.0	35.0	16°	80	1.00	28000
	ER20	3	1	**C5-391.14-20 130**	50.0	21.0	118.5	55.0	109.9	130.0	35.0	7°	80	1.31	28000
	ER25	3	1	**C5-391.14-25 100**	50.0	26.0	88.0	65.0	80.0	100.0	42.0	14°	80	1.13	28000
C6	ER16	3	1	**C6-391.14-16 100**	63.0	17.0	89.4	60.0	78.0	100.0	28.0	44°	80	1.26	20000
	ER20	3	1	**C6-391.14-20 060**	63.0	21.0	48.5	31.1	38.0	60.0	33.7	65°	80	1.00	20000
	ER25	3	1	**C6-391.14-25 130**	63.0	26.0	118.0	65.0	108.0	130.0	42.0	13°	80	1.90	20000
	ER25	3	1	**C6-391.14-25 160**	63.0	26.0	148.0	65.0	138.0	160.0	42.0	8°	80	2.50	20000
	ER32	3	1	**C6-391.14-32 130**	63.0	33.0	117.0	75.0	108.0	130.0	50.0	11°	80	2.22	20000
C8	ER32	3	1	**C8-391.14-32 160**	80.0	33.0	147.0	75.0	130.0	160.0	50.0	15°	80	0.30	14000
	ER40	3	1	**C8-391.14-40 160**	80.0	41.0	145.0	95.0	130.0	160.0	63.0	13°	80	4.58	14000
C10	ER32	3	1	**C10-391.14-32 160**	100.0	33.0	147.0	75.0	124.0	160.0	50.0	27°	80	5.98	10000
	ER40	3	1	**C10-391.14-40 160**	100.0	41.0	145.0	95.0	124.0	160.0	63.0	32°	80	6.32	10000
	ER50	3	1	**C10-391.14-50 160**	100.0	52.0	139.0	100.0	124.0	160.0	80.0	22°	80	7.21	10000

Para componentes, visite www.sandvik.coromant.com


M1



N23



N15

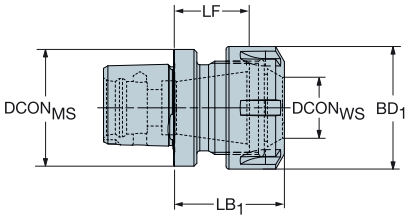
Coromant Capto® para mandril porta-pinça ER

Interface do lado da peça DIN 6499-B

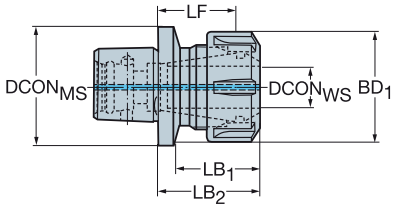
Desenho curto, somente para fixação segmentada

DSGN 1





2



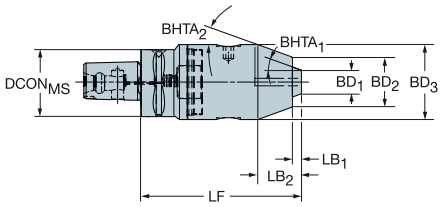
						Dimensões, mm										
CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	DSGN	Código para pedido	DCON$_{MS}$	DCON$_{WS}$	LF	LB$_1$	LB$_2$	BD$_1$	BD$_2$	BAR	KG	RPMX
C3	ER16	3	1	2	C3-391.14-16 035	32.0	17.0	24.0	26.6	34.6	28.0	32.0	80	0.10	55000
	ER20	3	1	1	C3-391.14-20 036	32.0	21.0	24.5	36.0		33.7		80	0.17	55000
C4	ER16	3	1	2	C4-391.14-16 035	40.0	17.0	24.0	26.6	34.6	28.0	40.0	80	0.20	39000
	ER20	3	1	2	C4-391.14-20 035	40.0	21.0	23.5	27.0	35.0	33.7	40.0	80	0.25	39000
	ER25	3	1	1	C4-391.14-25 038	40.0	26.0	26.0	38.0		42.0		80	0.30	39000
C5	ER20	3	1	2	C5-391.14-20 036	50.0	21.0	24.0	27.5	35.5	35.0	50.0	80	0.30	28000
	ER25	3	1	2	C5-391.14-25 037	50.0	26.0	25.0	29.0	37.0	42.0	50.0	80	0.30	28000
	ER32	3	1	1	C5-391.14-32 045	50.0	33.0	32.0	45.0		50.0		80	0.52	28000

Coromant Capto® para mandril porta-broca

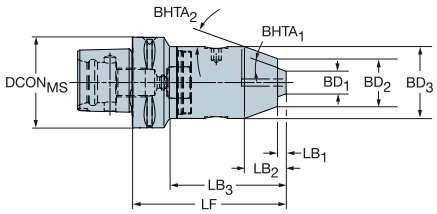
Refrigeração externa e interna

DSGN 8





16



						Dimensões, mm															
CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	DSGN	Código para pedido	DCON$_{MS}$	LF	LB$_1$	LB$_2$	LB$_3$	LB$_4$	BD$_1$	BD$_2$	BD$_3$	BD$_4$	BHTA$_1$	BHTA$_2$	BAR	NM	KG	RPMX
C3	8 - 1	3	1	8	C3-391.32-08 076	32.0	76.0	3.0	19.1	76.0		9.9	24.1	36.0		19°	20°	50	10.00	0.54	8000
	1 - 13	3	1	8	C3-391.32-13 102	32.0	96.0	6.0	22.2	102.0		15.7	38.1	50.0		19°	20°	50	20.00	1.14	8000
C4	8 - 1	3	1	16	C4-391.32-08 077	40.0	77.0	3.0	19.1	55.8	77.0	9.9	24.1	36.0	40.0	19°	20°	50	10.00	0.64	8000
	1 - 13	3	1	8	C4-391.32-13 104	40.0	98.0	6.0	22.2	104.0		15.7	38.1	50.0		19°	20°	50	20.00	1.24	8000
C5	8 - 1	3	1	16	C5-391.32-08 079	50.0	76.0	3.0	19.1	53.6	79.0	9.9	24.1	36.0	50.0	19°	20°	50	10.00	0.85	8000
	1 - 13	3	1	8	C5-391.32-13 103	50.0	97.0	6.0	22.2	103.0		15.7	38.1	50.0		19°	20°	50	20.00	1.41	8000
C6	1 - 13	3	1	16	C6-391.32-13 107	63.0	101.0	6.0	22.2	79.8	107.0	15.7	38.1	50.0	63.0	19°	20°	50	20.00	1.79	8000
	16 - 1	3	1	16	C6-391.32-16 112	63.0	106.0	6.0	22.2	88.4	112.0	15.7	45.1	57.0	63.0	19°	20°	50	20.00	2.02	8000
C8	1 - 13	3	1	16	C8-391.32-13 112	80.0	106.0	6.0	22.2	77.1	112.0	15.7	38.1	50.0	80.0	19°	20°	50	20.00	2.78	8000
	16 - 1	3	1	16	C8-391.32-16 117	80.0	111.0	6.0	31.2	84.2	117.0	15.7	38.1	57.0	80.0	19°	20°	50	20.00	3.02	8000

Para componentes, visite www.sandvik.coromant.com


M1



N23



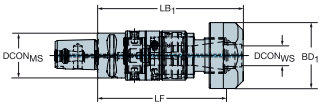
N15

Coromant Capto® para CoroChuck™ 970

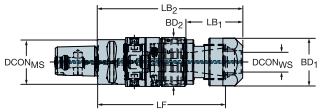
Interface do lado da peça DIN 6499-B



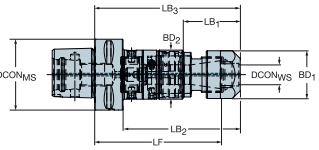
DSGN 1



2



5

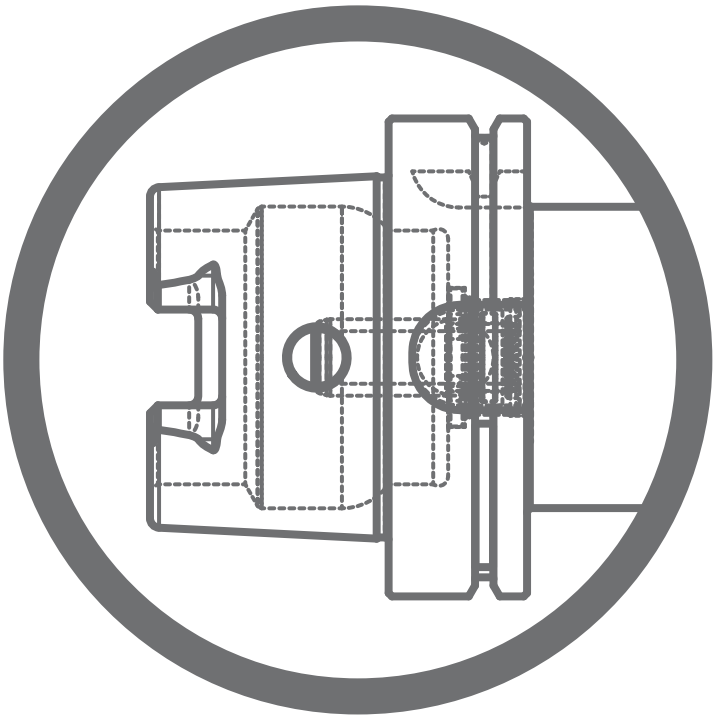


							Dimensões, mm											
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	KG	RPMX
C3	ER11	M5	3	1	5	**970-C3-11-078**	32.0	11.3	74.2	24.1	63.0	78.0	18.7	23.5	32.0	80	0.27	8000
	ER20	M12	3	1	2	**970-C3-20-102**	32.0	20.8	89.2	35.3	97.2		33.7	35.0		80	0.60	8000
C4	ER11	M5	3	1	5	**970-C4-11-080**	40.0	11.3	76.2	24.1	60.0	80.0	18.7	23.5	40.0	80	0.40	8000
	ER20	M12	3	1	5	**970-C4-20-102**	40.0	20.8	89.2	35.3	76.9	97.2	33.7	35.0	40.0	80	0.68	8000
	ER25	M20	3	1	2	**970-C4-25-122**	40.0	25.8	108.1	37.1	116.6		42.0	44.0		80	1.04	8000
C5	ER20	M12	3	1	5	**970-C5-20-103**	50.0	20.8	89.7	35.3	77.6	97.7	33.7	35.0	50.0	80	0.88	8000
	ER25	M20	3	1	5	**970-C5-25-122**	50.0	25.8	108.6	37.1	97.1	117.1	42.0	44.0	50.0	80	1.24	8000
	ER40	M30	3	1	1	**970-C5-40-154**	50.0	40.8	137.2	148.6			63.0			80	2.66	8000
C6	ER20	M12	3	1	5	**970-C6-20-105**	63.0	20.8	91.7	35.3	77.6	99.7	33.7	35.0	63.0	80	1.21	8000
	ER25	M20	3	1	5	**970-C6-25-124**	63.0	25.8	110.6	37.1	97.1	119.1	42.0	44.0	63.0	80	1.57	8000
	ER32	M27	3	1	2	**970-C6-32-128**	63.0	32.8	118.3	105.8	127.8		50.0	63.0		80	1.53	8000
	ER40	M30	3	1	1	**970-C6-40-154**	63.0	40.8	136.7	148.1			63.0			80	2.95	8000
	ER50	M48	3	1	5	**970-C6-50-210**	63.0	52.0	187.5	76.5	134.5	208.0	77.7	80.0	86.0	80	4.90	8000
C8	ER20	M12	3	1	5	**970-C8-20-112**	80.0	20.8	98.7	35.3	76.6	106.7	33.7	35.0	80.0	80	2.22	8000
	ER25	M20	3	1	5	**970-C8-25-131**	80.0	25.8	117.6	37.1	96.1	126.1	42.0	44.0	80.0	80	2.58	8000
	ER32	M27	3	1	2	**970-C8-32-135**	80.0	32.8	125.3	104.8	134.8		50.0	80.0		80	2.50	8000
	ER40	M30	3	1	2	**970-C8-40-161**	80.0	40.8	143.7	125.1	155.1		63.0	80.0		80	4.00	8000
	ER50	M48	3	1	5	**970-C8-50-215**	80.0	52.0	192.0	76.5	134.5	212.5	77.7	80.0	86.0	80	6.87	8000
C10	ER25	M20	3	1	5	**970-C10-25-143**	100.0	25.8	129.6	37.1	102.1	138.1	42.0	44.0	100.0	80	4.29	8000
	ER40	M30	3	1	2	**970-C10-40-173**	100.0	40.8	155.7	131.1	167.1		63.0	100.0		80	5.76	8000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15 N5

Interface HSK do lado da máquina

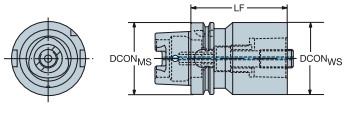


HSK para adaptador Coromant Capto®

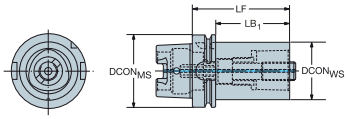
Interface do lado da máquina HSK A/C



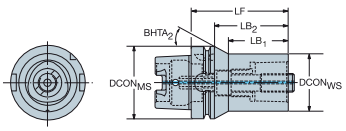
DSGN 1



2

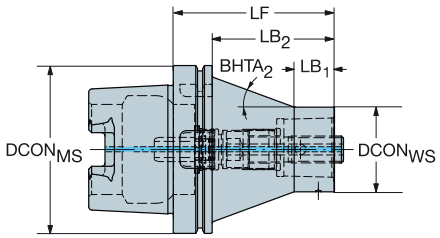


7



						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_2	BD_3	$BHTA_2$	BAR	NM	KG
50	C3	1	1	2	C3-390.410-50 075A	50.0	32.0	75.0	49.0	75.0		50.0		0°	100	45.00	0.67
	C4	1	1	2	C4-390.410-50 080A	50.0	40.0	80.0	54.0	80.0		50.0		0°	100	55.00	0.85
63	C3	1	1	2	C3-390.410-63 075C	63.0	32.0	75.0	49.0	75.0		63.0		0°	100	45.00	0.97
	C4	1	1	2	C4-390.410-63 080C	63.0	40.0	80.0	54.0	80.0		63.0		0°	100	55.00	1.14
	C5	1	1	2	C5-390.410-63 090C	63.0	50.0	90.0	64.0	90.0		63.0		0°	100	95.00	1.47
80	C4	1	1	2	C4-390.410-80 090	80.0	40.0	90.0	64.0	90.0		80.0		0°	100	55.00	1.69
	C5	1	1	2	C5-390.410-80 095	80.0	50.0	95.0	69.0	95.0		80.0		0°	100	95.00	2.02
	C6	1	1	2	C6-390.410-80 110	80.0	63.0	110.0	84.0	110.0		80.0		0°	100	170.00	2.79
100	C3	1	1	7	C3-390.410-100 080A	100.0	32.0	80.0	43.0	51.0	80.0	32.0	100.0	45°	100	45.00	2.42
	C4	1	1	2	C4-390.410-100 090A	100.0	40.0	90.0	61.0	90.0		100.0		0°	100	55.00	2.63
	C5	1	1	2	C5-390.410-100 100A	100.0	50.0	100.0	71.0	100.0		100.0		0°	100	95.00	3.02
	C6	1	1	2	C6-390.410-100 110A	100.0	63.0	110.0	81.0	110.0		100.0		0°	100	170.00	3.70
	C8	1	1	2	C8-390.410-100 120A	100.0	80.0	120.0	91.0	120.0		100.0		0°	100	170.00	4.87
	C10	1	1	1	C10-390.410-100 155	100.0	100.0	155.0	155.0						100	380.00	7.64
125	C4	1	1	7	C4-390.410-125 095	125.0	40.0	95.0	46.0	66.0	95.0	40.0	125.0	45°	100	55.00	4.15
	C5	1	1	7	C5-390.410-125 105	125.0	50.0	105.0	66.0	76.0	105.0	50.0	125.0	45°	100	95.00	4.46
	C6	1	1	2	C6-390.410-125 120	125.0	63.0	120.0	91.0	120.0		125.0		0°	100	170.00	5.35
	C8	1	1	2	C8-390.410-125 130	125.0	80.0	130.0	101.0	130.0		125.0		0°	100	170.00	6.70
	C10	1	1	2	C10-390.410-125 160	125.0	100.0	160.0	131.0	160.0		125.0		0°	100	380.00	9.66
160	C6	1	1	2	C6-390.410-160 125	160.0	63.0	125.0	94.0	125.0		160.0		0°	100	170.00	8.55
	C8	1	1	2	C8-390.410-160 135	160.0	80.0	135.0	104.0	135.0		160.0		0°	100	170.00	10.16
	C10	1	1	2	C10-390.410-160 160	160.0	100.0	160.0	129.0	160.0		160.0		0°	100	380.00	12.94





Desenho para usinagem pesada

					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	$BHTA_2$	BAR	NM	KG
100	C3	1	1	C3-390.410-100080HD	100.0	32.0	80.0	20.0	51.0	41°	100	45.00	2.93
	C4	1	1	C4-390.410-100090HD	100.0	40.0	90.0	20.0	61.0	29°	100	55.00	3.27
	C5	1	1	C5-390.410-100100HD	100.0	50.0	100.0	30.0	71.0	23°	100	95.00	3.58
	C6	1	1	C6-390.410-100110HD	100.0	63.0	110.0	30.0	81.0	12°	100	170.00	4.22
125	C4	1	1	C4-390.410-125095HD	125.0	40.0	95.0	20.0	66.0	36°	100	55.00	5.25
	C5	1	1	C5-390.410-125105HD	125.0	50.0	105.0	20.0	76.0	27°	100	95.00	5.82
	C6	1	1	C6-390.410-125120HD	125.0	63.0	120.0	30.0	91.0	20°	100	170.00	6.57
	C8	1	1	C8-390.410-125130HD	125.0	80.0	130.0	30.0	101.0	11°	100	170.00	7.76

Entregamos um tubo especial para refrigeração junto com os suportes básicos HSK

Para componentes, visite www.sandvik.coromant.com


M1



N23



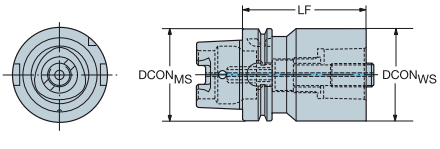
N15

HSK para adaptador Coromant Capto®

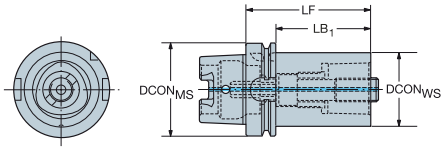
Interface do lado da máquina HSK A/C/T



DSGN 1



2

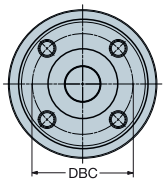


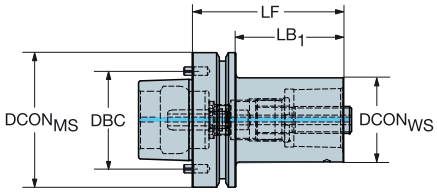
						Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	BD_2	BAR	NM	KG
40	C3	1	1	2	**C3-390.419-40 065**	40.0	32.0	65.0	45.0	65.0	40.0	100	45.00	0.46
	C4	1	1	1	**C4-390.419-40 075**	40.0	40.0	75.0	75.0			100	55.00	0.60
63	C5	1	1	2	**C5-390.419-63 090**	63.0	50.0	90.0	64.0	90.0	63.0	100	95.00	1.46
	C6	1	1	1	**C6-390.419-63 110**	63.0	63.0	110.0	110.0			100	170.00	2.14
100	C6	1	1	2	**C6-390.419-100 110**	100.0	63.0	110.0	81.0	110.0	100.0	100	170.00	3.72
	C8	1	1	2	**C8-390.419-100 120**	100.0	80.0	120.0	91.0	120.0	100.0	100	170.00	4.88

interface do lado da máquina HSK F com pinos

Para a família de máquinas Makino MAG







					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LF	LB_1	BAR	NM	KG
80	C5	1	1	**C5-390.612-80 090**	80.0	58.0	50.0	90.0	64.0	100	95.00	1.92

Entregamos um tubo especial para refrigeração junto com os suportes básicos HSK

HSK80F - Compatível com a família de máquinas Makino MAG 1, 3, 4, 7 - para usinagem de alumínio em estruturas aeroespaciais

Para componentes, visite www.sandvik.coromant.com



M1



N23

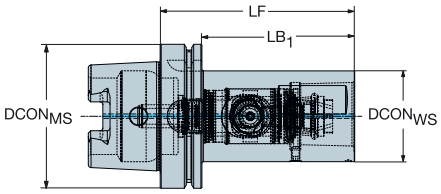


N15

HSK para adaptador Coromant Capto® com troca rápida

Interface do lado da máquina HSK A/C





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BAR	NM	KG	RPMX
63	C5	1	1	**HA06-QC-C5-115**	63.0	50.0	115.0	88.0	100	70.00	1.77	20500
100	C6	1	1	**HA10-QC-C6-135**	100.0	63.0	135.0	105.0	100	90.00	4.17	12500
	C8	1	1	**HA10-QC-C8-165**	100.0	80.0	165.0	135.0	100	130.00	6.32	12500

Para componentes, visite www.sandvik.coromant.com


M1



N23



N6

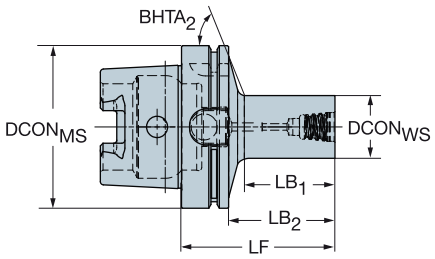


N15

HSK para adaptador Coromant EH

Interface do lado da máquina HSK A/C

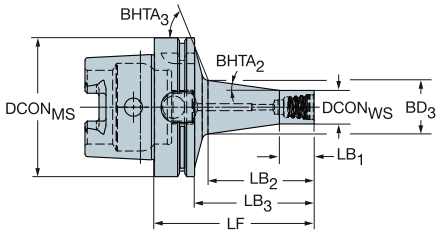




Desenho curto

					Dimensões, mm						BAR	NM	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	$BHTA_2$				RPMX
40	E10	1	1	**392.410EH-40 10 040**	40.0	9.6	40.0	13.0	20.0	59°	100	12.00	0.28	30000
	E12	1	1	**392.410EH-40 12 043**	40.0	11.6	43.0	16.3	23.0	58°	100	15.00	0.30	30000
	E16	1	1	**392.410EH-40 16 048**	40.0	15.4	48.0	21.9	28.0	55°	100	30.00	0.35	30000
	E20	1	1	**392.410EH-40 20 045**	40.0	19.2	45.0	19.4	25.0	50°	100	50.00	0.37	30000
50	E10	1	1	**392.410EH-50 10 047**	50.0	9.6	47.0	13.0	21.0	63°	100	12.00	0.49	25000
	E12	1	1	**392.410EH-50 12 050**	50.0	11.6	50.0	16.3	24.0	62°	100	15.00	0.51	25000
	E16	1	1	**392.410EH-50 16 055**	50.0	15.4	55.0	21.8	29.0	60°	100	30.00	0.57	25000
	E20	1	1	**392.410EH-50 20 052**	50.0	19.2	52.0	19.3	26.0	58°	100	50.00	0.58	25000
	E25	1	1	**392.410EH-50 25 057**	50.0	24.1	57.0	24.9	31.0	54°	100	65.00	0.63	25000
63	E10	1	1	**392.410EH-63 10 049**	63.0	9.6	49.0	13.5	23.0	66°	100	12.00	0.78	20500
	E12	1	1	**392.410EH-63 12 051**	63.0	11.6	51.0	15.8	25.0	65°	100	15.00	0.81	20500
	E16	1	1	**392.410EH-63 16 056**	63.0	15.4	56.0	21.3	30.0	65°	100	30.00	0.85	20500
	E20	1	1	**392.410EH-63 20 053**	63.0	19.2	53.0	18.8	27.0	63°	100	50.00	0.87	20500
	E25	1	1	**392.410EH-63 25 059**	63.0	24.1	59.0	25.5	33.0	61°	100	65.00	0.93	20500





Desenho longo

					Dimensões, mm										BAR	NM	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_3	$BHTA_2$	$BHTA_3$					RPMX
63	E10	1	1	**392.410EH-63 10 062**	63.0	9.6	62.0	10.0	27.9	36.0	14.6	8°	66°		100	12.00	0.80	20500
	E12	1	1	**392.410EH-63 12 068**	63.0	11.6	68.0	12.0	34.3	42.0	17.9	8°	65°		100	15.00	0.83	20500
	E16	1	1	**392.410EH-63 16 078**	63.0	15.4	78.0	16.0	45.1	52.0	23.6	8°	64°		100	30.00	0.92	20500
	E20	1	1	**392.410EH-63 20 091**	63.0	19.2	91.0	20.0	59.0	65.0	30.1	8°	61°		100	50.00	1.01	20500
	E25	1	1	**392.410EH-63 25 105**	63.0	24.1	105.0	25.0	74.0	79.0	37.6	8°	54°		100	65.00	1.21	20500
100	E20	1	1	**392.410EH-100 20 100**	100.0	19.2	100.0	20.0	60.3	71.0	30.5	8°	70°		100	50.00	2.58	12500
	E25	1	1	**392.410EH-100 25 115**	100.0	24.1	115.0	25.0	76.4	86.0	38.6	8°	70°		100	65.00	2.68	12500

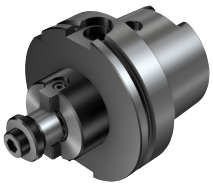
Para componentes, visite www.sandvik.coromant.com

M1 N23 N15 N3

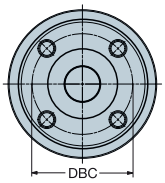
HSK para adaptador tipo árvore

Interface do lado da máquina HSK A/C

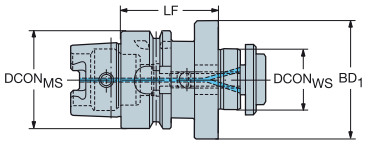
Refrigeração pelo flange



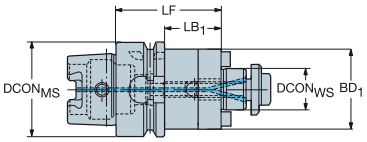
DSGN



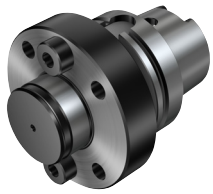
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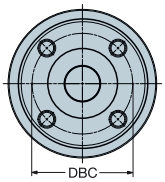


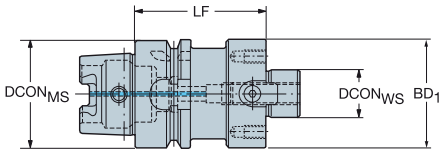
2



						Dimensões, mm											
CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	DSGN	**Código para pedido**	DCON$_{MS}$	DBC	DCON$_{WS}$	LF	LB$_1$	LB$_2$	BD$_1$	BD$_2$	BAR	NM	KG	RPMX
40	16	1	4	2	**392.41005C-4016050**	40.0		16.0	50.0	30.0	50.0	32.0	40.0	80	22.00	0.45	30000
	22	1	4	1	**392.41005C-4022050**	40.0		22.0	50.0	50.0		48.0		80	45.00	0.60	30000
50	16	1	4	2	**392.41005C-5016050**	50.0		16.0	50.0	24.0	50.0	32.0	50.0	80	22.00	0.62	25000
	22	1	4	2	**392.41005C-5022060**	50.0		22.0	60.0	34.0	60.0	48.0	50.0	80	45.00	0.92	25000
63	16	1	4	2	**392.41005C6316050**	63.0		16.0	50.0	24.0	50.0	32.0	63.0	80	22.00	0.87	20500
	22	1	4	2	**392.41005C6322050**	63.0		22.0	50.0	24.0	50.0	50.0	63.0	80	45.00	1.12	20500
	27	1	4	2	**392.41005C6327060**	63.0		27.0	60.0	24.0	60.0	60.0	63.0	80	80.00	1.45	20500
	32	1	4	1	**392.41005C6332060**	63.0		32.0	60.0	60.0		78.0		80	180.00	1.80	20500
	40S	1	4	1	**392.41005C6340060M**	63.0	66.7	40.0	60.0	60.0		87.0		80	300.00	2.13	20500
80	22	1	4	2	**392.41005C8022050**	80.0		22.0	50.0	24.0	50.0	50.0	80.0	80	45.00	1.59	14000
	27	1	4	2	**392.41005C8027050**	80.0		27.0	50.0	24.0	50.0	60.0	80.0	80	80.00	1.78	14000
	32	1	4	2	**392.41005C8032060**	80.0		32.0	60.0	34.0	60.0	78.0	80.0	80	180.00	2.42	14000
	40	1	4	1	**392.41005C8040060**	80.0		40.0	60.0	60.0		87.0		80	300.00	2.74	14000
100	22	1	4	2	**392.41005C10022100**	100.0		22.0	100.0	71.0	100.0	50.0	100.0	80	45.00	3.25	12500
	27	1	4	2	**392.41005C10027100**	100.0		27.0	100.0	71.0	100.0	60.0	100.0	80	80.00	3.76	12500
	32	1	4	2	**392.41005C10032100**	100.0		32.0	100.0	71.0	100.0	78.0	100.0	80	180.00	4.90	12500
	40S	1	4	2	**392.41005C10040100M**	100.0	66.7	40.0	100.0	71.0	100.0	87.0	100.0	80	300.00	5.62	12500
125	32	1	4	2	**392.41005C12532100**	125.0		32.0	100.0	71.0	100.0	78.0	125.0	80	180.00	6.19	9500
	40S	1	4	2	**392.41005C12540100M**	125.0	66.7	40.0	100.0	71.0	100.0	87.0	125.0	80	300.00	7.05	9500







				Dimensões, mm							
CZC$_{MS}$	CZC$_{WS}$	DSGN	**Código para pedido**	DCON$_{MS}$	DBC	DCON$_{WS}$	LF	BD$_1$	NM	KG	RPMX
100	60	1	**392.41005-10060075**	100.0	101.6	60.0	75.0	130.0	180.00	6.30	12500
125	60	1	**392.41005-12560085**	125.0	101.6	60.0	85.0	130.0	180.00	9.70	9500

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

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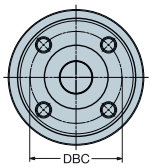
HSK-BT para adaptador tipo árvore com parafusos de acionamento

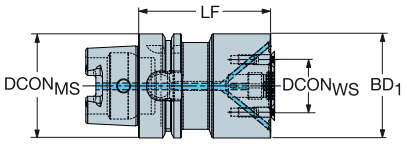
Interface do lado da máquina HSK A/C

Para CoroMill® QD com refrigeração interna

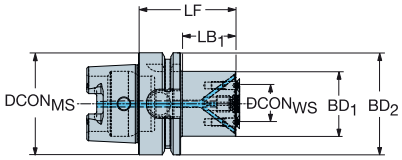


DSGN 1





2

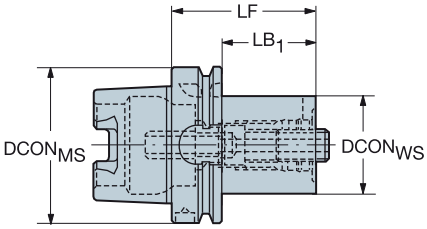


						Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
63	X10	1	3	2	**HA06-X10-032-055**	63.0	22.0	10.0	2	55.0	28.0	55.0	32.0	63.0	80	6.40	0.85	12000
	X22	1	3	2	**HA06-X22-040-060**	63.0	32.0	22.0	2	60.0	33.0	60.0	40.0	63.0	80	3.90	1.01	11000
	X32	1	3	1	**HA06-X32-063-080**	63.0	45.0	32.0	2	80.0	80.0		63.0		80	6.40	1.82	10000

HSK para adaptador VL

Interface do lado da máquina HSK A/C





					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BAR	NM	KG
100	80	1	1	**390.410-100 80 090**	100.0	80.0	90.0	61.0	100	170.00	4.39

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

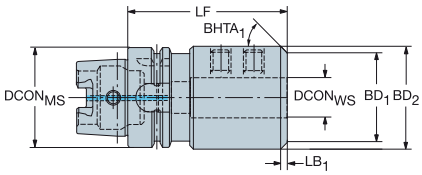
HSK para adaptador Weldon

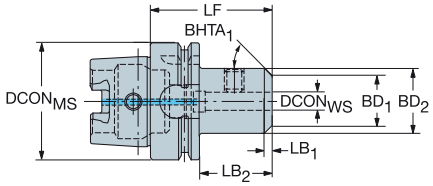
Interface do lado da máquina HSK A/C

Interface do lado da peça DIN 6535-HB e DIN 1835-B

DSGN 3 6







						Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
63	8	1	1	6	**392.41020-63 08 065B**	63.0	8.0	65.0	2.0	39.0	65.0	24.0	28.0	63.0	45°	20	7.00	0.83	20500
	10	1	1	6	**392.41020-63 10 065B**	63.0	10.0	65.0	2.0	39.0	65.0	31.0	35.0	63.0	45°	20	10.00	1.02	20500
	12	1	1	6	**392.41020-63 12 080B**	63.0	12.0	80.0	2.0	54.0	80.0	38.0	42.0	63.0	45°	20	12.00	1.18	20500
	16	1	1	6	**392.41020-63 16 080B**	63.0	16.0	80.0	2.0	54.0	80.0	44.0	48.0	63.0	45°	20	15.00	1.32	20500
	20	1	1	6	**392.41020-63 20 080B**	63.0	20.0	80.0	4.0	54.0	80.0	44.0	52.0	63.0	45°	20	20.00	1.39	20500
	25	1	1	3	**392.41020-63 25 110B**	63.0	25.0	110.0	5.0	110.0		55.0	65.0		45°	20	25.00	2.35	20500
	32	1	1	3	**392.41020-63 32 110B**	63.0	32.0	110.0	5.0	110.0		62.0	72.0		45°	20	45.00	2.60	20500
100	12	1	1	6	**392.41020-100 12 080A**	100.0	12.0	80.0	5.0	51.0	80.0	32.0	42.0	100.0	45°	20	12.00	2.62	12500
	16	1	1	6	**392.41020-100 16 100A**	100.0	16.0	100.0	5.0	71.0	100.0	32.0	42.0	100.0	45°	20	15.00	2.98	12500
	20	1	1	6	**392.41020-100 20 100A**	100.0	20.0	100.0	5.0	71.0	100.0	42.0	52.0	100.0	45°	20	20.00	3.12	12500
	25	1	1	6	**392.41020-100 25 100A**	100.0	25.0	100.0	8.0	71.0	100.0	49.0	65.0	100.0	45°	20	25.00	3.59	12500
	32	1	1	6	**392.41020-100 32 100A**	100.0	32.0	100.0	8.0	71.0	100.0	56.0	72.0	100.0	45°	20	45.00	3.84	12500
	40	1	1	6	**392.41020-100 40 120A**	100.0	40.0	120.0	8.0	91.0	120.0	74.0	90.0	100.0	45°	20	45.00	5.64	12500

Para componentes, visite www.sandvik.coromant.com

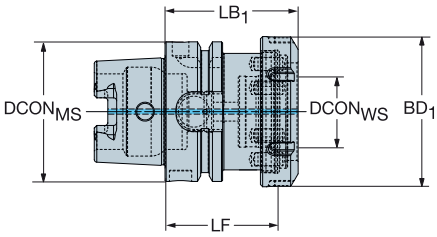
M1 N23 N15

HSK para adaptador MDI

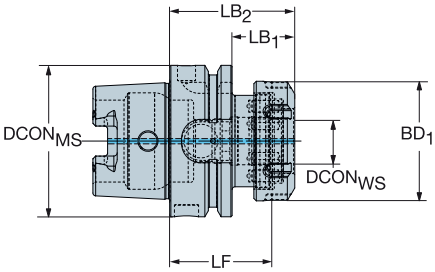
Interface do lado da máquina HSK A/C/T



DSGN 1



DSGN 2



						Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
63	MDI-20	1	1	2	**HT06-DM20-N-042**	63.0	20.0	42.0	26.0	52.0	49.7	63.0	80	135.00	0.86	20000
	MDI-25	1	1	2	**HT06-DM25-N-050**	63.0	25.0	50.0	34.0	60.0	62.7	63.0	80	170.00	1.10	20000
	MDI-32	1	1	1	**HT06-DM32-N-050**	63.0	32.0	50.0	60.0		67.7		80	200.00	1.18	20000

Para componentes, visite www.sandvik.coromant.com

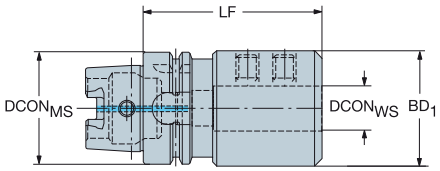
M1 N23 N15 N5

HSK para adaptador ISO 9766

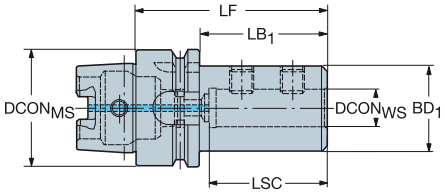
Interface do lado da máquina HSK A/C



DSGN 1



2

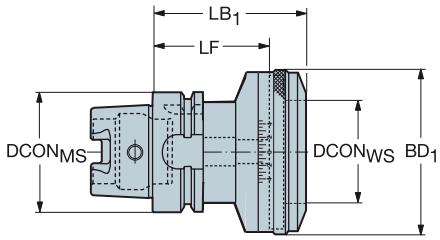


						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
63	16	1	1	2	**392.41027-63 16 080B**	63.0	16.0	49	80.0	54.0	80.0	36.0	63.0	20	10.00	1.02	20500
	20	1	1	2	**392.41027-63 20 080B**	63.0	20.0	51	80.0	54.0	80.0	40.0	63.0	20	12.00	1.06	20500
	25	1	1	2	**392.41027-63 25 090B**	63.0	25.0	57	90.0	64.0	90.0	45.0	63.0	20	20.00	0.12	20500
	32	1	1	2	**392.41027-63 32 090B**	63.0	32.0	61	90.0	64.0	90.0	52.0	63.0	20	30.00	1.32	20500
	40	1	1	1	**392.41027-63 40 110**	63.0	40.0	71	110.0	110.0		65.0		20	40.00	1.93	20500
80	20	1	1	2	**392.41027-80 20 085**	80.0	20.0	51	85.0	59.0	85.0	40.0	80.0	20	12.00	1.59	14000
	25	1	1	2	**392.41027-80 25 090**	80.0	25.0	57	90.0	64.0	90.0	45.0	80.0	20	20.00	1.70	14000
	32	1	1	2	**392.41027-80 32 095**	80.0	32.0	61	95.0	69.0	95.0	52.0	80.0	20	30.00	1.88	14000
	40	1	1	2	**392.41027-80 40 110**	80.0	40.0	71	110.0	84.0	110.0	65.0	80.0	20	40.00	2.58	14000
100	16	1	1	2	**392.41027-100 16 090A**	100.0	16.0	49	90.0	61.0	90.0	36.0	100.0	20	10.00	2.52	12500
	20	1	1	2	**392.41027-100 20 090A**	100.0	20.0	51	90.0	61.0	90.0	40.0	100.0	20	12.00	2.58	12500
	25	1	1	2	**392.41027-100 25 100A**	100.0	25.0	57	100.0	71.0	100.0	45.0	100.0	20	20.00	2.73	12500
	32	1	1	2	**392.41027-100 32 100A**	100.0	32.0	61	100.0	71.0	100.0	52.0	100.0	20	30.00	2.84	12500
	40	1	1	2	**392.41027-100 40 110A**	100.0	40.0	71	110.0	81.0	110.0	65.0	100.0	20	40.00	3.43	12500
	50	1	1	2	**392.41027-100 50 120**	100.0	50.0	81	120.0	91.0	120.0	75.0	100.0	20	45.00	3.95	12500

HSK para adaptador ISO 9766 ajustável

Interface do lado da máquina HSK A/C





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BD_1	BAR	KG	RPMX
63	1	1	1	**392.410277-63 01 060B**	63.0	78.0	60.0	84.6	86.0	20	2.09	12000
100	2	1	1	**392.410277-100 02 065A**	100.0	98.0	65.0	89.6	106.0	20	4.64	9000
	3	1	1	**392.410277-100 03 085A**	100.0	136.0	85.0	95.0	140.0	20	6.58	6000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

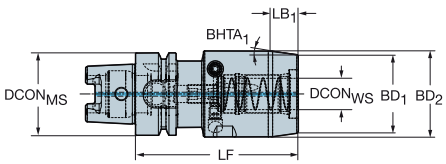
HSK para CoroChuck™ 930

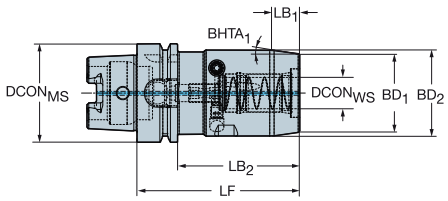
Desenho para usinagem pesada

Interface do lado da máquina HSK A/C

DSGN 3 6



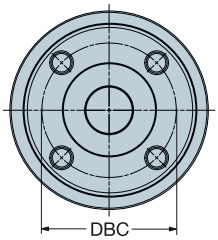


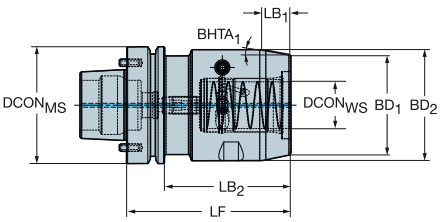


						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
63	20	1	1	6	**930-HA06-HD-20-104**	63.0	20.0	51	104.0	17.8	78.0	104.0	50.0	55.0	62.9	8°	80	10.00	1.89	20000
	25	1	1	3	**930-HA06-HD-25-110**	63.0	25.0	57	110.0	18.8	110.0		57.0	65.0		12°	80	10.00	2.35	20000
	32	1	1	3	**930-HA06-HD-32-112**	63.0	32.0	61	112.0	18.8	112.0		68.0	76.0		12°	80	10.00	2.90	20000
80	32	1	1	6	**930-HA08-HD-32-110**	80.0	32.0	61	110.0	18.8	84.0	110.0	68.0	76.0	80.0	12°	80	10.00	3.44	14000
100	20	1	1	6	**930-HA10-HD-20-100**	100.0	20.0	51	100.0	17.8	71.0	100.0	50.0	55.0	99.9	8°	80	10.00	3.18	10000
	25	1	1	6	**930-HA10-HD-25-106**	100.0	25.0	57	106.0	18.8	77.0	106.0	57.0	65.0	99.9	12°	80	10.00	3.72	10000
	32	1	1	6	**930-HA10-HD-32-110**	100.0	32.0	61	110.0	18.8	81.0	110.0	68.0	76.0	99.9	12°	80	10.00	4.40	10000
	32	1	1	6	**930-HA10-HD-32-180**	100.0	32.0	61	180.0	18.8	151.0	180.0	68.0	76.0	100.0	12°	80	10.00	6.84	10000

Interface HSK F do lado da máquina e com pinos para Makino







					Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	$BHTA_1$	BAR	NM	KG	RPMX
80	32	1	1	**930-HF08-HD-32-112**	80.0	58.0	32.0	61	112.0	18.8	86.0	68.0	76.0	12°	80	10.00	3.48	24000

Para componentes, visite www.sandvik.coromant.com

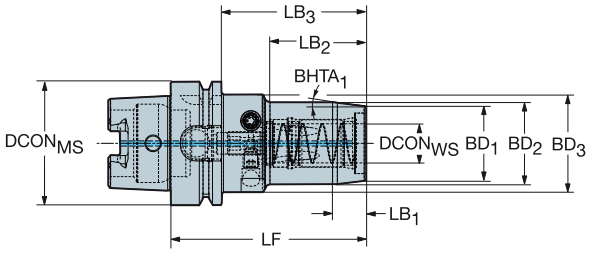
M1 N23 N6 N15 N4

HSK para CoroChuck™ 930

Desenho delgado

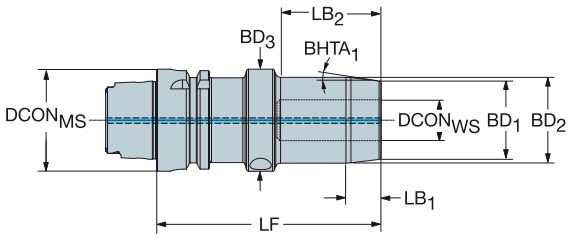
Interface do lado da máquina HSK A/C





					Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
40	6	1	1	**930-HA04-S-06-070**	40.0	6.0	37	70.0	11.3	33.2	50.0	22.0	26.0	32.0	10°	80	8.00	0.40	30000
	8	1	1	**930-HA04-S-08-070**	40.0	8.0	37	70.0	11.3	35.3	50.0	24.0	28.0	32.0	10°	80	8.00	0.42	30000
	10	1	1	**930-HA04-S-10-075**	40.0	10.0	41	75.0	11.3	39.6	55.0	26.0	30.0	32.0	10°	80	8.00	0.46	30000
	12	1	1	**930-HA04-S-12-080**	40.0	12.0	46	80.0	11.3	41.0	60.0	28.0	32.0	33.5	10°	80	8.00	0.51	30000
50	6	1	1	**930-HA05-S-06-074**	50.0	6.0	37	74.0	11.3	30.2	48.0	22.0	26.0	40.0	10°	80	8.00	0.64	25000
	8	1	1	**930-HA05-S-08-074**	50.0	8.0	37	74.0	11.3	30.2	48.0	24.0	28.0	40.0	10°	80	8.00	0.65	25000
	10	1	1	**930-HA05-S-10-080**	50.0	10.0	41	80.0	11.3	34.2	54.0	26.0	30.0	40.0	10°	80	8.00	0.71	25000
	12	1	1	**930-HA05-S-12-085**	50.0	12.0	46	85.0	11.3	38.2	59.0	28.0	32.0	40.0	10°	80	8.00	0.75	25000
63	6	1	1	**930-HA06-S-06-074**	63.0	6.0	37	74.0	11.3	30.2	48.0	22.0	26.0	40.0	10°	80	8.00	0.90	20000
	8	1	1	**930-HA06-S-08-074**	63.0	8.0	37	74.0	11.3	30.2	48.0	24.0	28.0	40.0	10°	80	8.00	0.91	20000
	10	1	1	**930-HA06-S-10-080**	63.0	10.0	41	80.0	11.3	34.2	54.0	26.0	30.0	40.0	10°	80	8.00	0.99	20000
	12	1	1	**930-HA06-S-12-090**	63.0	12.0	46	90.0	11.3	38.2	64.0	28.0	32.0	50.0	10°	80	8.00	1.21	20000
	20	1	1	**930-HA06-S-20-100**	63.0	20.0	51	100.0	16.0	49.2	74.0	38.0	42.0	50.0	7°	80	8.00	1.40	20000
100	12	1	1	**930-HA10-S-12-095**	100.0	12.0	46	95.0	11.3	38.2	66.0	28.0	32.0	50.0	10°	80	8.00	2.63	10000
	20	1	1	**930-HA10-S-20-100**	100.0	20.0	51	100.0	16.0	49.2	71.0	38.0	42.0	50.0	7°	80	8.00	2.74	10000





					Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	$BHTA_1$	BAR	NM	KG	RPMX	
40	12	1	1	**930-HA04-S-12-096**	40.0	12.0	46	96.0	11.3	38.2	28.0	32.0	10°	80	8.00	0.70	40000	
50	20	1	1	**930-HA05-S-20-090**	50.0	20.0	51	90.0	16.0	64.0	37.6	41.5	7°	80	8.00	0.89	25000	
	20	1	1	**930-HA05-S-20-110**	50.0	20.0	51	110.0	16.0	49.2	38.0	42.0	7°	80	8.00	1.19	36000	
63	25	1	1	**930-HA06-S-25-108**	63.0	25.0	57	108.0	12.9	81.1	45.0	50.0	11°	80	8.00	1.66	20000	
80	25	1	1	**930-HA08-S-25-110**	80.0	25.0	57	110.0	12.9	83.1	45.0	50.0	11°	80	8.00	2.13	14000	
100	25	1	1	**930-HA10-S-25-110**	100.0	25.0	57	110.0	12.9	80.1	45.0	50.0	11°	80	8.00	3.02	10000	

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15 N4

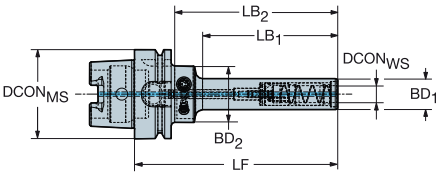
POR

HSK para CoroChuck™ 930

Desenho tipo lápis

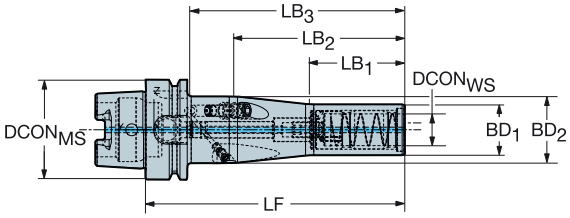
Interface do lado da máquina HSK A/C





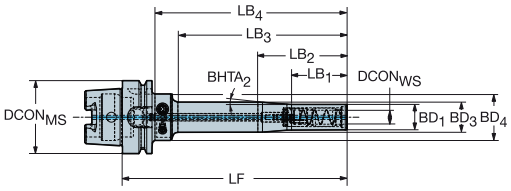
					Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_2$	BAR	NM	KG	RPMX
63	6	1	1	**930-HA06-P-06-094**	63.0	6.0	37	94.0	45.8	52.1	68.0	94.0	14.5	14.5	40.0	63.0	62°	80	8.00	0.89	20000
	8	1	1	**930-HA06-P-08-094**	63.0	8.0	37	94.0	45.8	65.5	94.0		17.5	40.0	63.0		0°	80	8.00	0.87	20000
	10	1	1	**930-HA06-P-10-104**	63.0	10.0	41	104.0	55.8	75.5	104.0		20.0	40.0	63.0		0°	80	8.00	0.91	20000
	10	1	1	**930-HA06-P-10-144**	63.0	10.0	41	144.0	95.8	115.5	144.0		20.0	40.0	63.0		0°	80	8.00	1.01	20000
	12	1	1	**930-HA06-P-12-109**	63.0	12.0	46	109.0	60.8	66.4	83.0	109.0	22.0	22.0	40.0	63.0	55°	80	8.00	0.98	20000
	12	1	1	**930-HA06-P-12-144**	63.0	12.0	46	144.0	95.8	101.4	118.0	144.0	22.0	22.0	40.0	63.0	55°	80	8.00	1.09	20000
100	12	1	1	**930-HA10-P-12-115**	100.0	12.0	46	115.0	60.8	66.4	86.0	115.0	22.0	22.0	40.0	100.0	55°	80	8.00	2.40	10000
	12	1	1	**930-HA10-P-12-150**	100.0	12.0	46	150.0	95.8	101.4	121.0	150.0	22.0	22.0	40.0	100.0	55°	80	8.00	2.51	10000





					Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_3	$BHTA_2$	BAR	NM	KG	RPMX
63	20	1	1	**930-HA06-P-20-163**	63.0	20.0	51	163.0	60.0	108.0	137.0	32.0	42.0	6°	80	8.00	1.59	20000
100	20	1	1	**930-HA10-P-20-170**	100.0	20.0	51	170.0	60.0	108.0	141.0	32.0	42.0	6°	80	8.00	3.06	10000





					Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_3	BD_4	$BHTA_2$	BAR	NM	KG	RPMX
63	12	1	1	**930-HA06-P-12-194**	63.0	12.0	46	194.0	50.0	75.0	145.8	168.0	22.0	26.0	40.0	4°	80	8.00	1.39	20000
100	12	1	1	**930-HA10-P-12-200**	100.0	12.0	46	200.0	50.0	75.0	145.8	171.0	22.0	26.0	40.0	4°	80	8.00	2.79	10000

Para componentes, visite www.sandvik.coromant.com

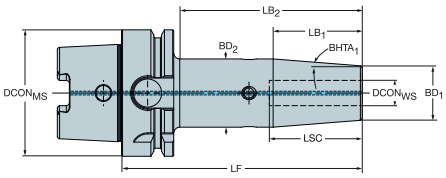
M1 N23 N6 N15 N4

HSK para mandril com fixação térmica

Interface do lado da máquina HSK A/C

Refrigeração interna





Para usinagem MQL

					Dimensões, mm								BAR	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	$BHTA_1$			RPMX
63	6	1	1	**HA06-SH06Q-S-080**	63.0	6.0	22	80.0	38.1	54.0	21.0	27.0	4°	10	0.83	20500
	6	1	1	**HA06-SH06Q-S-120**	63.0	6.0	22	120.0	38.1	94.0	21.0	27.0	4°	10	1.01	20500
	8	1	1	**HA06-SH08Q-S-080**	63.0	8.0	26	80.0	38.1	54.0	21.0	27.0	4°	10	0.82	20500
	8	1	1	**HA06-SH08Q-S-120**	63.0	8.0	26	120.0	38.1	94.0	21.0	27.0	4°	10	1.00	20500
	10	1	1	**HA06-SH10Q-S-085**	63.0	10.0	31	85.0	50.8	59.0	24.0	32.0	4°	10	0.90	20500
	10	1	1	**HA06-SH10Q-S-120**	63.0	10.0	31	120.0	50.8	94.0	24.0	32.0	4°	10	1.11	20500
	12	1	1	**HA06-SH12Q-S-090**	63.0	12.0	34	90.0	50.8	64.0	24.0	32.0	4°	10	0.91	20500
	12	1	1	**HA06-SH12Q-S-120**	63.0	12.0	34	120.0	50.8	94.0	24.0	32.0	4°	10	1.09	20500
	16	1	1	**HA06-SH16Q-S-095**	63.0	16.0	39	95.0	44.4	69.0	27.0	34.0	4°	10	0.97	20500
	16	1	1	**HA06-SH16Q-S-120**	63.0	16.0	39	120.0	44.4	94.0	27.0	34.0	4°	10	1.14	20500
	20	1	1	**HA06-SH20Q-S-100**	63.0	20.0	41	100.0	57.2	74.0	33.0	42.0	4°	10	1.17	20500
	20	1	1	**HA06-SH20Q-S-120**	63.0	20.0	41	120.0	57.2	94.0	33.0	42.0	4°	10	1.38	20500
	25	1	1	**HA06-SH25Q-S-115**	63.0	25.0	47	115.0	57.2	89.0	44.0	53.0	4°	10	1.75	20500
	32	1	1	**HA06-SH32Q-S-120**	63.0	32.0	51	120.0	57.2	94.0	44.0	53.0	4°	10	1.64	20500
100	6	1	1	**HA10-SH06Q-S-085**	100.0	6.0	22	85.0	38.1	56.0	21.0	27.0	4°	10	2.19	12500
	6	1	1	**HA10-SH06Q-S-120**	100.0	6.0	22	120.0	38.1	91.0	21.0	27.0	4°	10	2.34	12500
	8	1	1	**HA10-SH08Q-S-085**	100.0	8.0	26	85.0	38.1	56.0	21.0	27.0	4°	10	2.18	12500
	8	1	1	**HA10-SH08Q-S-120**	100.0	8.0	26	120.0	38.1	91.0	21.0	27.0	4°	10	2.33	12500
	10	1	1	**HA10-SH10Q-S-090**	100.0	10.0	31	90.0	50.8	61.0	24.0	32.0	4°	10	2.26	12500
	10	1	1	**HA10-SH10Q-S-120**	100.0	10.0	31	120.0	50.8	91.0	24.0	32.0	4°	10	2.44	12500
	12	1	1	**HA10-SH12Q-S-095**	100.0	12.0	34	95.0	50.8	66.0	24.0	32.0	4°	10	2.28	12500
	12	1	1	**HA10-SH12Q-S-120**	100.0	12.0	34	120.0	50.8	91.0	24.0	32.0	4°	10	2.42	12500
	16	1	1	**HA10-SH16Q-S-100**	100.0	16.0	39	100.0	44.4	71.0	27.0	34.0	4°	10	2.34	12500
	16	1	1	**HA10-SH16Q-S-130**	100.0	16.0	39	130.0	44.4	101.0	27.0	34.0	4°	10	2.54	12500
	20	1	1	**HA10-SH20Q-S-105**	100.0	20.0	41	105.0	57.2	76.0	33.0	42.0	4°	10	2.54	12500
	20	1	1	**HA10-SH20Q-S-130**	100.0	20.0	41	130.0	57.2	101.0	33.0	42.0	4°	10	2.80	12500
	25	1	1	**HA10-SH25Q-S-115**	100.0	25.0	47	115.0	57.2	86.0	44.0	53.0	4°	10	3.06	12500
	32	1	1	**HA10-SH32Q-S-120**	100.0	32.0	51	120.0	57.2	91.0	44.0	53.0	4°	10	2.95	12500

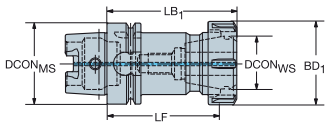
Balanço: Possibilidade de ajuste preciso

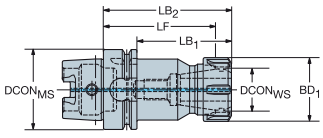
HSK para mandril porta-pinça ER

Interface do lado da peça DIN 6499-B

DSGN 1 2







						Dimensões, mm								BAR	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2				RPMX
40	ER25	1	1	1	**392.41014-4025062**	40.0	26.0	50.0	62.0		42.0			80	0.42	30000
50	ER32	1	1	1	**392.41014-5032072**	50.0	33.0	59.0	72.0		50.0			80	0.70	25000
63	ER16	1	1	2	**392.41014-63 16 100**	63.0	17.0	89.4	71.0	100.0	28.0	63.0		80	0.96	20500
	ER25	1	1	2	**392.41014-63 25 100**	63.0	26.0	88.0	74.0	100.0	42.0	63.0		80	1.24	20500
	ER32	1	1	2	**392.41014-63 32 100B**	63.0	33.0	87.0	74.0	100.0	50.0	63.0		80	1.37	20500
	ER40	1	1	1	**392.41014-63 40 120B**	63.0	41.0	105.0	120.0		63.0			80	1.88	20500
100	ER32	1	1	2	**392.41014-100 32 100A**	100.0	33.0	87.0	71.0	100.0	50.0	100.0		80	2.75	12500
	ER40	1	1	2	**392.41014-100 40 120A**	100.0	41.0	105.0	91.0	120.0	63.0	100.0		80	3.48	12500
	ER50	1	1	2	**392.41014-100 50 130A**	100.0	52.0	109.0	101.0	130.0	78.0	100.0		80	4.45	12500

Para componentes, visite www.sandvik.coromant.com



M1



N23



N15

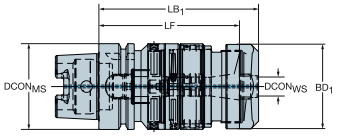
HSK para CoroChuck™ 970

Interface do lado da máquina HSK A/C

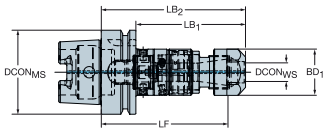
Interface do lado da peça DIN 6499-B

DSGN 1

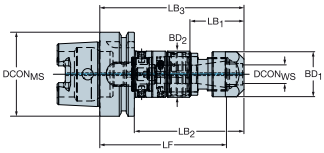




2



5



							Dimensões, mm									
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	KG	RPMX
63	ER32	M27	1	1	2	**970-HA06-32-131**	63.0	32.8	121.7	105.2	131.2	50.0	63.0	80	1.41	8000
	ER40	M30	1	1	1	**970-HA06-40-160**	63.0	41.0	143.1	154.5		63.0		80	2.91	8000
100	ER32	M27	1	1	2	**970-HA10-32-138**	100.0	32.8	128.2	108.7	137.7	50.0	100.0	80	2.80	8000
	ER40	M30	1	1	2	**970-HA10-40-164**	100.0	40.8	146.6	129.1	158.0	63.0	100.0	80	4.35	8000

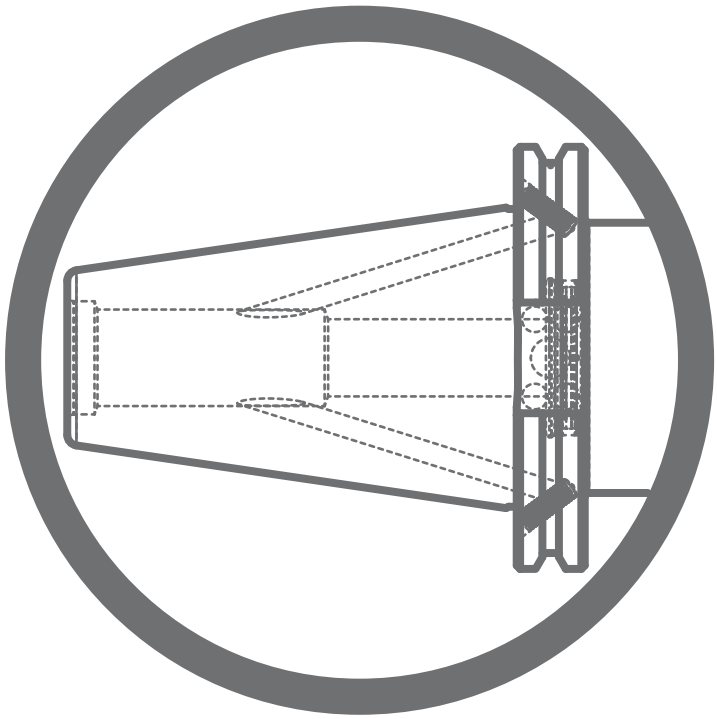
Para usinagem MQL

							Dimensões, mm										
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BAR	KG	RPMX
63	ER20	M12	1	1	5	**970-HA06-20-108**	63.0	20.8	95.1	35.3	77.1	103.1	33.7	35.0	80	1.09	8000
	ER20	M12	1	1	5	**970-HA06Q-20-108**	63.0	20.8	95.1	40.3	82.1	108.1	33.7	34.6	80	1.10	8000
	ER25	M20	1	1	5	**970-HA06-25-128**	63.0	25.8	114.0	37.1	96.5	122.5	42.0	44.0	80	1.44	8000
	ER25	M20	1	1	5	**970-HA06Q-25-128**	63.0	25.8	114.0	43.2	101.5	127.5	41.7	44.0	80	1.05	8000
100	ER20	M12	1	1	5	**970-HA10-20-115**	100.0	20.8	101.6	35.3	80.5	109.6	33.7	35.0	80	2.58	8000
	ER20	M12	1	1	5	**970-HA10Q-20-115**	100.0	20.8	101.6	40.7	85.6	114.6	33.7	34.6	80	2.53	8000
	ER25	M20	1	1	5	**970-HA10-25-134**	100.0	25.8	120.5	37.1	100.0	129.0	42.0	44.0	80	2.92	8000
	ER25	M20	1	1	5	**970-HA10Q-25-134**	100.0	25.8	120.5	42.1	105.0	134.0	41.7	44.0	80	2.89	8000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15 N5

Interface no lado da máquina BIG-PLUS® ISO



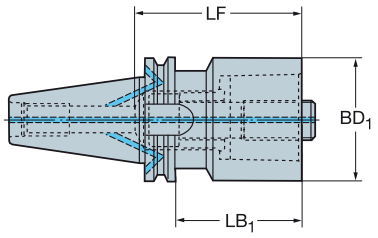
POR

BIG-PLUS ISO para adaptador Coromant Capto®

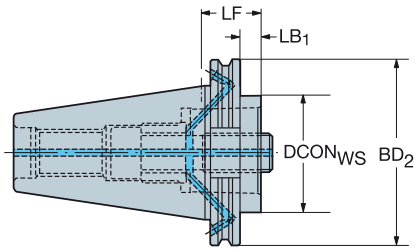
Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB



DSGN 1



2

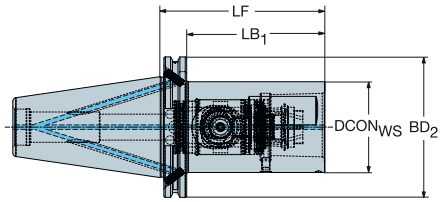


						Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	Código para pedido	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_2	BAR	NM	KG
40	C3	7	1	2	C3-390B.540-40 030	M16	32.0	30.0	10.9	30.0	63.5	80	45.00	0.89
	C4	7	1	2	C4-390B.540-40 040	M16	40.0	40.0	20.9	40.0	63.5	80	55.00	0.96
	C5	7	1	2	C5-390B.540-40 050	M16	50.0	50.0	30.9	50.0	63.5	80	95.00	1.12
	C6	7	1	2	C6-390B.540-40 085	M16	63.0	85.0	30.9	50.0	63.5	80	170.00	1.81
50	C3	7	1	2	C3-390.540-50 030A	M24	32.0	30.0	10.9	30.0	97.5	80	45.00	2.80
	C3	7	1	2	C3-390.540-50 060	M24	32.0	60.0	40.9	60.0	97.5	80	45.00	2.91
	C4	7	1	2	C4-390.540-50 030A	M24	40.0	30.0	10.9	30.0	97.5	80	55.00	2.80
	C4	7	1	2	C4-390.540-50 060	M24	40.0	60.0	40.9	60.0	97.5	80	55.00	3.01
	C5	7	1	2	C5-390.540-50 030A	M24	50.0	30.0	10.9	30.0	97.5	80	95.00	2.75
	C5	7	1	2	C5-390.540-50 070	M24	50.0	70.0	50.9	70.0	97.5	80	95.00	3.27
	C6	7	1	2	C6-390.540-50 050A	M24	63.0	50.0	30.9	50.0	97.5	80	170.00	3.10
	C6	7	1	2	C6-390.540-50 100	M24	63.0	100.0	80.9	100.0	97.5	80	170.00	4.22
	C8	7	1	2	C8-390.540-50 070A	M24	80.0	70.0	50.9	70.0	97.5	80	170.00	3.90
	C8	7	1	2	C8-390.540-50 120	M24	80.0	120.0	100.9	120.0	97.5	80	170.00	5.74
	C10	7	1	1	C10-390.540-50 140	M24	100.0	140.0	140.0			80	380.00	7.72

BIG-PLUS ISO para adaptador Coromant Capto® com troca rápida

Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
50	C6	7	1	IB50-QC-C6-115	M24	63.0	115.0	95.0	97.4	80	90.00	4.48

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Para componentes, visite www.sandvik.coromant.com


M1



N23



N15

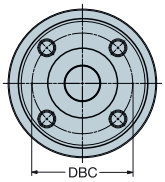
BIG-PLUS ISO para adaptador tipo árvore

Refrigeração pela flange

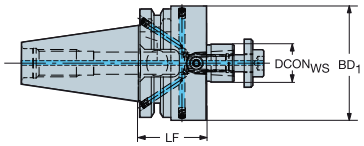
Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB



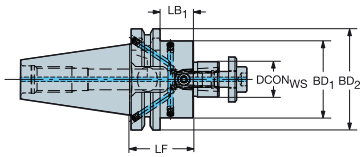
DSGN



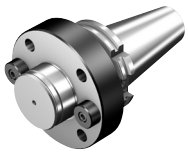
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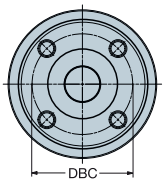


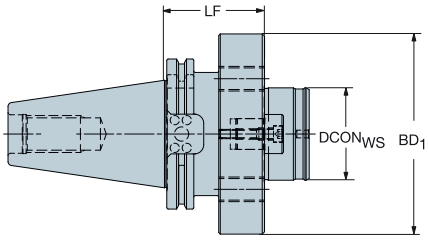
2



CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	DSGN	Código para pedido	Dimensões, mm DBC	CRKS	DCON$_{WS}$	LF	LB$_1$	LB$_2$	BD$_1$	BD$_2$	BAR	NM	KG	RPMX
40	16	7	4	2	392.54005C4016045		M16	16.0	45.0	25.9	45.0	32.0	63.5	80	22.00	1.04	18000
	22	7	4	2	392.54005C4022040		M16	22.0	40.0	20.9	40.0	48.0	63.5	80	45.00	1.20	18000
	27	7	4	2	392.54005C4027050		M16	27.0	50.0	30.9	50.0	60.0	63.5	80	80.00	1.51	18000
	32	7	4	1	392.54005C4032055		M16	32.0	55.0	55.0		78.0		80	180.00	2.03	18000
	40S	7	4	1	392.54005C4040055M	66.7	M16	40.0	55.0	55.0		87.0		80	300.00	2.37	18000
50	22	7	4	2	392.54005C5022040		M24	22.0	40.0	21.0	40.0	48.0	97.5	80	45.00	3.04	12000
	27	7	4	2	392.54005C5027050		M24	27.0	50.0	30.9	50.0	60.0	97.5	80	80.00	3.45	12000
	32	7	4	2	392.54005C5032055		M24	32.0	55.0	35.9	55.0	78.0	97.5	80	180.00	4.11	12000
	40S	7	4	2	392.54005C5040060	66.7	M24	40.0	60.0	40.9	60.0	87.0	97.0	80	300.00	4.65	12000







CZC$_{MS}$	CZC$_{WS}$	Código para pedido	Dimensões, mm DBC	CRKS	DCON$_{WS}$	LF	BD$_1$	NM	KG	RPMX
50	60	392.54005-5060065	101.6	M24	60.0	65.0	130.0	180.00	7.70	12000

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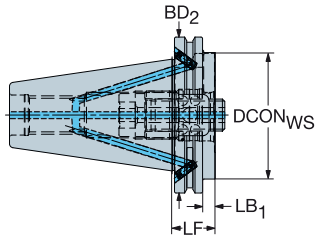
M1 N23 N15

BIG-PLUS ISO para adaptador VL

Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB

Interface do lado da peça DIN 6499-B





					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG	RPMX
50	80	7	1	**390B.540-50 80 027**	M24	80.0	27.0	7.9	97.5	80	170.00	2.87	12000

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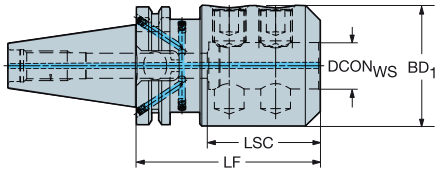
M1 N23 N15

BIG-PLUS ISO para adaptador Weldon / ISO 9766

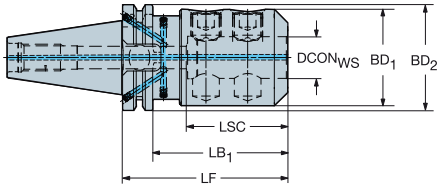
Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB



DSGN 1



2



						Dimensões, mm											
CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	DCON$_{WS}$	LSC	LF	LB$_1$	LB$_2$	BD$_1$	BD$_2$	BAR	NM	KG	RPMX
40	16	7	1	2	392.54023-4016060	M16	16.0		60.0	40.9	60.0	48.0	63.5	20	25.00	1.32	18000
	20	7	1	2	392.54023-4020070	M16	20.0		70.0	50.9	70.0	52.0	63.5	20	25.00	1.52	18000
	25	7	1	1	392.54023-4025100	M16	25.0		100.0	100.0		65.0		20	25.00	2.43	18000
	32	7	1	1	392.54023-4032105	M16	32.0		105.0	105.0		72.0		20	45.00	2.80	18000
	40	7	1	1	392.54023-4040115	M16	40.0		115.0	115.0		90.0		20	45.00	4.28	18000
50	25	7	1	2	392.54023-5025085	M24	25.0	60	85.0	65.9	85.0	65.0	97.5	20	25.00	4.05	12000
	32	7	1	2	392.54023-5032090	M24	32.0	64	90.0	69.9	90.0	72.0	97.5	20	45.00	4.42	12000
	40	7	1	2	392.54023-5040115	M24	40.0	74	115.0	95.9	115.0	90.0	97.0	20	45.00	6.35	12000

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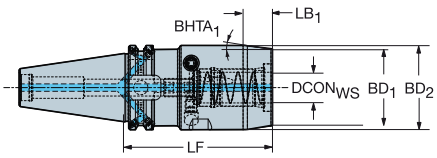
M1 N23 N15

BIG-PLUS ISO para CoroChuck™ 930

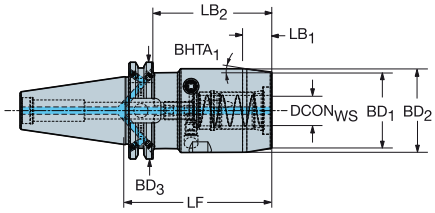
Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB

DSGN 3





DSGN 6

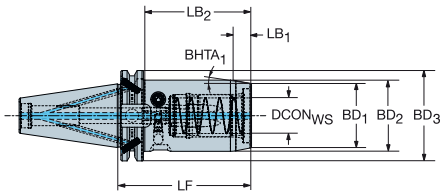


Desenho para usinagem pesada

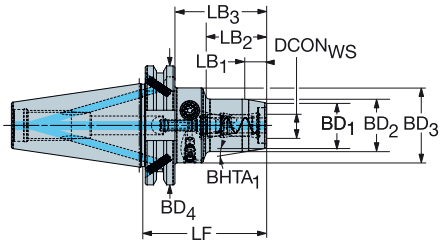
						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
40	20	7	1	6	**930-IB40-HD-20-097**	M16	20.0	51	97.0	17.8	77.9	97.0	50.0	55.0	63.5	8°	80	10.00	2.03	18000
	25	7	1	3	**930-IB40-HD-25-103**	M16	25.0	57	103.0	18.8	103.0		57.0	65.0		12°	80	10.00	2.50	18000
50	20	7	1	6	**930-IB50-HD-20-083**	M24	20.0	51	83.0	17.8	63.9	83.0	50.0	55.0	97.4	8°	80	10.00	3.72	12000
	25	7	1	6	**930-IB50-HD-25-087**	M24	25.0	57	87.0	18.8	67.9	87.0	57.0	65.0	97.4	12°	80	10.00	4.17	12000
	32	7	1	6	**930-IB50-HD-32-077**	M24	32.0	61	77.0	18.8	57.9	77.0	68.0	76.0	97.4	12°	80	10.00	4.27	12000

DSGN 6





DSGN 10



Desenho delgado

						Dimensões, mm																	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_1$	BAR	NM	KG	RPMX
40	6	7	1	10	**930-IB40-S-06-068**	M16	6.0	37	68.0	11.3	30.2	48.9	68.0	22.0	26.0	40.0	63.5	10°	80	8.00	1.08	18000
	8	7	1	10	**930-IB40-S-08-068**	M16	8.0	37	68.0	11.3	30.2	48.9	68.0	24.0	28.0	40.0	63.5	10°	80	8.00	1.10	18000
	10	7	1	10	**930-IB40-S-10-072**	M16	10.0	41	72.0	11.3	34.2	52.9	72.0	26.0	30.0	40.0	63.5	10°	80	8.00	1.13	18000
	12	7	1	10	**930-IB40-S-12-080**	M16	12.0	46	80.0	11.3	38.2	60.9	80.0	28.0	32.0	50.0	63.5	10°	80	8.00	1.33	18000
	20	7	1	10	**930-IB40-S-20-090**	M16	20.0	51	90.0	16.0	49.2	70.9	90.0	38.0	42.0	50.0	63.5	7°	80	8.00	1.52	18000
	25	7	1	6	**930-IB40-S-25-095**	M16	25.0	57	95.0	12.9	75.0	95.0		45.0	50.0	63.5		11°	80	8.00	1.74	18000
50	20	7	1	10	**930-IB50-S-20-089**	M24	20.0	51	89.0	16.0	49.2	69.9	89.0	38.0	42.0	50.0	97.4	7°	80	8.00	3.40	12000
	25	7	1	6	**930-IB50-S-25-095**	M24	25.0	57	95.0	12.9	73.5	95.0		45.0	50.0	97.4		11°	80	8.00	3.61	12000

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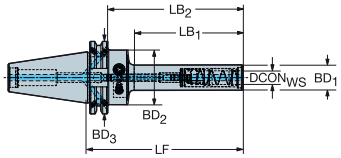
M1 N23 N15 N4

BIG-PLUS ISO para CoroChuck™ 930

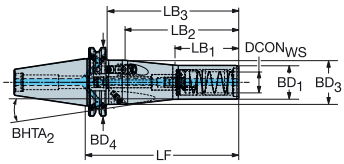
Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB



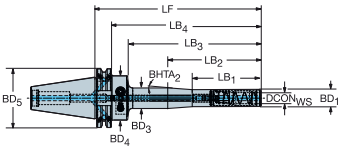
DSGN 5



11



17

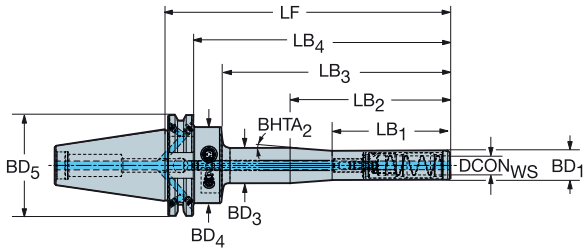


Desenho tipo lápis

						Dimensões, mm																	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	LB_5	BD_1	BD_2	BD_3	BD_4	BD_5	$BHTA_2$	BAR	NM	KG	RPMX
40	8	7	1	5	**930-IB40-P-08-088**	M16	8.0	37	88.0	45.8	66.5	88.0			17.5	40.0	63.5			0°	80	8.00	1.06	18000
	10	7	1	5	**930-IB40-P-10-098**	M16	10.0	41	98.0	55.8	76.5	98.0			20.0	40.0	63.5			0°	80	8.00	1.10	18000
	10	7	1	5	**930-IB40-P-10-138**	M16	10.0	41	138.0	95.8	116.5	138.0			20.0	40.0	63.5			0°	80	8.00	1.20	18000
	12	7	1	5	**930-IB40-P-12-103**	M16	12.0	46	103.0	65.0	83.9	103.0			22.0	40.0	63.5			0°	80	8.00	1.19	18000
	12	7	1	5	**930-IB40-P-12-138**	M16	12.0	46	138.0	100.0	118.9	138.0			22.0	40.0	63.5			0°	80	8.00	1.29	18000
	12	7	1	17	**930-IB40-P-12-188**	M16	12.0	46	188.0	50.0	75.0	150.0	168.9	188	22.0	22.0	26.0	40.0	63	4°	80	8.00	1.58	18000
	20	7	1	11	**930-IB40-P-20-145**	M16	20.0	51	145.0	60.0	108.0	125.9	145.0		32.0	32.0	42.0	63.5		5°	80	8.00	1.66	18000

DSGN 17





						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_3	BD_4	BD_5	$BHTA_2$	BAR	NM	KG	RPMX
40	12	7	1	17	**930-IB40-P-12-188**	M16	12.0	46	188.0	50.0	75.0	150.0	168.9	22.0	26.0	40.0	63	4°	80	8.00	1.58	18000

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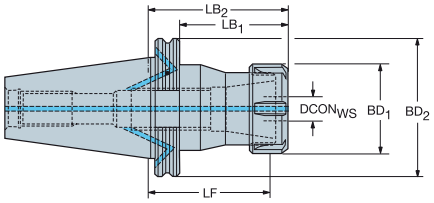
M1 N23 N15 N4

BIG-PLUS ISO para mandril porta-pinça ER

Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB

Interface do lado da peça DIN 6499-B





					Dimensões, mm							BAR	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2			RPMX
40	ER25	7	1	**392.54014-4025070**	M16	26.0	58.0	30.9	70.0	42.0	63.5	80	1.17	18000
	ER40	7	1	**392.54014-4040075**	M16	41.0	60.0	55.9	75.0	63.0	63.5	80	1.43	18000

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M1



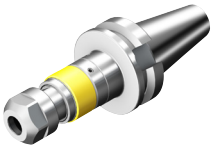
N23

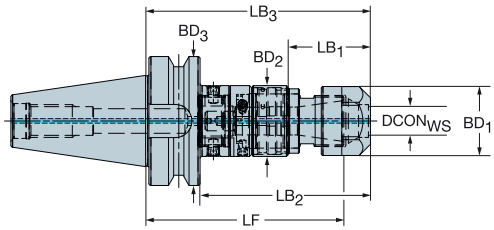


N15

BIG-PLUS ISO para CoroChuck™ 970

Interface do lado da peça DIN 6499-B





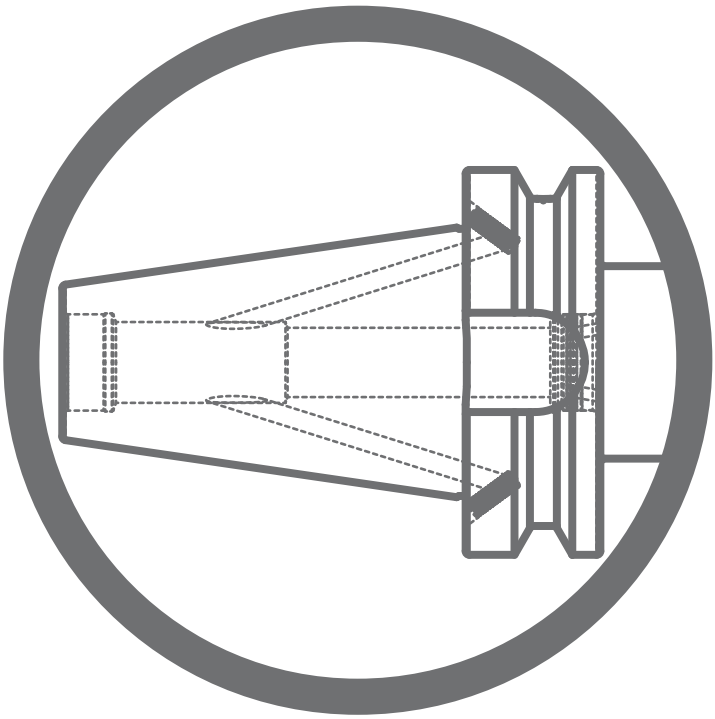
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	Código para pedido	Dimensões, mm CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	KG	RPMX
50	ER20	M12	7	1	**970-IB50-20-106**	M24	20.8	93.2	35.3	82.1	101.2	33.7	35.0	97.5	80	3.00	8000
	ER25	M20	7	1	**970-IB50-25-126**	M24	25.8	112.1	37.1	101.5	120.6	42.0	44.0	97.5	80	3.50	8000

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N23 N15 N5

Interface no lado da máquina BIG-PLUS® MAS-BT

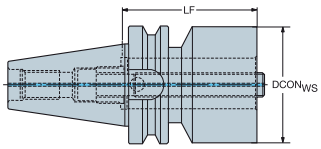


BIG-PLUS MAS-BT para adaptador Coromant Capto®

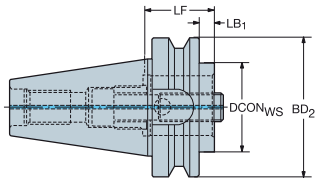
Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339



DSGN 1



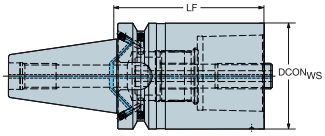
DSGN 2



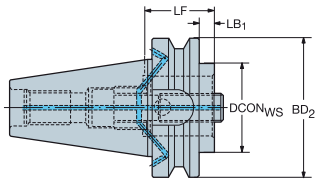
						Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_2	BAR	NM	KG
30	C3	1	1	2	**C3-390.555-30 040**	M12	32.0	40.0	18.0	40.0	46.0	80	45.00	0.48
	C4	1	1	2	**C4-390.555-30 060**	M12	40.0	60.0	38.0	60.0	46.0	80	55.00	0.67
	C5	1	1	1	**C5-390.555-30 080**	M12	50.0	80.0	80.0			80	95.00	1.08



DSGN 1



DSGN 2



						Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_2	BAR	NM	KG
40	C3	7	1	2	**C3-390B.555-40 030**	M16	32.0	30.0	3.0	30.0	63.0	80	45.00	1.00
	C4	7	1	2	**C4-390B.555-40 040**	M16	40.0	40.0	13.0	40.0	63.0	80	55.00	1.04
	C4	7	1	2	**C4-390B.555-40 070**	M16	40.0	70.0	43.0	70.0	63.0	80	55.00	1.32
	C5	7	1	2	**C5-390B.555-40 050**	M16	50.0	50.0	23.0	50.0	63.0	80	95.00	1.16
	C5	7	1	2	**C5-390B.555-40 090**	M16	50.0	90.0	63.0	90.0	63.0	80	95.00	1.73
	C6	7	1	1	**C6-390B.555-40 075**	M16	63.0	75.0	75.0			80	170.00	1.75
50	C3	7	1	2	**C3-390B.558-50 040**	M24	32.0	40.0	2.0	40.0	100.0	80	45.00	3.72
	C3	7	1	2	**C3-390B.558-50 070**	M24	32.0	70.0	32.0	70.0	100.0	80	45.00	3.82
	C4	7	1	2	**C4-390B.558-50 040**	M24	40.0	40.0	2.0	40.0	100.0	80	55.00	3.72
	C4	7	1	2	**C4-390B.558-50 070**	M24	40.0	70.0	32.0	70.0	100.0	80	55.00	3.90
	C5	7	1	2	**C5-390B.558-50 040**	M24	50.0	40.0	2.0	40.0	100.0	80	95.00	3.59
	C5	7	1	2	**C5-390B.558-50 080**	M24	50.0	80.0	42.0	80.0	100.0	80	95.00	4.13
	C6	7	1	2	**C6-390B.558-50 050**	M24	63.0	50.0	12.0	50.0	100.0	80	170.00	3.64
	C6	7	1	2	**C6-390B.558-50 100**	M24	63.0	100.0	62.0	100.0	100.0	80	170.00	4.75
	C8	7	1	2	**C8-390B.558-50 070**	M24	80.0	70.0	32.0	70.0	100.0	80	170.00	4.16
	C8	7	1	2	**C8-390B.558-50 120**	M24	80.0	120.0	82.0	120.0	100.0	80	170.00	6.02
	C10	7	1	1	**C10-390B.558-50 140**	M24	100.0	140.0	140.0			80	380.00	8.01

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M1 N23 N15

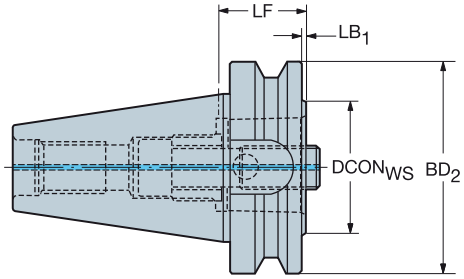
POR

BIG-PLUS MAS-BT para adaptador Coromant Capto®

Polígono girado a 90° para controle de precisão da ponta da ferramenta

Desenvolvido para as séries e-machine Mazak™ e Mori Seiki NT™



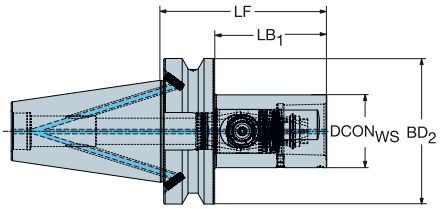


					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
40	C5	1	1	**C5-390.562-40 050**	M16	50.0	50.0	23.0	63.0	80	45.00	1.16
50	C6	1	1	**C6-390.562-50 050**	M24	63.0	50.0	12.0	100.0	80	65.00	3.66
	C8	1	1	**C8-390.562-50 070**	M24	80.0	70.0	32.0	100.0	80	65.00	4.18

BIG-PLUS MAS-BT para adaptador Coromant Capto® com troca rápida

Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339

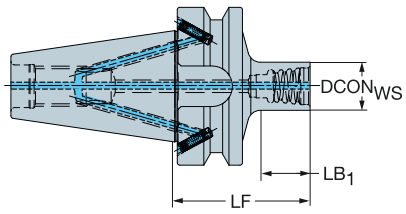




					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
50	C6	7	1	**BB50-QC-C6-135**	M24	63.0	135.0	96.0	135.0	80	90.00	5.52

BIG-PLUS MAS-BT para adaptador Coromant EH





					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG	RPMX
30	E12	1	1	**EH-BB30-12-044**	M12	11.6	44.0	15.4	46.0	80	15.00	0.41	25000
	E16	1	1	**EH-BB30-16-050**	M12	15.4	50.0	22.0	46.0	80	30.00	0.43	25000
	E20	1	1	**EH-BB30-20-047**	M12	19.2	47.0	19.4	46.0	80	50.00	0.43	25000
	E25	1	1	**EH-BB30-25-052**	M12	24.1	52.0	25.1	46.0	80	65.00	0.46	25000

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M1



N23



N15


N3

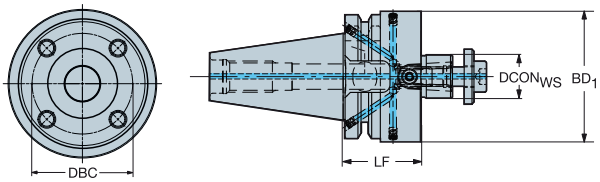
BIG-PLUS MAS-BT para adaptador tipo árvore

Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339

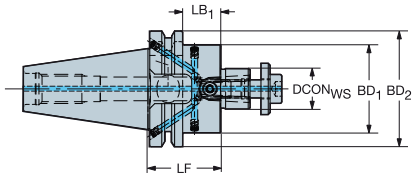
DSGN



1



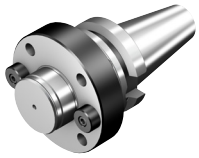
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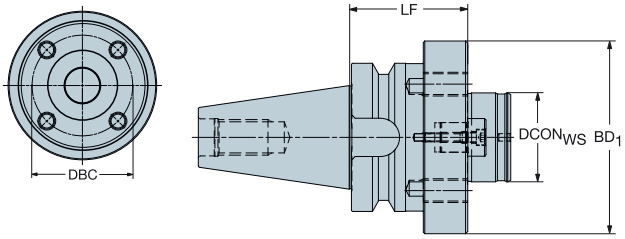


						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	DBC	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
30	16	1	4	2	392.55505C3016040		M12	16.0	40.0	18.0	40.0	32.0	46.0	80	22.00	0.55	25000
	22	1	4	1	392.55505C3022040		M12	22.0	40.0	40.0		48.0		80	45.00	0.73	25000
	27	1	4	1	392.55505C3027040		M12	27.0	40.0	40.0		60.0		80	80.00	0.91	25000
	32	1	4	1	392.55505C3032045		M12	32.0	45.0	45.0		78.0		80	180.00	1.40	25000
40	16	7	4	2	392.55505C4016050		M16	16.0	50.0	23.0	50.0	32.0	63.0	80	22.00	1.18	18000
	22	7	4	2	392.55505C4022045		M16	22.0	45.0	18.0	45.0	48.0	63.0	80	45.00	1.32	18000
	27	7	4	2	392.55505C4027045		M16	27.0	45.0	18.0	45.0	60.0	63.0	80	80.00	1.50	18000
	32	7	4	1	392.55505C4032050		M16	32.0	50.0	50.0		78.0		80	180.00	2.01	18000
	40S	7	4	1	392.55505C4040055M	66.7	M16	40.0	55.0	55.0		87.0		80	300.00	2.58	18000
50	22	7	4	2	392.55805C5022055		M24	22.0	55.0	17.0	55.0	48.0	100.0	80	45.00	3.96	12000
	27	7	4	2	392.55805C5027055		M24	27.0	55.0	17.0	55.0	60.0	100.0	80	80.00	4.14	12000
	32	7	4	2	392.55805C5032055		M24	32.0	55.0	17.0	55.0	78.0	100.0	80	180.00	4.43	12000
	40S	7	4	2	392.55805C5040055	66.7	M24	40.0	55.0	17.0	55.0	87.0	100.0	80	300.00	4.69	12000

BIG-PLUS MAS-BT para adaptador tipo árvore

Interface do lado da máquina compatível com ISO 7388-1 e DIN 69871-ADB





			Dimensões, mm							
CZC_{MS}	CZC_{WS}	**Código para pedido**	DBC	CRKS	$DCON_{WS}$	LF	BD_1	NM	KG	RPMX
50	60	392.55805-5060080	101.6	M24	60.0	80.0	130.0	180.00	8.82	12000

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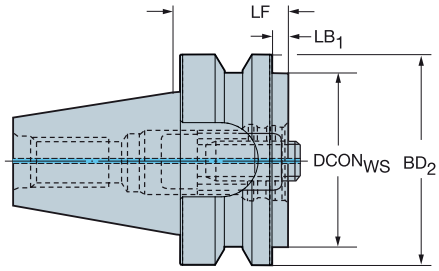
M1 N23 N15

BIG-PLUS MAS-BT para adaptador VL

Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339

Refrigeração pelo centro





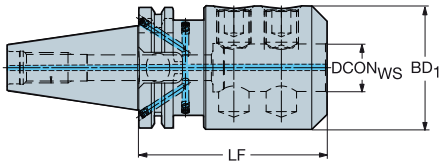
					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
50	80	1	1	**390.558-50 80 040**	M24	80.0	40.0	2.0	100.0	80	180.00	3.50

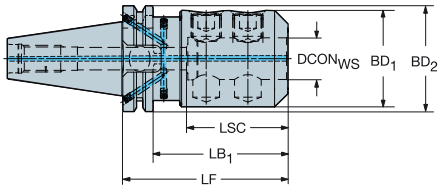
BIG-PLUS MAS-BT para adaptador Weldon / ISO 9766

Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339

DSGN 1 2







						Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
30	16	1	1	1	**392.55523-3016060**	M12	16.0	60.0	60.0		48.0		20	20.00	0.86	25000
	20	1	1	1	**392.55523-3020065**	M12	20.0	65.0	65.0		52.0		20	20.00	0.97	25000
	25	1	1	1	**392.55523-3025090**	M12	25.0	90.0	90.0		65.0		20	65.00	1.80	25000
	32	1	1	1	**392.55523-3032095**	M12	32.0	95.0	95.0		72.0		20	45.00	2.16	25000
40	16	7	1	2	**392.55523-4016065**	M16	16.0	65.0	38.0	65.0	48.0	63.0	20	20.00	1.43	18000
	20	7	1	2	**392.55523-4020065**	M16	20.0	65.0	38.0	65.0	52.0	63.0	20	20.00	1.49	18000
	25	7	1	1	**392.55523-4025090**	M16	25.0	90.0	90.0		65.0		20	25.00	2.30	18000
	32	7	1	1	**392.55523-4032100**	M16	32.0	100.0	100.0		72.0		20	45.00	2.80	18000
	40	7	1	1	**392.55523-4040110**	M16	40.0	110.0	110.0		90.0		20	45.00	4.28	18000
50	25	7	1	2	**392.55823-5025100**	M24	25.0	100.0	62.0	100.0	65.0	100.0	20	25.00	4.94	12000
	32	7	1	2	**392.55823-5032105**	M24	32.0	105.0	67.0	105.0	72.0	100.0	20	45.00	5.26	12000
	40	7	1	2	**392.55823-5040115**	M24	40.0	115.0	77.0	115.0	90.0	100.0	20	45.00	6.60	12000
	50	7	1	1	**392.55823-5050130**	M24	50.0	130.0	100.0		100.0		20	60.00	7.81	12000

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M1



N23



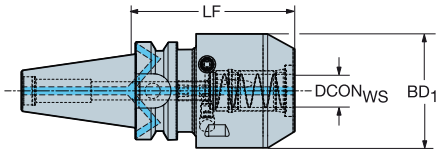
N15

BIG-PLUS MAS-BT para CoroChuck™ 930

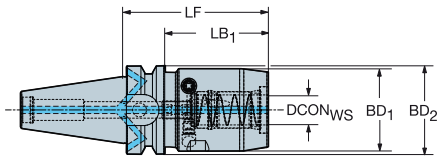
Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339



DSGN 3



DSGN 6

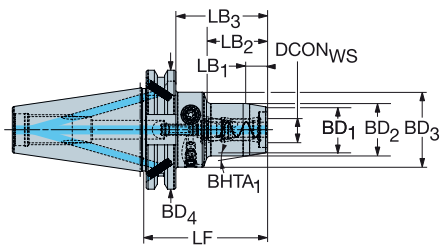


Desenho para usinagem pesada

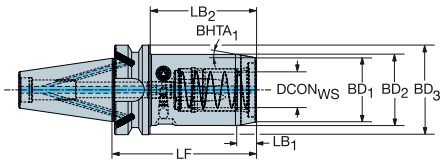
						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
40	20	7	1	6	**930-BB40-HD-20-088**	M16	20.0	51	88.0	17.8	61.0	88.0	50.0	55.0	63.0	8°	80	10.00	1.95	18000
	25	7	1	3	**930-BB40-HD-25-094**	M16	25.0	57	94.0	18.8	94.0		57.0	65.0		12°	80	10.00	2.40	18000
50	20	7	1	6	**930-BB50-HD-20-102**	M24	20.0	51	102.0	17.8	64.0	102.0	50.0	55.0	100.0	8°	80	10.00	4.75	12000
	25	7	1	6	**930-BB50-HD-25-106**	M24	25.0	57	106.0	18.8	68.0	106.0	57.0	65.0	100.0	12°	80	10.00	5.16	12000
	32	7	1	6	**930-BB50-HD-32-096**	M24	32.0	61	96.0	18.8	58.0	96.0	68.0	76.0	100.0	12°	80	10.00	5.25	12000

DSGN 10





DSGN 6



Desenho delgado

						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_1$	BAR	NM	KG	RPMX
30	6	1	1	6	**930-BB30-S-06-048**	M12	6.0	37	48.0	9.3	12.8	48.0		22.0	26.0	46.0		12°	80	8.00	0.56	25000
	8	1	1	6	**930-BB30-S-08-048**	M12	8.0	37	48.0	9.3	12.8	48.0		24.0	28.0	46.0		12°	80	8.00	0.57	25000
	10	1	1	6	**930-BB30-S-10-048**	M12	10.0	41	48.0	9.3	13.8	48.0		26.0	30.0	46.0		12°	80	8.00	0.56	25000
	12	1	1	10	**930-BB30-S-12-082**	M12	12.0	46	82.0	11.3	38.2	60.0	82.0	28.0	32.0	40.0	46.0	10°	80	8.00	0.76	25000
	20	1	1	6	**930-BB30-S-20-088**	M12	20.0	51	88.0	16.0	66.0	88.0		38.0	42.0	46.0		7°	80	8.00	0.94	25000
40	6	7	1	10	**930-BB40-S-06-075**	M16	6.0	37	75.0	11.3	30.2	48.0	75.0	22.0	26.0	40.0	63.0	10°	80	8.00	1.23	18000
	8	7	1	10	**930-BB40-S-08-075**	M16	8.0	37	75.0	11.3	30.2	48.0	75.0	24.0	28.0	40.0	63.0	10°	80	8.00	1.25	18000
	10	7	1	10	**930-BB40-S-10-080**	M16	10.0	41	80.0	11.3	34.2	53.0	80.0	26.0	30.0	40.0	63.0	10°	80	8.00	1.29	18000
	12	7	1	10	**930-BB40-S-12-085**	M16	12.0	46	85.0	11.3	40.0	58.0	85.0	26.0	32.0	50.0	63.0	10°	80	8.00	1.40	18000
	20	7	1	10	**930-BB40-S-20-094**	M16	20.0	51	94.0	16.0	49.2	67.0	94.0	37.9	42.0	50.0	63.0	7°	80	8.00	1.62	18000
	25	7	1	6	**930-BB40-S-25-102**	M16	25.0	57	102.0	12.9	74.0	102.0		45.0	50.0	63.0		11°	80	10.00	1.87	18000
50	20	7	1	10	**930-BB50-S-20-108**	M24	20.0	51	108.0	16.0	49.2	70.0	108.0	37.9	42.0	50.0	100.0	7°	80	8.00	4.41	12000
	25	7	1	6	**930-BB50-S-25-114**	M24	25.0	57	114.0	12.9	73.5	114.0		45.0	50.0	100.0		11°	80	10.00	4.62	12000

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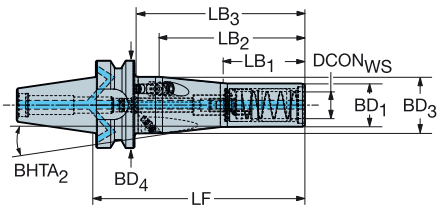
M1 N23 N15 N4

BIG-PLUS MAS-BT para CoroChuck™ 930

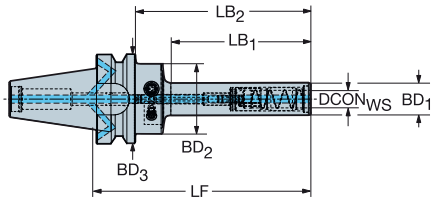
Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339

DSGN 11





DSGN 5

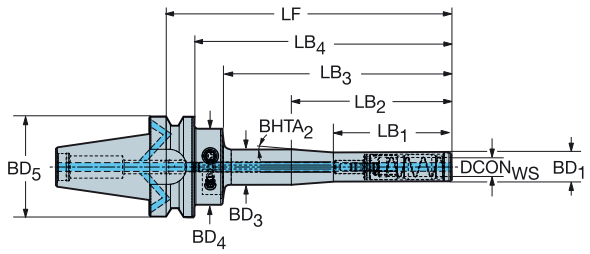


Desenho tipo lápis

						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_2$	BAR	NM	KG	RPMX
30	6	1	1	5	**930-BB30-P-06-088**	M12	6.0	37	88.0	50.0	66.0	88.0		14.5	40.0	46.0		0°	80	8.00	0.62	25000
	8	1	1	5	**930-BB30-P-08-088**	M12	8.0	37	88.0	45.8	66.0	88.0		17.5	40.0	46.0		0°	80	8.00	0.60	25000
	10	1	1	5	**930-BB30-P-10-098**	M12	10.0	41	98.0	55.8	76.0	98.0		20.0	40.0	46.0		0°	80	8.00	0.64	25000
	10	1	1	5	**930-BB30-P-10-138**	M12	10.0	41	138.0	95.8	116.0	138.0		20.0	40.0	46.0		0°	80	8.00	0.74	25000
	12	1	1	5	**930-BB30-P-12-103**	M12	12.0	46	103.0	65.0	81.0	103.0		22.0	40.0	46.0		0°	80	8.00	0.71	25000
	12	1	1	5	**930-BB30-P-12-138**	M12	12.0	46	138.0	100.0	116.0	138.0		22.0	40.0	46.0		0°	80	8.00	0.80	25000
40	8	7	1	5	**930-BB40-P-08-095**	M16	8.0	37	95.0	45.8	65.5	95.0		17.5	40.0	63.0		0°	80	8.00	1.21	18000
	10	7	1	5	**930-BB40-P-10-105**	M16	10.0	41	105.0	55.8	75.5	105.0		20.0	40.0	63.0		0°	80	8.00	1.25	18000
	10	7	1	5	**930-BB40-P-10-145**	M16	10.0	41	145.0	95.8	115.5	145.0		20.0	40.0	63.0		0°	80	8.00	1.35	18000
	12	7	1	5	**930-BB40-P-12-110**	M16	12.0	46	110.0	65.0	83.0	110.0		22.0	40.0	63.0		0°	80	8.00	1.33	18000
	12	7	1	5	**930-BB40-P-12-145**	M16	12.0	46	145.0	100.0	118.0	145.0		22.0	40.0	63.0		0°	80	8.00	1.47	18000
	20	7	1	11	**930-BB40-P-20-153**	M16	20.0	51	153.0	60.0	108.0	126.0	153.0	32.0	32.0	42.0	63.0	5°	80	8.00	1.85	18000

DSGN 17





						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_3	BD_4	BD_5	$BHTA_2$	BAR	NM	KG	RPMX
30	12	1	1	17	**930-BB30-P-12-188**	M12	12.0	46	188.0	50.0	75.0	150.0	166.0	22.0	26.0	40.0	46	4°	80	8.00	1.08	25000
40	12	7	1	17	**930-BB40-P-12-195**	M16	12.0	46	195.0	50.0	75.0	150.0	168.0	22.0	26.0	40.0	63	4°	80	8.00	1.68	18000

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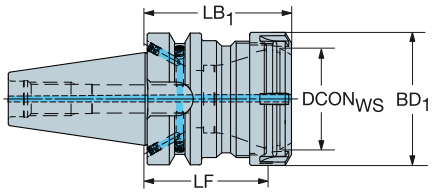
M1 N23 N15 N4

BIG-PLUS MAS-BT para mandril porta-pinça ER

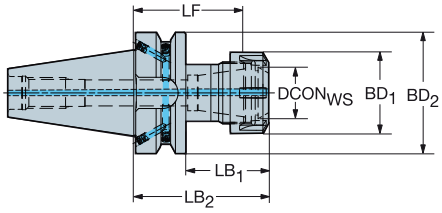
Interface do lado da máquina compatível com MAS-BT 403 e JIS B 6339



DSGN 1



2



Interface do lado da peça DIN 6499-B

						Dimensões, mm							BAR	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2			RPMX
30	ER11	1	1	2	**392.55514-3011050**	M12	11.4	43.4	28.0	50.0	18.7	46.0	80	0.45	25000
	ER16	1	1	2	**392.55514-3016050**	M12	17.0	39.4	28.0	50.0	28.0	46.0	80	0.47	25000
	ER20	1	1	2	**392.55514-3020052**	M12	21.0	40.5	30.0	52.0	33.7	46.0	80	0.49	25000
	ER25	1	1	2	**392.55514-3025060**	M12	26.0	48.0	38.0	60.0	42.0	46.0	80	0.60	25000
	ER32	1	1	1	**392.55514-3032060**	M12	33.0	47.0	60.0		50.0		80	0.64	25000
40	ER25	7	1	2	**392.55514-4025070**	M16	26.0	58.0	43.0	70.0	42.0	63.0	80	1.24	18000
	ER40	7	1	1	**392.55514-4040070**	M16	41.0	55.0	70.0		63.0		80	1.39	18000

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M1



N23



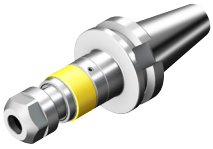
N15

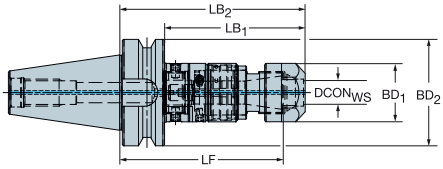
POR

BIG-PLUS MAS-BT para CoroChuck™ 970

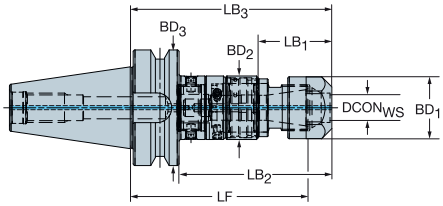
Interface do lado da peça DIN 6499-B

DSGN 2





5



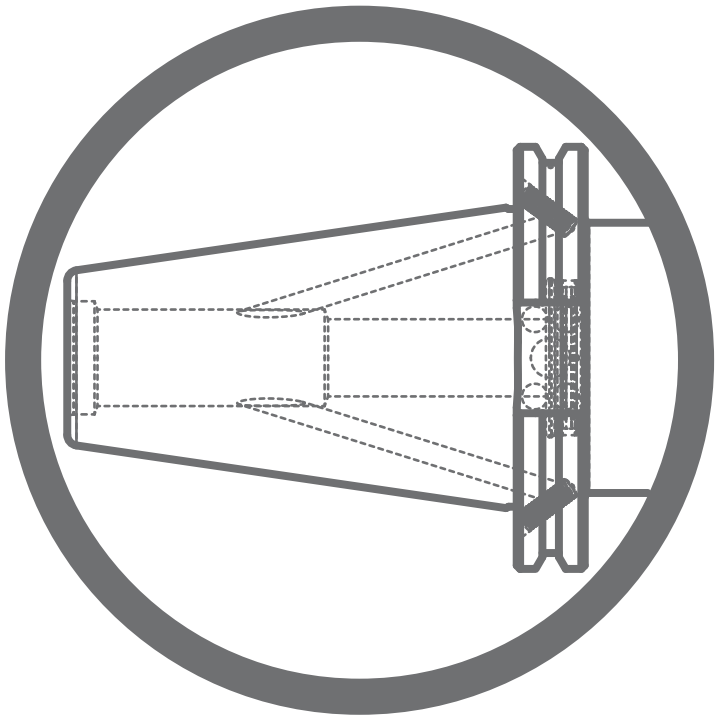
							Dimensões, mm											
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	KG	RPMX
30	ER11	M5	1	1	5	**970-BB30-11-082**	M12	11.3	78.2	24.1	60.0	82.0	18.7	23.5	46.0	80	0.52	8000
	ER20	M12	1	1	5	**970-BB30-20-105**	M12	20.8	92.2	40.3	83.1	105.2	33.7	35.0	46.0	80	0.84	8000
	ER25	M20	1	1	5	**970-BB30-25-125**	M12	25.8	111.1	42.1	102.6	124.6	42.0	44.0	46.0	80	1.20	8000
40	ER20	M12	7	1	5	**970-BB40-20-110**	M16	20.8	97.2	40.3	83.1	110.2	33.7	35.0	63.0	80	1.43	8000
	ER25	M20	7	1	5	**970-BB40-25-130**	M16	25.8	116.1	42.1	102.6	129.6	42.0	44.0	63.0	80	1.79	8000
50	ER20	M12	7	1	5	**970-BB50-20-125**	M24	20.8	112.2	40.3	87.1	125.2	33.7	35.0	100.0	80	4.11	8000
	ER25	M20	7	1	5	**970-BB50-25-145**	M24	25.8	131.1	42.1	106.6	144.6	42.0	44.0	100.0	80	4.50	8000
	ER40	M30	7	1	2	**970-BB50-40-174**	M24	40.8	157.2	136.0	174.0		63.0	100.0		80	5.66	8000

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M1 N23 N15 N5

Interface no lado da máquina ISO 7388-1

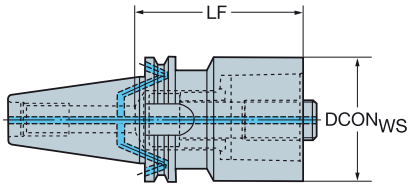


ISO 7388-1 para adaptador Coromant Capto®

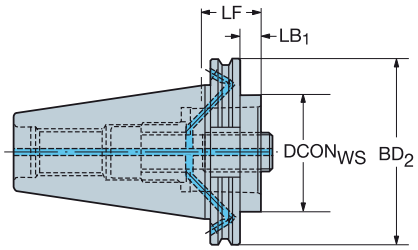
Interface do lado da máquina compatível com DIN 69871-ADB



DSGN 1



2

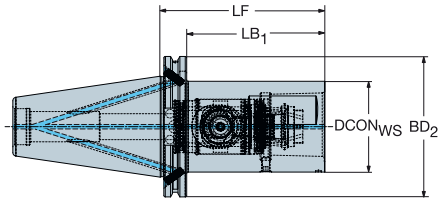


						Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	Código para pedido	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_2	BAR	NM	KG
40	C3	7	1	2	C3-390B.140-40 030	M16	32.0	30.0	10.9	30.0	63.5	80	45.00	0.87
	C3	7	1	2	C3-390B.140-40 060	M16	32.0	60.0	40.9	60.0	63.5	80	45.00	1.02
	C4	7	1	2	C4-390B.140-40 030	M16	40.0	30.0	10.9	30.0	63.5	80	55.00	0.86
	C4	7	1	2	C4-390B.140-40 060	M16	40.0	60.0	40.9	60.0	63.5	80	55.00	1.12
	C5	7	1	2	C5-390B.140-40 040	M16	50.0	40.0	20.9	40.0	63.5	80	95.00	0.96
	C5	7	1	2	C5-390B.140-40 080	M16	50.0	80.0	60.9	80.0	63.5	80	95.00	1.52
	C6	7	1	2	C6-390B.140-40 085	M16	63.0	85.0	65.9	85.0	63.5	80	170.00	1.84
50	C3	7	1	2	C3-390B.140-50 030	M24	32.0	30.0	10.9	30.0	97.5	80	45.00	2.73
	C3	7	1	2	C3-390B.140-50 060	M24	32.0	60.0	40.9	60.0	97.5	80	45.00	2.86
	C4	7	1	2	C4-390B.140-50 030	M24	40.0	30.0	10.9	30.0	97.5	80	55.00	2.74
	C4	7	1	2	C4-390B.140-50 060	M24	40.0	60.0	40.9	60.0	97.5	80	55.00	2.96
	C5	7	1	2	C5-390B.140-50 030	M24	50.0	30.0	10.9	30.0	97.5	80	95.00	2.70
	C5	7	1	2	C5-390B.140-50 070	M24	50.0	70.0	50.9	70.0	97.5	80	95.00	3.21
	C6	7	1	2	C6-390B.140-50 030	M24	63.0	30.0	10.9	30.0	97.5	80	170.00	2.62
	C6	7	1	2	C6-390B.140-50 080	M24	63.0	80.0	60.9	80.0	97.5	80	170.00	3.71
	C8	7	1	2	C8-390B.140-50 070	M24	80.0	70.0	50.9	70.0	97.5	80	170.00	3.83
	C8	7	1	2	C8-390B.140-50 120	M24	80.0	120.0	100.9	120.0	97.5	80	170.00	5.69
	C10	7	1	1	C10-390B.140-50 140	M24	100.0	140.0	140.0			80	380.00	7.66
60	C8	1	1	2	C8-390.140-60 120	M30	80.0	120.0	100.9	120.0	155.0	80	170.00	12.57
	C10	1	1	2	C10-390.140-60 050	M30	100.0	50.0	30.9	50.0	155.0	80	380.00	9.35

ISO 7388-1 para adaptador Coromant Capto® com troca rápida

Interface do lado da máquina compatível com DIN 69871-ADB





				Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
50	C5	7	1	I50-QC-C5-095	M24	50.0	95.0	75.0	97.4	80	70.00	3.54
	C6	7	1	I50-QC-C6-115	M24	63.0	115.0	95.0	97.4	80	90.00	4.43
	C8	7	1	I50-QC-C8-135	M24	80.0	135.0	115.0	97.4	80	130.00	6.06

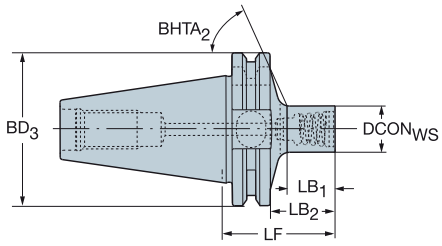
Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

ISO 7388-1 para adaptador Coromant EH

Interface do lado da máquina compatível com DIN 69871-AD

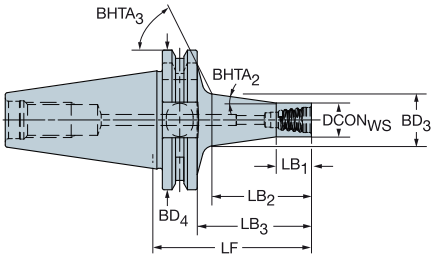




Desenho curto

					Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_3	$BHTA_2$	BAR	NM	KG	RPMX
40	E10	1	1	**392.140EH-40 10 041**	M16	9.6	41.0	12.7	21.9	63.5	65°	80	12.00	0.96	18000
	E12	1	1	**392.140EH-40 12 044**	M16	11.6	44.0	16.0	24.9	63.5	65°	80	15.00	0.97	18000
	E16	1	1	**392.140EH-40 16 049**	M16	15.4	49.0	21.5	29.9	63.5	65°	80	30.00	1.03	18000
	E20	1	1	**392.140EH-40 20 046**	M16	19.2	46.0	19.0	27.0	63.5	63°	80	50.00	1.05	18000
	E25	1	1	**392.140EH-40 25 051**	M16	24.1	51.0	24.6	31.9	63.5	61°	80	65.00	1.09	18000





Desenho longo

					Dimensões, mm												
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_3	BD_4	$BHTA_2$	$BHTA_3$	BAR	NM	KG	RPMX
40	E10	1	1	**392.140EH-40 10 055**	M16	9.6	55.0	10.0	28.1	35.9	14.7	63.5	8°	65°	80	12.00	0.97	18000
	E12	1	1	**392.140EH-40 12 060**	M16	11.6	60.0	12.0	33.5	40.9	17.6	63.5	8°	65°	80	15.00	1.00	18000
	E16	1	1	**392.140EH-40 16 071**	M16	15.4	71.0	16.0	45.3	51.9	23.6	63.5	8°	63°	80	30.00	1.09	18000
	E20	1	1	**392.140EH-40 20 084**	M16	19.2	84.0	20.0	59.1	64.9	30.2	63.5	8°	61°	80	50.00	1.19	18000
	E25	1	1	**392.140EH-40 25 100**	M16	24.1	100.0	25.0	76.2	80.9	38.5	63.5	8°	51°	80	65.00	1.40	18000

Para componentes, visite www.sandvik.coromant.com

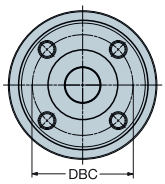
M1 N23 N15 N3

ISO 7388-1 para adaptador tipo árvore

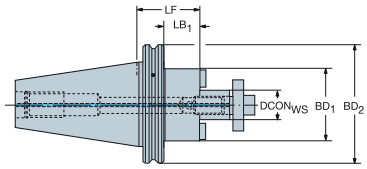
Interface do lado da máquina compatível com DIN 69871-ADB



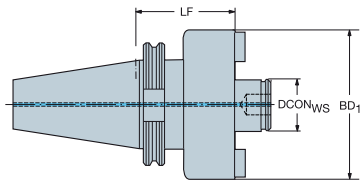
DSGN



2



1



						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	DBC	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
40	16	7	1	2	**A1B05-40 16 035**		M16	16.0	35.0	15.9	35.0	36.0	63.5	80	22.00	1.04	18000
	16	7	1	2	**A1B05-40 16 100**		M16	16.0	100.0	78.9	100.0	36.0	63.5	80	22.00	1.47	18000
	22	7	1	2	**A1B05-40 22 035**		M16	22.0	35.0	13.9	35.0	48.0	63.5	80	45.00	1.15	18000
	22	7	1	2	**A1B05-40 22 100**		M16	22.0	100.0	78.9	100.0	48.0	63.5	80	45.00	2.02	18000
	27	7	1	2	**A1B05-40 27 035**		M16	27.0	35.0	15.0	35.0	48.0	63.5	80	80.00	1.08	18000
	27	7	1	2	**A1B05-40 27 100**		M16	27.0	100.0	80.9	100.0	60.0	63.5	80	80.00	2.59	18000
	32	7	1	1	**A1B05-40 32 050**		M16	32.0	50.0	50.0		78.0		80	180.00	1.82	18000
50	22	7	1	2	**A1B05-50 22 035**		M24	22.0	35.0	15.9	35.0	48.0	97.5	80	45.00	3.00	12000
	22	7	1	2	**A1B05-50 22 100**		M24	22.0	100.0	77.9	100.0	48.0	97.5	80	45.00	4.03	12000
	27	7	1	2	**A1B05-50 27 035**		M24	27.0	35.0	12.9	35.0	60.0	97.5	80	80.00	3.26	12000
	27	7	1	2	**A1B05-50 27 100**		M24	27.0	100.0	77.9	100.0	60.0	97.5	80	80.00	4.68	12000
	32	7	1	2	**A1B05-50 32 035**		M24	32.0	35.0	12.9	35.0	78.0	97.5	80	180.00	3.54	12000
	32	7	1	2	**A1B05-50 32 100**		M24	32.0	100.0	77.9	100.0	78.0	97.5	80	180.00	5.78	12000
	40S	7	1	2	**A1B05-50 40 050**	66.7	M24	40.0	50.0	30.9	50.0	89.0	97.5	80	300.00	4.48	12000
	60	7	1	1	**A1F05-50 60 070**	101.6	M24	60.0	70.0	70.0		127.0		80	180.00	7.76	

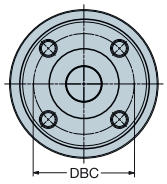
Todos os suportes são fornecidos com um parafuso standard sem furo para refrigeração. Para fresas com canais de refrigeração, um novo parafuso com furos de refrigeração radiais é necessário e pode ser pedido separadamente.
Consulte a página M13

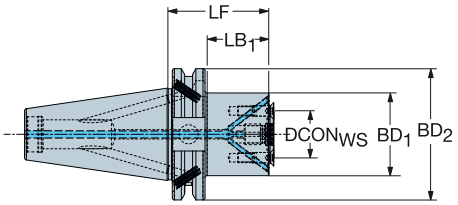
ISO 7388-1 para adaptador tipo árvore com parafusos de acionamento

Interface do lado da máquina compatível com DIN 69871-ADB

Para CoroMill® QD com refrigeração interna







					Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	DBC	CRKS	$DCON_{WS}$	LSC	LF	LB_1	BD_1	BD_2	BAR	NM	KG	RPMX
40	X10	7	3	**I40-X10-032-045**	22.0	M16	10.0	2	45.0	24.5	32.0	63.5	80	6.40	1.00	12000
	X22	7	3	**I40-X22-040-050**	32.0	M16	22.0	2	50.0	29.5	40.0	63.5	80	3.90	1.14	11000
	X32	7	3	**I40-X32-063-070**	45.0	M16	32.0	2	70.0	50.5	63.0	63.5	80	6.40	1.89	10000

Para componentes, visite www.sandvik.coromant.com



M1



N23



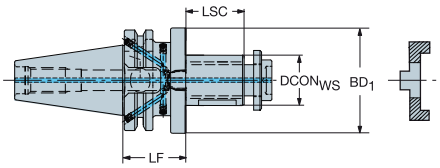
N15

ISO 7388-1 para adaptador tipo árvore para fresa de disco e de facear

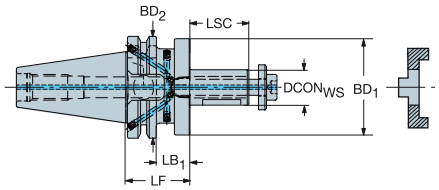
Interface do lado da máquina compatível com DIN 69871-ADB



DSGN 1



DSGN 2



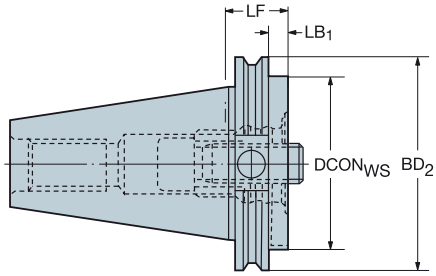
						Dimensões, mm										
CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	DCON$_{WS}$	LSC	LF	LB$_1$	LB$_2$	BD$_1$	BD$_2$	BAR	NM	KG
40	22	7	1	2	**A1B08-40 22 055**	M16	22.0	31	43.0	19.9	43.0	40.0	63.5	80	45.00	1.26
	27	7	1	2	**A1B08-40 27 055**	M16	27.0	33	43.0	22.9	43.0	48.0	63.5	80	80.00	1.45
	32	7	1	2	**A1B08-40 32 060**	M16	32.0	37	46.0	26.9	46.0	58.0	63.5	80	180.00	1.76
	40	7	1	1	**A1B08-40 40 060**	M16	40.0	41	46.0	60.0		70.0		80	300.00	2.38

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

ISO 7388-1 para adaptador VL

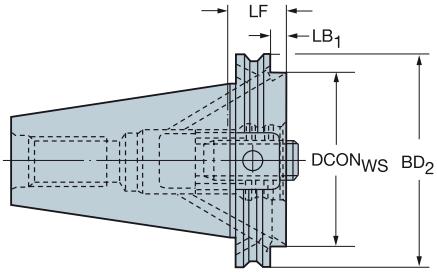




Interface do lado da máquina compatível com DIN 69871-AD

					Dimensões, mm							
										BAR	NM	KG
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2			
50	80	1	1	**390.140-50 80 027**	M24	80.0	27.0	7.9	97.5	20	180.00	2.88





Interface do lado da máquina compatível com DIN 69871-B

					Dimensões, mm							
										BAR	NM	KG
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2			
50	80	6	1	**390.272-50 80 027**	M24	80.0	27.0	7.9	97.5	20	180.00	2.86

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

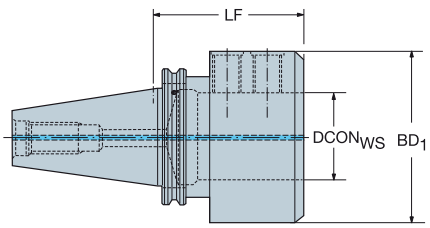
ISO 7388-1 para adaptador Weldon

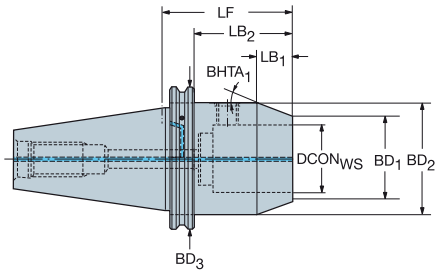
Interface do lado da máquina compatível com DIN 69871-ADB

Interface do lado da peça DIN 6535-HB e DIN 1835-B

DSGN 3 6







						Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG
40	6	7	1	6	**A1B20-40 06 050**	M16	6.0	50.0	11.0	28.9	50.0	12.3	25.0	63.5	30°	20	3.00	0.91
	6	7	1	6	**A1B20-40 06 100**	M16	6.0	100.0	11.0	78.9	100.0	12.3	25.0	63.5	30°	20	3.00	1.06
	8	7	1	6	**A1B20-40 08 050**	M16	8.0	50.0	11.0	28.9	50.0	15.3	28.0	63.5	30°	20	7.00	0.82
	8	7	1	6	**A1B20-40 08 100**	M16	8.0	100.0	11.0	78.9	100.0	15.3	28.0	63.5	30°	20	7.00	1.14
	10	7	1	6	**A1B20-40 10 050**	M16	10.0	50.0	13.0	28.9	50.0	20.0	35.0	63.5	30°	20	10.00	0.92
	10	7	1	6	**A1B20-40 10 100**	M16	10.0	100.0	13.0	78.9	100.0	20.0	35.0	63.5	30°	20	10.00	1.34
	12	7	1	6	**A1B20-40 12 050**	M16	12.0	50.0	13.0	28.9	50.0	27.0	42.0	63.5	30°	20	12.00	1.07
	12	7	1	6	**A1B20-40 12 100**	M16	12.0	100.0	13.0	78.9	100.0	27.0	42.0	63.5	30°	20	12.00	1.57
	16	7	1	6	**A1B20-40 16 063**	M16	16.0	63.0	13.0	41.9	63.0	33.0	48.0	63.5	30°	20	15.00	1.30
	16	7	1	6	**A1B20-40 16 100**	M16	16.0	100.0	13.0	78.9	100.0	33.0	48.0	63.5	30°	20	15.00	1.79
	20	7	1	6	**A1B20-40 20 063**	M16	20.0	63.0	13.0	41.9	63.0	37.0	52.0	63.5	30°	20	20.00	1.26
	20	7	1	6	**A1B20-40 20 100**	M16	20.0	100.0	13.0	78.9	100.0	37.0	52.0	63.5	30°	20	20.00	1.89
	25	7	1	3	**A1B20-40 25 100**	M16	25.0	100.0	13.0	100.0		50.0	65.0		30°	20	25.00	2.24
	32	7	1	3	**A1B20-40 32 100**	M16	32.0	100.0	12.0	100.0		58.1	72.0		30°	20	45.00	2.54
50	12	7	1	6	**A1B20-50 12 063**	M24	12.0	63.0	13.0	40.9	63.0	27.0	42.0	97.4	30°	20	12.00	3.00
	16	7	1	6	**A1B20-50 16 063**	M24	16.0	63.0	13.0	40.9	63.0	33.0	48.0	97.4	30°	20	15.00	3.20
	20	7	1	6	**A1B20-50 20 063**	M24	20.0	63.0	13.0	40.9	63.0	37.0	52.0	97.4	30°	20	20.00	3.26
	20	7	1	6	**A1B20-50 20 100**	M24	20.0	100.0	13.0	77.9	100.0	37.0	52.0	97.4	30°	20	20.00	3.87
	25	7	1	6	**A1B20-50 25 080**	M24	25.0	80.0	13.0	57.9	80.0	50.0	65.0	97.4	30°	20	25.00	3.92
	25	7	1	6	**A1B20-50 25 100**	M24	25.0	100.0	13.0	77.9	100.0	50.0	65.0	97.4	30°	20	25.00	4.45
	32	7	1	6	**A1B20-50 32 100**	M24	32.0	100.0	12.0	77.9	100.0	58.1	72.0	97.4	30°	20	45.00	4.60
	32	7	1	6	**A1B20-50 32 160**	M24	32.0	160.0	12.0	137.9	160.0	58.1	72.0	97.4	30°	20	45.00	6.60
	40	7	1	6	**A1B20-50 40 120**	M24	40.0	120.0	15.0	97.9	120.0	60.7	78.0	97.4	30°	20	45.00	5.50

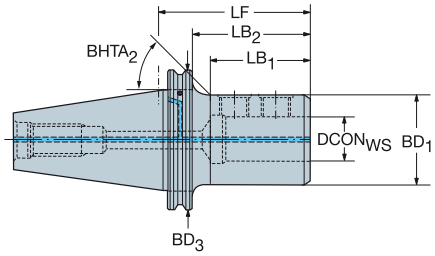
Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

ISO 7388-1 para adaptador ISO 9766

Interface do lado da máquina compatível com DIN 69871-ADB





					Dimensões, mm							BAR	NM	KG
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	BD_1	BD_2			
40	16	7	1	**A1B27-40 16 080**	M16	16.0	49	80.0	55.9	36.0	63.5	20	10.00	1.21
	20	7	1	**A1B27-40 20 080**	M16	20.0	51	80.0	55.9	40.0	63.5	20	12.00	1.27
	25	7	1	**A1B27-40 25 085**	M16	25.0	57	85.0	64.9	45.0	63.5	20	20.00	1.38
	32	7	1	**A1B27-40 32 090**	M16	32.0	61	90.0	69.9	52.0	63.5	20	30.00	1.50
50	16	7	1	**A1B27-50 16 080**	M24	16.0	49	80.0	59.9	36.0	97.5	20	10.00	3.16
	20	7	1	**A1B27-50 20 080**	M24	20.0	51	80.0	59.9	40.0	97.5	20	12.00	3.20
	25	7	1	**A1B27-50 25 085**	M24	25.0	57	85.0	64.9	45.0	97.5	20	20.00	3.36
	32	7	1	**A1B27-50 32 090**	M24	32.0	61	90.0	69.9	52.0	97.5	20	30.00	3.52
	40	7	1	**A1B27-50 40 090**	M24	40.0	71	90.0	69.9	75.0	97.5	20	40.00	4.40
	50	7	1	**A1B27-50 50 100**	M24	50.0	81	100.0	79.9	75.0	97.5	20	45.00	4.22

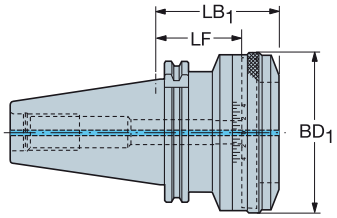
Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

ISO 7388-1 para adaptador ISO 9766 ajustável

Interface do lado da máquina compatível com DIN 69871-AD





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_1	BAR	KG	RPMX
40	1	1	1	**392.140277-40 01 055A**	M16	78.0	55.0	79.6	86.0	20	2.26	12000
50	2	1	1	**392.140277-50 02 055A**	M24	98.0	55.0	79.6	106.0	20	5.16	9000
	3	1	1	**392.140277-50 03 075A**	M24	136.0	75.0	85.0	140.0	20	7.03	6000

Para componentes, visite www.sandvik.coromant.com

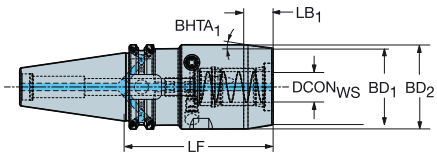
M1 N23

ISO 7388-1 para CoroChuck™ 930

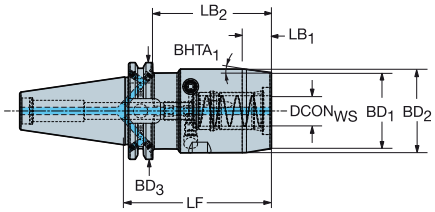
Interface do lado da máquina compatível com DIN 69871-ADB

DSGN 3





DSGN 6

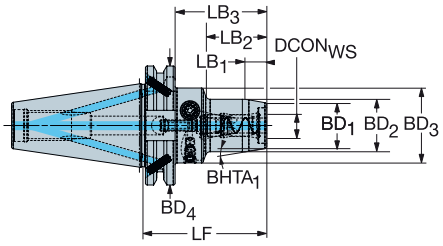


Desenho para usinagem pesada

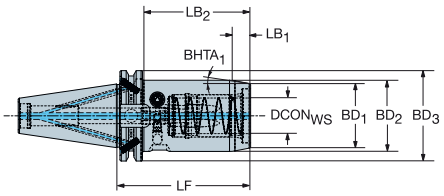
						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
40	20	7	1	6	**930-I40-HD-20-097**	M16	20.0	51	97.0	17.8	77.9	97.0	50.0	55.0	63.5	8°	80	10.00	2.03	18000
	25	7	1	3	**930-I40-HD-25-103**	M16	25.0	57	103.0	18.8	103.0		57.0	65.0		12°	80	10.00	2.48	18000
50	20	7	1	6	**930-I50-HD-20-083**	M24	20.0	51	83.0	17.8	63.9	83.0	50.0	55.0	97.4	8°	80	10.00	3.68	12000
	25	7	1	6	**930-I50-HD-25-087**	M24	25.0	57	87.0	18.8	67.9	87.0	57.0	65.0	97.4	12°	80	10.00	4.13	12000
	32	7	1	6	**930-I50-HD-32-077**	M24	32.0	61	77.0	18.8	57.9	77.0	68.0	76.0	97.4	12°	80	10.00	4.24	12000
	32	7	1	6	**930-I50-HD-32-170**	M24	32.0	61	170.0	18.8	150.9	170.0	68.0	76.0	97.4	12°	80	10.00	7.43	12000

DSGN 10





DSGN 6



Desenho delgado

						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BD_4	$BHTA_1$	$BHTA_3$	BAR	NM	KG	RPMX
40	6	7	1	10	**930-I40-S-06-068**	M16	6.0	37	68.0	11.3	30.2	48.9	22.0	26.0	40.0	63.5	10°	0°	80	8.00	1.06	18000
	8	7	1	10	**930-I40-S-08-068**	M16	8.0	37	68.0	11.3	30.2	48.9	24.0	28.0	40.0	63.5	10°	0°	80	8.00	1.07	18000
	10	7	1	10	**930-I40-S-10-072**	M16	10.0	41	72.0	11.3	34.2	52.9	26.0	30.0	40.0	63.5	10°	0°	80	8.00	1.11	18000
	12	7	1	10	**930-I40-S-12-080**	M16	12.0	46	80.0	11.3	38.2	60.9	28.0	32.0	50.0	63.5	10°	0°	80	8.00	1.32	18000
	20	7	1	10	**930-I40-S-20-090**	M16	20.0	51	90.0	16.0	49.2	70.9	38.0	42.0	50.0	63.5	7°	0°	80	8.00	1.50	18000
	25	7	1	6	**930-I40-S-25-095**	M16	25.0	57	95.0	12.9	75.0	76.0	45.0	50.0	50.0	63.5	11°	82°	80	8.00	1.71	18000
50	20	7	1	10	**930-I50-S-20-089**	M24	20.0	51	89.0	16.0	49.2	69.9	38.0	42.0	50.0	97.4	7°	0°	80	8.00	3.34	12000
	25	7	1	6	**930-I50-S-25-095**	M24	25.0	57	95.0	12.9	73.5	76.0	45.0	50.0	50.0	97.4	11°	84°	80	8.00	3.57	12000

Para componentes, visite www.sandvik.coromant.com

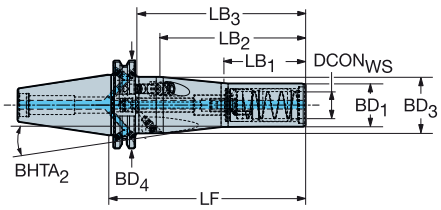
M1 N23 N6 N15 N4

ISO 7388-1 para CoroChuck™ 930

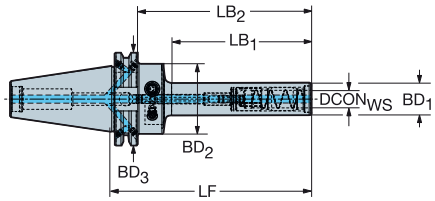
Interface do lado da máquina compatível com DIN 69871-ADB

DSGN 11





DSGN 5

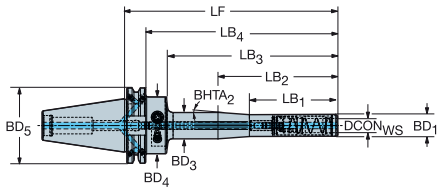


Desenho tipo lápis

						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_2$	BAR	NM	KG	RPMX
40	8	7	1	5	**930-I40-P-08-088**	M16	8.0	37	88.0	45.8	66.5	88.0		17.5	40.0	63.5		0°	80	8.00	1.04	18000
	10	7	1	5	**930-I40-P-10-098**	M16	10.0	41	98.0	55.8	76.5	98.0		20.0	40.0	63.5		0°	80	8.00	1.09	18000
	10	7	1	5	**930-I40-P-10-138**	M16	10.0	41	138.0	95.8	116.5	138.0		20.0	40.0	63.5		0°	80	8.00	1.18	18000
	12	7	1	5	**930-I40-P-12-103**	M16	12.0	46	103.0	60.8	83.9	103.0		22.0	40.0	63.5		0°	80	8.00	1.17	18000
	12	7	1	5	**930-I40-P-12-138**	M16	12.0	46	138.0	95.8	118.9	138.0		22.0	40.0	63.5		0°	80	8.00	1.27	18000
	20	7	1	11	**930-I40-P-20-145**	M16	20.0	51	145.0	60.0	108.0	125.9	145.0	32.0	32.0	42.0	63.5	6°	80	8.00	1.68	18000

DSGN 17





						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_3	BD_4	BD_5	$BHTA_2$	BAR	NM	KG	RPMX
40	12	7	1	17	**930-I40-P-12-188**	M16	12.0	46	188.0	50.0	75.0	145.8	168.9	22.0	26.0	40.0	63	4°	80	8.00	1.57	18000

Para componentes, visite www.sandvik.coromant.com

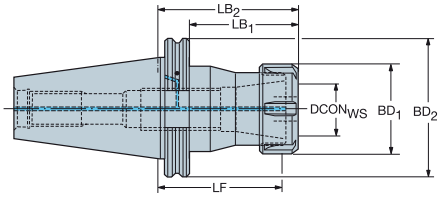
M1 N23 N6 N15 N4

ISO 7388-1 para mandril porta-pinça ER

Interface do lado da máquina compatível com DIN 69871-ADB

Interface do lado da peça DIN 6499-B





					Dimensões, mm							BAR	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2			RPMX
40	ER16	7	1	**A1B14-40 16 070**	M16	17.0	59.7	50.9	70.0	28.0	63.5	80	0.97	18000
	ER16	7	1	**A1B14-40 16 100**	M16	17.0	89.7	80.9	100.0	28.0	63.5	80	1.12	18000
	ER20	7	1	**A1B14-40 20 070**	M16	21.0	58.8	50.9	70.0	34.0	63.5	80	1.02	18000
	ER20	7	1	**A1B14-40 20 100**	M16	21.0	88.8	80.9	100.0	34.0	63.5	80	1.25	18000
	ER25	7	1	**A1B14-40 25 070**	M16	26.0	58.3	50.9	70.0	42.0	63.5	80	1.13	18000
	ER25	7	1	**A1B14-40 25 100**	M16	26.0	88.3	80.9	100.0	42.0	63.5	80	1.44	18000
	ER32	7	1	**A1B14-40 32 070**	M16	33.0	57.3	50.9	70.0	50.0	63.5	80	1.18	18000
	ER40	7	1	**A1B14-40 40 070**	M16	41.0	55.3	50.9	70.0	63.0	63.5	80	1.25	18000
50	ER20	7	1	**A1B14-50 20 070**	M24	21.0	58.8	50.9	70.0	34.0	97.5	80	2.96	12000
	ER20	7	1	**A1B14-50 20 100**	M24	21.0	88.8	80.9	100.0	34.0	97.5	80	3.23	12000
	ER25	7	1	**A1B14-50 25 070**	M24	26.0	58.3	50.9	70.0	42.0	97.5	80	3.02	12000
	ER25	7	1	**A1B14-50 25 100**	M24	26.0	88.3	80.9	100.0	42.0	97.5	80	3.45	12000
	ER32	7	1	**A1B14-50 32 070**	M24	33.0	57.3	50.9	70.0	50.0	97.5	80	3.08	12000
	ER32	7	1	**A1B14-50 32 100**	M24	33.0	87.3	80.9	100.0	50.0	97.5	80	3.58	12000
	ER40	7	1	**A1B14-50 40 070**	M24	41.0	55.3	50.9	70.0	63.0	97.5	80	3.20	12000

Para componentes, visite www.sandvik.coromant.com


M1



N23

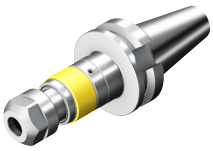


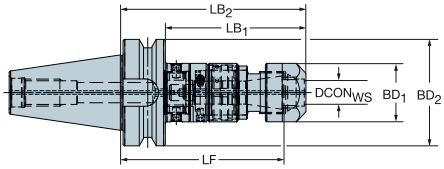
N15

ISO 7388.1 para CoroChuck™ 970

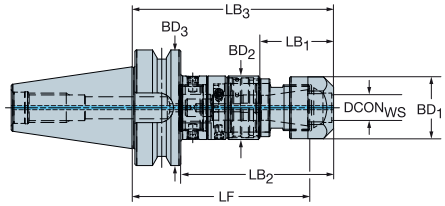
Interface do lado da peça DIN 6499-B

DSGN 2





5

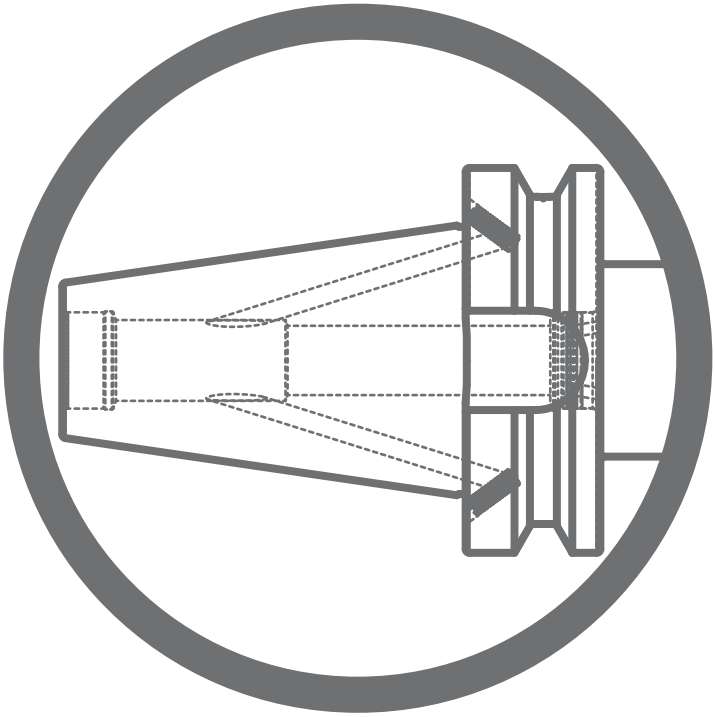


							Dimensões, mm											
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	KG	RPMX
40	ER20	M12	1	1	5	**970-I40-20-102**	M16	20.8	89.2	35.3	78.1	97.2	33.7	35.0	63.5	80	1.26	8000
	ER25	M20	1	1	5	**970-I40-25-122**	M16	25.8	108.1	37.1	97.5	116.6	42.0	44.0	63.5	80	1.63	8000
	ER32	M27	1	1	2	**970-I40-32-125**	M16	32.8	115.8	106.2	125.3		50.0	63.5		80	1.58	8000
50	ER20	M12	1	1	5	**970-I50-20-106**	M24	20.8	93.2	35.3	82.1	101.2	33.7	35.0	97.5	80	3.12	8000
	ER25	M20	1	1	5	**970-I50-25-126**	M24	25.8	112.1	37.1	101.5	120.6	42.0	44.0	97.5	80	3.75	8000
	ER32	M27	1	1	2	**970-I50-32-129**	M24	32.8	119.8	110.2	129.3		50.0	97.5		80	3.36	8000
	ER40	M30	1	1	2	**970-I50-40-155**	M24	40.8	138.2	130.6	149.6		63.0	97.5		80	4.94	8000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15 N5

Interface no lado da máquina MAS-BT

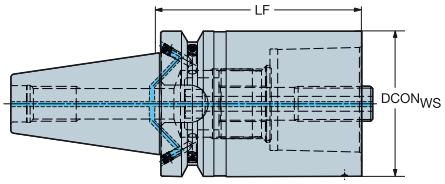


MAS-BT 403 para adaptador Coromant Capto®

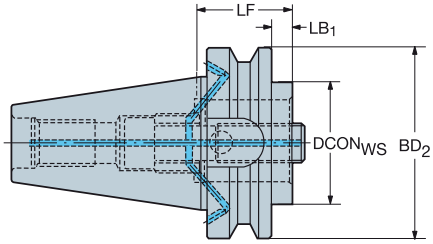
Interface do lado da máquina compatível com JIS B 6339



DSGN 1



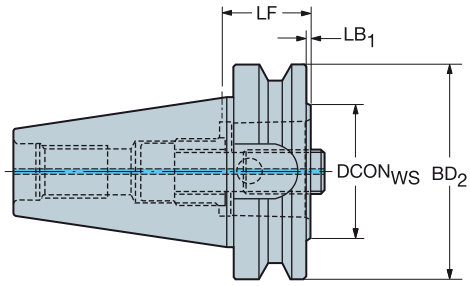
2



						Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_2	BAR	NM	KG
30	C3	1	1	2	**C3-390.55-30 030**	M12	32.0	30.0	8.0	30.0	46.0	80	45.00	0.42
	C3	1	1	2	**C3-390.55-30 060**	M12	32.0	60.0	38.0	60.0	46.0	80	45.00	0.58
	C4	1	1	2	**C4-390.55-30 060**	M12	40.0	60.0	38.0	60.0	46.0	80	55.00	0.67
	C5	1	1	1	**C5-390.55-30 080**	M12	50.0	80.0	80.0			80	95.00	1.07
40	C3	7	1	2	**C3-390B.55-40 030**	M16	32.0	30.0	3.0	30.0	63.0	80	45.00	0.99
	C3	7	1	2	**C3-390B.55-40 060**	M16	32.0	60.0	33.0	60.0	63.0	80	45.00	1.14
	C4	7	1	2	**C4-390B.55-40 030**	M16	40.0	30.0	3.0	30.0	63.0	80	55.00	0.95
	C4	7	1	2	**C4-390B.55-40 060**	M16	40.0	60.0	33.0	60.0	63.0	80	55.00	1.21
	C5	7	1	2	**C5-390B.55-40 050**	M16	50.0	50.0	23.0	50.0	63.0	80	95.00	1.15
	C5	7	1	2	**C5-390B.55-40 090**	M16	50.0	90.0	63.0	90.0	63.0	80	95.00	1.72
	C6	7	1	1	**C6-390B.55-40 075**	M16	63.0	75.0	75.0			80	170.00	1.74
50	C3	7	1	2	**C3-390B.58-50 040**	M24	32.0	40.0	2.0	40.0	100.0	80	45.00	3.68
	C3	7	1	2	**C3-390B.58-50 070**	M24	32.0	70.0	32.0	70.0	100.0	80	45.00	3.80
	C4	7	1	2	**C4-390B.58-50 040**	M24	40.0	40.0	2.0	40.0	100.0	80	55.00	3.65
	C4	7	1	2	**C4-390B.58-50 070**	M24	40.0	70.0	32.0	70.0	100.0	80	55.00	3.88
	C5	7	1	2	**C5-390B.58-50 040**	M24	50.0	40.0	2.0	40.0	100.0	80	95.00	3.56
	C5	7	1	2	**C5-390B.58-50 080**	M24	50.0	80.0	42.0	80.0	100.0	80	95.00	4.09
	C6	7	1	2	**C6-390B.58-50 050**	M24	63.0	50.0	12.0	50.0	100.0	80	170.00	3.61
	C6	7	1	2	**C6-390B.58-50 100**	M24	63.0	100.0	62.0	100.0	100.0	80	170.00	4.71
	C8	7	1	2	**C8-390B.58-50 070**	M24	80.0	70.0	32.0	70.0	100.0	80	170.00	4.12
	C8	7	1	2	**C8-390B.58-50 120**	M24	80.0	120.0	72.0	120.0	100.0	80	170.00	5.98
	C10	7	1	1	**C10-390B.58-50 140**	M24	100.0	140.0	140.0			80	380.00	8.00
60	C8	1	1	2	**C8-390.58-60 120**	M30	80.0	120.0	72.0	120.0	155.0	80	170.00	15.14
	C10	1	1	2	**C10-390.58-60 080**	M30	100.0	80.0	32.0	80.0	155.0	80	380.00	13.30

Polígono girado a 90° para controle de precisão da ponta da ferramenta
Desenvolvido para as séries e-machine Mazak™ e Mori Seiki NT™





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
40	C5	1	1	**C5-390.605-40 030**	M16	50.0	30.0	3.0	63.0	80	95.00	0.88
50	C6	1	1	**C6-390.605-50 040**	M24	63.0	40.0	2.0	100.0	80	170.00	3.26
	C8	1	1	**C8-390.605-50 070**	M24	80.0	70.0	32.0	100.0	80	170.00	4.14

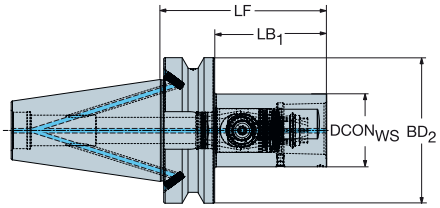
Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

MAS-BT 403 para adaptador Coromant Capto® com troca rápida

Interface do lado da máquina compatível com JIS B 6339



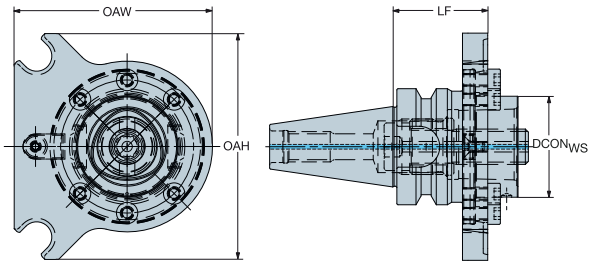


					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
50	C5	7	1	**B50-QC-C5-115**	M24	50.0	115.0	76.0	100.0	80	70.00	4.55
	C6	7	1	**B50-QC-C6-135**	M24	63.0	135.0	96.0	100.0	80	90.00	5.49
	C8	7	1	**B50-QC-C8-150**	M24	80.0	150.0	111.0	100.0	80	130.00	6.91

MAS-BT 403 para adaptador de torneamento Coromant Capto®

Para tornofresadora Brother Speedio

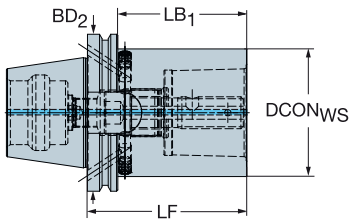




					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{WS}$	LF	OAW	OAH	BAR	NM	KG
30	C4	1	1	**C4-390.680-30 050Y**	40.0	50.0	77.0	90.0	80	55	1.0

Cone curto MAS-BT para adaptador Coromant Capto®





					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
50	C8	6	1	**C8-390.670-50 100**	80.0	100.0	62.0	100.0	150	170.00	4.43

Para componentes, visite www.sandvik.coromant.com

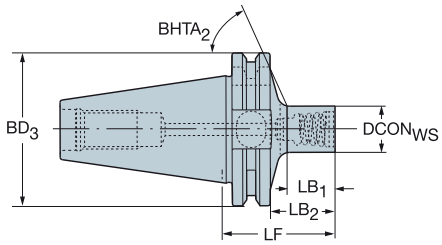
M1 N23 N23 N15

MAS-BT 403 para adaptador Coromant EH

Interface do lado da máquina compatível com JIS B 6339

DSGN 7

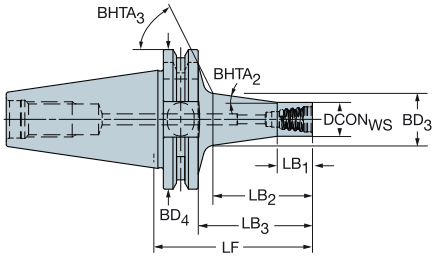




						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_3	$BHTA_2$	BAR	NM	KG	RPMX
30	E10	1	1	7	**392.55EH-30 10 044**	M12	9.6	44.0	13.3	22.0	46.0	65°	80	12.00	0.51	25000
	E12	1	1	7	**392.55EH-30 12 046**	M12	11.6	46.0	15.6	24.0	46.0	64°	80	15.00	0.52	25000
	E16	1	1	7	**392.55EH-30 16 041**	M12	15.4	41.3	8.0	19.3	46.0	49°	80	30.00	0.57	25000
	E16	1	1	7	**392.55EH-30 16 052**	M12	15.4	52.0	22.1	30.0	46.0	63°	80	30.00	0.58	25000
	E16	1	1	7	**392.55EH-30 16 056**	M12	15.4	56.3	16.0	34.3	46.0	35°	80	30.00	0.61	25000
	E20	1	1	7	**392.55EH-30 20 049**	M12	19.2	49.0	19.6	27.0	46.0	61°	80	50.00	0.59	25000
	E20	1	1	7	**392.55EH-30 20 069**	M12	19.2	68.7	25.0	34.7	46.0	27°	80	50.00	0.66	25000
	E25	1	1	7	**392.55EH-30 25 054**	M12	24.1	54.0	25.2	32.0	46.0	58°	80	65.00	0.65	25000
40	E10	1	1	7	**392.55EH-40 10 051**	M16	9.6	51.0	13.0	24.0	63.0	67°	80	12.00	1.16	18000
	E12	1	1	7	**392.55EH-40 12 054**	M16	11.6	54.0	16.3	27.0	63.0	67°	80	15.00	1.18	18000
	E16	1	1	7	**392.55EH-40 16 060**	M16	15.4	60.0	22.8	33.0	63.0	66°	80	30.00	1.23	18000
	E20	1	1	7	**392.55EH-40 20 056**	M16	19.2	56.0	19.3	29.0	63.0	66°	80	50.00	1.25	18000
	E25	1	1	7	**392.55EH-40 25 062**	M16	24.1	62.0	26.0	35.0	63.0	65°	80	65.00	1.30	18000

DSGN 15





						Dimensões, mm														
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_3	BD_4	$BHTA_2$	$BHTA_3$	BAR	NM	KG	RPMX
30	E10	1	1	15	**392.55EH-30 10 057**	M12	9.6	57.0	10.0	27.6	35.0	14.6	46.0	7°	65°	80	12.00	0.51	25000
	E12	1	1	15	**392.55EH-30 12 063**	M12	11.6	63.0	12.0	34.1	41.0	17.8	46.0	8°	64°	80	15.00	0.54	25000
	E16	1	1	15	**392.55EH-30 16 074**	M12	15.4	74.0	16.0	45.9	52.0	23.8	46.0	8°	61°	80	30.00	0.64	25000
	E20	1	1	15	**392.55EH-30 20 086**	M12	19.2	86.0	20.0	58.7	64.0	30.1	46.0	8°	56°	80	50.00	0.73	25000
	E25	1	1	15	**392.55EH-30 25 077**	M12	24.1	77.0	25.0	49.9	55.0	31.1	46.0	8°	55°	80	65.00	0.75	25000
40	E10	1	1	15	**392.55EH-40 10 065**	M16	9.6	65.0	10.0	28.4	38.0	14.8	63.0	8°	68°	80	12.00	1.18	18000
	E12	1	1	15	**392.55EH-40 12 070**	M16	11.6	70.0	12.0	33.8	43.0	17.7	63.0	8°	67°	80	15.00	1.20	18000
	E16	1	1	15	**392.55EH-40 16 081**	M16	15.4	81.0	16.0	45.6	54.0	23.7	63.0	8°	66°	80	30.00	1.29	18000
	E20	1	1	15	**392.55EH-40 20 094**	M16	19.2	94.0	20.0	59.5	67.0	30.3	63.0	8°	65°	80	50.00	1.39	18000
	E25	1	1	15	**392.55EH-40 25 108**	M16	24.1	108.0	25.0	74.5	81.0	38.0	63.0	8°	62°	80	65.00	1.59	18000

Para componentes, visite www.sandvik.coromant.com

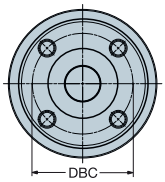
N23 N15 N3

MAS-BT 403 para adaptador tipo árvore

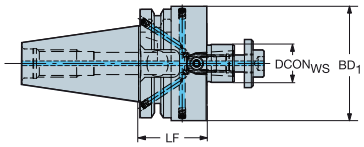
Interface do lado da máquina compatível com JIS B 6339



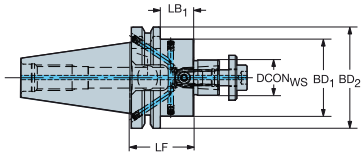
DSGN



1



2

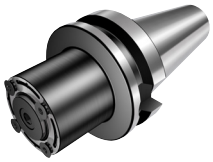


						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	DBC	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
30	16	1	1	2	**A205-30 16 035**		M12	16.0	35.0	13.0	35.0	36.0	46.0	80	22.00	0.54	25000
	22	1	1	2	**A205-30 22 035**		M12	22.0	35.0	11.9	35.0	42.0	46.0	80	45.00	0.63	25000
	27	1	1	2	**A205-30 27 035**		M12	27.0	35.0	13.0	35.0	42.0	46.0	80	80.00	0.67	25000
	32	1	1	1	**A205-30 32 050**		M12	32.0	50.0	50.0		78.0		80	180.00	1.40	25000
40	16	7	1	2	**A2B05-40 16 035**		M16	16.0	35.0	8.0	35.0	36.0	63.0	80	22.00	0.96	18000
	16	7	1	2	**A2B05-40 16 100**		M16	16.0	100.0	71.0	100.0	36.0	63.0	80	22.00	1.58	18000
	22	7	1	2	**A2B05-40 22 035**		M16	22.0	35.0	6.0	35.0	48.0	63.0	80	45.00	1.20	18000
	22	7	1	2	**A2B05-40 22 100**		M16	22.0	100.0	71.0	100.0	48.0	63.0	80	45.00	2.07	18000
	27	7	1	2	**A2B05-40 27 035**		M16	27.0	35.0	6.0	35.0	48.0	63.0	80	80.00	1.26	18000
	27	7	1	2	**A2B05-40 27 100**		M16	27.0	100.0	71.0	100.0	59.0	63.0	80	80.00	2.66	18000
	32	7	1	1	**A2B05-40 32 065**		M16	32.0	65.0	65.0		78.0		80	180.00	2.35	18000
	40S	7	1	1	**A2B05-40 40 070**	66.7	M16	40.0	70.0	70.0		87.0		80	300.00	3.08	18000
50	22	7	4	2	**A2B05-50 22 055**		M24	22.0	55.0	14.0	55.0	48.0	100.0	80	45.00	4.06	12000
	22	7	1	2	**A2B05-50 22 100**		M24	22.0	100.0	59.0	100.0	48.0	100.0	80	45.00	4.79	12000
	27	7	1	2	**A2B05-50 27 055**		M24	27.0	55.0	14.0	55.0	60.0	100.0	80	80.00	4.26	12000
	27	7	1	2	**A2B05-50 27 100**		M24	27.0	100.0	59.0	100.0	60.0	100.0	80	80.00	5.28	12000
	32	7	1	2	**A2B05-50 32 055**		M24	32.0	55.0	14.0	55.0	78.0	100.0	80	180.00	4.62	12000
	32	7	1	2	**A2B05-50 32 100**		M24	32.0	100.0	59.0	100.0	78.0	100.0	80	180.00	6.31	12000
	40S	7	1	2	**A2B05-50 40 055**	66.7	M24	40.0	55.0	14.0	55.0	89.0	100.0	80	300.00	5.04	12000
	60	7	1	1	**A2F05-50 60 080**	101.6	M24	60.0	80.0	80.0		127.0		80	180.00	7.78	12000

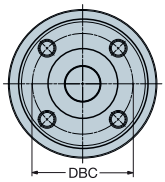
Todos os suportes são fornecidos com um parafuso standard sem furo para refrigeração. Para fresas com canais de refrigeração, um novo parafuso com furos de refrigeração radiais é necessário e pode ser pedido separadamente.
Consulte a página M13

MAS-BT para adaptador tipo árvore com parafusos de acionamento

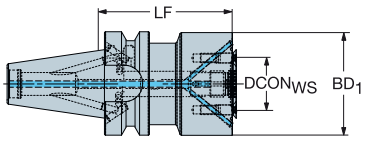
Interface do lado da máquina compatível com JIS B 6339



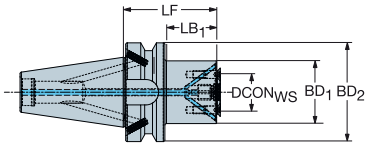
DSGN



1



2



						Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	DBC	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
30	X10	1	3	2	**B30-X10-032-050**	22.0	M12	10.0	2	50.0	27.0	50.0	32.0	46.0	80	6.40	0.60	12000
	X22	1	3	2	**B30-X22-040-055**	32.0	M12	22.0	2	55.0	32.0	55.0	40.0	46.0	80	3.90	0.73	11000
40	X10	7	3	2	**B40-X10-032-055**	22.0	M16	10.0	2	55.0	27.0	55.0	32.0	63.0	80	6.40	1.18	12000
	X22	7	3	2	**B40-X22-040-060**	32.0	M16	22.0	2	60.0	32.0	60.0	40.0	63.0	80	3.90	1.33	11000
	X32	7	3	1	**B40-X32-063-080**	45.0	M16	32.0	2	80.0	80.0		63.0		80	6.40	2.28	10000

Para componentes, visite www.sandvik.coromant.com



M1



N23



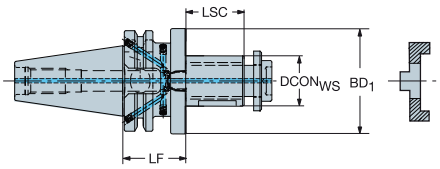
N15

MAS-BT 403 para adaptador tipo árvore para fresa de disco e de facear

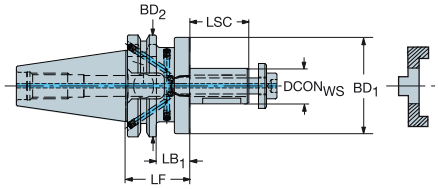
Interface do lado da máquina compatível com JIS B 6339



DSGN 1



2



						Dimensões, mm											
CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	DCON$_{WS}$	LSC	LF	LB$_1$	LB$_2$	BD$_1$	BD$_2$	BAR	NM	KG	RPMX
30	22	1	1	2	**A208-30 22 047**	M12	22.0	31	35.0	13.0	35.0	40.0	46.0	80	45.00	0.71	25000
	27	1	1	1	**A208-30 27 050**	M12	27.0	33	38.0	38.0		48.0		80	80.00	0.87	25000
40	22	7	1	2	**A2B08-40 22 055**	M16	22.0	31	43.0	12.0	43.0	40.0	63.0	80	45.00	1.35	18000
	27	7	1	2	**A2B08-40 27 055**	M16	27.0	33	43.0	15.0	43.0	48.0	63.0	80	80.00	1.51	18000
	32	7	1	2	**A2B08-40 32 060**	M16	32.0	38	46.0	18.0	46.0	58.0	63.0	80	180.00	1.86	18000
	40	7	1	1	**A2B08-40 40 070**	M16	40.0	41	56.0	56.0		70.0		80	300.00	2.70	18000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

MAS-BT 403 para adaptador Weldon

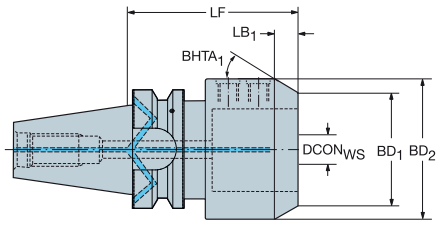
Interface do lado da máquina compatível com JIS B 6339

Interface do lado da peça DIN 6535-HB e DIN 1835-B

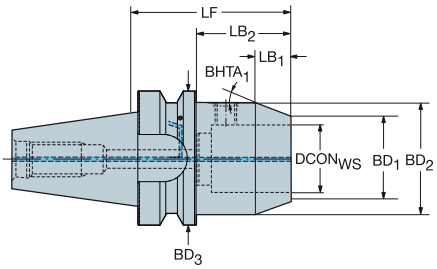
DSGN



3



6



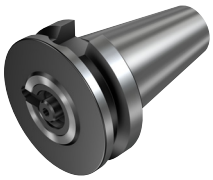
						Dimensões, mm													
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG
30	12	1	1	6	**A2B20-30 12 052**	M12	12.0	52.0	12.6	28.9	52.0	27.0	41.5	46.0	30°	20	12.00	0.63
	16	1	1	3	**A2B20-30 16 063**	M12	16.0	63.0	12.6	63.0		33.0	47.5		30°	20	15.00	0.83
	20	1	1	3	**A2B20-30 20 063**	M12	20.0	63.0	12.6	63.0		37.0	51.5		30°	20	20.00	0.87
40	6	7	1	6	**A2B20-40 06 100**	M16	6.0	100.0	11.0	71.0	100.0	12.3	25.0	63.0	30°	20	3.00	1.21
	8	7	1	6	**A2B20-40 08 100**	M16	8.0	100.0	11.0	71.0	100.0	15.3	28.0	63.0	30°	20	7.00	1.27
	10	7	1	6	**A2B20-40 10 100**	M16	10.0	100.0	13.0	71.0	100.0	20.0	35.0	63.0	30°	20	10.00	1.44
	12	7	1	6	**A2B20-40 12 063**	M16	12.0	63.0	13.0	34.0	63.0	27.0	42.0	63.0	30°	20	12.00	1.12
	12	7	1	6	**A2B20-40 12 100**	M16	12.0	100.0	13.0	71.0	100.0	27.0	42.0	63.0	30°	20	12.00	1.66
	16	7	1	6	**A2B20-40 16 063**	M16	16.0	63.0	13.0	34.0	63.0	33.0	48.0	63.0	30°	20	15.00	1.35
	16	7	1	6	**A2B20-40 16 100**	M16	16.0	100.0	13.0	71.0	100.0	33.0	48.0	63.0	30°	20	15.00	1.84
	20	7	1	6	**A2B20-40 20 063**	M16	20.0	63.0	13.0	34.0	63.0	37.0	52.0	63.0	30°	20	20.00	1.37
	20	7	1	6	**A2B20-40 20 100**	M16	20.0	100.0	13.0	71.0	100.0	37.0	52.0	63.0	30°	20	20.00	1.96
	25	7	1	6	**A2B20-40 25 090**	M16	25.0	90.0	13.0	61.0	90.0	44.0	59.0	63.0	30°	20	25.00	1.73
	32	7	1	3	**A2B20-40 32 100**	M16	32.0	100.0	13.0	100.0		57.0	72.0		30°	20	45.00	2.40
50	6	7	1	6	**A2B20-50 06 063**	M24	6.0	63.0	11.0	22.0	63.0	12.3	25.0	100.0	30°	20	3.00	3.81
	8	7	1	6	**A2B20-50 08 063**	M24	8.0	63.0	11.0	22.0	63.0	15.3	28.0	100.0	30°	20	7.00	3.84
	10	7	1	6	**A2B20-50 10 070**	M24	10.0	70.0	13.0	29.0	70.0	20.0	35.0	100.0	30°	20	10.00	3.90
	12	7	1	6	**A2B20-50 12 080**	M24	12.0	80.0	13.0	36.0	80.0	26.8	42.0	100.0	30°	20	12.00	4.04
	16	7	1	6	**A2B20-50 16 080**	M24	16.0	80.0	13.0	39.0	80.0	33.0	48.0	100.0	30°	20	15.00	4.16
	20	7	1	6	**A2B20-50 20 080**	M24	20.0	80.0	13.0	39.0	80.0	37.0	52.0	100.0	30°	20	20.00	4.18
	20	7	1	6	**A2B20-50 20 100**	M24	20.0	100.0	13.0	59.0	100.0	37.0	52.0	100.0	30°	20	20.00	4.58
	25	7	1	6	**A2B20-50 25 100**	M24	25.0	100.0	13.0	59.0	100.0	50.0	65.0	100.0	30°	20	25.00	4.90
	25	7	1	6	**A2B20-50 25 160**	M24	25.0	160.0	13.0	119.0	160.0	50.0	65.0	100.0	30°	20	25.00	6.62
	32	7	1	6	**A2B20-50 32 105**	M24	32.0	105.0	12.0	64.0	105.0	58.1	72.0	100.0	30°	20	45.00	5.30
	32	7	1	6	**A2B20-50 32 160**	M24	32.0	160.0	12.0	119.0	160.0	58.1	72.0	100.0	30°	20	45.00	7.20
	40	7	1	6	**A2B20-50 40 115**	M24	40.0	115.0	15.0	74.0	115.0	60.7	78.0	100.0	30°	20	45.00	5.60

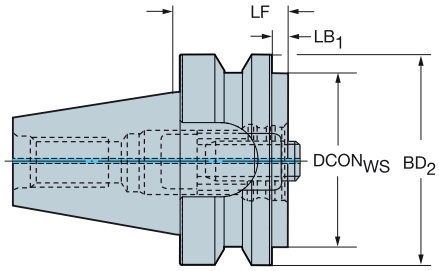
Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

MAS-BT 403 para adaptador VL

Interface do lado da máquina compatível com JIS B 6339





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2	BAR	NM	KG
50	80	1	1	**390.58-50 80 040**	M24	80.0	40.0	2.0	100.0	20	180.00	3.63

Para componentes, visite www.sandvik.coromant.com

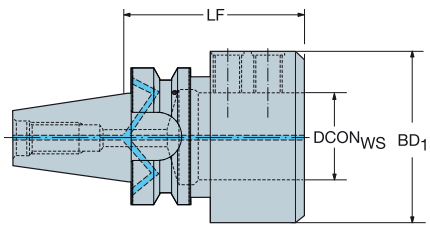
M1 N23 N15

MAS-BT 403 para adaptador ISO 9766

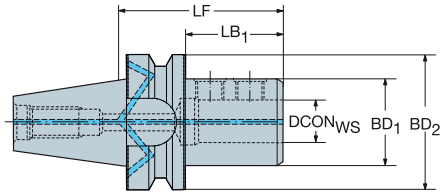
Interface do lado da máquina compatível com JIS B 6339



DSGN 1



2

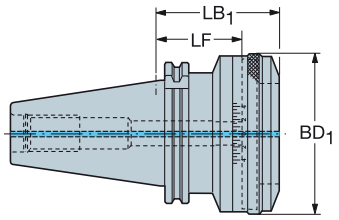


						Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
30	16	1	1	2	**A227-30 16 080**	M12	16.0	49	80.0	58.0	80.0	36.0	46.0	20	10.00	0.76	25000
	20	1	1	2	**A227-30 20 080**	M12	20.0	51	80.0	56.9	80.0	40.0	46.0	20	12.00	0.82	25000
	25	1	1	2	**A227-30 25 085**	M12	25.0	57	85.0	62.9	85.0	45.0	46.0	20	20.00	0.92	25000
	32	1	1	1	**A227-30 32 090**	M12	32.0	61	90.0	90.0		52.0		20	30.00	1.03	25000
40	16	7	1	2	**A2B27-40 16 070**	M16	16.0	49	70.0	42.0	70.0	36.0	63.0	20	10.00	1.24	18000
	20	7	1	2	**A2B27-40 20 075**	M16	20.0	51	75.0	48.0	75.0	40.0	63.0	20	12.00	1.32	18000
	25	7	1	2	**A2B27-40 25 080**	M16	25.0	57	80.0	52.0	80.0	45.0	63.0	20	20.00	1.40	18000
	32	7	1	2	**A2B27-40 32 085**	M16	32.0	61	85.0	57.0	85.0	52.0	63.0	20	30.00	1.51	18000
50	16	7	1	2	**A2B27-50 16 080**	M24	16.0	49	80.0	41.5	80.0	36.0	100.0	20	10.00	3.98	12000
	20	7	1	2	**A2B27-50 20 085**	M24	20.0	51	85.0	46.0	85.0	40.0	100.0	20	12.00	3.98	12000
	25	7	1	2	**A2B27-50 25 090**	M24	25.0	57	90.0	51.0	90.0	45.0	100.0	20	20.00	4.08	12000
	32	7	1	2	**A2B27-50 32 095**	M24	32.0	61	95.0	56.0	95.0	52.0	100.0	20	30.00	4.24	12000
	40	7	1	2	**A2B27-50 40 105**	M24	40.0	71	105.0	66.0	105.0	75.0	100.0	20	40.00	5.32	12000
	50	7	1	2	**A2B27-50 50 113**	M24	50.0	81	113.0	74.0	113.0	75.0	100.0	20	45.00	4.96	12000

MAS-BT 403 para adaptador ISO 9766 ajustável

Interface do lado da máquina compatível com JIS B 6339





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_1	BAR	KG	RPMX
40	1	1	1	**392.55277-40 01 055A**	M16	78.0	55.0	79.6	86.0	20	2.38	12000
50	2	1	1	**392.58277-50 02 063A**	M24	98.0	63.0	87.6	106.0	20	5.79	9000
	3	1	1	**392.58277-50 03 080B**	M24	136.0	80.0	90.0	140.0	20	7.36	6000

Para componentes, visite www.sandvik.coromant.com

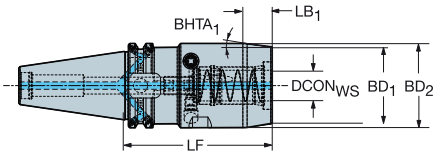
M1 N23 N15

MAS-BT 403 para CoroChuck™ 930

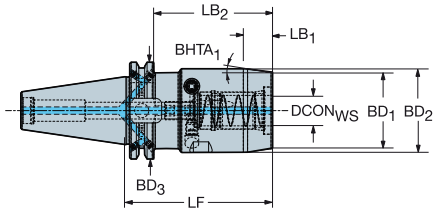
Interface do lado da máquina compatível com JIS B 6339

DSGN 3





DSGN 6

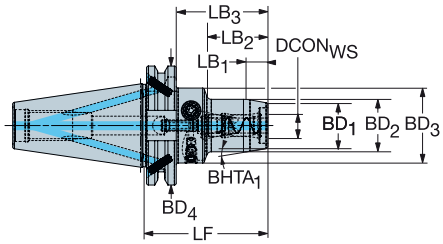


Desenho para usinagem pesada

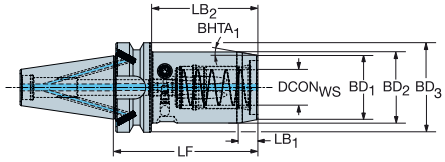
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	Código para pedido	Dimensões, mm CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	$BHTA_1$	BAR	NM	KG	RPMX
40	20	7	1	6	930-B40-HD-20-088	M16	20.0	51	88.0	17.8	61.0	88.0	50.0	55.0	63.0	8°	80	10.00	1.93	18000
	25	7	1	3	930-B40-HD-25-094	M16	25.0	57	94.0	18.8	94.0		57.0	65.0		12°	80	10.00	2.39	18000
50	20	7	1	6	930-B50-HD-20-102	M24	20.0	51	102.0	17.8	64.0	102.0	50.0	55.0	100.0	8°	80	10.00	4.68	12000
	25	7	1	6	930-B50-HD-25-106	M24	25.0	57	106.0	18.8	68.0	106.0	57.0	65.0	100.0	12°	80	10.00	5.15	12000
	32	7	1	6	930-B50-HD-32-096	M24	32.0	61	96.0	18.8	58.0	96.0	68.0	76.0	100.0	12°	80	10.00	5.23	12000
	32	7	1	6	930-B50-HD-32-185	M24	32.0	61	185.0	18.8	147.0	185.0	68.0	76.0	100.0	12°	80	10.00	8.34	12000

DSGN 10





DSGN 6



Desenho delgado

CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	Código para pedido	Dimensões, mm CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_1$	BAR	NM	KG	RPMX
30	6	1	1	6	930-B30-S-06-048	M12	6.0	37	48.0	9.3	12.8	48.0		22.0	26.0	46.0		12°	80	8.00	0.55	25000
	8	1	1	6	930-B30-S-08-048	M12	8.0	37	48.0	9.3	12.8	48.0		24.0	28.0	46.0		12°	80	8.00	0.56	25000
	10	1	1	6	930-B30-S-10-048	M12	10.0	41	48.0	9.3	13.8	48.0		26.0	30.0	46.0		12°	80	8.00	0.55	25000
	12	1	1	10	930-B30-S-12-082	M12	12.0	46	82.0	11.3	38.2	60.0	82.0	28.0	32.0	40.0	46.0	10°	80	8.00	0.75	25000
	20	1	1	6	930-B30-S-20-088	M12	20.0	51	88.0	16.0	66.0	88.0		38.0	42.0	46.0		7°	80	8.00	0.93	25000
40	6	7	1	10	930-B40-S-06-075	M16	6.0	37	75.0	11.3	30.2	48.0	75.0	22.0	26.0	40.0	63.0	10°	80	8.00	1.21	18000
	8	7	1	10	930-B40-S-08-075	M16	8.0	37	75.0	11.3	30.2	48.0	75.0	24.0	28.0	40.0	63.0	10°	80	8.00	1.23	18000
	10	7	1	10	930-B40-S-10-080	M16	10.0	41	80.0	11.3	34.2	53.0	80.0	26.0	30.0	40.0	63.0	10°	80	8.00	1.27	18000
	12	7	1	10	930-B40-S-12-085	M16	12.0	46	85.0	11.3	38.2	58.0	85.0	27.9	32.0	50.0	63.0	10°	80	8.00	1.45	18000
	20	7	1	10	930-B40-S-20-094	M16	20.0	51	94.0	16.0	49.2	67.0	94.0	37.9	42.0	50.0	63.0	7°	80	8.00	1.62	18000
	25	7	1	6	930-B40-S-25-102	M16	25.0	57	102.0	12.9	74.0		102.0	45.0	50.0		63.0	11°	80	8.00	1.86	18000
50	20	7	1	10	930-B50-S-20-108	M24	20.0	51	108.0	16.0	49.2	70.0	108.0	37.9	42.0	50.0	100.0	7°	80	8.00	4.35	12000
	25	7	1	6	930-B50-S-25-114	M24	25.0	57	114.0	12.9	73.5		114.0	45.0	50.0		100.0	11°	80	8.00	4.59	12000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15 N4

POR

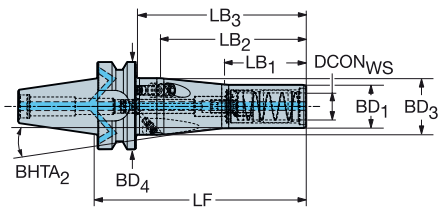
MAS-BT 403 para CoroChuck™ 930

Interface do lado da máquina compatível com JIS B 6339

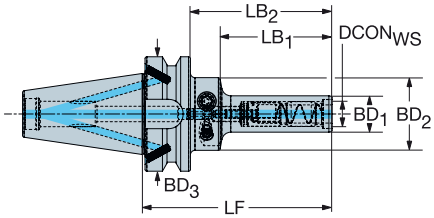
Desenho tipo lápis

DSGN 11





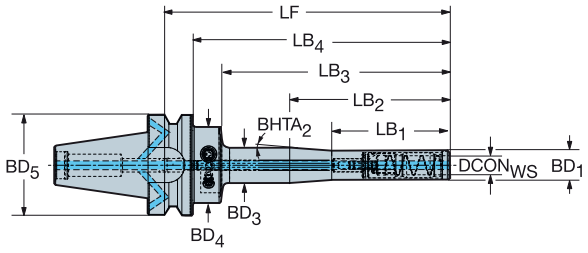
DSGN 5



						Dimensões, mm																
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_2	BD_3	BD_4	$BHTA_2$	BAR	NM	KG	RPMX
30	6	1	1	11	**930-B30-P-06-088**	M12	6.0	37	88.0	45.8	52.1	66.0	88.0	14.5	14.5	40.0	46.0	0°	80	8.00	0.62	25000
	8	1	1	5	**930-B30-P-08-088**	M12	8.0	37	88.0	45.8	66.0	88.0		17.5	40.0	46.0		0°	80	8.00	0.59	25000
	10	1	1	5	**930-B30-P-10-098**	M12	10.0	41	98.0	55.8	76.0	98.0		20.0	40.0	46.0		0°	80	8.00	0.63	25000
	10	1	1	5	**930-B30-P-10-138**	M12	10.0	41	138.0	95.8	116.0	138.0		20.0	40.0	46.0		0°	80	8.00	0.73	25000
	12	1	1	11	**930-B30-P-12-103**	M12	12.0	46	103.0	60.8	66.4	81.0	103.0	22.0	22.0	40.0	46.0	0°	80	8.00	0.71	25000
	12	1	1	11	**930-B30-P-12-138**	M12	12.0	46	138.0	95.8	101.4	116.0	138.0	22.0	22.0	40.0	46.0	0°	80	8.00	0.81	25000
40	8	7	1	5	**930-B40-P-08-095**	M16	8.0	37	95.0	45.8	65.5	95.0		17.5	40.0	63.0		0°	80	8.00	1.20	18000
	10	7	1	5	**930-B40-P-10-105**	M16	10.0	41	105.0	55.8	75.5	105.0		20.0	40.0	63.0		0°	80	8.00	1.24	18000
	10	7	1	5	**930-B40-P-10-145**	M16	10.0	41	145.0	95.8	115.5	145.0		20.0	40.0	63.0		0°	80	8.00	1.34	18000
	12	7	1	11	**930-B40-P-12-110**	M16	12.0	46	110.0	60.8	66.4	83.0	110.0	22.0	22.0	40.0	63.0	0°	80	8.00	1.32	18000
	12	7	1	11	**930-B40-P-12-145**	M16	12.0	46	145.0	95.8	101.4	118.0	145.0	22.0	22.0	40.0	63.0	0°	80	8.00	1.47	18000
	20	7	1	11	**930-B40-P-20-153**	M16	20.0	51	153.0	60.0	108.0	126.0	153.0	32.0	32.0	42.0	63.0	6°	80	8.00	1.84	18000

DSGN 17





						Dimensões, mm																	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_3	BD_4	BD_5	$BHTA_2$	BAR	NM	KG	RPMX
30	12	1	1	17	**930-B30-P-12-188**	M12	12.0	46	188.0	50.0	75.0	151.1	166.0	22.0	26.0	40.0	46	4°	80	8.00	1.10	25000
40	12	7	1	17	**930-B40-P-12-195**	M16	12.0	46	195.0	50.0	75.0	151.1	168.0	22.0	26.0	40.0	46	4°	80	8.00	1.72	18000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N6 N15 N4

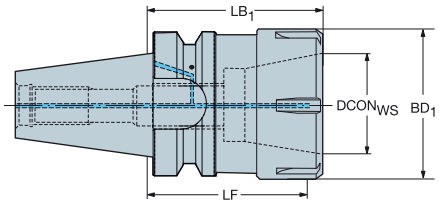
MAS-BT 403 para mandril porta-pinça ER

Interface do lado da máquina compatível com JIS B 6339

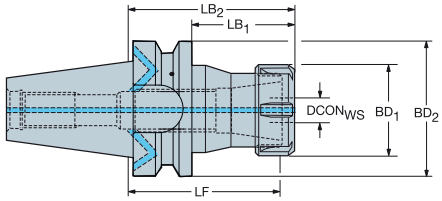
Interface do lado da peça DIN 6499-B



DSGN 1



2



						Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_1	BD_2	BAR	KG	RPMX
30	ER11	1	1	2	**A2B14-30 11 050**	M12	11.4	43.7	26.9	50.0	19.0	46.0	80	0.43	25000
	ER16	1	1	2	**A214-30 16 080**	M12	17.0	69.7	56.9	80.0	28.0	46.0	80	0.59	25000
	ER16	1	1	2	**A214-30 16 100**	M12	17.0	89.7	76.9	100.0	28.0	46.0	80	0.68	25000
	ER16	1	1	2	**A214-30 16 130**	M12	17.0	119.7	106.9	130.0	28.0	46.0	80	0.81	25000
	ER16	1	1	2	**A2B14-30 16 050**	M12	17.0	39.7	26.9	50.0	27.7	46.0	80	0.46	25000
	ER20	1	1	2	**A214-30 20 090**	M12	21.0	78.8	66.9	90.0	34.0	46.0	80	0.73	25000
	ER20	1	1	2	**A214-30 20 130**	M12	21.0	118.8	106.9	130.0	34.0	46.0	80	0.99	25000
	ER20	1	1	2	**A2B14-30 20 050**	M12	21.0	38.8	26.9	50.0	34.0	46.0	80	0.48	25000
	ER25	1	1	2	**A214-30 25 100**	M12	26.0	88.3	76.9	100.0	42.0	46.0	80	0.99	25000
	ER25	1	1	2	**A214-30 25 130**	M12	26.0	118.3	108.0	130.0	42.0	46.0	80	1.30	25000
	ER25	1	1	2	**A2B14-30 25 062**	M12	26.0	50.3	38.9	62.0	42.0	46.0	80	0.58	25000
	ER32	1	1	1	**A214-30 32 070**	M12	33.0	57.3	70.0		50.0		80	0.70	25000
	ER32	1	1	1	**A214-30 32 130**	M12	33.0	117.3	130.0		50.0		80	1.25	25000
40	ER16	7	1	2	**A2B14-40 16 070**	M16	17.0	59.7	41.0	70.0	28.0	63.0	80	1.10	18000
	ER16	7	1	2	**A2B14-40 16 100**	M16	17.0	89.7	71.0	100.0	28.0	63.0	80	1.25	18000
	ER20	7	1	2	**A2B14-40 20 070**	M16	21.0	58.8	41.0	70.0	34.0	63.0	80	1.15	18000
	ER20	7	1	2	**A2B14-40 20 100**	M16	21.0	88.8	71.0	100.0	34.0	63.0	80	1.33	18000
	ER25	7	1	2	**A2B14-40 25 070**	M16	26.0	58.3	41.0	70.0	42.0	63.0	80	1.22	18000
	ER25	7	1	2	**A2B14-40 25 100**	M16	26.0	88.3	71.0	100.0	42.0	63.0	80	1.50	18000
	ER32	7	1	2	**A2B14-40 32 070**	M16	33.0	57.3	41.0	70.0	50.0	63.0	80	1.24	18000
	ER40	7	1	1	**A2B14-40 40 070**	M16	41.0	55.3	70.0		63.0		80	1.35	18000
50	ER20	7	1	2	**A2B14-50 20 070**	M24	21.0	58.8	29.0	70.0	34.0	100.0	80	3.80	12000
	ER20	7	1	2	**A2B14-50 20 100**	M24	21.0	88.8	59.0	100.0	34.0	100.0	80	4.11	12000
	ER25	7	1	2	**A2B14-50 25 070**	M24	26.0	58.3	29.0	70.0	42.0	100.0	80	3.88	12000
	ER25	7	1	2	**A2B14-50 25 100**	M24	26.0	88.3	59.0	100.0	42.0	100.0	80	4.26	12000
	ER32	7	1	2	**A2B14-50 32 070**	M24	33.0	57.3	28.6	70.0	50.0	100.0	80	3.84	12000
	ER32	7	1	2	**A2B14-50 32 100**	M24	33.0	87.3	59.0	100.0	50.0	100.0	80	4.26	12000
	ER40	7	1	2	**A2B14-50 40 080**	M24	41.0	65.3	39.0	80.0	63.0	100.0	80	4.04	12000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

POR

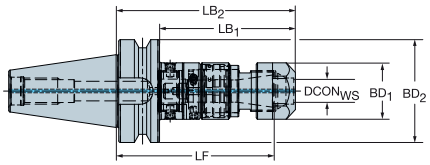
MAS-BT 403 para CoroChuck™ 970

Interface do lado da máquina compatível com JIS B 6339

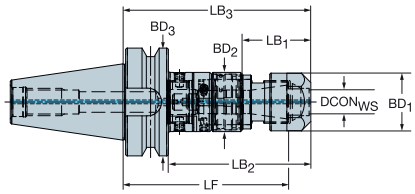
Interface do lado da peça DIN 6499-B



DSGN 2



DSGN 5

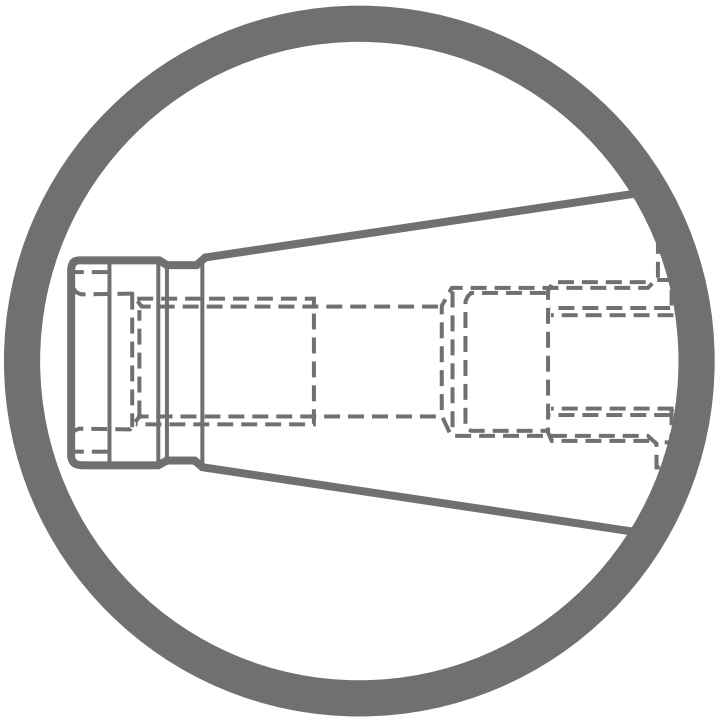


							Dimensões, mm											
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	KG	RPMX
30	ER11	M5	1	1	5	**970-B30-11-082**	M12	11.3	78.2	24.1	60.0	82.0	18.7	23.5	46.0	80	0.55	8000
	ER20	M12	1	1	5	**970-B30-20-105**	M12	20.8	92.2	35.3	78.1	100.2	33.7	35.0	46.0	80	0.83	8000
	ER25	M20	1	1	5	**970-B30-25-125**	M12	25.8	111.1	37.1	97.6	119.6	42.0	44.0	46.0	80	1.19	8000
40	ER20	M12	1	1	5	**970-B40-20-110**	M16	20.8	97.2	35.3	78.1	105.2	33.7	35.0	63.0	80	1.42	8000
	ER25	M20	1	1	5	**970-B40-25-130**	M16	25.8	116.1	37.1	97.6	124.6	42.0	44.0	63.0	80	1.78	8000
	ER32	M27	1	1	2	**970-B40-32-133**	M16	32.8	123.8	106.3	133.3		50.0	63.0		80	1.74	8000
50	ER20	M12	1	1	5	**970-B50-20-125**	M24	20.8	112.2	35.3	82.1	120.2	33.7	35.0	100.0	80	4.09	8000
	ER25	M20	1	1	5	**970-B50-25-145**	M24	25.8	131.1	37.1	101.6	139.6	42.0	44.0	100.0	80	4.47	8000
	ER32	M27	1	1	2	**970-B50-32-148**	M24	32.8	138.8	110.3	148.3		50.0	100.0		80	4.33	8000
	ER40	M30	1	1	2	**970-B50-40-174**	M24	40.8	157.2	130.6	168.6		63.0	100.0		80	5.90	8000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15 N5

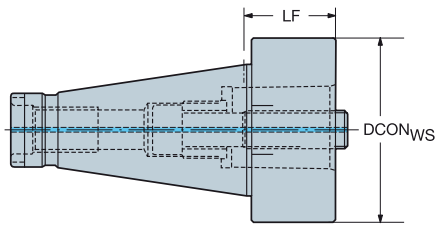
Interface no lado da máquina DIN 2080



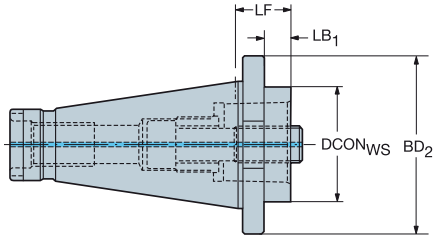
DIN 2080 para adaptador Coromant Capto®



DSGN 1



2



						Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	LB_2	BD_2	BAR	NM	KG
40	C3	1	1	2	**C3-390.00-40 030**	M16	32.0	30.0	18.4	30.0	63.0	80	45.00	0.86
	C4	1	1	2	**C4-390.00-40 030**	M16	40.0	30.0	18.4	30.0	63.0	80	55.00	0.09
	C4	1	1	2	**C4-390.00-40 060**	M16	40.0	60.0	48.4	60.0	63.0	80	55.00	1.13
	C5	1	1	2	**C5-390.00-40 030**	M16	50.0	30.0	18.4	30.0	63.0	80	95.00	0.90
	C6	1	1	1	**C6-390.00-40 075**	M16	63.0	75.0	75.0			80	170.00	1.87
50	C3	1	1	2	**C3-390.00-50 030**	M24	32.0	30.0	14.8	30.0	97.5	80	45.00	2.78
	C3	1	1	2	**C3-390.00-50 060**	M24	32.0	60.0	44.8	60.0	97.5	80	45.00	2.89
	C4	1	1	2	**C4-390.00-50 030**	M24	40.0	30.0	14.8	30.0	97.5	80	55.00	2.79
	C4	1	1	2	**C4-390.00-50 060**	M24	40.0	60.0	44.8	60.0	97.5	80	55.00	3.01
	C5	1	1	2	**C5-390.00-50 030**	M24	50.0	30.0	14.8	30.0	97.5	80	95.00	2.76
	C5	1	1	2	**C5-390.00-50 070**	M24	50.0	70.0	54.8	70.0	97.5	80	95.00	3.28
	C6	1	1	2	**C6-390.00-50 030**	M24	63.0	30.0	14.8	30.0	97.5	80	170.00	2.72
	C6	1	1	2	**C6-390.00-50 080**	M24	63.0	80.0	64.8	80.0	97.5	80	170.00	3.82
	C8	1	1	2	**C8-390.00-50 070**	M24	80.0	70.0	54.8	70.0	97.5	80	170.00	3.98
	C8	1	1	2	**C8-390.00-50 120**	M24	80.0	120.0	104.8	120.0	97.5	80	170.00	5.84

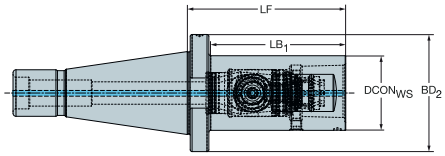
Para componentes, visite www.sandvik.coromant.com

N23

N15

DIN 2080 para adaptador Coromant Capto® com troca rápida



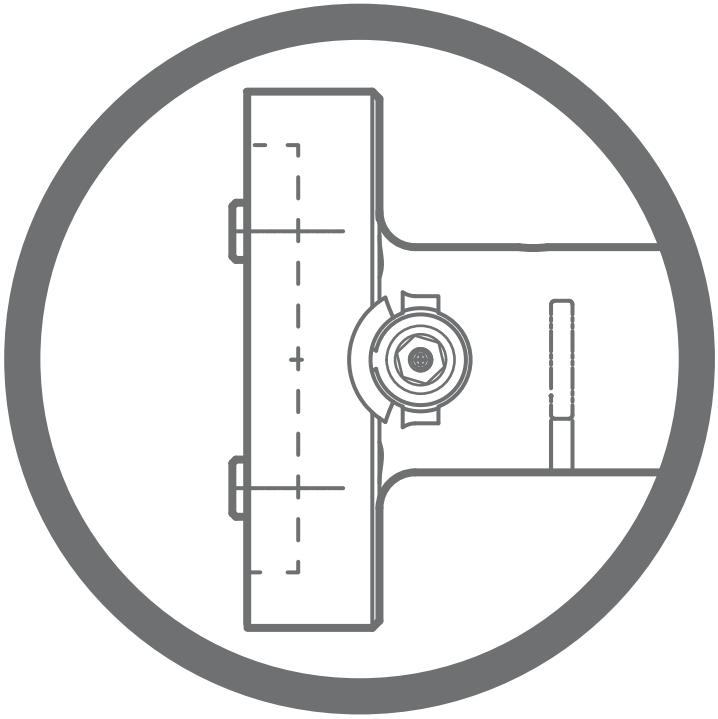


					Dimensões, mm							
										BAR	NM	KG
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	CRKS	$DCON_{WS}$	LF	LB_1	BD_2			
40	C5	1	1	**DN40-QC-C5-095**	M16	50.0	95.0	83.4	62.8	80	70.00	1.70
50	C8	1	1	**DN50-QC-C8-140**	M24	80.0	140.0	124.8	97.3	80	130.00	6.30

Para componentes, visite www.sandvik.coromant.com

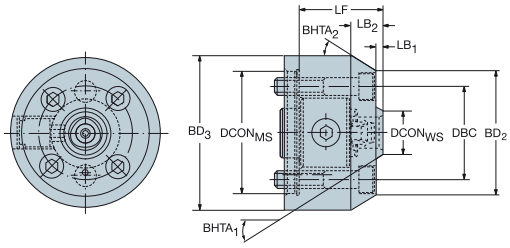
N23 N15

Interface no lado da máquina DIN 2079



DIN 2079 para adaptador Coromant Capto®

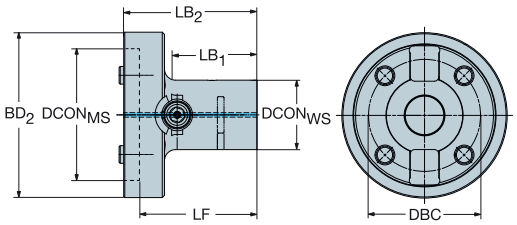




CZC$_{MS}$	CZC$_{WS}$	Código para pedido	Dimensões, mm DCON$_{MS}$	DBC	DCON$_{WS}$	LF	LB$_1$	LB$_2$	BD$_2$	BD$_3$	BHTA$_1$	BHTA$_2$	NM	KG
40	C3	C3-390.34705-40 060	88.8	66.7	32.0	60.0	5.0	22.3	90.0	110.0	30°	30°	35.00	3.99
	C4	C4-390.34705-40 070	88.8	66.7	40.0	70.0	5.0	22.3	90.0	110.0	30°	30°	15.00	5.00

DIN 2079 para adaptador Coromant Capto® com troca rápida



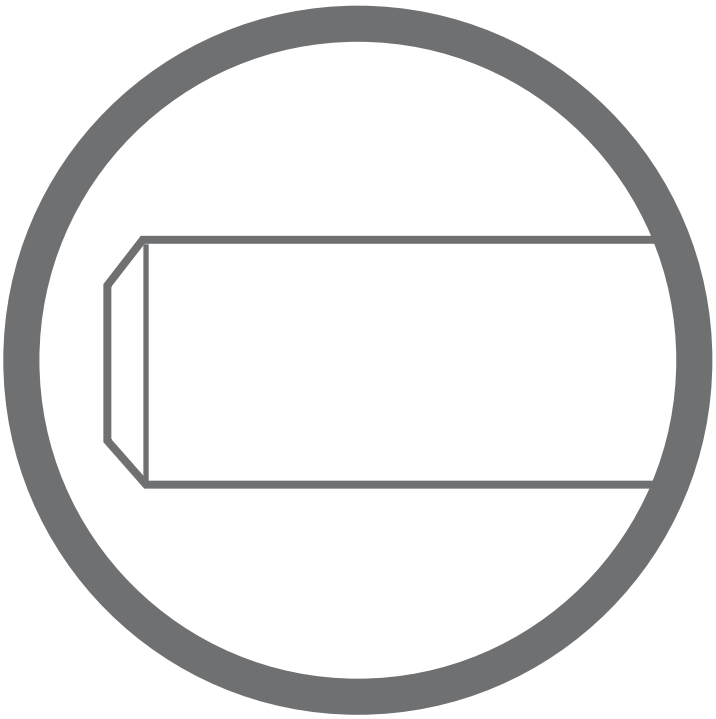


CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DBC	DCON$_{WS}$	LF	LB$_1$	LB$_2$	BD$_2$	BAR	NM	KG
40	C5	1	1	SI40-QC-C5-090	88.8	66.7	50.0	90.0	70.0	102.0	110.0	80	70.00	2.30
50	C6	1	1	SI50-QC-C6-105	128.5	101.6	63.0	105.0	74.0	121.0	150.0	80	90.00	5.00
	C8	3	1	SI50-QC-C8-135	128.5	101.6	80.0	135.0	104.0	151.0	150.0	80	130.00	6.89

Para componentes, visite www.sandvik.coromant.com

N23 N15

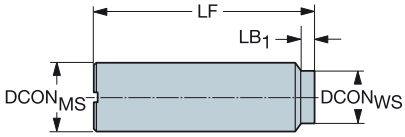
Interface do lado da máquina Haste cilíndrica



Haste cilíndrica para adaptador Coromant EH

Desenho reto

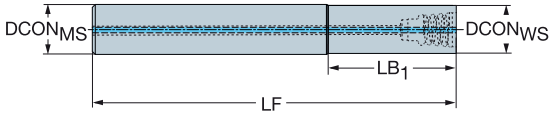




Haste de aço

CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	LSC	LF	LB$_1$	BAR	NM	KG	RPMX
10	E10	1	1	**E10-A10-SS-075**	10.0	9.6	54	75.0	20.0	80	12.00	0.09	40000
12	E12	1	1	**E12-A12-SS-100**	12.0	11.6	77	100.0	22.0	80	15.00	0.14	31000
16	E10	1	1	**E10-A16-SS-065**	16.0	9.6	57	65.0	5.0	80	12.00	0.14	40000
	E12	1	1	**E12-A16-SS-065**	16.0	11.6	58	65.0	5.0	80	15.00	0.15	40000
20	E16	1	1	**E16-A20-SS-070**	20.0	15.4	63	70.0	5.0	80	30.00	0.26	40000
	E16	1	1	**E16-A20-SS-110**	20.0	15.4	83	110.0	25.0	80	30.00	0.33	40000
	E20	1	1	**E20-A20-SS-120**	20.0	19.2	89	120.0	30.0	80	50.00	0.38	34000
25	E20	1	1	**E20-A25-SS-080**	25.0	19.2	73	80.0	5.0	80	50.00	0.39	40000
	E25	1	1	**E25-A25-SS-140**	25.0	24.1	99	140.0	40.0	80	65.00	0.63	25000
32	E25	1	1	**E25-A32-SS-080**	32.0	24.1	73	80.0	5.0	80	65.00	0.62	40000





Haste de metal pesado

CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	LSC	LF	LB$_1$	BAR	KG	RPMX
10	E10	1	1	**EH10-A10-SH-100**	10.0	9.6	79	100.0	20.0	80	0.18	26000
12	E12	1	1	**EH12-A12-SH-110**	12.0	11.6	84	110.0	25.0	80	0.26	25000
16	E16	1	1	**EH16-A16-SH-130**	16.0	15.4	94	130.0	35.0	80	0.52	22000
20	E20	1	1	**EH20-A20-SH-160**	20.0	19.2	114	160.0	45.0	80	0.92	17000
25	E25	1	1	**EH25-A25-SH-185**	25.0	24.1	119	185.0	65.0	80	1.58	16000

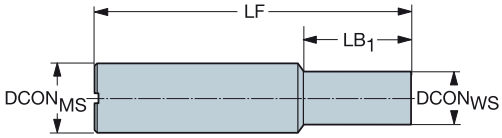
Para componentes, visite www.sandvik.coromant.com

N23 N6 N15 N3

Haste cilíndrica para adaptador Coromant EH

Desenho reto





Haste de metal duro

					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	BAR	NM	KG	RPMX
10	E10	1	1	**E10-A10-SE-100**	10.0	9.6	49	100.0	50.0	80	12.00	0.15	35000
12	E12	1	1	**E12-A12-SE-100**	12.0	11.6	51	100.0	48.0	80	15.00	0.20	40000
16	E16	1	1	**E16-A16-SE-135**	16.0	15.4	54	135.0	80.0	80	30.00	0.44	27000
20	E20	1	1	**E20-A20-SE-095**	20.0	19.2	56	95.0	38.0	80	50.00	0.46	40000
	E20	1	1	**E20-A20-SE-180**	20.0	19.2	69	180.0	110.0	80	50.00	0.82	20000
25	E25	1	1	**E25-A25-SE-200**	25.0	24.1	79	200.0	120.0	80	65.00	1.36	19000

Nota!

A haste inteiriça de metal duro deve ser usada para acabamento/semiacabamento somente

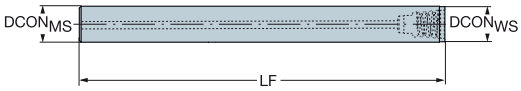
Para componentes, visite www.sandvik.coromant.com

N23 N6 N15 N3

Haste cilíndrica para adaptador Coromant EH

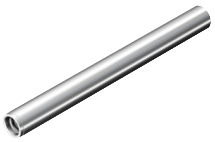
Desenho reto

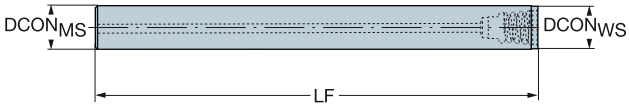




Haste de aço pequena G

CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	LSC	LF	BAR	KG	RPMX
9	E10	1	1	EH10-A09.7-SS-080	9.7	9.6	78	80.0	80	0.10	40000
11	E12	1	1	EH12-A11.7-SS-085	11.7	11.6	83	85.0	80	0.12	40000
15	E16	1	1	EH16-A15.7-SS-100	15.7	15.4	97	100.0	80	0.24	40000
19	E20	1	1	EH20-A19.7-SS-120	19.7	19.2	117	120.0	80	0.38	40000
24	E25	1	1	EH25-A24.7-SS-135	24.7	24.1	132	135.0	80	0.56	40000





Haste de metal pesado G pequena

CZC$_{MS}$	CZC$_{WS}$	CNSC	CXSC	Código para pedido	Dimensões, mm DCON$_{MS}$	DCON$_{WS}$	LSC	LF	BAR	NM	KG	RPMX
9	E10	1	1	EH10-A09.7-SH-120	9.7	9.6	117	120.0	80		0.20	19000
	E10	1	1	EH10-A09.7-SH-100	9.7	9.6	97	100.0	80	12.00	0.17	23000
11	E12	1	1	EH12-A11.7-SH-135	11.7	11.6	132	135.0	80		0.29	17000
	E12	1	1	EH12-A11.7-SH-110	11.7	11.6	107	110.0	80	15.00	0.25	23000
15	E16	1	1	EH16-A15.7-SH-160	15.7	15.4	156	160.0	80		0.61	15000
	E16	1	1	EH16-A15.7-SH-130	15.7	15.4	126	130.0	80	30.00	0.51	19000
19	E20	1	1	EH20-A19.7-SH-200	19.7	19.2	196	200.0	80		1.15	12000
	E20	1	1	EH20-A19.7-SH-160	19.7	19.2	156	160.0	80	50.00	0.91	19000
24	E25	1	1	EH25-A24.7-SH-235	24.7	24.1	231	235.0	80		1.99	10500
	E25	1	1	EH25-A24.7-SH-185	24.7	24.1	181	185.0	80	65.00	1.58	14000

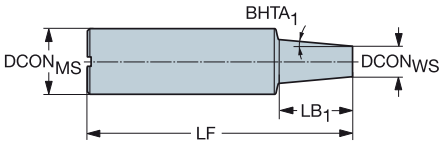
Para componentes, visite www.sandvik.coromant.com

N23 N15 N3

Haste cilíndrica para adaptador Coromant EH

Desenho cônico

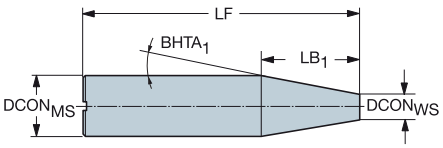




Haste de aço

					Dimensões, mm						BAR	NM	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	$BHTA_1$				RPMX
16	E10	1	1	E10-A16-CS-140	16.0	9.6	103	140.0	36.6	5°	80	12.00	0.24	16000
	E10	1	1	E10-A16-CS-160	16.0	9.6	108	160.0	50.0	1°	80	12.00	0.24	12000
	E12	1	1	E12-A16-CS-140	16.0	11.6	115	140.0	25.1	5°	80	15.00	0.25	16000
	E12	1	1	E12-A16-CS-170	16.0	11.6	108	170.0	60.0	1°	80	15.00	0.30	12000
20	E16	1	1	E16-A20-CS-190	20.0	15.4	112	190.0	75.0	1°	80	30.00	0.49	13000
25	E16	1	1	E16-A25-CS-170	25.0	15.4	115	170.0	54.9	5°	80	30.00	0.66	18000
32	E10	1	1	E10-A32-CS-250	32.0	9.6	186	250.0	63.5	10°	80	12.00	1.39	10000
	E12	1	1	E12-A32-CS-250	32.0	11.6	192	250.0	57.8	10°	80	15.00	1.50	10000
	E20	1	1	E20-A32-CS-180	32.0	19.2	107	180.0	73.2	5°	80	50.00	1.06	20000
	E25	1	1	E25-A32-CS-200	32.0	24.1	154	200.0	45.1	5°	80	65.00	1.29	15000

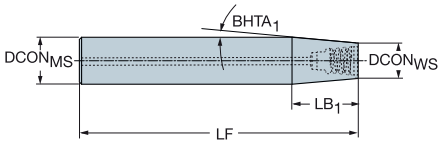




Haste de aço

					Dimensões, mm						BAR	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	$BHTA_1$			RPMX
20	E16	1	1	EH16-A20-CS-165	20.0	15.4	138	165.0	26.3	5°	80	0.44	27000
25	E20	1	1	EH20-A25-CS-200	25.0	19.2	120	200.0	80.0	1°	80	0.70	19000





Haste de metal duro

					Dimensões, mm						BAR	NM	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	$BHTA_1$				RPMX
16	E10	1	1	EH10-A16-CE-140	16.0	9.6	103	140.0	36.6	5°	80		0.41	36000
	E12	1	1	EH12-A16-CE-165	16.0	11.6	139	165.0	25.1	5°	80		0.50	23000
	E10	1	1	E10-A16-CE-155	16.0	9.6	52	155.0	100.0	1°	80	12.00	0.34	22000
	E12	1	1	E12-A16-CE-150	16.0	11.6	58	150.0	90.0	1°	80	15.00	0.39	23000
20	E16	1	1	EH16-A20-CE-165	20.0	15.4	138	165.0	26.3	5°	80		0.78	27000
	E16	1	1	E16-A20-CE-175	20.0	15.4	55	175.0	118.0	1°	80	30.00	0.72	22000
25	E20	1	1	EH20-A25-CE-150	25.0	19.2	116	150.0	33.1	5°	80	50.00	1.05	23000
	E20	1	1	EH20-A25-CE-200	25.0	19.2	117	200.0	83.0	2°	80	50.00	1.08	19000
32	E20	1	1	EH20-A32-CE-175	32.0	19.2	101	175.0	73.2	5°	80	50.00	1.78	21000
	E25	1	1	EH25-A32-CE-190	32.0	24.1	144	190.0	45.1	5°	80	65.00	2.07	20000
	E25	1	1	EH25-A32-CE-215	32.0	24.1	169	215.0	45.1	5°	80	65.00	2.41	18000

Nota!

A haste inteiriça de metal duro deve ser usada para acabamento/semiacabamento somente

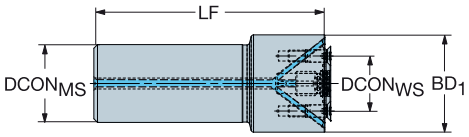
Para componentes, visite www.sandvik.coromant.com

N23 N6 N15 N3

Haste cilíndrica para adaptador tipo árvore com parafusos de acionamento

Para CoroMill® QD com refrigeração interna





					Dimensões, mm									
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LSC	LF	BD_1	BAR	NM	KG	RPMX
25	X10	1	3	**CY25-X10-032-090**	25.0	22.0	10.0	57	90.0	32.0	80	6.40	0.42	12000
	X22	1	3	**CY25-X22-040-090**	25.0	32.0	22.0	57	90.0	40.0	80	3.90	0.53	11000
32	X22	1	3	**CY32-X22-040-095**	32.0	32.0	22.0	61	95.0	40.0	80	3.90	0.71	11000

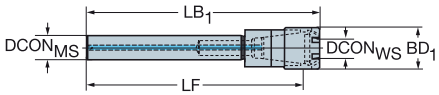
ISO 13399 N23

CNSC CXSC N15

Haste cilíndrica para mandril porta-pinça ER

Interface do lado da peça DIN 6499-B





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	BD_1	BAR	KG
8	ER11	1	1	**393.14-08 11 056**	8.0	11.4	52	75.0	82.5	16.0	20	0.05
12	ER16	1	1	**393.14-12 16 080**	12.0	17.0	77	107.0	118.5	22.0	20	0.13
16	ER11	1	1	**393.14-16 11 150**	16.0	11.4	149	163.5	171.0	16.0	20	0.21
20	ER16	1	1	**393.14-20 16 155**	20.0	17.0	155	170.0	181.5	22.0	20	0.31
25	ER20	1	1	**393.14-25 20 170A**	25.0	21.0	141	170.5	182.0	28.0	20	0.51

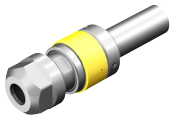
Para componentes, visite www.sandvik.coromant.com

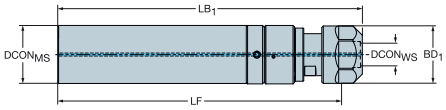
M1 N23 N15

Haste cilíndrica para CoroChuck™ 970

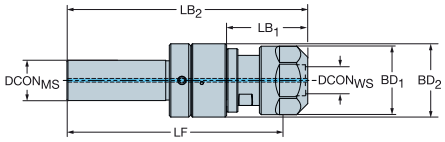
Interface do lado da peça DIN 6499-B

DSGN 1





DSGN 2

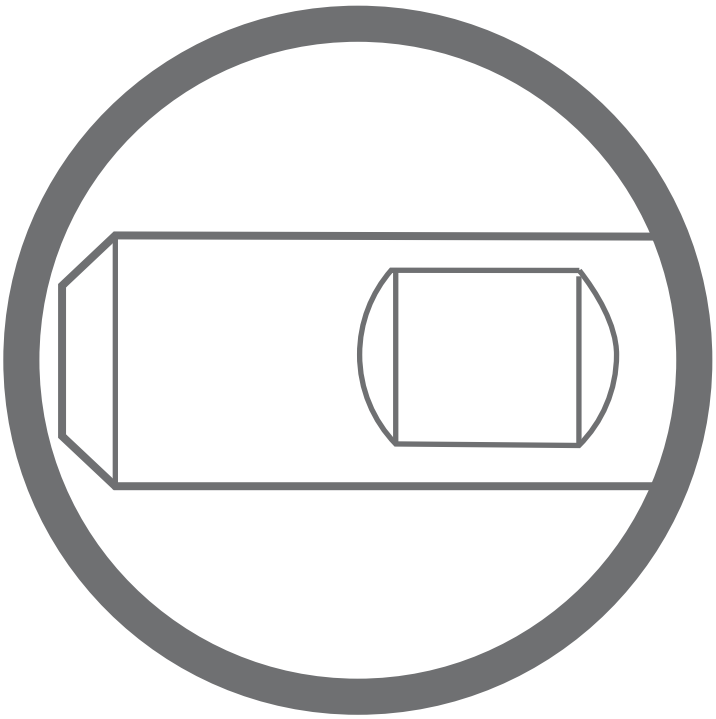


							Dimensões, mm										
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	BAR	KG	RPMX
12	ER8	M3	1	1	1	**970-CY12-8-052**	12.0	8.5	70	94.0	100.0		12.0		60	0.12	8000
16	ER11	M5	1	1	2	**970-CY16-11-052**	16.0	11.3	44	91.5	25.2	96.4	18.7	23.5	80	0.16	8000
20	ER20	M12	1	1	2	**970-CY20-20-069**	20.0	20.8	50	106.5	40.2	119.5	34.0	34.6	80	0.44	8000

Para componentes, visite www.sandvik.coromant.com

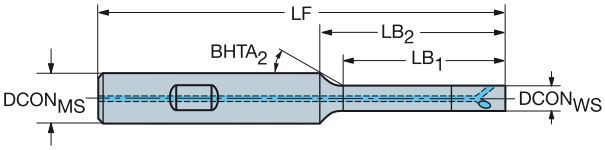
M1 N23 N15 N5

Interface no lado da máquina haste Weldon



Weldon para adaptador CoroMill® 327



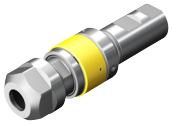


					Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	$BHTA_2$	BAR	NM	KG	RPMX
12	06	1	1	327-12B15SC-06	12.0	6.0	46	70.5	11.5	17.2	6.0	30°	20	1.80	0.07	40000
	06	1	1	327-12B21EC-06	12.0	6.0	46	76.5	17.5	23.2	6.0	30°	20	1.80	0.13	40000
	06	1	1	327-12B30EC-06	12.0	6.0	46	86.5	26.5	32.2	6.0	30°	20	1.80	0.13	40000
	06	1	1	327-12B42EC-06	12.0	6.0	46	96.5	38.5	44.2	6.0	30°	20	1.80	0.13	40000
16	09	1	1	327-16B18SC-09	16.0	9.0	49	74.3	12.2	18.8	9.0	30°	20	4.30	0.19	40000
	12	1	1	327-16B24SC-12	16.0	12.0	49	74.3	18.3	22.3	12.0	30°	20	6.50	0.10	40000
	09	1	1	327-16B32EC-09	16.0	9.0	49	94.3	26.2	32.8	9.0	30°	20	4.30	0.27	40000
	09	1	1	327-16B45EC-09	16.0	9.0	49	104.3	39.2	45.8	9.0	30°	20	4.30	0.20	40000
	09	1	1	327-16B64EC-09	16.0	9.0	49	124.3	58.2	64.8	9.0	30°	20	4.30	0.30	40000
	12	1	1	327-16B42EC-12	16.0	12.0	49	94.3	36.3	40.3	12.0	30°	20	6.50	0.28	40000
	12	1	1	327-16B60EC-12	16.0	12.0	49	124.3	54.3	58.3	12.0	30°	20	6.50	0.34	35000
	12	1	1	327-16B85EC-12	16.0	12.0	49	154.3	79.3	83.3	12.0	30°	20	6.50	0.39	30000
	14	1	1	327-16B42EC-14	16.0	14.3	49	93.5	35.5	37.5	14.3	30°	20	6.50	0.30	40000
	14	1	1	327-16B60EC-14	16.0	14.3	49	123.5	53.5	55.5	14.3	30°	20	6.50	0.37	35000
	14	1	1	327-16B85EC-14	16.0	14.3	49	153.5	78.5	80.5	14.3	30°	20	6.50	0.47	27000
20	14	1	1	327-20B35SC-14	20.0	14.3	51	93.5	28.5	33.2	14.0	30°	20	6.50	0.28	40000

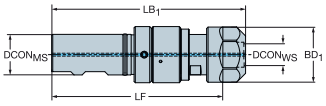
S = Haste de aço
E = Haste de metal duro

Weldon para CoroChuck™ 970

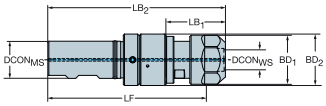
Interface do lado da peça DIN 6499-B



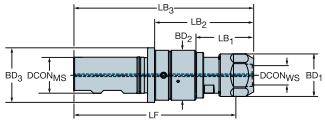
DSGN 1



2



5

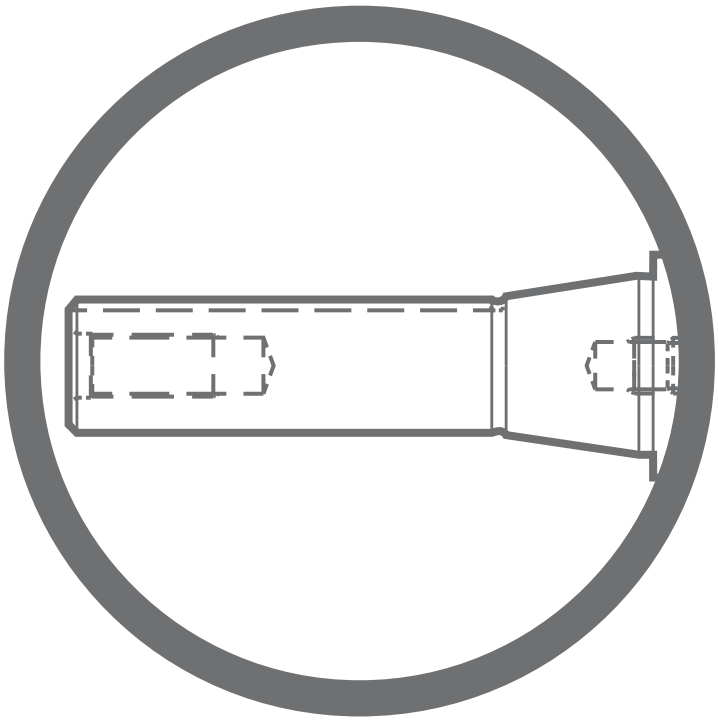


						Dimensões, mm												
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	DSGN	Código para pedido	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	KG	RPMX
16	ER11	M5	1	1	2	970-WE16-11-052	16.0	11.3	44	91.5	25.2	96.4		18.7	23.5		80	0.18	8000
20	ER11	M5	1	1	5	970-WE20-11-052	20.0	11.3	50	97.8	25.2	48.6	102.7	18.7	23.5	28.5	80	0.22	8000
	ER20	M12	1	1	2	970-WE20-20-069	20.0	20.8	50	106.5	40.3	119.5		33.7	34.6		80	0.44	8000
25	ER11	M5	1	1	5	970-WE25-11-052	25.0	11.3	50	97.8	25.2	48.6	102.7	18.7	23.5	28.5	80	0.30	8000
	ER20	M12	1	1	2	970-WE25-20-069	25.0	20.8	50	106.5	40.1	119.5		33.7	34.6		80	0.47	8000
	ER25	M20	1	1	2	970-WE25-25-088	25.0	25.8	50	125.4	42.2	138.9		41.7	44.0		80	0.84	8000
	ER40	M30	1	1	1	970-WE25-40-117	25.0	40.8	50	151.4	167.9			63.0			80	2.10	8000
40	ER50	M48	1	1	5	970-WE40-50-164	40.0	52.0	70	211.8	78.5	134.8	234.3	78.0	80.0	86.0	80	5.20	8000

Para componentes, visite www.sandvik.coromant.com

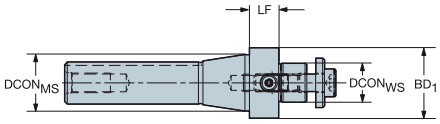
M1 N23 N15 N5

Interface no lado da máquina Bridgeport



R8 (Bridgeport) para adaptador tipo árvore



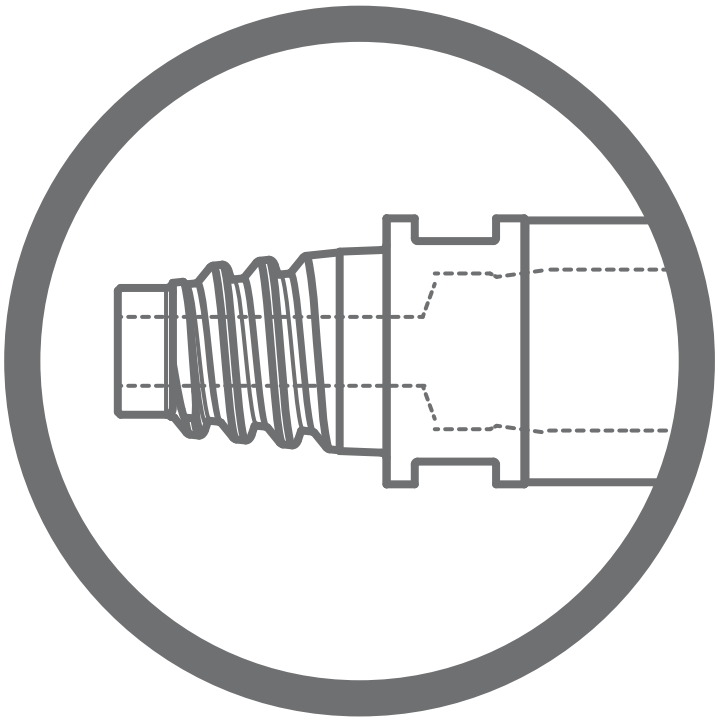


			Dimensões, mm					
CZC_{MS}	CZC_{WS}	**Código para pedido**	$DCON_{WS}$	LF	BD_1	NM	KG	RPMX
R8	22	**392.R8.05-22 020**	22.0	20.0	40.0	45.00	0.67	10000

Para componentes, visite www.sandvik.coromant.com

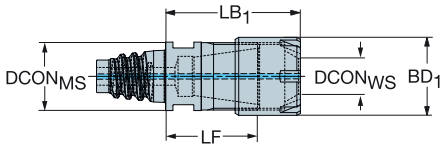
M1 N23 N15

Interface Coromant EH, lado da máquina



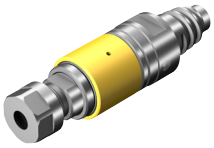
Adaptador Coromant EH para ER

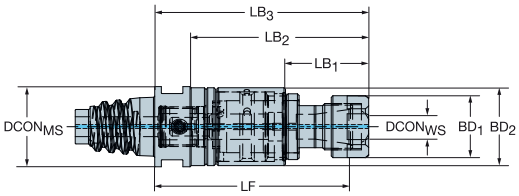




					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BD_1	BAR	KG	RPMX
E12	ER8	1	1	**ER-EH12-08-024**	11.7	8.5	18.0	24.0	12.0	80	0.03	40000
E16	ER11	1	1	**ER-EH16-11-028**	15.5	11.4	20.5	28.0	16.0	80	0.04	40000
E20	ER16	1	1	**ER-EH20-16-038**	19.3	17.0	26.5	38.0	22.0	80	0.08	40000
E25	ER20	1	1	**ER-EH25-20-042**	24.2	21.0	30.5	42.0	28.0	80	0.12	32000

Coromant EH para CoroChuck™ 970

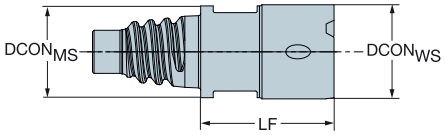




						Dimensões, mm										
CZC_{MS}	CZC_{WS}	TRMAX	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BAR	KG	RPMX
E25	ER11	M5	1	1	**970-EH25-11-065**	24.2	11.3	59.8	25.1	53.6	64.6	18.7	23.5	80	0.16	8000

Coromant EH para adaptador CoroMill® 327



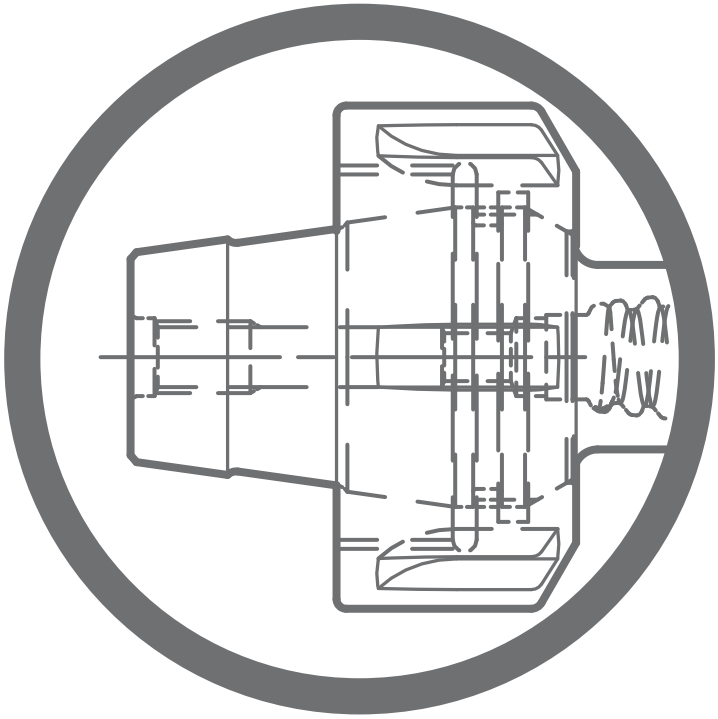


					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	BD_1	BAR	NM	KG	RPMX
E10	09	1	3	**327-EH10-09-015**	9.7	9.0	15.0	10.0	20	4.30	0.02	40000
E12	12	1	3	**327-EH12-12-017**	11.7	12.0	17.0	12.0	20	6.50	0.02	40000
	14	1	3	**327-EH12-14-017**	11.7	14.3	17.0	14.3	20	6.50	0.01	40000

Para componentes, visite www.sandvik.coromant.com

N23 N6 N15 N3

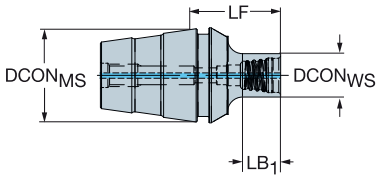
Interface no lado da máquina ER



ER para adaptador Coromant EH

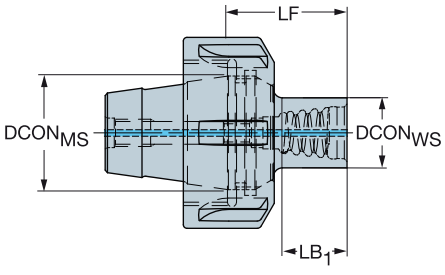
Interface do lado da máquina DIN 6499-B





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BAR	NM	KG	RPMX
ER16	E10	1	1	**EH-ER16-10-008**	17.0	9.6	14.9	7.2	80	12.00	0.09	40000
ER20	E10	1	1	**EH-ER20-10-008**	21.0	9.6	15.8	7.2	80	12.00	0.11	40000
	E12	1	1	**EH-ER20-12-010**	21.0	11.6	17.8	9.2	80	15.00	0.13	40000
ER25	E10	1	1	**EH-ER25-10-012**	26.0	9.6	20.3	7.2	80	12.00	0.16	32000
	E12	1	1	**EH-ER25-12-014**	26.0	11.6	22.3	10.2	80	15.00	0.17	32000
	E16	1	1	**EH-ER25-16-016**	26.0	15.4	24.3	14.2	80	30.00	0.22	32000
ER32	E10	1	1	**EH-ER32-10-012**	33.0	9.6	21.5	7.4	80	12.00	0.25	25000
	E12	1	1	**EH-ER32-12-014**	33.0	11.6	23.5	9.4	80	15.00	0.27	25000
	E16	1	1	**EH-ER32-16-018**	33.0	15.4	27.5	13.4	80	30.00	0.35	25000
	E20	1	1	**EH-ER32-20-022**	33.0	19.2	31.5	18.9	80	50.00	0.34	25000
	E25	1	1	**EH-ER32-25-025**	33.0	24.1	34.5	25.0	80	65.00	0.41	25000
ER40	E16	1	1	**EH-ER40-16-022**	41.0	15.4	33.1	15.0	20		0.51	20000
	E20	1	1	**EH-ER40-20-025**	41.0	19.2	36.1	19.0	20		0.53	20000
	E25	1	1	**EH-ER40-25-028**	41.0	24.1	39.1	24.0	20		0.58	20000





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BAR	NM	KG	RPMX
ER11	E10	1	1	**392.EREH-11 10 008**	11.4	9.6	16.8	8.0	80	12.00	0.09	40000
ER16	E12	1	1	**392.EREH-16 12 010**	17.0	11.6	20.5	10.0	80	15.00	0.16	40000
ER20	E16	1	1	**392.EREH-20 16 014**	21.0	15.4	24.1	14.0	80	30.00	0.27	40000
ER25	E20	1	1	**392.EREH-25 20 019**	26.0	19.2	29.1	19.0	80	50.00	0.36	40000

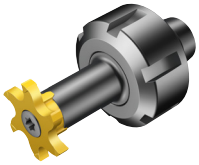
Para componentes, visite www.sandvik.coromant.com

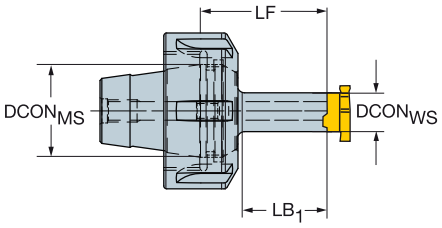
M1 N23 N15 N3

POR

ER para adaptador CoroMill® 327

Interface do lado da máquina DIN 6499-B



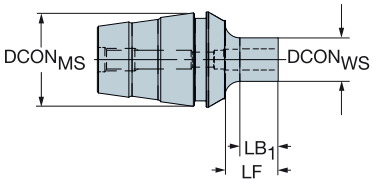


			Dimensões, mm							
CZC_{MS}	CZC_{WS}	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BD_1	NM	KG	RPMX
ER11	09	**392.ER327-11 09 022**	11.4	9.0	25.0	16.0	9.0	4.30	0.07	40000
ER16	09	**392.ER327-16 09 022**	17.0	9.0	26.8	16.2	9.0	4.30	0.15	40000
	12	**392.ER327-16 12 030**	17.0	12.0	34.8	24.3	12.0	6.50	0.22	40000
ER20	12	**392.ER327-20 12 030**	21.0	12.0	34.7	24.8	12.0	6.50	0.25	40000
	14	**392.ER327-20 14 035**	21.0	14.3	38.9	28.8	14.0	6.50	0.27	40000
ER32	14	**392.ER327-32 14 035**	33.0	14.3	41.3	28.8	14.0	6.50	0.50	25000

Nota!

A porca não é uma porca ER standard e, portanto, não intercambiável com componentes séries 5533 050-0X. A porca está sempre incluída no pacote!





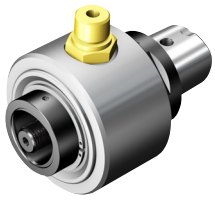
			Dimensões, mm							
CZC_{MS}	CZC_{WS}	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BD_1	NM	KG	RPMX
ER11	06	**327-ER11-06-016**	11.4	6.0	17.5	12.8	6.0	1.80	0.03	40000
ER20	09	**327-ER20-09-022**	21.0	9.0	24.7	16.5	9.0	4.30	0.09	40000
ER25	09	**327-ER25-09-022**	26.0	9.0	25.2	16.5	9.0	4.30	0.13	32000
	12	**327-ER25-12-030**	26.0	12.0	33.2	24.6	12.0	6.50	0.22	32000
	14	**327-ER25-14-019**	26.0	14.3	22.9	14.3	14.0	6.50	0.21	32000
	14	**327-ER25-14-035**	26.0	14.3	37.4	28.8	14.0	6.50	0.23	32000
ER32	12	**327-ER32-12-030**	33.0	12.0	34.2	24.6	12.0	6.50	0.31	25000
	14	**327-ER32-14-019**	33.0	14.3	23.9	14.3	14.0	6.50	0.30	25000

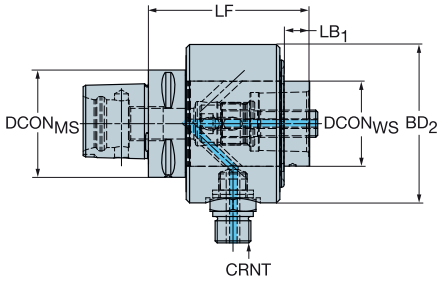
Para componentes, visite www.sandvik.coromant.com

M1 N23

Adaptador de redução Coromant Capto®

Indutor de refrigeração



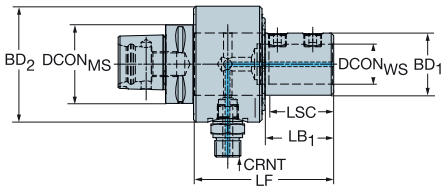


					Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	BD_2	CRNT	BAR	NM	KG	RPMX
C5	C4	2	1	**C5-391.02CCH-40 090**	50.0	40.0	90.0	16.5	78.0	G 3/8"	18	55.00	1.96	6300
C6	C5	2	1	**C6-391.02CCH-50 095**	63.0	50.0	95.0	15.0	93.0	G 1/2"	18	95.00	1.60	4300
C8	C6	2	1	**C8-391.02CCH-63 110**	80.0	63.0	110.0	15.0	108.0	G 1/2"	18	170.00	4.77	3300

Coromant Capto® para adaptador ISO 9766

Indutor de refrigeração





					Dimensões, mm											
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	BD_1	BD_2	CRNT	BAR	NM	KG	RPMX
C5	20	2	1	**C5-391.27CCH-20 120**	50.0	20.0	51	120.0	46.5	40.0	78.0	G 3/8"	18	12.00	2.27	6300
	25	2	1	**C5-391.27CCH-25 135**	50.0	25.0	57	135.0	49.7	45.0	93.0	G 1/2"	18	20	3.16	5300
C6	32	2	1	**C6-391.27CCH-32 135**	63.0	32.0	61	135.0	55.0	50.0	93.0	G 1/2"	18	30	3.41	5300
C8	40	2	1	**C8-391.27CCH-40 155**	80.0	40.0	71	155.0	63.5	65.0	108.0	G 1/2"	18	40	5.75	4000

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

Silent Tools®

Adaptadores com mecanismo antivibratório

Aplicação

- Em operações com longos balanços
- Aumento da produtividade e melhorias no acabamento superficial com balanços curtos



Minimiza vibrações com longos balanços (acima de 3xD_)

Os adaptadores Silent Tools minimizam a vibração por meio de um amortecedor dentro da ferramenta que mantém boa produtividade e tolerâncias estreitas mesmo com longos balanços

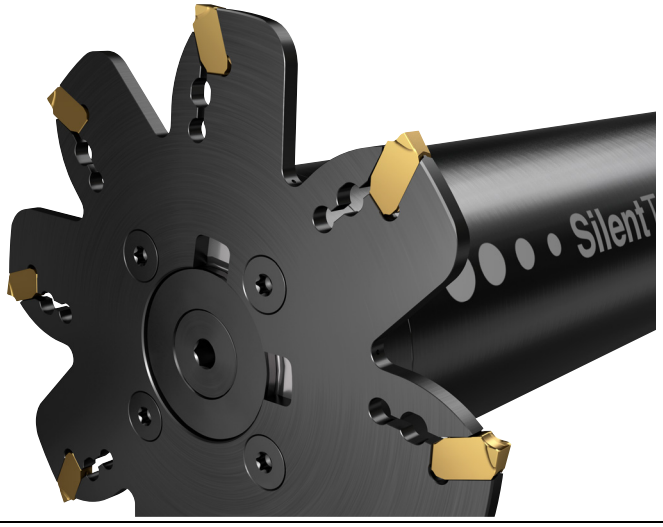
SilentTools®

Mandrilamento

Geralmente, os problemas causados pela vibração são encontrados em operações de mandrilamento e outras, especialmente na usinagem com longos balanços. As vibrações podem gerar acabamento superficial ruim, precisão insuficiente, perda de produtividade, maior desgaste da pastilha e da máquina-ferramenta, além do ruído. Portanto, solucionar problemas de vibração sempre impulsionará a produtividade.

Fresamento

Em muitos centros de usinagem, as peças e as máquinas-ferramentas precisam de montagens de ferramentas longas para alcançar o fundo de peças grandes. O risco de vibração é alto e a solução típica é uma usinagem mais lenta ou ferramentas antivibratórias. Com os adaptadores para fresamento Silent Tools, a trepidação e as vibrações são eliminadas, permitindo que a taxa de usinagem seja aumentada e ainda melhorando a segurança do processo. As ferramentas Silent Tools para fresamento são impulsionadoras da produtividade.



www.sandvik.coromant.com/silenttools



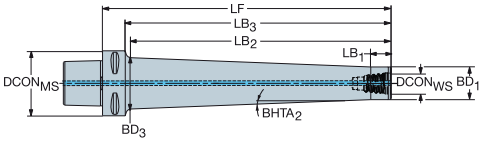
O sistema antivibratório consiste em uma massa pesada, apoiada por elementos de mola de borracha

Coromant Capto® para adaptador antivibratório Coromant EH

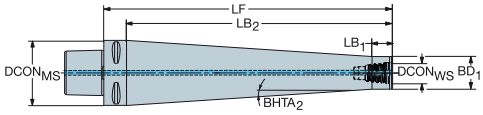


SilentTools®

DSGN 12



DSGN 7



						Dimensões, mm															
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	LB_4	BD_1	BD_3	BD_4	$BHTA_2$	$BHTA_3$	BAR	NM	KG	RPMX
C4	E16	3	1	12	**C4-EH16D-175**	40.0	15.4	175.0	3.0	150.0	155.0	175.0	19.5	29.7	40.0	2°	45°	70	30.00	1.05	15000
C5	E20	3	1	12	**C5-EH20D-185**	50.0	19.2	185.0	3.0	159.0	165.0	185.0	24.0	33.8	50.0	1°	53°	70	50.00	1.53	15000
	E25	3	1	7	**C5-EH25D-280**	50.0	24.1	280.0	20.0	260.0	280.0		31.7	50.0		2°	0°	70	65.00	5.29	10000
C6	E25	3	1	12	**C6-EH25D-280**	63.0	24.1	280.0	20.0	252.0	258.0	280.0	31.7	49.7	63.0	2°	67°	70	65.00	5.68	10000
	E25	3	1	12	**C6-EH25D-340**	63.0	24.1	340.0	20.0	313.0	317.8	340.0	31.7	54.7	63.0	2°	61°	70	65.00	7.00	8000
C8	E25	3	1	12	**C8-EH25D-420**	80.0	24.1	420.0	8.0	384.0	390.0	420.0	31.7	61.7	80.0	2°	71°	70	65.00	10.61	6000

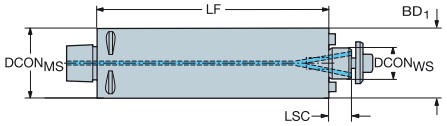
Para componentes, visite www.sandvik.coromant.com

N23 N15 N3

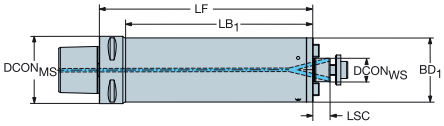
Coromant Capto® para adaptador antivibratório tipo árvore



DSGN 1



2

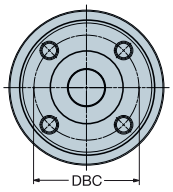


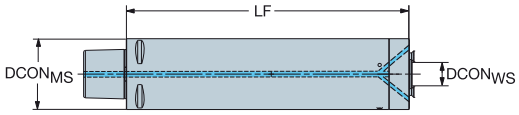
SilentTools®

						Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	DSGN	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	LB_2	BD_1	BD_2	BAR	NM	KG	RPMX
C4	16	3	4	2	**C4-Q16D-038-130**	40.0	16.0	11	130.0	107.8	130.0	38.0	40.0	70	22.00	1.62	16000
	16	3	4	2	**C4-Q16D-038-200**	40.0	16.0	11	200.0	177.8	200.0	38.0	40.0	70	22.00	2.32	8000
C5	22	3	4	2	**C5-Q22D-048-180**	50.0	22.0	16	180.0	157.6	180.0	47.5	50.0	70	45.00	3.22	14000
	22	3	4	2	**C5-Q22D-048-220**	50.0	22.0	16	220.0	197.6	220.0	47.5	50.0	70	45.00	6.04	11000
	22	3	4	2	**C5-Q22D-048-270**	50.0	22.0	16	270.0	247.6	270.0	47.5	50.0	70	45.00	6.85	7000
C6	22	3	4	2	**C6-Q22D-060-200**	63.0	22.0	16	200.0	175.4	200.0	60.0	63.0	70	45.00	8.05	15000
	22	3	4	2	**C6-Q22D-060-260**	63.0	22.0	16	260.0	235.4	260.0	60.0	63.0	70	45.00	9.29	11000
	22	3	4	2	**C6-Q22D-060-310**	63.0	22.0	16	310.0	285.4	310.0	60.0	63.0	70	45.00	10.86	6000
	27	3	4	1	**C6-Q27D-063-200**	63.0	27.0	18	200.0	200.0		63.0		70	80.00	8.54	11000
	27	3	4	1	**C6-Q27D-063-260**	63.0	27.0	18	260.0	260.0		63.0		70	80.00	9.88	8000
	27	3	4	1	**C6-Q27D-063-310**	63.0	27.0	18	310.0	310.0		63.0		70	80.00	11.57	5000
C8	27	3	4	2	**C8-Q27D-076-220**	80.0	27.0	18	220.0	187.2	220.0	76.0	80.0	70	80.00	12.92	12000
	27	3	4	2	**C8-Q27D-076-320**	80.0	27.0	18	320.0	287.2	320.0	76.0	80.0	70	80.00	13.40	8000
	27	3	4	2	**C8-Q27D-076-360**	80.0	27.0	18	360.0	327.2	360.0	76.0	80.0	70	80.00	18.20	6000
	32	3	4	1	**C8-Q32D-080-220**	80.0	32.0	20	220.0	220.0		80.0		70	180.00	13.73	10000
	32	3	4	1	**C8-Q32D-080-320**	80.0	32.0	20	320.0	320.0		80.0		70	180.00	18.00	6000
	32	3	4	1	**C8-Q32D-080-360**	80.0	32.0	20	360.0	360.0		80.0		70	180.00	19.60	4000
C10	32	3	4	2	**C10-Q32D-095-400**	100.0	32.0	20	400.0	361.0	400.0	95.0	100.0	70	180.00	30.00	5000
	40	3	4	1	**C10-Q40D-100-400**	100.0	40.0	23	400.0	400.0		100.0		70	300.00	28.30	5000

Coromant Capto® para adaptador tipo árvore com adaptador antivibratório com parafusos de acionamento







SilentTools®

Para CoroMill® QD com refrigeração interna

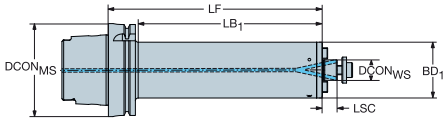
					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	DBC	$DCON_{WS}$	LSC	LF	BAR	NM	KG
C3	X10	3	4	**C3-X10D-032-128**	32.0	22.0	10.0	2	128.0	70	6.40	1.10
C4	X22	3	3	**C4-X22D-040-160**	40.0	32.0	22.0	2	160.0	70	3.90	1.92
C6	X32	3	3	**C6-X32D-063-252**	63.0	45.0	32.0	2	252.0	70	6.40	9.30
C8	X40	3	3	**C8-X40D-080-320**	80.0	63.0	40.0	2	320.0	70	70.00	17.45

Para componentes, visite www.sandvik.coromant.com

M1 N23 N15

HSK para adaptador tipo árvore antivibratório





SilentTools®

					Dimensões, mm						BAR	NM	KG	
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	LB_1	BD_1				RPMX
63	16	1	4	**HA06-Q16D-038-160**	63.0	16.0	11	160.0	131.0	38.0	70	22.00	4.35	16000
	16	1	4	**HA06-Q16D-038-230**	63.0	16.0	11	230.0	201.0	38.0	70	22.00	5.06	8000
	22	1	4	**HA06-Q22D-048-210**	63.0	22.0	16	210.0	181.0	47.5	70	45.00	6.10	8000
	22	1	4	**HA06-Q22D-048-260**	63.0	22.0	16	260.0	231.0	47.5	70	45.00	6.89	5000
100	22	1	4	**HA10-Q22D-048-213**	100.0	22.0	16	213.0	181.0	47.5	70	45.00	7.68	14000
	22	1	4	**HA10-Q22D-048-263**	100.0	22.0	16	263.0	231.0	47.5	70	45.00	8.55	9000
	22	1	4	**HA10-Q22D-060-230**	100.0	22.0	16	230.0	198.0	60.0	70	45.00	9.78	14000
	22	1	4	**HA10-Q22D-060-340**	100.0	22.0	16	340.0	308.0	60.0	70	45.00	12.96	7000
	27	1	4	**HA10-Q27D-076-250**	100.0	27.0	18	250.0	218.0	76.0	70	80.00	14.13	10000
	27	1	4	**HA10-Q27D-076-390**	100.0	27.0	18	390.0	358.0	76.0	70	80.00	20.00	5000
	32	1	4	**HA10-Q32D-080-250**	100.0	32.0	20	250.0	218.0	80.0	70	180.00	15.30	10000
	32	1	4	**HA10-Q32D-080-390**	100.0	32.0	20	390.0	358.0	80.0	70	180.00	21.07	5000

Para componentes, visite www.sandvik.coromant.com


M1



N23



N15

Acessórios

Coromant Capto® M2

Dispositivo de montagem M3
Carrinho de ferramentas para Coromant Capto M4
Cassetes (assento poligonal) M5
Mecanismo de trava para cassetes M6
Item de montagem M7-M9
Valor de torque M10

HSK

Item de montagem M11

Item acessório para CoroBore®

Unidade de pré-medição Corobore® XL M12
Conjunto de calços M12

Árvore

Parafusos para montagem tipo árvore com furo para refrigeração M13
Anéis espaçadores M14

Buchas e pinças

Pinças cilíndricas M15-M18
Extrator para pinças cilíndricas M18
Bucha cilíndrica com interface de travamento mecânico M19
Bucha excêntrica M20
Pinça ER M21
Pinça ER para haste de macho M24
Discos de vedação para pinça ER M25
Bucha para cabeça de mandrilamento de precisão M26
Item de montagem M27

Adaptadores

Cassete ajustável para adaptador de broca M28
VL M28

Chaves e torquímetros

Ferramentas para montagem M29
Torquímetro Torx Plus® M32

Tirantes de tração M33-M34

Coromant Capto®

Três sistemas em um

Aplicação

- Coromant Capto trabalha em todos os tipos de máquinas:
- Centros de torneamento - troca rápida e refrigeração de alta pressão.
- Máquinas multitarefas e centros de usinagem - interface de fuso rotativo, ferramentas modulares e troca rápida.
- Disponível em seis tamanhos, há uma solução Coromant Capto flexível para todas as necessidades: C3-C10



Características e benefícios

- Flexível com modularidade ampliada
- Alta precisão e estabilidade básicas
- Estoque de ferramentas minimizado
- Tempo de set-up reduzido
- Alta transmissão de torque
- Alta resistência à deflexão
- Troca de ferramenta rápida e automatizada
- Tecnologia avançada de olhal para processo seguro mesmo com pressões baixas
- Refrigeração interna de alta pressão, da máquina até a aresta de corte
- Balanceado e concêntrico
- Autocentrante

www.sandvik.coromant.com/coromantcapto

Troca rápida

- Centros de torneamento
- Tornos verticais

Porta-ferramentas acionados e unidades de fixação Coromant Capto reduzem o tempo de set-up e de troca da ferramenta para maior utilização da máquina.

Fuso integrado

- Máquinas multitarefas
- Tornos verticais
- Centros de usinagem com opção de torneamento

O Coromant Capto integrado ao fuso agrega estabilidade e versatilidade.

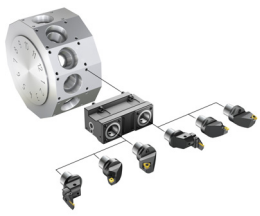
Sistema modular

- Centros de usinagem
- Máquinas multitarefas
- Tornos verticais

Os adaptadores Coromant Capto de interface de máquina combinados com os adaptadores de extensão e redução permitem a montagem de ferramentas com diferentes comprimentos e desenhos independentemente da interface da máquina.

Gama Coromant Capto®

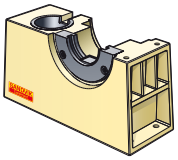
O programa Coromant Capto inclui adaptadores de interface da máquina, unidades de fixação, porta-ferramentas, ferramentas de corte integradas, adaptadores e mandris.



Dispositivo de montagem

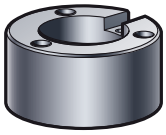
Dispositivo do corpo
Código para pedido:

391.500



Corpo do dispositivo de fixação para buchas
Código para pedido:

391.501



Código para pedido



Bucha	Tipo de suporte, tamanho
391.540-C3	Coromant Capto tamanho C3
391.540-C4	Coromant Capto tamanho C4
391.540-C5	Coromant Capto tamanho C5
391.540-C6	Coromant Capto tamanho C6
391.540-C8	Coromant Capto Tamanho C8
391.540-C10	Coromant Capto tamanho C10
391.540-HA04	HSK 40 Formato A/C
391.540-HA05	HSK 50 Formato A/C
391.540-HA06	HSK 63 Formato A/C
391.540-HA08	HSK 80 Formato A/C
391.540-HA10	HSK 100 Formato A/C
391.540-30	MAS-BT/CAT/ISO 30
391.540-40	MAS-BT/CAT/ISO 40
391.540-50	MAS-BT/CAT/ISO 50

Código para pedido



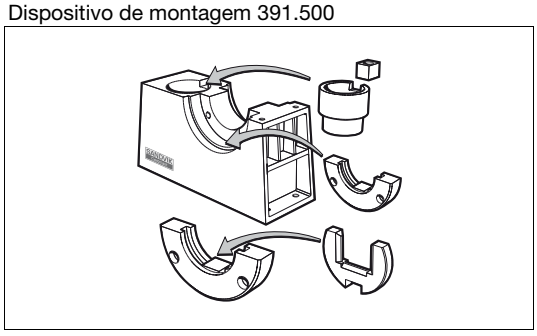


Flange	Anel	Tipo de suporte, tamanho
391.510-140 50	391.530-C3	Coromant Capto tamanho C3
391.510-140 50	391.530-C4	Coromant Capto tamanho C4
391.510-140 50	391.530-C5	Coromant Capto tamanho C5
391.510-140 50	391.530-C6	Coromant Capto tamanho C6
391.510-140 50	391.530-C8	Coromant Capto Tamanho C8
	391.530-C10*	Coromant Capto tamanho C10
391.510-HA04		HSK 40 Formato A
391.510-HA05		HSK 50 Formato A
391.510-HA06		HSK 63 Formato A
391.510-HA08		HSK 80 Formato A
391.510-HA10		HSK 100 Formato A
391.510-HA12		HSK 125 Formato A
391.510-55 30		MAS-BT 30
391.510-55 40		MAS-BT 40
391.510-55 50		MAS-BT 50
391.510-562-40		BIG-PLUS, MAS-BT 40
391.510-562-50		BIG-PLUS, MAS-BT 50
391.510-140 40		DIN 69871/40, ANSIB 5.50-40. ISO7388/1-40, CAT 40
391.510-140 50		DIN 69871/50, ANSIB 5.50-40. ISO7388/1-50, CAT 50
391.510-540 40		BIG-PLUS DIN69871/1-40, BIG-PLUS 7388/1-40, CAT 40
391.510-540 50		BIG-PLUS DIN69871/1-50, BIG-PLUS 7388/1-50, CAT 50
391.510-00 40		DIN 2080-40/NMTB 40
391.510-00 50		DIN 2080-50/NMTB 50
A391.510-45 40		ANSIB 5.50-2009, CAT-V 40-2009
A391.510-45 50		ANSIB 5.50-2009, CAT-V 50-2009
A391.510-545 40		BIG-PLUS ANSIB 5.50-2009, CAT-V 40-2009
A391.510-545 50		BIG-PLUS ANSIB 5.50-2009, CAT-V 50-2009
391.510-140 50	391.530-970-11	CoroChuck 970, ER11
391.510-140 50	391.530-970-20	CoroChuck 970, ER20
391.510-140 50	391.530-970-25	CoroChuck 970, ER25
391.510-140 50	391.530-970-32	CoroChuck 970, ER32
391.510-140 50	391.530-970-40	CoroChuck 970, ER40

Nota: A chave é fornecida com a bucha.

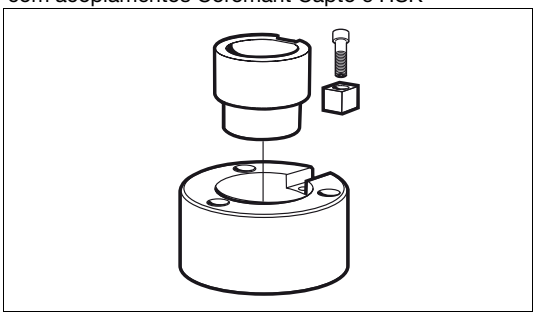
* colar e flange combinados

Dispositivo de montagem 391.500



Escolha a flange, o anel e a bucha adequados à ferramenta a ser montada.

Dispositivo 391.501 para manutenção de ferramentas com acoplamentos Coromant Capto e HSK



Escolha a bucha adequada ao acoplamento.
O dispositivo deve ser fixado à bancada com três parafusos (não fornecidos com o dispositivo).

Carrinho de ferramentas para Coromant Capto

Ferramentas de troca rápida



1. Suporte da bandeja
2. Bandejas de ferramentas
3. Suportes injetados (devem ser pedidos separadamente)

Código para pedido	O kit consiste em:		
CCW-KIT	TC-0	4 peças	Bandejas de ferramentas
	TCC-2	4 pares	Suportes para bandejas de ferramentas

Para solicitar um carrinho completo 1 pç CCW-KIT + porta-ferramentas.
Bandejas de ferramenta e suportes das bandejas podem ser comprados como acessórios extras.

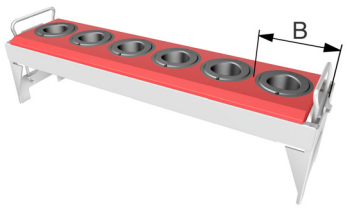
Bancada vertical



Código para pedido
BS-KIT

Sem códigos de acessórios para bancada vertical.

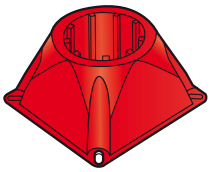
Suportes injetados - devem ser pedidos separadamente

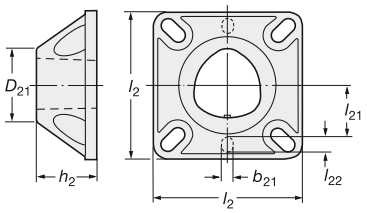


Código para pedido	Largura (B)	Número máx. de suportes em uma bandeja
C3-IC-1	58	C3 = 9
C4-IC-1	58	C4 = 9
C5-IC-1	65.5	C5 = 8
C6-IC-1	81.5	C6 = 6
C8-IC-1	105	C8 = 5
C10-IC-1	120	C10 = 4

Cassetes (assento poligonal)

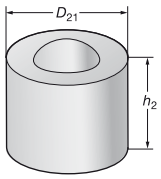
Coromant Capto®



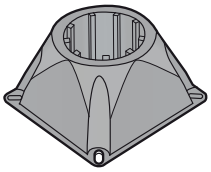


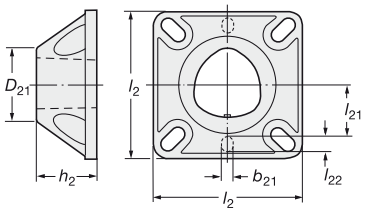
-4000
Cassetes de plástico para armazenagem (cor vermelha)

-6000-B



Blanks de alumínio para cassetes



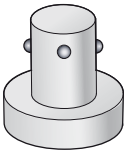


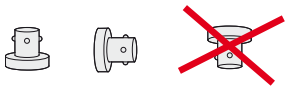
-5000
Cassete de plástico de alta resistência para armazenagem de ferramentas na máquina (cor preta)

Tamanho do acoplamento	**Código para pedido**	Dimensões, mm b_{21}	D_{21}	h_2	l_2	l_{21}	Todos os cassetes de plástico conforme padrão de furo nos tamanhos 17 mm, 20 mm, 25 mm e 1".
C3	**C3-C-4000**	- 32	26	65	-	-	Plástico de alta resistência. Cor vermelha. Deve ser usado: – sozinho para estoque em posição vertical – com mecanismo tipo PL-01 para posição horizontal ou vertical
C4	**C4-C-4000**	6 50	39	74	26	8	
C5	**C5-C-4000**	6 50	39	74	26	8	
C6	**C6-C-4000**	8 80	63	116	41	10	
C8	**C8-C-4000**	8 80	63	116	41	10	
C4	**C4-C-5000**	6 50	39	74	26	8	Plástico de alta resistência reforçado (cor preta). Para armazenagem de ferramentas na máquina com mecanismo AL-01.
C5	**C5-C-5000**	6 50	39	74	26	8	
C6	**C6-C-5000**	8 80	63	116	41	10	
C8	**C8-C-5000**	8 80	63	116	41	10	
C10	**C10-C-5000**	8 100	80	150	60	68	
C6	**C6-C-6000-B**	- 120	63	-	-	-	Blanks de alumínio para cassete, para adaptação individual. Devevser usado com AL-01.
C8	**C8-C-6000-B**	120	63	-	-	-	
C10	**C10-C-6000-B**	138	80	-	-	-	

Mecanismo de trava para cassetes

-PL

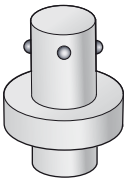


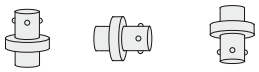


Mecanismo de travamento passivo

Para armazenar no sentido vertical para cima e horizontal. NUNCA armazenar invertido.

-AL





Mecanismo de travamento ativo

Para armazenar em todos os ângulos: vertical para cima e para baixo ou horizontal.

CZC	**Código para pedido**	Força de ação de empuxe, N	
C4	**C4-PL-01**	55	Mecanismo de trava central passivo. Fixação por mecanismo com mola. Encaixa-se diretamente em todos os cassetes tipo 4000.
C5	**C5-PL-01**	120	
C6	**C6-PL-01**	150	
C8	**C8-PL-01**	240	

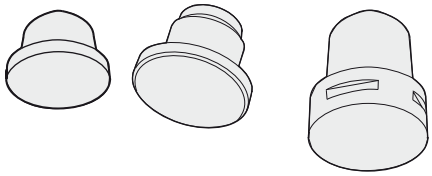
CZC	**Código para pedido**	Peso da ferramenta máx. recomendado, Kg	
C4	**C4-AL-01**	40	Mecanismo de trava ativo – ação mecânica de empuxe. Encaixa-se diretamente em todos os cassetes tipo 5000/6000.
C5	**C5-AL-01**	60	
C6	**C6-AL-01**	75	
C8	**C8-AL-01**	110	
C10	**C10-AL-01**	150	

CZC	**Código para pedido**	Peso da ferramenta máx. recomendado, Kg	
C6	**C6-AL-02**	75	Mecanismo de trava ativo – ação mecânica de empuxe. Encaixa-se diretamente em todos os cassetes tipo 5000/6000.
C8	**C8-AL-02**	110	

Item de montagem

Plugue de proteção

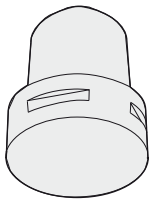
CP-11 CP-01 CPA-01



Tamanho do acoplamento	**Código para pedido**		
	Unidade manual	Unidade automática	Tipo 3000
C3	**C3-CP-01**	-	**C3-CP-11**
C4	**C4-CP-01**	**C4-CPA-01**	**C4-CP-11**
C5	**C5-CP-01**	**C5-CPA-01**	**C5-CP-11**
C6	**C6-CP-01**	**C6-CPA-01**	-
C8	**C8-CP-01**	**C8-CPA-01**	-
C10	-	**C10-CPA-01**	-

Ferramenta de balanceamento

Cx-BAT-01

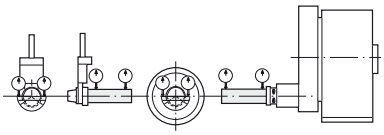


Tamanho do acoplamento	**Código para pedido**
C3	**C3-BAT-01**
C4	**C4-BAT-01**
C5	**C5-BAT-01**
C6	**C6-BAT-01**
C8	**C8-BAT-01**
C10	**C10-BAT-01**

Item de montagem

Padrões de ajuste

Posição de verificação para garras do trocador

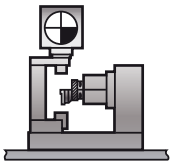


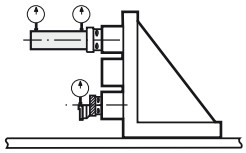
Orientação do fuso

O sistema Coromant Capto garante precisão e repetibilidade excepcionais, porém é necessário que as outras peças, no processo total de usinagem, estejam posicionadas de modo correto e exato.

A Coromant oferece uma gama de padrões de ajuste axial e de altura de centro para os vários tamanhos de acoplamento, que são enfaticamente recomendados para ajuste de importantes parâmetros tais como:

Linha de centro da torre da ferramenta





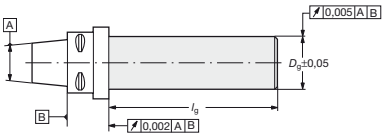
- A linha de centro da torre da ferramenta
- Orientação do fuso
- A posição da ferramenta para as garras do trocador
- A altura de centro da ferramenta e a posição da aresta de corte (f1 e dimensões 1). Os padrões podem ser usados em um dispositivo de pré-medição
- Dispositivos da peça

Pré-ajuste da ferramenta

Controle geométrico do dispositivo da peça

Padrão axial

Padrões de ajuste MAS-11

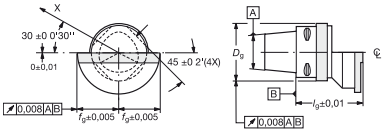


Tamanho do acoplamento	**Código para pedido**	Dimensões, mm D_g	l_g
C3	**C3-MAS-11**	25	160
C4	**C4-MAS-11**	25	160
C5	**C5-MAS-11**	32	210
C6	**C6-MAS-11**	40	315
C8	**C8-MAS-11**	40	315
C10	**C10-MAS-11**	60	420

Padrão da altura de centro

Padrões de ajuste MAS-01

(Polígono) Canal da garra



Tamanho do acoplamento	**Código para pedido**	Dimensões, mm f_g	l_g	D_g
C3	**C3-MAS-01**	22	40	34
C4	**C4-MAS-01**	27	50	42
C5	**C5-MAS-01**	35	60	52
C6	**C6-MAS-01**	45	65	65
C8	**C8-MAS-01**	55	80	82
C10	**C10-MAS-01**	65	100	102

Padrão da altura de centro

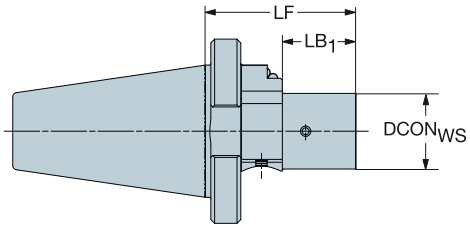
Tamanho do acoplamento	**Código para pedido**	Dimensões, mm l_g	D_g
C4	**C4-MAS-25 140**	140	25
C5	**C5-MAS-32 145**	145	32
C6	**C6-MAS-40 180**	180	40
C8	**C8-MAS-40 240**	240	40

POR

Item de montagem

Unidade de pré-medição

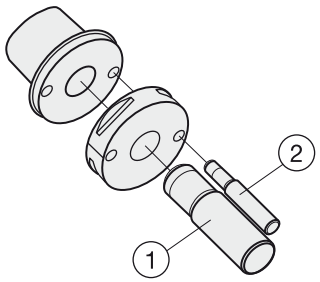




					Dimensões, mm		
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{WS}$	LF	LB_1
50	C3	0	0	**C3-PMU-I50**	32	75	36
	C4	0	0	**C4-PMU-I50**	40	80	39
	C5	0	0	**C5-PMU-I50**	50	90	45
	C6	0	0	**C6-PMU-I50**	63	107	56
	C8	0	0	**C8-PMU-I50**	80	127	60

Ferramenta para alinhamento

Essa ferramenta é usada para verificar a tolerância de posicionamento na Troca Automática de Ferramentas entre o braço do trocador e o magazine e a unidade de fixação/fuso. Se as tolerâncias não forem obtidas, o resultado pode ser um desgaste anormal da ferramenta ou da interface Coromant Capto, fixação incorreta, quebra da ferramenta, danos pessoais etc. Instruções e tolerâncias estão disponíveis na embalagem junto com a ferramenta.



	Código para pedido	Componentes	
		1	2
Tamanho do acoplamento	**Ferramenta**	Pino padrão	Pino padrão
C4	**C4-AMT-01**	5552 069-03	5552 069-01
C5	**C5-AMT-01**	5552 069-04	5552 069-01
C6	**C6-AMT-01**	5552 069-05	5552 069-02
C8	**C8-AMT-01**	5552 069-05	5552 069-02
C10	**C10-AMT-01**	5552 069-09	5552 069-08

Valor de torque

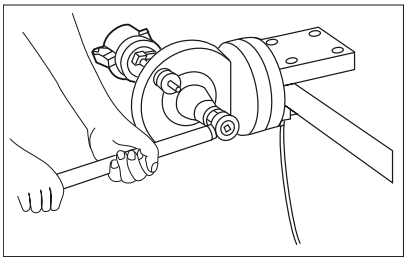
Recomendações de torque

Valor de torque para Coromant Capto® :

Unidades de fixação manual e porta-ferramentas acionados com mecanismo de came

CZC	Torque Nm
C3	35
C4	50
C5	70
C6	90
C8	130
C10	285

Suportes básicos Coromant Capto®



Fixação por parafuso central

CZC	Torque Nm
C3	45
C4	55
C5	95
C6	170
C8	170
C10	380

POR

Item de montagem

Tubo de refrigeração para programa HSK sólido



Tamanho do HSK	**Código para pedido**	Dimensões, mm BD	THL	OAL	KG	**Chave** **Código para pedido**	Torque Nm
40	**5692 022-02**	8	7.5	29.5	0.01	**5680 094-02**	10
50	**5692 022-03**	10	9.5	32.8	0.02	**5680 094-03**	15
63	**5692 022-04**	12	11.5	46.5	0.03	**5680 094-04**	20
100	**5692 022-06**	16	15.5	44.5	0.05	**5680 094-06**	30
100	**5692 022-16**		16.0	44	0.06	**5680 094-06**	30
125	**5692 022-07**	18	17.5	48	0.08	**5680 094-07**	30

Parafusos MQL com fixação térmica

Fig. 1

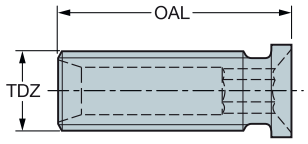
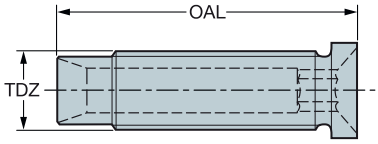


Fig. 2



Código para pedido	Tamanho	Fig.	Dimensões OAL	TDZ	Tamanho da chaveta
5692 039-01	6 mm	2	34	M5	SW 2,5
5692 039-02	6 mm	1	17	M5	SW 2,5
5692 039-03	8 mm	2	34	M6	SW 3
5692 039-04	8 mm	1	18	M6	SW 3
5692 039-05	10 mm	2	35	M8x1	SW 4
5692 039-06	10 mm	1	18	M8x1	SW 4
5692 039-07	12 mm	2	35	M10x1	SW 5
5692 039-08	12 mm	1	18	M10x1	SW 5
5692 039-09	16 mm	2	37	M10x1	SW 5
5692 039-10	16 mm	1	22	M10x1	SW 5
5692 039-11	20 mm	2	40	M10x1	SW 5
5692 039-12	20 mm	1	23,5	M10x1	SW 5
5692 039-13	25 mm	1	27,5	M10x1	SW 5
5692 039-14	25 mm	1	30,5	M10x1	SW 5

Parafusos de balanceamento



Código para pedido
5514 100-01

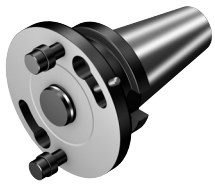
Parafusos de ajuste para porta-macho MQL Corochuck 970-HAxxQ-xx-xxx

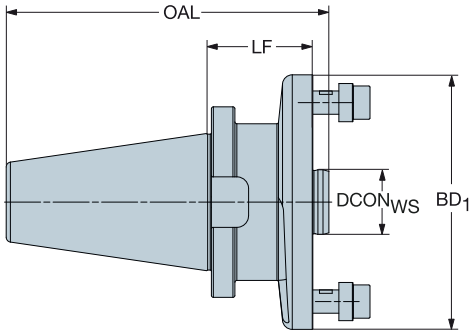
Machos com centro externo

Diâmetro da haste do macho mm, mm	ER20	ER25
6, 7	5692 037-01	
8, 9	5692 037-02	5692 037-04
10	5692 037-03	5692 037-03
11-16		5692 037-05

N23

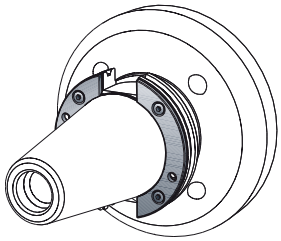
Unidade de pré-medição Corobore® XL

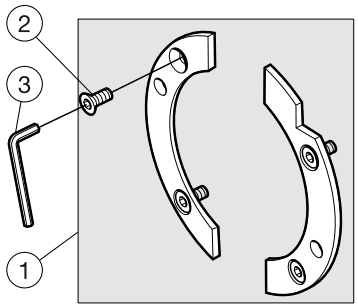




CZC_{MS}	CZC_{WS}	CNSC	Código para pedido	Dimensões, mm DCON	OAL	LF	BD_1	KG
50	33	0	I50-PMU-A33	33	178.30	50.0	130.0	5.59

Conjunto de calços



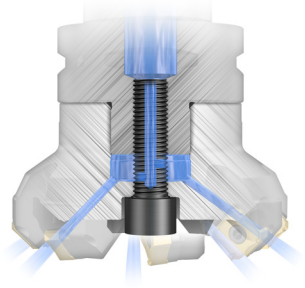


1 Conjunto de calços	2 Parafuso	3 Chave
5549 128-50	3213 011-256	3021 010-025 (2.5)

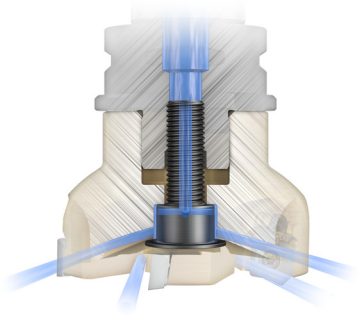
Parafusos para montagem tipo árvore com furo para refrigeração

ISO A





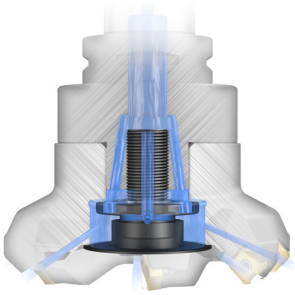
Tamanho da árvore	Parafuso		Chave
16	5512 073-03	(M8)	3021 010-060 (6.0)
22	5512 073-01	(M10)	3021 010-080 (8.0)
22	5512 073-04	(M10)	3021 010-080 (8.0)
27	5512 073-02	(M12)	3021 010-100 (10.0)
32	5512 073-05	(M16)	3021 010-140 (12.0)



Tamanho da árvore	Parafuso		Chave
22	5512 087-01	(M10)	5680 043-17 (30IP)
27	5512 087-02	(M12)	5680 043-18 (50IP)
27	5512 098-05*	(M12)	5680 043-13 (15IP)
			5680 043-18 (50IP)
32	5512 087-03	(M16)	5680 043-19 (55IP)

* O conjunto de parafusos tem uma capa ajustável

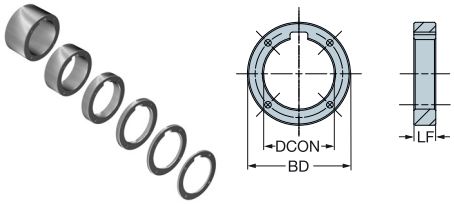
ISO B



Tamanho da árvore	Parafuso		Chave
32	5512 098-04	(M16)	3021 010-060 (6.0) 3021 010-120 (12.0)
40	5512 098-03	(M20)	3021 010-060 (6.0) 3021 010-120 (12.0)

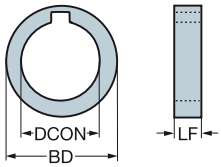
Anéis espaçadores

Itens de montagem para CoroMill® 331
Conjunto com furo



Métrico, mm	LF	0.5	1	1.5	2	3	4	5	6	10	20	30
Código do conjunto	DCON	BD	BD	BD	BD	BD	BD	BD	BD	BD	BD	BD
5549 091-032	27	39	39	39	41	41	41	41	41	41	41	41
5549 091-042	32	45	45	45	47	47	47	47	47	47	47	47
5549 091-052	40	54	54	54	55	55	55	55	55	55	55	55

Ajuste sem furo



Código para pedido	**Para adaptador**	Dimensões, mm										
		LF	0.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	10.0	20.0	30.0
		DCON	BD	BD	BD	BD	BD	BD	BD	BD	BD	BD	BD
5549 091-011	**391.10-16…**	16	25	25	25	27	27	27	27	27	27	27	–
5549 091-021	**391.10-22…**	22	33	33	33	34	34	34	34	34	34	34	34
5549 091-061	**391.10-50…**	50	67	67	–	68	68	68	68	68	68	68	68
5549 091-071	**391.10-60…**	60	84	84	–	84	84	84	84	84	84	84	84

Parafusos e arruelas de refrigeração para CoroMill® 331



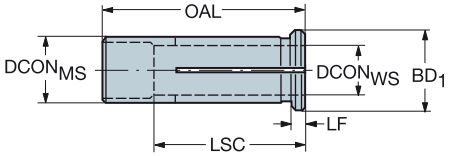
Métrica

Código do conjunto	Código do parafuso	Código da arruela	Tamanho da árvore
5512 076-101	5512 076-01	5549 210-01	27
5512 076-102	5512 076-02	5549 210-02	32
5512 076-103	5512 076-03	5549 210-03	40

Pinças cilíndricas

Selada metalicamente para refrigeração através da ferramenta





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	BD	LSC	OAL	LF	BAR	KG
6	3	1	1	**393.CGS-06 03 27**	6	3	9	27.0	30	3	80	0.012
12	3	1	1	**393.CGS-12 03 40**	12	3	16	40.0	44	4	80	0.036
	4	1	1	**393.CGS-12 04 40**	12	4	16	40.0	44	4	80	0.035
	5	1	1	**393.CGS-12 05 40**	12	5	16	40.0	44	4	80	0.030
	6	1	1	**393.CGS-12 06 40**	12	6	16	40.0	44	4	80	0.035
	7	1	1	**393.CGS-12 07 40**	12	7	16	40.0	44	4	80	0.032
	8	1	1	**393.CGS-12 08 40**	12	8	16	40.0	44	4	80	0.029
	9	1	1	**393.CGS-12 09 40**	12	9	16	40.0	44	4	80	0.024
	10	1	1	**393.CGS-12 10 40**	12	10	16	40.0	44	4	80	0.020
20	3	1	1	**393.CGS-20 03 52**	20	3	25	50.0	54	4	80	0.118
	4	1	1	**393.CGS-20 04 52**	20	4	25	50.0	54	4	80	0.104
	5	1	1	**393.CGS-20 05 52**	20	5	25	50.0	54	4	80	0.100
	6	1	1	**393.CGS-20 06 52**	20	6	25	50.0	54	4	80	0.110
	7	1	1	**393.CGS-20 07 52**	20	7	25	50.0	54	4	80	0.110
	8	1	1	**393.CGS-20 08 52**	20	8	25	50.0	54	4	80	0.108
	9	1	1	**393.CGS-20 09 52**	20	9	25	50.0	54	4	80	0.106
	9.7	1	1	**393.CGS-20 09.7 50**	20	9	25	50.0	54	4	80	0.102
	10	1	1	**393.CGS-20 10 52**	20	10	25	50.0	54	4	80	0.102
	11.7	1	1	**393.CGS-20 11.7 50**	20	11	25	50.0	54	4	80	0.094
	12	1	1	**393.CGS-20 12 52**	20	12	25	50.0	54	4	80	0.094
	14	1	1	**393.CGS-20 14 52**	20	14	25	50.0	54	4	80	0.081
	15.7	1	1	**393.CGS-20 15.7 50**	20	15	25	50.0	54	4	80	0.067
	16	1	1	**393.CGS-20 16 52**	20	16	25	50.0	54	4	80	0.065
	18	1	1	**393.CGS-20 18 52**	20	18	25	50.0	54	4	80	0.045
25	3	1	1	**393.CGS-25 03 56**	25	3	30	56.0	60	4	80	0.212
	4	1	1	**393.CGS-25 04 56**	25	4	30	56.0	60	4	80	0.191
	5	1	1	**393.CGS-25 05 56**	25	5	30	56.0	60	4	80	0.208
	6	1	1	**393.CGS-25 06 56**	25	6	30	56.0	60	4	80	0.192
	7	1	1	**393.CGS-25 07 56**	25	7	30	56.0	60	4	80	0.204
	8	1	1	**393.CGS-25 08 56**	25	8	30	56.0	60	4	80	0.200
	9	1	1	**393.CGS-25 09 56**	25	9	30	56.0	60	4	80	0.197
	9.7	1	1	**393.CGS-25 09.7 56**	25	9	30	56.0	60	4	80	0.185
	10	1	1	**393.CGS-25 10 56**	25	10	30	56.0	60	4	80	0.186
	11.7	1	1	**393.CGS-25 11.7 56**	25	11	30	56.0	60	4	80	0.161
	12	1	1	**393.CGS-25 12 56**	25	12	30	56.0	60	4	80	0.167
	14	1	1	**393.CGS-25 14 56**	25	14	30	56.0	60	4	80	0.156
	15.7	1	1	**393.CGS-25 15.7 56**	25	15	30	56.0	60	4	80	0.151
	16	1	1	**393.CGS-25 16 56**	25	16	30	56.0	60	4	80	0.150
	18	1	1	**393.CGS-25 18 56**	25	18	30	56.0	60	4	80	0.121
	19.7	1	1	**393.CGS-25 19.7 56**	25	19	30	56.0	60	4	80	0.102
	20	1	1	**393.CGS-25 20 56**	25	20	30	56.0	60	4	80	0.100
32	8	1	1	**393.CGS-32 08 60**	32	8	36	60.0	64	4	80	0.329
	10	1	1	**393.CGS-32 10 60**	32	10	36	60.0	64	4	80	0.300
	12	1	1	**393.CGS-32 12 60**	32	12	36	60.0	64	4	80	0.312
	14	1	1	**393.CGS-32 14 60**	32	14	36	60.0	64	4	80	0.300
	15.7	1	1	**393.CGS-32 15.7 60**	32	15	36	60.0	64	4	80	0.287
	16	1	1	**393.CGS-32 16 60**	32	16	36	60.0	64	4	80	0.288
	18	1	1	**393.CGS-32 18 60**	32	18	36	60.0	64	4	80	0.268
	19.7	1	1	**393.CGS-32 19.7 60**	32	19	36	60.0	64	4	80	0.248
	20	1	1	**393.CGS-32 20 60**	32	20	36	60.0	64	4	80	0.248
	24.7	1	1	**393.CGS-32 24.7 60**	32	24	36	60.0	64	4	80	0.184
	25	1	1	**393.CGS-32 25 60**	32	25	36	60.0	64	4	80	0.181

LSC Comprimento de fixação necessário para alcançar o efeito de vedação.

Para extratores de pinças cilíndricas, consulte a página M18.

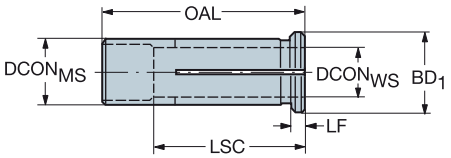
ISO 13399 N23

CNSC CXSC N15

Pinças cilíndricas

Refrigeração de precisão





					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	OAL	LF	BAR	KG
12	2.90	1	4	**393.CF-12 02.9 40**	12.00	2.90	40.00	44.00	4	80	0.03
	3.00	1	4	**393.CF-12 03 40**	12.00	3.00	40.00	44.00	4	80	0.03
	3.80	1	4	**393.CF-12 03.8 40**	12.00	3.80	29.00	44.00	4	80	0.03
	4.00	1	4	**393.CF-12 04 40**	12.00	4.00	40.00	44.00	4	80	0.03
	4.80	1	4	**393.CF-12 04.8 40**	12.00	4.80	30.00	44.00	4	80	0.03
	5.00	1	4	**393.CF-12 05 40**	12.00	5.00	36.00	44.00	4	80	0.03
	5.80	1	4	**393.CF-12 05.8 40**	12.00	5.80	36.00	44.00	4	80	0.03
	6.00	1	4	**393.CF-12 06 40**	12.00	6.00	36.00	44.00	4	80	0.03
	7.80	1	4	**393.CF-12 07.8 40**	12.00	7.80	37.00	44.00	4	80	0.02
	8.00	1	4	**393.CF-12 08 40**	12.00	8.00	40.00	44.00	4	80	0.02
20	6.00	1	4	**393.CF-20 06 50**	20.00	6.00	50.00	54.00	4	80	0.11
	8.00	1	4	**393.CF-20 08 50**	20.00	8.00	37.00	54.00	4	80	0.10
	9.70	1	4	**393.CF-20 09.7 50**	20.00	9.70	40.00	54.00	4	80	0.10
	10.00	1	4	**393.CF-20 10 50**	20.00	10.00	45.00	54.00	4	80	0.09
	11.70	1	4	**393.CF-20 11.7 50**	20.00	11.70	45.00	54.00	4	80	0.09
	12.00	1	4	**393.CF-20 12 50**	20.00	12.00	45.00	54.00	4	80	0.09
	15.70	1	4	**393.CF-20 15.7 50**	20.00	15.70	50.00	54.00	4	80	0.06
	16.00	1	4	**393.CF-20 16 50**	20.00	16.00	48.00	54.00	4	80	0.06
25	9.70	1	4	**393.CF-25 09.7 56**	25.00	9.70	56.00	60.00	4	80	0.18
	10.00	1	4	**393.CF-25 10 56**	25.00	10.00	56.00	60.00	4	80	0.16
	11.70	1	4	**393.CF-25 11.7 56**	25.00	11.70	41.00	60.00	4	80	0.16
	12.00	1	4	**393.CF-25 12 56**	25.00	12.00	46.00	60.00	4	80	0.16
	15.70	1	4	**393.CF-25 15.7 56**	25.00	15.70	56.00	60.00	4	80	0.15
	16.00	1	4	**393.CF-25 16 56**	25.00	16.00	56.00	60.00	4	80	0.15
	19.70	1	4	**393.CF-25 19.7 56**	25.00	19.70	56.00	60.00	4	80	0.10
	20.00	1	4	**393.CF-25 20 56**	25.00	20.00	50.00	60.00	4	80	0.10
32	15.70	1	4	**393.CF-32 15.7 60**	32.00	15.70	60.00	64.00	4	80	0.28
	19.70	1	4	**393.CF-32 19.7 60**	32.00	19.70	60.00	64.00	4	80	0.24
	20.00	1	4	**393.CF-32 20 60**	32.00	20.00	60.00	64.00	4	80	0.24
	24.70	1	4	**393.CF-32 24.7 60**	32.00	24.70	56.00	64.00	4	80	0.18
	25.00	1	4	**393.CF-32 25 60**	32.00	25.00	57.00	64.00	4	80	0.18

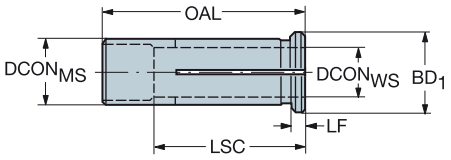
Para extratores de pinças cilíndricas, consulte a página M18.

N23 N15

Pinças cilíndricas

Pinça não selada





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	BD	LSC	OAL	LF	BAR	KG
12	6	1	4	**393.CG-12 06 40**	12	6	16	40.0	44	4	80	0.034
	7	1	4	**393.CG-12 07 40**	12	7	16	40.0	44	4	80	0.030
	8	1	4	**393.CG-12 08 40**	12	8	16	40.0	44	4	80	0.029
	9	1	4	**393.CG-12 09 40**	12	9	16	40.0	44	4	80	0.025
	10	1	4	**393.CG-12 10 40**	12	10	16	40.0	44	4	80	0.020
20	3	1	4	**393.CG-20 03 52**	20	3	25	50.0	54	4	80	0.120
	4	1	4	**393.CG-20 04 52**	20	4	25	50.0	54	4	80	0.114
	5	1	4	**393.CG-20 05 52**	20	5	25	50.0	54	4	80	0.100
	6	1	4	**393.CG-20 06 52**	20	6	25	50.0	54	4	80	0.113
	7	1	4	**393.CG-20 07 52**	20	7	25	50.0	54	4	80	0.100
	8	1	4	**393.CG-20 08 52**	20	8	25	50.0	54	4	80	0.109
	9	1	4	**393.CG-20 09 52**	20	9	25	50.0	54	4	80	0.103
	10	1	4	**393.CG-20 10 52**	20	10	25	50.0	54	4	80	0.101
	12	1	4	**393.CG-20 12 52**	20	12	25	50.0	54	4	80	0.095
	14	1	4	**393.CG-20 14 52**	20	14	25	50.0	54	4	80	0.080
	16	1	4	**393.CG-20 16 52**	20	16	25	50.0	54	4	80	0.064
25	6	1	4	**393.CG-25 06 56**	25	6	30	56.0	60	4	80	0.192
	8	1	4	**393.CG-25 08 56**	25	8	30	56.0	60	4	80	0.200
	10	1	4	**393.CG-25 10 56**	25	10	30	56.0	60	4	80	0.171
	12	1	4	**393.CG-25 12 56**	25	12	30	56.0	60	4	80	0.168
	14	1	4	**393.CG-25 14 56**	25	14	30	56.0	60	4	80	0.154
	16	1	4	**393.CG-25 16 56**	25	16	30	56.0	60	4	80	0.139
	18	1	4	**393.CG-25 18 56**	25	18	30	56.0	60	4	80	0.120
	20	1	4	**393.CG-25 20 56**	25	20	30	56.0	60	4	80	0.100
32	6	1	4	**393.CG-32 06 60**	32	6	36	60.0	64	4	80	0.306
	8	1	4	**393.CG-32 08 60**	32	8	36	60.0	64	4	80	0.328
	10	1	4	**393.CG-32 10 60**	32	10	36	60.0	64	4	80	0.324
	12	1	4	**393.CG-32 12 60**	32	12	36	60.0	64	4	80	0.314
	14	1	4	**393.CG-32 14 60**	32	14	36	60.0	64	4	80	0.300
	16	1	4	**393.CG-32 16 60**	32	16	36	60.0	64	4	80	0.282
	18	1	4	**393.CG-32 18 60**	32	18	36	60.0	64	4	80	0.267
	20	1	4	**393.CG-32 20 60**	32	20	36	60.0	64	4	80	0.246
	25	1	4	**393.CG-32 25 60**	32	25	36	60.0	64	4	80	0.181

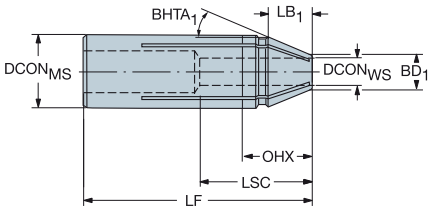
Para extratores de pinças cilíndricas, consulte a página M18.

N23 N15

Pinças cilíndricas

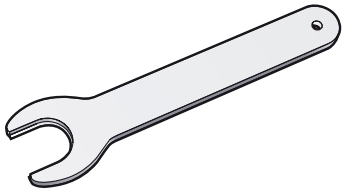
Tipo lápis





					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	BD	LB	BHTA	LSC	LF	BAR	KG
20	3	1	4	**393.CGP-20 03 72**	20	3	7	14	20°	55.0	72	80	0.134
	6	1	4	**393.CGP-20 06 72**	20	6	9	14	20°	55.0	72	80	0.139
	8	1	4	**393.CGP-20 08 72**	20	8	11	13	17°	55.0	72	80	0.127
	10	1	4	**393.CGP-20 10 72**	20	10	13	13	15°	55.0	72	80	0.123
	12	1	4	**393.CGP-20 12 72**	20	12	15	13	13°	55.0	72	80	0.112

Extrator para pinças cilíndricas



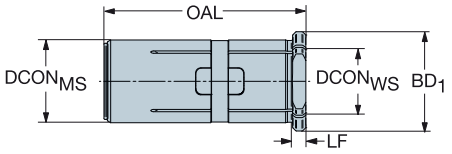
Código para pedido	Para tamanho de pinça
5680 061-01	12
5680 061-02	16
5680 061-03	20
5680 061-04	25
5680 061-05	32

N23 N15

Bucha cilíndrica com interface de travamento mecânico

393.CLF





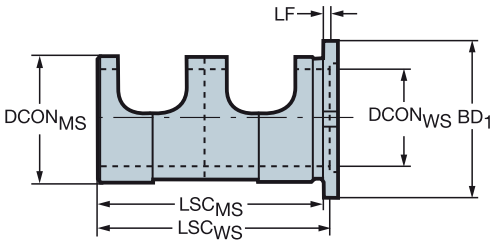
Aplicação	Código para pedido	Dimensões, mm					Acessórios	
		$DCON_{WS}$	$DCON_{MS}$	BD_1	LF	OAL	Anchor screw	Ferramenta de montagem
CoroChuck™ 930 HD32	393.CLF-321660	16	32	36	4	65	5519 140-02	5680 140-02
	393.CLF-322060	20	32	36	4	65		
	393.CLF-322560	25	32	36	4	65		
CoroChuck™ 930 HD/S25	393.CLF-251256	12	25	30	4	61	5519 140-02	5680 140-02
	393.CLF-251656	16	25	30	4	61		
	393.CLF-252056	20	25	30	4	61		
CoroChuck™ 930 HD/S20	393.CLF-201052	10	20	25	4	55	5519 140-01	5680 140-01
	393.CLF-201252	12	20	25	4	55		
	393.CLF-201652	16	20	25	4	55		

O parafuso âncora e a ferramenta de montagem devem ser pedidos separadamente.
Para instruções de montagem, consulte www.sandvik.coromant.com/corochuck930/instructions

Bucha excêntrica

Para CoroDrill® 880





Dimensões, mm											
CZC$_{MS}$	CZC$_{WS}$	ADJLN	ADJLX	**Código para pedido**	DCON$_{MS}$	DCON$_{WS}$	BD$_1$	LB$_1$	OAL	LF	KG
25	20	-0.30	0.30	**416.2-L20-25**	25	20	33	5	60	2	0.084
32	25	-0.30	0.30	**416.2-L25-32**	32	25	40	5	65	3	0.153
40	32	-0.30	0.30	**416.2-L32-40**	40	32	50	5	75	2	0.238
50	40	-0.30	0.30	**416.2-L40-50**	50	40	60	5	85	2	0.419

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N23 N15

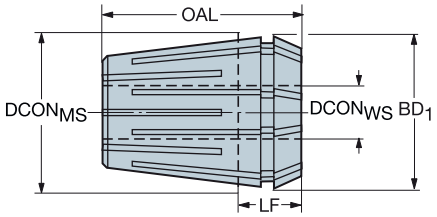
POR

Pinça ER

Selada metalicamente para refrigeração através da ferramenta

Compatível com DIN 6499-B





					Dimensões, mm							BAR	KG
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	$DCONN_{WS}$	$DCONX_{WS}$	BD_1	OAL	LF		
ER16	3 (h9)	1	1	**393.15-16 03**	17	3			17	27	10	300	0.026
	4 (h9)	1	1	**393.15-16 04**	17	4			17	27	10	300	0.025
	5.0 - 4.5	1	1	**393.15-16 05**	17		4.5	5.0	17	27	10	300	0.026
	6.0 - 5.5	1	1	**393.15-16 06**	17		5.5	6.0	17	27	10	300	0.024
	8.0 - 7.5	1	1	**393.15-16 08**	17		7.5	8.0	17	27	10	300	0.021
	10.0 - 9.5	1	1	**393.15-16 10**	17		9.5	10.0	17	27	10	300	0.017
ER20	3 (h9)	1	1	**393.15-20 03**	21	3			21	31	11	300	0.047
	4 (h9)	1	1	**393.15-20 04**	21	4			21	31	11	300	0.046
	5 (h9)	1	1	**393.15-20 05**	21	5			21	31	11	300	0.045
	6 (h9)	1	1	**393.15-20 06**	21	6			21	31	11	300	0.044
	8.0 - 7.5	1	1	**393.15-20 08**	21		7.5	8.0	21	31	11	300	0.041
	10.0 - 9.5	1	1	**393.15-20 10**	21		9.5	10.0	21	31	11	300	0.036
	12.0 - 11.5	1	1	**393.15-20 12**	21		11.5	12.0	21	31	11	300	0.030
ER25	6 (h9)	1	1	**393.15-25 06**	26	6			26	34	11	300	0.080
	8.0 - 7.5	1	1	**393.15-25 08**	26		7.5	8.0	26	34	11	300	0.078
	10.0 - 9.5	1	1	**393.15-25 10**	26		9.5	10.0	26	34	11	300	0.074
	12.0 - 11.5	1	1	**393.15-25 12**	26		11.5	12.0	26	34	11	300	0.066
	14.0 - 13.5	1	1	**393.15-25 14**	26		13.5	14.0	26	34	11	300	0.060
	16.0 - 15.5	1	1	**393.15-25 16**	26		15.5	16.0	26	34	11	300	0.049
ER32	6 (h9)	1	1	**393.15-32 06**	33	6			33	40	12	300	0.163
	8.0 - 7.5	1	1	**393.15-32 08**	33		7.5	8.0	33	40	12	300	0.167
	10.0 - 9.5	1	1	**393.15-32 10**	33		9.5	10.0	33	40	12	300	0.158
	12.0 - 11.5	1	1	**393.15-32 12**	33		11.5	12.0	33	40	12	300	0.154
	14.0 - 13.5	1	1	**393.15-32 14**	33		13.5	14.0	33	40	12	300	0.135
	16.0 - 15.5	1	1	**393.15-32 16**	33		15.5	16.0	33	40	12	300	0.124
	18.0 - 17.5	1	1	**393.15-32 18**	33		17.5	18.0	33	40	12	300	0.112
	20.0 - 19.5	1	1	**393.15-32 20**	33		19.5	20.0	33	40	12	300	0.098
ER40	6 (h9)	1	1	**393.15-40 06**	41	6			41	46	14	300	0.291
	8 (h9)	1	1	**393.15-40 08**	41	8			41	46	14	300	0.289
	10.0 - 9.5	1	1	**393.15-40 10**	41		9.5	10.0	41	46	14	300	0.293
	12.0 - 11.5	1	1	**393.15-40 12**	41		11.5	12.0	41	46	14	300	0.286
	14.0 - 13.5	1	1	**393.15-40 14**	41		13.5	14.0	41	46	14	300	0.276
	16.0 - 15.5	1	1	**393.15-40 16**	41		15.5	16.0	41	46	14	300	0.265
	18.0 - 17.5	1	1	**393.15-40 18**	41		17.5	18.0	41	46	14	300	0.250
	20.0 - 19.5	1	1	**393.15-40 20**	41		19.5	20.0	41	46	14	300	0.232
	25.0 - 24.5	1	1	**393.15-40 25**	41		24.5	25.0	41	46	14	300	0.181

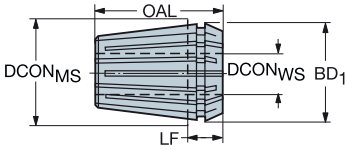
N23 N15

Pinça ER

Refrigeração através da pinça

Compatível com DIN 6499-B





					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCONN_{WS}$	$DCONX_{WS}$	BD_1	OAL	LF	BAR	KG
ER8	3.00 - 2.50	1	4	**393.14-08 0300**	8	2.5	3.0	8	13	4	300	0.005
	3.50 - 3.00	1	4	**393.14-08 0350**	8	3.0	3.5	8	13	4	300	0.005
	4.00 - 3.50	1	4	**393.14-08 0400**	8	3.5	4.0	11	13	4	300	0.005
ER11	1.00 - 0.75	1	4	**393.14-11 0100**	11	0.8	1.0	11	18	6	300	0.009
	1.25 - 1.00	1	4	**393.14-11 0125**	11	1.0	1.3	11	18	6	300	0.009
	1.50 - 1.25	1	4	**393.14-11 0150**	11	1.3	1.5	11	18	6	300	0.009
	1.75 - 1.50	1	4	**393.14-11 0175**	11	1.5	1.8	11	18	6	300	0.009
	2.00 - 1.75	1	4	**393.14-11 0200**	11	1.8	2.0	11	18	6	300	0.009
	2.25 - 2.00	1	4	**393.14-11 0225**	11	2.0	2.3	11	18	6	300	0.009
	2.50 - 2.25	1	4	**393.14-11 0250**	11	2.3	2.5	11	18	6	300	0.009
	3.00 - 2.50	1	4	**393.14-11 0300**	11	2.5	3.0	11	18	6	300	0.009
	3.50 - 3.00	1	4	**393.14-11 0350**	11	3.0	3.5	11	18	6	300	0.009
	4.00 - 3.50	1	4	**393.14-11 0400**	11	3.5	4.0	11	18	6	300	0.009
	4.50 - 4.00	1	4	**393.14-11 0450**	11	4.0	4.5	11	18	6	300	0.009
	5.00 - 4.50	1	4	**393.14-11 0500**	11	4.5	5.0	11	18	6	300	0.009
	5.50 - 5.00	1	4	**393.14-11 0550**	11	5.0	5.5	11	18	6	300	0.008
	6.00 - 5.50	1	4	**393.14-11 0600**	11	5.5	6.0	11	18	6	300	0.007
	6.50 - 6.00	1	4	**393.14-11 0650**	11	6.0	6.5	11	18	6	300	0.007
	7.00 - 6.50	1	4	**393.14-11 0700**	11	6.5	7.0	11	18	6	300	0.006
ER16	1.0 - 0.5	1	4	**393.14-16 0100**	17	0.5	1.0	17	27	10	300	0.027
	1.5 - 1.0	1	4	**393.14-16 0150**	17	1.0	1.5	17	27	10	300	0.027
	2.0 - 1.0	1	4	**393.14-16 0200**	17	1.0	2.0	17	27	10	300	0.027
	2.5 - 1.5	1	4	**393.14-16 0250**	17	1.5	2.5	17	27	10	300	0.027
	3.0 - 2.0	1	4	**393.14-16 0300**	17	2.0	3.0	17	27	10	300	0.024
	4.0 - 3.0	1	4	**393.14-16 0400**	17	3.0	4.0	17	27	10	300	0.003
	5.0 - 4.0	1	4	**393.14-16 0500**	17	4.0	5.0	17	27	10	300	0.025
	6.0 - 5.0	1	4	**393.14-16 0600**	17	5.0	6.0	17	27	10	300	0.023
	7.0 - 6.0	1	4	**393.14-16 0700**	17	6.0	7.0	17	27	10	300	0.021
	8.0 - 7.0	1	4	**393.14-16 0800**	17	7.0	8.0	17	27	10	300	0.020
	9.0 - 8.0	1	4	**393.14-16 0900**	17	8.0	9.0	17	27	10	300	0.018
	10.0 - 9.0	1	4	**393.14-16 1000**	17	9.0	10.0	17	27	10	300	0.016
ER20	1.5 - 1.0	1	4	**393.14-20 015**	21	1.0	1.5	21	31	11	300	0.047
	2.0 - 1.5	1	4	**393.14-20 020**	21	1.5	2.0	21	31	11	300	0.049
	2.5 - 2.0	1	4	**393.14-20 025**	21	2.0	2.5	21	31	11	300	0.048
	3.0 - 2.5	1	4	**393.14-20 030**	21	2.5	3.0	21	31	11	300	0.046
	4.0 - 3.0	1	4	**393.14-20 040**	21	3.0	4.0	21	31	11	300	0.045
	5.0 - 4.0	1	4	**393.14-20 050**	21	4.0	5.0	21	31	11	300	0.044
	6.0 - 5.0	1	4	**393.14-20 060**	21	5.0	6.0	21	31	11	300	0.043
	7.0 - 6.0	1	4	**393.14-20 070**	21	6.0	7.0	21	31	11	300	0.041
	8.0 - 7.0	1	4	**393.14-20 080**	21	7.0	8.0	21	31	11	300	0.037
	9.0 - 8.0	1	4	**393.14-20 090**	21	8.0	9.0	21	31	11	300	0.037
	10.0 - 9.0	1	4	**393.14-20 100**	21	9.0	10.0	21	31	11	300	0.034
	11.0 - 10.0	1	4	**393.14-20 110**	21	10.0	11.0	21	31	11	300	0.033
	12.0 - 11.0	1	4	**393.14-20 120**	21	11.0	12.0	21	31	11	300	0.031
	13.0 - 12.0	1	4	**393.14-20 130**	21	12.0	13.0	21	31	11	300	0.026
ER25	2.0 - 1.5	1	4	**393.14-25 020**	26	1.5	2.0	26	34	11	300	0.079
	2.5 - 2.0	1	4	**393.14-25 025**	26	2.0	2.5	26	34	11	300	0.079
	3.0 - 2.5	1	4	**393.14-25 030**	26	2.5	3.0	26	34	11	300	0.078
	4.0 - 3.0	1	4	**393.14-25 040**	26	3.0	4.0	26	34	11	300	0.079
	5.0 - 4.0	1	4	**393.14-25 050**	26	4.0	5.0	26	34	11	300	0.078
	6.0 - 5.0	1	4	**393.14-25 060**	26	5.0	6.0	26	34	11	300	0.076
	7.0 - 6.0	1	4	**393.14-25 070**	26	6.0	7.0	26	34	11	300	0.076
	8.0 - 7.0	1	4	**393.14-25 080**	26	7.0	8.0	26	34	11	300	0.073
	9.0 - 8.0	1	4	**393.14-25 090**	26	8.0	9.0	26	34	11	300	0.078
	10.0 - 9.0	1	4	**393.14-25 100**	26	9.0	10.0	26	34	11	300	0.070
	11.0 - 10.0	1	4	**393.14-25 110**	26	10.0	11.0	26	34	11	300	0.067
	12.0 - 11.0	1	4	**393.14-25 120**	26	11.0	12.0	26	34	11	300	0.064
	13.0 - 12.0	1	4	**393.14-25 130**	26	12.0	13.0	26	34	11	300	0.063
	14.0 - 13.0	1	4	**393.14-25 140**	26	13.0	14.0	26	34	11	300	0.057
	15.0 - 14.0	1	4	**393.14-25 150**	26	14.0	15.0	26	34	11	300	0.054
	16.0 - 15.0	1	4	**393.14-25 160**	26	15.0	16.0	26	34	11	300	0.047

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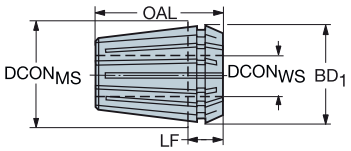
POR

Pinça ER

Refrigeração através da pinça

Compatível com DIN 6499-B





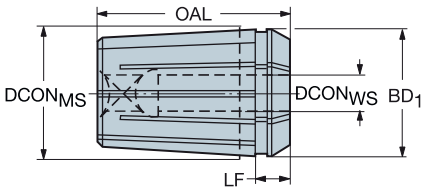
					Dimensões, mm							
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCONN_{WS}$	$DCONX_{WS}$	BD_1	OAL	LF	BAR	KG
ER32	2.5 - 2.0	1	4	**393.14-32 025**	33	2.0	2.5	33	40	12	300	0.155
	3.0 - 2.5	1	4	**393.14-32 030**	33	2.5	3.0	33	40	12	300	0.161
	4.0 - 3.0	1	4	**393.14-32 040**	33	3.0	4.0	33	40	12	300	0.154
	5.0 - 4.0	1	4	**393.14-32 050**	33	4.0	5.0	33	40	12	300	0.151
	6.0 - 5.0	1	4	**393.14-32 060**	33	5.0	6.0	33	40	12	300	0.157
	7.0 - 6.0	1	4	**393.14-32 070**	33	6.0	7.0	33	40	12	300	0.161
	8.0 - 7.0	1	4	**393.14-32 080**	33	7.0	8.0	33	40	12	300	0.158
	9.0 - 8.0	1	4	**393.14-32 090**	33	8.0	9.0	33	40	12	300	0.157
	10.0 - 9.0	1	4	**393.14-32 100**	33	9.0	10.0	33	40	12	300	0.144
	11.0 - 10.0	1	4	**393.14-32 110**	33	10.0	11.0	33	40	12	300	0.151
	12.0 - 11.0	1	4	**393.14-32 120**	33	11.0	12.0	33	40	12	300	0.147
	13.0 - 12.0	1	4	**393.14-32 130**	33	12.0	13.0	33	40	12	300	0.143
	14.0 - 13.0	1	4	**393.14-32 140**	33	13.0	14.0	33	40	12	300	0.142
	15.0 - 14.0	1	4	**393.14-32 150**	33	14.0	15.0	33	40	12	300	0.124
	16.0 - 15.0	1	4	**393.14-32 160**	33	15.0	16.0	33	40	12	300	0.126
	17.0 - 16.0	1	4	**393.14-32 170**	33	16.0	17.0	33	40	12	300	0.114
	18.0 - 17.0	1	4	**393.14-32 180**	33	17.0	18.0	33	40	12	300	0.108
	19.0 - 18.0	1	4	**393.14-32 190**	33	18.0	19.0	33	40	12	300	0.109
	20.0 - 19.0	1	4	**393.14-32 200**	33	19.0	20.0	33	40	12	300	0.095
ER40	4.0 - 3.0	1	4	**393.14-40 040**	41	3.0	4.0	41	46	14	300	0.302
	5.0 - 4.0	1	4	**393.14-40 050**	41	4.0	5.0	41	46	14	300	0.316
	6.0 - 5.0	1	4	**393.14-40 060**	41	5.0	6.0	41	46	14	300	0.304
	7.0 - 6.0	1	4	**393.14-40 070**	41	6.0	7.0	41	46	14	300	0.282
	8.0 - 7.0	1	4	**393.14-40 080**	41	7.0	8.0	41	46	14	300	0.305
	9.0 - 8.0	1	4	**393.14-40 090**	41	8.0	9.0	41	46	14	300	0.302
	10.0 - 9.0	1	4	**393.14-40 100**	41	9.0	10.0	41	46	14	300	0.299
	11.0 - 10.0	1	4	**393.14-40 110**	41	10.0	11.0	41	46	14	300	0.295
	12.0 - 11.0	1	4	**393.14-40 120**	41	11.0	12.0	41	46	14	300	0.292
	13.0 - 12.0	1	4	**393.14-40 130**	41	12.0	13.0	41	46	14	300	0.286
	14.0 - 13.0	1	4	**393.14-40 140**	41	13.0	14.0	41	46	14	300	0.281
	15.0 - 14.0	1	4	**393.14-40 150**	41	14.0	15.0	41	46	14	300	0.275
	16.0 - 15.0	1	4	**393.14-40 160**	41	15.0	16.0	41	46	14	300	0.269
	17.0 - 16.0	1	4	**393.14-40 170**	41	16.0	17.0	41	46	14	300	0.261
	18.0 - 17.0	1	4	**393.14-40 180**	41	17.0	18.0	41	46	14	300	0.253
	19.0 - 18.0	1	4	**393.14-40 190**	41	18.0	19.0	41	46	14	300	0.250
	20.0 - 19.0	1	4	**393.14-40 200**	41	19.0	20.0	41	46	14	300	0.228
	21.0 - 20.0	1	4	**393.14-40 210**	41	20.0	21.0	41	46	14	300	0.217
	22.0 - 21.0	1	4	**393.14-40 220**	41	21.0	22.0	41	46	14	300	0.220
	23.0 - 22.0	1	4	**393.14-40 230**	41	22.0	23.0	41	46	14	300	0.210
	24.0 - 23.0	1	4	**393.14-40 240**	41	23.0	24.0	41	46	14	300	0.198
	25.0 - 24.0	1	4	**393.14-40 250**	41	24.0	25.0	41	46	14	300	0.187
	26.0 - 25.0	1	4	**393.14-40 260**	41	25.0	26.0	41	46	14	300	0.174
ER50	26.0 - 24.0	1	4	**393.14-50 260**	52	24.0	26.0	52	60	21	300	0.478
	28.0 - 26.0	1	4	**393.14-50 280**	52	26.0	28.0	52	60	21	300	0.461
	30.0 - 28.0	1	4	**393.14-50 300**	52	28.0	30.0	52	60	21	300	0.413
	32.0 - 30.0	1	4	**393.14-50 320**	52	30.0	32.0	52	60	21	300	0.371
	34.0 - 32.0	1	4	**393.14-50 340**	52	32.0	34.0	52	60	21	300	0.332
	36.0 - 34.0	1	4	**393.14-50 360**	52	34.0	36.0	52	60	21	300	0.279

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Pinça ER para haste de macho

Compatível com DIN 6499-B



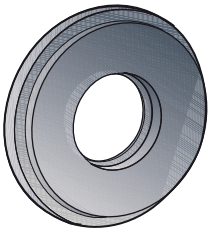


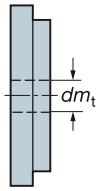
					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	BD_1	OAL	LF	BAR	KG
ER11	4.00 x 3.15	1	4	393.14-11 D040X0315	11	4	11	18	4	300	0.009
	2.50 x 2.00	1	4	393.14-11 D025X021	11	2	11	18	4	300	0.009
	2.80 x 2.10	1	4	393.14-11 D028X021	11	2	11	18	4	300	0.010
	5.00 x 4.00	1	4	393.14-11 D050X040	11	5	11	18	4	300	0.008
	3.50 x 2.70	1	4	393.14-11 D035X027	11	3	11	18	4	300	0.010
	4.00 x 3.00	1	4	393.14-11 D040X030	11	4	11	18	4	300	0.009
	4.50 x 3.40	1	4	393.14-11 D045X034	11	4	11	18	4	300	0.008
	6.00 x 4.90	1	4	393.14-11 D060X049	11	6	11	18	4	300	0.007
ER20	4.00 x 3.15	1	4	393.14-20 D040X0315	20	4	21	31	7	300	0.047
	5.00 x 4.00	1	4	393.14-20 D050X040	20	5	21	31	7	300	0.044
	3.50 x 2.70	1	4	393.14-20 D035X027	20	3	21	31	7	300	0.045
	6.30 x 5.00	1	4	393.14-20 D063X050	20	6	21	31	7	300	0.042
	7.10 x 5.60	1	4	393.14-20 D071X056	20	7	21	31	7	300	0.043
	4.50 x 3.40	1	4	393.14-20 D045X034	20	4	21	31	7	300	0.043
	8.00 x 6.30	1	4	393.14-20 D080X063	20	8	21	31	7	300	0.039
	5.50 x 4.30	1	4	393.14-20 D055X043	20	5	21	31	7	300	0.043
	9.00 x 7.10	1	4	393.14-20 D090X071	20	9	21	31	7	300	0.039
	6.00 x 4.90	1	4	393.14-20 D060X049	20	6	21	31	7	300	0.042
	10.00 x 8.00	1	4	393.14-20 D100X080	20	10	21	31	7	300	0.035
	7.00 x 5.50	1	4	393.14-20 D070X055	20	7	21	31	7	300	0.041
ER25	8.00 x 6.30	1	4	393.14-25 D080X063	25	8	26	34	8	300	0.077
	9.00 x 7.10	1	4	393.14-25 D090X071	25	9	26	34	8	300	0.077
	6.00 x 4.90	1	4	393.14-25 D060X049	25	6	26	34	8	300	0.077
	10.00 x 8.00	1	4	393.14-25 D100X080	25	10	26	34	8	300	0.074
	7.00 x 5.50	1	4	393.14-25 D070X055	25	7	26	34	8	300	0.076
	11.20 x 9.00	1	4	393.14-25 D112X090	25	11	26	34	8	300	0.071
	12.50 x 10.00	1	4	393.14-25 D125X100	25	12	26	34	8	300	0.065
	14.00 x 11.20	1	4	393.14-25 D140X112	25	14	26	34	8	300	0.057
	11.00 x 9.00	1	4	393.14-25 D110X090	25	11	26	34	8	300	0.071
	12.00 x 9.00	1	4	393.14-25 D120X090	25	12	26	34	8	300	0.067
	16.00 x 12.00	1	4	393.14-25 D160X120	25	16	26	34	8	300	0.047
ER40	12.50 x 10.00	1	4	393.14-40 D125X100	40	12	41	46	11	300	0.283
	14.00 x 11.20	1	4	393.14-40 D140X112	40	14	41	46	11	300	0.275
	16.00 x 12.50	1	4	393.14-40 D160X125	40	16	41	46	11	300	0.265
	12.00 x 9.00	1	4	393.14-40 D120X090	40	12	41	46	11	300	0.281
	18.00 x 14.50	1	4	393.14-40 D180X145	40	18	41	46	11	300	0.248
	20.00 x 16.00	1	4	393.14-40 D200X160	40	20	41	46	11	300	0.234
	22.00 x 18.00	1	4	393.14-40 D220X180	40	22	41	46	11	300	0.213
ER50	22.00 x 18.00	1	4	393.14-50 D220X180	52	22	52	60	17	300	0.543
	25.00 x 20.00	1	4	393.14-50 D250X200	52	25	52	60	17	300	0.500
	28.00 x 22.00	1	4	393.14-50 D280X220	52	28	52	60	17	300	0.449
	32.00 x 24.00	1	4	393.14-50 D320X240	52	32	52	60	17	300	0.380

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POR

Discos de vedação para pinça ER

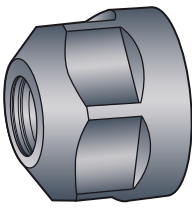


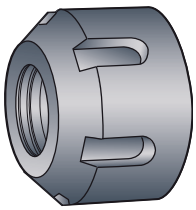


Tamanho 16		Tamanho 25		Tamanho 32		Tamanho 40	
Gama, mm dm_t	**Código para pedido**	Gama, mm dm_t	**Código para pedido**	Gama, mm dm_t	**Código para pedido**	Gama, mm dm_t	**Código para pedido**
3.0-2.5	**3916.00300**	6.0-5.5	**3925.00600**	3.0-2.5	**3932.00300**	6.0-5.5	**3940.00600**
4.0-3.5	**3916.00400**	7.0-6.5	**3925.00700**	4.0-3.5	**3932.00400**	7.0-6.5	**3940.00700**
5.0-4.5	**3916.00500**	8.0-7.5	**3925.00800**	5.0-4.5	**3932.00500**	8.0-7.5	**3940.00800**
6.0-5.5	**3916.00600**	9.0-8.5	**3925.00900**	6.0-5.5	**3932.00600**	9.0-8.5	**3940.00900**
7.0-6.5	**3916.00700**	10.0-9.5	**3925.01000**	7.0-6.5	**3932.00700**	10.0-9.5	**3940.01000**
8.0-7.5	**3916.00800**	11.0-10.5	**3925.01100**	8.0-7.5	**3932.00800**	11.0-10.5	**3940.01100**
9.0-8.5	**3916.00900**	12.0-11.5	**3925.01200**	9.0-8.5	**3932.00900**	12.0-11.5	**3940.01200**
10.0-9.5	**3916.01000**	13.0-12.5	**3925.01300**	10.0-9.5	**3932.01000**	13.0-12.5	**3940.01300**
		14.0-13.5	**3925.01400**	11.0-10.5	**3932.01100**	14.0-13.5	**3940.01400**
		15.0-14.5	**3925.01500**	12.0-11.5	**3932.01200**	15.0-14.5	**3940.01500**
		16.0-15.5	**3925.01600**	13.0-12.5	**3932.01300**	16.0-15.5	**3940.01600**
				14.0-13.5	**3932.01400**	17.0-16.5	**3940.01700**
				15.0-14.5	**3932.01500**	18.0-17.5	**3940.01800**
				16.0-15.5	**3932.01600**	19.0-18.5	**3940.01900**
				17.0-16.5	**3932.01700**	20.0-19.5	**3940.02000**
				18.0-17.5	**3932.01800**	21.0-20.5	**3940.02100**
				19.0-18.5	**3932.01900**	22.0-21.5	**3940.02200**
Tamanho 20				20.0-19.5	**3932.02000**	25.0-24.5	**3940.02500**
						26.0-25.5	**3940.02600**
Gama, mm dm_t	**Código para pedido**						
3.0-2.5	**3920.00300**						
4.0-3.5	**3920.00400**						
5.0-4.5	**3920.00500**						
6.0-5.5	**3920.00600**						
7.0-6.5	**3920.00700**						
8.0-7.5	**3920.00800**						
9.0-8.5	**3920.00900**						
10.0-9.5	**3920.01000**						
11.0-10.5	**3920.01100**						
12.0-11.5	**3920.01200**						
13.0-12.5	**3920.01300**						

Capacidade de 0.5 mm por disco Pressão de refrigeração máx 150 bar.

Porcas de pinça ER para refrigeração interna com disco de vedação

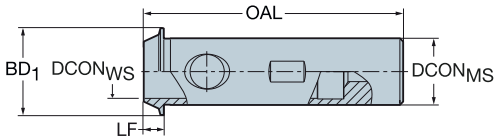




CZC	**Código para pedido**	TDZ	**Chave**	
ER16	**5533 051-01**	M22 x 1.5	**5680 091-01**	
ER20	**5533 051-02**	M25 x 1.5	**5680 091-02**	
ER25	**5533 051-03**	M32 x 1.5	**5680 096-02**	
ER32	**5533 051-04**	M40 x 1.5	**5680 096-03**	
ER40	**5533 051-05**	M50 x 1.5	**5680 096-04**	

Bucha para cabeça de mandrilamento de precisão





					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	BD_1	OAL	LF	BAR	KG
20	16	1	1	**393.37A-20 16 072**	20	16	26	78	6	20	0.114

Deve ser usado com barras de mandrilar R429U/R429.90

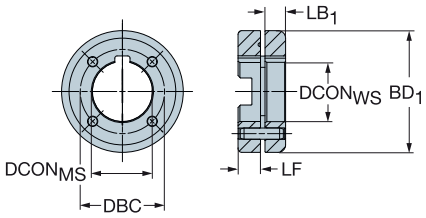
N23 N15

POR

Item de montagem

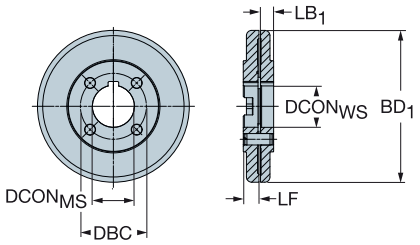
Discos de apoio para CoroMill® QD





					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	OAL	LF	LB_1	BD_1	BAR	KG
32	X32	4	4	**5549 201-011**	32.00	32.00	2.40	25.40	12	11.00	65.00	80	0.46
40	X40	4	4	**5549 201-021**	40.00	40.00	2.40	29.00	15	11.60	87.00	80	0.98





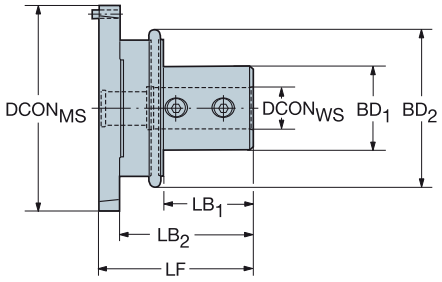
					Dimensões, mm								
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	OAL	LF	LB_1	BD_1	BAR	KG
40	X40	4	4	**5549 201-041**	40.00	40.00	2.40	29.00	15	12.50	145.00	80	2.75
	X40	4	4	**5549 201-081**	40.00	40.00	2.40	29.00	15	11.60	185.00	80	4.62

ISO 13399 N23

CNSC CXSC N15

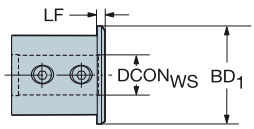
Cassete ajustável para adaptador de broca





					Dimensões, mm										
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LF	LB_1	LB_2	LB_3	BD_1	BD_2	BD_3	BAR	KG
01	20	1	1	**393.277-20 01 075A**	78.0	20.0	75.0	44.0	65.0	75.0	40.0	55.2	78.0	20	0.85
	25	1	1	**393.277-25 01 080A**	78.0	25.0	80.0	50.0	70.0	80.0	45.0	55.2	78.0	20	0.94
02	20	1	1	**393.277-20 02 075A**	98.0	20.0	75.0	44.0	65.0	75.0	40.0	75.2	98.0	20	1.26
	25	1	1	**393.277-25 02 085A**	98.0	25.0	85.0	54.0	75.0	85.0	45.0	75.2	98.0	20	1.39
	32	1	1	**393.277-32 02 085A**	98.0	32.0	85.0	54.0	75.0	85.0	52.0	75.2	98.0	20	1.47
03	40	1	1	**393.277-40 03 090A**	136.0	40.0	90.0	65.0	90.0		65.0	136.0		20	3.52
	50	1	1	**393.277-50 03 100A**	136.0	50.0	100.0	75.0	110.0		75.0	163.0		20	3.90

Bucha

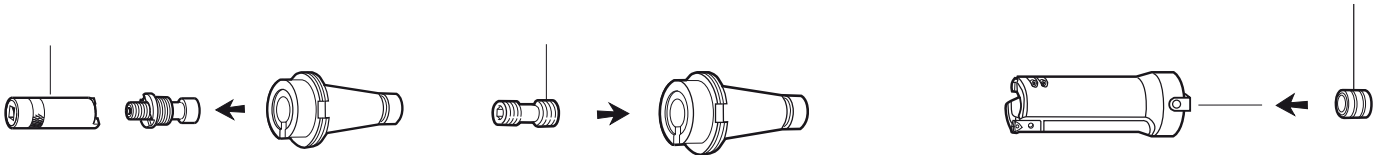


					Dimensões, mm						
CZC_{MS}	CZC_{WS}	CNSC	CXSC	**Código para pedido**	$DCON_{MS}$	$DCON_{WS}$	LSC	LF	BD_1	BAR	KG
40	32	1	1	**393.277-40 32 074A**	40.0	32.0	70	4.0	48.0	80	0.30

VL

Ferramenta de trepanação

1. **2.** **3.**



1.	**2.**	**3.**
Código para pedido	**Código para pedido**	**Código para pedido**
Chave	**Parafuso**	**Bucha centralizadora**
5680 065-02	5516 030-01	5638 030-01

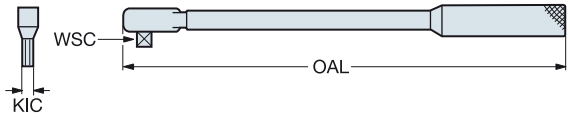
N23 N15

POR

Ferramentas para montagem

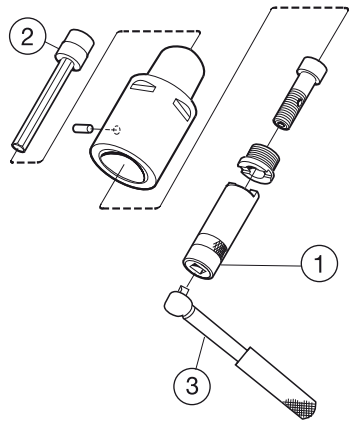
Coromant Capto®

Torquímetro para unidades de fixação manuais, troca rápida



Tamanho do acoplamento	**Torquímetro** **Código para pedido**	Dimensões, mm Faixa de torque, Nm	WSC	OAL	**Soquete** **Código para pedido**	KIC
C3	**C-TK-01M**	20-100	1/2"	345	**5680 035-14**	8
C4	**C-TK-01M**	20-100	1/2"	345	**5680 035-06**	10
C5	**C-TK-01M**	20-100	1/2"	345	**5680 035-07**	12
C6	**C-TK-01M**	20-100	1/2"	345	**5680 035-07**	12
C8	**C-TK-02**	40-200	1/2"	440	**5680 035-07**	12
C10	**C-TK-03**	60-300	1/2"	548	**5680 035-10**	17

Torquímetro para montagens modulares, fixação por parafuso central



Tamanho do acoplamento	**3. Torquímetro** **Código para pedido**	Dimensões, mm Faixa de torque, Nm	WSC	OAL	**2. Chave de extensão** **Código para pedido**	KIC	**1. Chave da porca de retenção** **Código para pedido**
C3	**C-TK-02**	40-200	1/2"	345	**5680 015-05**	8	**5680 065-13**
C4	**C-TK-02**	40-200	1/2"	345	**5680 015-05**	8	**5680 065-10**
C5	**C-TK-02**	40-200	1/2"	345	**5680 015-01**	10	**5680 065-11**
C6	**C-TK-02**	40-200	1/2"	345	**5680 015-02**	14	**5680 065-12**
C8	**C-TK-02**	40-200	1/2"	440	**5680 015-02**	14	**5680 065-12**
C10	**C-TK-04**	80-400	3/4"	683	**5680 015-06**	17	**5680 065-14**

Deve ser calibrado conforme a norma ISO 6789, precisão dentro de 4%

Ferramentas para montagem

Torquímetro



Código para pedido	Faixa de torque	Interface em ponta
ER-TK-01M	10-50 Nm	16
ER-TK-02M	50-300 Nm	16

Bits



Código para pedido	Tamanho ER	Interface em ponta
5680 103-01	ER 11	16
5680 103-02	ER 16	16
5680 103-03	ER 20	16



Código para pedido	Tamanho ER	Tamanho MDI	Interface em ponta
5680 103-04	ER 25		16
5680 103-05	ER 32	20	16
5680 103-06	ER 40	25	16
5680 103-07		32	16
5680 103-08		40	16
5680 103-09		50	16

POR

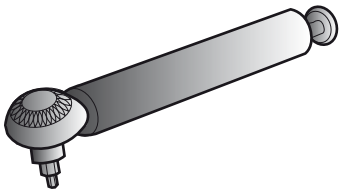
Ferramentas para montagem

Chave para pinça integrada

CZC	Código para pedido
ER11	5680 091-03
ER16	5680 096-06
ER20	5680 096-01
ER25	5680 096-02
ER32	5680 096-03

CoroChuck™ 930

Torquímetro

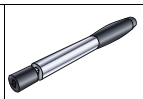


Código para pedido
5680 099-01

Coromant EH

Componentes principais





Tamanho do acoplamento	Chave	Cabeça do torquímetro[1]	Cabeça do torquímetro para fresa de topo com 2 arestas[1]	Valor de torque Nm	Torquímetro[1]	Faixa de torque Nm
E10	5680 093-01	5680 089-01	5680 089-06	12	5680 088-01	10-20
E12	5680 093-02	5680 089-02	5680 089-07	15	5680 088-01	10-20
E16	5680 093-03	5680 089-03	5680 089-08	30	5680 088-02	25-65
E20	5680 093-04	5680 089-04		50	5680 088-02	25-65
E25	5680 093-05	5680 089-05		65	5680 088-02	25-65

[1] Os acessórios devem ser pedidos separadamente.

Torquímetro Torx Plus®

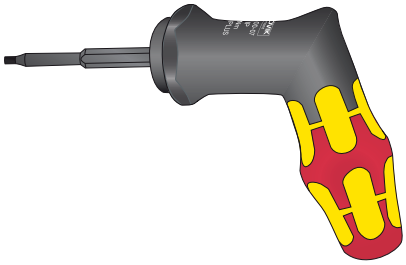
O torque correto na montagem das pastilhas nas fresas é um pré-requisito para o bom funcionamento da ferramenta. Junto com os parafusos Torx Plus a nova chave é garantia de uma fixação melhor e mais segura da pastilha.

As chaves, disponíveis em 6 tamanhos e testadas para suportarem 10.000 apertos de pastilhas, foram calibradas para o torque necessário, a fim de proporcionar uma correta fixação das pastilhas das fresas Sandvik Coromant.

Um torquímetro é sempre recomendado para fresas com parafuso Torx plus. O novo torquímetro deve ser pedido separadamente.

Nota! O Torx Plus é uma marca registrada da Camcar Textron (EUA).

Nota!
Queremos frisar para todos os nossos clientes que as novas chaves Torx Plus NÃO servem para os parafusos Torx standard.



5680 100-07 (20IP) and 5680 100-08 (25IP)

Torquímetro Torx Plus®

Torquímetro	Tamanho	Torque Nm	
5680 100-01	6IP	0.6	
5680 100-02	7IP	0.9	
5680 100-03	8IP	1.2	
5680 100-04	9IP	1.4	
5680 100-05	10IP	2.0	
5680 100-06	15IP	3.0	
5680 100-07	20IP	5.0	
5680 100-08	25IP	7.5	
5680 100-09	HEX 5	6.0	
5680 100-10	20IP	6.0	

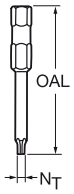
Torquímetro e pontas

5680 105-01
5680 105-02



5680 105-05
5680 105-06





Torquímetro	Faixa de torque Nm	Manípulo
5680 105-01	0.3 - 1.2	Reto
5680 105-02	1.2 - 3.0	Reto
5680 105-05	3.0 - 6.0	Angular
5680 105-06	4.0 - 8.8	Angular

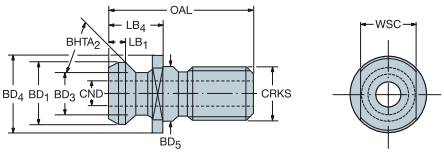
Bit	OAL mm	N_T Torx Plus
5680 084-01	50	8IP
5680 084-02	50	15IP
5680 084-03	89	15IP
5680 084-04	50	7IP
5680 084-05	50	9IP
5680 084-06	50	10IP
5680 084-07	50	20IP
5680 084-08	89	20IP
5680 084-09	89	25IP
5680 084-10	89	30IP
5680 084-11	50	6IP
5680 084-12	80	27IP
5680 084-13	35	50IP

Bit	OAL mm	N_T Torx Plus
5680 084-14	50	30IP
5680 084-15	25	15IP
5680 084-16	25	30IP
5680 084-17	25	6IP
5680 084-18	25	7IP
5680 084-19	25	8IP
5680 084-20	25	9IP
5680 084-21	25	10IP
5680 084-22	25	20IP
5680 084-23	25	25IP
5680 083-01	25	HEX3
5680 083-04	50	HEX2,5

Tirantes de tração



PS-VxxC

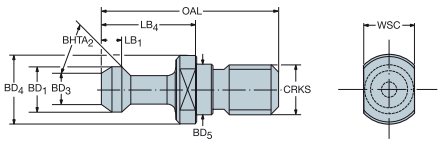


CAT-V

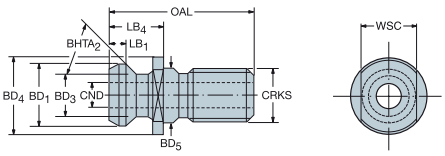
					Dimensões, mm												
CZC	CRKS	CNSC	CXSC	**Código para pedido**	WSC	LB_1	LB_4	CND	BD_1	BD_3	BD_4	BD_5	$BHTA_2$	OAL	KG	Máquina
40	M16	1	1	**PS-V40C-45-001**	18	5.4	16.4	7	19.0	12.9	22.5		45°	38	0.04	
	M16	1	1	**PS-V40C-45-006**	19	5.1	19.1	6	18.8	12.4	22.1	17	45°	47	0.06	Fadal
50	M24	1	1	**PS-V50C-45-001**	30	7.7	25.5	11	29.1	19.6	37.0		45°	59	0.15	
	1-8 UNC	1	1	**PS-V50C-45-005**	31	7.6	25.4	11	29.0	20.8	36.3	26	45°	58	0.17	Mazak
	1-8 UNC	1	1	**PS-V50C-45-008**	29	9.9	45.2	9	22.9	16.9	38.1	24	45°	79	0.20	Makino
	1-8 UNC	1	1	**PS-V50C-60-001**	29	9.9	44.9	6	23.0	17.0	38.1	25	60°	82	0.29	Okuma



PS-Ixx



PS-IxxC



ISO

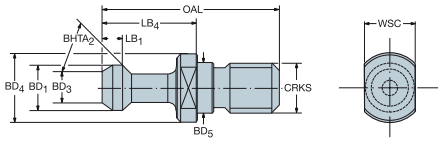
					Dimensões, mm													
CZC	CRKS	CNSC	CXSC	**Código para pedido**	WSC	LB_1	LB_4	CND	BD_1	BD_3	BD_4	BD_5	$BHTA_2$	OAL	KG	BSG	Máquina
30	M12	0	0	**PS-I30-75-001**	14	5.0	24.0		13.0	9.0	17.0	13	75°	44	0.04		
40	M16	0	0	**PS-I40-75-001**	19	6.0	26.0		19.0	14.0	23.0	17	75°	54	0.05	DIN 69872	
	M16	1	1	**PS-I40C-45-001**	18	5.3	16.4	7	19.0	12.9	22.5	17	45°	44	0.05	ISO 7388 B	
	M16	1	1	**PS-I40C-45-002**	19	5.0	16.2	7	18.8	12.4	21.8	17	45°	41	0.05		Mazak
	M16	1	1	**PS-I40C-45-003**	19	5.0	19.1	7	18.8	12.4	22.0	17	45°	44	0.05		Mazak
	M16	1	1	**PS-I40C-75-001**	19	6.0	26.0	7	19.0	14.0	23.0	17	75°	54	0.05	DIN 69872	
	M16	1	1	**PS-I40C-75-002**	19	6.0	26.0	7	19.0	14.0	23.0	17	75°	54	0.05	ISO 7388	
	M16	1	1	**PS-I40C-75-003**	19	6.0	29.0	7	19.0	14.1	23.0	17	75°	54	0.05		Mori Seiki
50	M24	0	0	**PS-I50-45-001**	30	7.6	25.5		29.1	19.6	37.0	25	45°	65	0.15	ISO 7388 B	
	M24	0	0	**PS-I50-75-001**	30	9.0	34.0		28.0	21.0	36.0	25	75°	74	0.15	DIN 69872	
	M24	0	0	**PS-I50-75-002**	30	9.0	34.0		28.0	21.0	36.0	20	75°	74	0.15		
	M24	0	0	**PS-I50-75-003**	30	9.0	34.0		28.0	21.1	36.0	25	75°	74	0.15		
	M24	0	0	**PS-I50-90-001**	30	10.0	46.6		22.0	16.0	39.0	32	90°	99	0.15		GSP
	M24	1	1	**PS-I50C-45-001**	30	7.6	25.5	11	29.1	19.6	37.0	25	45°	65	0.15	ISO 7388 B	
	M24	1	1	**PS-I50C-45-002**	26	5.2	16.4	7	19.0	12.9	30.0	25	45°	56	0.15		
	M24	1	1	**PS-I50C-45-003**	30	7.6	25.4	10	29.0	20.8	36.5	25	45°	65	0.15		Yamazaki
	M24	1	1	**PS-I50C-45-004**	30	7.6	25.4	10	29.0	20.8	36.5	25	45°	65	0.15		Yamazaki
	M24	1	1	**PS-I50C-75-001**	30	9.0	34.0	11	28.0	21.0	36.0	25	75°	74	0.15	DIN 69872	
	M24	1	1	**PS-I50C-75-002**	30	9.0	34.0	11	28.0	21.0	36.0	25	75°	74	0.15	ISO 7388	
	M24	1	1	**PS-I50C-90-001**	30	6.5	32.5	6	20.0	13.0	38.5		90°	70	0.15		Forest

N23 N15

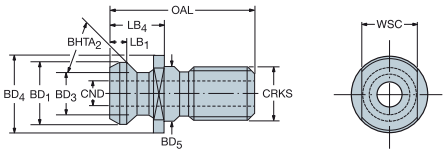
Tirantes de tração



PS-Bxx



PS-BxxC



MAS-BT

					Dimensões, mm												
CZC	CRKS	CNSC	CXSC	Código para pedido	WSC	LB_1	LB_4	CND	BD_1	BD_3	BD_4	BD_5	$BHTA_2$	OAL	KG	BSG	Máquina
30	M12	0	0	PS-B30-45-001	13	5.0	23.0		11.0	7.0	16.0	12	45°	43	0.03		
	M12	0	0	PS-B30-60-001	13	7.0	35.0		11.0	7.0	16.0	12	60°	43	0.03		
	M12	1	1	PS-B30C-45-001	13	5.0	23.0	2	11.0	7.0	16.5	12	45°	43	0.03		
	M12	1	1	PS-B30C-45-002	13	5.0	23.0	2	11.0	7.0	16.5	12	45°	43	0.03		Mori Seiki
	M12	1	1	PS-B30C-45-003	13	5.0	23.0	4	11.0	8.0	16.5	12	45°	43	0.03		Fanuc
	M12	1	1	PS-B30C-60-001	13	5.0	23.0	2	11.0	7.0	16.5	12	60°	43	0.03		
	M12	1	1	PS-B30C-60-002	13	5.0	23.0	2	11.0	7.5	16.5	12	60°	43	0.03		Brother
40	M16	0	0	PS-B40-45-001	19	7.0	35.0		15.0	10.0	23.0	17	45°	60	0.05		
	M16	0	0	PS-B40-60-001	19	7.0	35.0		15.0	10.0	23.0	17	60°	60	0.05		
	M16	0	0	PS-B40-90-001	19	7.0	35.0		15.0	10.0	23.0	17	90°	60	0.05		
	M16	1	1	PS-B40C-45-001	19	7.0	35.0	4	15.0	10.0	23.0	17	45°	60	0.05		
	M16	1	1	PS-B40C-60-001	19	7.0	35.0	3	15.0	10.0	23.0	17	60°	60	0.05		
	M16	1	1	PS-B40C-75-001	18	11.4	25.1	7	25.3	21.1	25.3	17	75°	53	0.05		
	M16	1	1	PS-B40C-75-002	19	6.0	29.0	7	19.0	14.0	23.0	17	75°	54	0.05	JIS 40	
	M16	1	1	PS-B40C-90-001	19	7.0	35.0	3	15.0	10.0	23.0	17	90°	60	0.05		
50	M24	0	0	PS-B50-45-001	30	10.0	45.0		23.0	17.0	38.0	25	45°	85	0.25		
	M24	0	0	PS-B50-60-001	30	10.0	45.0		23.0	17.0	38.0	25	60°	85	0.25		
	M24	0	0	PS-B50-90-001	30	10.0	45.0		23.0	17.0	38.0	25	90°	85	0.25		Okuma
	M24	1	1	PS-B50C-45-001	30	10.0	45.0	7	23.0	17.0	38.0	25	45°	85	0.25		
	M24	1	1	PS-B50C-60-001	30	10.0	45.0	8	23.0	17.0	38.0	25	60°	85	0.25		
	M24	1	1	PS-B50C-75-001	30	9.0	34.0	11	28.0	21.0	36.0	25	75°	74	0.22	JIS 50	
	M24	1	1	PS-B50C-90-001	30	8.0	31.0	6	24.0	18.0	36.0	25	90°	71	0.20		Mitsui
	M24	1	1	PS-B50C-90-002	30	10.0	45.0	8	23.0	17.0	38.0	25	90°	85	0.25		Okuma

N23 N15

Informações gerais

Wiper

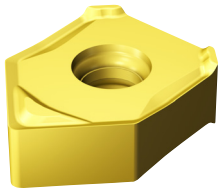
Pastilhas para maior produtividade

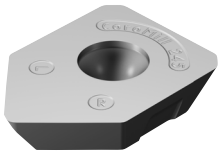
Wiper

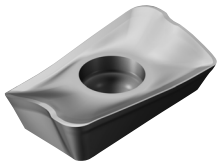
O excelente acabamento superficial pode ser alcançado com pastilhas standard combinadas com uma ou mais pastilhas Wiper. As pastilhas Wiper trabalham de maneira mais eficiente com alto avanço por rotação, fn, em fresas de diâmetros maiores com passo extrafino e facilidade de ajuste.

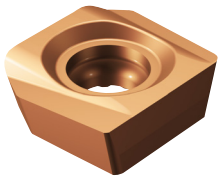
O avanço por rotação pode ser aumentado aprox. quatro vezes enquanto ainda mantém boa qualidade superficial. As pastilhas Wiper podem ser usadas no fresamento da maioria dos materiais para produzir superfícies com boa textura – mesmo sob condições desfavoráveis.





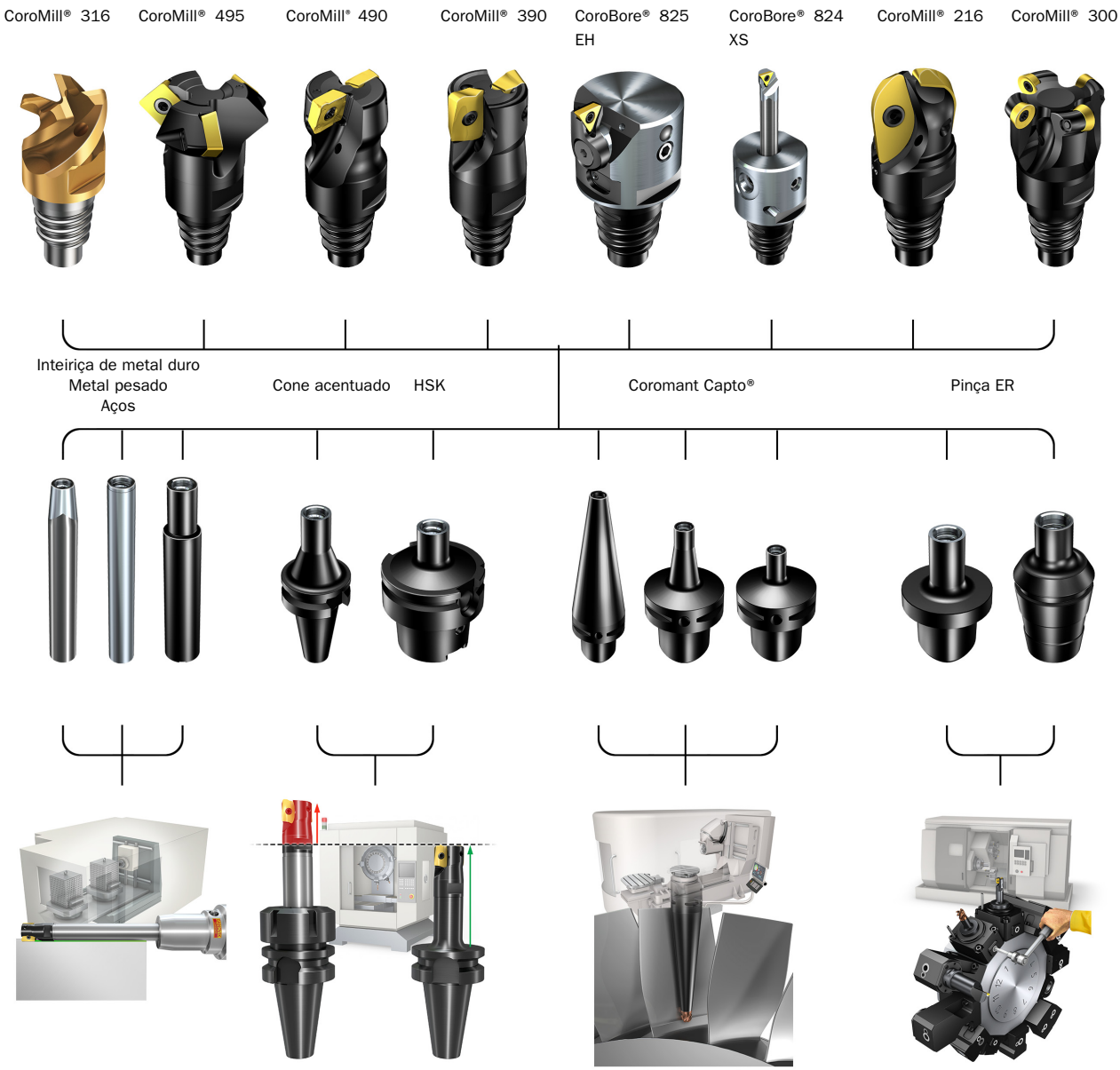






Sistema modular - Coromant EH

Flexibilidade da ferramenta para diâmetros pequenos



Centros de usinagem grandes

Longos balanços com estabilidade e folga.

Centros de usinagem pequenos e médios

Quando a linha de calibração for crítica.

Centros de usinagem médios a grandes

Modularidade com Coromant Capto® em comprimentos diferentes.

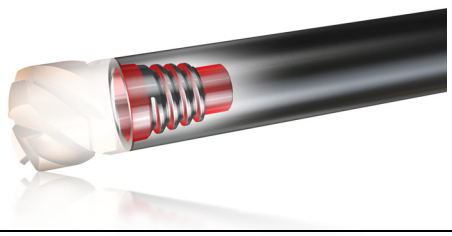
Centros de torneamento com porta-ferramentas acionados

Comprimento de calibração curto e diâmetro de volteio.

Para mais informações sobre o sistema Coromant EH:
www.sandvik.coromant.com/coromanteh

Acoplamento EH Coromant

O acoplamento Coromant EH é baseado em uma rosca de parafuso auto-centrante para montagem segura, rigidez e segurança. O acoplamento tem um encosto físico que facilita verificar se a cabeça está corretamente apertada e ajuda a não sobrecarregar a fixação.



CoroChuck™ 930

Mandril hidráulico de alta precisão com alta segurança contra extração

Aplicação

- Adequado para operações de fresamento e furação em que a precisão, fácil manuseio e alta segurança contra extração são necessários
- Abrange todas as importantes interfaces da máquina



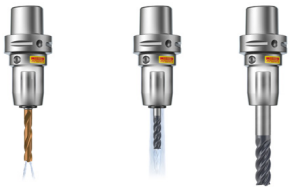
Características e benefícios

- A alta taxa de remoção de metal aumenta a produtividade
- Processo seguro e usinagem segura
- Troca de ferramentas e set-up rápidos
- Acabamento superficial aprimorado e maior vida útil da ferramenta
- Tolerância estreita do furo
- Melhor segurança contra extração disponível no mercado devido a mais nova tecnologia Fulcrum* usada para desempenho máximo com alta força de fixação. A força de fixação se repete constantemente
- Manuseio fácil com torquímetro usado para fixação segura
- O acoplamento do lado da máquina é retificado como última operação a fim de garantir as mais altas exigências de precisão
- Repetição de alta precisão
- Balanceamento conforme norma DIN 69888
- O comprimento de fixação pode ser ajustado com um parafuso de ajuste

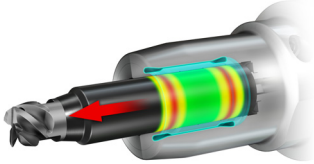
www.sandvik.coromant.com/corochuck930

Tipos de acoplamento disponíveis

- Coromant Capto®
- HSK
- BIG-PLUS
- ISO
- CAT-V
- MAS-BT



O CoroChuck™ 930 pode ser usado com ou sem pinças de redução. Para refrigeração interna, use as pinças 393.CGS e para refrigeração externa, use 393.CG.



A tecnologia Fulcrum* propicia melhor segurança contra extração. Ela permite a fixação segura com dois suportes de cada lado (fulcrums).



Disponível também como interface BIG-PLUS para centros de usinagem.

CoroChuck™ 970

Para um processo seguro de rosqueamento com macho

Aplicação

- Para eliminação de roscas muito grandes
- Adequado para todas as operações de rosqueamento sincronizado com machos



Características e benefícios

- Melhora a vida útil da ferramenta para rosqueamento com macho
- Processo de usinagem seguro
- Reduz significativamente o risco de cortar roscas muito grandes
- O rosqueamento sincronizado com macho reduz a força de avanço nos flancos do macho
- Profundidade precisa devido à compensação axial limitada
- Novo desenho aprimorado para refrigeração interna
- Adequado para refrigeração de alta pressão até 80 bars (1160 psi)
- Mais extremidades traseiras para adequar à sua máquina

www.sandvik.coromant.com/corochuck970

Tipos de acoplamento disponíveis

- Coromant Capto®
- Cone ISO (ISO, MAS-BT, CAT-V)
- HSK
- Cilíndrica
- Weldon
- Coromant EH

Gama de produtos

- Tamanhos ER para CoroChuck 970: 8, 11, 20, 25, 32, 40 e 50.
- O tamanho ER 50 tem um quadrado dentro do adaptador e deve ser usado com o maior macho (M48). A pinça que será usada com esse macho grande será uma pinça sem quadrado.
- Para HSK 63 e HSK 100, é possível usar MQL nos tamanhos ER 20 e 25.

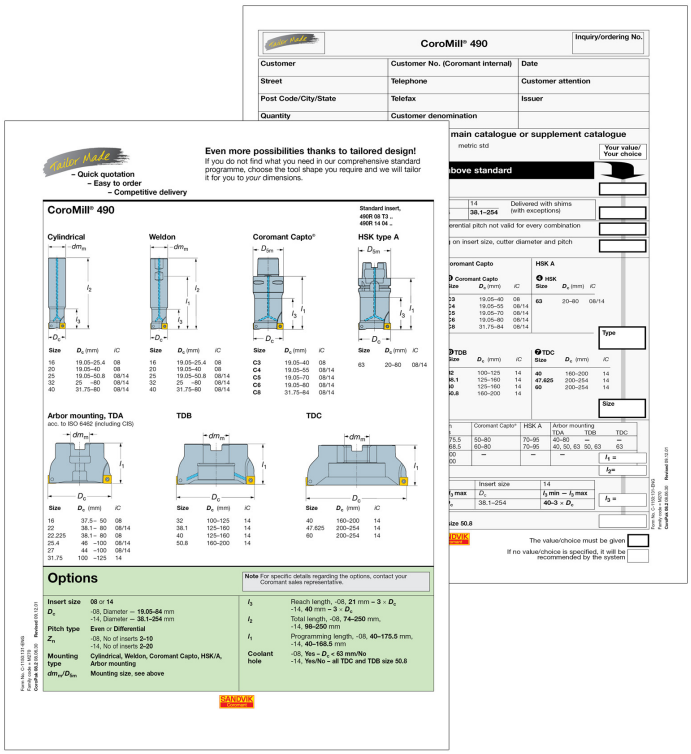
Gama de produtos

Desenho	Coromant Capto®	Coromant EH	Cone ISO (ISO, MAS-BT, CAT-V)	BIG-PLUS (ISO, MAS-BT, CAT-V)	HSK	Cilíndrica	Weldon
SynchroFlex®	C3, C4, C5, C6, C8, C10	25	30, 40, 50	30, 40, 50	63, 100	12, 16, 20	12, 16, 25, 25A, 40

Tailor Made

Opções adicionais de ferramentas desenhadas conforme suas necessidades específicas.





Além de um abrangente programa standard, nós podemos lhe oferecer ferramentas sob medida. Com o nosso serviço Tailor Made você está livre para especificar suas próprias dimensões sem ter que pagar pelo preço de uma ferramenta especial.

O que você pode esperar de nós

- Cotação rápida
- Pedido fácil
- Garantia de desempenho nos produtos e dados de corte determinados
- Prazos de entrega competitivos

www.sandvik.coromant.com/tailormade

A opção Tailor Made está disponível nas seguintes famílias de produtos:

Fresamento

- CoroMill® 245
- CoroMill® 300
- CoroMill® 390
- CoroMill® 419
- CoroMill® 490
- CoroMill® 790
- CoroMill® Century
- CoroMill® 331
- CoroMill® QD
- CoroMill® 415
- CoroMill® 425
- CoroMill® 345
- CoroMill® 365
- CoroMill® 745

Furação

- CoroDrill® 870
- CoroDrill® 880
- CoroDrill® DS20

Adaptadores

- Coromant EH
- CoroChuck™ 930
- Coromant Capto®

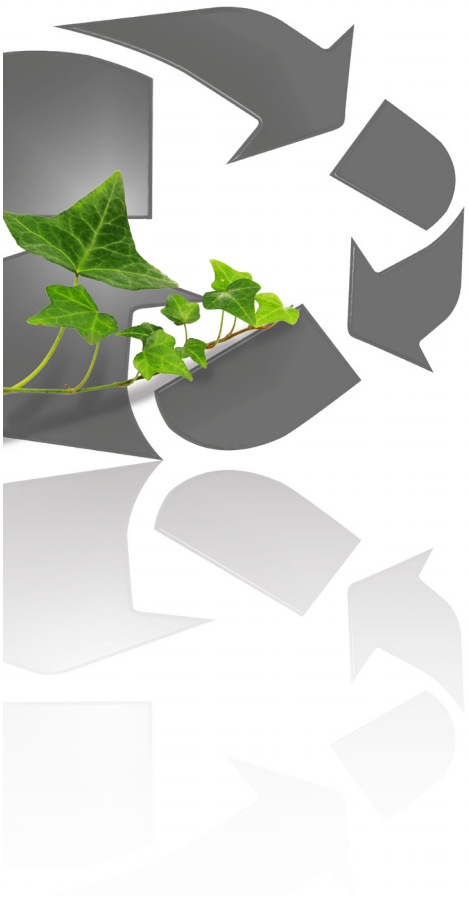
Soluções específicas para a área da engenharia

Quando nossas soluções standard ou Tailor Made não atenderem às suas necessidades, você pode contar com a ampla experiência da Sandvik Coromant em soluções de ferramentas específicas para lidar com critérios exigentes na área da engenharia.
Acesse nossos formulários Tailor Made em www.sandvik.coromant.com

Para a segurança do meio-ambiente

Conheça o novo Conceito de Reciclagem da Coromant (CRC)!

O Conceito de Reciclagem da Coromant (CRC) é um serviço abrangente, oferecido pela Sandvik Coromant para pastilhas de metal duro usadas, em todos os seus respectivos clientes. Em tempos do aumento de consumo de matérias-primas não renováveis, o gerenciamento econômico de recursos escassos é um dever de todos os fabricantes. A Sandvik Coromant está fazendo a parte dela oferecendo-se para coletar pastilhas de metal duro e ferramentas inteiriças de metal duro usadas e reciclá-las de maneira o mais favorável possível ao meio-ambiente. Todas as pastilhas de metal duro são recolhidas em uma caixa de coleta no próprio local de trabalho. Quando a caixa de coleta ficar suficientemente cheia, o seu conteúdo é então transferido para a caixa de transporte a qual é enviada para a Sandvik Coromant, ou um distribuidor/representante Coromant mais próximo, que também pode lhe fornecer mais detalhes a respeito.



Os benefícios do CRC (Conceito de Reciclagem da Coromant) falam por si só!

- Um sistema de reciclagem mundial exclusivo.
- Para todos os nossos clientes e clientes de nossos distribuidores.
- Procedimento simples com caixas de coleta e transporte.
- Menos sucata para preservação do meio ambiente.
- Melhor utilização de recursos.
- Pastilhas de metal duro de outros fabricantes também são aceitas.

Solicite caixas de coleta para cada torno, fresadora, furadeira ou para seu centro de usinagem. Recomendamos uma caixa de coleta para as pastilhas e uma caixa separada para ferramentas inteiriças de metal duro para cada local em que se realize uma operação de usinagem. Para instruções detalhadas sobre como vender suas pastilhas de metal duro usadas, visite www.sandvik.coromant.com/br e selecione o seu mercado.

	Códigos para pedido
Caixa de coleta:	91617
Caixa de transporte para ferramentas inteiriças de metal duro (madeira):	92994
Caixa de transporte para pastilhas (madeira):	92995

Informações sobre segurança

Composição do material

Porta-ferramentas
Os porta-ferramentas contêm principalmente ferro (FE) e elementos de baixa-liga como cromo, níquel, manganês, molibdênio e silício.
Pastilhas intercambiáveis/ferramentas de corte/ferramentas rotativas
As substâncias de produtos de metais duros contêm principalmente carboneto de tungstênio e cobalto. Elas também podem conter carbonetos e carbonitretos dos seguintes elementos: titânio, tântalo, nióbio, cromo, molibdênio e vanádio.

Rotas de exposição

A afiação ou aquecimento do blank de metal duro, ou de um produto de metal duro produzirá poeira ou fumaça com elementos perigosos que podem ser inalados, tragados ou entrar em contato com a pele ou olhos.

Toxidade elevada

O pó é tóxico quando inalado e essa inalação pode ocasionar irritação das vias respiratórias. Uma inalação mais grave em termos de toxidade é a inalação combinada de carboneto de tungstênio e cobalto, comparada com a inalação só de cobalto.
O contato com a pele pode causar irritação e rachaduras. Pessoas sensíveis podem apresentar uma reação alérgica.

Toxidade crônica

A inalação repetida de aerossóis que contenham cobalto pode causar obstrução das vias respiratórias. A inalação prolongada de altas concentrações pode causar fibrose ou câncer de pulmão. Estudos epidemiológicos indicam que trabalhadores que no passado estiveram expostos a altas concentrações de carboneto de tungstênio/cobalto carregam um alto risco de desenvolver câncer de pulmão.
O cobalto e o níquel são agentes em potencial para causar irritações na pele. Um contato repetido ou prolongado pode causar irritação.

Fases de risco

Tóxico: perigo de sérios danos à saúde devido à exposição prolongada por inalação
Tóxico quando inalado
Evidências limitadas de efeito cancerígeno
Pode causar sensibilidade pela inalação e contato com a pele

Medidas preventivas

Evite a formação e a inalação do pó. Use ventilação local por exaustão adequada para manter a exposição pessoal bem abaixo dos limites nacionais autorizados.
Se não houver ventilação ou ela for inadequada, use máscaras respiratórias aprovadas nacionalmente para esse fim.
Use óculos de segurança com laterais quando necessário.
Evite contato repetitivo com a pele. Use luvas adequadas. Lave bem as mãos depois do manuseio.
Use roupas protetoras adequadas. Lave as roupas quando necessário.
Não coma, beba ou fume na área de trabalho. Lave a pele bem antes de comer, beber ou fumar.



Chave de código geral para fresa CoroMill

R	A	390	–	063	Q	22	L	–	11	M	050
1	2	3		4	5	6	7		8	9	10

1 Tipo

R = Versão direita rotativas

2 Desempenho

A = Polegadas

3 Código principal

P. ex.: 390 = CoroMill® 390

4 Diâmetro de corte

P. ex.: 063 = 63 mm

5 Tipo de acoplamento

A = Cilíndrica, mm
B = Weldon mm
C = Coromant Capto®
D = Cilíndrica polegadas
J = Montagem CIS tipo árvore
M = Weldon, polegadas
N = Whistle Notch polegadas
Q = Montagem tipo árvore mm
O = Cilíndrica polegadas
R = Montagem tipo árvore polegadas
T = Acoplamento com rosca
W = Whistle Notch mm
HA= HSK formato A

6 Tamanho do acoplamento

22 = 22 mm

7 Extra longa

L = Extra longa

8 Tamanho da pastilha

11 = 11 mm (LE)

9

L = Passo largo
M = Passo fino
H = Passo extra-fino

10 Comprimento, LF

P. ex.: 050 = 50 mm

Chave de código geral para pastilhas CoroMill

R	390	–	11	T3	12	M	–	P	L	W
1	2		3	4	5	6		7	8	9

1 Versão da pastilha

R = Versão direita
L = Versão esquerda

2 Código principal

P. ex.: 390= CoroMill® 390

3 Largura da pastilha

P. ex.: 11 = 11 mm

4 Espessura da pastilha, S mm

P. ex.: T3 S = 3.97
04 S = 4.76
06 S = 6.33

5 Raio de canto

P. ex.: 12 = 1,2 mm

6 Performance da aresta

M = Alta segurança da aresta
E = Altíssima precisão e agudeza da aresta
H = Alta precisão e alta agudeza da aresta
K = Corte altamente afiado

7 Principal área de aplicação ISO

P M K N S H

8 Operação

L = Corte leve
M = Média
H = Pesada
T = Torno-fresamento

9 Wiper

W = Wiper

POR

Chave de código para CoroMill® 327

Pastilha CoroMill 327

Usinagem de canais e de chanfros

327	R	12	–	22	130	45	08	–	GC
1	2	3		4	5	9	12		7

Rosqueamento

327	R	06	–	12	100	VM	–	TH
1	2	3		4	10	11		7

Perfilamento

327	R	06	–	12	220	11	–	RM
1	2	3		4	5	6		7

Canais

327	R	12	–	28	150	01	–	GM	M
1	2	3		4	5	6		7	8

1 Nome do produto
2 Pastilha versão direita
3 Tamanho do acoplamento (interface)
4 D_{min} (mm)
5 Largura da pastilha
6 Raio ex 02 = raio 0.2 mm
7 Tipo de pastilha
GM = Canais
RM = raio de ponta completo
CH = Chanfro
GC = Canais e chanfro
TH = Rosqueamento
8 M = passo estreito
9 Chanfro 45°
10 Passo da rosca mm: passo x 100
11 Tipo de rosca VM = Perfil V 60°
MM = Métrica 60°
WH = Whitworth 55°
12 Profundidade de corte máxima, CDX em mm

Suportes CoroMill® 327

327	–	12	B	15	S	C	–	06
1		2	3	4	5	6		7

1 Nome do produto
2 Diâmetro da haste, DCON
3 Tipo de haste B = Weldon
4 Comprimento de alcance
5 Materiais da haste S = aço
E = inteiriça de metal duro
6 Refrigeração interna
7 Tamanho do acoplamento (interface)

Chave de código para CoroMill® 328

Pastilha CoroMill® 328

Chanframento

328	R	13	–	110	45	–	GC
1	2	3		4	7		6

Rosqueamento

328	R	13	–	150	VM	–	TH
1	2	3		8	9		6

Canais

328	R	13	–	110	01	–	GM
1	2	3		4	5		6

1 Nome do produto
2 Pastilha versão direita
3 Tamanho da pastilha
4 Largura da pastilha
5 Raio ex 02 = raio 0.2 mm
6 Geometria
GM = Canais
GC = Canais e chanfro
TH = Rosqueamento
7 Chanfro 45°
8 Passo da rosca mm: passo x 100
9 Tipo de rosca VM = Perfil V 60°

Fresas CoroMill® 328

328	–	039	B	25	–	13	M
1		2	3	4		5	6

1 Nome do produto
2 Diâmetro de corte, DC
3 Tipo de haste B = Weldon
Q = Árvore
S = Furo com rasgo de chaveta
4 Diâmetro de haste/acoplamentos (DCON)
5 Tamanho da pastilha
6 Passo

POR

Chave de código para porta-ferramentas

Suporte cilíndrico

A	E12	–	A	20	–	S	S	–	140
1	2		3	4		5	6		7

Suporte Coromant Capto®

C3	–	A	391.EH	–	10	035
8		1	9		10	7

Suporte sólido

392.45EH	–	40	–	10	–	056
9		11		10		7

1	Sistema de medidas
A =	Versão em polegadas

2	Tamanho da interface
E12=	Tamanho do acoplamento EH

3	Tipo de suporte
A =	Cilíndrica

4	Diâmetro do suporte
P. ex.:	DCON = 20 mm

5	Tipo de suporte
S =	Reto
C =	Cônico

6	Material do suporte
S =	Aços
E =	Inteiriça de metal duro

7	Comprimento do suporte
P. ex.:	140 = 140 mm

8	Tamanho do acoplamento
C =	Coromant Capto®

9	Tipo de suporte/família
391.EH =	Suporte Coromant Capto® EH
392.140EH =	ISO 7388.1
392.55EH =	MAS-BT 403
A392.45EH =	CAT V
392.410EH =	Suporte HSK Formato A/C
A392.R8EH =	Suporte Bridgeport
392.EREH =	Suporte integrado EH

10	Tamanho da interface
	Tamanho do acoplamento EH

11	Tamanho do cone
	Tamanho do cone para suportes sólidos Coromant

Chave de código para suportes sólidos

A	A	1	B	05	–	50	32	060
1	2	3	4	5		6	7	8

1 Versão em polegadas

2 Refrigeração pelo centro

3 Tipo fuso

1=ISO 7388/1 (DIN 69871)
2= MAS-BT
3=CAT V-Flange

4 Opções

B= Refrigeração pela flange
F= Montagem da flange
X= Extra curta

5 Tipo de suporte

05 = Suporte para fresa de facear
14= mandril porta-pinça ER
20 = Suporte para fresa de topo com haste tipo Weldon
27= Suporte para broca de furação curta - haste ISO 9766

6 Tamanho do cone 30, 40, 50

7 Tamanho do furo ou piloto, $DCON_{WS}$

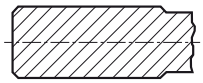
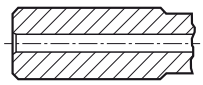
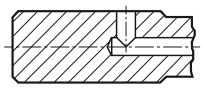
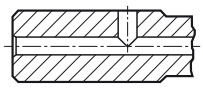
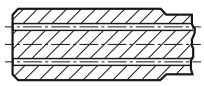
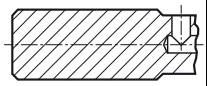
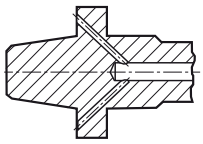
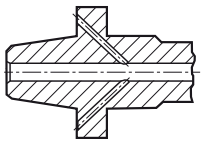
mm		
09	19	38
13	25	51
16	32	63

8 Comprimento para programação, mm

060 = 60 mm

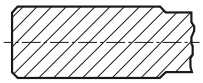
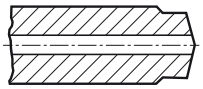
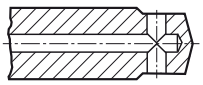
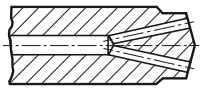
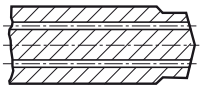
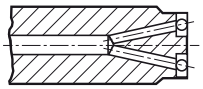
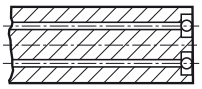
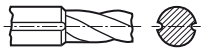
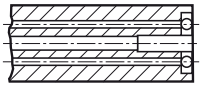
CNSC

Código do tipo de entrada de refrigeração

Código	Descrição	Imagem
0	Sem refrigeração	
1	Entrada axial concêntrica	
2	Entrada radial	
3	Entrada axial concêntrica e radial	
4	Entrada axial concêntrica no círculo	
5	Entrada radial antes do adaptador	
6	Decentralizada sobre o flange	
7	Decentralizada sobre o flange e axial	
8	Decentralizada sobre canais na haste	

CXSC

Código do tipo de saída para refrigeração

Código	Descrição	Imagem
0	Sem saída de refrigeração	
1	Saída axial concêntrica	
2	Saída radial	
3	Saída inclinada axial	
4	Axial concêntrica no círculo	
5	Saída axial inclinada com olhal, ajustável	
6	Saída decentralizada com olhal, ajustável	
7	Decentralizada sobre canais na haste	
8	Axial ou decentralizada com olhal, ajustável	

Fórmulas e definições:

v_c = velocidade de corte	m/min (metro/minuto)
n = velocidade do fuso	rpm (rotação por minuto)
v_f = avanço da mesa	mm/min
z_n = número total de arestas de corte	
z_c = número de arestas de corte efetivas	
f_z = avanço por dente	mm/z
f_n = avanço por rotação	mm/rot
h_{ex} = espessura máxima	mm
a_p = profundidade de corte	mm
a_e/D_c % = imersão radial	%
T = tempo de usinagem	mín.
Q = taxa de remoção de metal	mm/rot
nap = números de passes	
k_c = força de corte específica	N/mm^2
R_a = rugosidade superficial	µm

Tamanho da pastilha

△ = comprimento da aresta de corte em mm

POR

Ifind

Nossas ferramentas mais práticas reunidas para sua conveniência

Você está on-line, está em movimento e está na fábrica. Onde quer que você esteja, você pode acessar os recursos de que precisa através do app Ifind.

O app irá ajudá-lo a encontrar ferramentas, soluções ou as informações de que você precisa para suas atividades. Você pode obter recomendações de ferramentas, fazer pedidos, rastrear sua compra e até aprender mais sobre usinagem. O que você quer fazer hoje?

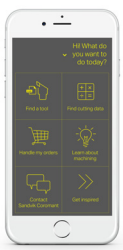
Tudo que você encontrar no app Ifind está disponível em qualquer dispositivo.?

Available on the App Store

ANDROID APP ON Google play







Lista de referência cruzada de materiais

ISO	MC	CMC	País									
			Europa	Alemanha	Grã-Bretanha		Suécia	EUA	França	Itália	Espanha	Japão
			Norma									
			DIN EN	W.-nr.	BS	EN	SS	AISI/SAE/ASTM	AFNOR	UNI	UNE	JIS
P	**Aços sem liga**											
Aços	P1.1.Z.AN	01.1	S235JR G2	1.0038	4360 40 C	-	1311	A570.36	E 24-2 Ne	-	-	STKM 12A;C
	P1.1.Z.AN	01.1	S235J2 G3	1.0116	4360 40 B	-	1312	A573-81 65	E 24-U	Fe37-3	-	-
	P1.1.Z.AN	01.1	C15	1.0401	080M15	-	1350	1015	CC12	C15C16	F.111	-
	P1.1.Z.AN	01.1	C22	1.0402	050A20	2C/2D	1450	1020	CC20	C20C21	F.112	-
	P1.1.Z.AN	01.1	C15E	1.1141	080M15	32C	1370	1015	XC12	C16	C15K	S15C
	P1.1.Z.AN	01.1	C25E	1.1158	-	-	-	1025	-	-	-	S25C
	P1.1.Z.AN	01.1	S380N	1.8900	4360 55 E	-	2145	A572-60	-	FeE390KG	-	-
	P1.1.Z.AN	01.1	17MnV7	1.0870	4360 55 E	-	2142	A572-60	NFA 35-501 E 36	-	-	-
	P1.1.Z.AN	02.1	55Si7	1.0904	250A53	45	2085	9255	55S7	55Si8	56Si7	-
	P1.1.Z.AN	02.2	-	-	-	-	2090	9255	55S7	-	-	-
	P1.2.Z.AN	01.2	C35	1.0501	060A35	-	1550	1035	CC35	C35	F.113	-
	P1.2.Z.AN	01.2	C45	1.0503	080M46	-	1650	1045	CC45	C45	F.114	-
	P1.2.Z.AN	01.2	40Mn4	1.1157	150M36	15	-	1039	35M5	-	-	-
	P1.2.Z.AN	01.2	36MN5	1.1167	-	-	2120	1335	40M5	-	36Mn5	SMn438(H)
	P1.2.Z.AN	01.2	28Mn6	1.1170	150M28	14A	-	1330	20M5	C28Mn	-	SCMn1
	P1.2.Z.AN	01.2	C35G	1.1183	060A35	-	1572	1035	XC38TS	C36	-	S35C
	P1.2.Z.AN	01.2	C45E	1.1191	080M46	-	1672	1045	XC42	C45	C45K	S45C
	P1.2.Z.AN	01.2	C53G	1.1213	060A52	-	1674	1050	XC48TS	C53	-	S50C
	P1.2.Z.AN	01.3	C55	1.0535	070M55	-	1655	1055	-	C55	-	-
	P1.2.Z.AN	01.3	C55E	1.1203	070M55	-	-	1055	XC55	C50	C55K	S55C
	P1.2.Z.AN	02.1	S275J2G3	1.0144	4360 43C	-	1412	A573-81	E 28-3	-	-	SM 400A;B;C
	P1.2.Z.AN	02.1	S355J2G3+C2	1.0570	4360 50B	-	2132	-	E36-3	Fe52BFN/Fe52CFN	-	SM490A;B;C;YA;YB
	P1.2.Z.AN	02.1	S355J2G3	1.0841	150 M 19	-	2172	5120	20 MC 5	Fe52	F-431	-
	P1.3.Z.AN	01.3	C60E	1.0601	080A62	43D	-	1060	CC55	C60	-	-
	P1.3.Z.AN	01.3	C60E	1.1221	080A62	43D	1678	1060	XC60	C60	-	S58C
	P1.3.Z.AN	01.4	C101E	1.1274	060 A 96	-	1870	1095	XC 100	-	F-5117	-
	P1.3.Z.AN	01.4	C101u	1.1545	BW 1A	-	1880	W 1	Y105	C36KU	F-5118	SK 3
	P1.3.Z.AN	01.4	C105W1	-	BW2	-	2900	W210	Y120	C120KU	F.515	SUP4
	P1.3.Z.AN	02.1	S340 MGC	1.0961	-	-	-	9262	60SC7	60SiCr8	60SiCr8	-
	P1.4.Z.AN	01.1	11SMn30	1.0715	230M07	-	1912	1213	S250	CF9SMn28	11SMn28	SUM22
	P1.4.Z.AN	01.1	11SMnPb30	1.0718	-	-	1914	12L13	S250Pb	CF9SMnPb28	11SMnPb28	SUM22L
	P1.4.Z.AN	01.1	10SPb20	1.0722	-	-	-	-	10PbF2	CF10SPb20	10SPb20	-
	P1.4.Z.AN	01.1	11SMn37	1.0736	240M07	1B	-	1215	S 300	CF9SMn36	12SMn35	-
	P1.4.Z.AN	01.1	11SMnPb37	1.0737	-	-	1926	12L14	S300Pb	CF9SMnPb36	12SMnP35	-
	P1.4.Z.AN	01.2	35S20	1.0726	212M36	8M	1957	1140	35MF4	-	F210G	-
	P1.5.C.UT	01.1	GC16E	1.1142	030A04	1A	1325	1115	-	-	-	-
	Aços baixa-liga											
	P2.1.Z.AN	02.1	16Mo3	1.5415	1501-240	-	2912	A204Gr.A	15D3	16Mo3KW	16Mo3	-
	P2.1.Z.AN	02.1	14Ni6	1.5622	-	-	-	A350LF5	16N6	14Ni6	15Ni6	-
	P2.1.Z.AN	02.1	21NiCrMo2	1.6523	805M20	362	2506	8620	20NCD2	20NiCrMo2	20NiCrMo2	SNCM220(H)
	P2.1.Z.AN	02.1	17CrNiMo6	1.6587	820A16	-	-	-	18NCD6	-	14NiCrMo13	-
	P2.1.Z.AN	02.1	15Cr3	1.7015	523M15	-	-	5015	12C3	-	-	SCr415(H)
	P2.1.Z.AN	02.1	55Cr3	1.7176	527A60	48	-	5155	55C3	-	-	SUP9(A)
	P2.1.Z.AN	02.1	15CrMo5	1.7262	-	-	2216	-	12CD4	-	12CrMo4	SCM415(H)
	P2.1.Z.AN	02.1	13CrMo4-5	1.7335	1501-620Gr27	-	-	A182 F11;F12	15CD3.5 15CD4.5	14CrMo4 5	14CrMo45	-
	P2.1.Z.AN	02.1	10CrMo9 10	1.7380	1501-622 Gr.31;45	-	2218	A182 F.22	12CD9, 10	12CrMo9, 10	TU.H	-
	P2.1.Z.AN	02.1	14MoV6 3	1.7715	1503-660-440	-	-	-	-	-	13MoCrV6	-
	P2.1.Z.AN	02.1	50CoMo4	1.7228	823M30	33	2512	-	-	653M31	-	-
	P2.1.Z.AN	02.2	14NiCr10	1.5732	-	-	-	3415	14NC11	16NiCr11	15NiCr11	SNC415(H)
	P2.1.Z.AN	02.2	14NiCr14	1.5752	655M13; A12	36A	-	3415;3310	12NC15	-	-	SNC815(H)
	P2.1.Z.AN	02.1/02.2	16MnCr5	1.7131	(527M20)	-	2511	5115	16MC5	16MnCr5	16MnCr5	-
	P2.1.Z.AN	02.1/02.2	34CrMo4	1.7220	708A37	19B	2234	4137;4135	35CD4	35CrMo4	34CrMo4	SCM432;SCCRM3
	P2.1.Z.AN	02.1/02.2	41CrMo4	1.7223	708M40	19A	2244	4140;4142	42CD4TS	41CrMo4	42CrMo4	SCM 440
	P2.1.Z.AN	02.1/02.2	42CrMo4	1.7225	708M40	19A	2244	4140	42CD4	42CrMo4	42CrMo4	SCM440(H)
	P2.1.Z.AN	03.11	14NiCrMo134	1.6657	832M13	36C	-	-	-	15NiCrMo13	14NiCrMo131	-
	P2.2.Z.AN	02.1	31CrMo12	1.8515	722 M 24	-	2240	-	30 CD 12	30CrMo12	F-1712	-
	P2.2.Z.AN	02.1	39CrMoV13 9	1.8523	897M39	40C	-	-	-	36CrMoV12	-	-
	P2.2.Z.AN	02.1	41CrS4	1.7039	524A14	-	2092	L1	-	105WCR 5	-	-
	P2.2.Z.AN	02.1	50NiCr13	1.2721	-	-	2550	L6	55NCV6	-	F-528	-
	P2.2.Z.AN	03.11	45WCrV7	1.2542	BS1	-	2710	S1	-	45WCrV8KU	45WCrSi8	-
	P2.2.Z.AN/P2.5.Z.HT	02.1/02.2	36CrNiMo4	1.6511	816M40	110	-	9840	40NCD3	38NiCrMo4(KB)	35NiCrMo4	-
	P2.2.Z.AN/P2.5.Z.HT	02.1/02.2	34CrNiMo6	1.6582	817M40	24	2541	4340	35NCD6	35NiCrMo6(KB)	-	-
	P2.2.Z.AN/P2.5.Z.HT	02.1/02.2	34Cr4	1.7033	530A32	18B	-	5132	32C4	34Cr4(KB)	35Cr4	SCr430(H)
	P2.2.Z.AN/P2.5.Z.HT	02.1/02.2	41Cr4	1.7035	530A40	18	-	5140	42C4	41Cr4	42Cr4	SCr440(H)
	P2.2.Z.AN/P2.5.Z.HT	02.1/02.2	32CrMo12	1.7361	722M24	40B	2240	-	30CD12	32CrMo12	F.124.A	-
	P2.2.Z.AN/P2.5.Z.HT	02.1/02.2	51CrV4	1.8159	735A50	47	2230	6150	50CV4	50CrV4	51CrV4	SUP10
	P2.2.Z.AN/P2.5.Z.HT	02.1/02.2	41CrAlMo7	1.8509	905M39	41B	2940	-	40CAD6, 12	41CrAlMo7	41CrAlMo7	-
	P2.3.Z.AN	02.1	100Cr6	1.3505	534A99	31	2258	52100	100C6	100Cr6	F.131	SUJ2

Lista de referência cruzada de materiais

ISO	MC	CMC	País									
			Europa	Alemanha	Grã-Bretanha		Suécia	EUA	França	Itália	Espanha	Japão
			Norma									
			DIN EN	W.-nr.	BS	EN	SS	AISI/SAE/ASTM	AFNOR	UNI	UNE	JIS
P	P2.3.Z.AN/H1.2.Z.HA	02.1/02.2	105WCr6	1.2419	-	-	2140	-	105WC13	10WCr6	105WCr5	SKS31
	P2.3.Z.AN/H1.2.Z.HA	-	-	-	-	-	-	-	-	107WCr5KU	-	SKS2, SKS3
	P2.3.Z.AN/H1.2.Z.HA	02.1/02.2	-	1.2714	-	-	-	L6	55NCDV7	-	F.520.S	SKT4
	P2.3.Z.AN/H1.3.Z.HA	02.1/02.2	100Cr6	1.2067	BL3	-	-	L3	Y100C6	-	100Cr6	-
	P2.4.Z.AN	02.1	16MnCr5	1.7139	-	-	2127	-	-	-	-	-
	P2.5.Z.HT	02.1	16Mo5	1.5423	1503-245-420	-	-	4520	-	16Mo5	16Mo5	-
	P2.5.Z.HT	02.1	40NiCrMo8-4	1.6562	311-Type 7	-	-	8740	-	40NiCrMo2(KB)	40NiCrMo2	SNCM240
	P2.5.Z.HT	02.1	42Cr4	1.7045	-	-	2245	5140	-	-	42Cr4	SCr440
	P2.5.Z.HT	02.1	31NiCrMo14	1.5755	830 M 31	-	2534	-	-	-	F-1270	-
	P2.5.Z.HT	02.2	36NiCr6	1.5710	640A35	111A	-	3135	35NC6	-	-	SNC236
	P2.6.C.UT	02.1	22Mo4	1.5419	605A32	-	2108	8620	-	-	F520.S	-
	P2.6.C.UT	02.1/02.2	25CrMo4	1.7218	1717CDS110	-	2225	4130	25CD4	25CrMo4(KB)	AM26CrMo4	SCM420;SCM430
	P2.6.C.UT	06.2	-	-	-	-	2223	-	-	-	-	-
	Aços alta-liga											
	P3.0.Z.AN	03.11	X210Cr12	1.2080	BD3	-	-	D3	Z200C12	X210Cr13KU X250Cr12KU	X210Cr12	SKD1
	P3.0.Z.AN	03.11	X43Cr13	1.2083	-	-	2314	-	-	-	-	-
	P3.0.Z.AN	03.11	X40CrMoV5 1	1.2344	BH13	-	2242	H13	Z40CDV5	X35CrMoV05KU X40CrMoV511KU	X40CrMoV5	SKD61
	P3.0.Z.AN	03.11	X100CrMoV5 1	1.2363	BA2	-	2260	A2	Z100CDV5	X100CrMoV51KU	X100CrMoV5	SKD12
	P3.0.Z.AN	03.11	X210CrW12	1.2436	-	-	2312	-	-	X215CrW12 1KU	X210CrW12	SKD2
	P3.0.Z.AN	03.11	X30WCrV9 3	1.2581	BH21	-	-	H21	Z30WCV9	X28W09KU X30WCrV9 3KU	X30WCrV9	SKD5
	P3.0.Z.AN	03.11	X165CrMoV 12	1.2601	-	-	2310	-	-	X165CrMoW12KU	X160CrMoV12	-
	P3.0.Z.AN	03.21	X155CrMoV12-1	1.2379	-	-	2736	HNV3	-	-	-	-
	P3.0.Z.HT	03.11	X8Ni9	1.5662	1501-509;510	-	-	ASTM A353	-	X10Ni9	XBNi09	-
	P3.0.Z.HT	03.11	12Ni19	1.5680	-	-	-	2515	Z18N5	-	-	-
	P3.1.Z.AN	03.11	S6-5-2	1.3343	4959BA2	-	2715	D3	Z40CSD10	15NiCrMo13	-	SUH3
	P3.1.Z.AN	03.13	-	-	BM 2	-	2722	M 2	Z85WDCV	HS 6-5-2-2	F-5603.	SKH 51
	P3.1.Z.AN	03.13	HS 6-5-2-5	1.3243	BM 35	-	2723	M 35	6-5-2-5	HS 6-5-2-5	F-5613	SKH 55
	P3.1.Z.AN	03.13	HS 2-9-2	1.3348	-	-	2782	M 7	-	HS 2-9-2	F-5607	-
	P3.2.C.AQ	06.33	G-X120Mn12	1.3401	Z120M12	-	2183	L3	Z120M12	XG120Mn12	X120Mn12	SCMnH/1
Aços	**Aços inoxidáveis ferríticos/martensíticos**											
	P5.0.Z.AN	05.11/15.11	X10CrAL13	1.4724	403S17	-	-	405	Z10C13	X10CrAl12	F.311	SUS405
	P5.0.Z.AN	05.11/15.11	X10CrAL18	1.4742	430S15	60	-	430	Z10CAS18	X8Cr17	F.3113	SUS430
	P5.0.Z.AN	05.11/15.11	X10CrAL2-4	1.4762	-	-	2322	446	Z10CAS24	X16Cr26	-	SUH446
	P5.0.Z.AN	05.11/15.11	X1CrMoTi18-2	1.4521	-	-	2326	S44400	-	-	-	-
	P5.0.Z.AN/P5.0.Z.HT	05.11/15.11	X6Cr13	1.4000	403S17	-	2301	403	Z6C13	X6Cr13	F.3110	SUS403
	P5.0.Z.AN/P5.0.Z.HT	-	X7Cr14	1.4001	-	-	-	-	-	-	F.8401	-
	P5.0.Z.AN/P5.0.Z.HT	05.11/15.11	X10Cr13	1.4006	410S21	56A	2302	410	Z10C14	X12Cr13	F.3401	SUS410
	P5.0.Z.AN/P5.0.Z.HT	05.11/15.11	X6Cr17	1.4016	430S15	960	2320	430	Z8C17	X8Cr17	F3113	SUS430
	P5.0.Z.AN/P5.0.Z.HT	05.11/15.11	X6CrAL13	1.4002	405S17	-	-	405	Z8CA12	X6CrAl13	-	-
	P5.0.Z.AN/P5.0.Z.HT	05.11/15.11	X20Cr13	1.4021	420S37	-	2303	420	Z20C13	X20Cr13	-	-
	P5.0.Z.AN/P5.0.Z.HT	05.11/15.11	X6CrMo17-1	1.4113	434S17	-	2325	434	Z8CD17.01	X8CrMo17	-	SUS434
	P5.0.Z.HT	03.11	X45CrS9-3-1	1.4718	401S45	52	-	HW3	Z45CS9	X45GrSi8	F322	SUH1
	P5.0.Z.HT	05.11/15.11	X85CrMoV18-2	1.4748	443S65	59	-	HNV6	Z80CSN20.02	X80CrSiNi20	F.320B	SUH4
	P5.0.Z.HT	05.11/15.11	X20CrMoV12-1	1.4922	-	-	2317	-	-	X20CrMoNi 12 01	-	-
	P5.0.Z.PH	05.11/15.11	X12CrS13	1.4005	416 S 21	-	2380	416	Z11CF13	X12 CrS 13	F-3411	SUS 416
	P5.0.Z.PH	05.11/15.11	X46Cr13	1.4034	420S45	56D	2304	-	Z40CM	X40Cr14	F.3405	SUS420J2
	P5.0.Z.PH	05.11/15.11	X19CrNi17-2	1.4057	431S29	57	2321	431	Z15CNi6.02	X16CrNi16	F.3427	SUS431
	P5.0.Z.PH	05.12/15.12	X5CrNiCuNb16-4	1.4542 1.4548	-	-	-	630	Z7CNU17-04	-	-	-
	P5.0.Z.PH	15.21	X4 CrNiMo16-5	1.4418	-	-	2387	-	Z6CND16-04-01	-	-	-
	P5.1.Z.AN/P5.0.Z.HT	05.11/15.11	X14CrMoS17	1.4104	-	-	2383	430F	Z10CF17	X10CrS17	F.3117	SUS430F

			Marcas
P2.1.Z.AN	02.1		OVAKO 520M (Ovako Steel)
P2.2.Z.AN	02.1	1.0045	FORMAX (Uddeholm Tooling)
P2.2.Z.AN	02.1		IMACRO NIT (Imatra Steel)
P2.5.Z.HT	02.2		INEXA 482 (XM) (Inexa Profil)
P1.2.Z.AN			S355J2G3(XM)
P1.2.Z.AN			C45(XM)
P1.2.Z.AN			16MnCrS5(XM)
P2.5.Z.HT			INEXA280(XM)
P2.5.Z.HT	02.2		070M20(XM)
P2.5.Z.HT	02.2		HARDOX 500 (SSAB – Swedish Steel Corp.)
P2.5.Z.HT			WELDOX 700 (SSAB – Swedish Steel Corp.)

Lista de referência cruzada de materiais

ISO	MC	CMC	País								
			Europa	Alemanha	Grã-Bretanha		Suécia	EUA	França	Itália	Espanha	Japão
			Norma									
			DIN EN	W.-nr.	BS	EN	SS	AISI/SAE/ASTM	AFNOR	UNI	UNE	JIS
M	**Aços inoxidáveis austenísticos**											
	M1.0.Z.AQ	05.11/15.11	X3CrNiMo13-4	1.4313	425C11	-	2385	CA6-NM	Z4CND13.4M Z38C13M	(G)X6CrNi304	-	SCS5
	M1.0.Z.AQ/M1.0.C.UT	05.11/15.11	X53CrMnNiN21-9	1.4871	349S54	-	-	EV8	Z52CMN21.09	X53CrMnNiN21 9	-	SUH35, SUH36
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X2CrNiN18-10	1.4311	304S62	-	2371	304LN	Z2CN18.10	-	-	SUS304LN
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X2CrNiMoN17-13-3	1.4429	-	-	2375	316LN	Z2CND17.13	-	-	SUS316LN
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X2CrNiMo17-12-2	1.4404	316S13	-	2348	316L	Z2CND17-12	X2CrNiMo1712	-	-
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X2CrNiMo18-14-3	1.4435	316S13	-	2353	316L	Z2CND17.12	X2CrNiMo17 12	-	SCS16, SUS316L
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X3CrNiMo17-3-3	1.4436	316S33	-	2343, 2347	316	Z6CND18-12-03	X8CrNiMo1713	-	-
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X2CrNiMo18-15-4	1.4438	317S12	-	2367	317L	Z2CND19.15	X2CrNiMo18 16	-	SUS317L
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X6CrNiNb18-10	1.4550	347S17	58F	2338	347	Z6CNNb18.10	X6CrNiNb18 11	F.3552 F.3524	SUS347
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X6CrNiMoTi17-12-2	1.4571	320S17	58J	2350	316Ti	Z6NDT17.12	X6CrNiMoTi17 12	F.3535	-
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X10CrNiMoNb 18-12	1.4583	-	-	-	318	Z6CNDNb17 13B	X6CrNiMoNb17 13	-	-
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X15CrNiSi20-12	1.4828	309S24	-	-	309	Z15CNS20.12	-	-	SUH309
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X2CrNiMoN17-11-2	1.4406	301S21	58C	2370	308	Z1NCDU25.20	-	F.8414	SCS17
	M1.0.Z.AQ	05.21/15.21	X1CrNiMoCuN20-18-7	1.4547	-	-	2378	S31254	Z1CNDU20-18-06AZ	-	-	-
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X9CrNi18-8	1.4310	-	-	2331	301	Z12CN17.07	X12CrNi17 07	F.3517	SUS301
	M1.0.Z.PH	05.22/15.22	X7CrNiAL17-7	1.4568 1.4504	316S111	-	-	17-7PH	Z8CNA17-07	X2CrNiMo1712	-	-
	M1.0.Z.AQ/M1.0.C.UT	05.21/15.21	X2CrNi19-11	1.4306	304S11 304S12	-	2352	304L	Z2CN18-10	X2CrNi18 11	-	-
	M1.1.Z.AQ	05.21/15.21	-	-	304S31	58E	2332, 2333	304	Z6CN18.09	X5CrNi18 10	F.3504 F.3541	SUS304
	M1.1.Z.AQ	05.21/15.21	X5CrNi18-10	1.4301	304S15	58E	2332	304	Z6CN18.09	X5CrNi18 10	F.3551	SUS304
	M1.1.Z.AQ	05.21/15.21	X5CrNiMo17-2-2	1.4401	316S16	58J	2347	316	Z6CND17.11	X5CrNiMo17 12	F.3543	SUS316
	M1.1.Z.AQ	05.21/15.21	X6CrNiTi18-10	1.4541	321S12	58B	2337	321	Z6CNT18.10	X6CrNiTi18 11	F.3553 F.3523	SUS321
	M1.2.Z.AQ	05.21/15.21	X8CrNiS18-9	1.4305	303S21	58M	2346	303	Z10CNF 18.09	X10CrNiS 18.09	F.3508	SUS303
	Aços inoxidáveis super austeníticos (Ni>20%)											
	M2.0.C.AQ	20.11	G-X40NiCrSi36-18	1.4865	330C11	-	-	-	-	XG50NiCr39 19	-	SCH15
	M2.0.Z.AQ	05.21/15.21	X1NiCrMoCu25-20-5	1.4539	-	-	2562	UNS V 0890A	Z2 NCDU25-20	-	-	-
	M2.0.Z.AQ	05.21/15.21	X8CrNi25-21	1.4845	310S24	-	2361	310S	Z12CN25 20	X6CrNi25 20	F.331	SUH310
	M2.0.Z.AQ	20.11	X12NiCrSi36 16	1.4864	-	-	-	330	Z12NCS35.16	F-3313	-	SUH330
	M2.0.Z.AQ	05.23/15.23	X1NiCrMoCu31-27-4	1.4563	-	-	2584	NO8028	Z1NCDU31-27-03	-	-	-
	Aços inoxidáveis Duplex (austenísticos/ferríticos)											
	M3.1.Z.AQ/M3.1.C.AQ	05.51/15.51	X2CrNiN23-4	1.4362	-	-	2376	S31500	-	-	-	-
	M3.1.Z.AQ/M3.1.C.AQ	05.51/15.51	X8CrNiMo27-5	-	-	-	2324	S32900	-	-	-	-
	M3.2.Z.AQ/M3.2.C.AQ	05.52/15.52	X2CrNiN23-4	-	-	-	2327	S32304	Z2CN23-04AZ	-	-	-
	M3.2.Z.AQ/M3.2.C.AQ	05.52/15.52	-	-	-	-	2328	-	-	-	-	-
	M3.2.Z.AQ/M3.2.C.AQ	05.52/15.52	X2CrNiMoN22-53	-	-	-	2377	S31803	Z2CND22-05-03	-	-	-

			Marcas
	M1.1.Z.AQ	05.21/15.21	SANMAC 304 (Sandvik Steel)
	M1.1.Z.AQ	05.21/15.21	1.0045 SANMAC 304L (Sandvik Steel)
	M1.1.Z.AQ	05.21/15.21	SANMAC 316 (Sandvik Steel)
	M1.1.Z.AQ	05.21/15.21	SANMAC 316L (Sandvik Steel)
	M1.0.Z.AQ	05.23/15.23	254 SMO
	M2.0.Z.AQ	05.23/15.23	654 SMO
	M3.2.Z.AQ	05.52/15.52	SANMAC SAF 2205 (Sandvik Steel)
	M3.2.Z.AQ	05.52/15.52	SANMAC SAF 2507 (Sandvik Steel)

Lista de referência cruzada de materiais

ISO	MC	CMC	País									
			Europa	Alemanha	Grã-Bretanha		Suécia	EUA	França	Itália	Espanha	Japão
			Norma									
			DIN EN	W.-nr.	BS	EN	SS	AISI/SAE/ASTM	AFNOR	UNI	UNE	JIS
K	**Ferros fundidos maleáveis**											
	K1.1.C.NS	07.1	-	-	8 290/6	-	0814	-	MN 32-8	-	-	FCMB310
	K1.1.C.NS	07.1	EN-GJMB350-10	0.8135	B 340/12	-	0815	32510	MN 35-10	-	-	FCMW330
	K1.1.C.NS	07.2	EN-GJMB450-6	0.8145	P 440/7	-	0852	40010	Mn 450	GMN 45	-	FCMW370
	K1.1.C.NS	07.2	EN-GJMB550-4	0.8155	P 510/4	-	0854	50005	MP 50-5	GMN 55	-	FCMP490
					P 570/3		0858	70003	MP 60-3			FCMP540
	K1.1.C.NS	07.2	EN-GJMB650-2	0.8165	P570/3	-	0856	A220-70003	Mn 650-3	GMN 65	-	FCMP590
	K1.1.C.NS	07.3	EN-GJMB700-2	0.8170	P690/2	-	0862	A220-80002	Mn700-2	GMN 70	-	FCMP690
	Ferros fundidos cinzentos											
	K2.1.C.UT	08.1	-	-	-	-	0100	-	-	-	-	-
	K2.1.C.UT	08.1	EN-GJL-100	0.6010	-	-	0110	No 20 B	Ft 10 D	-	-	FC100
	K2.1.C.UT	08.1	EN-GJL-150	0.6015	Grade 150	-	0115	No 25 B	Ft 15 D	G 15	FG 15	FC150
	K2.1.C.UT	08.1	EN-GJL-200	0.6020	Grade 220	-	0120	No 30 B	Ft 20 D	G 20	-	FC200
	K2.1.C.UT	08.2	EN-GJL-250	0.6025	Grade 260	-	0125	No 35 B	Ft 25 D	G 25	FG 25	FC250
	K2.1.C.UT	08.2	EN-JLZ	0.6040	Grade 400	-	0140	No 55 B	Ft 40 D	-	-	-
	K2.2.C.UT	08.2	EN-GJL-300	0.6030	Grade 300	-	0130	No 45 B	Ft 30 D	G 30	FG 30	FC300
	K2.2.C.UT	08.2	EN-GJL-350	0.6035	Grade 350	-	0135	No 50 B	Ft 35 D	G 35	FG 35	FC350
	K2.3.C.UT	08.3	GGL-NiCr20-2	0.6660	L-NiCuCr202	-	0523	A436 Type 2	L-NC 202	-	-	-
Ferros fundidos	**Ferros fundidos nodulares**											
	K3.1.C.UT	09.1	EN-GJS-400-15	0.7040	SNG 420/12	-	0717-02	60-40-18	FCS 400-12	GS 370-17	FGE 38-17	FCD400
	K3.1.C.UT	09.1	EN-GJS-400-18-LT	0.7043	SNG 370/17	-	0717-12	-	FGS 370-17	-	-	-
	K3.1.C.UT	09.1	EN-GJS-350-22-LT	0.7033	-	-	0717-15	-	-	-	-	-
	K3.1.C.UT	09.1	EN-GJS-800-7	0.7050	SNG 500/7	-	0727	80-55-06	FGS 500-7	GS 500	FGE 50-7	FCD500
	K3.2.C.UT	09.2	EN-GJS-600-3	0.7060	SNG 600/3	-	0732-03	-	FGS 600-3	-	-	FCD600
	K3.3.C.UT	09.2	EN-GJS-700-2	0.7070	SNG 700/2	-	0737-01	100-70-03	FGS 700-2	GS 700-2	FGS 70-2	FCD700
	K3.5.C.UT	-	EN-GJSA-XNiCr20-2	0.7660	Grade S6	-	0776	A43D2	S-NC 202	-	-	-
	Ferro vermicular											
	K4.1.C.UT	-	EN-GJV-300									
	K4.1.C.UT	-	EN-GJV-350									
	K4.2.C.UT	-	EN-GJV-400									
	K4.2.C.UT	-	EN-GJV-450									
	K4.2.C.UT	-	EN-GJV-500									
	Ferro dúctil austemperado											
	K5.1.C.NS	-	EN-GJS-800-8	-	-	-	-	ASTM A897 No. 1	-	-	-	-
	K5.1.C.NS	-	EN-GJS-1000-5	-	-	-	-	ASTM A897 No. 2	-	-	-	-
	K5.2.C.NS	-	EN-GJS-1200-2	-	-		-	ASTM A897 No. 3	-	-	-	-
	K5.2.C.NS	-	EN-GJS-1400-1	-	-	-	-	ASTM A897 No. 4	-	-	-	-
	K5.3.C.NS	-	-	-	-	-	-	ASTM A897 No. 5	-	-	-	-

Lista de referência cruzada de materiais

ISO	MC	CMC	País Europa	Alemanha	Grã-Bretanha		Suécia	EUA	França	Itália	Espanha	Japão
			Norma DIN EN	W.-nr.	BS	EN	SS	AISI/SAE/ASTM	AFNOR	UNI	UNE	JIS
N	**Ligas à base de alumínio**											
Metais não ferrosos	N1.3.C.AG	30.21	G-AlSi9MgWA	3.2373	-	-	4251	SC64D	A-S7G	-	-	C4BS
	N1.3.C.UT	30.21	G-ALMG5	-	LM5	-	4252	GD-AlSi12	A-SU12	-	-	AC4A
	N1.3.C.UT/N1.3.C.AG	30.21/30.22	-	-	LM25	-	4244	356.1	-	-	-	A5052
	N1.3.C.UT	-	GD-AlSi12	-	-	-	4247	A413.0	-	-	-	A6061
	N1.3.C.AG	-	GD-AlSi8Cu3	-	LM24	-	4250	A380.1	-	-	-	A7075
	N1.3.C.UT	-	G-AlSi12(Cu)	-	LM20	-	4260	A413.1	-	-	-	ADC12
	N1.3.C.UT	-	G-AlSi12	-	LM6	-	4261	A413.2	-	-	-	-
	N1.3.C.AG	-	G-AlSi10Mg(Cu)	-	LM9	-	4253	A360.2	-	-	-	-
S	**Ligas à base de níquel**											
Super ligas resistentes ao calor	S2.0.Z.AG	20.22	S-NiCr13A16MoNb	LW2 4670	mar-46	-	-	5391	NC12AD	-	-	-
	S2.0.C.UT	20.24	NiCo15Cr10MoAlTi	LW2 4674	-	-	-	AMS 5397	-	-	-	-
	S2.0.Z.AG	20.22	NiFe35Cr14MoTi	LW2.4662	-	-	-	5660	ZSNCDT42	-	-	-
	S2.0.Z.AG	20.22	NiCr19Fe19NbMo	LW2.4668	HR8	-	-	5383	NC19eNB	-	-	-
	S2.0.Z.AG	20.22	NiCr20TiAk	2.4631	Hr401.601	-	-	-	NC20TA	-	-	-
	S2.0.Z.AG	20.22	NiCr19Co11MoTi	2.4973	-	-	-	AMS 5399	NC19KDT	-	-	-
	S2.0.Z.AG	20.22	NiCr19Fe19NbMo	LW2.4668	-	-	-	AMS 5544	NC20K14	-	-	-
	S2.0.Z.AN	20.21	-	2.4603	-	-	-	5390A	NC22FeD	-	-	-
	S2.0.Z.AN	20.21	NiCr22Mo9Nb	2.4856	-	-	-	5666	NC22FeDNB	-	-	-
	S2.0.Z.AN	20.21	NiCr20Ti	2.4630	HR5.203-4	-	-	-	NC20T	-	-	-
	S2.0.Z.AG	20.22	NiCu30AL3Ti	2.4375	3072-76	-	-	4676	-	-	-	-
	Ligas à base de cobalto											
	-	-	CoCr20W15Ni	-	-	-	-	5537C, AMS	KC20WN	-	-	-
	S3.0.Z.AG	20.32	CoCr22W14Ni	LW2.4964	-	-	-	5772	KC22WN	-	-	-
	Ligas de titânio											
	S4.2.Z.AN	23.22	TiAl5Sn2.5	3.7115.1	TA14/17	-	-	UNS R54520 UNS R56400	T-A5E	-	-	-
	S4.2.Z.AN	23.22	TiAl6V4	3.7165.1	TA10-13/TA28	-	-	UNS R56401	T-A6V	-	-	-
	S4.3.Z.AN	23.22	TiAl5V5Mo5Cr3	-	-	-	-	-	-	-	-	-
	S4.2.Z.AN	23.22	TiAl4Mo4Sn4Si0.5	3.7185	-	-	-	-	-	-	-	-
			Marcas									
			Ligas à base de ferro									
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	S2.0.Z.AG	20.2	Nimonic PE 13									
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	S2.0.Z.AN	20.21	Monel 400									
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	S2.0.Z.AG	S2.0.Z.AG	Inconel 718									
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A ISO 13399 é uma norma internacional que simplifica a troca de dados para ferramentas de corte. Você observará uma diferença nos novos parâmetros e descrições de cada ferramenta.

Pela primeira vez, há uma maneira padronizada de descrever os dados de produtos referentes às ferramentas de corte disponíveis. Quando todas as ferramentas na indústria compartilham os mesmos parâmetros e definições, comunicar as informações das ferramentas entre os sistemas de software torna-se algo muito mais rápido.

O que isso significa para você?

Basicamente, significa que seus sistemas podem conversar com os nossos, pois falam a mesma língua. Baixe os dados do produto de nosso website e use-os diretamente em seu software CAD/CAM para montar as ferramentas que você usa na produção. Não há necessidade de procurar informações em catálogos e interpretar dados de um sistema para outro. Imagine quanto tempo você economizará!

Nome abreviado	Nome recomendado
ADJLN	Limite mínimo de ajuste
ADJLX	Limite máximo de ajuste
ADJRG	Faixa de ajuste
ALP	Ângulo de folga axial
AN	Ângulo de folga principal
ANN	Ângulo de folga menor
APMX	Profundidade de corte máxima
APMX_EFW	Profundidade de corte máxima - avanço final
APMX_FFW	Profundidade de corte máxima - avanço lateral
AZ	Profundidade máxima de mergulho
B	Largura da haste
BAWS	Ângulo do corpo - lado da peça
BAMS	Ângulo do corpo - lado da máquina
BBD	Balanceado pelo desenho
BBR	Balanceado por teste rotacional
BCH	Comprimento do chanfro de canto
BD	Diâmetro do corpo
BHTA	Ângulo do cone de transição
BN	Largura da fase frontal
BS	Comprimento da aresta alisadora
BSG	Norma
BSR	Raio da aresta alisadora
CDX	Ângulo da aresta transversal
CEMR	Raio da aresta de corte principal
CF	Chanfro
CHBA	Ângulo do chanfro no corpo
CHBL	Comprimento do chanfro do corpo
CHW	Largura do chanfro de canto
CICT	Número de cortes
$CICT_{BALL}$	Número de arestas de corte - Pastilha Ball Nose
$CICT_{E}$	Número de arestas de corte - posição final
$CICT_{P}$	Número de arestas de corte - posição periférica
$CICT_{S}$	Número de arestas de corte - posição lateral
$CICT_{SP}$	Número de arestas de corte - Pastilha para proteção da haste
$CICT_{T}$	Número de arestas de corte - total
CND	Diâmetro de entrada para refrigeração
CNSC	Código do tipo de entrada de refrigeração
CNT	Tamanho da rosca da entrada para refrigeração
COATING	Cobertura
CP	Pressão máx. de refrigeração
CRKS	Tamanho da rosca do tirante de tração
CRNT	Tamanho da rosca de entrada radial de refrigeração
CTPT	Tipo de operação
CUTDIA	Máximo diâmetro de corte da peça
CW	Largura de corte
CWN	Largura mínima de corte
CWTOLL	Menor tolerância da largura de corte
CWTOLU	Maior tolerância da largura de corte
CWX	Largura máxima de corte
CXSC	Código do tipo de saída para refrigeração
CZC	Código do tamanho da conexão
CZC_{MS}	Código do tamanho de conexão - lado da máquina
CZC_{WS}	Código do tamanho de conexão - lado da peça
D1	Diâmetro do furo de fixação
DAH	Diâmetro do furo de acesso
DAXIN	Diâmetro interno mínimo do canal axial
DAXN	Diâmetro externo mínimo do canal axial
DAXX	Diâmetro externo máximo do canal axial

DBC	Diâmetro do círculo para fixação
DC	Diâmetro de corte
DCB	Diâmetro do furo de conexão
DCBN	Diâmetro mínimo do furo de conexão
DCBX	Diâmetro máximo do furo de conexão
DCF	Diâmetro de corte da face de contato
DCIN	Diâmetro de corte interno
DCN	Mínimo diâmetro de corte
DCON	Diâmetro de conexão
$DCON_{MS}$	Diâmetro de conexão - lado da máquina
$DCON_{WS}$	Diâmetro de conexão - lado da peça
$DCONN_{WS}$	lado mínimo da peça com o diâmetro de conexão
$DCONX_{WS}$	lado máximo da peça com o diâmetro de conexão
DCPS	Tamanho do alojamento para chip de dados.
$DCSF_{MS}$	Diâmetro da superfície de contato - lado da máquina
$DCSF_{WS}$	Diâmetro da superfície de contato - lado da peça
DCX	Máximo diâmetro de corte
DHUB	Diâmetro do cubo
DIX	Máximo diâmetro para interferência no trocador de ferramenta
DMIN	Diâmetro mínimo do furo
DMM	Diâmetro da haste
DN	Diâmetro do pescoço
DRVCT	Número de guias
DSGN	Desenho
EPSR	Ângulo da pastilha
FHA	Ângulo de hélice do canal
FLGT	Espessura da flange
FTDZ	Tamanho do diâmetro para rosca
GB	Ângulo da face frontal
H	Altura da haste
HA	Altura teórica da rosca
HB	Diferença de altura da rosca
HBH	Altura do offset da cabeça até o fundo
HC	Altura real da rosca
HF	Altura funcional
HRY	Menor ponto do plano de referência
HTB	Altura do corpo
HTH	Altura
IC	Diâmetro do círculo inscrito
INSL	Comprimento da pastilha
INSUC	Código de uso da pastilha
IZC	Código do tamanho da pastilha
KAPR	Ângulo da aresta de corte da ferramenta
KAPR_EFW	Ângulo da aresta de corte da ferramenta - avanço final
KCH	Chanfro de canto
KRINS	Ângulo da aresta de corte principal
KWW	Largura da chaveta
L	Comprimento da aresta de corte
LAMS	Ângulo de inclinação
LB	Comprimento do corpo
LCF	Comprimento do canal para cavacos
LCOX	Comprimento máximo de corte
LE	Comprimento efetivo da aresta de corte
LF	Comprimento útil
LFN	Comprimento útil mínimo
LH	Comprimento da cabeça
LPR	Comprimento de programação
LS	Comprimento da haste
LSC	Comprimento de fixação
LSCN	Comprimento mínimo de fixação
LSCS	Distância até o início da fixação
LSCX	Comprimento máximo de fixação
LSD	Comprimento da haste
LU	Comprimento útil (máx. recomendado)
LU_BFW	Comprimento útil - faceamento reverso
LUX	Comprimento máximo utilizável
MHD	Distância do furo de montagem
MIID	Identificação da pastilha padrão
$MIID_E$	Identificação da pastilha padrão - posição final
$MIID_S$	Identificação da pastilha padrão - posição lateral
$MIID_C$	Identificação da pastilha padrão - posição central
$MIID_P$	Identificação da pastilha padrão - posição periférica
$MIID_I$	Identificação da pastilha padrão - posição intermediária
MMCC	Código para torque de pré-set
MMCX	Torque de corte máximo
NOF	Número de canais
NT	Número de dentes
OAH	Altura total
OAL	Comprimento total
OAW	Largura total
OH	Balanço recomendado
OHN	Balanço mínimo
OHX	Balanço máximo
ORDCODE	Código de pedido

PCL	Comprimento cilíndrico periférico
PDX	Distância ex do perfil
PDY	Distância ey do perfil
PHD	Diâmetro do furo pré-usinado
PHDX	Diâmetro máximo do furo pré-usinado
PL	Comprimento da ponta
PNA	Ângulo do perfil
PRFRAD	Raio do perfil
PRSPC	Especificação do perfil
PSIR	Ângulo de ataque da ferramenta
PSIRL	Ângulo da aresta de corte principal, versão esquerda
PSIRR	Ângulo da aresta de corte principal, versão direita
PSW	Largura do canal pré-usinado
RADH	Altura radial do corpo
RADW	Largura radial do corpo
RAR	Ângulo de folga do lado direito
RE	Raio de canto
REEQ	Equivalente ao raio do canto
REL	Raio de canto esquerdo
RER	Raio de canto direito
RETOLL	Menor tolerância do raio de canto
RETOLU	Maior tolerância do raio de canto
RGL	Comprimento da reafiação
RMPX	Ângulo máximo para usinagem em rampa
RPMX	Rotação máxima
S	Raio da peça
SDL	Comprimento do diâmetro escalonado
SIG	Ângulo da ponta
SPTL	Linha de divisão
SSC	Código do tamanho do assento da pastilha
SSC_E	Código do tamanho do assento da pastilha - posição final
SSC_P	Código do tamanho do assento da pastilha - posição periférica
SSC_S	Código do tamanho do assento da pastilha - posição lateral
STA	Ângulo escalonado
STDNO	Número da norma
SUBSTRATE	Substrato
TCDC	Classe de tolerância do diâmetro de corte
TCDCON	Tolerância do diâmetro de conexão
TCDMM	Tolerância do diâmetro da haste
TCHA	Tolerância atingível do furo
TCHAL	Menor tolerância atingível do furo
TCHAU	Maior tolerância atingível do furo
TCT	Classe de tolerância da ferramenta
TCTR	Classe de tolerância da rosca
TD	Diâmetro da rosca
TDZ	Dimensão da rosca
TFLA	Total flutuação do macho à frente
TFLB	Total flutuação do macho para trás
TG	Gradiente do cone
THBTP	Conicidade da rosca
THCA	Ângulo de correção helicoidal da rosca
THCHT	Tipo de chanfro do macho
THFT	Tipo de rosca
THFTS	Tipo de rosca standard
THL	Comprimento da rosca
THUB	Espessura do cubo
TP	Passo da rosca
TPI	Fios por polegada
TPIN	Mínimos fios por polegada
TPIX	Máximos fios por polegada
TPN	Passo mínimo da rosca
TPT	Perfil da rosca
TPX	Passo máximo da rosca
TRMAX	Gama de machos máx.
TQ	Torque
TSYC	Código da ferramenta
TTP	Tipo de rosca
ULDR	Relação comprimento/diâmetro útil
VCX	Velocidade de corte máxima
W1	Largura da pastilha
WB	Largura do corpo
WF	Largura útil
WFCIRP	Largura para o ponto de referência da ferramenta de corte
WSC	Largura de fixação
WT	Peso do item
ZADJ	número de pastilhas ajustáveis
ZEFF	Número efetivo de arestas de corte - frontal
ZEFP	Número efetivo de arestas de corte na periferia (ZEFP)
ZWX	Número máximo de pastilhas Wiper

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