

B400 138
B411 142
B441 141

B442 143
B481 139

G400 169
G405 170



129 - 186



B100 144
B101 162
B121 164
B122 152
B157 159
B161 160
B170 156

B180 154
B301 149
B334 146
B335 147
B901 148
B903 150
B952 151

B953 153
B954 165
B955 166
B956 167
B957 168

G125 184
G129 174
G132 179
G135 171
G136 176
G137 172
G138 180
G142 176
G149 175
G154 173
G171 181
G236 185
G314 183
G335 171
G338 180
G560 176
G570 176
G600 178
M138 182

材料	Material	Material	Material
涂层	Tratamento	Tratamiento superficial	Coating
标准	Norma	Estándar	Standard
加工方向	Direção	Dirección	Direction
柄部	Haste	Mango	Shank
槽型	Tipo de Canal	Tipo de Canal	Flute Style
公差	Tolerância	Tolerancia	Tolerance
锥度	Escala de conicidade	Escala de conicidad	Taper gradient
<ul style="list-style-type: none"> ■ 性能卓越 ■ 性能良好 实例 10 = 外缘处的切削速度，米/分， +/- 10%	Excelente para a Aplicação Bom para a Aplicação Exemplo 10 = Velocidade periférica em metros/minuto +/- 10%	Excelente para Aplicación Bueno para Aplicación Ejemplo 10 = Velocidad Periférica en metros/minuto +/- 10%	Excellent for Application Good for Application Example 10 = Peripheral speed in metres/minute +/- 10%
产品型号	Código	Código de producto	Product Codes
尺寸范围	Gama de medidas	Rango de Diámetros	Size Range

AMG	中文	Português	Español	English
1.1	铁磁性低碳钢	Aço macio magnético	Acero blando	Magnetic soft steel
1.2	结构钢, 表面渗碳钢	Aço estrutural, Aço cementado	Acero de construcción/cementación	Structural steel, case carburizing steel
1.3	普通碳钢	Aço-carbono	Acero al carbono	Plain Carbon steel
1.4	合金钢	Aço de liga	Acero aleado	Alloy steel
1.5	合金钢, 淬火回火钢	Aço de liga, Aço temperado	Acero aleado/temple y revenido	Alloy steel, Hardened and tempered steel
1.6	合金钢, 淬火回火钢	Aço de liga, Aço temperado	Acero aleado/temple y revenido	Alloy steel, Hardened and tempered steel
1.7	热处理合金钢	Aço de liga temperado	Acero aleado cementado	Alloy steel, Heat treated
1.8	淬火合金钢, 耐磨钢	Aço de liga temperado	Acero aleado cementado	Alloy steel, Hardened & Wear resistant steel
2.1	易切削不锈钢	Aço inoxidável de maquinagem fácil	Acero inoxidable fácil mecanizado	Free machining, Stainless Steel
2.2	奥氏体不锈钢	Austenítico	Austenítico	Austenitic
2.3	铁素体 + 奥氏体, 马氏体不锈钢	Ferrítico + Austenítico + Martensítico	Ferrítico, Ferr. + Aust., Marten	Ferritic + Austenitic, Ferritic, Martensitic
2.4	沉淀硬化不锈钢	Aço inoxidável de fácil usinagem	Acero Inoxidable Templado	Precipitation Hardened
3.1	灰铸铁	Grafite laminar	Con grafito laminar	Lamellar graphite
3.2	灰铸铁	Grafite laminar	Con grafito laminar	Lamellar graphite
3.3	球墨铸铁, 可锻铸铁	Grafite nodular/ Ferro fundido maleável	Con graf. laminar, fundic. maleable	Nodular graphite, Malleable Cast Iron
3.4	球墨铸铁, 可锻铸铁	Grafite nodular/ Ferro fundido maleável	Con graf. laminar, fundic. maleable	Nodular graphite, Malleable Cast Iron
4.1	纯钛	Titânio, sem liga	Titanio no aleado	Titanium, unalloyed
4.2	钛合金	Titânio, com liga	Titanio aleado	Titanium, alloyed
4.3	钛合金	Titânio, com liga	Titanio aleado	Titanium, alloyed
5.1	纯镍	Níquel, sem liga	Níquel no aleado	Nickel, unalloyed
5.2	镍合金	Níquel, com liga	Níquel aleado	Nickel, alloyed
5.3	镍合金	Níquel, com liga	Níquel aleado	Nickel, alloyed
6.1	紫铜	Cobre	Cobre	Copper
6.2	β黄铜, 青铜	Latão beta, bronze	β-Latón, bronce	β-Brass, Bronze
6.3	α黄铜	Latão alfa	α-Latón	α-Brass
6.4	高强度青铜	Bronze de alta resistência	Metal AMPCO	High Strength Bronze
7.1	纯铝, 纯镁	Al, Mg, sem liga	Al, Mg, no aleado	Al, Mg, unalloyed
7.2	铝合金, 硅含量 < 0.5%	Al com liga, Si<0.5%	Al aleado con Si < 0.5%	Al alloyed, Si < 0.5%
7.3	铝合金, 硅含量 > 0.5% < 10%	Al com liga, Si>0.5%<10%	Al aleado con Si > 0.5% < 10%	Al alloyed, Si > 0.5% < 10%
7.4	铝合金, 硅含量 > 10% 晶须增强铝合金, 镁合金	Al com liga, Si>10% reforçadas com monocristais fiiformes, ligas de Al/Mg	Al aleado, Si>10% Reforzado por filamentos, Al-aleados, Mg-aleados	Al alloyed, Si > 10% Whisker reinforced Al-alloys Mg-alloys
8.1	热塑性塑料	Termoplásticos	Termoplásticos	Thermoplastics
8.2	热固性塑料	Plásticos termoduros	Plásticos endurecidos por calor	Thermosetting plastics
8.3	增强塑料	Materiais plásticos reforçados	Materiales plásticos reforzados	Reinforced plastic materials
9.1	金属陶瓷	Cerametal (metalocerâmica)	Cerametales (metales-cerámicas)	Cermets (metals-ceramics)
10.1	标准石墨	Grafite standard	Grafito standard	Graphite

	HM	HM	HM	HM	HM	HSS	HSS	HSS	HSS-E	HSS	HSS	HSS	HSS	
	DIN 8093	DIN 8093	DIN 8050	DIN 8094	DIN 8051	DIN 206	DORMER	DORMER	BS 328	BS 328	DIN 9	DIN 9	ANSI	
	H7	Ø 95-5.5 S +0.004 ØS 51-12 D +0.005	H7	H7	H7	H7			H7					
										1.48 ▶	1.50 ▶	1.50 ▶		
	B400	B481	B441	B411	B442	B100	B334	B335	B901	B301	B903	B952	B122	
	1.00 - 20.00	0.98 - 12.05	10.00 - 20.00	5.00 - 30.00	10.00 - 20.00	1.50 - 50.00	N000 - N16	N000 BLADES - N16NUT	1.50 - 1/2	1/16 - 1/2	1.50 - 20.00	1.20 - 50.00	3/8 - 1.1/16	
AMG	138	138	141	142	143	144	146	147	148	149	150	151	152	ISO
1.1	■18B	■18B	■18B	■18B	■18B	■18C	■		■18C	■18C	■18C	■18C	■18C	P 1
1.2	■18B	■18B	■18B	■18B	■18B	■14C	■		■14C	■14C	■14C	■14C	■14C	P 1
1.3	■14B	■14B	■14B	■14B	■14B	■11C	■		■11C	■11C	■11C	■11C	■11C	P 2
1.4	■14B	■14B	■14B	■14B	■14B	■10B	■		■10B	■10B	■10B	■10B	■10B	P 3
1.5	■10C	■10C	■10C	■10C	■10C	■5B	■		■5B	■5B	■5B	■5B	■5B	P 4
1.6	■10C	■10C	■10C	■10C	■10C	■4A	■		■4A	■4A	■4A	■4A	■4A	H 1
1.7														H 3
1.8														H 4
2.1						■8F	■		■8C	■8C	■8C	■8C	■8C	M 1
2.2										■5B	■5B	■5B	■5B	M 3
2.3										■6B	■6B	■6B	■6B	M 2
2.4														S 2
3.1	■17D	■17D	■17D	■17D	■17D	■14E	■		■14E	■14E	■14E	■14E	■14E	K 1
3.2	■17D	■17D	■17D	■17D	■17D	■11D	■		■11D	■11D	■11D	■11D	■11D	K 2
3.3	■17D	■17D	■17D	■17D	■17D	■10C	■		■10C	■10C	■10C	■10C	■10C	K 3
3.4	■14D	■14D	■14D	■14D	■14D	■9C	■		■9C	■9C	■9C	■9C	■9C	K 4
4.1	■14C	■14C	■14C	■14C	■14C	■11C	■		■11C	■11C	■11C	■11C	■11C	S 1
4.2	■14C	■14C	■14C	■14C	■14C	■5B	■		■5B	■5B	■5B	■5B	■5B	S 2
4.3	■10B	■10B	■10B	■10B	■10B	■4B	■		■4B	■4B	■4B	■4B	■4B	S 3
5.1	■10C	■10C	■10C	■10C	■10C	■5D	■		■5D	■5D	■5D	■5D	■5D	S 1
5.2	■10B	■10B	■10B	■10B	■10B	■3C	■		■3C					S 2
5.3	■10B	■10B	■10B	■10B	■10B	■2C	■		■2C					S 3
6.1	■38E	■38E	■38E	■38E	■38E	■18D	■		■18D	■18D	■18D	■18D	■18D	N 3
6.2	■38E	■38E	■38E	■38E	■38E	■20E	■		■20E	■20E	■20E	■20E	■20E	N 4
6.3	■38E	■38E	■38E	■38E	■38E	■18D	■		■18D	■18D	■18D	■18D	■18D	N 3
6.4	■38D	■38D	■38D	■38D	■38D	■11D	■		■11D	■11D	■11D	■11D	■11D	N 4
7.1	■60D	■60D	■60D	■60D	■60D	■23F	■		■23F	■23F	■23F	■23F	■23F	N 1
7.2	■60D	■60D	■60D	■60D	■60D	■18F	■		■18F	■18F	■18F	■18F	■18F	N 1
7.3	■25D	■25D	■25D	■25D	■25D				■15E	■15E	■15E	■15E	■15E	N 1
7.4	■25D	■25D	■25D	■25D	■25D				■14D	■14D	■14D	■14D	■14D	N 2
8.1	■25C	■25C	■25C	■25C	■25C									O
8.2	■13C	■13C	■13C	■13C	■13C	■21B	■		■21B	■21B	■21B	■21B	■21B	O
8.3														O
9.1														H
10.1														O

HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS	HSS-E	HSS-E	HSS-E	
DIN 2179	DIN 212	DIN 212	DIN 212	DIN 208	BS 328	DIN 311	DIN 2180	DIN 219	DIN 217	
	DIN 6939FA									
	B	B	E	B	B			B		
	H7	$\begin{matrix} \text{H7} \\ \text{H8} \\ \text{H9} \\ \text{H10} \end{matrix}$	H7	H7	H7	k11		H7		
1:50							1:50			
B953	B180	B170	B157	B161	B101	B121	B954	B955	B956	B957
1.00 - 12.00	1.50 - 20.00	0.98 - 12.00	2.00 - 20.00	3.00 - 50.00	3.00 - 2"	10.00 - 30.00	5.00 - 30.00	25.00 - 80.00	13.00 - 40.00	N3DRIVER - N9WASHER

AMG	153	154	156	159	160	162	164	165	166	167	168	ISO
1.1	25C	25C	25C	25C	25C	18C	18C	25C	18C			P 1
1.2	20C	20C	20C	20C	20C	14C	14C	20C	14C			P 1
1.3	16C	16C	16C	16C	16C	11C	11C	16C	11C			P 2
1.4	15B	15B	15B	15B	15B	10B	10B	15B	10B			P 3
1.5	9B	9B	9B	9B	9B	5B	5B	9B	5B			P 4
1.6	5A	5A	5A	5A	5A	4A	4A	5A	4A			H 1
1.7												H 3
1.8												H 4
2.1	11C	11C	11C	11C	11C	8C		11C	8C			M 1
2.2	6B	6B	6B	6B	6B			6B	5B			M 3
2.3	8B	8B	8B	8B	8B			8B	6B			M 2
2.4		6B										S 2
3.1		16E	16E		16E	14E	14E		14E			K 1
3.2		15D	15D		15D	11D	11D					K 2
3.3		13C	13C		13C	10C	10C					K 3
3.4		11C	11C		11C	9C	9C					K 4
4.1	15C	15C	15C	15C	15C	11C	11C	15C	11C			S 1
4.2	9B	9B	9B	9B	9B	5B		9B	5B			S 2
4.3	5B	5B	5B	5B	5B	4B		5B	4B			S 3
5.1	8D	8D	8D	8D	8D	5D		8D	5D			S 1
5.2	5C	5C	5C	5C	5C	3C		5C	3C			S 2
5.3	3C	3C	3C	3C	3C	2C		3C	2C			S 3
6.1	25D	25D	25D	25D	25D	18D		25D	18D			N 3
6.2	28E	28E	28E	28E	28E	20E		28E	20E			N 4
6.3		25D	25D		25D	18D						N 3
6.4		14D	14D		14D	11D						N 4
7.1	28F			28F		23F		28F	23F			N 1
7.2	25F			25F		18F		25F	18F			N 1
7.3	20E			20E				20E	15E			N 1
7.4	16D			16D				16D	14D			N 2
8.1	30B			30B				30B				O
8.2						21B	21B		21B			O
8.3												O
9.1	3A			3A				3A				H
10.1												O

材料	Material	Material	Material
涂层	Tratamento	Tratamiento superficial	Coating
标准	Norma	Estándar	Standard
加工方向	Direção	Dirección	Direction
应用	Aplicação	Aplicaciones	Application
柄部	Haste	Mango	Shank
镗孔度数	Ângulo de Escareado	° de avellanado	Countersink °
■ 性能卓越	Excelente para a Aplicação	Excelente para Aplicación	Excellent for Application
■ 性能良好	Bom para a Aplicação	Bueno para Aplicación	Good for Application
实例 10 = 外缘处的切削速度，米/分， +/- 10%	Exemplo 10 = Velocidade periférica em metros/minuto +/- 10%	Ejemplo 10 = Velocidad Periférica en metros/minuto +/- 10%	Example 10 = Peripheral speed in metres/minute +/- 10%
产品型号	Código	Código de producto	Product Codes
尺寸范围	Gama de medidas	Rango de Diámetros	Size Range

AMG	中文	Português	Español	English
1.1	铁磁性低碳钢	Aço macio magnético	Acero blando	Magnetic soft steel
1.2	结构钢, 表面渗碳钢	Aço estrutural, Aço cementado	Acero de construcción/cementación	Structural steel, case carburizing steel
1.3	普通碳钢	Aço-carbono	Acero al carbono	Plain Carbon steel
1.4	合金钢	Aço de liga	Acero aleado	Alloy steel
1.5	合金钢, 淬火回火钢	Aço de liga, Aço temperado	Acero aleado/temple y revenido	Alloy steel, Hardened and tempered steel
1.6	合金钢, 淬火回火钢	Aço de liga, Aço temperado	Acero aleado/temple y revenido	Alloy steel, Hardened and tempered steel
1.7	热处理合金钢	Aço de liga temperado	Acero aleado cementado	Alloy steel, Heat treated
1.8	淬火合金钢, 耐磨钢	Aço de liga temperado	Acero aleado cementado	Alloy steel, Hardened & Wear resistant steel
2.1	易切削不锈钢	Aço inoxidável de maquinação fácil	Acero inoxidable fácil mecanizado	Free machining, Stainless Steel
2.2	奥氏体不锈钢	Austenítico	Austenítico	Austenitic
2.3	铁素体 + 奥氏体, 马氏体不锈钢	Ferrítico + Austenítico + Martensítico	Ferrítico, Ferr. + Aust., Marten	Ferritic + Austenitic, Ferritic, Martensitic
2.4	沉淀硬化不锈钢	Aço inoxidável de fácil usinagem	Acero Inoxidable Templado	Precipitation Hardened
3.1	灰铸铁	Grafite laminar	Con grafito laminar	Lamellar graphite
3.2	灰铸铁	Grafite laminar	Con grafito laminar	Lamellar graphite
3.3	球墨铸铁, 可锻铸铁	Grafite nodular/ Ferro fundido maleável	Con graf. laminar, fundic. maleable	Nodular graphite, Malleable Cast Iron
3.4	球墨铸铁, 可锻铸铁	Grafite nodular/ Ferro fundido maleável	Con graf. laminar, fundic. maleable	Nodular graphite, Malleable Cast Iron
4.1	纯钛	Titânio, sem liga	Titanio no aleado	Titanium, unalloyed
4.2	钛合金	Titânio, com liga	Titanio aleado	Titanium, alloyed
4.3	钛合金	Titânio, com liga	Titanio aleado	Titanium, alloyed
5.1	纯镍	Níquel, sem liga	Níquel no aleado	Nickel, unalloyed
5.2	镍合金	Níquel, com liga	Níquel aleado	Nickel, alloyed
5.3	镍合金	Níquel, com liga	Níquel aleado	Nickel, alloyed
6.1	紫铜	Cobre	Cobre	Copper
6.2	β黄铜, 青铜	Latão beta, bronze	β-Latón, bronce	β-Brass, Bronze
6.3	α黄铜	Latão alfa	α-Latón	α-Brass
6.4	高强度青铜	Bronze de alta resistência	Metal AMPCO	High Strength Bronze
7.1	纯铝, 纯镁	Al, Mg, sem liga	Al, Mg, no aleado	Al, Mg, unalloyed
7.2	铝合金, 硅含量 < 0.5%	Al com liga, Si<0.5%	Al aleado con Si < 0.5%	Al alloyed, Si < 0.5%
7.3	铝合金, 硅含量 > 0.5% < 10%	Al com liga, Si>0.5%<10%	Al aleado con Si > 0.5% < 10%	Al alloyed, Si > 0.5% < 10%
7.4	铝合金, 硅含量 > 10% 晶须增强铝合金, 镁合金	Al com liga, Si>10% reforçadas com monocristais filiformes, ligas de Al/Mg	Al aleado, Si>10% Reforzado por filamentos, Al-aleados, Mg-aleados	Al alloyed, Si > 10% Whisker reinforced Al-alloys Mg-alloys
8.1	热塑性塑料	Termoplásticos	Termoplásticos	Thermoplastics
8.2	热固性塑料	Plásticos termoduros	Plásticos endurecidos por calor	Thermosetting plastics
8.3	增强塑料	Materiais plásticos reforçados	Materiales plásticos reforzados	Reinforced plastic materials
9.1	金属陶瓷	Cerametal (metalocerâmica)	Cermetales (metales-cerámicas)	Cermets (metals-ceramics)
10.1	标准石墨	Grafite standard	Grafito standard	Graphite

	HM	HM	HSS	HSS	HSS	HSS	HSS	HSS-E	HSS	HSS	HSS	
	DIN 335C	DIN 335	DIN 334C	DIN 334C	DIN 334D	DIN 335C	DORMER	DORMER	DIN 335C	DIN 335C	DIN 335C	
	G400	G405	G135	G335	G137	G154	G129	G149	G136	G560	G142	
	6.30 - 31.00	8.30 - 12.40	6.30 - 25.00	6.30 - 25.00	16.00 - 80.00	6.30 - 25.00	6.00 - 31.50	5.00 - 50.00	4.30 - 31.00	6.30 - 31.00	4.80 - 31.00	
AMG	169	170	171	171	172	173	174	175	176	176	176	ISO
1.1	30F	30F	30F	50E	30F	30F	30D	30D	30F	50E	30F	P 1
1.2	25E	25E	25E	40E	25E	25E	25D	25D	25E	40E	25E	P 1
1.3	20D	20D	20D	30D	20D	20D	20C	20C	20D	30D	20D	P 2
1.4	15D	15D	15D	20D	15D	15D	15B	15B	15D	20D	15D	P 3
1.5	10B	10B	10B	15B	10B	10B	10A	10A	10B	15B	10B	P 4
1.6	6A	6A	6A	10B	6A	6A	6A	6A	6A	10B	6A	H 1
1.7												H 3
1.8												H 4
2.1	8C	8C	8C	8C	8C	8C	8B	8B	8C		8C	M 1
2.2	6B	6B	6B	6B	6B	6B	6A	6A	6B		6B	M 3
2.3	4A	4A	4A	4A	4A	4A			4A		4A	M 2
2.4												S 2
3.1	25F	25F	25F	45F	25F	25F	25D	25D	25F	45F		K 1
3.2	15D	15D	15D	35D	15D	15D	15C	15C	15D	35D		K 2
3.3	12C	12C	12C	30C	12C	12C	12A	12A	12C	30C		K 3
3.4	8C	8C	8C	30C	8C	8C	8A	8A	8C	30C		K 4
4.1	12C	12C	12C	20C	12C	12C	12B	12B	12C	20C	12C	S 1
4.2	10A	10A	10A	15A	10A	10A	10A	10A	10A	15A	10A	S 2
4.3	8A	8A	8A	10A	8A	8A	8A	8A	8A	10A		S 3
5.1	12C	12C	12C	20C	12C	12C	12B	12B	12C	20C	12C	S 1
5.2	6B	6B	6B	10B	6B	6B	6A	6A	6B	10B	6B	S 2
5.3	4A	4A	4A	6A	4A	4A	4A	4A	4A	6A		S 3
6.1	25D	25D	25D	40D	25D	25D	25B	25B	25D	40D	25D	N 3
6.2	20F	20F	20F	30F	20F	20F	20C	20C	20F	30F	20F	N 4
6.3	25F	25F	25F	40F	25F	25F	25C	25C	25F	40F	25F	N 3
6.4	10D	10D	10D	15D	10D	10D	10B	10B	10D	15D		N 4
7.1	30G	30G	30G	50G	30G	30G	30D	30D	30G	50G	30G	N 1
7.2	25F	25F	25F	40F	25F	25F	25C	25C	25F	40F	25F	N 1
7.3	20F	20F	20F	30F	20F	20F	20C	20C	20F	30F	20F	N 1
7.4	10F	10F	10F	15F	10F	10F	10C	10C	10F	15F	10F	N 2
8.1	30G	30G	30G	50G	30G	30G	30D	30D	30G	50G	30G	O
8.2	20G	20G	20G	30G	20G	20G	20D	20D	20G	30G	20G	O
8.3												O
9.1												H
10.1												O

	HSS-E	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS		
	ATICH				TN	TAIN	ST				
	DIN 335C	DORMER	DIN 335A	DIN 335D	DIN 335D	DIN 335C	DORMER	DORMER	DIN 373		
	90°	90°	90°	90°	90°	100°	20°	20°	180°		
	G570	G600	G132	G138	G338	G171	M138	G314	G125	G236	
	6.30 - 31.00	6.30 - 25.00	8.00 - 20.00	25.00 - 80.00	25.00 - 63.00	6.30 - 25.00	No.1 - No.6	4.00 - 36.00	6.50 - 20.00	Set	
	NEW	NEW									
AMG	176	178	179	180	180	181	182	183	184	185	ISO
1.1	■45E	■22F		■30F	■50F	■50E	■30D	■30D	■30E		P 1
1.2	■36E	■17E		■25E	■40E	■40E	■25D	■25D	■25E		P 1
1.3	■27D	■15D	■20E	■20D	■30D	■30D	■20C	■20C	■20D		P 2
1.4	■22D	■12D	■15D	■15D	■20D	■20D	■15B	■15B	■15D		P 3
1.5	■17B	■8B	■10D	■10B	■15B	■15B	■10A	■10A	■10C		P 4
1.6	■12B	■6A	■6B	■6A	■10A	■10B	■6A	■6A	■6C		H 1
1.7											H 3
1.8											H 4
2.1	■17C	■8C		■8C			■8B	■8B	■8D		M 1
2.2	■12B	■6B		■6B			■6A	■6A	■6C		M 3
2.3	■15A	■4A	■4B	■4A			■4A	■4A			M 2
2.4	■10A										S 2
3.1	■40C	■25F		■25F	■45F	■45F	■25D	■25D	■25E		K 1
3.2	■32C	■15D		■15D	■35D	■35D	■15C	■15C	■15E		K 2
3.3	■27C	■12C		■12C	■30C	■30C	■12A	■12A	■12D		K 3
3.4	■24C		■8D	■8C	■30C	■30C	■8A	■8A	■8C		K 4
4.1				■12C	■20C	■20C	■12B	■12B	■12E		S 1
4.2			■8A	■10A	■15A	■15A	■10A	■10A	■10E		S 2
4.3			■8A	■8A	■10A	■10A	■8A	■8A	■8E		S 3
5.1				■12C	■20C	■20C	■12B	■12B	■12E		S 1
5.2	■6A		■6C	■6B	■10B	■10B	■6A	■6A	■6C		S 2
5.3	■4A		■4B	■4A	■6A	■6A	■4A	■4A	■4E		S 3
6.1	■40D	■25D		■25D	■40D	■40D	■25B	■25B	■25C		N 3
6.2	■30F	■20F		■20F	■30F	■30F	■20C	■20C	■20C		N 4
6.3	■40F	■25F		■25F	■40F	■40F	■25C	■25C	■25C		N 3
6.4	■15D	■10D	■10F	■10D	■15D	■15D	■10B	■10B			N 4
7.1	■45G	■30G		■30G	■50G	■50G	■30D	■30D	■30G		N 1
7.2	■36F	■25F		■25F	■40F	■40F	■25C	■25C	■25G		N 1
7.3	■27F	■20F		■20F	■30F	■30F	■20C	■20C	■20G		N 1
7.4	■13F	■10F		■10F	■15F	■15F	■10C	■10C	■10E		N 2
8.1				■30G	■50G	■50G	■30D	■30D	■30C		O
8.2				■20G	■30G	■30G	■20D	■20D	■20C		O
8.3		■5G									O
9.1											H
10.1											O

	Ø mm												
	1,5	2	3	5	8	10	12	16	20	25	30	40	50
A	0,045	0,055	0,078	0,100	0,150	0,170	0,185	0,220	0,250	0,280	0,320	0,390	0,440
B	0,055	0,072	0,110	0,150	0,180	0,210	0,240	0,280	0,310	0,360	0,400	0,500	0,550
C	0,065	0,085	0,135	0,185	0,220	0,260	0,285	0,335	0,390	0,440	0,480	0,600	0,680
D	0,080	0,110	0,160	0,200	0,270	0,320	0,360	0,410	0,470	0,540	0,600	0,730	0,850
E	0,100	0,140	0,180	0,250	0,350	0,390	0,430	0,500	0,530	0,640	0,750	0,910	1,100
F	0,140	0,180	0,260	0,350	0,440	0,500	0,550	0,630	0,700	0,800	0,930	1,200	1,500
mm/REV ± 15%													

	Ø mm										
	6	8	10	16	20	25	32	40	60	80	
A	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.12	0.14	0.16	
B	0.04	0.05	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.20	
C	0.05	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	
D	0.06	0.08	0.10	0.12	0.15	0.18	0.20	0.22	0.25	0.28	
E	0.08	0.10	0.12	0.15	0.18	0.20	0.25	0.27	0.30	0.32	
F	0.09	0.11	0.13	0.16	0.19	0.21	0.26	0.29	0.33	0.36	
G	0.10	0.12	0.15	0.18	0.20	0.22	0.28	0.32	0.36	0.40	
H	0.12	0.15	0.18	0.20	0.22	0.25	0.30	0.35	0.40	0.45	
mm/REV											

● 预钻孔时确定铰削余量的一般准则 ● Regras gerais para material a ser removido durante a furação ● Guía general para la eliminación de material cuando existe agujero pre-taladrado ● General guidelines for stock removal when pre-drilling holes

	Ø (mm)					
	3 - 5mm	5.1 - 10mm	10.1 - 20mm	20.1 - 30mm	> 30mm	
1.1	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-0.5	P 1
1.2	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-0.5	P 1
1.3	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-0.5	P 2
1.4	0.1-0.2	0.2	0.2	0.3	0.3-0.4	P 3
1.5	0.1-0.2	0.2	0.2	0.3	0.3-0.4	P 4
1.6	0.1-0.2	0.2	0.2	0.3	0.3-0.4	H 1
1.7	0.1-0.2	0.2	0.2	0.3	0.3-0.4	H 3
1.8	0.1-0.2	0.2	0.2	0.3	0.3-0.4	H 4
2.1	0.1-0.2	0.2	0.2	0.3	0.3-0.4	M 1
2.2	0.1-0.2	0.2	0.2	0.3	0.3-0.4	M 3
2.3	0.1-0.2	0.2	0.2	0.3	0.3-0.4	M 2
2.4	0.1-0.2	0.2	0.2	0.3	0.3-0.4	S 2
3.1	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-0.5	K 1
3.2	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-0.5	K 2
3.3	0.1-0.2	0.2	0.3	0.4	0.5	K 3
3.4	0.1-0.2	0.2	0.3	0.4	0.5	K 4
4.1	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.3-0.4	S 1
4.2	0.1-0.2	0.2	0.2	0.3	0.3-0.4	S 2
4.3	0.1-0.2	0.2	0.2	0.3	0.3-0.4	S 3
5.1	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-0.5	S 1
5.2	0.1-0.2	0.2	0.2	0.3	0.3-0.4	S 2
5.3	0.1-0.2	0.2	0.2	0.3	0.3-0.4	S 3
6.1	0.1-0.2	0.2-0.3	0.3-0.4	0.4-0.5	0.5	N 3
6.2	0.1-0.2	0.2	0.2-0.3	0.3	0.3-0.4	N 4
6.3	0.1-0.2	0.2	0.2-0.3	0.3	0.3-0.4	N 3
6.4	0.1-0.2	0.2	0.2-0.3	0.3	0.3-0.4	N 4
7.1	0.1-0.2	0.2-0.3	0.3-0.4	0.4-0.5	0.5	N 1
7.2	0.1-0.2	0.2-0.3	0.3-0.4	0.4-0.5	0.5	N 1
7.3	0.1-0.2	0.2-0.3	0.3-0.4	0.4-0.5	0.5	N 1
7.4	0.1-0.2	0.2-0.3	0.3-0.4	0.4-0.5	0.5	N 2
8.1	0.1-0.2	0.3	0.4	0.4-0.5	0.5	O
8.2	0.1-0.2	0.2	0.2	0.3	0.3-0.4	O
8.3	0.1-0.2	0.2	0.2	0.3	0.3-0.4	O
9.1	0.1-0.2	0.2	0.2	0.3	0.3-0.4	H
10.1	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-0.5	O

对于可调铰刀或镶片铰刀，把铰削余量减少 30%；对于大螺旋角铰刀，把铰削余量增加 50% / Para alargadores ajustáveis reduza o sobremetal em 30%. Para alargadores com hélice rápida aumente em 50% / Para escariadores ajustables y con cuchillas reducir la eliminación de material un 30%. Para escariadores de hélice rápida incrementar un 50% / For adjustable or blade reamers reduce stock removal by 30%. For quick helix reamers increase by 50%

B400

HM



DIN
8093



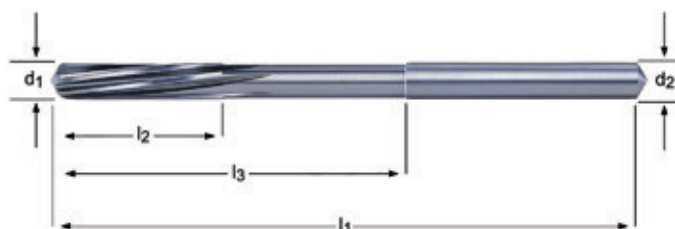
B

H7

- 极不等距机用铰刀
- Alargador Máquina com Espaçamento Extremamente Desigual
- Escariador de máquina Espacio extremadamente irregular
- Machine Reamer Extremely unequal spacing

B400

B400	▪	1.5	1.6	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	
		8.1	8.2																			
	▪	1.1	1.2	1.3	1.4																	



B400



1.00 - 20.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Ø _{h9} mm	B400
1.0	34	6	15	3	1.0	B4001.0 ¹⁾
1.2	38	8	16.5	3	1.2	B4001.2 ¹⁾
1.4	40	8	18	3	1.4	B4001.4 ¹⁾
1.5	40	8	18	3	1.5	B4001.5 ¹⁾
1.6	49	11	26	3	1.6	B4001.6 ¹⁾
1.8	49	11	25	4	1.8	B4001.8 ¹⁾
2.0	49	11	24	4	2.0	B4002.0 ¹⁾
2.2	57	15	30	4	2.2	B4002.2 ¹⁾
2.5	57	15	28	4	2.5	B4002.5 ¹⁾
2.8	61	15	32	4	2.8	B4002.8 ¹⁾
3.0	61	15	30	6	3.0	B4003.0 ¹⁾
3.2	70	18	33	6	3.2	B4003.2 ¹⁾
3.5	70	18	33	6	3.5	B4003.5 ¹⁾
4.0	75	19	44	6	4.0	B4004.0 ¹⁾
4.5	80	21	46	6	4.5	B4004.5 ¹⁾
5.0	86	23	53	6	5.0	B4005.0 ¹⁾
5.5	93	26	56	6	5.6	B4005.5 ¹⁾
6.0	93	26	56	6	5.6	B4006.0 ¹⁾
6.5	101	28	63	6	6.3	B4006.5 ²⁾
7.0	109	31	69	6	7.1	B4007.0 ²⁾
8.0	117	33	75	6	8.0	B4008.0 ²⁾
9.0	125	36	81	6	9.0	B4009.0 ²⁾
10.0	133	38	87	6	10.0	B40010.0 ²⁾
12.0	151	44	105	6	10.0	B40012.0 ²⁾
14.0	160	47	110	8	12.5	B40014.0 ²⁾
16.0	170	52	120	8	12.5	B40016.0 ²⁾
18.0	182	56	130	6	14.0	B40018.0 ³⁾
20.0	195	60	137	6	16.0	B40020.0 ³⁾

¹⁾ 整体硬质合金 / Metal Duro / Monobloc de Metal Duro / Solid Carbide

²⁾ 硬质合金刀头 / Cabeça de Metal Duro / Cabeza de Metal Duro / Carbide Head

³⁾ 硬质合金镶片 / Ponta em Metal Duro / Punta de Metal Duro / Carbide Tipped

B481



- NC-用于高精度夹头以丝为单位的铰刀
- NC - Alargador Centesimal para Porta Ferramentas de Alta Precisão
- NC - Escariador Centesimal para portas de alta precisión
- NC - Centesimal Reamer for High Precision Chucks

极不等距
Espaceamento Extremamente Desigual
Espacio extremadamente irregular
Extremely unequal spacing

B481

B481	▪	1.5	1.6	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	
		8.1	8.2																			
	▪	1.1	1.2	1.3	1.4																	



d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Ø _{h6} mm	B481
0.98	49.5	6	21.5	3	4	B4810.98
0.99	49.5	6	21.5	3	4	B4810.99
1.00	49.5	6	21.5	3	4	B4811.00
1.01	49.5	6	21.5	3	4	B4811.01
1.02	49.5	6	21.5	3	4	B4811.02
1.03	49.5	9	21.5	3	4	B4811.03
1.48	49	9	21	3	4	B4811.48
1.49	49	9	21	3	4	B4811.49
1.50	49	9	21	3	4	B4811.50
1.51	49	9	21	3	4	B4811.51
1.52	49	9	21	3	4	B4811.52
1.53	49	9	21	3	4	B4811.53
1.98	49	12	21	4	4	B4811.98
1.99	49	12	21	4	4	B4811.99
2.00	49	12	21	4	4	B4812.00
2.01	49	12	21	4	4	B4812.01
2.02	49	12	21	4	4	B4812.02
2.03	49	12	21	4	4	B4812.03
2.48	59	16	31	4	4	B4812.48
2.49	59	16	31	4	4	B4812.49
2.50	59	16	31	4	4	B4812.50
2.51	59	16	31	4	4	B4812.51
2.52	59	16	31	4	4	B4812.52
2.53	59	16	31	4	4	B4812.53
2.97	62.5	17	35	6	4	B4812.97
2.98	62.5	17	35	6	4	B4812.98
2.99	62.5	17	35	6	4	B4812.99
3.00	62.5	17	35	6	4	B4813.00
3.01	62.5	17	35	6	4	B4813.01
3.02	62.5	17	35	6	4	B4813.02
3.03	62.5	17	35	6	4	B4813.03
3.97	75	19	47	6	4	B4813.97
3.98	75	19	47	6	4	B4813.98
3.99	75	19	47	6	4	B4813.99
4.00	75	19	47	6	4	B4814.00
4.01	75	19	47	6	4	B4814.01

d_1 \emptyset mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 $\emptyset h_6$ mm	B481
4.02	75	19	47	6	4	B4814.02
4.03	75	19	47	6	4	B4814.03
4.97	86	23	50	6	6	B4814.97
4.98	86	23	50	6	6	B4814.98
4.99	86	23	50	6	6	B4814.99
5.00	86	23	50	6	6	B4815.00
5.01	86	23	50	6	6	B4815.01
5.02	86	23	50	6	6	B4815.02
5.03	86	23	50	6	6	B4815.03
5.97	93	26	57	6	6	B4815.97
5.98	93	26	57	6	6	B4815.98
5.99	93	26	57	6	6	B4815.99
6.00	93	26	57	6	6	B4816.00
6.01	93	26	57	6	6	B4816.01
6.02	93	26	57	6	6	B4816.02
6.03	93	26	57	6	6	B4816.03
7.97	117	33	81	6	8	B4817.97
7.98	117	33	81	6	8	B4817.98
7.99	117	33	81	6	8	B4817.99
8.00	117	33	81	6	8	B4818.00
8.01	117	33	81	6	8	B4818.01
8.02	117	33	81	6	8	B4818.02
8.03	117	33	81	6	8	B4818.03
8.04	117	33	81	6	8	B4818.04
9.97	133	38	93	6	10	B4819.97
9.98	133	38	93	6	10	B4819.98
9.99	133	38	93	6	10	B4819.99
10.00	133	38	93	6	10	B48110.00
10.01	133	38	93	6	10	B48110.01
10.02	133	38	93	6	10	B48110.02
10.03	133	38	93	6	10	B48110.03
10.04	133	38	93	6	10	B48110.04
10.05	133	38	93	6	10	B48110.05
11.97	151	44	106	6	12	B48111.97
11.98	151	44	106	6	12	B48111.98
11.99	151	44	106	6	12	B48111.99
12.00	151	44	106	6	12	B48112.00
12.01	151	44	106	6	12	B48112.01
12.02	151	44	106	6	12	B48112.02
12.03	151	44	106	6	12	B48112.03
12.04	151	44	106	6	12	B48112.04
12.05	151	44	106	6	12	B48112.05

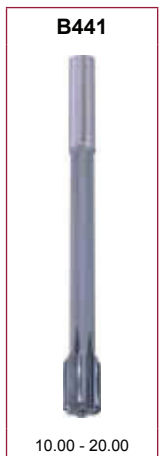
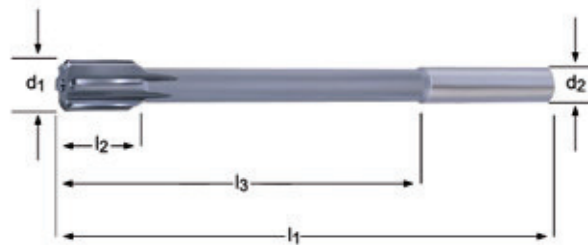
B441



- 极不等距机用铰刀
- Alargador Máquina com Espaçamento Extremamente Desigual
- Escariador de máquina Espacio extremadamente irregular
- Machine Reamer Extremely unequal spacing

B441

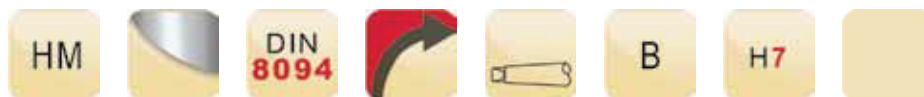
B441	▪	1.5	1.6	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	
		8.1	8.2																			
	•	1.1	1.2	1.3	1.4																	



d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Ø h_9 mm	B441
10.0	133	19	87	6	10	B44110.0 ³⁾
11.0	142	19	96	6	10	B44111.0 ³⁾
12.0	151	19	105	6	10	B44112.0 ³⁾
13.0	151	19	105	6	10	B44113.0 ³⁾
14.0	160	19	110	6	12.5	B44114.0 ³⁾
15.0	162	19	112	6	12.5	B44115.0 ³⁾
16.0	170	22	120	6	12.5	B44116.0 ³⁾
17.0	175	22	123	6	14	B44117.0 ³⁾
18.0	182	22	130	6	14	B44118.0 ³⁾
19.0	189	22	131	6	16	B44119.0 ³⁾
20.0	195	22	137	6	16	B44120.0 ³⁾

³⁾ 硬质合金镶片 / Ponta em Metal Duro / Punta de Metal Duro / Carbide Tipped

B411



- 极不等距机用铰刀
- Alargador Máquina com Espaçamento Extremamente Desigual
- Escariador de máquina Espacio extremadamente irregular
- Machine Reamer Extremely unequal spacing

B411

B411	▪	1.5	1.6	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	
		8.1	8.2																			
	•	1.1	1.2	1.3	1.4																	

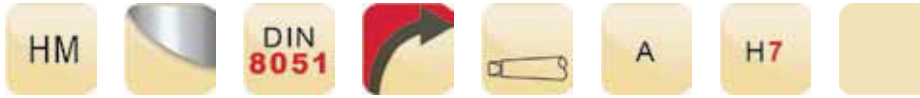


d_1 Ø	l_1	l_2	l_3	z	MK	B411
mm	mm	mm	mm			
5.0	133	23	67.5	6	1	B4115.0 ²⁾
6.0	138	26	72.5	6	1	B4116.0 ²⁾
7.0	150	31	84.5	6	1	B4117.0 ²⁾
8.0	156	33	90.5	6	1	B4118.0 ²⁾
9.0	162	36	96.5	6	1	B4119.0 ²⁾
10.0	168	38	102.5	6	1	B41110.0 ²⁾
12.0	182	44	116.5	6	1	B41112.0 ²⁾
14.0	189	47	123.5	8	1	B41114.0 ²⁾
15.0	204	50	124	8	2	B41115.0 ²⁾
16.0	210	52	130	8	2	B41116.0 ²⁾
17.0	214	54	134	6	2	B41117.0 ³⁾
18.0	219	56	139	6	2	B41118.0 ³⁾
19.0	223	58	143	6	2	B41119.0 ³⁾
20.0	228	60	148	6	2	B41120.0 ³⁾
22.0	237	64	157	6	2	B41122.0 ³⁾
24.0	268	68	169	8	3	B41124.0 ³⁾
25.0	268	68	169	8	3	B41125.0 ³⁾
26.0	273	70	174	8	3	B41126.0 ³⁾
30.0	281	73	182	8	3	B41130.0 ³⁾

²⁾ 硬质合金刀头 / Ponta de Metal Duro / Cabeza de Metal Duro / Carbide Head

³⁾ 硬质合金镶片 / Ponta em Metal Duro / Punta de Metal Duro / Carbide Tipped

B442



- 极不等距机用铰刀
- Alargador Máquina com Espaçamento Extremamente Desigual
- Escariador de máquina Espacio extremadamente irregular
- Machine Reamer Extremely unequal spacing

B442

B442	▪	1.5	1.6	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	
		8.1	8.2																			
	•	1.1	1.2	1.3	1.4																	



d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	MK	B442
10.0	168	19	102.5	6	1	B44210.0
12.0	182	19	116.5	6	1	B44212.0
14.0	189	19	123.5	6	1	B44214.0
15.0	204	19	124	6	2	B44215.0
16.0	210	22	130	6	2	B44216.0
17.0	214	22	134	6	2	B44217.0
18.0	219	22	139	6	2	B44218.0
19.0	223	22	143	6	2	B44219.0
20.0	228	22	148	6	2	B44220.0

B100

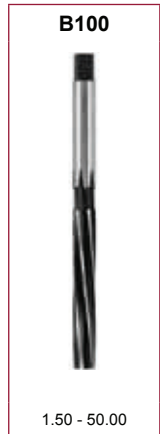


B100

- 手用铰刀
- Alargador Manual
- Escariador de mano
- Hand Reamer

d2 = d1, 公差为 e9
 d2=d1 com tolerância e9
 d2=d1 Tolerancia e9
 d2=d1 with tolerance e9

B100	▪	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2							
	•	1.5	1.6	3.2	3.3	3.4	4.2	4.3	5.1	5.2	5.3	6.1	6.3	6.4	7.1	7.2



d ₁ Ø Inch	d ₁ Ø mm	l ₁ mm	l ₂ mm	l ₃ mm	z	□ a mm	B100
	1.50	41	20	5	3	1.12	B1001.5
1/16	1.59	41	20	5	3	1.12	B1001/16
	1.60	44	21	5	3	1.25	B1001.6
5/64	1.98	47	23	6	4	1.40	B1005/64
	2.00	50	25	6	4	1.60	B1002.0
3/32	2.38	54	27	7	4	1.80	B1003/32
	2.50	58	29	7	4	2.10	B1002.5
7/64	2.78	62	31	8	6	2.10	B1007/64
	3.00	62	31	8	6	2.40	B1003.0
1/8	3.18	66	33	8	6	2.40	B1001/8
	3.20	66	33	8	6	2.40	B1003.2
	3.50	71	35	9	6	2.70	B1003.5
9/64	3.57	71	35	9	6	2.70	B1009/64
5/32	3.97	76	38	10	6	3.00	B1005/32
	4.00	76	38	10	6	3.00	B1004.0
11/64	4.37	81	41	10	6	3.40	B10011/64
	4.50	81	41	10	6	3.40	B1004.5
3/16	4.76	87	44	11	6	3.80	B1003/16
	5.00	87	44	11	6	3.80	B1005.0
13/64	5.16	87	44	11	6	3.80	B10013/64
	5.50	93	47	12	6	4.30	B1005.5
7/32	5.56	93	47	12	6	4.30	B1007/32
15/64	5.95	93	47	12	6	4.90	B10015/64
	6.00	93	47	12	6	4.90	B1006.0
1/4	6.35	100	50	13	6	4.90	B1001/4
	6.50	100	50	13	6	4.90	B1006.5
17/64	6.75	107	54	14	6	5.50	B10017/64
	7.00	107	54	14	6	5.50	B1007.0
9/32	7.14	107	54	14	6	6.20	B1009/32
	7.50	107	54	14	6	6.20	B1007.5
19/64	7.54	115	58	15	6	6.20	B10019/64
5/16	7.94	115	58	15	6	6.20	B1005/16
	8.00	115	58	15	6	6.20	B1008.0
21/64	8.33	115	58	15	6	7.00	B10021/64
	8.50	115	58	15	6	7.00	B1008.5
11/32	8.73	124	62	16	6	7.00	B10011/32
	9.00	124	62	16	6	7.00	B1009.0
23/64	9.13	124	62	16	6	8.00	B10023/64

d_1 Ø Inch	d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	\square a mm	B100
	9.50	124	62	16	6	8.00	B1009.5
3/8	9.52	124	62	17	6	8.00	B1003/8
25/64	9.92	133	66	17	6	8.00	B10025/64
	10.00	133	66	17	6	8.00	B10010.0
13/32	10.32	133	66	17	6	8.00	B10013/32
	10.50	133	66	17	6	8.00	B10010.5
	11.00	142	71	18	6	9.00	B10011.0
7/16	11.11	142	71	18	6	9.00	B1007/16
	11.50	142	71	18	6	9.00	B10011.5
	12.00	152	76	19	6	9.00	B10012.0
	12.50	152	76	19	6	10.00	B10012.5
1/2	12.70	152	76	19	6	10.00	B1001/2
	13.00	152	76	19	6	10.00	B10013.0
17/32	13.49	163	81	20	8	11.00	B10017/32
	13.50	163	81	20	8	11.00	B10013.5
	14.00	163	81	20	8	11.00	B10014.0
9/16	14.29	163	81	20	8	11.00	B1009/16
	14.50	163	81	20	8	11.00	B10014.5
	15.00	163	81	20	8	12.00	B10015.0
19/32	15.08	163	81	22	8	12.00	B10019/32
5/8	15.88	175	87	22	8	12.00	B1005/8
	16.00	175	87	22	8	12.00	B10016.0
	17.00	175	87	22	8	13.00	B10017.0
11/16	17.46	188	93	23	8	14.50	B10011/16
	18.00	188	93	23	8	14.50	B10018.0
	19.00	188	93	23	8	14.50	B10019.0
3/4	19.05	188	93	25	8	14.50	B1003/4
	20.00	201	100	25	8	16.00	B10020.0
13/16	20.64	201	100	25	8	16.00	B10013/16
	21.00	201	100	25	8	16.00	B10021.0
	22.00	215	107	27	8	18.00	B10022.0
7/8	22.22	215	107	27	8	18.00	B1007/8
	23.00	215	107	27	8	18.00	B10023.0
	24.00	231	115	29	8	18.00	B10024.0
	25.00	231	115	29	8	20.00	B10025.0
1"	25.40	231	115	29	8	20.00	B1001
	26.00	231	115	29	8	20.00	B10026.0
	27.00	247	124	31	10	22.00	B10027.0
	28.00	247	124	31	10	22.00	B10028.0
	29.00	247	124	31	10	22.00	B10029.0
	30.00	247	124	31	10	24.00	B10030.0
	31.00	265	133	33	10	24.00	B10031.0
	32.00	265	133	33	10	24.00	B10032.0
	33.00	265	133	33	10	26.00	B10033.0
	34.00	284	142	36	10	26.00	B10034.0
	35.00	284	142	36	10	29.00	B10035.0
	36.00	284	142	36	10	29.00	B10036.0
	37.00	284	142	36	10	29.00	B10037.0
	38.00	305	152	38	10	29.00	B10038.0
	39.00	305	152	38	10	32.00	B10039.0
	40.00	305	152	38	10	32.00	B10040.0
	45.00	326	163	41	12	35.00	B10045.0
	50.00	347	174	44	12	39.00	B10050.0

B334

HSS



- 手用快调铰刀
- Alargador Manual Ajuste Rápido
- Escariador de mano Extensibles
- Hand Reamer Quickly Adjustable

B334

B334	▪	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2							
	•	1.5	1.6	3.2	3.3	3.4	4.2	4.3	5.1	5.2	5.3	6.1	6.3	6.4	7.1	7.2



B334



N000 - N16

Nr.	d min-max mm	l ₁ mm	l ₂ mm	l ₃ mm	z	∇ a mm	B334
000	6.4 - 7.2	110	32	7	4	3.0	B334000
00	7.2 - 8.0	110	32	7	4	3.4	B33400
0	8.0 - 9.0	115	34	9	5	3.8	B3340
1	9.0 - 10.0	115	34	9	5	4.3	B3341
2	10.0 - 11.0	115	34	9	5	4.9	B3342
3	11.0 - 12.0	125	35	9	5	4.9	B3343
4	12.0 - 13.5	135	41	9	5	6.2	B3344
5	13.5 - 15.5	146	50	12	5	7.0	B3345
6	15.5 - 18.0	166	60	12	5	8.0	B3346
7	18.0 - 21.0	178	65	15	5	9.0	B3347
8	21.0 - 24.0	195	76	15	5	11.0	B3348
9	24.0 - 27.5	218	82	18	5	12.0	B3349
10	27.5 - 31.5	245	86	18	5	14.5	B33410
11	31.5 - 37.0	280	98	18	6	18.0	B33411
12	37.0 - 45.0	325	108	20	6	20.0	B33412
13	45.0 - 55.0	370	118	20	6	26.0	B33413
14	55.0 - 67.0	400	125	20	6	32.0	B33414
15	67.0 - 80.0	435	140	23	8	39.0	B33415
16	80.0 - 95.0	475	155	23	8	49.0	B33416

B335



B335

- 手用快调铰刀配件 (B334)
- Alargador Manual Ajuste Rápido - Acessórios (B334)
- Accesorios para el porta-escariador tipo B334
- Hand Reamer Quickly Adjustable - Spare Parts (B334)



BLADES



NUT



Nr.	B335
000	B335000BLADES
000	B335000NUT
00	B33500BLADES
00	B33500NUT
0	B3350BLADES
0	B3350NUT
1	B3351BLADES
1	B3351NUT
2	B3352BLADES
2	B3352NUT
3	B3353BLADES
3	B3353NUT
4	B3354BLADES
4	B3354NUT
5	B3355BLADES
5	B3355NUT
6	B3356BLADES
6	B3356NUT
7	B3357BLADES
7	B3357NUT
8	B3358BLADES
8	B3358NUT
9	B3359BLADES
9	B3359NUT
10	B33510BLADES
10	B33510NUT
11	B33511BLADES
11	B33511NUT
12	B33512BLADES
12	B33512NUT
13	B33513BLADES
13	B33513NUT
14	B33514BLADES
14	B33514NUT
15	B33515BLADES
15	B33515NUT
16	B33516BLADES
16	B33516NUT

B901

HSS-E



BS
328



- 机用铰刀
- Alargador Máquina
- Escariador de máquina
- Machine Reamer

$d_2 = d_1 - 0.025$
 $d_2 = d_1 - 0.025$
 $d_2 = d_1 - 0.025$
 $d_2 = d_1 - 0.025$

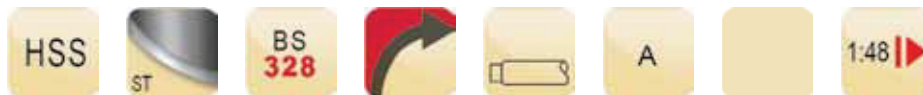
B901

B901	▪	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2							
	•	1.5	1.6	3.2	3.3	3.4	4.2	4.3	5.1	5.2	5.3	6.1	6.3	6.4	7.1	7.2



d_1 Ø Inch	d_2 Ø mm	l_1 mm	l_2 mm	z	B901
	1.50	44	21	4	B9011.5
1/16	1.59	44	21	4	B9011/16
	2.00	50	25	4	B9012.0
3/32	2.38	58	29	4	B9013/32
	2.50	58	29	4	B9012.5
	3.00	62	31	4	B9013.0
1/8	3.18	66	33	4	B9011/8
	3.50	71	35	4	B9013.5
5/32	3.97	76	38	6	B9015/32
	4.00	76	38	6	B9014.0
	4.50	81	41	6	B9014.5
3/16	4.76	87	44	6	B9013/16
	5.00	87	44	6	B9015.0
13/64	5.16	87	44	6	B90113/64
	5.50	93	47	6	B9015.5
7/32	5.56	93	47	6	B9017/32
15/64	5.95	93	47	6	B90115/64
	6.00	93	47	6	B9016.0
1/4	6.35	100	50	6	B9011/4
	7.00	107	54	6	B9017.0
9/32	7.14	107	54	6	B9019/32
5/16	7.94	115	58	6	B9015/16
	8.00	115	58	6	B9018.0
	9.00	124	62	6	B9019.0
3/8	9.52	133	66	6	B9013/8
	10.00	133	66	6	B90110.0
	11.00	142	71	6	B90111.0
7/16	11.11	142	71	6	B9017/16
	12.00	152	76	6	B90112.0
1/2	12.70	152	76	6	B9011/2

B301



- 手用锥形铰刀
- Alargador Manual para Pino Cônico
- Escariador de mano para pasadores cónicos
- Hand Taper Pin Reamer

B301

B301	▪	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2										
	•	1.5	1.6	2.2	2.3	3.2	3.3	3.4	4.2	4.3	5.1	6.1	6.3	6.4	7.1	7.2	7.3	7.4	8.2



nom Ø	d ₁ Ø mm	l ₁ mm	l ₂ mm	z	∇ a mm	d ₂ Ø mm	B301
1/16	1.10	51	25	4	1.2	1.63	B3011/16 ⁴⁾
5/64	1.50	51	25	4	1.6	2.03	B3015/64 ⁴⁾
3/32	1.75	57	32	4	2.0	2.41	B3013/32 ⁴⁾
7/64	2.03	64	38	4	2.2	2.82	B3017/64 ⁴⁾
1/8	2.30	70	44	4	2.5	3.23	B3011/8 ⁴⁾
9/64	2.64	73	48	4	2.8	3.63	B3019/64 ⁴⁾
5/32	2.95	76	51	4	3.1	4.01	B3015/32 ⁴⁾
11/64	3.23	89	57	4	3.6	4.42	B30111/64 ⁴⁾
3/16	3.50	102	70	4	4.0	4.95	B3013/16 ⁴⁾
7/32	4.13	102	70	6	4.5	5.59	B3017/32 ⁴⁾
1/4	4.64	117	86	6	5.0	6.43	B3011/4 ⁵⁾
9/32	5.23	143	105	6	5.6	7.42	B3019/32 ⁵⁾
5/16	5.84	143	105	6	6.3	8.03	B3015/16 ⁵⁾
11/32	6.43	152	114	6	7.1	8.81	B30111/32 ⁵⁾
3/8	7.03	165	127	6	8.0	9.68	B3013/8 ⁵⁾
13/32	7.42	191	146	6	8.0	10.46	B30113/32 ⁵⁾
7/16	8.21	191	146	6	9.0	11.25	B3017/16 ⁵⁾
1/2	9.41	210	165	6	10.0	12.85	B3011/2 ⁵⁾

⁴⁾ 公差极限 + 0.0030 / Limite de tolerância +0.0030 / Límite de tolerancia +0.0030 / Limit of tolerance +0.0030

⁵⁾ 公差极限 + 0.0050 / Limite de tolerância +0.0050 / Límite de tolerancia +0.0050 / Limit of tolerance +0.0050

B903



- 手用锥销铰刀
- Alargador Manual para Pino Cônico
- Escariador de mano para pasadores cónicos
- Hand Taper Pin Reamer

B903

B903	▪	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2										
	•	1.5	1.6	2.2	2.3	3.2	3.3	3.4	4.2	4.3	5.1	6.1	6.3	6.4	7.1	7.2	7.3	7.4	8.2

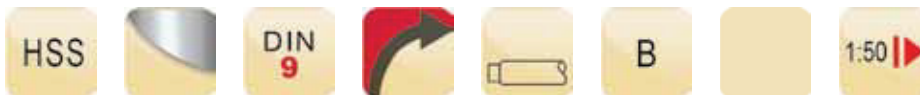


nom Ø	d ₁ Ø mm	d ₂ Ø mm	l ₁ mm	l ₂ mm	z	∠ a mm	d ₃ Ø _{h₁₁} mm	B903
1.5	1.40	2.14	57	37	4	1.80	2.14	B9031.5 ⁶⁾
2.0	1.90	2.86	68	48	4	2.24	2.86	B9032.0 ⁶⁾
2.5	2.40	3.36	68	48	4	2.80	3.36	B9032.5 ⁶⁾
3.0	2.90	4.06	80	58	4	3.15	4.00	B9033.0 ⁶⁾
4.0	3.90	5.26	93	68	4	4.00	5.00	B9034.0 ⁶⁾
5.0	4.90	6.36	100	73	4	5.00	6.30	B9035.0 ⁶⁾
6.0	5.90	8.00	135	105	6	6.30	7.90	B9036.0 ⁷⁾
8.0	7.90	10.80	180	145	6	8.00	10.50	B9038.0 ⁷⁾
10.0	9.90	13.40	215	175	6	10.00	13.30	B90310.0 ⁷⁾
12.0	11.80	16.00	255	210	8	11.20	16.00	B90312.0 ⁷⁾
13.0	12.86	16.74	255	210	8	12.50	16.74	B90313.0 ⁷⁾
14.0	13.86	17.74	255	210	8	12.50	17.74	B90314.0 ⁷⁾
16.0	15.80	20.40	280	230	8	14.00	20.40	B90316.0 ⁷⁾
20.0	19.80	24.80	310	250	8	18.00	24.80	B90320.0 ⁷⁾

⁶⁾ 公差极限 + 0.0750 / Limite de tolerância +0.0750 / Límite de tolerancia +0.0750 / Limit of tolerance +0.0750

⁷⁾ 公差极限 + 0.125 / Limite de tolerância +0.125 / Límite de tolerancia +0.125 / Limit of tolerance +0.125

B952



- 手用锥销铰刀
- Alargador Manual para Pino Cônico
- Escariador de mano para pasadores cónicos
- Hand Taper Pin Reamer

B952

B952	■	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2									
	•	1.5	1.6	2.2	2.3	3.2	3.3	3.4	4.2	4.3	5.1	6.1	6.3	6.4	7.1	7.2	7.3	7.4



nom Ø	d ₁ Ø mm	d ₂ Ø mm	l ₁ mm	l ₂ mm	z	□ a mm	d ₃ Øh ₁₁ mm	B952
1.2	1.1	1.74	50	32	3	2.4	3.15	B9521.2 ⁸⁾
1.5	1.4	2.14	57	37	3	2.4	3.15	B9521.5 ⁸⁾
2.0	1.9	2.86	68	48	3	2.4	3.15	B9522.0 ⁸⁾
2.5	2.4	3.36	68	48	4	2.4	3.15	B9522.5 ⁸⁾
3.0	2.9	4.06	80	58	5	3.0	4.00	B9523.0
3.5	3.4	4.66	87	63	5	3.4	4.50	B9523.5
4.0	3.9	5.26	93	68	5	3.8	5.00	B9524.0
4.5	4.4	5.80	95	70	5	4.3	5.60	B9524.5
5.0	4.9	6.36	100	73	5	4.9	6.30	B9525.0
5.5	5.4	7.20	118	90	6	5.5	7.10	B9525.5
6.0	5.9	8.00	135	105	6	6.2	8.00	B9526.0
6.5	6.4	8.60	140	110	6	6.2	8.00	B9526.5
7.0	6.9	9.40	160	125	6	7.0	9.00	B9527.0
8.0	7.9	10.8	180	145	6	8.0	10.00	B9528.0
9.0	8.9	12.1	195	160	6	9.0	11.20	B9529.0
10.0	9.9	13.4	215	175	6	10.0	12.50	B95210.0
12.0	11.8	16.0	255	210	8	11.0	14.00	B95212.0
13.0	12.8	17.0	255	210	8	12.0	16.00	B95213.0
14.0	13.8	18.0	255	210	8	12.0	16.00	B95214.0
16.0	15.8	20.4	280	230	8	14.5	18.00	B95216.0
20.0	19.8	24.8	310	250	8	18.0	22.40	B95220.0
25.0	24.7	30.7	370	300	10	22.0	28.00	B95225.0
30.0	29.7	36.1	400	320	10	24.0	31.50	B95230.0
40.0	39.7	46.5	430	340	12	32.0	40.00	B95240.0
50.0	49.7	56.9	460	360	12	39.0	50.00	B95250.0

⁸⁾ 直槽, A 型 / Canal Reto, forma A / Estrias rectas, forma A / Straight Flute, form A

B122

HSS



ANSI



- 左螺旋槽铰刀
- Alargador Piloto Canal Helicoidal
- Escariadores de máquina rectos
- Straight Car Reamers, LH Helical Flute

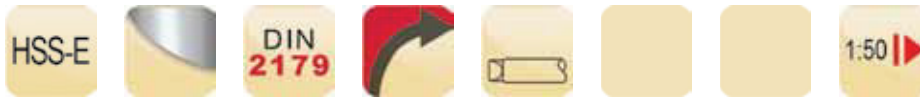
B122

B122	▪	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2										
	•	1.5	1.6	2.2	2.3	3.2	3.3	3.4	4.2	4.3	5.1	6.1	6.3	6.4	7.1	7.2	7.3	7.4	8.2



d_1 Ø Inch	d_1 decimal Inch	l_1 Inch	l_2 Inch	z	d_2 Ø Inch	B122
3/8	0.3750	4.5/8	2.1/2	4	3/8	B1223/8
1/2	0.5000	5.7/8	3.3/4	5	1/2	B1221/2
9/16	0.5625	5.7/8	3.3/4	5	1/2	B1229/16
5/8	0.6250	6.3/8	4.1/4	5	1/2	B1225/8
11/16	0.6875	6.3/8	4.1/4	5	1/2	B12211/16
3/4	0.7500	6.7/8	4.1/2	5	1/2	B1223/4
13/16	0.8125	6.7/8	4.1/2	5	1/2	B12213/16
7/8	0.8750	6.7/8	4.1/2	5	1/2	B1227/8
15/16	0.9375	6.7/8	4.1/2	5	1/2	B12215/16
1"	1.0000	6.7/8	4.1/2	5	1/2	B1221
1.1/16	1.0625	6.7/8	4.1/2	5	1/2	B1221.1/16

B953



B953

- 45 度左螺旋圆锥销机用铰刀
- Alargador Máquina para pinos cónicos com corte a esquerda - Hélice 45°
- Escariador de máquina para pasadores cónicos Hélice a izquierdas 45°
- Machine Reamer for Conical Pin Left Hand Helix 45°

扁尾符合 DIN 1809
 Arraste de acordo com a DIN 1809
 Lengüeta según DIN 1809
 Tang to DIN 1809

B953	▪	2.1	2.2	2.3	4.1	4.2	4.3	5.1	5.2	5.3	6.1	7.1	7.2	7.3	7.4	8.1
	•	1.1	1.2	1.3	1.4	1.5	1.6	6.2	9.1							



nom Ø	d ₁ Ø mm	d ₂ Ø mm	l ₁ mm	l ₂ mm	z	d ₃ Øh ₉ mm	B953
1.0	0.8	1.46	60	33	2	1.4	B9531.0
1.5	1.4	2.14	70	37	2	2.1	B9531.5
2.0	1.9	2.86	86	48	3	3.15	B9532.0
2.5	2.4	3.36	86	48	3	3.15	B9532.5
3.0	2.9	4.06	100	58	3	4.0	B9533.0
4.0	3.9	5.26	112	68	3	5.0	B9534.0
5.0	4.9	6.36	122	73	3	6.3	B9535.0
6.0	5.9	8.00	160	105	3	8.0	B9536.0
6.5	6.4	8.78	188	119	3	8.5	B9536.5
8.0	7.9	10.80	207	145	3	10.0	B9538.0
10.0	9.9	13.40	245	175	3	12.5	B95310.0
12.0	11.8	16.00	290	210	3	16.0	B95312.0

B180

HSS-E



DIN 212



DIN 6535HA

B

H7

- NC-用于高精度夹头的铰刀
- NC - Alargador para mandris de alta precisão
- NC- Escariador de precisión
- NC - Reamer for High Precision Chucks

B180

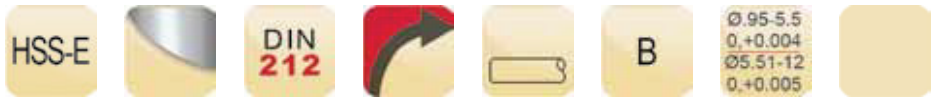
B180	▪	1.1	1.2	1.3	1.4	2.1	4.2	5.1											
	•	1.5	1.6	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.3	5.2	5.3	6.1	6.2	6.3	6.4	



d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Ø _{h6} mm	B180
1.5	40	8	18	3	2	B1801.5
1.6	43	9	20	3	2	B1801.6
1.7	43	9	20	3	2	B1801.7
1.8	46	10	22	4	2	B1801.8
1.9	46	10	22	4	2	B1801.9
2.0	49	11	24	4	2	B1802.0
2.1	49	11	24	4	2	B1802.1
2.2	53	12	26	4	3	B1802.2
2.3	53	12	26	4	3	B1802.3
2.4	57	14	28	4	3	B1802.4
2.5	57	14	28	4	3	B1802.5
2.6	57	14	28	4	3	B1802.6
2.7	61	15	32	6	3	B1802.7
2.8	61	15	32	6	3	B1802.8
2.9	61	15	32	6	3	B1802.9
3.0	61	15	32	6	3	B1803.0
3.1	65	16	35	6	4	B1803.1
3.2	65	16	35	6	4	B1803.2
3.3	65	16	35	6	4	B1803.3
3.4	70	18	40	6	4	B1803.4
3.5	70	18	40	6	4	B1803.5
3.6	70	18	40	6	4	B1803.6
3.7	70	18	40	6	4	B1803.7
3.8	75	19	43	6	4	B1803.8
3.9	75	19	43	6	4	B1803.9
4.0	75	19	43	6	4	B1804.0
4.1	75	19	43	6	4	B1804.1
4.2	75	19	43	6	4	B1804.2
4.3	80	21	47	6	5	B1804.3
4.4	80	21	47	6	5	B1804.4
4.5	80	21	47	6	5	B1804.5
4.6	80	21	47	6	5	B1804.6
4.7	80	21	47	6	5	B1804.7
4.8	86	23	52	6	5	B1804.8
4.9	86	23	52	6	5	B1804.9
5.0	86	23	52	6	5	B1805.0
5.1	86	23	52	6	5	B1805.1
5.2	86	23	52	6	5	B1805.2

d_1 \emptyset mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 $\emptyset h_6$ mm	B180
5.3	86	23	52	6	5	B1805.3
5.4	93	26	57	6	6	B1805.4
5.5	93	26	57	6	6	B1805.5
5.6	93	26	57	6	6	B1805.6
5.7	93	26	57	6	6	B1805.7
5.8	93	26	57	6	6	B1805.8
5.9	93	26	57	6	6	B1805.9
6.0	93	26	57	6	6	B1806.0
6.1	101	28	63	6	6	B1806.1
6.2	101	28	63	6	6	B1806.2
6.3	101	28	63	6	6	B1806.3
6.4	101	28	63	6	6	B1806.4
6.5	101	28	63	6	6	B1806.5
6.6	101	28	63	6	6	B1806.6
6.7	101	28	63	6	6	B1806.7
6.8	109	31	69	6	8	B1806.8
6.9	109	31	69	6	8	B1806.9
7.0	109	31	69	6	8	B1807.0
7.1	109	31	69	6	8	B1807.1
7.2	109	31	69	6	8	B1807.2
7.3	109	31	69	6	8	B1807.3
7.4	109	31	69	6	8	B1807.4
7.5	109	31	69	6	8	B1807.5
7.6	117	33	75	6	8	B1807.6
7.7	117	33	75	6	8	B1807.7
7.8	117	33	75	6	8	B1807.8
7.9	117	33	75	6	8	B1807.9
8.0	117	33	75	6	8	B1808.0
8.1	117	33	75	6	8	B1808.1
8.2	117	33	75	6	8	B1808.2
8.3	117	33	75	6	8	B1808.3
8.4	117	33	75	6	8	B1808.4
8.5	117	33	75	6	8	B1808.5
8.6	125	36	81	6	10	B1808.6
8.7	125	36	81	6	10	B1808.7
8.8	125	36	81	6	10	B1808.8
8.9	125	36	81	6	10	B1808.9
9.0	125	36	81	6	10	B1809.0
9.1	125	36	81	6	10	B1809.1
9.2	125	36	81	6	10	B1809.2
9.3	125	36	81	6	10	B1809.3
9.4	125	36	81	6	10	B1809.4
9.5	125	36	81	6	10	B1809.5
9.6	133	38	87	6	10	B1809.6
9.7	133	38	87	6	10	B1809.7
9.8	133	38	87	6	10	B1809.8
9.9	133	38	87	6	10	B1809.9
10.0	133	38	87	6	10	B18010.0
11.0	142	41	96	6	10	B18011.0
12.0	151	44	105	6	10	B18012.0
13.0	151	44	105	6	10	B18013.0
14.0	160	47	110	8	14	B18014.0
15.0	162	50	112	8	14	B18015.0
16.0	170	52	120	8	14	B18016.0
17.0	175	54	123	8	14	B18017.0
18.0	182	56	130	8	14	B18018.0
19.0	189	58	131	8	16	B18019.0
20.0	195	60	137	8	16	B18020.0

B170



- 以丝为单位的机用铰刀
- Alargador máquina centesimal
- Escariador de máquina centesimal
- Machine Centesimal Reamer

B170

B170	▪	1.1	1.2	1.3	1.4	2.1	4.2	5.1								
	•	1.5	1.6	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.3	5.2	5.3	6.1	6.2	6.3



d_1 Ø	l_1	l_2	l_3	z	d_2 Ø _{h9}	B170
mm	mm	mm	mm		mm	
0.98	34	5.5	15	3	1.0	B170.98
0.99	34	5.5	15	3	1.0	B170.99
1.00	34	5.5	15	3	1.0	B1701.0
1.01	34	5.5	15	3	1.0	B1701.01
1.02	34	5.5	15	3	1.0	B1701.02
1.03	34	5.5	15	3	1.0	B1701.03
1.04	34	5.5	15	3	1.0	B1701.04
1.05	34	5.5	15	3	1.0	B1701.05
1.49	40	8.0	18	3	1.5	B1701.49
1.50	40	8.0	18	3	1.5	B1701.5
1.51	43	9.0	20	3	1.6	B1701.51
1.52	43	9.0	20	3	1.6	B1701.52
1.98	49	11.0	24	4	2.0	B1701.98
1.99	49	11.0	24	4	2.0	B1701.99
2.00	49	11.0	24	4	2.0	B1702.0
2.01	49	11.0	24	4	2.0	B1702.01
2.02	49	11.0	24	4	2.0	B1702.02
2.03	49	11.0	24	4	2.0	B1702.03
2.04	49	11.0	24	4	2.0	B1702.04
2.05	49	11.0	24	4	2.0	B1702.05
2.49	57	14.0	28	4	2.5	B1702.49
2.50	57	14.0	28	4	2.5	B1702.5
2.51	57	14.0	28	4	2.5	B1702.51
2.52	57	14.0	28	4	2.5	B1702.52
2.98	61	15.0	32	6	3.0	B1702.98
2.99	61	15.0	32	6	3.0	B1702.99
3.00	61	15.0	32	6	3.0	B1703.0
3.01	65	16.0	35	6	3.2	B1703.01
3.02	65	16.0	35	6	3.2	B1703.02
3.03	65	16.0	35	6	3.2	B1703.03
3.04	65	16.0	35	6	3.2	B1703.04
3.05	65	16.0	35	6	3.2	B1703.05
3.49	70	18.0	40	6	3.5	B1703.49
3.50	70	18.0	40	6	3.5	B1703.5
3.51	70	18.0	40	6	3.5	B1703.51
3.52	70	18.0	40	6	3.5	B1703.52
3.98	75	19.0	43	6	4.0	B1703.98
3.99	75	19.0	43	6	4.0	B1703.99

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Ø h_3 mm	B170
4.00	75	19.0	43	6	4.0	B1704.0
4.01	75	19.0	43	6	4.0	B1704.01
4.02	75	19.0	43	6	4.0	B1704.02
4.03	75	19.0	43	6	4.0	B1704.03
4.04	75	19.0	43	6	4.0	B1704.04
4.05	75	19.0	43	6	4.0	B1704.05
4.49	80	21.0	47	6	4.5	B1704.49
4.50	80	21.0	47	6	4.5	B1704.5
4.51	80	21.0	47	6	4.5	B1704.51
4.52	80	21.0	47	6	4.5	B1704.52
4.98	86	23.0	52	6	5.0	B1704.98
4.99	86	23.0	52	6	5.0	B1704.99
5.00	86	23.0	52	6	5.0	B1705.0
5.01	86	23.0	52	6	5.0	B1705.01
5.02	86	23.0	52	6	5.0	B1705.02
5.03	86	23.0	52	6	5.0	B1705.03
5.04	86	23.0	52	6	5.0	B1705.04
5.05	86	23.0	52	6	5.0	B1705.05
5.49	93	26.0	57	6	5.6	B1705.49
5.50	93	26.0	57	6	5.6	B1705.5
5.51	93	26.0	57	6	5.6	B1705.51
5.52	93	26.0	57	6	5.6	B1705.52
5.98	93	26.0	57	6	5.6	B1705.98
5.99	93	26.0	57	6	5.6	B1705.99
6.00	93	26.0	57	6	5.6	B1706.0
6.01	101	28.0	63	6	6.3	B1706.01
6.02	101	28.0	63	6	6.3	B1706.02
6.03	101	28.0	63	6	6.3	B1706.03
6.04	101	28.0	63	6	6.3	B1706.04
6.05	101	28.0	63	6	6.3	B1706.05
6.49	101	28.0	63	6	6.3	B1706.49
6.50	101	28.0	63	6	6.3	B1706.5
6.51	101	28.0	63	6	6.3	B1706.51
6.52	101	28.0	63	6	6.3	B1706.52
6.98	109	31.0	69	6	7.1	B1706.98
6.99	109	31.0	69	6	7.1	B1706.99
7.00	109	31.0	69	6	7.1	B1707.0
7.01	109	31.0	69	6	7.1	B1707.01
7.02	109	31.0	69	6	7.1	B1707.02
7.03	109	31.0	69	6	7.1	B1707.03
7.04	109	31.0	69	6	7.1	B1707.04
7.05	109	31.0	69	6	7.1	B1707.05
7.49	109	31.0	69	6	7.1	B1707.49
7.50	109	31.0	69	6	7.1	B1707.5
7.51	117	33.0	75	6	8.0	B1707.51
7.52	117	33.0	75	6	8.0	B1707.52
7.98	117	33.0	75	6	8.0	B1707.98
7.99	117	33.0	75	6	8.0	B1707.99
8.00	117	33.0	75	6	8.0	B1708.0
8.01	117	33.0	75	6	8.0	B1708.01
8.02	117	33.0	75	6	8.0	B1708.02
8.03	117	33.0	75	6	8.0	B1708.03
8.04	117	33.0	75	6	8.0	B1708.04
8.05	117	33.0	75	6	8.0	B1708.05
8.49	117	33.0	75	6	8.0	B1708.49
8.50	117	33.0	75	6	8.0	B1708.5
8.51	125	36.0	81	6	9.0	B1708.51
8.52	125	36.0	81	6	9.0	B1708.52
8.98	125	36.0	81	6	9.0	B1708.98
8.99	125	36.0	81	6	9.0	B1708.99
9.00	125	36.0	81	6	9.0	B1709.0
9.01	125	36.0	81	6	9.0	B1709.01
9.02	125	36.0	81	6	9.0	B1709.02
9.03	125	36.0	81	6	9.0	B1709.03
9.04	125	36.0	81	6	9.0	B1709.04
9.05	125	36.0	81	6	9.0	B1709.05
9.49	125	36.0	81	6	9.0	B1709.49
9.50	125	36.0	81	6	9.0	B1709.5
9.51	133	38.0	87	6	10.0	B1709.51
9.52	133	38.0	87	6	10.0	B1709.52

d_1 Ø	l_1	l_2	l_3	z	d_2 Ø h_9	B170
mm	mm	mm	mm		mm	
9.98	133	38.0	87	6	10.0	B1709.98
9.99	133	38.0	87	6	10.0	B1709.99
10.00	133	38.0	87	6	10.0	B17010.0
10.01	133	38.0	87	6	10.0	B17010.01
10.02	133	38.0	87	6	10.0	B17010.02
10.03	133	38.0	87	6	10.0	B17010.03
10.04	133	38.0	87	6	10.0	B17010.04
10.05	133	38.0	87	6	10.0	B17010.05
10.49	133	38.0	87	6	10.0	B17010.49
10.50	133	38.0	87	6	10.0	B17010.5
10.51	133	38.0	87	6	10.0	B17010.51
10.52	133	38.0	87	6	10.0	B17010.52
10.98	142	41.0	96	6	10.0	B17010.98
10.99	142	41.0	96	6	10.0	B17010.99
11.00	142	41.0	96	6	10.0	B17011.0
11.01	142	41.0	96	6	10.0	B17011.01
11.02	142	41.0	96	6	10.0	B17011.02
11.03	142	41.0	96	6	10.0	B17011.03
11.04	142	41.0	96	6	10.0	B17011.04
11.05	142	41.0	96	6	10.0	B17011.05
11.49	142	41.0	96	6	10.0	B17011.49
11.50	142	41.0	96	6	10.0	B17011.5
11.51	142	41.0	96	6	10.0	B17011.51
11.52	142	41.0	96	6	10.0	B17011.52
11.98	151	44.0	105	6	10.0	B17011.98
11.99	151	44.0	105	6	10.0	B17011.99
12.00	151	44.0	105	6	10.0	B17012.0

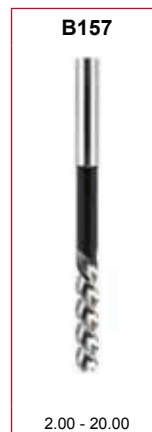
B157



- 45 度左螺旋机用铰刀
- Alargador Máquina com corte a esquerda - Hélice 45°
- Escariador de máquina Hélice a izquierdas 45°
- Machine Reamer Left Hand Helix 45°

B157

B157	▪	1.1	1.2	1.3	1.4	2.1	2.2	2.3	4.1	4.2	4.3	5.1	5.2	5.3	6.1	7.1	7.2	7.3	7.4	8.1
	•	1.5	1.6	6.2	9.1															



d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	l_4 mm	z	d_2 Ø h_9 mm	B157
2.0	49	11	3.5	24	3	2.0	B1572.0
3.0	61	15	4.0	32	3	3.0	B1573.0
4.0	75	19	4.0	43	3	4.0	B1574.0
5.0	86	23	4.5	52	3	5.0	B1575.0
6.0	93	26	6.0	57	3	5.6	B1576.0
7.0	109	31	7.0	69	3	7.1	B1577.0
8.0	117	33	9.0	75	3	8.0	B1578.0
9.0	125	36	9.5	81	3	9.0	B1579.0
10.0	133	38	10.0	87	3	10.0	B15710.0
11.0	142	41	10.5	96	3	10.0	B15711.0
12.0	151	44	11.0	105	3	10.0	B15712.0
13.0	151	44	11.5	105	3	10.0	B15713.0
14.0	160	47	12.0	110	3	12.5	B15714.0
15.0	162	50	12.5	112	3	12.5	B15715.0
16.0	170	52	13.0	120	3	12.5	B15716.0
17.0	175	54	13.5	123	3	14.0	B15717.0
18.0	182	56	14.0	130	3	14.0	B15718.0
19.0	189	58	14.5	131	3	16.0	B15719.0
20.0	195	60	15.0	137	3	16.0	B15720.0

B161



- 机用铰刀
- Alargador Máquina
- Escariador de máquina
- Machine Reamer

B161

B161	▪	1.1	1.2	1.3	1.4	2.1	4.1	5.1										
	•	1.5	1.6	2.2	2.3	3.1	3.2	3.3	3.4	4.2	4.3	5.2	5.3	6.1	6.2	6.3	6.4	



d_1 Ø	l_1	l_2	l_3	z	MK	B161
3.0	113	15	47.5	6	1	B1613.0
4.0	124	19	58.5	6	1	B1614.0
5.0	133	23	67.5	6	1	B1615.0
6.0	138	26	72.5	6	1	B1616.0
7.0	150	31	84.5	6	1	B1617.0
8.0	156	33	90.5	6	1	B1618.0
9.0	162	36	96.5	6	1	B1619.0
10.0	168	38	102.5	6	1	B16110.0
11.0	175	41	109.5	6	1	B16111.0
12.0	182	44	116.5	6	1	B16112.0
13.0	182	44	116.5	6	1	B16113.0
14.0	189	47	123.5	8	1	B16114.0
15.0	204	50	124	8	2	B16115.0
16.0	210	52	130	8	2	B16116.0
17.0	214	54	134	8	2	B16117.0
18.0	219	56	139	8	2	B16118.0
19.0	223	58	143	8	2	B16119.0
20.0	228	60	148	8	2	B16120.0
21.0	232	62	152	8	2	B16121.0
22.0	237	64	157	8	2	B16122.0
23.0	241	66	161	8	2	B16123.0
24.0	268	68	169	8	3	B16124.0
25.0	268	68	169	8	3	B16125.0
26.0	273	70	174	8	3	B16126.0
27.0	277	71	178	10	3	B16127.0
28.0	277	71	178	10	3	B16128.0
29.0	281	73	182	10	3	B16129.0
30.0	281	73	182	10	3	B16130.0
31.0	285	75	186	10	3	B16131.0
32.0	317	77	193	10	4	B16132.0
33.0	317	77	193	10	4	B16133.0
34.0	321	78	197	10	4	B16134.0
35.0	321	78	197	10	4	B16135.0
36.0	325	79	201	10	4	B16136.0
38.0	329	81	205	10	4	B16138.0
40.0	329	81	205	10	4	B16140.0

d_1 Ø	l_1	l_2	l_3	z	MK	B161
mm	mm	mm	mm			
42.0	333	82	209	12	4	B16142.0
44.0	336	83	212	12	4	B16144.0
45.0	336	83	212	12	4	B16145.0
46.0	340	84	216	12	4	B16146.0
47.0	340	84	216	12	4	B16147.0
48.0	344	86	220	12	4	B16148.0
50.0	344	86	220	12	4	B16150.0

B101



- 机用铰刀
- Alargador Máquina
- Escariador de máquina
- Machine Reamer

B101

B101	▪	1.1	1.2	1.3	1.4	2.1	3.1	4.1	6.2							
	•	1.5	1.6	3.2	3.3	3.4	4.2	4.3	5.1	5.2	5.3	6.1	6.3	6.4	7.1	7.2



d_1 Ø Inch	d_1 Ø mm	l_1 mm	l_2 mm	z	MK	B101
	3.00	112	33	4	1	B1013.0
1/8	3.18	112	33	4	1	B1011/8
	3.50	115	35	6	1	B1013.5
	4.00	117	38	6	1	B1014.0
	4.50	120	41	6	1	B1014.5
3/16	4.76	124	44	6	1	B1013/16
	5.00	124	44	6	1	B1015.0
	5.50	127	47	6	1	B1015.5
	6.00	127	47	6	1	B1016.0
1/4	6.35	130	50	6	1	B1011/4
	6.50	130	50	6	1	B1016.5
	7.00	134	54	6	1	B1017.0
5/16	7.94	138	58	6	1	B1015/16
	8.00	138	58	6	1	B1018.0
	8.50	138	58	6	1	B1018.5
	9.00	142	62	6	1	B1019.0
	9.50	142	62	6	1	B1019.5
3/8	9.52	146	66	6	1	B1013/8
	10.00	146	66	6	1	B10110.0
	10.50	146	66	6	1	B10110.5
	11.00	151	71	6	1	B10111.0
7/16	11.11	151	71	6	1	B1017/16
	12.00	156	76	6	1	B10112.0
	12.50	156	76	6	1	B10112.5
1/2	12.70	156	76	6	1	B1011/2
	13.00	156	76	6	1	B10113.0
	13.50	161	81	6	1	B10113.5
	14.00	161	81	8	1	B10114.0
9/16	14.29	181	81	8	2	B1019/16
	14.50	181	81	8	2	B10114.5
	15.00	181	81	8	2	B10115.0
	15.50	187	87	8	2	B10115.5
5/8	15.88	187	87	8	2	B1015/8
	16.00	187	87	8	2	B10116.0
	16.50	187	87	8	2	B10116.5
	17.00	187	87	8	2	B10117.0
	18.00	193	93	8	2	B10118.0
	19.00	193	93	8	2	B10119.0

d_1 Ø Inch	d_1 Ø mm	l_1 mm	l_2 mm	z	MK	B101
3/4	19.05	200	100	8	2	B1013/4
	20.00	200	100	8	2	B10120.0
13/16	20.64	200	100	8	2	B10113/16
	21.00	200	100	8	2	B10121.0
7/8	22.00	207	107	8	2	B10122.0
	22.22	207	107	8	2	B1017/8
	23.00	207	107	8	2	B10123.0
	24.00	242	115	8	3	B10124.0
	25.00	242	115	10	3	B10125.0
1"	25.40	242	115	10	3	B1011
	26.00	242	115	10	3	B10126.0
	27.00	251	124	10	3	B10127.0
	28.00	251	124	10	3	B10128.0
1.1/8	28.58	251	124	10	3	B1011.1/8
	29.00	251	124	10	3	B10129.0
	30.00	251	124	10	3	B10130.0
1.1/4	31.00	260	133	10	3	B10131.0
	31.75	260	133	10	3	B1011.1/4
	32.00	293	133	10	4	B10132.0
	34.00	302	142	10	4	B10134.0
1.3/8	34.93	302	142	10	4	B1011.3/8
	35.00	302	142	10	4	B10135.0
	36.00	302	142	10	4	B10136.0
	37.00	302	142	10	4	B10137.0
	38.00	312	152	10	4	B10138.0
1.1/2	38.10	312	152	10	4	B1011.1/2
	39.00	312	152	10	4	B10139.0
	40.00	312	152	10	4	B10140.0
	41.00	312	152	10	4	B10141.0
	42.00	312	152	10	4	B10142.0
	43.00	323	163	10	4	B10143.0
1.3/4	44.00	323	163	10	4	B10144.0
	44.45	323	163	10	4	B1011.3/4
	45.00	323	163	12	4	B10145.0
	46.00	323	163	12	4	B10146.0
	47.00	323	163	12	4	B10147.0
	48.00	334	174	12	4	B10148.0
2"	50.00	334	174	12	4	B10150.0
	50.80	334	174	12	4	B1012

B121

HSS



DIN
311



k11



- 莫氏锥柄扩孔铰刀
- Alargador Cônico com Haste Cônica
- MTS Escariador de mango cônico
- Morse Taper Shank Bridge Reamer

起始锥度 (I3) 为 1:10
Com 1:10 de conicidade inicial
Incluido cónico 1:10
With 1:10 starting taper (I3)

B121

B121	■	1.1	1.2	1.3	1.4	3.1	4.1
	●	1.5	1.6	3.2	3.3	3.4	8.2



B121



10.00 - 30.00

d_1 Ø	l_1	l_2	l_3	z	MK	B121
10.0	171	95	30	4	1	B12110.0
11.0	176	100	33	4	1	B12111.0
12.0	199	105	39	4	2	B12112.0
13.0	199	105	39	4	2	B12113.0
14.0	209	115	42	4	2	B12114.0
15.0	219	125	45	4	2	B12115.0
16.0	229	135	48	4	2	B12116.0
17.0	251	135	51	4	3	B12117.0
18.0	261	145	58	4	3	B12118.0
19.0	261	145	58	4	3	B12119.0
20.0	271	155	62	4	3	B12120.0
21.0	271	155	62	4	3	B12121.0
22.0	281	165	66	4	3	B12122.0
23.0	281	165	66	4	3	B12123.0
24.0	296	180	72	4	3	B12124.0
25.0	296	180	72	4	3	B12125.0
26.0	296	180	72	4	3	B12126.0
30.0	311	195	78	5	3	B12130.0

B954

HSS-E



DIN
2180



1:50

- 45 度左螺旋圆锥销机用铰刀
- Alargador Máquina para pinos Cônicos com corte a esquerda - Hélice 45°
- Escariador de máquina para pasadores cónicos Hélice a izquierdas 45°
- Machine Reamer for Conical Pin Left Hand Helix 45°

B954

B954	▪	2.1	2.2	2.3	4.1	4.2	4.3	5.1	5.2	5.3	6.1	7.1	7.2	7.3	7.4	8.1
	•	1.1	1.2	1.3	1.4	1.5	1.6	6.2	9.1							



5.00 - 30.00

nom Ø	d ₁ Ø mm	d ₂ Ø mm	l ₁ mm	l ₂ mm	z	MK	B954
5.0	4.90	6.36	155	73	3	1	B9545.0
6.0	5.90	8.00	187	105	3	1	B9546.0
8.0	7.90	10.80	227	145	3	1	B9548.0
10.0	9.90	13.40	257	175	3	1	B95410.0
12.0	11.80	16.00	315	210	3	2	B95412.0
13.0	12.86	16.74	295	194	3	2	B95413.0
14.0	13.86	17.74	295	194	3	2	B95414.0
16.0	15.80	20.40	335	230	3	2	B95416.0
20.0	19.80	24.80	377	250	3	3	B95420.0
25.0	24.70	30.70	427	300	3	3	B95425.0
30.0	29.70	36.10	475	320	4	4	B95430.0

B955

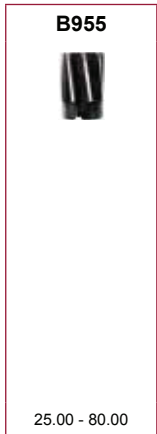


B955

- 套式铰刀
- Cabeça Intercambiável de Alargador Caracol
- Escariador hueco
- Shell Reamer

d2 = B956 的标称直径 d1
 d2=Diâmetro nominal d1 do B956
 d2=Diâmetro nominal d1 de B956
 d2=Nominal diameter d1of B956

B955	▪	1.1	1.2	1.3	1.4	2.1	4.1	5.1										
	•	1.5	1.6	2.2	2.3	3.1	4.2	4.3	5.2	5.3	6.1	6.2	7.1	7.2	7.3	7.4	8.2	



d ₁ Ø	l ₁	l ₂	z	d ₂ Ø	B955
mm	mm	mm		mm	
25.0	45	32	8	13	B95525.0
26.0	45	32	8	13	B95526.0
27.0	45	32	8	13	B95527.0
28.0	45	32	8	13	B95528.0
29.0	45	32	8	13	B95529.0
30.0	45	32	8	13	B95530.0
31.0	50	36	10	16	B95531.0
32.0	50	36	10	16	B95532.0
34.0	50	36	10	16	B95534.0
35.0	50	36	10	16	B95535.0
36.0	56	40	10	19	B95536.0
37.0	56	40	10	19	B95537.0
38.0	56	40	10	19	B95538.0
40.0	56	40	10	19	B95540.0
42.0	56	40	10	19	B95542.0
44.0	63	45	12	22	B95544.0
45.0	63	45	12	22	B95545.0
48.0	63	45	12	22	B95548.0
50.0	63	45	12	22	B95550.0
52.0	71	50	12	27	B95552.0
55.0	71	50	12	27	B95555.0
58.0	71	50	12	27	B95558.0
60.0	71	50	12	27	B95560.0
65.0	80	56	14	32	B95565.0
70.0	80	56	14	32	B95570.0
75.0	90	63	14	40	B95575.0
80.0	90	63	14	40	B95580.0

B956

HSS-E



DIN
217



- 莫氏锥柄铰刀刀杆 (B955)
- Haste Cônic Alargador Caracol (B955)
- Mango cónico Portaescariadores para escariadores huecos
- Morse Taper Shank Shell Reamer Arbor (B955)

B956



13.00 - 40.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	MK	B956
13.0	250	45	151	3	B95613.0
16.0	261	50	162	3	B95616.0
19.0	298	56	174	4	B95619.0
22.0	312	63	188	4	B95622.0
27.0	359	71	203	5	B95627.0
32.0	376	80	220	5	B95632.0
40.0	396	90	240	5	B95640.0

B957

- 套式铰刀心轴配件 (B956)
- Alargador Caracol - Acessório (B956)
- Portaescariadores para escariadores huecos - Accesorios (B956)
- Shell Reamer Arbor - Spare Parts (B956)



DRIVER



NUT



WASHER



		B957
Nr.	d	
3	13.00	B957N3DRIVER
3		B957N3NUT
3		B957N3WASHER
4	16.00	B957N4DRIVER
4		B957N4NUT
4		B957N4WASHER
5	19.00	B957N5DRIVER
5		B957N5NUT
5		B957N5WASHER
6	22.00	B957N6DRIVER
6		B957N6NUT
6		B957N6WASHER
7	27.00	B957N7DRIVER
7		B957N7NUT
7		B957N7WASHER
8	32.00	B957N8DRIVER
8		B957N8NUT
8		B957N8WASHER
9	40.00	B957N9DRIVER
9		B957N9NUT
9		B957N9WASHER

G400



- 高精度 - 90° 铤钻
- Escareador para chanfrar - 90°
- Avellanadores para portas de alta precisión - 90°
- Countersink for High Precision Chucks - 90°

G400

G400	■	1.1	1.2	1.3	1.4	1.5	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3
	•	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.1	7.2	7.3	7.4	8.1



max d mm	min d mm	l ₁ mm	d ₂ Øh ₅ mm	z	G400
6.30	1.5	45	5	3	G4006.3
8.30	2.0	50	6	3	G4008.3
10.40	2.5	50	6	3	G40010.4
12.40	2.8	56	8	3	G40012.4
16.50	3.2	60	10	3	G40016.5
20.50	3.5	63	10	3	G40020.5
25.00	3.8	67	10	3	G40025.0
31.00	4.2	71	12	3	G40031.0

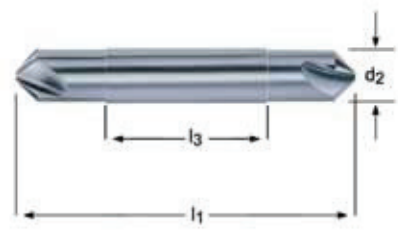
G405



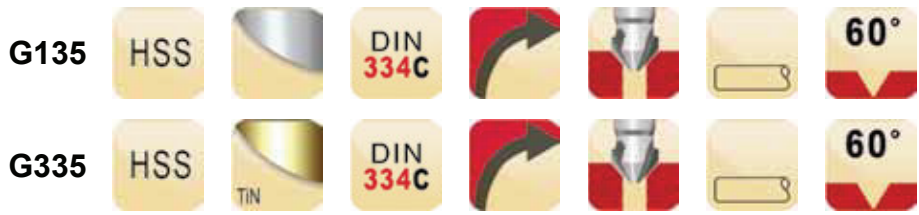
- 镗钻双端 - 90°
- Escareador duas pontas - 90°
- Avellanadores, Doble punta - 90°
- Countersink Double Ended - 90°

G405

G405	■	1.1	1.2	1.3	1.4	1.5	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3
	•	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.1	7.2	7.3	7.4	8.1

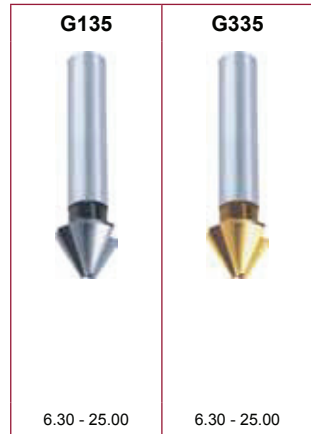


max d	min d	l ₁	l ₃	d ₂	z	G405
mm	mm	mm	mm	∅h ₆ mm		
8.30	2.0	67	46	10	3	G4058.3
10.40	2.5	74	47	12	3	G40510.4
12.40	2.8	76	45	14	3	G40512.4



- G135**
- 铤钻 - 60°
 - Escareador - 60°
- G335**
- Avellanadores - 60°
 - Countersink - 60°

G135	▪	1.1	1.2	1.3	1.4	1.5	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3
	•	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.1	7.2	7.3	7.4	8.1
G335	▪	1.1	1.2	1.3	3.1	3.2	3.3	3.4	7.1	7.2	7.3	7.4			
	•	1.4	1.5	1.6	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	8.1



max d mm	min d mm	l ₁ mm	d ₂ Øh ₉ mm	z	G135	G335
6.3	1.6	45	5	3	G1356.3	G3356.3
8.0	2.0	50	6	3	G1358.0	G3358.0
10.0	2.5	50	6	3	G13510.0	G33510.0
12.5	3.2	56	8	3	G13512.5	G33512.5
16.0	4.0	63	10	3	G13516.0	G33516.0
20.0	5.0	67	10	3	G13520.0	G33520.0
25.0	6.3	71	10	3	G13525.0	G33525.0

G137



- 莫氏锥柄铤钻 - 60°
- Escareador de Haste Cônica - 60°
- Avellanadores de mango cónico - 60°
- Morse Taper Shank Countersink - 60°

G137

G137	■	1.1	1.2	1.3	1.4	1.5	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3
	•	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.1	7.2	7.3	7.4	8.1



max d mm	min d mm	l ₁ mm	MK	z	G137
16.0	4.0	90	1	3	G13716.0
20.0	5.0	106	2	3	G13720.0
25.0	6.3	112	2	3	G13725.0
31.5	10.0	118	2	3	G13731.5
40.0	12.5	150	3	3	G13740.0
50.0	16.0	160	3	3	G13750.0
63.0	20.0	190	4	3	G13763.0
80.0	25.0	200	4	3	G13780.0

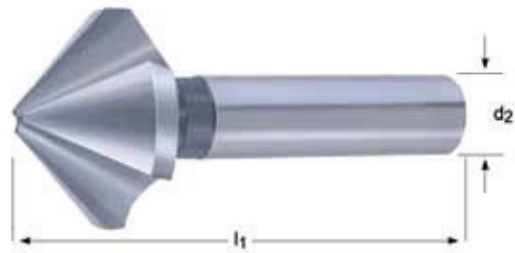
G154



G154

- 铤钻 - 82°
- Escareador - 82°
- Avellanadores - 82°
- Countersink - 82°

G154	▪	1.1	1.2	1.3	1.4	1.5	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3
	•	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.1	7.2	7.3	7.4	8.1



max d mm	min d mm	l ₁ mm	d ₂ Øh ₉ mm	z	G154
6.3	1.5	45	5	3	G1546.3
8.3	2.0	50	6	3	G1548.3
10.4	2.5	50	6	3	G15410.4
12.4	2.8	56	8	3	G15412.4
16.5	3.2	60	10	3	G15416.5
20.5	3.5	63	10	3	G15420.5
25.0	3.8	67	10	3	G15425.0

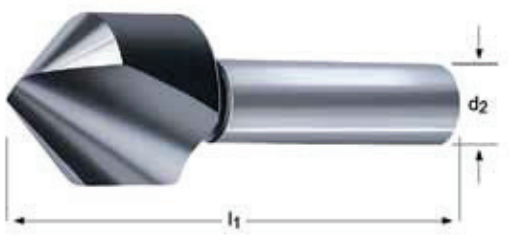
G129



- 铤钻 - 90°
- Escareador - 90°
- Avellanadores - 90°
- Countersink - 90°

G129

G129	■	1.1	1.2	1.3	1.4	4.1	4.2	5.1	5.2	6.1	6.2	6.3	7.1	7.2	
	•	1.5	1.6	2.1	2.2	3.1	3.2	3.3	3.4	4.3	5.3	6.4	7.3	7.4	8.1



max d mm	l ₁ mm	d ₂ Øh ₉ mm	z	G129
6.00	45	6	1	G1296.0
8.00	50	8	1	G1298.0
10.00	49	8	1	G12910.0
12.50	49	8	1	G12912.5
16.00	56	10	1	G12916.0
20.00	60	10	1	G12920.0
25.00	75	12	1	G12925.0
31.50	80	12	1	G12931.5

G149



- 铤钻 - 90°
- Escareador - 90°
- Avellanadores - 90°
- Countersink - 90°

G149

G149	■	1.1	1.2	1.3	1.4	4.1	4.2	5.1	5.2	6.1	6.2	6.3	7.1	7.2	
	•	1.5	1.6	2.1	2.2	3.1	3.2	3.3	3.4	4.3	5.3	6.4	7.3	7.4	8.1



max d mm	min d mm	l_1 mm	d_2 Ø mm	d_1 Ø mm	z	G149
5	2	45	6	10	1	G1495
10	5	48	8	14	1	G14910
15	10	65	10	21	1	G14915
20	15	84	12	28	1	G14920
25	20	102	15	35	1	G14925
30	25	115	15	44	1	G14930
35	30	127	15	48	1	G14935
40	35	136	15	53	1	G14940
50	40	166	20	60	1	G14950



G136

- 铤钻 - 90°
- Escareador - 90°

G560

- Avellanadores - 90°
- Countersink - 90°

G142

- 铤钻 - 90°
- Escareador com Alívio Radial Extra - 90°
- Avellanadores com alívio radial extra - 90°
- Countersink with extra radial relief - 90°

G570

- 铤钻 - 90°
- Escareador - 90°
- Avellanadores - 90°
- Countersink - 90°

G136	▪	1.1	1.2	1.3	1.4	4.1	4.2	5.1	5.2	6.1	6.2	6.3	7.1	7.2	8.1				
	•	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.3	5.3	6.4	7.3	7.4	8.2			
G560	▪	1.1	1.2	1.3	1.4	1.5	2.1	3.1	3.2	3.3	3.4	5.1	5.2	5.3	7.3	7.4			
	•	1.6	2.2	2.3	4.1	4.2	4.3	6.1	6.2	6.3	6.4	7.1	7.2	8.1	8.2				
G142	▪	1.1	1.2	2.1	2.2	2.3	4.1	5.1	6.1	6.2	7.1	7.2	8.1	8.2					
	•	1.3	1.4	4.2	5.2	6.3	7.3	7.4											
G570	▪	1.4	1.5	2.1	2.2	2.3													
	•	1.1	1.2	1.3	1.6	2.4	3.1	3.2	3.3	3.4	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3



max d	min d	l_1	d_2	$\varnothing h_9$	z	G136	G560	G142	G570
mm	mm	mm	mm	mm					
4.3	1.3	40	4	4	3	G1364.3			
4.8	1.3	40	4	4	3			G1424.8	
5.0	1.5	40	4	4	3	G1365.0		G1425.0	
5.3	1.5	40	4	4	3	G1365.3			

max d mm	min d mm	l ₁ mm	d ₂ Øh ₉ mm	z	G136	G560	G142	G570
5.8	1.5	45	5	3	G1365.8			
6.0	1.5	45	5	3	G1366.0		G1426.0	
6.3	1.5	45	5	3	G1366.3	G5606.3	G1426.3	G5706.3
7.0	1.8	50	6	3	G1367.0		G1427.0	
7.3	1.8	50	6	3	G1367.3		G1427.3	
8.0	2.0	50	6	3	G1368.0	G5608.0	G1428.0	
8.3	2.0	50	6	3	G1368.3	G5608.3	G1428.3	G5708.3
9.4	2.2	50	6	3	G1369.4			
10.0	2.5	50	6	3	G13610.0	G56010.0	G14210.0	
10.4	2.5	50	6	3	G13610.4	G56010.4	G14210.4	G57010.4
11.5	2.8	56	8	3	G13611.5		G14211.5	
12.4	2.8	56	8	3	G13612.4	G56012.4	G14212.4	G57012.4
13.4	2.9	56	8	3	G13613.4			
15.0	3.2	60	10	3	G13615.0		G14215.0	
16.5	3.2	60	10	3	G13616.5	G56016.5	G14216.5	G57016.5
19.0	3.5	63	10	3	G13619.0		G14219.0	
20.5	3.5	63	10	3	G13620.5	G56020.5	G14220.5	G57020.5
23.0	3.8	67	10	3	G13623.0		G14223.0	
25.0	3.8	67	10	3	G13625.0	G56025.0	G14225.0	G57025.0
26.0	3.8	67	10	3	G13626.0			
28.0	4.0	71	12	3	G13628.0			
30.0	4.2	71	12	3	G13630.0			
31.0	4.2	71	12	3	G13631.0	G56031.0	G14231.0	G57031.0

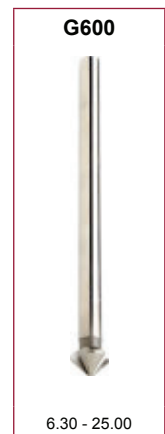
G600



- 镗钻，超长 - 90°
- Escareador Extra Longo - 90°
- Avellanadores, extra larga - 90°
- Countersink, Extra Long - 90°

G600

G600	■	1.1	1.2	1.3	1.4	1.5										
	•	1.6	2.1	2.2	2.3	3.1	3.2	3.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4



max d mm	min d mm	l_1 mm	d_2 $\varnothing h_9$ mm	z	G600
6.3	1.3	154	5	3	G6006.3
8.3	1.8	155	6	3	G6008.3
10.4	2.2	157	6	3	G60010.4
12.4	2.5	158	8	3	G60012.4
15.0	2.8	159	10	3	G60015.0
16.5	2.8	161	10	3	G60016.5
20.5	3.0	164	10	3	G60020.5
25.0	3.2	168	10	3	G60025.0

G132



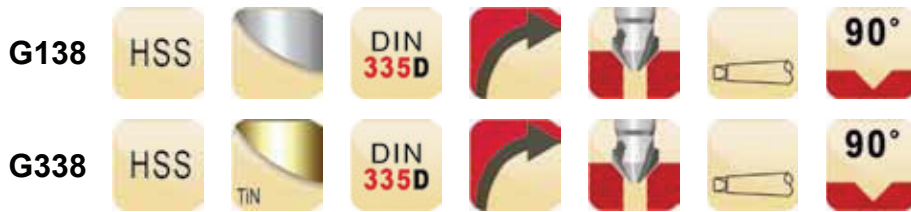
G132

- 铤钻 - 90°
- Escareador - 90°
- Avellanadores - 90°
- Countersink - 90°

G132	▪	1.5	1.6	3.4	4.2	4.3	5.2	5.3	6.4
	•	1.3	1.4	2.3	8.3				



max d mm	min d mm	l ₁ mm	d ₂ Øh ₉ mm	z	G132
8.0	-	48	8	5	G1328.0
12.5	2.0	48	8	5	G13212.5
16.0	3.2	56	10	7	G13216.0
20.0	5.0	60	10	7	G13220.0



- G138**
- 莫氏锥柄铤钻 - 90°
 - Escareador de Haste Cônica - 90°
- G338**
- Avellanadores de mango cónico - 90°
 - Morse Taper Shank Countersink - 90°

G138	▪	1.1	1.2	1.3	1.4	1.5	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3
	•	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.1	7.2	7.3	7.4	8.1
G338	▪	1.1	1.2	1.3	1.4	1.5	3.1	3.2	3.3	3.4	7.1	7.2	7.3	7.4	
	•	1.6	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	8.1	8.2	



max d mm	min d mm	L ₁ mm	MK	Z	G138	G338
25.0	3.8	106	2	3	G13825.0	G33825.0
30.0	4.2	112	2	3	G13830.0	
31.0	4.2	112	2	3	G13831.0	G33831.0
34.0	4.5	118	2	3	G13834.0	
37.0	4.8	118	2	3	G13837.0	G33837.0
40.0	10.0	140	3	3	G13840.0	G33840.0
50.0	14.0	150	3	3	G13850.0	G33850.0
63.0	16.0	180	4	3	G13863.0	G33863.0
80.0	22.0	190	4	3	G13880.0	

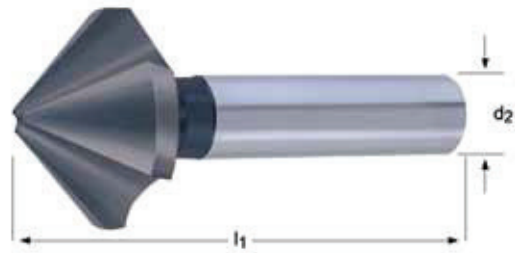
G171



G171

- 铤钻 - 100°
- Escareador - 100°
- Avellanadores - 100°
- Countersink - 100°

G171	▪	1.1	1.2	1.3	3.1	3.2	3.3	3.4	7.1	7.2	7.3	7.4				
	•	1.4	1.5	1.6	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	8.1	8.2



max d mm	min d mm	l ₁ mm	d ₂ Øh ₉ mm	z	G171
6.3	1.5	44.0	5.0	3	G1716.3
8.3	2.0	49.0	6.0	3	G1718.3
10.4	2.5	49.0	6.0	3	G17110.4
12.4	2.8	53.0	6.0	3	G17112.4
16.5	3.2	56.0	6.0	3	G17116.5
20.5	3.5	61.0	10.0	3	G17120.5
25.0	3.8	65.0	10.0	3	G17125.0

M138



- 圆锥钻
- Broca Cônica
- Broca Multi-diámetro
- Conical Drill

M138

M138	▪	1.1	1.2	1.3	1.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	7.1	7.2	8.1	8.2
	•	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.3	7.4					



Nr.	max d mm	min d mm	l ₂ mm	l ₁ mm	d ₂ h11 mm	M138
1	14	3	36	58	6	M1381
2	20	8	40	62	8	M1382
3	30	16	48	70	10	M1383
4	40	26	51	76	10	M1384
5	50	36	54	79	10	M1385
6	60	46	57	82	13	M1386

G314



G314

- 圆锥钻
- Broca Cônica
- Broca Multi-diâmetro
- Conical Drill

G314	▪	1.1	1.2	1.3	1.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	7.1	7.2	8.1	8.2
	•	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.4	7.3	7.4					



Nr.	d min-max mm	l_3 mm	l_1 mm	d_3 Ø mm	G314
412	4.0 mm ÷ 12.0 mm x 1.0 mm	5.0	80	6.0	G314412
1220	12.0 mm ÷ 20.0 mm x 1.0 mm	4.0	76	9.0	G3141220
2030	20.0 mm ÷ 30.0 mm x 1.0 mm	4.0	88	12.0	G3142030
3040	30.0 mm ÷ 40.0 mm x 1.0 mm	4.0	98	13.0	G3143040
420	4.0 mm ÷ 20.0 mm x 2.0 mm	4.0	76	8.0	G314420
630	6.0 mm ÷ 30.0 mm x 2.0 mm	4.0	98	10.0	G314630
M	9.0 mm ÷ 36.0 mm x 3.0 mm	3.0	86	12.0	G314M

G125



- 铤孔 - 180°
- Escareador - 180°
- Referantadores - 180°
- Counterbore - 180°

G125

G125	■	1.1	1.2	1.3	2.1	3.1	3.2	7.1	7.2	8.1								
	•	1.4	1.5	1.6	2.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	7.3	7.4



d_1 \varnothing_{z_3} mm	d_3 \varnothing_{e_8} mm	M	l_1 mm	l_2 mm	d_2 \varnothing_{h_9} mm	z	G125
6.5	2.5	M 3 t	71	14	5.0	3	G1256.5X2.5 ¹⁾
6.5	3.2	M 3 f	71	14	5.0	3	G1256.5X3.2 ²⁾
6.5	3.4	M 3 m	71	14	5.0	3	G1256.5X3.4 ³⁾
8.0	3.3	M 4 t	71	14	5.0	3	G1258.0X3.3 ¹⁾
8.0	4.3	M 4 f	71	14	5.0	3	G1258.0X4.3 ²⁾
8.0	4.5	M 4 m	71	14	5.0	3	G1258.0X4.5 ³⁾
10.0	4.2	M 5 t	80	18	8.0	3	G12510.0X4.2 ¹⁾
10.0	5.3	M 5 f	80	18	8.0	3	G12510.0X5.3 ²⁾
10.0	5.5	M 5 m	80	18	8.0	3	G12510.0X5.5 ³⁾
11.0	5.0	M 6 t	80	18	8.0	3	G12511.0X5.0 ¹⁾
11.0	6.4	M 6 f	80	18	8.0	3	G12511.0X6.4 ²⁾
11.0	6.6	M 6 m	80	18	8.0	3	G12511.0X6.6 ³⁾
15.0	6.8	M 8 t	100	22	12.5	3	G12515.0X6.8 ¹⁾
15.0	8.4	M 8 f	100	22	12.5	3	G12515.0X8.4 ²⁾
15.0	9.0	M 8 m	100	22	12.5	3	G12515.0X9.0 ³⁾
18.0	8.5	M 10 t	100	22	12.5	3	G12518.0X8.5 ¹⁾
18.0	10.5	M 10 f	100	22	12.5	3	G12518.0X10.5 ²⁾
18.0	11.0	M 10 m	100	22	12.5	3	G12518.0X11.0 ³⁾
20.0	10.2	M 12 t	100	22	12.5	3	G12520.0X10.2 ¹⁾
20.0	13.0	M 12 f	100	22	12.5	3	G12520.0X13.0 ²⁾
20.0	13.5	M 12 m	100	22	12.5	3	G12520.0X13.5 ³⁾

¹⁾ t = 用于攻丝底孔 / t= para furo do macho / t = Para agujero roscado / t= for tap hole

²⁾ f = 用于通孔的精加工 / f = furo passante fino / f= para agujero pasante fino / f= for through hole fine

³⁾ m = 用于通孔的半精加工 / m = para furo passante médio / m= Para agujero pasante medio / m= for through hole medium

G236

- 套装铤钻
- Jogo de escareadores
- Juego de Avellanadores
- Countersink set

A=套件中的型号, B=套件中的数量, C=套件中的直径
 A=Tipos no jogo, B=No. no jogo, C=Diâmetros no jogo
 A=Tipos en el juego, B=No. en el Juego, C=Diámetros en el Juego
 A=Styles in Set, B=No. in Set, C=Diameters in Set



Nr.	A	B	C	G236
1	G136	6	6.30 mm, 8.30 mm, 10.40 mm, 12.40 mm, 16.50 mm, 20.50 mm	G2361
2	G136	4	6.30 mm, 10.40 mm, 16.50 mm, 20.50 mm	G2362
3	G560	6	6.30 mm, 8.30 mm, 10.40 mm, 12.40 mm, 16.50 mm, 20.50 mm	G2363