DORMER

	Material	Material	Material	Matière
	Coating	Tratamiento superficial	Revestimento	Revêtement
	Standard	Norma	Standard	Standard
	Direction	Dirección	Direção	Direction
	Shank standard	Mango	Encabadouro	Queue
	Flute style	Tipo de corte	Formato da Navalha	Type de goujures
	Tolerance	Tolerancia	Tolerância	Tolérance
	Taper gradient	Conicidad	Ângulo de Conicidade	Conicité
■	Excellent for Application	Excelente para la Aplicación	Excelente para a Aplicação	Excellent pour les applications
●	Good for Application	Bueno para la Aplicación	Bom para a Aplicação	Acceptable pour les applications
	Example 10 = Peripheral speed in metres/minute +/- 10%	Ejemplo 10 = Velocidad Periférica en metros/ minuto +/- 10%	Exemplo 10 = velocidade periférica em metros / minuto + / - 10%	Exemple 10 = Vitesse périphérique en mètres/ minute +/- 10%
	Codes	Código de producto	Código	Codes
	Range	Rango de Diámetros	Gama de medidas	Gamme

AMG	English	Español	Português	Français
1.1	Magnetic soft steel	Acero blando	Aço macio de baixa resistência	Acier doux magnétique
1.2	Structural steel, case carburizing steel	Acero de construcción/cementación	Aço estrutural / Aço cementado	Acier de construction, Acier de cémentation
1.3	Plain Carbon steel	Acero al carbono	Aço carbono	Acier au carbone ordinaire
1.4	Alloy steel	Acero aleado	Aço de liga	Acier allié
1.5	Alloy steel, Hardened and tempered steel	Acero aleado/temple y revenido	Aço de Liga endurecido e temperado	Acier allié/ Acier trempé et revenu
1.6	Alloy steel, Hardened and tempered steel	Acero aleado/temple y revenido	Aço de Liga endurecido e temperado	Acier allié/ Acier trempé et revenu
1.7	Alloy steel, Heat treated	Acero aleado cementado	Aço de liga temperado	Acier allié trempé
1.8	Alloy steel, Hardened & Wear resistant steel	Acero aleado cementado	Aço de liga temperado / resistente ao degaste	Acier allié trempé
2.1	Free machining, Stainless Steel	Acero inoxidable fácil mecanizado	Aço inoxidável de fácil maquinação	Acier inoxydable de décolletage
2.2	Austenitic	Austenítico	Austenítico	Austénitique
2.3	Ferritic + Austenitic, Ferritic, Martensitic	Ferritico, Ferr. + Aust., Marten	Ferrítico + Austenítico + Martensílico	Ferritique + Austénitique, Martensitique
2.4	Precipitation Hardened	Acero Inoxidable Templado	Aço Inoxidável Temperado	Acier inoxydable Trempé
3.1	Lamellar graphite	Con grafito laminar	Grafite Lamelar	Graphite lamellaire
3.2	Lamellar graphite	Con grafito laminar	Grafite Lamelar	Graphite lamellaire
3.3	Nodular graphite, Malleable Cast Iron	Con graf. laminar, fundic. maleable	Grafite nodular / Ferro fundido maleável	Graphite nodulaire/ Fonte malléable
3.4	Nodular graphite, Malleable Cast Iron	Con graf. laminar, fundic. maleable	Grafite nodular / Ferro fundido maleável	Graphite nodulaire/ Fonte malléable
4.1	Titanium, unalloyed	Titanio no aleado	Titânio, sem liga	Titane, non-allié
4.2	Titanium, alloyed	Titanio aleado	Ligas de Titânio	Titane, allié
4.3	Titanium, alloyed	Titanio aleado	Ligas de Titânio	Titane, allié
5.1	Nickel, unalloyed	Níquel no aleado	Níquel, sem liga	Nickel, non-allié
5.2	Nickel, alloyed	Níquel aleado	Ligas de níquel	Nickel, allié
5.3	Nickel, alloyed	Níquel aleado	Ligas de níquel	Nickel, allié
6.1	Copper	Cobre	Cobre	Cuivre
6.2	β-Brass, Bronze	β-Latón, bronce	Latão beta, bronze	β-Laiton, Bronze
6.3	α-Brass	α-Latón	Latão alfa	α-Laiton
6.4	High Strength Bronze	Metal AMPCO	Ligas de Cu-Al-Fe, Bronze de alta resistência	Bronze, haute résistance
7.1	Al, Mg, unalloyed	Al, Mg, no aleado	Al, Mg, sem liga	Al, Mg, non-allié
7.2	Al alloyed, Si < 0.5%	Al aleado con Si < 0.5%	Ligas de Al, Si : Si < 0.5%	Al allié, Si < 0.5%
7.3	Al alloyed, Si > 0.5% < 10%	Al aleado con Si > 0.5% < 10%	Ligas de Al, Si : Si > 0.5% < 10%	Al allié, Si > 0.5% < 10%
7.4	Al alloyed, Si > 10% Whisker reinforced Al-alloys Mg-alloys	Al aleado, Si>10% Reforzado por filamentos, Al-aleados, Mg-aleados	Al com liga, Si>10%, reforçadas com monocristais filiformes, ligas Al/Mg	Al allié, Si>10% Alliages d'Al ou Mg, céramique renforcée
8.1	Thermoplastics	Termoplásticos	Termoplásticos	Thermoplastiques
8.2	Thermosetting plastics	Plásticos endurecidos por calor	Plásticos termoduros	Plastiques thermodurcissables
8.3	Reinforced plastic materials	Materiales plásticos reforzados	Materiais plásticos reforçados	Plastiques renforcés
9.1	Cermets (metals-ceramics)	Cerametales (metales-cerámicas)	Materiais cerâmicos (metalocerâmica)	Cermets (céramiques metalliques)
10.1	Graphite	Grafito standard	Grafite standard	Graphite standard

DORMER

	HM	HM	HM	HM	HM	HSS	HSS	HSS	HSS-E	HSS	HSS	HSS	HSS	HSS-E	HSS-E	HSS-E	HSS-E
						ST			ST	ST	ST		ST Bronze				
	DIN 8093	DIN 8093	DIN 8050	DIN 8094	DIN 8051	DIN 206	DORMER	DORMER	BS 328	BS 328	DIN 9	DIN 9	ANSI	DIN 2179	DIN 212	DIN 212	DIN 212
		DIN 6535HA													DIN 6535HA		
	B	B	A	B	A	B			B	A	A	B			B	B	E
	H7	Ø.95-5.5 0,+0.004 Ø5.51-12 0,+0.005	H7	H7	H7	H7			H7						H7	Ø.95-5.5 0,+0.004 Ø5.51-12 0,+0.005	H7
										1:48	1:50	1:50		1:50			
																		
	B400	B481	B441	B411	B442	B100	B334	B335	B901	B301	B903	B952	B122	B953	B180	B170	B157
	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	N000BLADES - N16NUT	1.50 - 1/2	1/16 - 1/2	1.50 - 20.00	1.20 - 50.00	3/8 - 1.1/16	1.00 - 12.00	1.50 - 20.0	0.98 - 12.00	2.00 - 20.00

AMG	152	153	155	156	157	158	160	161	162	163	164	165	166	167	168	170	173	ISO
1.1	●18B	●18B	●18B	●18B	●18B	■18C	■18C		■18C	■18C	■18C	■18C	■18C	●25C	■25C	■25C	■25C	P 1
1.2	●18B	●18B	●18B	●18B	●18B	■14C	■14C		■14C	■14C	■14C	■14C	■14C	●20C	■20C	■20C	■20C	P 1
1.3	●14B	●14B	●14B	●14B	●14B	■11C	■11C		■11C	■11C	■11C	■11C	■11C	●16C	■16C	■16C	■16C	P 2
1.4	●14B	●14B	●14B	●14B	●14B	■10B	■10B		■10B	■10B	■10B	■10B	■10B	●15B	■15B	■15B	■15B	P 3
1.5	■10C	■10C	■10C	■10C	■10C	●5B	●5B		●5B	●5B	●5B	●5B	●5B	●9B	●9B	●9B	●9B	P 4
1.6	■10C	■10C	■10C	■10C	■10C	●4A	●4A		●4A	●4A	●4A	●4A	●4A	●5A	●5A	●5A	●5A	H 1
1.7																		H 3
1.8																		H 4
2.1						■8F	■8F		■8C	■8C	■8C	■8C	■8C	■11C	■11C	■11C	■11C	M 1
2.2										●5B	●5B	●5B	●5B	■6B	●6B	●6B	■6B	M 3
2.3										●6B	●6B	●6B	●6B	■8B	●8B	●8B	■8B	M 2
2.4															●6B			S 2
3.1	■17D	■17D	■17D	■17D	■17D	■14E	■14E		■14E	■14E	■14E	■14E	■14E		●16E	●16E		K 1
3.2	■17D	■17D	■17D	■17D	■17D	●11D	●11D		●11D	●11D	●11D	●11D	●11D		●15D	●15D		K 2
3.3	■17D	■17D	■17D	■17D	■17D	●10C	●10C		●10C	●10C	●10C	●10C	●10C		●13C	●13C		K 3
3.4	■14D	■14D	■14D	■14D	■14D	●9C	●9C		●9C	●9C	●9C	●9C	●9C		●11C	●11C		K 4
4.1	■14C	■14C	■14C	■14C	■14C	■11C	■11C		■11C	■11C	■11C	■11C	■11C	■15C	●15C	●15C	■15C	S 1
4.2	■14C	■14C	■14C	■14C	■14C	●5B	●5B		●5B	●5B	●5B	●5B	●5B	■9B	■9B	■9B	■9B	S 2
4.3	■10B	■10B	■10B	■10B	■10B	●4B	●4B		●4B	●4B	●4B	●4B	●4B	■5B	●5B	●5B	■5B	S 3
5.1	■10C	■10C	■10C	■10C	■10C	●5D	●5D		●5D	●5D	●5D	●5D	●5D	■8D	■8D	■8D	■8D	S 1
5.2	■10B	■10B	■10B	■10B	■10B	●3C	●3C		●3C					■5C	●5C	●5C	■5C	S 2
5.3	■10B	■10B	■10B	■10B	■10B	●2C	●2C		●2C					■3C	●3C	●3C	■3C	S 3
6.1	■38E	■38E	■38E	■38E	■38E	●18D	●18D		●18D	●18D	●18D	●18D	●18D	■25D	●25D	●25D	■25D	N 3
6.2	■38E	■38E	■38E	■38E	■38E	■20E	■20E		■20E	■20E	■20E	■20E	■20E	●28E	●28E	●28E	●28E	N 4
6.3	■38E	■38E	■38E	■38E	■38E	●18D	●18D		●18D	●18D	●18D	●18D	●18D		●25D	●25D		N 3
6.4	■38D	■38D	■38D	■38D	■38D	●11D	●11D		●11D	●11D	●11D	●11D	●11D		●14D	●14D		N 4
7.1	■60D	■60D	■60D	■60D	■60D	●23F	●23F		●23F	●23F	●23F	●23F	●23F	■28F			■28F	N 1
7.2	■60D	■60D	■60D	■60D	■60D	●18F	●18F		●18F	●18F	●18F	●18F	●18F	■25F			■25F	N 1
7.3	■25D	■25D	■25D	■25D	■25D					●15E	●15E	●15E	●15E	■20E			■20E	N 1
7.4	■25D	■25D	■25D	■25D	■25D					●14D	●14D	●14D	●14D	■16D			■16D	N 2
8.1	■25C	■25C	■25C	■25C	■25C									■30B			■30B	O
8.2	■13C	■13C	■13C	■13C	■13C	●21B	●21B		●21B	●21B	●21B	●21B	●21B					O
8.3																		O
9.1														●3A			●3A	H
10.1																		O

DORMER

	HSS-E	HSS-E	HSS	HSS-E	HSS-E	HSS-E	
		ST	ST		ST		
	DIN 208	BS 328	DIN 311	DIN 2180	DIN 219	DIN 217	
	B	B			B		
	H7	H7	k11		H7		
				1:50			
							
	B161	B101	B121	B954	B955	B956	B957
	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	174	176	178	179	180	181	182	ISO
1.1	■25C	■18C	■18C	●25C	■18C			P 1
1.2	■20C	■14C	■14C	●20C	■14C			P 1
1.3	■16C	■11C	■11C	●16C	■11C			P 2
1.4	■15B	■10B	■10B	●15B	■10B			P 3
1.5	●9B	●5B	●5B	●9B	●5B			P 4
1.6	●5A	●4A	●4A	●5A	●4A			H 1
1.7								H 3
1.8								H 4
2.1	■11C	■8C		■11C	■8C			M 1
2.2	●6B			■6B	●5B			M 3
2.3	●8B			■8B	●6B			M 2
2.4								S 2
3.1	●16E	■14E	■14E		●14E			K 1
3.2	●15D	●11D	●11D					K 2
3.3	●13C	●10C	●10C					K 3
3.4	●11C	●9C	●9C					K 4
4.1	■15C	■11C	■11C	■15C	■11C			S 1
4.2	●9B	●5B		■9B	●5B			S 2
4.3	●5B	●4B		■5B	●4B			S 3
5.1	■8D	●5D		■8D	■5D			S 1
5.2	●5C	●3C		■5C	●3C			S 2
5.3	●3C	●2C		■3C	●2C			S 3
6.1	●25D	●18D		■25D	●18D			N 3
6.2	●28E	■20E		●28E	●20E			N 4
6.3	●25D	●18D						N 3
6.4	●14D	●11D						N 4
7.1		●23F		■28F	●23F			N 1
7.2		●18F		■25F	●18F			N 1
7.3				■20E	●15E			N 1
7.4				■16D	●14D			N 2
8.1				■30B				O
8.2		●21B	●21B		●21B			O
8.3								O
9.1				●3A				H
10.1								O

DORMER

	English	Español	Português	Français
	Material	Material	Material	Matière
	Coating	Tratamiento superficial	Revestimento	Revêtement
	Standard	Estándar	Standard	Standard
	Direction	Dirección	Direção	Direction
	Application	Aplicaciones	Aplicação	Utilisation
	Shank standard	Mango	Encabadouro	Queue
	Countersink angle	Conicidad	Ângulo de Escareador	Angle
■	Excellent for Application	Excelente para la Aplicación	Excelente para a Aplicação	Excellent pour les applications
●	Good for Application	Bueno para la Aplicación	Bom para a Aplicação	Acceptable pour les applications
	Example 10 = Peripheral speed in metres/minute +/- 10%	Ejemplo 10 = Velocidad Periférica en metros/ minuto +/- 10%	Exemplo 10 = velocidade periférica em metros / minuto + / - 10%	Exemple 10 = Vitesse périphérique en mètres/ minute +/- 10%
	Codes	Código de producto	Código	Codes
	Range	Rango de Diámetros	Gama de medidas	Gamme

AMG	English	Español	Português	Français
1.1	Magnetic soft steel	Acero blando	Aço macio de baixa resistência	Acier doux magnétique
1.2	Structural steel, case carburizing steel	Acero de construcción/cementación	Aço estrutural / Aço cementado	Acier de construction, Acier de cémentation
1.3	Plain Carbon steel	Acero al carbono	Aço carbono	Acier au carbone ordinaire
1.4	Alloy steel	Acero aleado	Aço de liga	Acier allié
1.5	Alloy steel, Hardened and tempered steel	Acero aleado/temple y revenido	Aço de Liga endurecido e temperado	Acier allié/ Acier trempé et revenu
1.6	Alloy steel, Hardened and tempered steel	Acero aleado/temple y revenido	Aço de Liga endurecido e temperado	Acier allié/ Acier trempé et revenu
1.7	Alloy steel, Heat treated	Acero aleado cementado	Aço de liga temperado	Acier allié trempé
1.8	Alloy steel, Hardened & Wear resistant steel	Acero aleado cementado	Aço de liga temperado / resistente ao degaste	Acier allié trempé
2.1	Free machining, Stainless Steel	Acero inoxidable fácil mecanizado	Aço inoxidável de fácil maquinação	Acier inoxydable de décolletage
2.2	Austenitic	Austenítico	Austenítico	Austénitique
2.3	Ferritic + Austenitic, Ferritic, Martensitic	Ferritico, Ferr. + Aust., Marten	Ferrítico + Austenítico + Martensílico	Ferritique + Austénitique, Martensitique
2.4	Precipitation Hardened	Acero Inoxidable Templado	Aço Inoxidável Temperado	Acier inoxydable Trempé
3.1	Lamellar graphite	Con grafito laminar	Grafite Lamelar	Graphite lamellaire
3.2	Lamellar graphite	Con grafito laminar	Grafite Lamelar	Graphite lamellaire
3.3	Nodular graphite, Malleable Cast Iron	Con graf. laminar, fundic. maleable	Grafite nodular / Ferro fundido maleável	Graphite nodulaire/ Fonte malléable
3.4	Nodular graphite, Malleable Cast Iron	Con graf. laminar, fundic. maleable	Grafite nodular / Ferro fundido maleável	Graphite nodulaire/ Fonte malléable
4.1	Titanium, unalloyed	Titanio no aleado	Titânio, sem liga	Titane, non-allié
4.2	Titanium, alloyed	Titanio aleado	Ligas de Titânio	Titane, allié
4.3	Titanium, alloyed	Titanio aleado	Ligas de Titânio	Titane, allié
5.1	Nickel, unalloyed	Níquel no aleado	Níquel, sem liga	Nickel, non-allié
5.2	Nickel, alloyed	Níquel aleado	Ligas de níquel	Nickel, allié
5.3	Nickel, alloyed	Níquel aleado	Ligas de níquel	Nickel, allié
6.1	Copper	Cobre	Cobre	Cuivre
6.2	β-Brass, Bronze	β-Latón, bronce	Latão beta, bronze	β-Laiton, Bronze
6.3	α-Brass	α-Latón	Latão alfa	α-Laiton
6.4	High Strength Bronze	Metal AMPCO	Ligas de Cu-Al-Fe, Bronze de alta resistência	Bronze, haute résistance
7.1	Al, Mg, unalloyed	Al, Mg, no aleado	Al, Mg, sem liga	Al, Mg, non-allié
7.2	Al alloyed, Si < 0.5%	Al aleado con Si < 0.5%	Ligas de Al, Si : Si < 0.5%	Al allié, Si < 0.5%
7.3	Al alloyed, Si > 0.5% < 10%	Al aleado con Si > 0.5% < 10%	Ligas de Al, Si : Si > 0.5% < 10%	Al allié, Si > 0.5% < 10%
7.4	Al alloyed, Si > 10% Whisker reinforced Al-alloys Mg-alloys	Al aleado, Si>10% Reforzado por filamentos, Al-aleados, Mg-aleados	Al com liga, Si>10%, reforçadas com monocristais filiformes, ligas Al/Mg	Al allié, Si>10% Alliages d'Al ou Mg, céramique renforcée
8.1	Thermoplastics	Termoplásticos	Termoplásticos	Thermoplastiques
8.2	Thermosetting plastics	Plásticos endurecidos por calor	Plásticos termoduros	Plastiques thermodurcissables
8.3	Reinforced plastic materials	Materiales plásticos reforzados	Materiais plásticos reforçados	Plastiques renforcés
9.1	Cermets (metals-ceramics)	Cerametales (metales-cerámicas)	Materiais cerâmicos (metalocerâmica)	Cermets (céramiques metalliques)
10.1	Graphite	Grafito standard	Grafite standard	Graphite standard

DORMER

	HM	HSS	HSS	HSS	HSS	HSS	HSS-E	HSS	HSS	HSS	HSS	HSS	HSS-E	HSS-E	
			TiN						TiAlN		TiAlN		AlTiCN		
	DIN 335C	DIN 334C	DIN 334C	DIN 334D	DIN 335C	DORMER	DORMER	DIN 335C	DIN 335C	DIN 335C	DIN 335C	DIN 335C	DIN 335C	DORMER	
	90°	60°	60°	60°	82°	90°	90°	90°	90°	90°	90°	90°	90°	90°	
															
	G400	G135	G335	G137	G154	G129	G149	G136	G560	G106	G506	G142	G570	G107	
	6.30 - 31.00	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	6.30 - 50.00	6.30 - 50.00	4.80 - 31.00	6.30 - 31.00	6.30 - 20.50	
AMG	183	184	184	185	186	187	188	189	189	189	189	191	191	192	ISO
1.1	■30F	■30F	■50E	■30F	■30F	■30D	■30D	■30F	■50E	■30F	■50E	■30F	●45E	■30F	P 1
1.2	■25E	■25E	■40E	■25E	■25E	■25D	■25D	■25E	■40E	■25E	■40E	■25E	●36E	■25E	P 1
1.3	■20D	■20D	■30D	■20D	■20D	■20C	■20C	■20D	■30D	■20D	■30D	●20D	●27D	■20D	P 2
1.4	■15D	■15D	●20D	■15D	■15D	■15B	■15B	■15D	■20D	■15D	●20D	●15D	■22D	■15D	P 3
1.5	■10B	■10B	●15B	■10B	■10B	●10A	●10A	●10B	■15B	■10B	●15B		■17B	■10B	P 4
1.6	●6A	●6A	●10B	●6A	●6A	●6A	●6A	●6A	●10B	●6A	●10B		●12B	●6A	H 1
1.7															H 3
1.8															H 4
2.1	●8C	●8C		●8C	●8C	●8B	●8B	●8C	■8C	●8C		■8C	■17C	●8C	M 1
2.2	●6B	●6B		●6B	●6B	●6A	●6A	●6B	●6B	●6B		■6B	■12B	●6B	M 3
2.3	●4A	●4A		●4A	●4A			●4A	●4A	●4A		■4A	■15A	●4A	M 2
2.4													●10A		S 2
3.1	●25F	●25F	■45F	●25F	●25F	●25D	●25D	●25F	■45F	●25F	■45F		●40C	●25F	K 1
3.2	●15D	●15D	■35D	●15D	●15D	●15C	●15C	●15D	■35D	●15D	■35D		●32C	●15D	K 2
3.3	●12C	●12C	■30C	●12C	●12C	●12A	●12A	●12C	■30C	●12C	■30C		●27C	●12C	K 3
3.4	●8C	●8C	■30C	●8C	●8C	●8A	●8A	●8C	■30C	●8C	■30C		●24C	●8C	K 4
4.1	■12C	■12C	●20C	■12C	■12C	■12B	■12B	■12C	●20C	■12C	●20C	■12C		■12C	S 1
4.2	■10A	■10A	●15A	■10A	■10A	■10A	■10A	■10A	●15A	■10A	●15A	●10A		■10A	S 2
4.3	■8A	■8A	●10A	■8A	■8A	●8A	●8A	●8A	●10A	■8A	●10A			■8A	S 3
5.1	■12C	■12C	●20C	■12C	■12C	■12B	■12B	■12C	■20C	■12C	●20C	■12C		■12C	S 1
5.2	■6B	■6B	●10B	■6B	■6B	■6A	■6A	■6B	■10B	■6B	●10B	●6B	●6A	■6B	S 2
5.3	■4A	■4A	●6A	■4A	■4A	●4A	●4A	●4A	■6A	■4A	●6A		●4A	■4A	S 3
6.1	■25D	■25D	●40D	■25D	■25D	■25B	■25B	■25D	●40D	■25D	●40D	■25D	●40D	■25D	N 3
6.2	■20F	■20F	●30F	■20F	■20F	■20C	■20C	■20F	●30F	■20F	●30F	■20F	●30F	■20F	N 4
6.3	■25F	■25F	●40F	■25F	■25F	■25C	■25C	■25F	●40F	■25F	●40F	●25F	●40F	■25F	N 3
6.4	●10D	●10D	●15D	●10D	●10D	●10B	●10B	●10D	●15D	●10D	●15D		●15D	●10D	N 4
7.1	●30G	●30G	■50G	●30G	●30G	■30D	■30D	■30G	●50G	●30G	■50G	■30G	●45G	●30G	N 1
7.2	●25F	●25F	■40F	●25F	●25F	■25C	■25C	■25F	●40F	●25F	■40F	■25F	●36F	●25F	N 1
7.3	●20F	●20F	■30F	●20F	●20F	●20C	●20C	●20F	■30F	●20F	■30F	●20F	●27F	●20F	N 1
7.4	●10F	●10F	■15F	●10F	●10F	●10C	●10C	●10F	■15F	●10F	■15F	●10F	●13F	●10F	N 2
8.1	●30G	●30G	●50G	●30G	●30G	●30D	●30D	■30G	●50G	●30G	●50G	■30G		●30G	O
8.2	●20G	●20G	●30G	●20G	●20G	●20D	●20D	●20G	●30G	●20G	●30G	■20G		●20G	O
8.3															O
9.1															H
10.1															O

DORMER

	HSS	HSS	HSS	HSS	HSS	HSS	HSS	
				TiN	TiAlN			
	DORMER	DIN 335A	DIN 335D	DIN 335D	DIN 335C	DORMER	DIN 373	
	90°	90°	90°	90°	100°	20°	180°	
								
	G600	G132	G138	G338	G171	G314	G125	G236
	6.30 - 25.00	8.00 - 20.00	25.00 - 80.00	25.00 - 63.00	6.30 - 25.00	4.00 - 9.00	6.50 - 20.00	Set

AMG	193	194	195	195	196	197	198	199	ISO
1.1	■22F		■30F	■50F	■50E	■30D	■30E		P 1
1.2	■17E		■25E	■40E	■40E	■25D	■25E		P 1
1.3	■15D	●20E	■20D	■30D	■30D	■20C	■20D		P 2
1.4	■12D	●15D	■15D	■20D	●20D	■15B	●15D		P 3
1.5	■8B	■10D	■10B	■15B	●15B	●10A	●10C		P 4
1.6	●6A	■6B	●6A	●10A	●10B	●6A	●6C		H 1
1.7									H 3
1.8									H 4
2.1	●8C		●8C			●8B	■8D		M 1
2.2	●6B		●6B			●6A	●6C		M 3
2.3	●4A	●4B	●4A			●4A			M 2
2.4									S 2
3.1	●25F		●25F	■45F	■45F	●25D	■25E		K 1
3.2	●15D		●15D	■35D	■35D	●15C	■15E		K 2
3.3	●12C		●12C	■30C	■30C	●12A	●12D		K 3
3.4		■8D	●8C	■30C	■30C	●8A	●8C		K 4
4.1			■12C	●20C	●20C	■12B	●12E		S 1
4.2		■8A	■10A	●15A	●15A	■10A	●10E		S 2
4.3		■8A	■8A	●10A	●10A	■8A	●8E		S 3
5.1			■12C	●20C	●20C	■12B	●12E		S 1
5.2		■6C	■6B	●10B	●10B	■6A	●6C		S 2
5.3		■4B	■4A	●6A	●6A	■4A	●4E		S 3
6.1	●25D		■25D	●40D	●40D	■25B	●25C		N 3
6.2	●20F		■20F	●30F	●30F	■20C	●20C		N 4
6.3	●25F		■25F	●40F	●40F	■25C	●25C		N 3
6.4	●10D	■10F	●10D	●15D	●15D	●10B			N 4
7.1	●30G		●30G	■50G	■50G	■30D	■30G		N 1
7.2	●25F		●25F	■40F	■40F	■25C	■25G		N 1
7.3	●20F		●20F	■30F	■30F	●20C	●20G		N 1
7.4	●10F		●10F	■15F	■15F	●10C	●10E		N 2
8.1			●30G	●50G	●50G	■30D	■30C		O
8.2			●20G	●30G	●30G	■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									

● General guidelines for stock removal when pre-drilling holes ● Guía general para la eliminación de material cuando existe agujero pre-taladrado ● Regras gerais para material a ser removido quando existe pré-furação ● Préconisations de surépaisseur de perçage avant alésage

	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-.05	P 1
1.2	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-.05	P 1
1.3	0.1-0.2	0.2	0.2-0.3	0.3-0.4	0.4-.05	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-.05	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

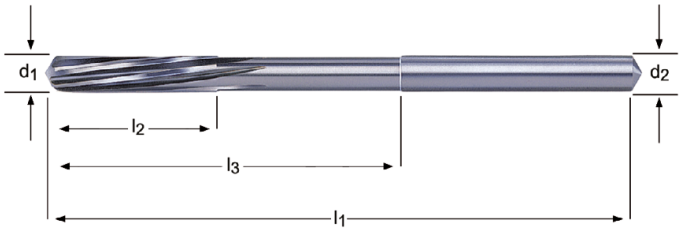
For adjustable or blade reamers reduce stock removal by 30%. For quick helix reamers increase by 50% / Para escariadores ajustables y con cuchillas reducir la eliminación de material un 30%.Para escariadores de hélice rápida incrementar un 50% / Para alargadores ajustáveis reduza o sobremetal em 30%. Para alargadores com hélice rápida aumente em 50% / Pour les alésoirs expansibles ou brasés réduire l'avance de 30%. Pour les alésoirs à hélice rapide augmenter de 50%.

B400

- Machine Reamer Extremely unequal spacing
- Escariador de máquina Espacio desigual
- Mandril de Máquina / Espaçamento extremamente Assimétrico
- Alésoir machine Pas inégal

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	HM		DIN 8093			B	H7	



1.00 - 20.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh$_9$ 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] Solid Carbide / Monobloc de Metal Duro / Metal Duro Integral / Carbure monobloc
[2] Carbide Head / Cabeza de Metal Duro / Empastilhado / Tête carbure
[3] Carbide Tipped / Punta de Metal Duro / Ponta de Metal Duro / Pointe carbure

B481

- NC - Centesimal Reamer for High Precision Chucks
- NC - Escariador Centesimal para portas de alta precisión
- NC - Mandril Centesimal p/ buchas de alta precisão
- NC - Alésoir au centième pour mandrins haute précision

Extremely unequal spacing
Espacio extremadamente irregular
Espaçamento Assimétrico
Pas différentiel

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																

B481	HM		DIN 8093		DIN 6535HA	B	Ø.95-5.5 0,+0.004 Ø5.51-12 0,+0.005	

B481

0.98 - 12.05

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh$_6$ 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
4.02	75	19	47	6	4	B4814.02
4.03	75	19	47	6	4	B4814.03

DORMER

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh_6 mm	B481
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

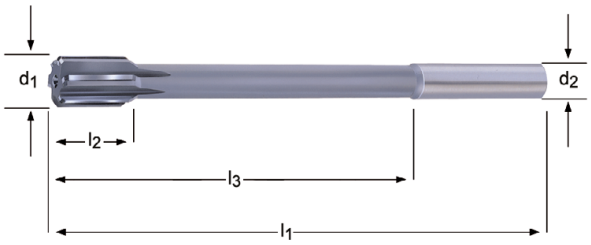
B441

- Machine Reamer Extremely unequal spacing
- Escariador de máquina Espacio desigual
- Mandril de Máquina / Espaçamento extremamente Assimétrico
- Alésoir machine Pas inégal

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

B441 HM | DIN 8050 | A | H7



B441

10.00 - 20.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh$_9$ 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] Carbide Tipped / Punta de Metal Duro / Ponta de Metal Duro / Pointe carbure

DORMER

B411

- Machine Reamer Extremely unequal spacing
- Escariador de máquina Espacio desigual
- Mandril de Máquina / Espaçamento extremamente Assimétrico
- Alésoir machine Pas inégal

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																

B411	HM		DIN 8094			B	H7	

B411

5.00 - 30.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	MK	B411
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]

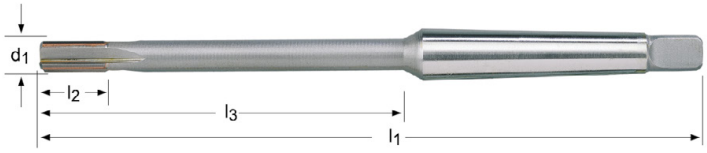
[2] Carbide Head / Cabeza de Metal Duro / Empastilhado / Tête carbure
[3] Carbide Tipped / Punta de Metal Duro / Ponta de Metal Duro / Pointe carbure

B442

- Machine Reamer Extremely unequal spacing
- Escariador de máquina Espacio desigual
- Mandril de Máquina / Espaçamento extremamente Assimétrico
- Alésoir machine Pas inégal

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																

B442	HM		DIN 8051			A	H7	



B442

10.00 - 20.00

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

DORMER

B100

- Hand Reamer
- Escariador de mano
- Mandril Manual
- Alésoir à main

d2=d1 with tolerance e9
d2=d1 Tolerancia e9
d2=d1 com tolerância e9
d2=d1 avec tolérance 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 8.2

B100 HSS | ST | DIN 206 | B | H7

B100

1.50 - 50.00

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
	9.50	124	62	16	6	8.00	B1009.5
3/8	9.52	124	62	17	6	8.00	B1003/8

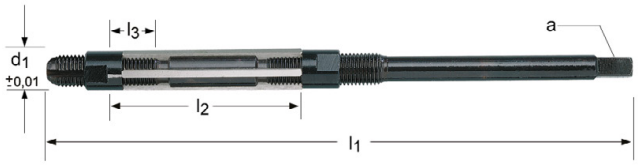
d_1 Ø Inch	d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	◹ a mm	B100
25/64	9.92	133	66	17	6	8.00	B10025/64
	10.00	133	66	17	6	8.00	B10010.0
13/32	10.32	133	66	17	6	8.00	B10013/32
	10.50	133	66	17	6	8.00	B10010.5
	11.00	142	71	18	6	9.00	B10011.0
7/16	11.11	142	71	18	6	9.00	B1007/16
	11.50	142	71	18	6	9.00	B10011.5
	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

- Hand Reamer Quickly Adjustable
- Escariador de mano extensible
- Mandril Manual Expansível
- Alésoirs à main expansibles

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	8.2

B334 HSS DORMER



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

- Hand Reamer Quickly Adjustable - Spare Parts (B334)
- Accesorios para el porta-escariador tipo B334
- Acessórios de Substituição p/ B334
- Accessoires pour alésoirs à main expansibles (B334)

B335 HSS DORMER

BLADES

NUT

B335

N000BLADES - N16NUT

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

- Machine Reamer — d2=d1 - 0.025
- Escariador de máquina — d2=d1 - 0.025
- Mandril de Máquina CM — d2=d1 - 0.025
- Alésoir machine conique pour trous de goupilles — d2=d1 - 0.025

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 | 8.2

B901 HSS-E | ST | BS 328 | B | H7

B901

1.50 - 1/2

d_1 Ø Inch	d_1 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

- Hand Taper Pin Reamer
- Escariador de mano para pasadores cónicos
- Mandril Manual Cónico p/ Cavilhas
- Alésoir à main conique

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

B301 HSS | ST | BS 328 | A | 1:48

B301

1/16 - 1/2

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] Limit of tolerance +0.0030 / Límite de tolerancia +0.0030 / Limite de tolerância +0.0030 / Tolérance +0.0030
[5] Limit of tolerance +0.0050 / Límite de tolerancia +0.0050 / Limite de tolerância +0.0050 / Tolérance +0.0050

DORMER

B903

- Hand Taper Pin Reamer
- Escariador de mano para pasadores cónicos
- Mandril Manual Cónico p/ Cavilhas
- Alésoir à main conique

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

B903	HSS	ST	DIN 9			A		1:50

B903

1.50 - 20.00

nom Ø	d_1 Ø mm	d_2 Ø mm	l_1 mm	l_2 mm	z	⧄ a mm	d_3 Øh_{11} 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] Limit of tolerance +0.0750 / Límite de tolerancia +0.0750 / Limite de tolerância +0.0750 / Tolérance +0.0750
[7] Limit of tolerance +0.125 / Límite de tolerancia +0.125 / Limite de tolerância +0.1250 / Tolérance +0.125

B952

- Hand Taper Pin Reamer
- Escariador de mano para pasadores cónicos
- Mandril Manual Cónico p/ Cavilhas
- Alésoir à main conique

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	8.2

B952	HSS		DIN 9			B		1:50

B952

1.20 - 50.00

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] Straight Flute, form A / Estrias rectas, forma A / Canais Direitos, forma A / Goujure droite, forme A

DORMER

B122

- Straight Car Reamers, LH Helical Flute
- Escariadores de máquina cilíndricos, hélice a izquierda
- Mandril Cilindrico, Hélice à Esquerda
- Alésoir cylindrique tôle fine, hélice à gauche

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

B122 HSS ST Bronze ANSI

B122

3/8 - 1.1/16

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

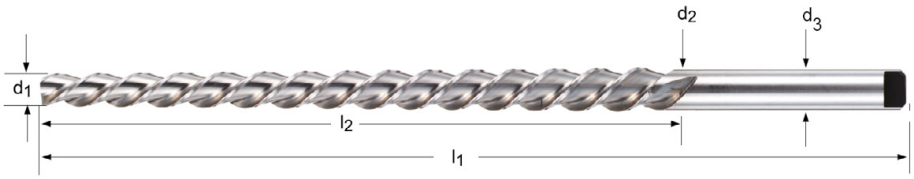
B953

- Machine Reamer for Conical Pin Left Hand Helix 45°
- Escariador de máquina para pasadores cónicos Hélice a izquierdas 45°
- Mandril de Máquina p/ Cavilhas Cónicas Hélice à Esquerda - 45º
- Alésoir Machine pour goupille conique Hélice à gauche à 45°

Tang to DIN 1809
Lengüeta según DIN 1809
Lingueta DIN 1809
Tenon selon la 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							

B953 HSS-E | DIN 2179 | 1:50



B953

1.00 - 12.00

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

DORMER

B180

- NC - Reamer for High Precision Chucks
- Escariador para portas de alta precision
- Mandril de Precisão p/ CNC
- Alésoir de précision - NC

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

B180 HSS-E | DIN 212 | DIN 6535HA | B | H7

B180

1.50 - 20.0

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh$_6$ 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
5.3	86	23	52	6	5	B1805.3
5.4	93	26	57	6	6	B1805.4

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh$_6$ mm	B180
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

DORMER

B170

- Machine Centesimal Reamer
- Escariador de máquina centesimal
- Mandril de Máquina Centesimal
- Alésoir Machine au centième

B170 ▪ 1.1 1.2 1.3 1.4 2.1 4.2 5.1

B170 • 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 6.4

B170 HSS-E | DIN 212 | B | Ø.95-5.5 0,+0.004 Ø5.51-12 0,+0.005

B170

0.98 - 12.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh$_9$ mm	B170
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
4.00	75	19.0	43	6	4.0	B1704.0
4.01	75	19.0	43	6	4.0	B1704.01

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh$_9$ mm	B170
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
9.98	133	38.0	87	6	10.0	B1709.98
9.99	133	38.0	87	6	10.0	B1709.99

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	d_2 Øh_9 mm	B170
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
10.51	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

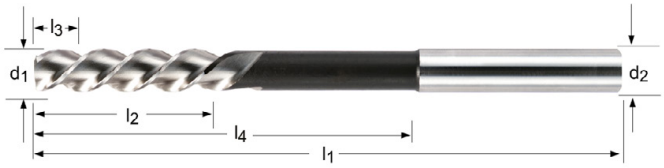
B157

- Machine Reamer Left Hand Helix 45°
- Escariador de máquina Hélice a izquierdas 45°
- Mandril de Máquina Hélice à esquerda - 45º
- Alésoir Machine Hélice 45° à gauche

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

B157 • 1.5 1.6 6.2 9.1

B157 HSS-E DIN 212 E H7



B157

2.00 - 20.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	l_4 mm	z	d_2 Øh$_9$ 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

DORMER

B161

- Machine Reamer
- Escariador de máquina
- Mandril de Máquina CM
- Alésoir machine conique pour trous de goupilles

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

B161 HSS-E | DIN 208 | B | H7

B161

3.00 - 50.00

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	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
42.0	333	82	209	12	4	B16142.0
44.0	336	83	212	12	4	B16144.0

d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	MK	B161
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

DORMER

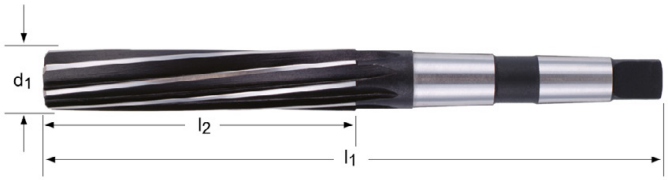
B101

- Machine Reamer
- Escariador de máquina
- Mandril de Máquina CM
- Alésoir machine conique pour trous de goupilles

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 8.2

B101 HSS-E | ST | BS 328 | B | H7



B101

3.00 - 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
3/4	19.05	200	100	8	2	B1013/4
	20.00	200	100	8	2	B10120.0

d_1 Ø Inch	d_1 Ø mm	l_1 mm	l_2 mm	z	MK	B101
13/16	20.64	200	100	8	2	B10113/16
	21.00	200	100	8	2	B10121.0
	22.00	207	107	8	2	B10122.0
7/8	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
	31.00	260	133	10	3	B10131.0
1.1/4	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
	44.00	323	163	10	4	B10144.0
1.3/4	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
	50.00	334	174	12	4	B10150.0
2“	50.80	334	174	12	4	B1012

DORMER

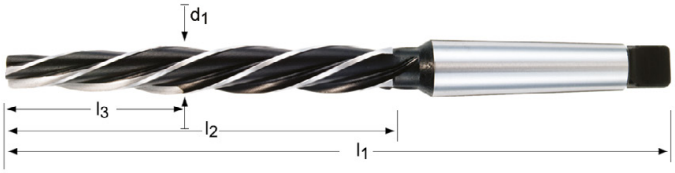
B121

- Morse Taper Shank Bridge Reamer
- MTS Escariador de mango cónico
- Mandril de Caldeireiro, Haste Cónica
- Queue cone morse Alésoirs de chaudronnerie

With 1:10 starting taper (l3)
Conicidad 1:10
Conicidade 1:10
Goupilles cônique 1:10

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 HSS | ST | DIN 311 | k11



B121

10.00 - 30.00

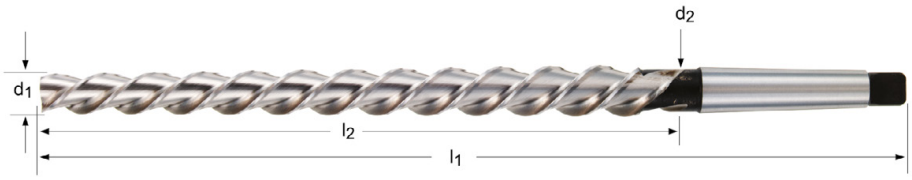
d_1 Ø mm	l_1 mm	l_2 mm	l_3 mm	z	MK	B121
10.0	171	95	30	4	1	B12110.0
11.0	176	100	33	4	1	B12111.0
12.0	199	105	39	4	2	B12112.0
13.0	199	105	39	4	2	B12113.0
14.0	209	115	42	4	2	B12114.0
15.0	219	125	45	4	2	B12115.0
16.0	229	135	48	4	2	B12116.0
17.0	251	135	51	4	3	B12117.0
18.0	261	145	58	4	3	B12118.0
19.0	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

- Machine Reamer for Conical Pin Left Hand Helix 45°
- Escariador de máquina para pasadores cónicos Hélice a izquierdas 45°
- Mandril de Máquina p/ Cavilhas Cónicas Hélice à Esquerda - 45º
- Alésoir Machine pour goupille conique Hélice à gauche à 45°

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							

B954 HSS-E DIN 2180 1:50



B954

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

DORMER

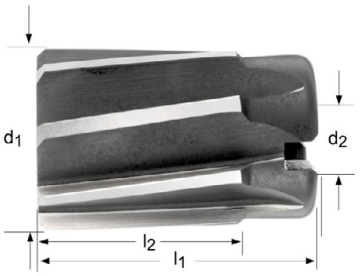
B955

- Shell Reamer
- Escariador hueco
- Cabeça de Mandrilar
- Alésoir creux machine

d2=Nominal diameter d1of B956
d2=Diámetro nominal d1de B956
d2=Diâmetro Nominal d1de B956
d2=Diamètre nominal d1 du 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

B955 HSS-E | ST | DIN 219 | B | H7



B955

25.00 - 80.00

d_1 Ø mm	l_1 mm	l_2 mm	z	d_2 Ø mm	B955
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

- Morse Taper Shank Shell Reamer Arbor (B955)
- Mango cónico Portaescariadores para escariadores huecos
- Haste CM Haste p/ Cabeças de Mandrilar
- Queue cône morse Porte-alésoirs creux

B956 HSS-E DIN 217

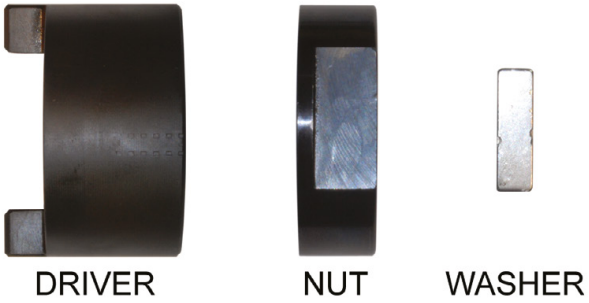
B956

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

- Shell Reamer Arbor - Spare Parts (B956)
- Portaescariadores para escariadores huecos - Accesorios (B956)
- Suplentes p/ (B956)
- Accessoires pour porte-alésoirs creux machine (B956)



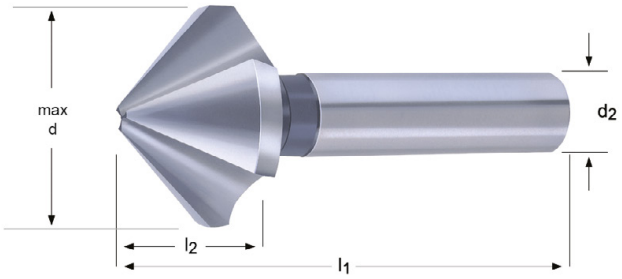
Nr.	d	B957
3	13.00	B957N3DRIVER
3		B957N3NUT
3		B957N3WASHER
4	16.00	B957N4DRIVER
4		B957N4NUT
4		B957N4WASHER
5	19.00	B957N5DRIVER
5		B957N5NUT
5		B957N5WASHER
6	22.00	B957N6DRIVER
6		B957N6NUT
6		B957N6WASHER
7	27.00	B957N7DRIVER
7		B957N7NUT
7		B957N7WASHER
8	32.00	B957N8DRIVER
8		B957N8NUT
8		B957N8WASHER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

G400

- Countersink for High Precision Chucks - 90°
- Avellanadores para portas de alta precisión - 90°
- Escareador de Precisão p/ CNC - 90°
- Fraises à ébavurer et à chanfreiner pour mandrins haute précision - 90°

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	8.2

G400 HM | DIN 335C | 90°



6.30 - 31.00

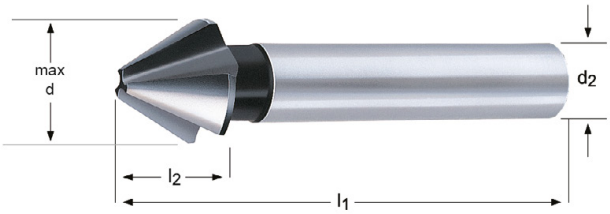
max d mm	min d mm	l_2 mm	l_1 mm	d_2 $Øh_6$ mm	z	G400
6.3	1.5	5.0	45	5	3	G4006.3
8.3	2.0	6.0	50	6	3	G4008.3
10.4	2.5	7.1	50	6	3	G40010.4
12.4	2.8	8.0	56	8	3	G40012.4
16.5	3.2	10.0	60	10	3	G40016.5
20.5	3.5	12.5	63	10	3	G40020.5
25.0	3.8	15.0	67	10	3	G40025.0
31.0	4.2	18.0	71	12	3	G40031.0

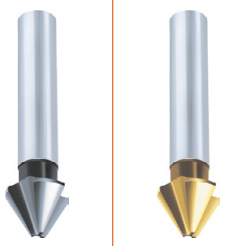
G135
G335

- Countersink - 60°
- Avellanadores - 60°
- Escareador - 60°
- Fraises à ébavurer et à chanfreiner - 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	8.2
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	8.2

G135	HSS		DIN 334C				60°
G335	HSS	TiN	DIN 334C				60°





6.30 - 25.00 | 6.30 - 25.00

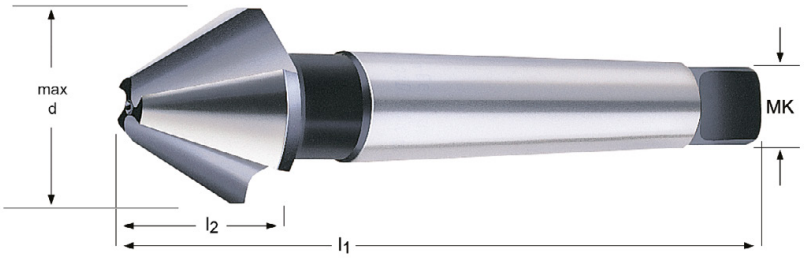
max d mm	min d mm	l_2 mm	l_1 mm	d_2 $\emptyset h_9$ mm	z	G135	G335
6.3	1.6	6.8	45	5	3	G1356.3	G3356.3
8.0	2.0	8.5	50	6	3	G1358.0	G3358.0
10.0	2.5	7.6	50	6	3	G13510.0	G33510.0
12.5	3.2	11.7	56	8	3	G13512.5	G33512.5
16.0	4.0	14.5	63	10	3	G13516.0	G33516.0
20.0	5.0	17.5	67	10	3	G13520.0	G33520.0
25.0	6.3	20.5	71	10	3	G13525.0	G33525.0

G137

- Morse Taper Shank Countersink - 60°
- Avellanadores de mango cónico - 60°
- Escareador CM - 60°
- Queue cône morse fraises à ébavurer et à chanfreiner - 60°

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	8.2

G137 HSS DIN 334D 60°



G137

16.00 - 80.00

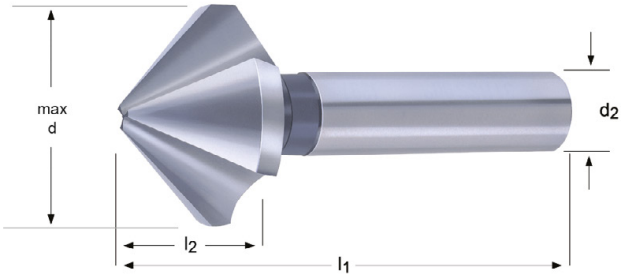
max d mm	min d mm	l_2 mm	l_1 mm	MK	z	G137
16.0	4.0	14.5	90	1	3	G13716.0
20.0	5.0	17.5	106	2	3	G13720.0
25.0	6.3	20.0	112	2	3	G13725.0
31.5	10.0	23.0	118	2	3	G13731.5
40.0	12.5	28.5	150	3	3	G13740.0
50.0	16.0	36.0	160	3	3	G13750.0
63.0	20.0	43.0	190	4	3	G13763.0
80.0	25.0	54.0	200	4	3	G13780.0

G154

- Countersink - 82°
- Avellanadores - 82°
- Escareador - 82°
- Fraises à ébavurer et à chanfreiner - 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	8.2

G154 HSS DIN 335C 82°



G154

6.30 - 25.00

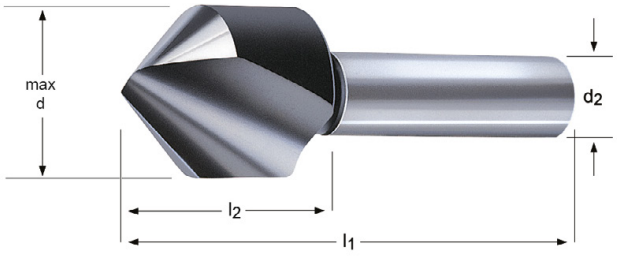
max d mm	min d mm	l_2 mm	l_1 mm	d_2 Øh$_9$ mm	z	G154
6.3	1.5	5.5	45	5	3	G1546.3
8.3	2.0	6.5	50	6	3	G1548.3
10.4	2.5	7.6	50	6	3	G15410.4
12.4	2.8	8.5	56	8	3	G15412.4
16.5	3.2	10.5	60	10	3	G15416.5
20.5	3.5	13.0	63	10	3	G15420.5
25.0	3.8	15.5	67	10	3	G15425.0

G129

- Countersink - 90°
- Avellanadores - 90°
- Escareador - 90°
- Fraises à ébavurer et à chanfreiner - 90°

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	
	•	1.1	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	8.2

G129 HSS DORMER 90°



G129

6.00 - 31.50

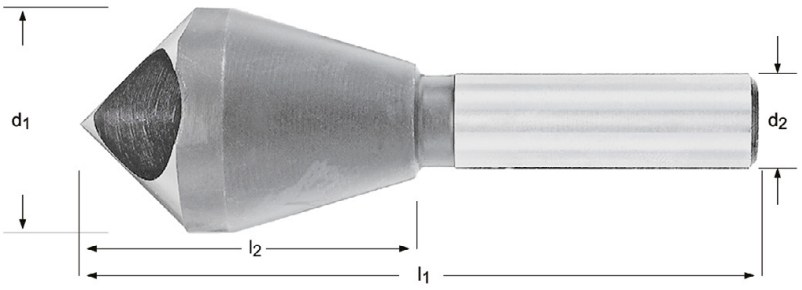
max d mm	l_2 mm	l_1 mm	d_2 Øh$_9$ mm	z	G129
6.0	0.0	45	6	1	G1296.0
8.0	0.0	50	8	1	G1298.0
10.0	17.0	49	8	1	G12910.0
12.5	17.0	49	8	1	G12912.5
16.0	20.0	56	10	1	G12916.0
20.0	24.0	60	10	1	G12920.0
25.0	25.0	75	12	1	G12925.0
31.5	29.0	80	12	1	G12931.5

G149

- Countersink - 90°
- Avellanadores - 90°
- Escareador - 90°
- Fraises à ébavurer et à chanfreiner - 90°

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	8.2

G149 HSS-E | DORMER | 90°



G149

5.00 - 50.00

max d mm	min d mm	l_2 mm	l_1 mm	d_2 Ø mm	d_1 Ø mm	z	G149
5	2	19.0	45	6	10	1	G1495
10	5	23.0	48	8	14	1	G14910
15	10	34.0	65	10	21	1	G14915
20	15	43.0	84	12	28	1	G14920
25	20	48.0	102	15	35	1	G14925
30	25	61.0	115	15	44	1	G14930
35	30	65.0	127	15	48	1	G14935
40	35	66.0	136	15	53	1	G14940
50	40	85.0	166	20	60	1	G14950

G136
G560

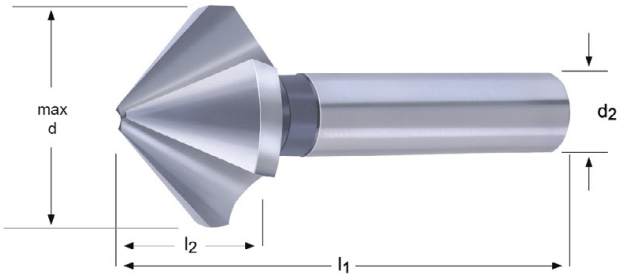
- Countersink - 90°
- Avellanadores - 90°
- Escareador - 90°
- Fraises à ébavurer et à chanfreiner - 90°

G106
G506

- Countersink with Tri-Flat shank - 90°
- Avellanador 90° con mango con 3 planos
- Escareador a 90° com encabadouro com 3 faces
- Fraises à ébavurer et à chanfreiner avec queue cylindrique 3 plats - 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	
G106	■	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	8.2
G506	■	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

G136	HSS		DIN 335C				90°	G236 194
G560	HSS	TiAlN	DIN 335C				90°	G236 194
G106	HSS		DIN 335C				90°	G236 194
G506	HSS	TiAlN	DIN 335C				90°	G236 194



G136	G560	G106	G506
			
4.30 - 31.00	6.30 - 31.00	6.30 - 50.00	6.30 - 50.00

max d mm	min d mm	l_2 mm	l_1 mm	d_2 Øh$_9$ mm	z	G136	G560	G106	G506
4.3	1.3	4.0	40	4	3	G1364.3			
5.0	1.5	4.5	40	4	3	G1365.0			
5.3	1.5	4.5	40	4	3	G1365.3			
5.8	1.5	5.0	45	5	3	G1365.8			
6.0	1.5	5.0	45	5	3	G1366.0			
6.3	1.5	5.5	45	5	3	G1366.3	G5606.3		
6.3	1.5	5.6	45	5	3			G1066.3	G5066.3
7.0	1.8	5.5	50	6	3	G1367.0			
7.3	1.8	6.1	50	6	3	G1367.3			
8.0	2.0	6.1	50	6	3	G1368.0	G5608.0		
8.3	2.0	6.5	50	6	3	G1368.3	G5608.3		

DORMER

max d mm	min d mm	l_2 mm	l_1 mm	d_2 Øh_9 mm	z	G136	G560	G106	G506
8.3	2.0	6.9	50	6	3			G1068.3	G5068.3
9.4	2.2	7.2	50	6	3	G1369.4			
10.0	2.5	7.6	50	6	3	G13610.0	G56010.0		
10.4	2.5	7.6	50	6	3	G13610.4	G56010.4		
10.4	2.5	7.8	50	6	3			G10610.4	G50610.4
11.5	2.8	8.0	56	8	3	G13611.5			
12.4	2.8	8.5	56	8	3	G13612.4	G56012.4		
12.4	2.8	8.6	56	8	3			G10612.4	G50612.4
13.4	2.9	9.0	56	8	3	G13613.4			
15.0	3.2	9.5	60	10	3	G13615.0			
16.5	3.2	10.5	60	10	3	G13616.5	G56016.5		
16.5	3.2	11.1	60	10	3			G10616.5	G50616.5
19.0	3.5	11.7	63	10	3	G13619.0			
20.5	3.5	13.0	63	10	3	G13620.5	G56020.5		
20.5	3.5	12.9	63	10	3			G10620.5	G50620.5
23.0	3.8	13.7	67	10	3	G13623.0			
25.0	3.8	15.5	67	10	3	G13625.0	G56025.0		
25.0	3.8	15.7	67	10	3			G10625.0	G50625.0
26.0	3.8	15.5	67	10	3	G13626.0			
28.0	4.0	16.5	71	12	3	G13628.0			
30.0	4.2	18.5	71	12	3	G13630.0			
31.0	4.2	18.5	71	12	3	G13631.0	G56031.0	G10631.0	G50631.0
34.0	4.5	19.0	103	16	3			G10634.0	G50634.0
37.0	4.5	21.2	118	16	3			G10637.0	G50637.0
40.0	4.5	20.0	118	16	3			G10640.0	G50640.0
50.0	5.0	23.6	126	16	3			G10650.0	G50650.0

G142

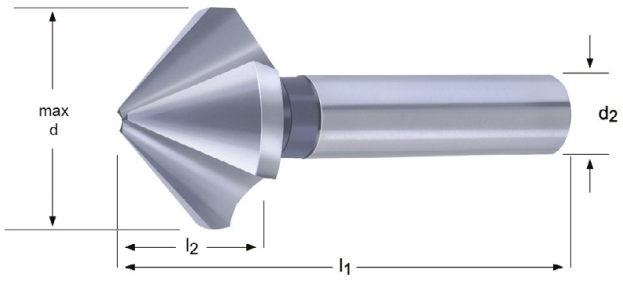
- Countersink with extra radial relief - 90°
- Avellanadores con alívio radial extra - 90°
- Escareador com alívio radial adicional - 90°
- Fraises à ébavurer et à chanfreiner avec dépouille accentuée - 90°

G570

- Countersink - 90°
- Avellanadores - 90°
- Escareador - 90°
- Fraises à ébavurer et à chanfreiner - 90°

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	7.4

G142	HSS		DIN 335C				90°
G570	HSS-E	AlTiCN	DIN 335C				90°



G142	G570
	
4.80 - 31.00	6.30 - 31.00

max d mm	min d mm	l_2 mm	l_1 mm	d_2 $Øh_9$ mm	z	G142	G570
4.8	1.3	4.5	40	4	3	G1424.8	
5.0	1.5	4.5	40	4	3	G1425.0	
6.0	1.5	5.0	45	5	3	G1426.0	
6.3	1.5	5.5	45	5	3	G1426.3	
6.3	1.5	6.5	45	5	3		G5706.3
7.0	1.8	5.5	50	6	3	G1427.0	
7.3	1.8	6.1	50	6	3	G1427.3	
8.0	2.0	6.1	50	6	3	G1428.0	
8.3	2.0	6.5	50	6	3	G1428.3	
8.3	2.0	8.2	50	6	3		G5708.3
10.0	2.5	7.6	50	6	3	G14210.0	
10.4	2.5	7.6	50	6	3	G14210.4	
10.4	2.5	9.7	50	6	3		G57010.4
11.5	2.8	8.0	56	8	3	G14211.5	
12.4	2.8	8.5	56	8	3	G14212.4	
12.4	2.8	10.6	56	8	3		G57012.4
15.0	3.2	9.5	60	10	3	G14215.0	
16.5	3.2	10.5	60	10	3	G14216.5	
16.5	3.2	13.9	60	10	3		G57016.5
19.0	3.5	11.7	63	10	3	G14219.0	
20.5	3.5	13.0	63	10	3	G14220.5	
20.5	3.5	17.1	63	10	3		G57020.5
23.0	3.8	13.7	67	10	3	G14223.0	
25.0	3.8	15.5	67	10	3	G14225.0	
25.0	3.8	21.4	67	10	3		G57025.0
31.0	4.2	18.5	71	12	3	G14231.0	
31.0	4.2	24.4	71	12	3		G57031.0

G107

- Countersink with hexagonal shank - 90°
- Avellanador 90° con mango hexagonal
- Escareador a 90° com encabadouro hexagonal
- Fraises à ébavurer et à chanfreiner avec queue hexagonale - 90

G107															
	▪	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	8.2

G107 HSS-E

G107

6.30 - 20.50

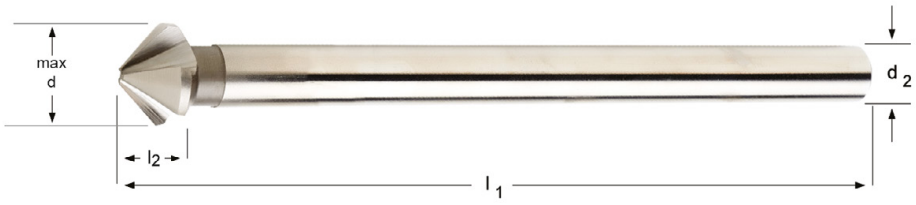
max d mm	min d mm	l_1 mm	d_2 Ø A/F mm	DIN 74	z	G107
6.3	1.5	50	1/4“	M2-M3	3	G1076.3
8.3	2.0	50	1/4“	M4	3	G1078.3
10.4	2.5	50	1/4“	M5	3	G10710.4
12.4	2.8	50	1/4“	M6	3	G10712.4
16.5	3.2	50	1/4“	M8	3	G10716.5
20.5	3.5	50	1/4“	M10	3	G10720.5

G600

- Countersink, Extra Long - 90°
- Avellanadores, extra largos - 90°
- Escareador, Extra Longa - 90°
- Fraises à ébavurer et à chanfreiner, Extra Longue - 90°

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

G600 HSS DORMER 90°



max d mm	min d mm	l_2 mm	l_1 mm	d_2 $Øh_9$ mm	z	G600
6.3	1.3	5.6	154	5	3	G6006.3
8.3	1.8	6.9	155	6	3	G6008.3
10.4	2.2	7.8	157	6	3	G60010.4
12.4	2.5	8.6	158	8	3	G60012.4
15.0	2.8	10.3	159	10	3	G60015.0
16.5	2.8	11.1	161	10	3	G60016.5
20.5	3.0	12.9	164	10	3	G60020.5
25.0	3.2	15.7	168	10	3	G60025.0

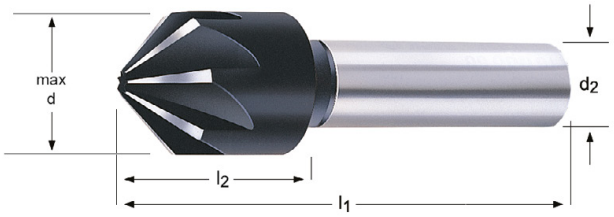
DORMER

G132

- Countersink - 90°
- Avellanadores - 90°
- Escareador - 90°
- Fraises à ébavurer et à chanfreiner - 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				

G132 HSS DIN 335A 90°



G132

8.00 - 20.00

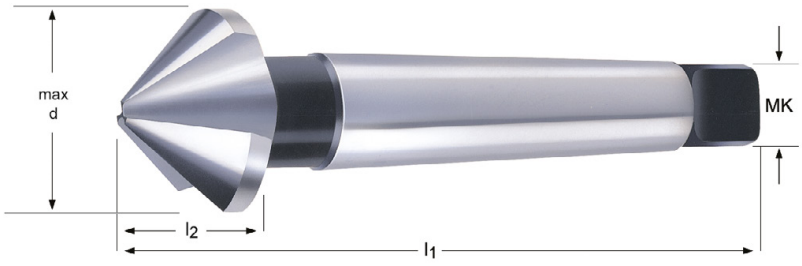
max d mm	min d mm	l_2 mm	l_1 mm	d_2 Øh$_9$ mm	z	G132
8.0	-	0.0	48	8	5	G1328.0
12.5	2.0	15.5	48	8	5	G13212.5
16.0	3.2	19.5	56	10	7	G13216.0
20.0	5.0	23.0	60	10	7	G13220.0

G138
G338

- Morse Taper Shank Countersink - 90°
- Avellanadores de mango cónico - 90°
- Escareador CM - 90°
- Queue cône morse fraises à ébavurer et à chanfreiner - 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	8.2
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		

G138	HSS		DIN 335D				90°
G338	HSS	TiN	DIN 335D				90°



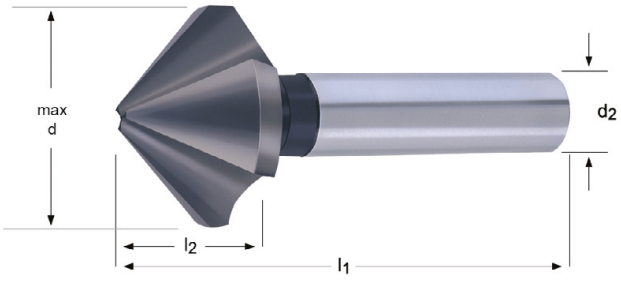
max d mm	min d mm	l_2 mm	l_1 mm	MK	z	G138	G338
25.0	3.8	15.5	106	2	3	G13825.0	G33825.0
30.0	4.2	18.5	112	2	3	G13830.0	
31.0	4.2	20.0	112	2	3	G13831.0	G33831.0
34.0	4.5	19.5	118	2	3	G13834.0	
37.0	4.8	21.7	118	2	3	G13837.0	G33837.0
40.0	10.0	20.5	140	3	3	G13840.0	G33840.0
50.0	14.0	24.1	150	3	3	G13850.0	G33850.0
63.0	16.0	28.5	180	4	3	G13863.0	G33863.0
80.0	22.0	36.0	190	4	3	G13880.0	

G171

- Countersink - 100°
- Avellanadores - 100°
- Escareador - 100°
- Fraises à ébavurer et à chanfreiner - 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

G171 HSS TiAlN DIN 335C 100°



G171

6.30 - 25.00

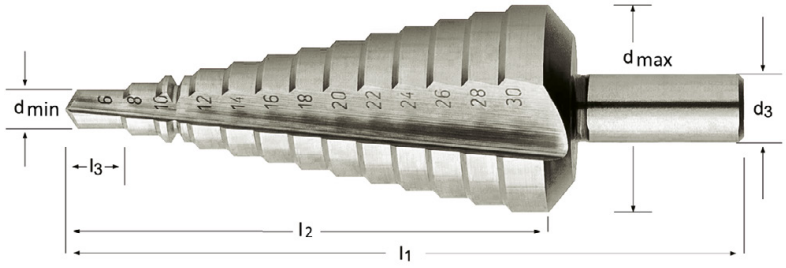
max d mm	min d mm	l_2 mm	l_1 mm	d_2 Øh$_9$ mm	z	G171
6.3	1.5	4.5	44	5	3	G1716.3
8.3	2.0	5.5	49	6	3	G1718.3
10.4	2.5	6.6	49	6	3	G17110.4
12.4	2.8	7.0	53	8	3	G17112.4
16.5	3.2	9.0	56	10	3	G17116.5
20.5	3.5	11.0	61	10	3	G17120.5
25.0	3.8	13.5	65	10	3	G17125.0

G314

- Conical Drill
- Broca Multi-diámetro
- Broca Cónica multi-diâmetro
- Forets multi-diamètres

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					

G314 HSS DORMER 20°



G314

4.00 - 9.00

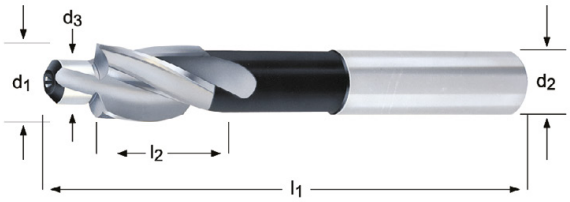
Nr.	d min-max mm	l_3 mm	l_2 mm	l_1 mm	d_3 Ø mm	G314
412	4.0 mm ÷ 12.0 mm x 1.0 mm	5.0	61	80	6.0	G314412
1220	12.0 mm ÷ 20.0 mm x 1.0 mm	4.0	55	76	9.0	G3141220
2030	20.0 mm ÷ 30.0 mm x 1.0 mm	4.0	67	88	12.0	G3142030
3040	30.0 mm ÷ 40.0 mm x 1.0 mm	4.0	74	98	13.0	G3143040
420	4.0 mm ÷ 20.0 mm x 2.0 mm	4.0	48	76	8.0	G314420
630	6.0 mm ÷ 30.0 mm x 2.0 mm	4.0	73	98	10.0	G314630
M	9.0 mm ÷ 36.0 mm x 3.0 mm	3.0	57	86	12.0	G314M

G125

- Counterbore - 180°
- Refrentadores - 180°
- Broca de Caixas - 180°
- Fraises pour logement de tête de vis - 180°

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	8.2

G125 HSS DIN 373 180°



G125

6.50 - 20.00

d_1 $Øz_9$ mm	d_3 $Øe_8$ mm	M	l_1 mm	l_2 mm	d_2 $Øh_9$ 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= for tap hole / t = Para agujero roscado / t = para furo de rosca / t = pour trou taraudé
[2] f= for through hole fine / f= para agujero pasante fino / f= para furo passante raso / f= pour trou de vis précis
[3] m= for through hole medium / m= Para agujero pasante medio / m = para furo passante médio / m = pour trou de vis moyen

G236

- Countersink set
- Juego de Avellanadores
- Jogo de Escareadores
- Coffrets de fraises à ébavurer et à chanfreiner

A=Styles in Set, B=No. in Set, C=Diameters in Set
A=Tipos en el juego, B=No. en el Juego, C=Diámetros en el Juego
A=Tipos no Jogo, B=Quant. por Jogo., C=Diâmetros por Jogo
A=Types de coffrets, B=Nombre dans le coffret, C=Diamètres dans le coffret

G236

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
4	G106	6	6.30 mm, 8.30 mm, 10.40 mm, 12.40 mm, 16.50 mm, 20.50 mm	G2364
5	G506	6	6.30 mm, 8.30 mm, 10.40 mm, 12.40 mm, 16.50 mm, 20.50 mm	G2365