

Grooving & Parting Off

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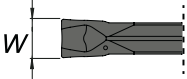
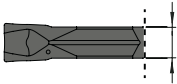
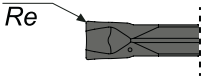
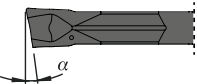
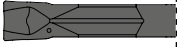
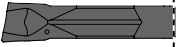
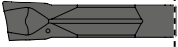


Code Key for Inserts | Chave de Codificação de Pastilhas Llave de Codificación de Plaquitas

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 - 2,00 mm 0300 - 3,00 mm 0400 - 4,00 mm 0500 - 5,00 mm 0600 - 6,00 mm	
3. Seat Size	
A - 1,60 mm B - 2,30 mm C - 3,30 mm D - 4,30 mm E - 4,90 mm F - 6,60 mm	
4. Cutting Radius	
020 - 0,20 mm 025 - 0,25 mm 040 - 0,40 mm 600 - 6,00 mm	
5. Relief Angle	
	
6. Insert Type	
N - Neutral 	L - Left 
R - Right 	
7. N° of Cutting Edges	
 	
8. Cutting Geometry	
MC - Medium Cut Off MG - Medium Grooving MM - Medium Multi Function MP - Medium Profiling NP - Non-Ferrous Profiling	

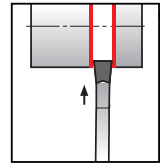
D

Grooving & Parting Off

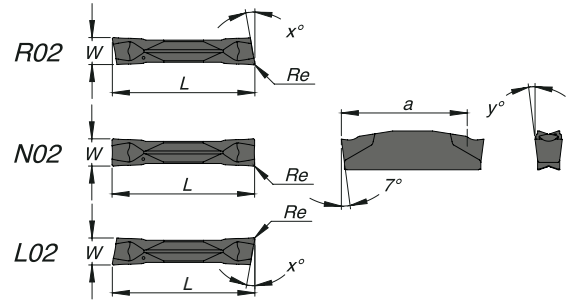
Grooving & Parting
Off Program

Technical
Data

GP...02-MC Inserts | Pastilhas | Plaquetas



Medium Parting Off



(1) Geometry Code	Reference	Grades									Dimensions (mm)						Cutting Conditions			
		P		M		K		N		S	W	Re	L	x°	a	y°	Seat Type	fn (mm/r)	Min	Max
		L7	L8	67	L8	L5	L6	10	67	25										
1130383	GP0200A020-N02-MC	○	⊗	⊗	⊗	○	⊗	○	○	○	2,0	0,2	20,5	-	18,5	6,0	A	0,06	0,05	0,10
1130384	GP0300B020-N02-MC	○	⊗	⊗	⊗	○	⊗	○	○	○	3,0	0,2	20,4	-	18,5	8,0	B	0,08	0,05	0,15
1130397	GP0400C020-N02-MC	○	⊗	⊗	⊗	○	⊗	○	○	○	4,0	0,2	21,0	-	18,5	7,0	C	0,13	0,05	0,25
1130416	GP0200A020-050R02-MC	○	○	○	○	○	○	○	○	○	2,0	0,2	20,5	5,0	18,5	6,0	A	0,05	0,04	0,08
1130417	GP0300B020-050R02-MC	○	○	○	○	○	○	○	○	○	3,0	0,2	20,4	5,0	18,5	8,0	B	0,07	0,04	0,12
1130418	GP0400C020-050R02-MC	○	○	○	○	○	○	○	○	○	4,0	0,2	21,0	5,0	18,5	7,0	C	0,10	0,04	0,20
1130419	GP0200A020-050L02-MC	○	○	○	○	○	○	○	○	○	2,0	0,2	20,5	5,0	18,5	6,0	A	0,05	0,04	0,08
1130420	GP0300B020-050L02-MC	○	○	○	○	○	○	○	○	○	3,0	0,2	20,4	5,0	18,5	8,0	B	0,07	0,04	0,12
1130421	GP0400C020-050L02-MC	○	○	○	○	○	○	○	○	○	4,0	0,2	21,0	5,0	18,5	7,0	C	0,10	0,04	0,20

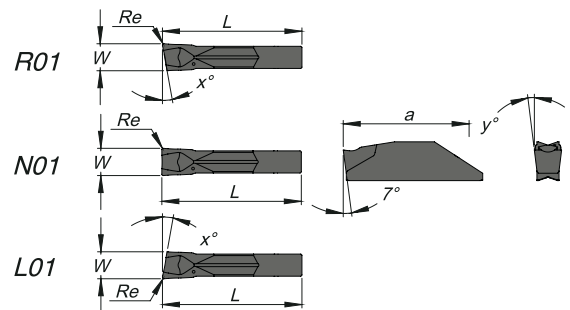
* Correspond to a Specific Holder.

Note: This solution is available from January of 2014.

GP...01-MC Inserts | Pastilhas | Plaquetas



Medium Parting Off



(1) Geometry Code	Reference	Grades									Dimensions (mm)						Cutting Conditions			
		P		M		K		N		S	W	Re	L	x°	a ¹	y°	Seat ² Type	fn (mm/r)	Min	Max
		L7	L8	67	L8	L5	L6	10	67	25										
1130422	GP0200A020-N01-MC	○	⊗	⊗	⊗	○	⊗	○	○	○	2,0	0,2	20,2	-	-	6,0	A	0,06	0,05	0,10
1130423	GP0300B020-N01-MC	○	⊗	⊗	⊗	○	⊗	○	○	○	3,0	0,2	20,1	-	-	8,0	B	0,08	0,05	0,15
1130424	GP0400C020-N01-MC	○	⊗	⊗	⊗	○	⊗	○	○	○	4,0	0,2	20,5	-	-	7,0	C	0,13	0,05	0,25
1130425	GP0200A020-050R01-MC	○	○	○	○	○	○	○	○	○	2,0	0,2	20,2	5,0	-	6,0	A	0,05	0,04	0,08
1130426	GP0300B020-050R01-MC	○	○	○	○	○	○	○	○	○	3,0	0,2	20,1	5,0	-	8,0	B	0,07	0,04	0,12
1130427	GP0400C020-050R01-MC	○	○	○	○	○	○	○	○	○	4,0	0,2	20,5	5,0	-	7,0	C	0,10	0,04	0,20
1130428	GP0200A020-050L01-MC	○	○	○	○	○	○	○	○	○	2,0	0,2	20,2	5,0	-	6,0	A	0,05	0,04	0,08
1130429	GP0300B020-050L01-MC	○	○	○	○	○	○	○	○	○	3,0	0,2	20,1	5,0	-	8,0	B	0,07	0,04	0,12
1130430	GP0400C020-050L01-MC	○	○	○	○	○	○	○	○	○	4,0	0,2	20,5	5,0	-	7,0	C	0,10	0,04	0,20

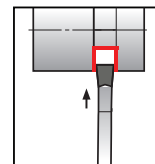
(1) - When using inserts with 1 Cutting edge, the "a" measure is given by the Toolholder.

(2) - Correspond to a Specific Holder.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

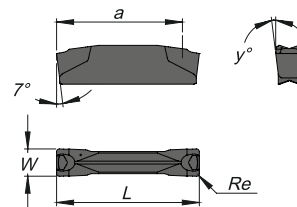
Note: This solution is available from January of 2014.



GP...02-MG Inserts | Pastilhas | Plaquetas



Medium Grooving



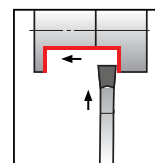
(1) Geometry Code	(2) Grade Code	Grades									Dimensions (mm)							Cutting Conditions				
		P		M			K		N		S		W	Re	L	x°	a	y°	Seat Type	fn (mm/r)	Min	Max
		L7	L8	67	L8	L5	L6	10	67	25												
1130398	GP0300B020-N02-MG	○	⊗	○	⊗	○	⊗	○	⊗	○	⊗	3,0	0,2	20,6	-	18,5	6,5	B	0,06	0,05	0,10	
1130399	GP0400C040-N02-MG	○	⊗	○	⊗	○	⊗	○	⊗	○	⊗	4,0	0,4	21,0	-	18,5	6,5	C	0,08	0,05	0,15	
1130400	GP0500D040-N02-MG	○	⊗	○	⊗	○	⊗	○	⊗	○	⊗	5,0	0,4	21,0	-	18,5	6,0	D	0,13	0,05	0,25	

* Correspond to a Specific Holder.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

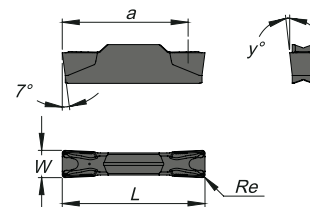
Note: This solution is available from January of 2014.



GP...02-MM Inserts | Pastilhas | Plaquetas



Medium Multi Function (Grooving & Turning)



(1) Geometry Code	(2) Grade Code	Grades									Dimensions (mm)							Cutting Conditions					
		P		M			K		N		S		W	Re	L	a	y°	Seat Type	Ap (mm)	fn (mm/r)		Min Max	
		L7	L8	67	L8	L5	L6	10	67	25	Min	Max								Min	Max		
1130401	GP0300B040-N02-MM	○	⊗	○	⊗	○	⊗	○	⊗	○	⊗	3,0	0,4	20,6	18,5	6,0	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	6,0	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	5,5	D	1,5	0,8	2,5	0,14	0,10	0,18
1130410	GP0800F080-N02-MM	○	⊗	○	⊗	○	⊗	○	⊗	○	⊗	8,0	0,8	26,0	21,5	7,0	F	2,2	1,0	3,8	0,18	0,15	0,22

* Correspond to a Specific Holder.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

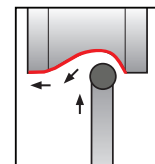
Note: This solution is available from January of 2014.

D

Grooving & Parting Off

Grooving & Parting Off Program

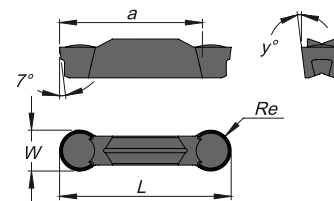
Technical Data



GP...02-MP Inserts | Pastilhas | Plaquetas



Medium Profiling



(1) Geometry Code	(2) Grade Code	Grades										Dimensions (mm)					Cutting Conditions					
		P		M		K		N		S		W	Re	L	a	y°	Seat Type	Ap (mm)	fn (mm/r)	Min	Max	Min
1130404	GP0600E300-N02-MP	PH5115	PH5125	PH6325	PH5125	PH5705	PH5320	PH0910	PH6325	PH0705	6,0	3,0	25,2	21,0	7,0	E	1,50	0,04	2,20	0,18	0,15	0,22

* Correspond to a Specific Holder.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

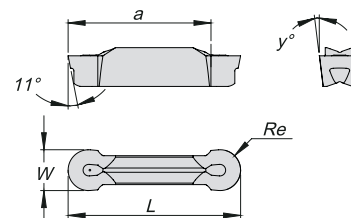
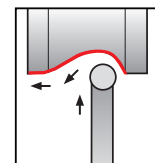
Insert Order Code = (1) Geometry Code + (2) Grade Code

Note: This solution is available from January of 2014.

GP...02-NP Inserts | Pastilhas | Plaquetas



Medium Aluminium Profiling



(1) Geometry Code	(2) Grade Code	Grades										Dimensions (mm)					Cutting Conditions					
		P		M		K		N		S		W	Re	L	a	y°	Seat Type	Ap (mm)	fn (mm/r)	Min	Max	Min
1130405	GP0600E300-N02-NP	PH5115	PH5125	PH6325	PH5125	PH5705	PH5320	PH0910	PH6325	PH0705	6,0	3,0	25,4	21,0	7,0	E	1,30	0,05	2,00	0,20	0,15	0,25

* Correspond to a Specific Holder.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Note: This solution is available from January of 2014.




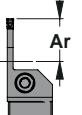
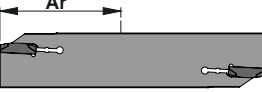
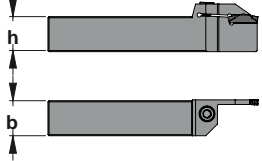

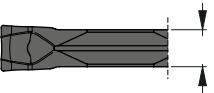
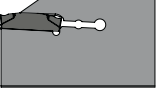
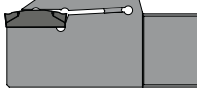
Code Key for Conventional Toolholders & Blades | Chave de Codificação de Lâminas | Llave de Codificación de Lamas

For Conventional Toolholders

GP	R	C	-	080	25.25	.A	.1	-	A
1	2	3		4	5	6	7		8

For Blades

GP	N	C	-	080	25	.A	.0	-	A
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. Maximum Depth of Cut					
					
5. Shaft Cutting Unit Dimension					
					
6. Seat Size					
A - 1,60 mm B - 2,30 mm C - 3,30 mm D - 4,30 mm E - 4,00 mm F - 6,60 mm					
					
7. Clamping System					
0 - Spring		1 - Screw			
8. Special Applications					

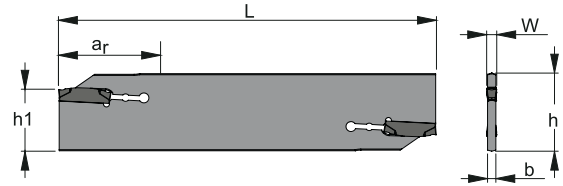
D




Grooving & Parting Off

Grooving & Parting Off Program

Technical Data

GPNC Grooving Tools | Ferramentas | Herramientas



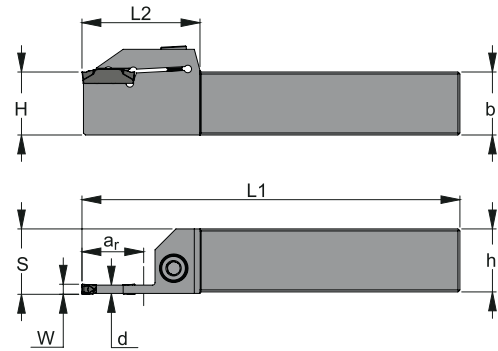
Order Code	Reference	Dimensions							Insert	Wrench 	Stock
		ar	L	h	h1	b	W	Seat Size			
213009800	GPNC-015 21.A.0	15	110	26	21,4	1,5	2	A	GP02...	LE03-04	
213010000	GPNC-020 25.A.0	20	150	32	25,0	1,5	2	A	GP02...	LE03-04	
213009500	GPNC-030 21.B.0	30	110	26	21,4	2,3	3	B	GP03...	LE03-04	
213009900	GPNC-055 25.B.0	55	150	32	25,0	2,3	3	B	GP03...	LE03-04	
213009700	GPNC-055 25.C.0	55	150	32	25,0	3,3	4	C	GP04...	LE03-04	

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

 Stock items / Itens de stock  Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Note: This solution is available from January of 2014.

GPRC & GPLC Grooving Tools | Ferramentas | Herramientas



Order Code	Reference	Dimensions										Insert	Screw	Wrench	Stock
		ar	L1	h	b	H	L2	S	d	W	Seat Size				
213011200	GPRC-010 25.25.A.1	10	150	25	5	25	32	26	1,6	2	A	GP02...	D0602200	SS50	☺
213009200	GPRC-020 25.25.A.1	20	150	25	25	25	42	26	1,6	2	A	GP02...	D0602200	SS50	☺
213011300	GPRC-010 25.25.B.1	10	150	25	25	25	32	26	2,3	3	B	GP03...	D0602200	SS50	☺
213009100	GPRC-020 25.25.B.1	20	150	25	25	25	41	26	2,3	3	B	GP03...	D0602200	SS50	☺
213011400	GPRC-013 25.25.C.1	13	150	25	25	25	34	26	3,3	4	C	GP04...	D0602200	SS50	☺
213009300	GPRC-025 25.25.C.1	25	150	25	25	25	47	26	3,3	4	C	GP04...	D0602200	SS50	☺
213011500	GPRC-013 25.25.D.1	13	150	25	25	25	34	26	4,3	5	D	GP05...	D0602200	SS50	☺
213009600	GPRC-032 25.25.D.1	32	150	25	25	25	57	26	4,3	5	D	GP05...	D0602200	SS50	☺
213011600	GPRC-016 25.25.E.1	16	150	25	25	25	39	26	4,9	6	E	GP06...	D0602200	SS50	☺
213009400	GPRC-032 25.25.E.1	32	150	25	25	25	58	26	4,9	6	E	GP06...	D0602200	SS50	☺
213010100	GPLC- 010 25.25.A.1	10	150	25	25	25	32	26	1,6	2	A	GP02...	D0602200	SS50	☺
213010200	GPLC- 020 25.25.A.1	20	150	25	25	25	42	26	1,6	2	A	GP02...	D0602200	SS50	☺
213010300	GPLC- 010 25.25.B.1	10	150	25	25	25	32	26	2,3	3	B	GP03...	D0602200	SS50	☺
213010400	GPLC- 020 25.25.B.1	20	150	25	25	25	41	26	2,3	3	B	GP03...	D0602200	SS50	☺
213010500	GPLC- 013 25.25.C.1	13	150	25	25	25	34	26	3,3	4	C	GP04...	D0602200	SS50	☺
213010600	GPLC- 025 25.25.C.1	25	150	25	25	25	47	26	3,3	4	C	GP04...	D0602200	SS50	☺
213010700	GPLC- 013 25.25.D.1	13	150	25	25	25	34	26	4,3	5	D	GP05...	D0602200	SS50	☺
213010800	GPLC- 032 25.25.D.1	32	150	25	25	25	57	26	4,3	5	D	GP05...	D0602200	SS50	☺
213010900	GPLC- 016 25.25.E.1	16	150	25	25	25	39	26	4,9	6	E	GP06...	D0602200	SS50	☺
213011000	GPLC- 032 25.25.E.1	32	150	25	25	25	58	26	4,9	6	E	GP06...	D0602200	SS50	☺

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

☺ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Note: This solution is available from January of 2014.

D

Grooving & Parting Off

Grooving & Parting Off Program

Technical Data



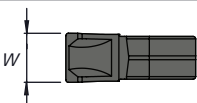
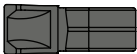
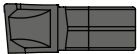
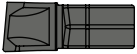
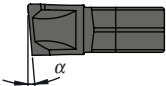
Code Key for Inserts | Chave de Codificação de Pastilhas Llave de Codificación de Plaquitas

For GCMX Inserts

GCMX	-	3	R	15
1		2	3	4

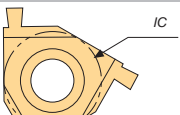
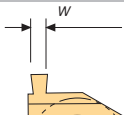
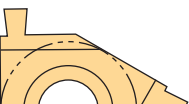
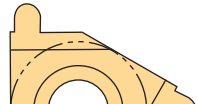
For SANCAR Inserts

SANCAR	-	3	R	5
1		2	3	4

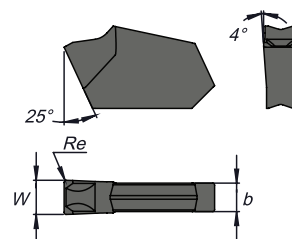
1 - Product Line	
GCMX 	SANCAR 
2 - Cutting Width	
2 mm 2,4 mm 3 mm 4 mm 4,8 mm 5 mm 6 mm	
3 - Insert Type	
N - Neutral R - Right L - Left	  
4 - Relief Angle	
4 - 4° 5 - 5° 8 - 8° 15 - 15°	

For Trigon 60° Inserts

16	-	ER	-	W	-	0.79
1		2		3		4

1 - Inscribed Circle	
16 - 9,525 mm	
2 - Insert Type	
ER - External Right IR - Internal Right	
3 - Cutting Edge Type	
W - Rectangular 	R - Rounded 
4 - Cutting Edge Length	
0.50 - 0,5 mm ... 2.36 - 2,36 mm	

GCMX-N Inserts | Pastilhas | Plaquetas

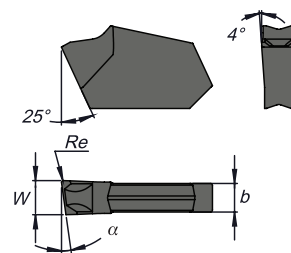


(1) Geometry Code	(2) Grade Code		Grades						Dimensions (mm)				Cutting Conditions		
			P		M		K								
			L7	N2	L7	N2	L6	N2	W	b	Re	α	fn (mm/rev)	Min	Max
1130165	GCMX-2N	GTN-2N	⊗	⊗	⊗	⊗	⊗	⊗	2,2	1,8	0,16	-	0,08	0,05	0,16
1130228	GCMX-2.4N	GTN-2.4N	○	○	○	○	○	○	2,4	2,0	0,16	-	0,10	0,06	0,18
1130169	GCMX-3N	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

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

GCMX-R Inserts | Pastilhas | Plaquetas

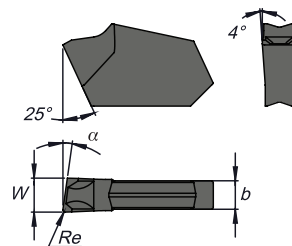


(1) Geometry Code	Grade Code		Grades						Dimensions (mm)				Cutting Conditions		
			P		M		K								
			L7	N2	L7	N2	L6	N2	W	b	Re	α	fn (mm/rev)	Min	Max
1130166	GCMX-2R 4	GTN-2R 4	○	○	○	○	○	○	2,2	1,8	0,16	4	0,07	0,04	0,13
1130167	GCMX-2R 8	GTN-2R 8	○	○	○	○	○	○	2,2	1,8	0,16	8	0,06	0,04	0,11
1130255	GCMX-2R 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

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

GCMX-L Inserts | Pastilhas | Plaquetas



(1) Geometry Code	Grade Code		Grades						Dimensions (mm)				Cutting Conditions		
			P		M		K								
			L7	N2	L7	N2	L6	N2	W	b	Re	α	fn (mm/rev)	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

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

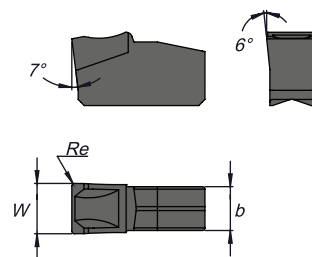
D

Grooving & Parting Off

Grooving & Parting Off Program

Technical Data

SANCAR-N Inserts | Pastilhas | Plaquetas

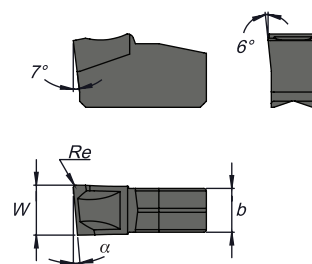


(1) Geometry Code	ISO Ref.	ANSI Ref.	Grades						Dimensions (mm)				Cutting Conditions		
			(2) Grade Code						W	b	Re	α	fn (mm/rev)	Min	Max
			P		M		K								
			L7	N2	L7	N2	L6	N2							
1130186	SANCAR-3N	SANCAR-3N	⊗	⊗	⊗	⊗	⊗	⊗	3,0	2,5	0,25	-	0,13	0,05	0,25
1130187	SANCAR-4N	SANCAR-4N	⊗	⊗	⊗	⊗	⊗	⊗	4,0	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

⊗ Stock items / Itens de stock ⊙ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

SANCAR-R Inserts | Pastilhas | Plaquetas

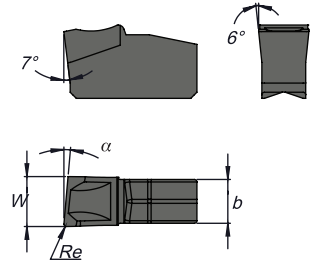


(1) Geometry Code	ISO Ref.	ANSI Ref.	Grades						Dimensions (mm)				Cutting Conditions		
			(2) Grade Code						W	b	Re	α	fn (mm/rev)	Min	Max
			P		M		K								
			L7	N2	L7	N2	L6	N2							
1130288	SANCAR-3R 5	SANCAR-3R 5	⊙	⊙	⊙	⊙	⊙	⊙	3,0	2,5	0,25	5	0,10	0,05	0,15
1130188	SANCAR-4R 5	SANCAR-4R 5	⊙	⊙	⊙	⊙	⊙	⊙	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

⊗ Stock items / Itens de stock ⊙ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

SANCAR-L Inserts | Pastilhas | Plaquetas

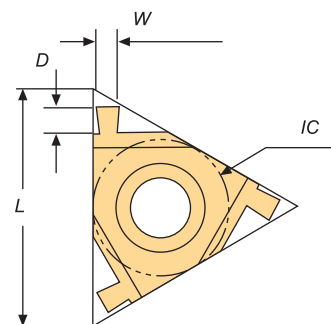
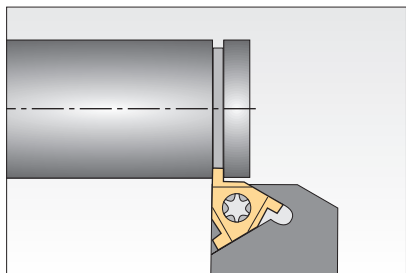


(1) Geometry Code	Grade Code		Grades						Dimensions (mm)				Cutting Conditions		
			P		M		K								
			L7	N2	L7	N2	L6	N2	W	b	Re	α	fn (mm/rev)	Min	Max
1130185	SANCAR-3L 5	SANCAR-3L 5	○	○	○	○	○	○	3,0	2,5	0,25	5	0,10	0,05	0,15
1130390	SANCAR-4L 5	SANCAR-4L 5	○	○	○	○	○	○	4,0	3,3	0,25	5	0,12	0,08	0,20
1130389	SANCAR-5L 5	SANCAR-5L 5	○	○	○	○	○	○	5,0	4,3	0,25	5	0,15	0,08	0,25

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Flat Grooving



External

Order Code (1)	Reference	Anvil	Dimensions (mm)				Stock - Grade Code (2)	
			IC	L	W	D	(68) PH6920	(12) PH0920
1881124	16 ER W 0.79	EA 16	9.525	16.00	0.79	1.20	○	○
1881125	16 ER W 1.00	EA 16	9.525	16.00	1.00	1.50	○	○
1881126	16 ER W 1.19	EA 16	9.525	16.00	1.19	1.80	○	○
1881127	16 ER W 1.39	EA 16	9.525	16.00	1.39	1.90	○	○
1881128	16 ER W 1.57	EA 16	9.525	16.00	1.57	2.00	○	○
1881129	16 ER W 1.70	EA 16	9.525	16.00	1.70	2.00	○	○
1881130	16 ER W 1.94	EA 16	9.525	16.00	1.94	2.00	○	○
1881131	16 ER W 2.24	EA 16	9.525	16.00	2.24	2.00	○	○
1881132	16 ER W 2.36	EA 16	9.525	16.00	2.36	2.00	○	○

Note: To select the toolholders "SXAN" see page E-42.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Internal

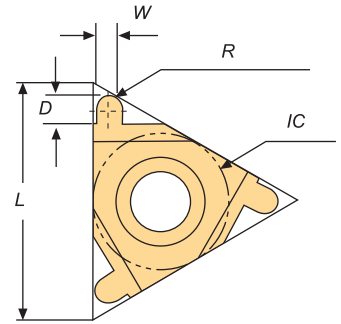
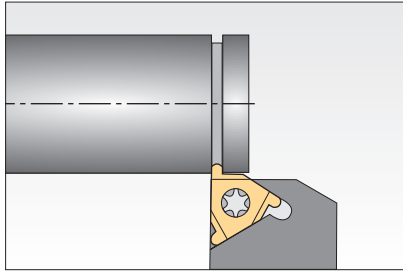
Order Code (1)	Reference	Anvil	Dimensions (mm)				Stock - Grade Code (2)	
			IC	L	W	D	(68) PH6920	(12) PH0920
1881142	11 IR W 0.50	-	6.35	11.00	0.50	1.20	○	○
1881143	11 IR W 0.79	-	6.35	11.00	0.79	1.20	○	○
1881144	11 IR W 1.00	-	6.35	11.00	1.00	1.50	○	○
1881133	16 IR W 0.79	IA 16	9.525	16.00	0.79	1.20	○	○
1881134	16 IR W 1.00	IA 16	9.525	16.00	1.00	1.50	○	○
1881135	16 IR W 1.19	IA 16	9.525	16.00	1.19	1.80	○	○
1881136	16 IR W 1.39	IA 16	9.525	16.00	1.39	1.90	○	○
1881137	16 IR W 1.57	IA 16	9.525	16.00	1.57	2.00	○	○
1881138	16 IR W 1.70	IA 16	9.525	16.00	1.70	2.00	○	○
1881139	16 IR W 1.94	IA 16	9.525	16.00	1.94	2.00	○	○
1881140	16 IR W 2.24	IA 16	9.525	16.00	2.24	2.00	○	○
1881141	16 IR W 2.36	IA 16	9.525	16.00	2.36	2.00	○	○

Note: To select the toolholders "SXFN" see page E-46.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Full Radius Grooving



External

Order Code (1)	Reference	Anvil	Dimensions (mm)					Stock - Grade Code (2)	
			L	IC	R	W	D	(68) PH6920	(12) PH0920
1881149	16 ER R 0.50	EA 16	16.00	9.525	0.50	1.00	1.00	○	○
1881150	16 ER R 0.75	EA 16	16.00	9.525	0.75	1.50	1.50	○	○
1881151	16 ER R 1.00	EA 16	16.00	9.525	1.00	2.00	2.00	○	○
1881152	16 ER R 1.25	EA 16	16.00	9.525	1.25	2.50	2.50	○	○

Note: To select the toolholders "SXAN" see page E-42.

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

Internal

Order Code (1)	Reference	Anvil	Dimensions (mm)					Stock - Grade Code (2)	
			L	IC	R	W	D	(68) PH6920	(12) PH0920
1881145	16 IR R 0.50	IA 16	16.00	9.525	0.50	1.00	1.00	○	○
1881146	16 IR R 0.75	IA 16	16.00	9.525	0.75	1.50	1.50	○	○
1881147	16 IR R 1.00	IA 16	16.00	9.525	1.00	2.00	2.00	○	○
1881148	16 IR R 1.25	IA 16	16.00	9.525	1.25	2.50	2.50	○	○

Note: To select the toolholders "SXFN" see page E-46.


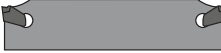

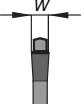
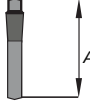
⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Insert Order Code = (1) Geometry Code + (2) Grade Code

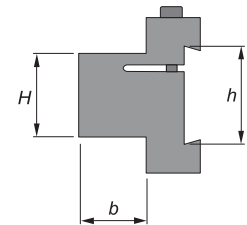
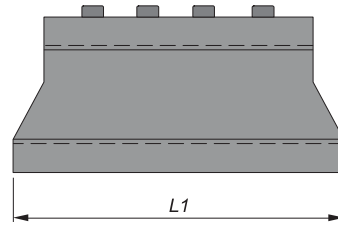
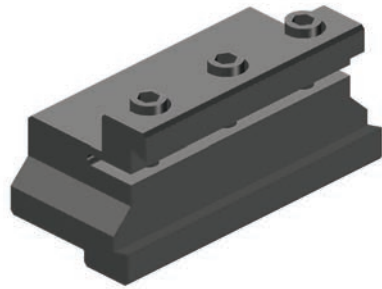
Code Key for Blades | Chave de Codificação de Lâminas Llave de Codificación de Lamas

For Blades

BL	PS	3	-	26
1	2	3		4

1 - Product Line	
BL - Blade	
2 - Blade Type	
PS - Positive Stop 	ST - Standard Blade 
S - SANCAR Blade 	
3 - Cutting Width	
2 mm 3 mm 4 mm 5 mm 6 mm 	
4 - Blade Height	
19 - 19 mm 26 - 26 mm 32- 32 mm 	

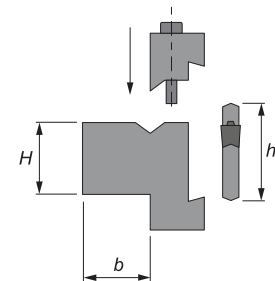
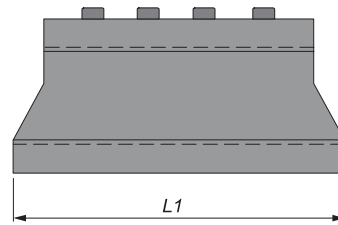
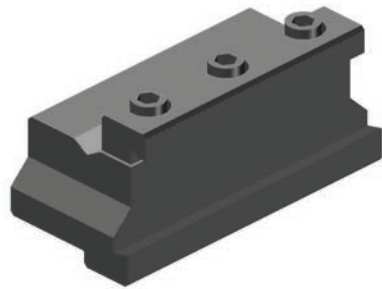
CPTS Grooving Tools | Ferramentas | Herramientas



Order Code	Reference	Dimensions				Kg	Screw	Wrench	Stock
		h	L1	H	b				
290009300	CPTS 1916	19	76	16	16	0,300	D0503000	SS40	<input checked="" type="checkbox"/>
290008200	CPTS 2616	26	76	16	16	0,450	D0603600	SS50	<input checked="" type="checkbox"/>
290006000	CPTS 2620	26	87	20	20	0,500	D0603600	SS50	<input checked="" type="checkbox"/>
290006100	CPTS 2625	26	87	25	25	0,650	D0603600	SS50	<input checked="" type="checkbox"/>
290006200	CPTS 3220	32	100	20	20	0,700	D0603600	SS50	<input checked="" type="checkbox"/>
290005000	CPTS 3225	32	110	25	25	0,950	D0603600	SS50	<input checked="" type="checkbox"/>
290006300	CPTS 3232	32	120	32	32	1,400	D0603600	SS50	<input checked="" type="checkbox"/>
290074000	CPTS 5250	52	135	50	50	3,400	D0804800	SS60	<input checked="" type="checkbox"/>

Stock items / Itens de stock Available under request / Disponibilidade sob consulta / Disponible bajo consulta

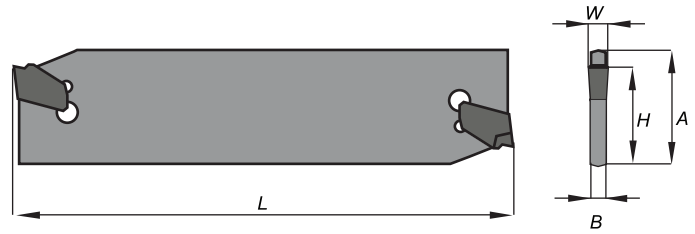
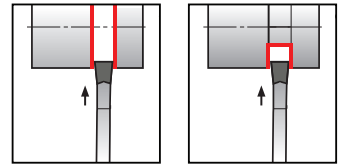
DPTS Grooving Tools | Ferramentas | Herramientas















Order Code	Reference	Dimensions				Kg	Screw	Wrench	Stock
		h	L1	H	b				
290045400	DPTS 1916	19	76	16	16	0,250	D0503000	SS40	<input checked="" type="checkbox"/>
290045500	DPTS 2620	26	87	20	20	0,550	D0603600	SS50	<input checked="" type="checkbox"/>
290046600	DPTS 2625	26	87	25	25	0,700	D0603600	SS50	<input checked="" type="checkbox"/>
290073600	DPTS 3220	32	100	20	20	0,750	D0603600	SS50	<input checked="" type="checkbox"/>
290073700	DPTS 3225	32	110	25	25	1,000	D0603600	SS50	<input checked="" type="checkbox"/>
290073800	DPTS 3232	32	120	32	32	1,450	D0603600	SS50	<input checked="" type="checkbox"/>
290073900	DPTS 5250	52	135	50	50	3,450	D0804800	SS60	<input checked="" type="checkbox"/>

Stock items / Itens de stock Available under request / Disponibilidade sob consulta / Disponible bajo consulta

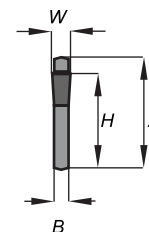
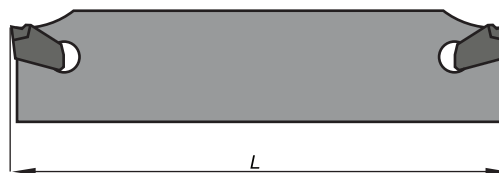
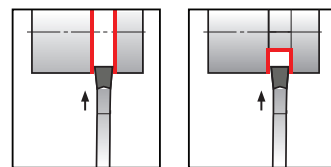
BLPS Grooving Tools | Ferramentas | Herramientas



Order Code	Reference	Dimensions					Inserts	Wrench 	Stock
		A	W	H	B	L			
213006900	BLPS 2-19	19	2	16	1,6	85	GCMX-2...	LE05	
213007000	BLPS 2-26	26	2	21,4	1,6	110	GCMX-2...	LE05	
213007100	BLPS 3-26	26	3	21,4	2,4	110	GCMX-3...	LE05	
213007200	BLPS 4-26	26	4	21,4	3,2	110	GCMX-4...	LE05	
213007300	BLPS 5-26	26	5	21,4	4	110	GCMX-5...	LE05	
213007400	BLPS 6-26	26	6	21,4	5,2	110	GCMX-6...	LE05	
213007500	BLPS 2-32	32	2	25	1,6	150	GCMX-2...	LE05	
213007600	BLPS 3-32	32	3	25	2,4	150	GCMX-3...	LE05	
213007700	BLPS 4-32	32	4	25	3,2	150	GCMX-4...	LE05	
213007800	BLPS 5-32	32	5	25	4	150	GCMX-5...	LE05	
213007900	BLPS 6-32	32	6	25	5,2	150	GCMX-6...	LE05	

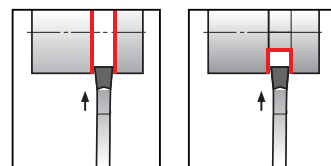
 Stock items / Itens de stock  Available under request / Disponibilidade sob consulta / Disponible bajo consulta

BLST Grooving Tools | Ferramentas | Herramientas

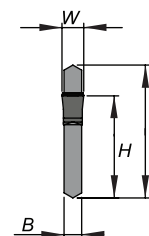


Order Code	Reference	Dimensions					Inserts	Wrench	Stock
		A	W	H	B	L			
213008000	BLST 2-19	19	2	16	1,6	85	GCMX-2...	LE05	☉
213008100	BLST 2-26	26	2	21,4	1,6	110	GCMX-2...	LE05	☉
213008200	BLST 3-26	26	3	21,4	2,4	110	GCMX-3...	LE05	☉
213008300	BLST 4-26	26	4	21,4	3,2	110	GCMX-4...	LE05	☉
213008400	BLST 5-26	26	5	21,4	4	110	GCMX-5...	LE05	☉
213008500	BLST 6-26	26	6	21,4	5,2	110	GCMX-6...	LE05	☉
213008600	BLST 2-32	32	2	25	1,6	150	GCMX-2...	LE05	☉
213008700	BLST 3-32	32	3	25	2,4	150	GCMX-3...	LE05	☉
213008800	BLST 4-32	32	4	25	3,2	150	GCMX-4...	LE05	☉
213008900	BLST 5-32	32	5	25	4	150	GCMX-5...	LE05	☉
213009000	BLST 6-32	32	6	25	5,2	150	GCMX-6...	LE05	☉

☉ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta



BLS Grooving Tools | Ferramentas | Herramientas



Order Code	Reference	Dimensions					Inserts	Wrench	Stock
		A	W	H	B	L			
213004600	BLS 3-32	32	3	25	2,4	150	SANCAR 3...	LE05	☉
213004700	BLS 4-32	32	4	25	3,2	150	SANCAR 4...	LE05	☉
213005500	BLS 5-32	32	5	25	4	150	SANCAR 5...	LE05	☉

☉ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Spare Parts | Acessórios | Accesorios

Screws



Order Code	Reference	Stock
290074100	D0503000	Ⓢ
290020700	D0603600	Ⓢ
290074200	D0804800	Ⓢ
290062900	D0602200	Ⓢ

Wrenches



Order Code	Reference	Stock
290021200	SS40	Ⓢ
290021300	SS50	Ⓢ
290074300	SS60	Ⓢ

Ⓢ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta



Order Code	Reference	Stock
290074400	LE05	Ⓢ

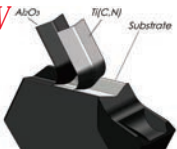


Order Code	Reference	Stock
119197300	LE03-04	Ⓢ

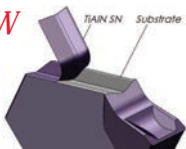
Grooving & Parting Off Grades Description

Coated Carbide Grades

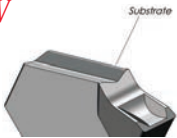
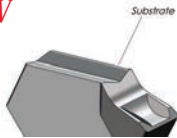
CVD Grades

<p>PH5115 <i>NEW</i></p>  <p>(P01-P30)</p> <p>A high wear resistant substrate associated with the Al₂O₃ coating, improves the performance in grooving operations under stable conditions due to the excellent hot hardness.</p>	<p>PH5125 <i>NEW</i></p>  <p>(P10-P35) (M05-M30)</p> <p>General grade for grooving operations with double side inserts. Represents a very good balance between wear resistance and toughness. Recommended for Steels and stainless steels with medium cutting speeds.</p>	<p>PH5135 <i>NEW</i></p>  <p>(P20-P40) (M15-M35) (K15-K30)</p> <p>A MT-CVD Coated grade suitable for Grooving and parting off operations with single side inserts. The high toughness make it the first choice in a wide range of materials with interrupted cuts. To be used at medium to low cutting speeds.</p>
<p>PH5320 <i>NEW</i></p>  <p>(K01-K25)</p> <p>An all-round grade for cast iron. The good balance between wear resistant and toughness make it the first choice for grooving, profiling and turning operations under good conditions. It is also able to withstand interrupted cuts.</p>	<p>PH5705 <i>NEW</i></p>  <p>(K05-K15)</p> <p>Suitable grade for cast iron. The high wear resistant substrate and the hot hardness coating improves the performance under stable conditions at medium to high cutting speeds with low feed rates.</p>	

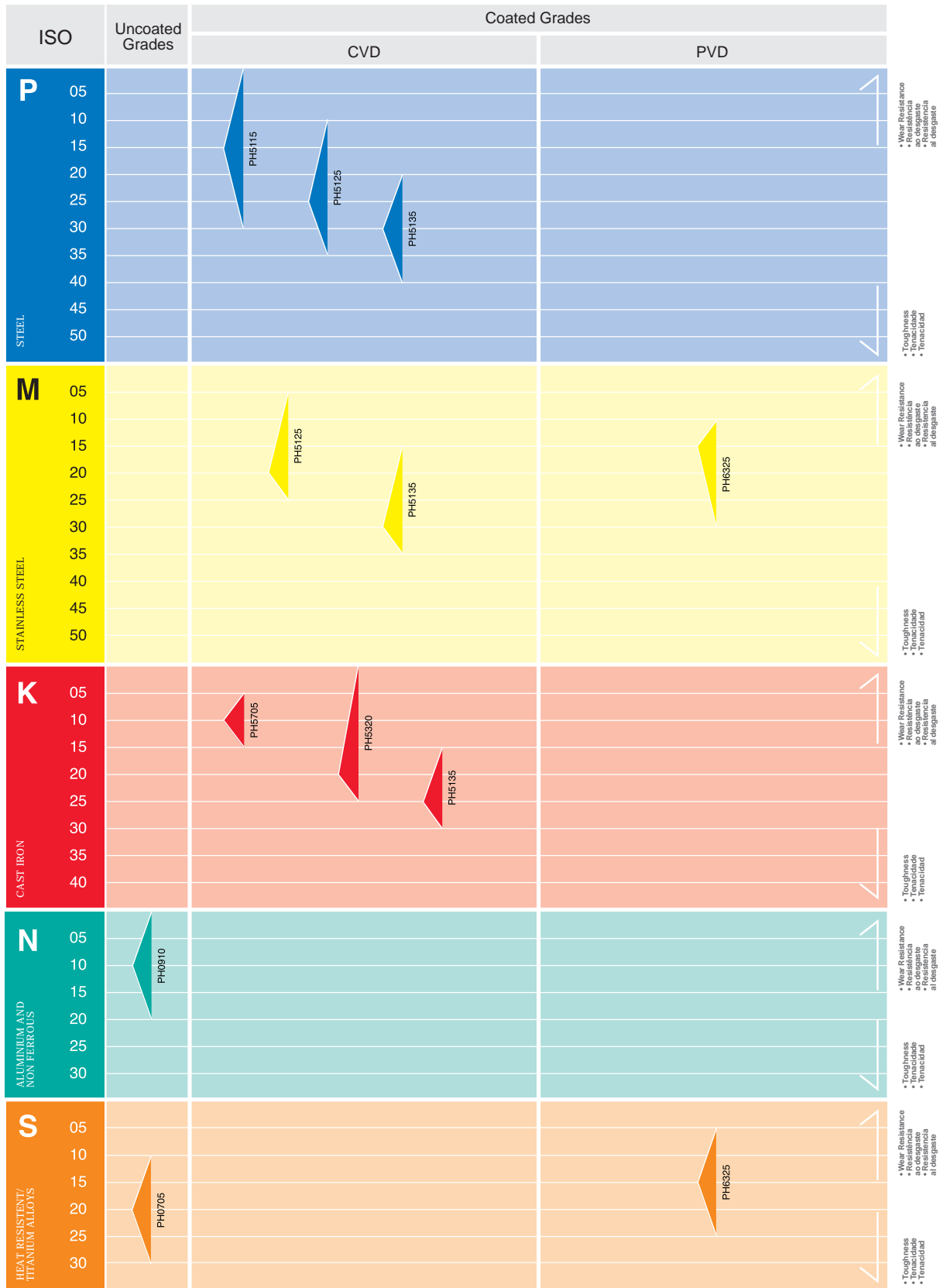
PVD Grades

<p>PH6325 <i>NEW</i></p>  <p>(M10-M30) (S10-S30)</p> <p>An all-round PVD grade for stainless steel and titanium alloys. The TiAlN coating and the good balance between wear resistant and toughness allows sharp edges, avoiding build up edge.</p>

Uncoated Carbide Grades

<p>PH0705 <i>NEW</i></p>  <p>(S10-S30)</p> <p>Uncoated carbide with fine-grain substrate suitable for turning, grooving and profiling operations. First choice for Super-Alloys and Titanium.</p>	<p>PH0910 <i>NEW</i></p>  <p>(N01-N30)</p> <p>Uncoated carbide micrograin grade combining a good abrasive wear resistance and toughness. Suitable for Non-Ferrous Materials and Aluminium alloys.</p>
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Grooving & Parting Off Grades



The position and the form of the grade symbols indicate the suitable field of application.

Centre of the field of application.

Recommended field of application.

Cutting Speed (m/min) | Velocidade de Corte (m/min) Velocidad de Corte (m/min)

ISO	MATERIAL	HB (Brinell)	CVD Coating		
			Wear Resistance		Toughness
		Grade fn (mm/rot)	PH5115	PH5135	PH5135
P	Unalloyed steel Low-alloyed steel High-alloy steel	125-170	85-165	70-150	70-140
		180-350	60-140	55-130	55-125
		200-325	50-130	45-115	45-115

ISO	MATERIAL	HB (Brinell)	CVD Coating		PVD Coating
			Wear Resistance	Toughness	
		Grade fn (mm/rot)	PH5125	PH5135	PH6325
M	SS - Ferritic/martensitic SS - Austenitic SS - Austenitic-ferretic (Duplex)	200-330	55-165	45-155	45-120
		180-330	55-140	50-130	50-115
		230-260	55-130	50-125	50-110

ISO	MATERIAL	HB (Brinell)	CVD Coating		
			Wear Resistance	Toughness	
		Grade fn (mm/rot)	PH5705	PH5320	PH5135
K	Malleable cast iron Grey cast iron Nodular cast iron	130-230	95-180	75-160	75-155
		180-220	90-175	70-155	70-140
		160-380	55-150	45-135	45-125

ISO	MATERIAL	HB (Brinell)	Uncoated
			PH0910
		Grade fn (mm/rot)	0.04 -0.35
N	Alluminium alloys Copper and copper alloys	60-130	190-1800
		90-110	40-420

ISO	MATERIAL	HB (Brinell)	PVD Coating	Uncoated
			PH6325	PH0705
		Grade fn (mm/rot)	0.04 -0.30	0.04 -0.30
S	Heat resistant super alloys (Iron base) Heat resistant super alloys (nickel base) Heat resistant super alloys (cobalt base) Titanium alloys (400<σ<1050[MPa])	200-280	33-80	26-50
		250-320	18-50	13-30
		200-320	23-70	13-35
		-	80-165	65-135