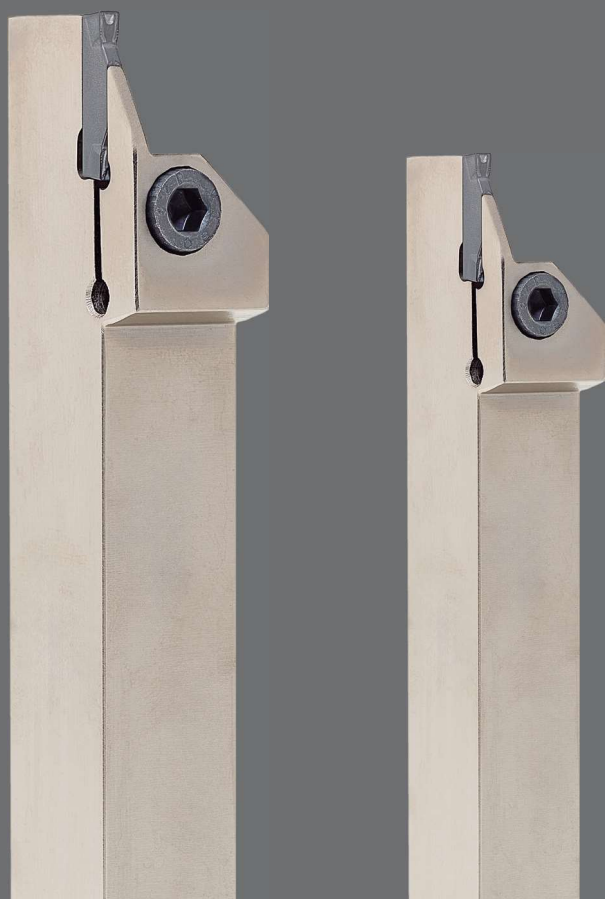


GROOVING PLUS



Grooving Plus is designed to address the specific requirements of parting and grooving applications, offering a new level of process security and productivity for machining operation.

O Grooving Plus foi projetado para atender às exigências específicas de aplicações de corte e canais, oferecendo um novo nível de segurança de processo e produtividade para operações de fresagem.

Grooving Plus está diseñado para abordar los requisitos específicos de aplicaciones de tronzado y ranurado, ofreciendo un nuevo nivel de seguridad y productividad para operaciones de fresado.

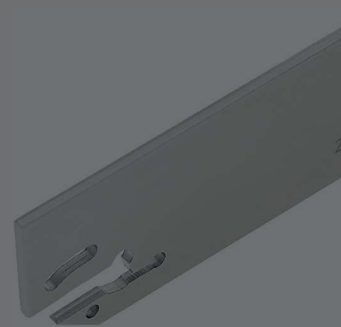
INSERTS > page 880

- > Cutting width from 2,0mm to 6,0mm
Largura de corte de 2,0mm a 6,0mm | Ancho de corte de 2,0mm a 6,0mm
- > 1 or 2 cutting edges
1 ou 2 arestas de corte | 1 o 2 filos de corte
- > Left, neutral, right and round inserts
Pastilhas esquerdas, neutras, direitas e redondas | Plaquitas izquierdas, neutras, derechas y redondas



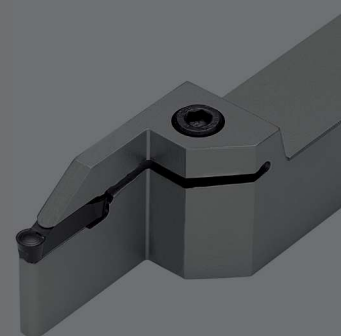
BLADES & TOOLHOLDERS > page 884

- > Blade GPNC
Lâmina GPNC | Lama GPNC
- > Toolholders CPTS and DPTS
Suportes CPTS e DPTS | Herramientas CPTS y DPTS



GROOVING TOOLHOLDERS > page 886

- > Monoblock
Monobloco | Monobloque
- > Right and Left
Esquerdo e Direito | Izquierdo y derecho



For R or L Insert type

GP	0300	B	020	-	050	R	02	-	MC
1	2	3	4		5	6	7		8

For N Insert type

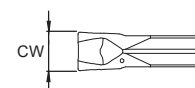
GP	0300	B	020	-	N	02	-	MC
1	2	3	4		6	7		8

1 - Product Line

GP - Grooving Plus

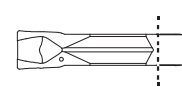
2 - Cutting Width

0200 - 2,00mm | 0300 - 3,00mm | 0400 - 4,00mm | 0500 - 5,00mm | 0600 - 6,00mm



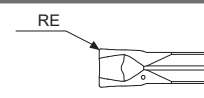
3 - Seat Size

A - GP0200 | B - GP0300 | C - GP0400 | D - GP0500 | E - GP0600

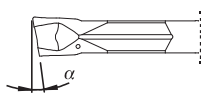


4 - Cutting Radius

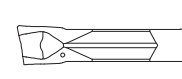
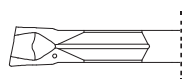
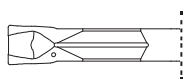
020 - 0,20mm | 025 - 0,25mm | 040 - 0,40mm | 600 - 6,00mm



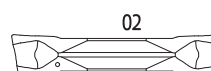
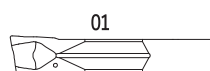
5 - Relief Angle



6 - Insert Type



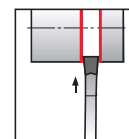
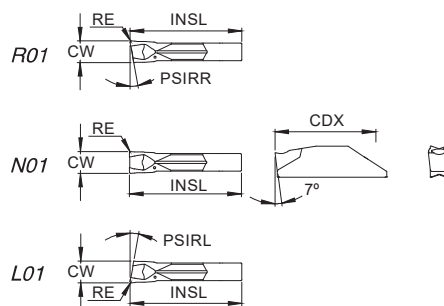
7 - N° of Cutting Edges



8 - Chipbreaker

MC - Medium Cut Off | MG - Medium Grooving | MM - Medium Multi Function | MP - Medium Profiling | NP - Non-Ferrous Profiling

GP...01-MC Medium Cut Off



		P				M				K			S		Dimensions Dimensões Dimensiones (mm)						Cutting conditions Condições de corte Condiciones de corte		
		CVD		PVD		CVD		PVD		CVD			PVD										
		⁽²⁾ Grade code		N2	U6	G4	P4	U6	G4	P4	L6	N2	U6	G4	P4								
⁽¹⁾ Geometry code	ISO/ANSI Reference	PH5135	PH5135	PH7920	PH930	PH5135	PH7920	PH930	PH5320	PH5135	PH5135	PH7920	PH930	CW	RE	INSL	PSIRR/L	CDX ¹	Seat ² Size	fn (mm/r)	Min	Max	
1130422	GP0200A020-N01-MC													2,0	0,2	20,2	-	-	A	0,06	0,05	0,10	
1130423	GP0300B020-N01-MC													3,0	0,2	20,1	-	-	B	0,08	0,05	0,15	
1130424	GP0400C020-N01-MC													4,0	0,2	20,5	-	-	C	0,13	0,05	0,25	
1130425	GP0200A020-050R01-MC													2,0	0,2	20,2	5,0	-	A	0,05	0,04	0,08	
1130426	GP0300B020-050R01-MC													3,0	0,2	20,1	5,0	-	B	0,07	0,04	0,12	
1130427	GP0400C020-050R01-MC													4,0	0,2	20,5	5,0	-	C	0,10	0,04	0,20	
1130428	GP0200A020-050L01-MC													2,0	0,2	20,2	5,0	-	A	0,05	0,04	0,08	
1130429	GP0300B020-050L01-MC													3,0	0,2	20,1	5,0	-	B	0,07	0,04	0,12	
1130430	GP0400C020-050L01-MC													4,0	0,2	20,5	5,0	-	C	0,10	0,04	0,20	

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Itens de stock

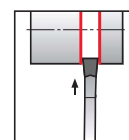
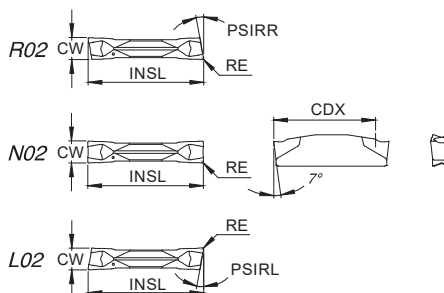
Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

Stock available until sold out | Stock disponível até acabar o stock | Stock disponible hasta acabar el stock

1 - When using inserts with 1 Cutting edge, the "a" measure is given by the Toolholder | 2 - Correspond to a Specific Holder

GP...02-MC Medium Cut Off



		P				M			K			S		Dimensions Dimensões Dimensiones (mm)							Cutting conditions Condições de corte Condiciones de corte			
		CVD		PVD		CVD		PVD		CVD			PVD											
		⁽²⁾ Grade code		N2	U6	G4	P4	U6	G4	P4	L6	N2	U6	G4	P4	CW	RE	INSL	PSIRR/L	CDX	Seat ² Size	fn (mm/r)	Min	Max
⁽¹⁾ Geometry code	ISO/ANSI Reference	PH5135	PH5135	PH7920	PH930	PH5135	PH7920	PH930	PH5320	PH5135	PH5135	PH7920	PH930											
1130383	GP0200A020-N02-MC				⊗			⊗	⊗				⊗			2,0	0,2	20,5	-	18,5	A	0,06	0,05	0,10
1130384	GP0300B020-N02-MC		⊗		⊗	⊗		⊗	⊗		⊗		⊗			3,0	0,2	20,4	-	18,5	B	0,08	0,05	0,15
1130397	GP0400C020-N02-MC		⊗		⊗	⊗		⊗	⊗		⊗		⊗			4,0	0,2	21,0	-	18,5	C	0,13	0,05	0,25
1130416	GP0200A020-050R02-MC		⊗	⊗	⊗	⊗	⊗	⊗	○		⊗	⊗	⊗			2,0	0,2	20,5	5,0	18,5	A	0,05	0,04	0,08
1130417	GP0300B020-050R02-MC	⊗	⊗		⊗	⊗		⊗	○	⊗	⊗		⊗			3,0	0,2	20,4	5,0	18,5	B	0,07	0,04	0,12
1130418	GP0400C020-050R02-MC		○			○		○	○		○		○			4,0	0,2	21,0	5,0	18,5	C	0,10	0,04	0,20
1130419	GP0200A020-050L02-MC	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗	⊗	⊗			2,0	0,2	20,5	5,0	18,5	A	0,05	0,04	0,08
1130420	GP0300B020-050L02-MC	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗	⊗	⊗			3,0	0,2	20,4	5,0	18,5	B	0,07	0,04	0,12
1130421	GP0400C020-050L02-MC		○		○	○		○	○		○		○			4,0	0,2	21,0	5,0	18,5	C	0,10	0,04	0,20

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Itens de stock

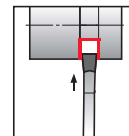
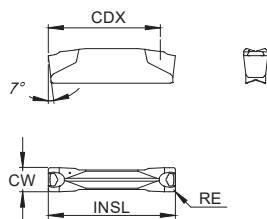
Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

Stock available until sold out | Stock disponível até acabar o stock | Stock disponible hasta acabar el stock

2 - Correspond to a Specific Holder

GP...02-MG Medium Grooving



		P				M			K		S		Dimensions Dimensões Dimensiones (mm)					Cutting conditions Condições de corte Condiciones de corte			
		CVD		PVD		CVD		PVD	CVD		PVD										
		⁽²⁾ Grade code		L8	U6	G4	T1	U6	G4	T1	L6	U6	G4	T1	CW	RE	INSL	CDX	Seat ² Size	fn (mm/r)	Min
⁽¹⁾ Geometry code	ISO/ANSI Reference	PH5125	PHS135	PH7920	PHP920	PHS135	PH7920	PHP920	PH5320	PHS135	PH7920	PHP920									
1130398	GP0300B020-N02-MG												3,0	0,2	21,0	18,5	B	0,06	0,05	0,10	
1130399	GP0400C040-N02-MG												4,0	0,4	21,0	18,5	C	0,08	0,05	0,15	
1130400	GP0500D040-N02-MG												5,0	0,4	21,0	18,5	D	0,13	0,05	0,25	

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Itens de stock

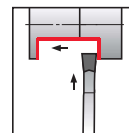
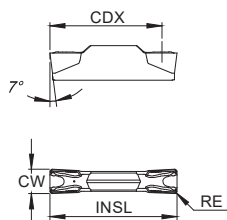
Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

Stock available until sold out | Stock disponível até acabar o stock | Stock disponible hasta acabar el stock

2 - Correspond to a Specific Holder

GP...02-MM Medium Multi Function



		P				M				K			S			Dimensions Dimensões Dimensiones (mm) CW RE INSL CDX ¹ Seat ² Size					Cutting conditions Condições de corte Condiciones de corte Ap (mm) Min Max fn (mm/r) Min Max							
		CVD		PVD		CVD		PVD		CVD		UNC	PVD															
		⁽²⁾ Grade code		U6	G4	T1	P4	U6	G4	T1	P4	L6	U6	25	G4											T1	P4	
⁽¹⁾ Geometry code	ISO/ANSI Reference	PHS135	PH7920	PHP920	PHP930	PHS135	PH7920	PHP920	PHP930	PH5320	PHS135	PH0705	PH7920	PHP920	PHP930													
1130401	GP0300B040-N02-MM															3,0	0,4	21,0	18,5	B	0,8	0,4	1,5	0,09	0,05	0,12		
1130402	GP0400C040-N02-MM															4,0	0,4	21,0	18,5	C	1,1	0,6	2,0	0,12	0,07	0,15		
1130403	GP0500D040-N02-MM															5,0	0,4	21,0	18,5	D	1,5	0,8	2,5	0,14	0,10	0,18		

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Itens de stock

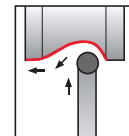
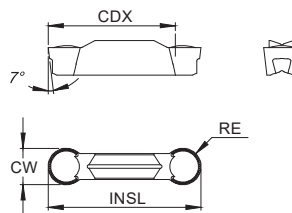
Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

Stock available until sold out | Stock disponível até acabar o stock | Stock disponible hasta acabar el stock

1 - When using inserts with 1 Cutting edge, the "a" measure is given by the Toolholder | 2 - Correspond to a Specific Holder

GP...02-MP Medium Profiling



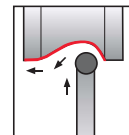
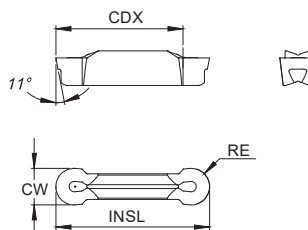
		P		M		K	S		Dimensions Dimensões Dimensiones (mm)					Cutting conditions Condições de corte Condiciones de corte					
		PVD		PVD		CVD	PVD												
		G4	T1	G4	T1	L6	G4	T1											
⁽¹⁾ Geometry code	ISO/ANSI Reference	PH7920	PHp920	PH7920	PHp920	PH5320	PH7920	PHp920	CW	RE	INSL	CDX	Seat ² Size	Ap (mm)	Min	Max	fn (mm/r)	Min	Max
1130607	GP0300B150-N02-MP								3,0	1,5	21,1	18,5	B	0,7	0,04	1,1	0,09	0,04	0,12
1130404	GP0600E300-N02-MP								6,0	3,0	25,2	21,0	E	1,50	0,04	2,20	0,18	0,15	0,22

First choice | Primeira opção | 1ª opción
 Stock item | Produto de stock | Itens de stock
 Available under request | Disponível sobre consulta | Disponible bajo consulta
 Insert order code = (1) Geometry Code + (2) Grade Code

Stock available until sold out | Stock disponível até acabar o stock | Stock disponible hasta acabar el stock

2 - Correspond to a Specific Holder

GP...02-NP Non-Ferrous Profiling



(1) Geometry code	(2) Grade code	N	Dimensions Dimensões Dimensiones (mm)					Cutting conditions Condições de corte Condiciones de corte					
		UNC											
		10											
	ISO/ANSI Reference	PH0910	CW	RE	INSL	CDX	Seat ² Size	Ap (mm)	Min	Max	fn (mm/r)	Min	Max
1130405	GP0600E300-N02-NP		6,0	3,0	25,4	18,5	E	1,30	0,50	2,50	0,20	0,15	0,25

First choice | Primeira opção | 1ª opción
 Stock item | Produto de stock | Itens de stock
 Available under request | Disponível sobre consulta | Disponible bajo consulta
 Insert order code = (1) Geometry Code + (2) Grade Code

Stock available until sold out | Stock disponível até acabar o stock | Stock disponible hasta acabar el stock

2 - Correspond to a Specific Holder

For Blades

GP	N	C	-	080	25	.A	.0
1	2	3		5	6	7	8

For Toolholders

GP	R	C	-	100	010	25.25	.A	.1
1	2	3		4	5	6	7	8

1 - Product Line

GP - Grooving Plus

2 - Work Side

R - Right



N - Neutral



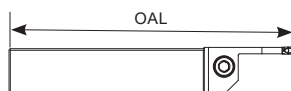
L - Left



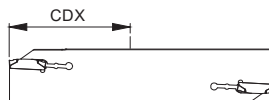
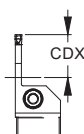
3 - Tool Type

C - Frontal

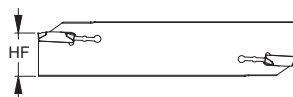
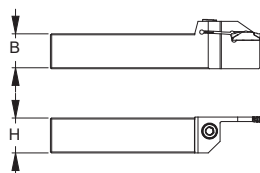
4 - Total toolholder length



5 - Maximum Depth of Cut

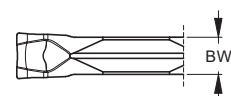


6 - Shaft | Cutting Unit Dimension



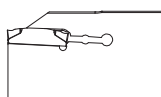
7 - Seat Size

A - 1,60mm | B - 2,30mm | C - 3,30mm | D - 4,30mm | E - 4,00mm | F - 6,60mm

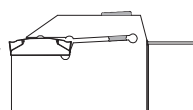


8 - Clamping System

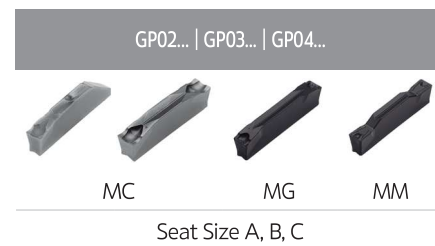
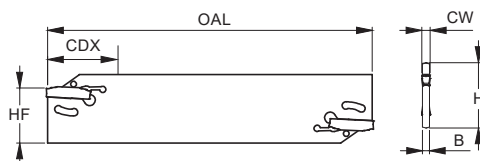
0 - Spring



1 - Screw



GPNC



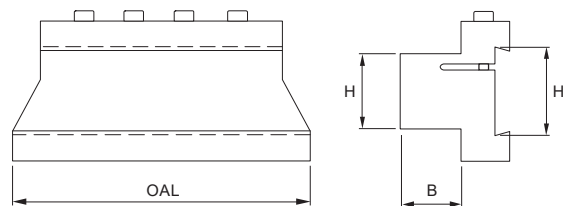
Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)							Insert	Toolholder		Wrench	Stock
		CDX	OAL	H	HF	B	CW	Seat Size		CPTS	DPTS		
213010000	GPNC-020 25.A.0	20	150	32	25,0	1,5	2	A	GP02...	CPTS 32...	DPTS 32...	LE25-30	Ⓢ
213009900	GPNC-055 25.B.0	55	150	32	25,0	2,3	3	B	GP03...	CPTS 32...	DPTS 32...	LE25-30	Ⓢ
213009700	GPNC-055 25.C.0	55	150	32	25,0	3,3	4	C	GP04...	CPTS 32...	DPTS 32...	LE25-30	Ⓢ

Ⓢ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: For inserts with 2 cutting edges, the ar is defined by the insert

CPTS

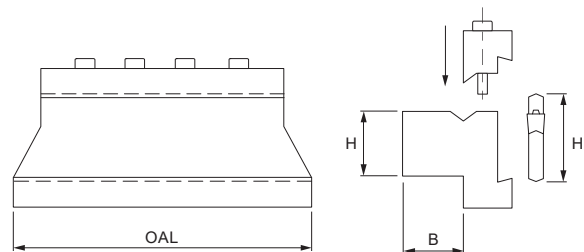


Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)				Kg	Screw	Wrench	Stock
		HF	OAL	H	B				
290006200	CPTS 3220	32	100	20	20	0,700	D0603600	SS50	Ⓢ
290005000	CPTS 3225	32	110	25	25	0,950	D0603600	SS50	Ⓢ
290006300	CPTS 3232	32	120	32	32	1,400	D0603600	SS50	Ⓢ

Ⓢ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

DPTS

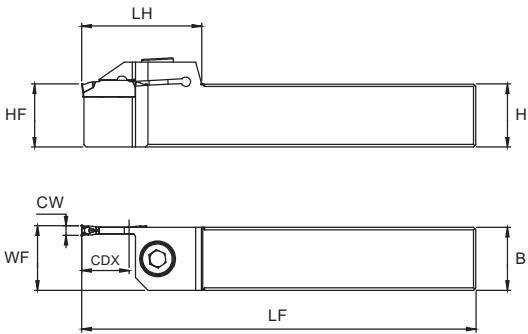


Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)				Kg	Screw	Wrench	Stock
		HF	OAL	H	B				
290073600	DPTS 3220	32	100	20	20	0,750	D0603600	SS50	Ⓢ
290073700	DPTS 3225	32	110	25	25	1,00	D0603600	SS50	Ⓢ
290073800	DPTS 3232	32	120	32	32	1,450	D0603600	SS50	Ⓢ

Ⓢ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

GPLC



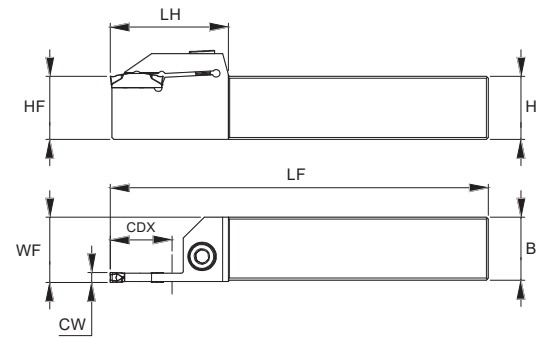
Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)								Seat Size	Insert	Screw	Wrench	Nm	Stock
		CDX	LF	B	H	HF	LH	WF	CW						
183020800	GPLC-100 010 16.16.A.1	10	100	16	16	16	30	16,25	2	A	GP02...	D0602200	SS50	2,0	○
183020900	GPLC-100 015 16.16.A.1	15	100	16	16	16	38	16,25	2		GP02...	D0602200	SS50	2,0	⊗
183021000	GPLC-125 010 20.20.A.1	10	125	20	20	20	32	20,25	2		GP02...	D0602600	SS50	2,0	○
183021100	GPLC-125 015 20.20.A.1	15	125	20	20	20	38	20,25	2		GP02...	D0602600	SS50	2,0	⊗
183021200	GPLC-150 010 25.25.A.1	10	150	25	25	25	34	25,25	2		GP02...	D0603100	SS50	2,0	⊗
183021300	GPLC-150 020 25.25.A.1	20	150	25	25	25	42	25,25	2		GP02...	D0603100	SS50	2,0	⊗
183021400	GPLC-100 010 16.16.B.1	10	100	16	16	16	30	16,5	3	B	GP03...	D0602200	SS50	2,0	○
183021500	GPLC-100 015 16.16.B.1	15	100	16	16	16	38	16,5	3		GP03...	D0602200	SS50	2,0	⊗
183021600	GPLC-125 010 20.20.B.1	10	125	20	20	20	32	20,5	3		GP03...	D0602600	SS50	2,0	○
183021700	GPLC-125 015 20.20.B.1	15	125	20	20	20	38	20,5	3		GP03...	D0602600	SS50	2,0	⊗
183021800	GPLC-150 010 25.25.B.1	10	150	25	25	25	34	25,5	3		GP03...	D0603100	SS50	2,0	⊗
183021900	GPLC-150 020 25.25.B.1	20	150	25	25	25	42	25,5	3		GP03...	D0603100	SS50	2,0	⊗
183022000	GPLC-125 013 20.20.C.1	13	125	20	20	20	32	20,5	4	C	GP04...	D0602600	SS50	3,0	○
183022100	GPLC-125 019 20.20.C.1	19	125	20	20	20	38	20,5	4		GP04...	D0602600	SS50	3,0	⊗
183022200	GPLC-150 013 25.25.C.1	13	150	25	25	25	34	25,5	4		GP04...	D0603100	SS50	3,0	⊗
183022300	GPLC-150 023 25.25.C.1	23	150	25	25	25	42	25,5	4		GP04...	D0603100	SS50	3,0	⊗
183022400	GPLC-125 013 20.20.D.1	13	125	20	20	20	32	20,5	5	D	GP05...	D0602600	SS50	3,0	○
183022500	GPLC-125 019 20.20.D.1	19	125	20	20	20	38	20,5	5		GP05...	D0602600	SS50	3,0	⊗
183022600	GPLC-150 013 25.25.D.1	13	150	25	25	25	34	25,5	5		GP05...	D0603100	SS50	3,0	⊗
183022700	GPLC-150 023 25.25.D.1	23	150	25	25	25	42	25,5	5		GP05...	D0603100	SS50	3,0	⊗
183022800	GPLC-150 015 25.25.E.1	15	150	25	25	25	34	26	6	E	GP06...	D0603100	SS50	4,0	⊗
183022900	GPLC-150 023 25.25.E.1	23	150	25	25	25	42	26	6		GP06...	D0603100	SS50	4,0	⊗

⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: For inserts with 2 cutting edges, the ar is defined by the insert

GP02... GP03... GP04... GP05...				GP06...	
					
MC			MG	MM	MP NP
Seat Size A, B, C, D				Seat Size E	

GPRC



Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)								Seat Size	Insert	Screw	Wrench	Nm	Stock
		CDX	LF	B	H	HF	LH	WF	CW						
183018400	GPRC-100 010 16.16.A.1	10	100	16	16	16	30	16,25	2	A	GP02...	D0602200	SS50	2,0	○
183018500	GPRC-100 015 16.16.A.1	15	100	16	16	16	38	16,25	2		GP02...	D0602200	SS50	2,0	⊗
183018600	GPRC-125 010 20.20.A.1	10	125	20	20	20	32	20,25	2		GP02...	D0602600	SS50	2,0	○
183018700	GPRC-125 015 20.20.A.1	15	125	20	20	20	38	20,25	2		GP02...	D0602600	SS50	2,0	⊗
183018800	GPRC-150 010 25.25.A.1	10	150	25	25	25	34	25,25	2		GP02...	D0603100	SS50	2,0	⊗
183018900	GPRC-150 020 25.25.A.1	20	150	25	25	25	42	25,25	2		GP02...	D0603100	SS50	2,0	⊗
183019000	GPRC-100 010 16.16.B.1	10	100	16	16	16	30	16,5	3	B	GP03...	D0602200	SS50	2,0	○
183019100	GPRC-100 015 16.16.B.1	15	100	16	16	16	38	16,5	3		GP03...	D0602200	SS50	2,0	⊗
183019200	GPRC-125 010 20.20.B.1	10	125	20	20	20	32	20,5	3		GP03...	D0602600	SS50	2,0	○
183019300	GPRC-125 015 20.20.B.1	15	125	20	20	20	38	20,5	3		GP03...	D0602600	SS50	2,0	⊗
183019400	GPRC-150 010 25.25.B.1	10	150	25	25	25	34	25,5	3		GP03...	D0603100	SS50	2,0	⊗
183019500	GPRC-150 020 25.25.B.1	20	150	25	25	25	42	25,5	3		GP03...	D0603100	SS50	2,0	⊗
183018300	GPRC-125 013 20.20.C.1	13	125	20	20	20	32	20,5	4	C	GP04...	D0602600	SS50	3,0	○
183018200	GPRC-125 019 20.20.C.1	19	125	20	20	20	38	20,5	4		GP04...	D0602600	SS50	3,0	⊗
183018100	GPRC-150 013 25.25.C.1	13	150	25	25	25	34	25,5	4		GP04...	D0603100	SS50	3,0	⊗
183018000	GPRC-150 023 25.25.C.1	23	150	25	25	25	42	25,5	4		GP04...	D0603100	SS50	3,0	⊗
183017900	GPRC-125 013 20.20.D.1	13	125	20	20	20	32	20,5	5	D	GP05...	D0602600	SS50	3,0	○
183017800	GPRC-125 019 20.20.D.1	19	125	20	20	20	38	20,5	5		GP05...	D0602600	SS50	3,0	⊗
183017700	GPRC-150 013 25.25.D.1	13	150	25	25	25	34	25,5	5		GP05...	D0603100	SS50	3,0	⊗
183017600	GPRC-150 023 25.25.D.1	23	150	25	25	25	42	25,5	5		GP05...	D0603100	SS50	3,0	⊗
183017500	GPRC-150 015 25.25.E.1	15	150	25	25	25	34	26	6	E	GP06...	D0603100	SS50	4,0	⊗
183020500	GPRC-150 023 25.25.E.1	23	150	25	25	25	42	26	6		GP06...	D0603100	SS50	4,0	⊗

⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

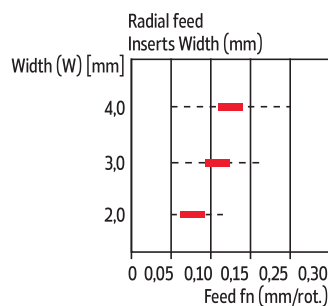
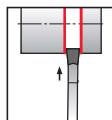
Note: For inserts with 2 cutting edges, the ar is defined by the insert

GP02... GP03... GP04... GP05...				GP06...	
MC	MG	MM	MP	NP	
Seat Size A, B, C, D				Seat Size E	

Feed recommendations and geometry descriptions

Grooving & Parting Off

GP...02-MC

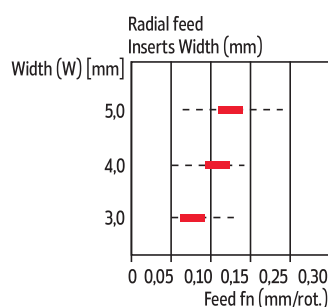
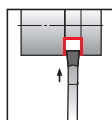
**Medium Parting Off**

Recommended for parting off, thin walled tubes and small diameter components in all materials.

The positive geometry eliminates the risk of built-up edge.

Low cutting forces resulting in reduced vibration.

GP...02-MG

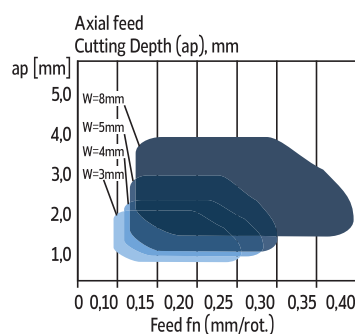
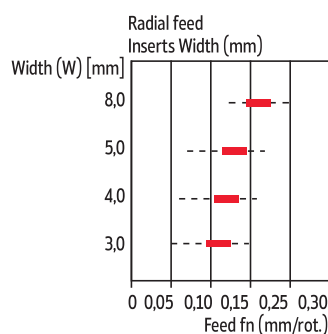
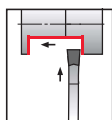
**Medium Grooving**

Outstanding chip control.

Reduces chip width, resulting in improved surface finish.

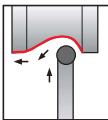
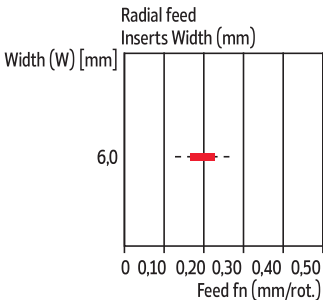
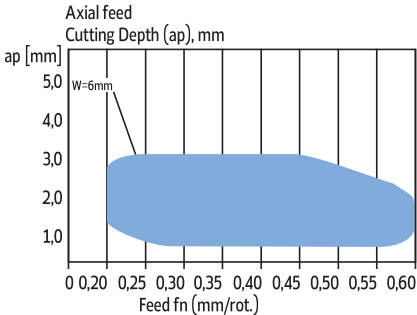
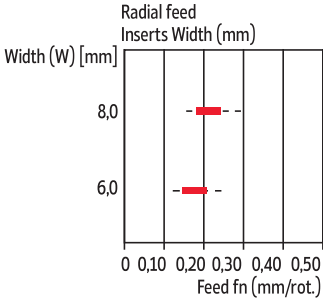
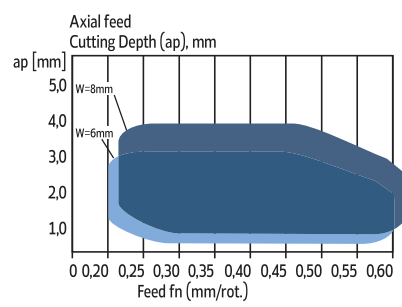
For all materials.

GP...02-MM

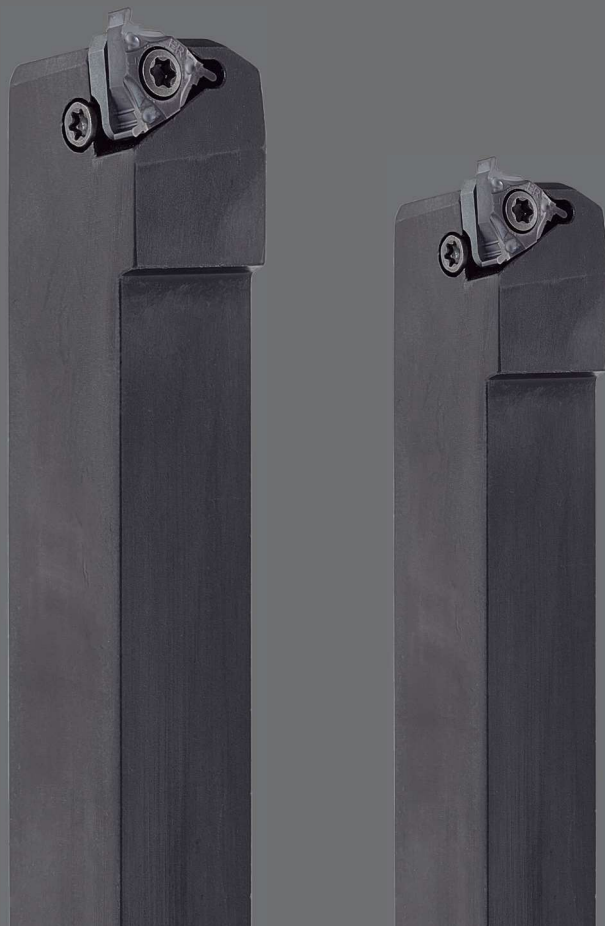
**Medium Multi Function
(Grooving & Turning)**

For grooving and turning in all materials.

Good chip control.

Feed recommendations and geometry descriptions			Grooving & Parting Off
GP...02-MP  			Medium Profiling For profiling all materials. Outstanding chip control even at low feeds and small depths of cut. Good surface finish.
			

GROOVING & PARTING OFF



These are standard tools for grooving and parting off applications. With trigon inserts, it is possible to perform internal and external grooving.

Estas são ferramentas padrão para aplicações de corte e canal. Com pastilhas trigonais é possível realizar canais internos e externos.

Estas son herramientas estándar para aplicaciones de ranurado y tronzado. Con las plaquitas trigon es posible realizar ranurados interiores y exteriores.

INSERTS > page 892

- > GCMX- L/N/R and SANCAR
GCMX-L/N/R e SANCAR | GCMX-L/N/R y SANCAR
- > 1 cutting edge
1 aresta de corte | 1 filo de corte



BLADES > page 897

- > BLST and BLS
Lâminas BLST e BLS | Lamas BLST y BLS
- > Toolholders CPTS and DPTS
Suportes CPTS e DPTS | Herramientas CPTS y DPTS



TOOLHOLDERS > page 900

- > CPTS and DPTS
Suportes CPTS e DPTS | Herramientas CPTS y DPTS



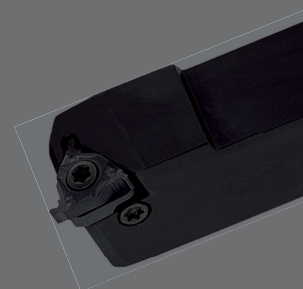
TRIGON INSERTS > page 901

- > Flat and Full Radius Grooving inserts
Pastilhas para canais planos e de raio completo | Plaquetas de ranurado de radio plano y completo
- > External and Internal
Externo e Interno | Externo e interno
- > From sizes 11 to 16
De tamanhos de 11 a 16 | De tamaños de 11 a 16



TOOLHOLDERS > page 904

- > External and Internal
Externo e Interno | Externo e interno



GCMX & SANCAR INSERTS CODE KEY

Chave de codificação para pastilhas | Llave de codificación para plaquitas

For GCMX Inserts

GCMX

1

-

3

2

R

3

15

4

For SANCAR Inserts

SANCAR

1

-

3

2

R

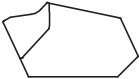
3

5

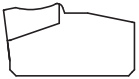
4

1 - Product Line

GCMX

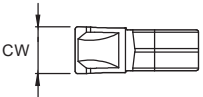


SANCAR



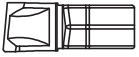
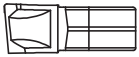
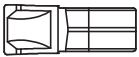
2 - Cutting Width

2mm | 2,4mm | 3mm | 4mm | 4,8mm | 5mm | 6mm



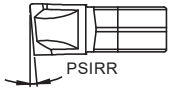
3 - Inserts Type

N - Neutral | R - Right | L - Left

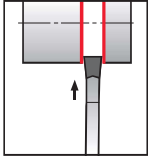
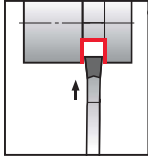
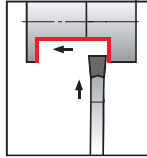
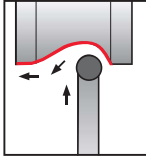


4 - Relief Angle

4 - 4° | 5 - 5° | 8 - 8° | 15 - 15°



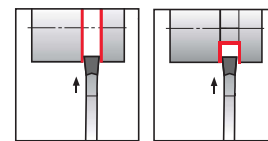
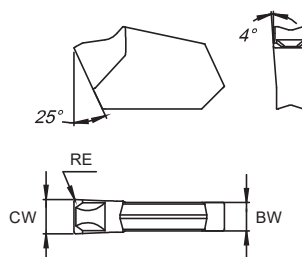
INSERTS OVERVIEW Visão geral | Visión general

Operation		Parting Off	General Grooving	Turning	Profiling
Insert Type + Chipbreaker					
	GCMX-...				
	SANCAR-...				

 First choice | Primeira opção | Primera opción

 Alternative | Alternativa

GCMX-N



			P		M	K	Dimensions Dimensões Dimensiones (mm)			Cutting conditions Condições de corte Condiciones de corte			
			CVD-MT		CVD-MT	CVD-MT							
			L7	N2	N2	L6							N2
⁽¹⁾ Geometry code	ISO Reference	ANSI Reference	PH5115	PH5135	PH5135	PH5320	PH5135	CW	BW	RE	fn (mm/r)	Min	Max
1130165	GCMX-2N	GTN-2N						2,2	1,8	0,16	0,08	0,05	0,16
1130228	GCMX-2.4N	GTN-2.4N						2,4	2,0	0,16	0,10	0,06	0,18
1130169	GCMX-3N	GTN-3N						3,1	2,6	0,20	0,15	0,10	0,25
1130174	GCMX-4N	GTN-4N						4,1	3,5	0,25	0,18	0,10	0,30
1130229	GCMX-4.8N	GTN-4.8N						4,8	4,2	0,28	0,20	0,12	0,35
1130175	GCMX-5N	GTN-5N						5,1	4,5	0,28	0,20	0,12	0,35
1130176	GCMX-6N	GTN-6N						6,4	5,5	0,35	0,25	0,15	0,40
1130449	GCMX-8N	GTN-8N						8,0	7,1	0,40	0,28	0,17	0,45

⊗ First choice | Primeira opção | 1ª opción

⊗ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta
Disponibile bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

GROOVING & PARTING OFF

Grooving Plus

Grooving & Parting Off

SAL - Swiss Automatic Lathes

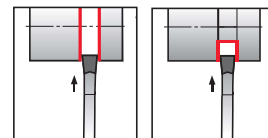
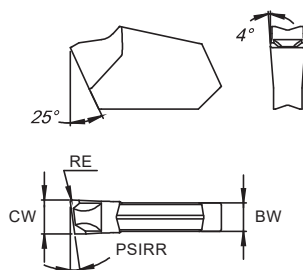
Light Grooving

Forming Grooving

Spare Parts

Technical Data

GCMX-R



			P		M	K		Dimensions Dimensões Dimensiones (mm)				Cutting conditions Condições de corte Condiciones de corte		
			CVD-MT		CVD-MT	CVD-MT								
	⁽²⁾ Grade code		L7	N2	N2	L6	N2							
⁽¹⁾ Geometry code	ISO Reference	ANSI Reference	PH5115	PH5135	PH5135	PH5320	PH5135	CW	BW	RE	PSIRR	fn (mm/r)	Min	Max
1130166	GCMX-2R 4	GTN-2R 4	○	○	○	○	○	2,2	1,8	0,16	4	0,07	0,04	0,13
1130167	GCMX-2R 8	GTN-2R 8	○	○	○	○	○	2,2	1,8	0,16	8	0,06	0,04	0,11
1130255	GCMX-2R 15	GTN-2R 15	○	○	○	○	○	2,2	1,8	0,16	15	0,06	0,04	0,09
1130257	GCMX-2.4R 4	GTN-2.4R 4	○	○	○	○	○	2,4	2,0	0,16	4	0,08	0,04	0,14
1130233	GCMX-2.4R 8	GTN-2.4R 8	○	○	○	○	○	2,4	2,0	0,16	8	0,07	0,04	0,12
1130258	GCMX-2.4R 15	GTN-2.4R 15	○	○	○	○	○	2,4	2,0	0,16	15	0,06	0,04	0,10
1130170	GCMX-3R 4	GTN-3R 4	○	○	○	○	○	3,1	2,6	0,20	4	0,08	0,05	0,15
1130171	GCMX-3R 8	GTN-3R 8	○	○	○	○	○	3,1	2,6	0,20	8	0,07	0,05	0,12
1130253	GCMX-3R 15	GTN-3R 15	○	○	○	○	○	3,1	2,6	0,20	15	0,06	0,05	0,10
1130261	GCMX-4R 4	GTN-4R 4	○	○	○	○	○	4,1	3,5	0,25	4	0,12	0,08	0,20
1130222	GCMX-4R 8	GTN-4R 8	○	○	○	○	○	4,1	3,5	0,25	8	0,10	0,08	0,12
1130262	GCMX-4R 15	GTN-4R 15	○	○	○	○	○	4,1	3,5	0,25	15	0,10	0,08	0,12
1130264	GCMX-4.8R 4	GTN-4.8R 4	○	○	○	○	○	4,8	4,2	0,28	4	0,18	0,10	0,25
1130230	GCMX-4.8R 8	GTN-4.8R 8	○	○	○	○	○	4,8	4,2	0,28	8	0,13	0,10	0,18
1130265	GCMX-4.8R 15	GTN-4.8R 15	○	○	○	○	○	4,8	4,2	0,28	15	0,12	0,09	0,15
1130268	GCMX-5R 4	GTN-5R 4	○	○	○	○	○	5,1	4,5	0,28	4	0,18	0,10	0,25
1130224	GCMX-5R 8	GTN-5R 8	○	○	○	○	○	5,1	4,5	0,28	8	0,13	0,10	0,18
1130269	GCMX-5R 15	GTN-5R 15	○	○	○	○	○	5,1	4,5	0,28	15	0,12	0,09	0,15
1130272	GCMX-6R 4	GTN-6R 4	○	○	○	○	○	6,4	5,5	0,35	4	0,20	0,10	0,30
1130227	GCMX-6R 8	GTN-6R 8	○	○	○	○	○	6,4	5,5	0,35	8	0,17	0,12	0,20
1130276	GCMX-6R 15	GTN-6R 15	○	○	○	○	○	6,4	5,5	0,35	15	0,14	0,10	0,18

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Ítems de stock

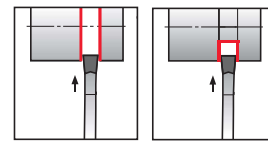
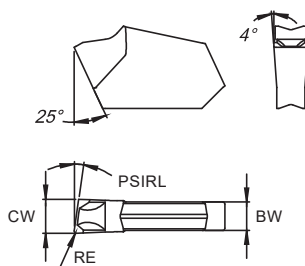
Available under request | Disponível sobre consulta
Disponible bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

INSERTS

Pastilhas | Plaquitas

GCMX-L



			P		M	K		Dimensions Dimensões Dimensiones (mm)				Cutting conditions Condições de corte Condiciones de corte		
			CVD-MT		CVD-MT	CVD-MT								
			L7	N2	N2	L6	N2							
(1) Geometry code	ISO Reference	ANSI Reference	PH5115	PH5135	PH5135	PH5320	PH5135	CW	BW	RE	PSIRL	fn (mm/r)	Min	Max
1130164	GCMX-2L 4	GTN-2L 4	○	○	○	○	○	2,2	1,8	0,16	4	0,07	0,04	0,13
1130220	GCMX-2L 8	GTN-2L 8	○	○	○	○	○	2,2	1,8	0,16	8	0,06	0,04	0,11
1130256	GCMX-2L 15	GTN-2L 15	○	○	○	○	○	2,2	1,8	0,16	15	0,06	0,04	0,09
1130259	GCMX-2.4L 4	GTN-2.4L 4	○	○	○	○	○	2,4	2,0	0,16	4	0,08	0,04	0,14
1130232	GCMX-2.4L 8	GTN-2.4L 8	○	○	○	○	○	2,4	2,0	0,16	8	0,07	0,04	0,12
1130260	GCMX-2.4L 15	GTN-2.4L 15	○	○	○	○	○	2,4	2,0	0,16	15	0,06	0,04	0,10
1130221	GCMX-3L 4	GTN-3L 4	○	○	○	○	○	3,1	2,6	0,20	4	0,08	0,05	0,15
1130168	GCMX-3L 8	GTN-3L 8	○	○	○	○	○	3,1	2,6	0,20	8	0,07	0,05	0,12
1130254	GCMX-3L 15	GTN-3L 15	○	○	○	○	○	3,1	2,6	0,20	15	0,06	0,05	0,10
1130173	GCMX-4L 4	GTN-4L 4	○	○	○	○	○	4,1	3,5	0,25	4	0,12	0,08	0,20
1130223	GCMX-4L 8	GTN-4L 8	○	○	○	○	○	4,1	3,5	0,25	8	0,10	0,08	0,12
1130263	GCMX-4L 15	GTN-4L 15	○	○	○	○	○	4,1	3,5	0,25	15	0,10	0,08	0,12
1130266	GCMX-4.8L 4	GTN-4.8L 4	○	○	○	○	○	4,8	4,2	0,28	4	0,18	0,10	0,25
1130231	GCMX-4.8L 8	GTN-4.8L 8	○	○	○	○	○	4,8	4,2	0,28	8	0,13	0,10	0,18
1130267	GCMX-4.8L 15	GTN-4.8L 15	○	○	○	○	○	4,8	4,2	0,28	15	0,12	0,09	0,15
1130270	GCMX-5L 4	GTN-5L 4	○	○	○	○	○	5,1	4,5	0,28	4	0,18	0,10	0,25
1130225	GCMX-5L 8	GTN-5L 8	○	○	○	○	○	5,1	4,5	0,28	8	0,13	0,10	0,18
1130271	GCMX-5L 15	GTN-5L 15	○	○	○	○	○	5,1	4,5	0,28	15	0,12	0,09	0,15
1130274	GCMX-6L 4	GTN-6L 4	○	○	○	○	○	6,4	5,5	0,35	4	0,20	0,10	0,30
1130226	GCMX-6L 8	GTN-6L 8	○	○	○	○	○	6,4	5,5	0,35	8	0,17	0,12	0,20
1130275	GCMX-6L 15	GTN-6L 15	○	○	○	○	○	6,4	5,5	0,35	15	0,14	0,10	0,18

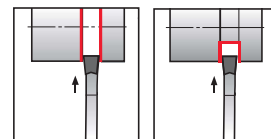
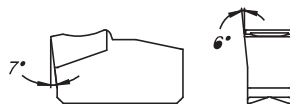
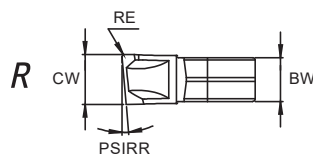
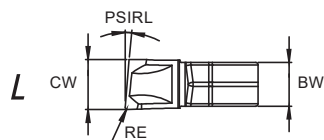
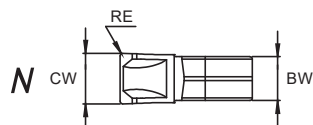
First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Ítems de stock

Available under request | Disponível sobre consulta
Disponible bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

SANCAR



			P		M	K		Dimensions Dimensões Dimensiones (mm)				Cutting conditions Condições de corte Condiciones de corte		
			CVD-MT		CVD-MT	CVD-MT								
			L7	N2	N2	L6	N2							
⁽¹⁾ Geometry code	ISO Reference	ANSI Reference	PH5115	PH5135	PH5135	PH5320	PH5135	CW	BW	RE	PSIRR/L	fn (mm/r)	Min	Max
1130186	SANCAR-3N	SANCAR-3N						3,0	2,5	0,25	-	0,13	0,05	0,25
1130187	SANCAR-4N	SANCAR-4N						4,0	3,3	0,25	-	0,18	0,10	0,30
1130189	SANCAR-5N	SANCAR-5N						5,0	4,3	0,25	-	0,22	0,10	0,35
1130185	SANCAR-3L 5	SANCAR-3L 5						3,0	2,5	0,25	5	0,10	0,05	0,15
1130390	SANCAR-4L 5	SANCAR-4L 5						4,0	3,3	0,25	5	0,12	0,08	0,20
1130389	SANCAR-5L 5	SANCAL-5L 5						5,0	4,3	0,25	5	0,15	0,08	0,25
1130288	SANCAR-3R 5	SANCAR-3R 5						3,0	2,5	0,25	5	0,10	0,05	0,15
1130188	SANCAR-4R 5	SANCAR-4R 5						4,0	3,3	0,25	5	0,12	0,08	0,20
1130388	SANCAR-5R 5	SANCAR-5R 5						5,0	4,3	0,25	5	0,15	0,08	0,25

⊗ First choice | Primeira opção | 1ª opción

⊗ Stock item | Produto de stock | Ítems de stock

○ Available under request | Disponível sobre consulta
Disponible bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

BL

1

ST

2

3

3

-

26

4

1 - Product Line

BL - Blade

2 - Blade Type

ST - Standard Blade



S - SANCAR Blade



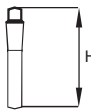
3 - Cutting Width

2mm | 3mm | 4mm | 5mm | 6mm

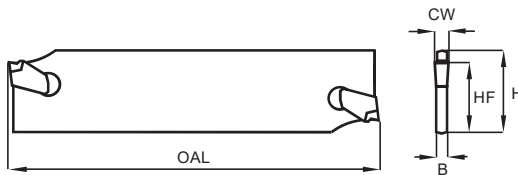


4 - Maximum Depth of Cut

19 - 19mm | 26 - 26mm | 32 - 32mm



BLST (GCMX)



GCMX...



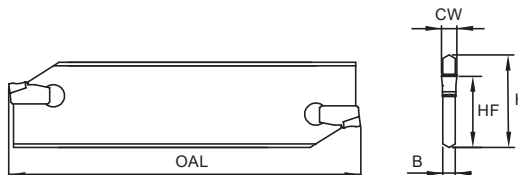
Hand Type
N, R, L

Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)					Inserts	Toolholder		Wrench	Stock
		H	CW	HF	B	OAL		CPTS	DPTS		
183008000	BLST 2-19	19	2	16	1,6	85	GCMX-2...	CPTS 19...	DPTS 19...	LE05	⊗
183008100	BLST 2-26	26	2	21,4	1,6	110	GCMX-2...	CPTS 26...	DPTS 26...	LE05	⊗
213008200	BLST 3-26	26	3	21,4	2,4	110	GCMX-3...	CPTS 26...	DPTS 26...	LE05	⊗
213008300	BLST 4-26	26	4	21,4	3,2	110	GCMX-4...	CPTS 26...	DPTS 26...	LE05	⊗
213008400	BLST 5-26	26	5	21,4	4	110	GCMX-5...	CPTS 26...	DPTS 26...	LE05	⊗
213008500	BLST 6-26	26	6	21,4	5,2	110	GCMX-6...	CPTS 26...	DPTS 26...	LE05	⊗
183008600	BLST 2-32	32	2	25	1,6	150	GCMX-2...	CPTS 32...	DPTS 32...	LE05	⊗
213008700	BLST 3-32	32	3	25	2,4	150	GCMX-3...	CPTS 32...	DPTS 32...	LE05	⊗
213008800	BLST 4-32	32	4	25	3,2	150	GCMX-4...	CPTS 32...	DPTS 32...	LE05	⊗
213008900	BLST 5-32	32	5	25	4	150	GCMX-5...	CPTS 32...	DPTS 32...	LE05	⊗
213009000	BLST 6-32	32	6	25	5,2	150	GCMX-6...	CPTS 32...	DPTS 32...	LE05	⊗

⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: Check the procedures for inserts extration on page D-749.

BLS (SANCAR)



SANCAR...



Hand Type
N, R, L

Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)					Inserts	Toolholder		Wrench	Stock
		H	CW	HF	B	OAL		CPTS	DPTS		
213004600	BLS 3-32	32	3	25	2,4	150	SANCAR 3...	CPTS 32...	DPTS 32...	LE05	⊗
213004700	BLS 4-32	32	4	25	3,2	150	SANCAR 4...	CPTS 32...	DPTS 32...	LE05	⊗
213005500	BLS 5-32	32	5	25	4	150	SANCAR 5...	CPTS 32...	DPTS 32...	LE05	⊗

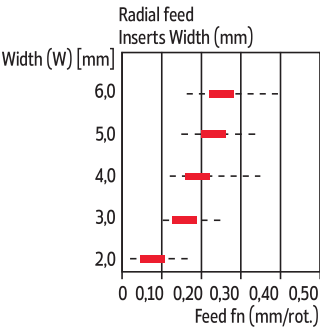
⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: Check the procedures for inserts extration on page D-749.

CUTTING PARAMETERS Parâmetros de corte | Parámetros de corte

Feed recommendations and geometry descriptions	Grooving & Parting Off
--	------------------------

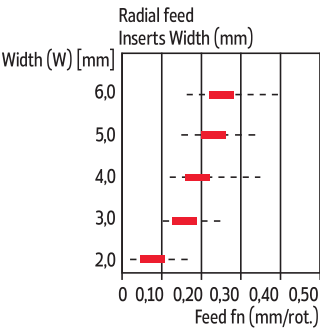
GCMX-...



Medium Parting Off

Most efficient on stainless steel and most types of steel at moderate feed rates. Superior straightness of cut

SANCAR-...



Medium Parting Off

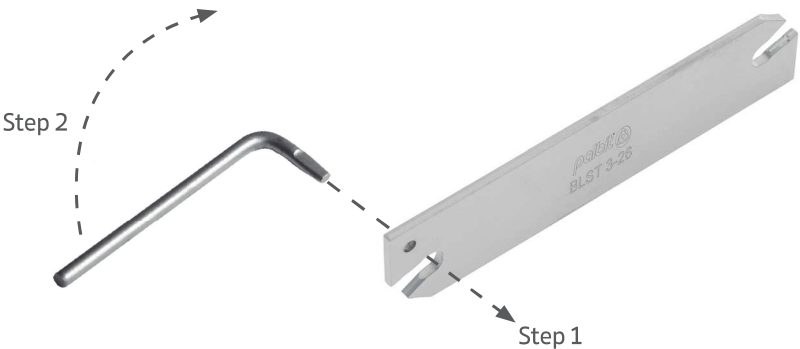
Optimizer to minimize pips and burrs on components. Recommended for steel, stainless steel and cast iron.

Recommended starting value.
For cutting speed recommendations, see page D-779

PROCEDURE FOR INSERT EXTRACTION

Procedimentos para remoção de pastilha | Procedimientos para retirar plaquita

1. Always use the right key to remove the insert.
Use sempre a chave adequada para retirar as pastilhas.
Utilice siempre la llave adecuada para retirar la plaquita.
2. Position the LE05 key according to **Step 1** and make sure it fits perfectly.
Posicione a chave LE05 de acordo com o **Passo 1** e certifique que está bem encaixada.
Coloque la llave LE05 de acuerdo con el **Paso 1** y asegúrese de que esté correctamente montada.
3. Hold the blade with one hand. With the other hand, rotate the LE05 key as illustrated in **Step 2**.
Segure a lâmina com uma mão. Com a outra rode a chave LE05 como ilustrado no **Passo 2**.
Sostenga la lama con una mano. Con la otra gire la llave LE05 como se ilustra en **Paso 2**.
4. Always replace damaged inserts with new ones.
Substitua sempre as pastilhas danificadas por pastilhas novas.
Siempre reemplace las plaquitas dañadas por plaquitas nuevas.



CPTS

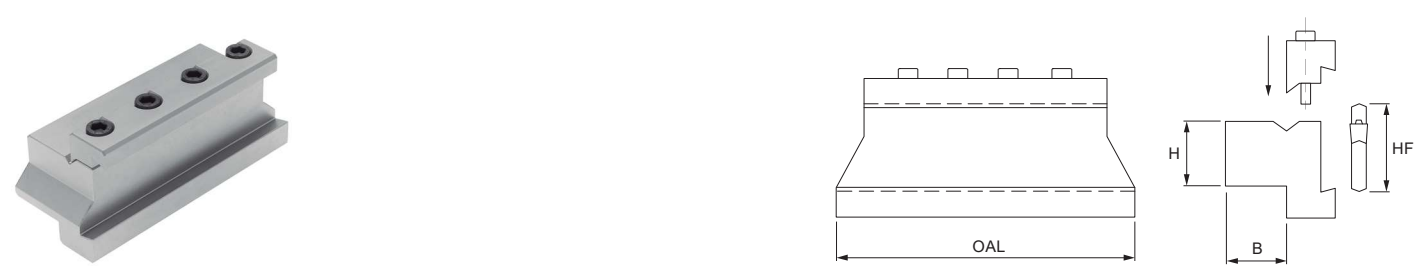


Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)				Kg	Screw	Wrench	Stock
		HF	OAL	H	B				
290009300	CPTS 1916	19	76	16	16	0,300	D0503000	SS40	
290008200	CPTS 2616	26	76	16	16	0,450	D0603600	SS50	
290006000	CPTS 2620	26	87	20	20	0,500	D0603600	SS50	
290006100	CPTS 2625	26	87	25	25	0,650	D0603600	SS50	
290006200	CPTS 3220	32	100	20	20	0,700	D0603600	SS50	
290005000	CPTS 3225	32	110	25	25	0,950	D0603600	SS50	
290006300	CPTS 3232	32	120	32	32	1,400	D0603600	SS50	

Stock item | Produto de stock | Itens de stock

Available under request | Disponível sobre consulta | Disponible bajo consulta

DPTS



Order code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)				Kg	Screw	Wrench	Stock
		HF	OAL	H	B				
290045400	DPTS 1916	19	76	16	16	0,250	D0503000	SS40	
290045500	DPTS 2620	26	87	20	20	0,550	D0603600	SS50	
290046600	DPTS 2625	26	87	25	25	0,700	D0603600	SS50	
290073600	DPTS 3220	32	100	20	20	0,750	D0603600	SS50	
290073700	DPTS 3225	32	110	25	25	1,00	D0603600	SS50	
290073800	DPTS 3232	32	120	32	32	1,450	D0603600	SS50	

Stock item | Produto de stock | Itens de stock

Available under request | Disponível sobre consulta | Disponible bajo consulta

TRIGON INSERTS CODE KEY

Chave de codificação para pastilhas | Llave de codificación para plaquitas

For Trigon 60° Inserts

16

-

ER

-

W

-

1.00

1

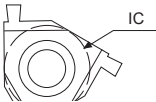
2

3

4

1 - Inscribed Circle

16 - 9,525mm



2 - Insert Type

ER - External Right | IR - Internal Right

3 - Cutting Edge Type

W - Rectangular

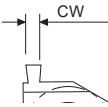


R - Rounded



4 - Cutting Edge Length

0,50 - 0,5mm | 2,25 - 2,25mm



GROOVING & PARTING OFF

Grooving Plus

Grooving & Parting Off

SAL - Swiss Automatic Lathes

Light Grooving

Forming Grooving

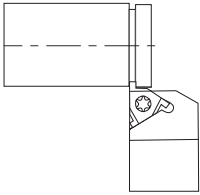
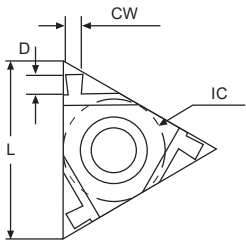
Spare Parts

Technical Data

FLAT GROOVING



External



Inserts ER = IL

Order code Código	Reference Referência Referencia	Anvil	Dimensions Dimensões Dimensiones (mm)				Stock - Grade Code (2)	
			IC	L	CW	D	(68) PH6920	(D0) PH8920
1883721	11 ER W 0.50	-	6,35	11,00	0,50	1,40	○	○
1883722	11 ER W 0.60	-	6,35	11,00	0,60	1,40	○	○
1883723	11 ER W 0.70	-	6,35	11,00	0,70	1,40	○	○
1883724	11 ER W 0.80	-	6,35	11,00	0,80	1,40	○	○
1883725	11 ER W 1.00	-	6,35	11,00	1,00	1,30	○	○
1883726	16 ER W 0.50	EA 16	9,525	16,00	0,50	1,40	○	○
1881125	16 ER W 1.00	EA 16	9,525	16,00	1,00	1,40	⊗	○
1883707	16 ER W 1.20	EA 16	9,525	16,00	1,20	1,60	⊗	○
1883720	16 ER W 1.40	EA 16	9,525	16,00	1,40	1,80	⊗	○
1881129	16 ER W 1.70	EA 16	9,525	16,00	1,70	2,00	⊗	⊗
1883711	16 ER W 1.95	EA 16	9,525	16,00	1,95	2,00	⊗	⊗
1883714	16 ER W 2.25	EA 16	9,525	16,00	2,25	2,25	⊗	⊗

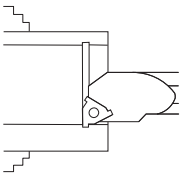
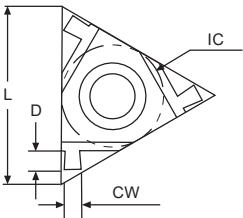
Stock item | Produto de stock | Itens de stock

Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code



Internal



Inserts IR = EL

Order code Código	Reference Referência Referencia	Anvil	Dimensions Dimensões Dimensiones (mm)				Stock - Grade Code (2)	
			IC	L	CW	D	(68) PH6920	(D0) PH8920
1881142	11 IR W 0.50	-	6,35	11,00	0,50	1,40	⊗	○
1883727	11 IR W 0.60	-	6,35	11,00	0,60	1,40	○	○
1883728	11 IR W 0.70	-	6,35	11,00	0,70	1,40	○	○
1883729	11 IR W 0.80	-	6,35	11,00	0,80	1,40	○	○
1881144	11 IR W 1.00	-	6,35	11,00	1,00	1,30	⊗	○
1883730	16 IR W 0.50	EA 16	9,525	16,00	0,50	1,40	○	○
1881134	16 IR W 1.00	EA 16	9,525	16,00	1,00	1,40	⊗	○
1883731	16 IR W 1.20	EA 16	9,525	16,00	1,20	1,60	⊗	○
1883712	16 IR W 1.40	EA 16	9,525	16,00	1,40	1,80	⊗	○
1881138	16 IR W 1.70	EA 16	9,525	16,00	1,70	2,00	⊗	○
1883710	16 IR W 1.95	EA 16	9,525	16,00	1,95	2,00	⊗	○
1883713	16 IR W 2.25	EA 16	9,525	16,00	2,25	2,25	⊗	○

Stock item | Produto de stock | Itens de stock

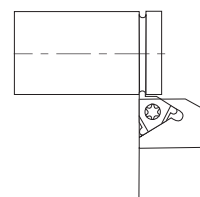
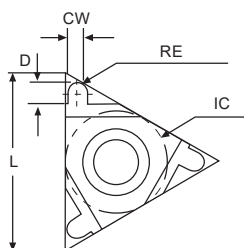
Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

FULL RADIUS GROOVING



External



Inserts ER = IL

Order code Código	Reference Referência Referencia	Anvil	Dimensions Dimensões Dimensiones (mm)					Stock - Grade Code (2)	
			IC	L	CW	RE	D	(68) PH6920	(D0) PH8920
1881149	16 ER R 0.50	EA 16	9,525	16	1,00	0,50	1,40	⊗	○
1883732	16 ER R 0.60	EA 16	9,525	16	1,20	0,60	1,60	○	○
1883733	16 ER R 0.90	EA 16	9,525	16	1,80	0,90	2,00	○	○
1881151	16 ER R 1.00	EA 16	9,525	16	2,00	1,00	2,00	○	○
1883734	16 ER R 1.10	EA 16	9,525	16	2,20	1,10	2,15	○	○
1883735	16 ER R 1.20	EA 16	9,525	16	2,40	1,20	2,15	○	○

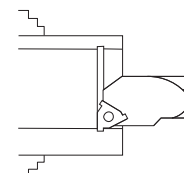
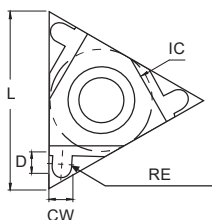
⊗ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code



Internal



Inserts IR = EL

Order code Código	Reference Referência Referencia	Anvil	Dimensions Dimensões Dimensiones (mm)					Stock - Grade Code (2)	
			IC	L	CW	RE	D	(68) PH6920	(D0) PH8920
1881145	16 IR R 0.50	EA 16	9,525	16	1,00	0,50	1,40	○	○
1883736	16 IR R 0.60	EA 16	9,525	16	1,20	0,60	1,60	○	○
1883737	16 IR R 0.90	EA 16	9,525	16	1,80	0,90	2,00	○	○
1881147	16 IR R 1.00	EA 16	9,525	16	2,00	1,00	2,00	○	○
1883738	16 IR R 1.10	EA 16	9,525	16	2,20	1,10	2,15	○	○
1883739	16 IR R 1.20	EA 16	9,525	16	2,40	1,20	2,15	○	○

⊗ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta
Disponível bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code

EXTERNAL TOOLHOLDERS CODE KEY

Chave de codificação para suporte externos | Llave de codificación para herramienta exterior

S	X	A	N	R	25	25	M	16
1	2	3	4	5	6	7	8	9

1 - Inserts Clamping System				
C	D	M	P	S

2 - Insert Shape			
C	D	E	K
R	S	T	V
X	W		

4 - Inserts Clearance Angle			
B	C	N	P

5 - Tool Hand		
R	L	N

8 - Length of Holder (mm)			
	D	60	P 170
	E	70	R 200
	F	80	S 250
	H	100	T 300
	K	125	U 350
	L	140	V 400
	M	150	X Special

3 - Toolholder Leading Angle		
A	B	C
D	E	F
G	H	J
K	L	M
N	Q	R
S	T	V
X	Z	

6 - Height of Shank (mm)

7 - Width of Shank (mm)

9 - Length of Inserts Cutting Edge (mm)	

SXAN



External Left

Order Code Código	Reference Referência Referencia	Insert Geometry	Dimensions Dimensões Dimensiones (mm)				Anvil	Anvil Screw	Insert Screw	Torx Key	Stock
			HF = H	B	WF	LF					
182014600	SXAN L 0808 H11	11 IR	8	8	11	100	-	-	P0260700	XT08	○
182006900	SXAN L 1010 H11	11 IR	10	10	11	100	-	-	P0260700	XT08	⊗
182015600	SXAN L 1212 K11	11 IR	12	12	12	125	-	-	P0260700	XT08	○
182015700	SXAN L 1212 F16	16 IR	12	12	16	80	IA16	P5000790	P5401390	XT10	○
182011600	SXAN L 1616 H16	16 IR	16	16	16	100	IA16	P5000790	P5401390	XT10	○
182003700	SXAN L 2020 K16	16 IR	20	20	20	125	IA16	P5000790	P5401390	XT10	⊗
182003100	SXAN L 2525 M16	16 IR	25	25	25	150	IA16	P5000790	P5401390	XT10	⊗
182011700	SXAN L 3232 P16	16 IR	32	32	32	170	IA16	P5000790	P5401390	XT10	○

⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

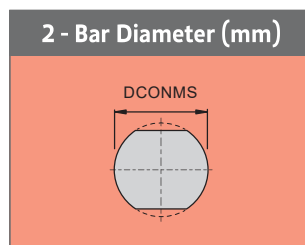
External Right

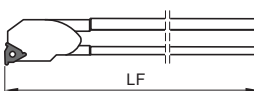
Order Code Código	Reference Referência Referencia	Insert Geometry	Dimensions Dimensões Dimensiones (mm)				Anvil	Anvil Screw	Insert Screw	Torx Key	Stock
			HF = H	B	WF	LF					
182014900	SXAN R 0808 H11	11 ER	8	8	11	100	-	-	P0260700	XT08	○
182007000	SXAN R 1010 H11	11 ER	10	10	11	100	-	-	P0260700	XT08	⊗
182016000	SXAN R 1212 K11	11 ER	12	12	12	125	-	-	P0260700	XT08	○
182003200	SXAN R 1212 F16	16 ER	12	12	16	80	EA16	P5000790	P5401390	XT10	⊗
182003300	SXAN R 1616 H16	16 ER	16	16	16	100	EA16	P5000790	P5401390	XT10	⊗
182004800	SXAN R 2020 K16	16 ER	20	20	20	125	EA16	P5000790	P5401390	XT10	⊗
182004900	SXAN R 2525 M16	16 ER	25	25	25	150	EA16	P5000790	P5401390	XT10	⊗
182005400	SXAN R 3232 P16	16 ER	32	32	32	170	EA16	P5000790	P5401390	XT10	⊗

⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

S	32	S	S	X	F	N	R	16
1	2	3	4	5	6	7	8	9

1 - Bar Type	
S	Steel shank



3 - Bar Length (mm)				
	H	100	T	300
	J	110	U	350
	K	125	V	400
	L	140	W	450
	M	150	Y	500
	Q	180	X	Special
	R	200		
	S	250		

4 - Inserts Clamping System			
C	M	P	S

5 - Insert Shape			
80°	55°	75°	55°
C	D	E	K
90°	60°	35°	80°
S	T	V	W
60°			
X			

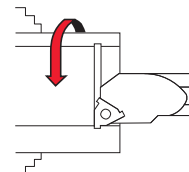
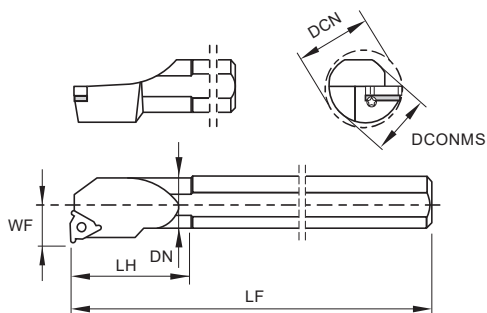
6 - Bar Leading Angle		
90°	75°	95°
F	K	L
107°30'	93°	93°
Q	U	U-BT
90°		
G		

7 - Inserts Clearance Angle			
5°	7°	0°	11°
B	C	N	P

8 - Bar Hand		
L	R	N

9 - Length of Inserts Cutting Edge (mm)				
C,D,E,V	K	S	T	W

SXFN



Internal Left

Order Code Código	Reference Referência Referencia	Insert Type	Dimensions Dimensões Dimensiones (mm)						Anvil	Anvil Screw	Insert Screw	Torx Key	Stock
			DCONMS	DN	DCN	LF	LH	WF					
182006100	S10H SXFN L 11	11 ER	10	10	12	100	-	7,4	-	-	P0260700	XT08	⊗
182014300	S10K SXFN L 11	11 ER	16	10	12	125	25	7,4	-	-	P0260700	XT08	○
182016300	S13L SXFN L 11	11 ER	16	13	15	140	32	8,9	-	-	P0260700	XT08	○
182006300	S13M SXFN L 16	16 ER	16	13	16	150	32	10,2	-	-	P5401391	XT10	○
182006000	S16P SXFN L 16	16 ER	20	16	19	170	40	11,7	-	-	P5401391	XT10	⊗
182002600	S20P SXFN L 16	16 ER	20	20	24	170	-	13,7	EA16	P5000790	P5401390	XT10	⊗
182005500	S25R SXFN L 16	16 ER	25	25	29	200	-	16,2	EA16	P5000790	P5401390	XT10	⊗
182012500	S32S SXFN L 16	16 ER	32	32	36	250	-	19,7	EA16	P5000790	P5401390	XT10	○
182012700	S40T SXFN L 16	16 ER	40	40	44	300	-	23,7	EA16	P5000790	P5401390	XT10	○

⊗ Stock item | Produto de stock
Itens de stock

○ Available under request | Disponível sobre consulta
Disponível bajo consulta

Note: All the toolholders SXFN are made with 1.5° helix angle. | Todos os ferros de torno são fornecidos com um ângulo de hélice de 1,5° | Todos los soportes se hacen con un ángulo de hélice de 1,5°.

Internal Right

Order Code Código	Reference Referência Referencia	Insert Type	Dimensions Dimensões Dimensiones (mm)						Anvil	Anvil Screw	Insert Screw	Torx Key	Stock
			DCONMS	DN	DCN	LF	LH	WF					
182002100	S10H SXFN R 11	11 IR	10	10	12,5	100	-	7,3	-	-	P0260700	XT08	⊗
182006200	S10K SXFN R 11	11 IR	16	10	12,5	125	25	7,3	-	-	P0260700	XT08	○
182016400	S10L SXFN R 11	11 IR	16	13	15	140	32	8,9	-	-	P0260700	XT08	○
182002300	S13M SXFN R 16	16 IR	16	13	16,5	150	32	10,4	-	-	P5401391	XT10	○
182002500	S16P SXFN R 16	16 IR	20	16	19,5	170	40	11,6	-	-	P5401391	XT10	⊗
182002700	S20P SXFN R 16	16 IR	20	20	23,5	170	-	13,6	IA16	P5000790	P5401390	XT10	⊗
182002900	S25R SXFN R 16	16 IR	25	25	28,5	200	-	16,3	IA16	P5000790	P5401390	XT10	⊗
182005600	S32S SXFN R 16	16 IR	32	32	35,5	250	-	19,6	IA16	P5000790	P5401390	XT10	○
182012600	S40T SXFN R 16	16 IR	40	40	43,5	300	-	23,6	IA16	P5000790	P5401390	XT10	○

⊗ Stock item | Produto de stock
Itens de stock

○ Available under request | Disponível sobre consulta
Disponível bajo consulta

Note: All the toolholders SXFN are made with 1.5° helix angle. | Todos os ferros de torno são fornecidos com um ângulo de hélice de 1,5° | Todos los soportes se hacen con un ángulo de hélice de 1,5°.