

DORMER PRAMET

CATALOGUE
CATÁLOGO

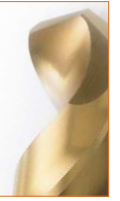
2019



 DORMER

A	A976	102	C837	479	E282	319	EP10	275	H858	21	P707	508	S262	426
A002	A977	102	C907	456	E286	305	EP10TIN	275	H860	24	P709	510	S264	421
A002S	A978	102	C908	466	E287	295	EP11	275	H861	24	P711	512	S501	436
A022	B		C920	457	E288	285	EP20	290	J		P713	514	S511	439
A080	B100	158	C922	463	E289	263	EP21	290	J200	205	P715	516	S521	423
A087	B101	176	C948	467	E290	269	EP30	300	J205	205	P721	520	S523	424
A088	B121	178	D		E291	263	EP31	300	J210	206	P801	501	S524	422
A089	B122	166	D200	485	E292	263	EP40	321	J215	206	P801C	501	S525	417
A094	B157	173	D400	492	E293	264	EP41	321	J220	207	P803	503	S526	418
A095	B161	174	D402	493	E294	263	EX006G	252	J225	207	P803C	503	S527	419
A099	B170	170	D420	492	E295	265	EX006H	252	J235	208	P805	505	S529	433
A100	B180	168	D422	493	E296	265	EX00TIN	252	J245	209	P805C	505	S531	434
A101	B301	163	D745	486	E297	243	EX016H	252	J260	211	P807	507	S533	435
A108	B334	160	D747	488	E298	254	EX10	280	J280	210	P807C	507	S534	437
A110	B335	161	D750	491	E299	277	EX10TIN	280	K		P809	509	S535	438
A117	B400	152	D751	491	E300	282	EX11	280	K100	536	P811	511	S536	429
A119	B411	156	D752	490	E303	239	EX20	292	K101	536	P811C	511	S610	404
A120	B441	155	D753	490	E382	324	EX21	292	K102	536	P813	513	S611	405
A122	B442	157	D763	485	E383	283	EX30	302	K103	537	P813C	513	S612	410
A123	B481	153	E		E384	278	EX31	302	K104	537	P815	515	S629	440
A124	B901	162	E000	247	E390	234	EX40	323	K200	538	P815C	515	S637	402
A125	B903	164	E000TIN	247	E412	255	EX41	323	K201	538	P817	517	S638	403
A130	B952	165	E001	247	E414	258	F		K202	538	P819	518	S710	396
A147	B953	167	E002	260	E422	249	F100	355	K203	538	P819	518	S710	396
A160	B954	179	E002TIN	260	E423	249	F108	355	K204	538	P821	519	S713	398
A166	B955	180	E003	260	E471	246	F110	356	K300	533	P821C	519	S714	400
A170	B956	181	E011	279	E472	246	F120	357	K301	533	P823	521	S715	401
A188	B957	182	E013	284	E473	259	F130	358	K302	533	P825	522	S716	409
A190	C		E021	291	E474	259	F140	359	K303	533	P831	502	S717	413
A191	C110	443	E023	293	E500	235	F150	360	K304	533	P833	504	S718	414
A199	C122	454	E031	301	E501	235	F170	361	K305	533	P835	506	S739	441
A200	C123	445	E033	303	E504	235	F180	362	K310	534	P837	508	S740	441
A201	C126	443	E041	322	E513	271	F190	363	K311	534	P841	512	S761	415
A205	C135	447	E043	325	E515	288	F201	355	K312	534	P842	520	S763	425
A206	C139	445	E100	230	E524	298	F202	369	K313	534	P843	523	S765	420
A210	C159	451	E101	230	E531	308	F272	372	K314	534	P844	524	S766	416
A225	C167	453	E102	230	E533	311	F300	364	K330	535	P880	525	S767	428
A237	C246	458	E105	266	E534	310	F302	370	K520	539	P890	526	S802HA	390
A238	C247	458	E108	286	E536	312	F310	365	K521	540	R		S802HB	390
A242	C273	460	E111	296	E538	314	F312	371	K522	541	R100	30	S803HA	393
A243	C295	460	E115	307	E539	313	F320	366	L		R120	28	S803HB	393
A244	C299	456	E119	318	E542	315	F330	367	L000	342	R122	26	S804HA	406
A266	C305	450	E200	232	E544	317	F370	368	L001	343	R123	26	S804HB	406
A295	C306	448	E201	234	E545	316	G		L002	344	R200	25	S812HA	391
A296	C333	462	E207	250	E547	320	G106	189	L110	348	R453	40	S812HB	391
A345	C336	452	E212	250	E550	328	G107	192	L112	349	R454	40	S813HA	394
A350	C346	455	E216	249	E570	306	G125	198	L113	339	R457	36	S813HB	394
A400	C352	450	E225	287	E600	240	G129	187	L114	340	R458	36	S814HA	408
A402	C353	448	E229	297	E605	262	G132	194	L115	341	R459	44	S814HB	408
A405	C367	449	E237	232	E606	248	G135	184	L119	337	R463	50	S822	392
A412	C400	468	E238	257	E610	240	G136	189	L120	345	R467	47	S823	395
A413	C403	469	E239	257	E620	326	G137	185	L126	338	R510	34	S902	397
A510	C407	466	E240	245	E621	327	G138	195	M		R520	32	S903	399
A520	C413	468	E241	245	E650	261	G142	191	M150	542	R6011	26	S904	412
A530	C428	464	E242	269	E651	294	G149	188	M151	543	R7131	27	S922	397
A553	C492	465	E243	336	E653	332	G154	186	M152	544	R950	18	S933	399
A620	C500	470	E250	232	E654	304	G171	196	M200	545	R960	18	S944	412
A720	C505	471	E251	232	E708	335	G236	199	P		R970	18	S991	442
A723	C700	484	E252	234	E709	334	G314	197	P601	502	S		T	
A730	C710	483	E255	244	E710	330	G335	184	P605	506	S216	411	T200	226
A777	C800	472	E256	244	E711	331	G338	195	P607	508	S217	413	T201	226
A900	C801	475	E258	250	E712	333	G400	183	P609	510	S218	414	T205	228
A901	C810	473	E260	256	E714	329	G506	189	P611	512	S219	407	T206	228
A920	C820	477	E261	256	E720	334	G560	189	P613	514	S225	417	T210	226
A921	C822	476	E263	250	E721	330	G570	191	P615	516	S226	418	T215	229
A940	C825	474	E266	249	EP006G	241	G600	193	P615	516	S227	419		
A941	C830	481	E268	269	EP006H	241	H		P621	520	S229	430		
A951	C831	482	E275	287	EP00TiN	241	H853	21	P701	502	S231	431		
A952	C835	480	E278	297	EP016H	241	H855	21	P703	504	S233	432		
									P705	506	S260	415		

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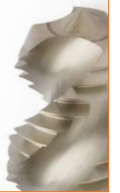
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201 - 212



213 - 350



351 - 372



373 - 494



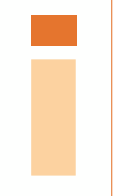
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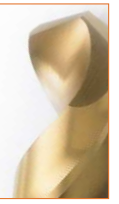
527 - 546



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A002	69	A166	111	A405	120	H855	21
A002S	69	A170	80	A412	121	H858	21
A022	57	A188	140	A413	122	H860	24
A080	137	A190	138	A510	83	H861	24
A087	132	A191	139	A520	61	R100	30
A088	130	A199	136	A530	105	R120	28
A089	134	A200	123	A553	86	R122	26
A094	133	A201	125	A620	57	R123	26
A095	131	A205	123	A720	65	R200	25
A099	135	A206	123	A723	53	R453	40
A100	69	A210	124	A730	105	R454	40
A101	69	A225	126	A777	76	R457	36
A108	76	A237	127	A900	88	R458	36
A110	92	A238	128	A901	88	R459	44
A117	57	A242	129	A920	66	R463	50
A119	55	A243	91	A921	66	R467	47
A120	57	A244	91	A940	95	R510	34
A122	54	A266	123	A941	95	R520	32
A123	56	A295	141	A951	116	R6011	26
A124	64	A296	142	A952	116	R7131	27
A125	98	A345	114	A976	102	R950	18
A130	105	A350	112	A977	102	R960	18
A147	76	A400	118	A978	102	R970	18
A160	82	A402	119	H853	21		

Material	Material	Material	Matière
Standard	Norma	Standard	Standard
Depth	Profundidad	Profundidade	Profondeur
Point Angle	Ángulo de la punta	° da Ponta	Affûtage
Coating	Tratamiento superficial	Revestimento	Revêtement
Shank standard	Mango	Encabadouro	Queue
Direction	Dirección	Direção	Direction
Coolant	Refrigeración	Refrigeração	Lubrification
<ul style="list-style-type: none"> ■ Excellent for Application ● Good for Application 	<p>Excelente para la Aplicación</p> <p>Bueno para la Aplicación</p>	<p>Excelente para a Aplicação</p> <p>Bom para a Aplicação</p>	<p>Excellent pour les applications</p> <p>Acceptable pour les applications</p>
<p>Example</p> <p>10 = Peripheral speed in metres/minute +/- 10%</p>	<p>Ejemplo</p> <p>10 = Velocidad Periférica en metros/ minuto +/- 10%</p>	<p>Exemplo</p> <p>10 = velocidade periférica em metros / minuto + / - 10%</p>	<p>Exemple</p> <p>10 = Vitesse périphérique en mètres/ minute +/- 10%</p>
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 desgaste	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	Ferrítico, 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	Grafite lamellaire
3.2	Lamellar graphite	Con grafito laminar	Grafite Lamelar	Grafite 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, Bronce 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)	Cermetales (metales-cerámicas)	Materiais cerâmicos (metalocerâmica)	Cermets (céramiques metalliques)
10.1	Graphite	Grafito standard	Grafite standard	Graphite standard

	HM	HM	HM	HSS	HSS	HSS			
				3XD	5XD	8XD			
				DIN 6535HB DIN 6535HE	DIN 6535HB DIN 6535HE	DIN 6535HE			
	R950	R960	R970	H853	H855	H858	H860	H861	
	15/32 - 42.00	15/32 - 30.50	15/32 - 42.00	12.00 - 42.50	12.00 - 42.50	14.00 - 42.50	N1 - N7	N1 - N6	
AMG	18	18	18	21	21	21	24	24	ISO
1.1	●110W	■110W							P 1
1.2	●100W	■100W							P 1
1.3	■100W								P 2
1.4	■85W								P 3
1.5	■85W								P 4
1.6	■60T								H 1
1.7									H 3
1.8									H 4
2.1		■60V							M 1
2.2		■50T							M 3
2.3		■40T							M 2
2.4	●35T	●35T							S 2
3.1		■120V	■120V						K 1
3.2		■116V	■116V						K 2
3.3	■88V	●88V	■80V						K 3
3.4	■88V	●88V	■80V						K 4
4.1		●45T							S 1
4.2		●35T							S 2
4.3		●30S							S 3
5.1		●35T							S 1
5.2		●30S							S 2
5.3		●25S							S 3
6.1									N 3
6.2									N 4
6.3									N 3
6.4									N 4
7.1									N 1
7.2									N 1
7.3									N 1
7.4									N 2
8.1									O
8.2									O
8.3									O
9.1									H
10.1									O

Material	Material	Material	Matière
Standard	Norma	Standard	Standard
Depth	Profundidad	Profundidade	Profondeur
Point Angle	Ángulo de la punta	Ângulo da Ponta	Affûtage
Coating	Tratamiento superficial	Revestimento	Revêtement
Shank standard	Mango	Encabadouro	Queue
Form	Forma	Forma	Forme
Direction	Dirección	Direção	Direction
Coolant	Refrigeración	Refrigeração	Lubrification
Countersink °	° de avellanado	° do Escareado	° d'épaulement
■ 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 do produto	Codes
Range	Rango de Diámetros	Gama de medidas	Gamme de diamètres

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 desgaste	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	Ferrítico, 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	Bronce, 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 métalliques)
10.1	Graphite	Grafito standard	Grafite standard	Graphite standard

	HM	HM	HM	HM	HM	HM	HM	HM	HM	HM	HM	HM	HM	HM
	DIN 333A	DORMER	DORMER	DORMER	DORMER	DIN 6539	DIN 338	DIN 6539	DIN 338	DIN 6537 K	DIN 6537 K	DIN 6537 L	DIN 6537 L	DORMER
	1XD	1XD	1XD	1XD	3XD	2.5XD	4XD	2.5XD	4XD	3XD	3XD	5XD	5XD	8XD
	118°	120°	90°	90°	140°	120°	120°	130°	130°	140°	140°	140°	140°	140°
				TiAIN DIN 6535HA	TiAIN DIN 6535HA			TiN	TiN	TiAIN DIN 6535HA	TiAIN DIN 6535HA	TiAIN DIN 6535HA	TiAIN DIN 6535HA	TiAIN DIN 6535HA
		N	N	N	N	N	N	N	N	CTW™	CTW™	CTW™	CTW™	CTW™
								CDX	CDX	FORCE X	FORCE X	FORCE X	FORCE X	FORCE X
	R200	R122	R123	R6011	R7131	R120	R100	R520	R510	R458	R457	R454	R453	R459
	1.00 - 5.00	5.00 - 20.00	5.00 - 20.00	6.00 - 16.00	3.30 - 10.40	1.00 - 12.00	1.00 - 14.00	3.00 - 16.50	3.00 - 14.25	3.00 - 20.00	3.00 - 20.00	3.00 - 20.00	3.00 - 20.00	3.00 - 16.00









AMG	25	26	26	26	27	28	30	32	34	36	36	40	40	44	ISO
1.1	■50H	■85S	■85S	■110S	■120W	●85S	●85S	■100X	■100W	■155W	■155W	■155V	■155V	■135V	P 1
1.2	■48H	■75S	■75S	■90S	■110W	●75S	●75S	■90X	■90W	■135W	■140W	■135V	■140V	■120V	P 1
1.3	■45F	■75S	■75S	■90S	■105W	●75S	●75S	■90X	■90W	■110W	■135V	■110V	■135V	■110U	P 2
1.4	■40E	■70S	■70S	■75S	■85V	●70S	●70S	■80X	■80W	■100V	■115V	■100V	■115V	■100U	P 3
1.5	■30D	■45S	■45S	■55S	■65V	●45S	●45S	■55X	■55V	■75V	■90V	■75V	■90V	■80U	P 4
1.6	■10C	■45S	■45S	■50S		●45S	●45S	■45W	■45V	■50U	■65U	■50U	■65U	■55T	H 1
1.7		■30S	■30S	■30S		●30S	●30S	●35U	●35T	■30U	■30U	■30U	■30U		H 3
1.8		■30S	■30S	■30S		●30S	●30S	●30T	●30S	■25U	■25U	■25U	■25U		H 4
2.1		■53S	■53S	■60S	■45V			●50W	●50V	■45U	■55V	■45U	■55V	■75V	M 1
2.2		■45S	■45S	■50S	■40V					■40T	■35V	■40T	■35V	■35V	M 3
2.3					■35U					■35T	■30U	■35T	●30U	●30U	M 2
2.4										●35T		●35T	●30U		S 2
3.1	■40H	■75T	■75T	■80T	■90W	●75U	●75T	■90Y	■90X	■90W	■110W	■90W	■110W	■120W	K 1
3.2	■35E	■75T	■75T	■80T	■90W	●75U	●75T	■90Y	■90X	■90W	■110W	■90W	■110W	■120W	K 2
3.3	■30D	■55T	■55T	■70T	■75V	●55U	●55T	■65X	■65W	■70V	■80V	■70V	■80V	■80V	K 3
3.4	■30D	■55T	■55T	■70T	■65V	●55U	●55T	■65X	■65W	■70V	■80V	■70V	■80V	■80V	K 4
4.1		■45T	■45T	■55T		■45T		●60W	●45V	●50U	■55V	●50U	■55V		S 1
4.2		■35T	■35T	■45T		●35T		●45V		●40U	●45V	●40U	■45V		S 2
4.3		■25S	■25S	■35S		●25T		●35U		●35T	■40U	●35T	■40U		S 3
5.1		■45T	■45T	■55T		■40U		■50W	●50V						S 1
5.2		■30S	■30S	■40S		●30T									S 2
5.3		■20S	■20S	■30S		●20T									S 3
6.1	■110F	■275V	■275V	■275V	■125W	■275W				■100V	■125W	■100V	■125W	●125V	N 3
6.2	■100H	■250V	■250V	■250V	■220W	●275W	■250V			■200V	■220W	■200V	■220W	●220V	N 4
6.3	■90G	■250V	■250V	■250V	■220W	●275W	■250V			■200V	■220W	■200V	■220W	●220V	N 3
6.4	■75F	■70T	■70T	■70T	■100V	●70U				●80U	■100V	●80U	■100V	■100U	N 4
7.1	■120I	■200V	■200V	■200V	■250W	■200W	●200V	■225Z	■225Y	■225W	■250W	■225W	■250W	●285W	N 1
7.2	■110H	■200V	■200V	■200V	■250W	■200W	●200V	■225Z	■225Y	■225W	■250W	■225W	■250W	■285W	N 1
7.3	■100G	■112V	■112V	■112V	■200V	●112W	●112V	■150Y	■150X	■180V	■200V	■180V	■200V	■190V	N 1
7.4	■90G	■60V	■60V	■60V	■150V	●60W	●60V	■65Y	■65X	■120V	■150V	■120V	■150V	■95V	N 2
8.1		■60X	■60X	■60X		■60U	■60X	■75Z	■75X						O
8.2		■100V	■100V	■100V		■100U	■100V	■115V	■115V						O
8.3															O
9.1															H
10.1															O

	HM	HM	HSS-E	HSS	HSS	HSS	HSS	HSS	HSS-E	HSS-E	HSS	HSS HM	HSS-E	HSS-E	HSS-E	
	DIN 6537 K	DIN 6537 L	DORMER	DIN 1897	DIN 1897	DIN 1897	DIN 1897	DIN 1897	DIN ANSI	DIN 1897	DIN 1897	DIN 1897	DIN 1899	DIN 1899	DIN ANSI	DIN ANSI
	3XD	5XD	1XD	1XD	1.25XD	1.5XD	2.5XD	2.5XD	2.5XD	2.5XD	2.5XD	2.5XD	2.5XD	3XD	3XD	
	140°	140°		90°/120°	120°	120°	135°	135°	130°	135°	130°	118°	118°	130°	130°	
	TiAlN	TiAlN	Bronze		ST	ST	ST	TiN	Bronze	Bronze	TiN	ST				Alcrona Top
	DIN 6535HA	DIN 6535HA														
	CTW™	CTW™	N	N	N	N	N	N	N	N		H	N	W	W	
	FORCE M	FORCE M									ADX					PFX
	R467	R463	A723	A122	A119	A123	A120	A022	A620	A117	A520	A124	A720	A920	A921	
	3.00 - 16.00	3.00 - 16.00	6.00 - 8.00	6.00 - 20.00	3.30 - 5.10	3/32 - 1/4	0.50 - 25.00	0.50 - 16.00	2.50 - 13.00	1.00 - 13.00	3.00 - 13.00	3.00 - 16.00	0.15 - 1.40	1.00 - 20.00	2.50 - 16.00	
AMG	47	50	53	54	55	56	57	57	57	57	61	64	65	66	66	ISO
1.1			■35D	■35E	■35C	■35E	■35J	■35K	●38K	●38K	■57M		■35A	■40J	■60M	P 1
1.2			■30D	■30E	■27C	■30E	■30J	■32K	●33H	●33H	■47M		■30A	■34J	■52M	P 1
1.3			●25C	■27C	●23C	■27C	■27G	■25I	●30G	●30G	■40K		■27A	■32I	■53J	P 2
1.4			●20C	●21C	●20C	●21C	■21G	■23H	●27G	●27G	■32I		■23A	■32I	■53J	P 3
1.5				●14C	●8C	●14C	●14F	■16G	●18F	■18F	■21G	●40C	●17A	■23E	■38G	P 4
1.6				●10B	●7A	●10B	●10E	●10E	●11E	■11E	●11E	●37A	●10A	■19E	■30G	H 1
1.7																H 3
1.8																H 4
2.1	■85G	■85G		●16C	●15A	●16C	■16F	■15G	■22F	■22F	■30I		●22A	■15F	■17F	M 1
2.2	■75G	■75G		●9D	●7C	●9D	●9H	●8I	■11H	■11H	■16I	●35C	●10A	■7F	■9F	M 3
2.3	■60F	■60F		●10B	●10A	●10B	●10D	●9E	■15D	■15D	■20G	●35C	●15A	■9D	■11D	M 2
2.4	■60E	■60E														S 2
3.1				●32E			■32J	■32K	●34K	●34K	■48M	■55C	■30A	●34L	■53L	K 1
3.2				●27C			■27G	■25I	●30F	●30F	■37K	■43C	■24A	●26L	■42L	K 2
3.3				●20C			■20F	■20G	●22F	●22F	■30J	■40C	■20A	●26L	■42L	K 3
3.4				●16B			●16F	●16G	●17F	■17F	■26F	■32A	●14A	●19J	■36J	K 4
4.1	■55V	■55V		●27C	●27A	●27C	■27G	■25I	●30G	■30G	■34I	●40A	●23A	■30G	●48I	S 1
4.2	■45V	■45V		■12B	■12A	■12B	■16E	■14F	●18F	■18F	■20G	■35A	●17A	■18G	●29I	S 2
4.3	■40U	■40U		●7A	●7A	●7A	●8C	●8C	●10C	■10C	●4B	●25A	●8A	■10C	●16E	S 3
5.1	●55U	●55U		●13D	●9A	●13D	●13H	●13H	●15H	■15H	●17I	●30A	●10A	■15I	●24L	S 1
5.2	●45U	●45U		●8C	●4C	●8C	●8F	●8F	●9F	■9F	●11G	●25A	●7A	■9G	●14I	S 2
5.3	●40U	●40U		●4A	●3C	●4A	●4B	●4B	●6C	■6C	●7E	●20A	●4A	■6E	●10G	S 3
6.1				■27D	●27A	■27D	●36H	●36H	●38I	●38I	●40E		●35A	●65H		N 3
6.2				■33E	■33C	■33E	●38J	■38K	●40K	●40K	■50I	●70G	●40A	●66J		N 4
6.3				■27D	●27C	■27D	●27I	●27I	●27J	●27J	■45K	●60E	●35A	●40J	●71J	N 3
6.4				■16D	●16C	■16D	●16H	●16I	●16I	●16I	●20F	●50C	●27A	●31G	●50I	N 4
7.1				■33E	■33C	■33E	●33K	■40F	●40K	●35K	●55I		●35A	●75L		N 1
7.2				■30E	●30C	■30E	●30J	■32K	●35J	●33J	■50M		●30A	■45N		N 1
7.3				●30D	●30C	■30D	●30I	■32J	●32I	●31I	■37K		●27A	■40N		N 1
7.4				●25D	●25C	●25D	●25I	●25J	●30G	●30G	■35I		●27A	●36J	■48J	N 2
8.1				●30F	●30I	●30F	●30K	●30K	●40L	●35M	●65G		●48A	●55J		O
8.2				●35E	●35C	●35E	●35I	●35I	●32K	●28K	■50G	●60E	●25A	●40H		O
8.3				●17D		●17D	●17G	●17G	●18I	●17I	■35F					O
9.1				●12A		●12A	●4C	●4C		■6C		●9C				H
10.1																O

	HSS	HSS	HSS	HSS	HSS	HSS-E	HSS-E	HSS	HSS HM	HSS	HSS-E	HSS-E	HSS-E	HSS	HSS	HSS		
	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DIN 338	DORMER	DIN 338	DIN 338	DORMER	DIN ANSI	DIN ANSI	NAS 907	NAS 907	DIN 340		
	4XD	4XD	4XD	4XD	4XD	6XD	4XD	4XD	4XD	4XD	5XD	6XD	6XD	4XD	4XD	6XD		
	118°	118°	118°	118°	135°	130°	135°	118°	118°	130°	130°	130°	130°	135°	118°	118°		
	TIN	TIN	ST	ST	ST		Bronze	ST	ST	TIN	TiAlN Top		Alcrona Top			ST		
											DIN 6535HA							
	N	N	N	N	W	VA	N	N	N			W	W	N	N	N		
								NAS 907J										
	002	002								ADX	ADX	PFX	PFX					
	A002	A002S	A100	A101	A108	A147	A777	A170	A160	A510	A553	A900	A901	A243	A244	A110		
	1.00 - 16.00	2.00 - 13.00	0.20 - 20.00	1.00 - 12.00	1.00 - 16.00	0.30 - 15.00	0.30 - 16.00	13.00 - 1.1/2	4.00 - 16.00	3.00 - 14.00	5.00 - 20.00	1.00 - 20.00	1.50 - 16.00	3/32 - 1/4	1/8 - 1/4	0.50 - 1"		
AMG	69	69	69	69	76	76	76	80	82	83	86	88	88	91	91	92	ISO	
1.1	47J	47J	35H	35H	35I	35I	35J	35H	60E	57M	85L	38H	60J			27G	P 1	
1.2	40J	40J	30H	30H	30I	30I	30H	30H	60E	47M	70L	33H	50J			25G	P 1	
1.3	35F	35F	25F	25F	25G	25G	27G	25F	55D	40K	60L	26H	44I	25F	25F	20E	P 2	
1.4	30F	30F	20F	20F	20F	20F	24F	20E	50D	30H	45H	26H	44I	20F	20F	16E	P 3	
1.5	18F	18F	13E	13E	13E	13E	17E	13D	40C	21F	28F	21E	33G	13E	13E	9D	P 4	
1.6	10E	10E	9D	9D	9D	9D	10D	9C	37A	11D	15D	16E	26G	9D	9D	6B	H 1	
1.7																		H 3
1.8																		H 4
2.1	20F	20F	15E	15E	15E	15E	22E	15D	40B	28G	40G	15E	17E	15E	15E	10D	M 1	
2.2	12G	12G	8G	8G	9G	9G	11G	7F	35C	14I	19I	7E	9E	8G	8G	6F	M 3	
2.3	16C	16C	9C	9C	10D	10D	15C	7B	35A	19G	27G	9C	11C	9C	9C	4B	M 2	
2.4							7B											S 2
3.1	40J	40J	30H	30H	30H	30H	35H	27H	50C	42K	70K	24J	58I	30I	30I	28H	K 1	
3.2	30E	30E	24F	24F	24F	24F	28D	22E	40A	32J	50J	19J	47I	24F	24F	21E	K 2	
3.3	28E	28E	20E	20E	20E	20E	22E	19D	35A	28J	45J	19J	34J	20E	20E	15D	K 3	
3.4	26E	26E	14E	14E	14E	14E	17E	12D	30A	25F	42F	14I	28I	14E	14E	13D	K 4	
4.1	23F	23F	23E	23E	25G	25G	28F	17E	35A	32G	45G	22E	35G	23F	23F	17E	S 1	
4.2	13D	13D	12D	12D	16E	16E	20D	9C	35A	20H	30E	15E	24G	12D	12D	9C	S 2	
4.3	7B	7B	6B	6B	7B	7B	11C	5A	25A	4B	8C	6C	10E	6B	6B	4A	S 3	
5.1	13G	13G	10G	10G	12G	12G	15G	8F	30A	17I	25I	14G	22I	10G	10G	8F	S 1	
5.2	7E	7E	6E	6E	7G	7G	7E	4D	25A	9E	15E	7G	11I	6E	6E	4D	S 2	
5.3	3A	3A	3A	3A	6E	6E	6B	3A	20A	6E	10G	6C	10E	3A	3A	3A	S 3	
6.1	50G	50G	33G	33G	33G	33G	38H	35F	55D	40D	70G	65G				30E	N 3	
6.2	33I	33I	35I	35I	35I	35I	40F	33H	70G	50I	85I	53I				32H	N 4	
6.3	39H	39H	27H	27H	31H	31H	27H	27G	60C	45I	80I	34H	56I	27H	27H	27G	N 3	
6.4	30G	30G	16G	16G	16G	16G	21F	16F	50C	20F	35G	30G	48I	16G	16G	16E	N 4	
7.1	41K	41K	33J	33J	33J	33J	33J	33I	50I	50G	70H	60J				32I	N 1	
7.2	38J	38J	30I	30I	30I	30I	30I	30H	45H	50M	100M	45N				27H	N 1	
7.3	33I	33I	27H	27H	27H	27H	27H	27G	40G	31I	55I	40N				27G	N 1	
7.4	33I	33I	24F	24F	24F	24F	27F	22G	35F	33I	55J	28I	48I	24F	24F	25E	N 2	
8.1	30I	30I	30J	30J	30J	30J		30I		65G	90G	55I				35I	O	
8.2	50H	50H	28H	28H	28H	28H		28G	60E	50G		40G				26G	O	
8.3	35F	35F	14F	14F	14F	14F		14E		35F						12E	O	
9.1	3B	3B	3B	3B	3B	3B	6C	3A	9C					3B	3B	3A	H	
10.1																	O	

	HSS-E	HSS-E	HSS	HSS-E	HSS-E	HSS-E	HSS	HSS	HSS-E	HSS HM	HSS	HSS	HSS	HSS	HSS	
	DIN ANSI	DIN ANSI	BS 328	DIN 1869/1	DIN 1869/2	DIN 1869/3	DIN 345	DIN 345	DIN 345	DIN 345	DIN 341	DIN 1870/1	DIN 1870/1	DIN 1870/2	DIN 8374	
	10XD	10XD	10XD	15XD	20XD	25XD	4XD	4XD	4XD	4XD	6XD	10XD	15XD	20XD	4XD	
	130°	130°	118°	130°	130°	130°	118°	118°	118°	118°	118°	118°	130°	130°	118°	
		Alcrona Top	ST				ST	TiN	Bronze	ST	ST	ST	ST	ST	ST	
	W	W	N	W	W	W	N	N	N	N	N	N	N	W	W	N
	PFX	PFX		PFX	PFX	PFX										
	A940	A941	A125	A976	A977	A978	A130	A530	A730	A166	A350	A345	A951	A952	A400	
	1.00 - 20.00	1.00 - 16.00	1.40 - 1"	1.50 - 14.00	1.50 - 14.00	3.00 - 10.00	3.00 - 50.80	8.50 - 40.00	10.00 - 32.00	10.00 - 33.00	5.00 - 50.00	8.00 - 40.00	10.00 - 30.00	8.00 - 40.00	M3 - M10	
AMG	95	95	98	102	102	102	105	105	105	111	112	114	116	116	118	ISO
1.1	■38F	■53G	■24E	●31C	●31B	●31A	■35I	■47I	●35J	●60E	■27I	■24G	■27G	■27G	■32G	P 1
1.2	■33F	■46G	■22E	●26C	●26B	●26A	■30I	■40I	●30H	●60E	■25I	■22G	■22G	■22G	■27G	P 1
1.3	■22G	■36G	●16C	●22C	■22B	■22A	■25F	■30F	●27G	●55D	■20G	●17E	■19E	■19E	■22E	P 2
1.4	■22G	■36G	●15C	●22C	■22B	■22A	■20F	■27F	●23F	●50D	●16F	●15D	●15D	●15D	■20E	P 3
1.5	■17C	■23D	●6A	■12A	■12A	■12A	●12E	●20E	■17E	●40C	●10E	●6C	●8C	●8C	●10C	P 4
1.6	■12C	■17D	●5A	■10A	■10A	■10A	●9D	●10D	■10D	●37A	●6D	●5B	●6B	●6B	●6C	H 1
1.7																H 3
1.8																H 4
2.1	■15C	■17C	●9C	●12B	●12B	●12A	●15E	●24E	●24E	●40B	●13E	●12C	●12C	●12C	●16E	M 1
2.2	■7E	■9E	●4E	●7C	●7B	●7A	●9G	●13G	■11G	●35C	●4G	●4E	●6E	●6E	●9G	M 3
2.3	■9B	■11B	●8A	●8A	●8A	●8A	●10C	●20C	■17C	●35A	●8C	●8A	●12A	●12A	●12C	M 2
2.4																S 2
3.1		■36I	●22G				■30I	●36I	●35J	■50C	●26I	●22G	●22G	●22G	■30G	K 1
3.2	●16I	■30I	●18D	●23C	●23B	●23A	■24E	■28E	●28G	■40C	●20F	●18D	●16D	●16D	■25E	K 2
3.3	●16I	■30I	●13C	●16C	●16B	●16A	●20E	■27E	●22E	■35C	●18E	●13C	●13C	●13C	●19E	K 3
3.4	●12H	■24H	●9C	●11A	●11A	●11A	●14E	■22E	■17E	■30A	●11E	●9C	●9C	●9C	●18C	K 4
4.1	■18E	●25F	●11D	●15C	●15B	●15A	●23F	●32F	●28G	●35A	●16F	●15D	●18D	●18D	●23E	S 1
4.2	■13C	●18D	●9B	●11A	●11A	●11A	●13D	●18D	●20D	●35A	●9D	●9B	●10B	●10B	●14C	S 2
4.3	■6C	●8D	●5A	●5A	●5A	●5A	●7B	●13B	●11C	●25A	●5B	●5A	●6A	●6A	●8A	S 3
5.1			●5E				●10G	●13G	●15G	●30A	●8G	●8E	●7E	●7E	●10G	S 1
5.2			●4C				●7E	●6E	●7E	●25A	●4E	●4C	●5C	●5C	●6C	S 2
5.3			●3A				●4A	●3A	●6B	●20A	●3A	●3A	●3A	●3A	●4A	S 3
6.1	●65F		●24D				●33F	●60G	●38L	●55D	●33F	●27D	●22D	●22D	●35E	N 3
6.2	●70F		●33G				●35I	●55I	●40J	●75G	●35I	●33G	●33G	●33G	●40E	N 4
6.3	●34G	●48H	●22F	●30D	●30C	●30B	●35H	■40G	●27H	●60C	●35H	●27F	●22F	●22F	●32E	N 3
6.4	●30G	●42H	●18D	●27D	●27C	●27B	●16F	●35E	●21F	●50C	●16F	●16D	●16D	●16D	●20E	N 4
7.1	●53H		●24H				●26J	●55I	●33J	●50I	●33J	●33H	●30H	●30H	●45E	N 1
7.2	■45N		●22G				●30I	●45I	●30I	●45H	●25I	●27G	●27G	●27G	●32E	N 1
7.3	●40N		●22F				●28H	●35G	●30H	●40G	●27H	●27F	●24F	●24F	●32E	N 1
7.4	●30G	■42H	●20E	●27D	●27C	●27B	●23H	●28G	●27F	●35F	●25H	●24F	●22F	●22F	●25E	N 2
8.1	●55H		●30H				●30K	●50J	●35K		●35L	●30J	●30J	●30J	●30I	O
8.2	●40F		●26F				●28J	●50H	●28J	●60E	●26J	●30H	●30H	●30H		O
8.3			●10D				●14H	●35F	●20H		●12H	●10F	●10F	●10F		O
9.1			●3A				●3B	●3B	●5C	●9C	●3B	●3A	●3A	●3A		H
10.1																O

	HSS	HSS	HSS	HSS	HSS	HSS	HSS-E	HSS-E	HSS	HSS	HSS	HSS-E	HSS-E	HSS-E	
	DIN 8376	DIN 8377	DORMER	DORMER	DIN 333A	DIN 333A	DIN 333A	DIN 333A	DIN 333R	DORMER	BS 328	DIN 333A	DIN 333R	DORMER	
	4XD	4XD	2.5XD	2.5XD	1XD	1XD	1XD	1XD	1XD	1XD	1XD	1XD	1XD	1XD	
	118°	118°	118°	118°	118°	118°	118°	118°	118°	122°	120°	118°	118°	118°	
	ST	ST	ST	ST		TIN		TiAlN							
	N	N													
	180°	180°	90°	180°	60°	60°	60°	60°	60°	60°	60°	60°	60°	60°	
	A402	A405	A412	A413	A200	A205	A206	A266	A210	A201	A225	A237	A238	A242	
	M3 - M10	M6 - M18	M3 - M10	M3 - M10	0.50 - 12.50	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	0.50 - 10.00	0.63 - 6.00	3/64 - 5/16	1.60 - 10.00	1.60 - 8.00	1.00 - 5.00	
AMG	119	120	121	122	123	123	123	123	124	125	126	127	128	129	ISO
1.1	■32G	■32G	■32I	■32I	■35I	■42I	■42I	■42I	■35I	■35I	■35I	■35I	■35I	■35I	P 1
1.2	■27G	■27G	■27I	■27I	■30I	■36I	■36I	■36I	■30I	■30I	■30I	■30I	■30I	■30I	P 1
1.3	■22E	■22E	■22G	■22G	■25G	■30G	■30G	■30G	■25G	■25G	■25G	■25G	■25G	■25G	P 2
1.4	■20E	■20E	■20G	■20G	■20F	■24F	■24F	■24F	■20F	■20F	■20F	■20F	■20F	■20F	P 3
1.5	●10C	●10C	●10E	●10E	●13E	●16E	●16E	●16E	●13E	●13E	●13E	●13E	●13E	●13E	P 4
1.6	●6C	●6C	●6C	●6C	●9D	●11D	●11D	●11D	●9D	●9D	●9D	●9D	●9D	●9D	H 1
1.7															H 3
1.8															H 4
2.1	●16E	●16E	■16G	■16G	●15E	●18E	●18E	●18E	●15E	●15E	●15E	●15E	●15E	●15E	M 1
2.2	●9G	●9G	●9I	●9I	●8G	●10G	●10G	●10G	●8G	●8G	●8G	●8G	●8G	●8G	M 3
2.3	●12C	●12C	●12E	●12E	●10C	●12C	●12C	●12C	●10C	●10C	●10C	●10C	●10C	●10C	M 2
2.4															S 2
3.1	■30G	■30G	■30G	■30G	■30I	■36I	■36I	■36I	■30I	■30I	■30I	■30I	■30I	■30I	K 1
3.2	■25E	■25E	■25E	■25E	■24F	■29F	■29F	■29F	■24F	■24F	■24F	■24F	■24F	■24F	K 2
3.3	●19E	●19E	●19E	●19E	●20E	●24E	●24E	●24E	●20E	●20E	●20E	●20E	●20E	●20E	K 3
3.4	●18C	●18C	●18E	●18E	●14E	●17E	●17E	●17E	●14E	●14E	●14E	●14E	●14E	●14E	K 4
4.1	●23E	●23E	●27G	●27G	●24F	●29F	●29F	●29F	●24F	●24F	●24F	●24F	●24F	●24F	S 1
4.2	●14C	●14C	●16E	●16E	●13D	●16D	●16D	●16D	●13D	●13D	●13D	●13D	●13D	●13D	S 2
4.3	●8A	●8A	●8C	●8C	●7B	●8B	●8B	●8B	●7B	●7B	●7B	●7B	●7B	●7B	S 3
5.1	●10G	●10G	●13I	●13I	●10G	●12G	●12G	●12G	●10G	●10G	●10G	●10G	●10G	●10G	S 1
5.2	●6C	●6C	●8G	●8G	●5E	●6E	●6E	●6E	●5E	●5E	●5E	●5E	●5E	●5E	S 2
5.3	●4A	●4A	●4C	●4C	●4A	●5A	●5A	●5A	●4A	●4A	●4A	●4A	●4A	●4A	S 3
6.1	●35E	●35E	●35G	●35G	●35G	●42G	●42G	●42G	●35G	●35G	●35G	●35G	●35G	●35G	N 3
6.2	●40E	●40E	●40G	●40G	●33I	●40I	●40I	●40I	●33I	●33I	●33I	●33I	●33I	●33I	N 4
6.3	●32E	●32E	●32G	●32G	●27H	●32H	●32H	●32H	●27H	●27H	●27H	●27H	●27H	●27H	N 3
6.4	●20E	●20E	●20G	●20G	●16G	●19G	●19G	●19G	●16G	●16G	●16G	●16G	●16G	●16G	N 4
7.1	●45E	●45E	●45G	●45G	●33J	●40J	●40J	●40J	●33J	●33J	●33J	●33J	●33J	●33J	N 1
7.2	●32E	●32E	●32G	●32G	●30I	●36I	●36I	●36I	●30I	●30I	●30I	●30I	●30I	●30I	N 1
7.3	●32E	●32E	●27G	●27G	●27H	●32H	●32H	●32H	●27H	●27H	●27H	●27H	●27H	●27H	N 1
7.4	●25E	●25E	●25G	●25G	●22H	●26H	●26H	●26H	●22H	●22H	●22H	●22H	●22H	●22H	N 2
8.1	●30I	●30I	●30I	●30I	●30J	●36J	●36J	●36J	●30J	●30J	●30J	●30J	●30J	●30J	O
8.2					●28H	●34H	●34H	●34H	●28H	●28H	●28H	●28H	●28H	●28H	O
8.3					●14F	●17F	●17F	●17F	●14F	●14F	●14F	●14F	●14F	●14F	O
9.1					●3B	●4B	●4B	●4B	●3B	●3B	●3B	●3B	●3B	●3B	H
10.1															O

								
	A088	A095	A087	A094	A089	A099	A099	
	Set	Set	Set	Set	Set	Set	DRILLBOY	
AMG	130	131	132	 133	134	135	135	ISO
1.1								P 1
1.2								P 1
1.3								P 2
1.4								P 3
1.5								P 4
1.6								H 1
1.7								H 3
1.8								H 4
2.1								M 1
2.2								M 3
2.3								M 2
2.4								S 2
3.1								K 1
3.2								K 2
3.3								K 3
3.4								K 4
4.1								S 1
4.2								S 2
4.3								S 3
5.1								S 1
5.2								S 2
5.3								S 3
6.1								N 3
6.2								N 4
6.3								N 3
6.4								N 4
7.1								N 1
7.2								N 1
7.3								N 1
7.4								N 2
8.1								O
8.2								O
8.3								O
9.1								H
10.1								O



A199
Set

A080
Set


A190
Set

A191
Set

A188
Set

A295
Set

A296
Set

AMG	136	137	 138	139	140	141	142	ISO
1.1								P 1
1.2								P 1
1.3								P 2
1.4								P 3
1.5								P 4
1.6								H 1
1.7								H 3
1.8								H 4
2.1								M 1
2.2								M 3
2.3								M 2
2.4								S 2
3.1								K 1
3.2								K 2
3.3								K 3
3.4								K 4
4.1								S 1
4.2								S 2
4.3								S 3
5.1								S 1
5.2								S 2
5.3								S 3
6.1								N 3
6.2								N 4
6.3								N 3
6.4								N 4
7.1								N 1
7.2								N 1
7.3								N 1
7.4								N 2
8.1								O
8.2								O
8.3								O
9.1								H
10.1								O

Fn	HM				HSS HM		HSS		HSS-E								
	Ø(D)	1mm	2mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm	15mm	16mm	20mm	25mm	30mm	40mm	50mm
A	0.012	0.023	0.029	0.032	0.036	0.042	0.054	0.062	0.069	0.082	0.086	0.110	0.125	0.135	0.155	0.175	
B	0.014	0.028	0.037	0.041	0.046	0.053	0.067	0.080	0.090	0.103	0.108	0.135	0.153	0.165	0.188	0.208	
C	0.015	0.032	0.044	0.050	0.056	0.064	0.080	0.098	0.110	0.125	0.130	0.160	0.180	0.195	0.220	0.240	
D	0.016	0.038	0.053	0.060	0.068	0.078	0.098	0.119	0.130	0.149	0.155	0.188	0.210	0.228	0.253	0.275	
E	0.017	0.043	0.062	0.071	0.080	0.092	0.115	0.140	0.150	0.173	0.180	0.215	0.240	0.260	0.285	0.310	
F	0.018	0.050	0.073	0.084	0.095	0.109	0.138	0.165	0.178	0.202	0.210	0.248	0.275	0.295	0.320	0.343	
G	0.019	0.056	0.084	0.096	0.109	0.126	0.160	0.190	0.205	0.231	0.240	0.280	0.310	0.330	0.355	0.375	
H	0.020	0.066	0.102	0.116	0.130	0.150	0.190	0.228	0.243	0.271	0.280	0.320	0.355	0.375	0.398	0.418	
I	0.021	0.076	0.119	0.134	0.150	0.173	0.220	0.265	0.280	0.310	0.320	0.360	0.400	0.420	0.440	0.460	
J	0.024	0.084	0.135	0.152	0.170	0.197	0.250	0.298	0.315	0.349	0.360	0.405	0.445	0.465	0.485	0.503	
K	0.026	0.092	0.150	0.170	0.190	0.220	0.280	0.330	0.350	0.388	0.400	0.450	0.490	0.510	0.530	0.545	
L	0.028	0.101	0.165	0.186	0.208	0.240	0.305	0.360	0.385	0.419	0.430	0.485	0.525	0.545	0.568	0.588	
M	0.030	0.110	0.180	0.202	0.225	0.260	0.330	0.390	0.420	0.450	0.460	0.520	0.560	0.580	0.605	0.630	
N	0.032	0.119	0.195	0.218	0.242	0.280	0.355	0.420	0.455	0.481	0.490	0.555	0.595	0.615	0.642	0.672	
S	0.008	0.014	0.020	0.025	0.030	0.037	0.050	0.080	0.100	0.123	0.130	0.150					
T	0.015	0.028	0.040	0.050	0.060	0.070	0.090	0.110	0.130	0.160	0.170	0.190					
U	0.026	0.048	0.070	0.080	0.090	0.107	0.140	0.170	0.200	0.223	0.230	0.240					
V	0.038	0.069	0.100	0.115	0.130	0.153	0.200	0.250	0.280	0.310	0.320	0.340					
W	0.049	0.089	0.130	0.150	0.170	0.200	0.260	0.330	0.380	0.418	0.430	0.450					
X	0.056	0.103	0.150	0.180	0.210	0.250	0.330	0.420	0.480	0.533	0.550	0.580					
Y	0.068	0.124	0.180	0.220	0.260	0.317	0.430	0.550	0.700	0.700	0.700	0.740					
Z	0.094	0.172	0.250	0.325	0.400	0.533	0.800	1.000	1.100	1.175	1.200	1.200					

mm/N ± 25 %

$$n = \frac{V_c \times 1000}{\pi \times D}$$

$$V_f = n \times f \times n$$

Fn	HM						
Ø(D)	12mm	15mm	16mm	20mm	25mm	30mm	40mm
S	0.100	0.123	0.130	0.150	0.170	0.190	0.220
T	0.130	0.160	0.170	0.190	0.210	0.230	0.260
U	0.200	0.223	0.230	0.240	0.270	0.300	0.360
V	0.280	0.310	0.320	0.340	0.400	0.440	0.510
W	0.380	0.418	0.430	0.450	0.470	0.490	0.520

mm/N ± 25 %

R950 R960 R970		18
H853 H855 H858		21
H860 H861		24



H861	H860	R950 R960 R970	H853 H855 H858
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R950	R960	R970	H853	H855	H858	H860	H861
15/32 - 42.00	15/32 - 30.50	15/32 - 42.00	15/32 - 42.00	15/32 - 30.50	15/32 - 42.00	N1 - N7	N1 - N6

R950	R960	R970	H853	H855	H858	H860	H861
R95015/32	R96015/32	R97015/32					
R95012.0	R96012.0	R97012.0	H85312.0	H85512.0	H85812.0		
R95012.1	R96012.1	R97012.1	H85331/64	H85531/64			
R95012.2	R96012.2	R97012.2					
R95031/64	R96031/64	R97031/64					
R95012.5	R96012.5	R97012.5					
R95012.6	R96012.6	R97012.6	H85312.5	H85512.5	H85812.5	H860N1	H860N1
R9501/2	R9601/2	R9701/2	H8531/2	H8551/2			
R95012.8	R96012.8	R97012.8					
R95012.9	R96012.9	R97012.9					
R95013.0	R96013.0	R97013.0					
R95033/64	R96033/64	R97033/64	H85313.0	H85513.0	H85813.0		
R95013.2	R96013.2	R97013.2	H85317/32	H85517/32			
R95017/32	R96017/32	R97017/32					
R95013.5	R96013.5	R97013.5					
R95013.6	R96013.6	R97013.6					
R95013.7	R96013.7	R97013.7					
R95013.8	R96013.8	R97013.8					
R95035/64	R96035/64	R97035/64	H85314.0	H85514.0	H85814.0		
R95014.0	R96014.0	R97014.0	H8539/16	H8559/16			
R95014.1	R96014.1	R97014.1					
R95014.2	R96014.2	R97014.2					
R9509/16	R9609/16	R9709/16					
R95014.5	R96014.5	R97014.5					
R95014.6	R96014.6	R97014.6				H860N1	H861N1
R95037/64	R96037/64	R97037/64					
R95014.7	R96014.7	R97014.7					
R95014.8	R96014.8	R97014.8					
R95015.0	R96015.0	R97015.0	H85315.0	H85515.0	H85815.0		
R95019/32	R96019/32	R97019/32	H85339/64	H85539/64			
R95015.1	R96015.1	R97015.1					
R95015.2	R96015.2	R97015.2					
R95039/64	R96039/64	R97039/64					
R95015.5	R96015.5	R97015.5					

R950	R960	R970	H853	H855	H858	H860	H861
R95015.6	R96015.6	R97015.6					
R95015.7	R96015.7	R97015.7					
R9505/8	R9605/8	R9705/8					
R95016.0	R96016.0	R97016.0					
R95016.1	R96016.1	R97016.1	H85316.0	H85516.0	H85816.0		
R95016.2	R96016.2	R97016.2	H85341/64	H85541/64			
R95041/64	R96041/64	R97041/64					
R95016.5	R96016.5	R97016.5					
R95016.6	R96016.6	R97016.6					
R95021/32	R96021/32	R97021/32					
R95016.7	R96016.7	R97016.7					
R95017.0	R96017.0	R97017.0					
R95043/64	R96043/64	R97043/64	H85317.0	H85517.0	H85817.0	H860N2	H861N2
R95017.1	R96017.1	R97017.1	H85311/16	H85511/16			
R95017.2	R96017.2	R97017.2					
R95011/16	R96011/16	R97011/16					
R95017.5	R96017.5	R97017.5					
R95017.6	R96017.6	R97017.6					
R95017.7	R96017.7	R97017.7					
R95045/64	R96045/64	R97045/64					
R95018.0	R96018.0	R97018.0	H85318.0	H85518.0	H85818.0		
R95018.1	R96018.1	R97018.1	H85323/32	H85523/32			
R95018.2	R96018.2	R97018.2					
R95023/32	R96023/32	R97023/32					
R95018.5	R96018.5	R97018.5					
R95018.6	R96018.6	R97018.6					
R95047/64	R96047/64	R97047/64					
R95018.7	R96018.7	R97018.7					
R95018.9	R96018.9	R97018.9					
R95019.0	R96019.0	R97019.0					
R9503/4	R9603/4	R9703/4	H85319.0	H85519.0	H85819.0		
R95019.1	R96019.1	R97019.1	H85349/64	H85549/64			
R95019.2	R96019.2	R97019.2					
R95019.25	R96019.25	R97019.25					
R95049/64	R96049/64	R97049/64					
R95019.5	R96019.5	R97019.5					
R95019.6	R96019.6	R97019.6				H860N3	H861N3
R95019.7	R96019.7	R97019.7					
R95025/32	R96025/32	R97025/32	H85320.0	H85520.0	H85820.0		
R95020.0	R96020.0	R97020.0	H85351/64	H85551/64			
R95051/64	R96051/64	R97051/64					
R95020.5	R96020.5	R97020.5					
R95013/16	R96013/16	R97013/16					
R95021.0	R96021.0	R97021.0					
R95053/64	R96053/64	R97053/64	H85321.0	H85521.0	H85821.0		
R95027/32	R96027/32	R97027/32	H85327/32	H85527/32			
R95021.5	R96021.5	R97021.5					
R95055/64	R96055/64	R97055/64					
R95022.0	R96022.0	R97022.0					
R9507/8	R9607/8	R9707/8	H85322.0	H85522.0	H85822.0		
R95022.5	R96022.5	R97022.5	H85357/64	H85557/64			
R95057/64	R96057/64	R97057/64					
R95022.7	R96022.7	R97022.7					
R95023.0	R96023.0	R97023.0					
R95029/32	R96029/32	R97029/32	H85323.0	H85523.0	H85823.0	H860N4	H861N3
R95059/64	R96059/64	R97059/64	H85359/64	H85559/64			
R95023.5	R96023.5	R97023.5					
R95015/16	R96015/16	R97015/16					
R95024.0	R96024.0	R97024.0					
R95061/64	R96061/64	R97061/64	H85324.0	H85524.0	H85824.0		
R95024.5	R96024.5	R97024.5	H85331/32	H85531/32			
R95031/32	R96031/32	R97031/32					

R950	R960	R970	H853	H855	H858	H860	H861
R95025.0	R96025.0	R97025.0					
R95063/64	R96063/64	R97063/64					
R9501	R9601	R9701	H85325.0	H85525.0	H85825.0		
R95025.5	R96025.5	R97025.5	H8531.1/64	H8551.1/64			
R95025.65	R96025.65	R97025.65					
R9501.1/64	R9601.1/64	R9701.1/64					
R95026.0	R96026.0	R97026.0					
R9501.1/32	R9601.1/32	R9701.1/32	H85326.0	H85526.0	H85826.0	H860N5	H861N4
R95026.5	R96026.5	R97026.5	H8531.3/64	H8551.3/64			
R9501.3/64	R9601.3/64	R9701.3/64					
R9501.1/16	R9601.1/16	R9701.1/16					
R95027.0	R96027.0	R97027.0	H85327.0	H85527.0	H85827.0		
R9501.5/64	R9601.5/64	R9701.5/64	H8531.3/32	H8551.3/32			
R95027.5	R96027.5	R97027.5					
R9501.3/32	R9601.3/32	R9701.3/32					
R95028.0	R96028.0	R97028.0					
R9501.7/64	R9601.7/64	R9701.7/64	H85328.0	H85528.0	H85828.0		
R95028.5	R96028.5	R97028.5	H8531.1/8	H8551.1/8			
R9501.1/8	R9601.1/8	R9701.1/8					
R9501.9/64	R9601.9/64	R9701.9/64					
R95029.0	R96029.0	R97029.0	H85329.0	H85529.0	H85829.0		
R9501.5/32	R9601.5/32	R9701.5/32	H8531.11/64	H8551.11/64			
R95029.5	R96029.5	R97029.5					
R9501.11/64	R9601.11/64	R9701.11/64					
R95030.0	R96030.0	R97030.0	H85330.0	H85530.0	H85830.0	H860N6	H861N5
R9501.3/16	R9601.3/16	R9701.3/16	H8531.3/16	H8551.3/16			
R95030.5	R96030.5	R97030.5					
R9501.7/32		R9701.7/32					
R95031.0		R97031.0	H85332.0	H85532.0	H85832.0		
R9501.1/4		R9701.1/4					
R95032.0		R97032.0					
R95032.5		R97032.5					
R9501.19/64		R9701.19/64	H85333.5	H85533.5	H85833.5		
R95033.0		R97033.0					
R95033.5		R97033.5					
R95034.0		R97034.0					
R9501.11/32		R9701.11/32					
R95034.5		R97034.5	H85335.0	H85535.0	H85835.0		
R9501.3/8		R9701.3/8					
R95035.0		R97035.0					
R95036.0		R97036.0					
R9501.27/64		R9701.27/64	H85336.5	H85536.5	H85836.5		
R95036.5		R97036.5					
R95037.0		R97037.0					
R9501.15/32		R9701.15/32	H85338.0	H85538.0	H85838.0	H860N7	H861N6
R95037.5		R97037.5					
R95038.0		R97038.0					
R9501.1/2		R9701.1/2					
R95038.5		R97038.5					
R9501.17/32		R9701.17/32	H85339.5	H85539.5	H85839.5		
R95039.0		R97039.0					
R95039.5		R97039.5					
R9501.9/16		R9701.9/16					
R95040.0		R97040.0	H85341.0	H85541.0	H85841.0		
R95041.0		R97041.0					
R9501.5/8		R9701.5/8	H85342.5	H85542.5	H85842.5		
R95042.0		R97042.0					

R950

- Hydra Drill Head for Steel
- punta Hydra para Acero
- Cabeça Hydra para Aço
- Tête Hydra pour les aciers

Four (4) screws and one (1) screwdriver are included with a drill body
 Cuatro (4) tornillos y un (1) destornillador incluidos con cada cuerpo
 Quatro (4) parafusos e uma (1) chave estão incluídos com o corpo da broca
 Quatre (4) vis et un (1) tournevis sont inclus avec le corps

R960

- Hydra Drill Head for Stainless Steel
- punta Hydra para Acero Inoxidable
- Cabeça Hydra para Aço Inoxidável
- Tête Hydra pour les aciers inoxydables

Four (4) screws and one (1) screwdriver are included with a drill body
 Cuatro (4) tornillos y un (1) destornillador incluidos con cada cuerpo
 Quatro (4) parafusos e uma (1) chave estão incluídos com o corpo da broca
 Quatre (4) vis et un (1) tournevis sont inclus avec le corps

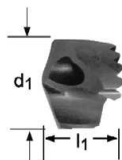
R970

- Hydra Drill Head for Cast Iron
- punta Hydra para Hierro Fundido
- Cabeça Hydra para Ferro fundido
- Tête Hydra pour les fontes

Four (4) screws and one (1) screwdriver are included with a drill body
 Cuatro (4) tornillos y un (1) destornillador incluidos con cada cuerpo
 Quatro (4) parafusos e uma (1) chave estão incluídos com o corpo da broca
 Quatre (4) vis et un (1) tournevis sont inclus avec le corps



R950	▪	1.3	1.4	1.5	1.6	3.3	3.4	
	•	1.1	1.2	2.4				
R960	▪	1.1	1.2	2.1	2.2	2.3	3.1	3.2
	•	2.4	3.3	3.4	4.1			
R970	▪	3.1	3.2	3.3	3.4			



R950	R960	R970
15/32 - 42.00	15/32 - 30.50	15/32 - 42.00

d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_1 mm	R950	R960	R970
15/32	11.91	0.4688	9.1	R95015/32	R96015/32	R97015/32
	12.00	0.4724	9.1	R95012.0	R96012.0	R97012.0
	12.10	0.4764	9.1	R95012.1	R96012.1	R97012.1
31/64	12.20	0.4803	9.1	R95012.2	R96012.2	R97012.2
	12.30	0.4844	9.1	R95031/64	R96031/64	R97031/64
	12.50	0.4921	9.4	R95012.5	R96012.5	R97012.5
1/2	12.60	0.4961	9.4	R95012.6	R96012.6	R97012.6
	12.70	0.5000	9.4	R9501/2	R9601/2	R9701/2
	12.80	0.5039	9.4	R95012.8	R96012.8	R97012.8
33/64	12.90	0.5079	9.4	R95012.9	R96012.9	R97012.9
	13.00	0.5118	9.7	R95013.0	R96013.0	R97013.0
	13.10	0.5156	9.7	R95033/64	R96033/64	R97033/64
17/32	13.20	0.5197	9.7	R95013.2	R96013.2	R97013.2
	13.49	0.5313	9.7	R95017/32	R96017/32	R97017/32
	13.50	0.5315	10.3	R95013.5	R96013.5	R97013.5
	13.60	0.5354	10.3	R95013.6	R96013.6	R97013.6
	13.70	0.5394	10.3	R95013.7	R96013.7	R97013.7
	13.80	0.5433	10.3	R95013.8	R96013.8	R97013.8

d_1 Øh ₇ Inch	d_1 Øh ₇ mm	d_1 decimal Inch	l_1 mm	R950	R960	R970
35/64	13.89	0.5469	10.3	R95035/64	R96035/64	R97035/64
	14.00	0.5512	10.3	R95014.0	R96014.0	R97014.0
	14.10	0.5551	10.3	R95014.1	R96014.1	R97014.1
9/16	14.20	0.5591	10.3	R95014.2	R96014.2	R97014.2
	14.29	0.5625	10.3	R9509/16	R9609/16	R9709/16
	14.50	0.5709	10.3	R95014.5	R96014.5	R97014.5
37/64	14.60	0.5748	11.0	R95014.6	R96014.6	R97014.6
	14.68	0.5781	11.0	R95037/64	R96037/64	R97037/64
	14.70	0.5787	11.0	R95014.7	R96014.7	R97014.7
19/32	14.80	0.5827	11.0	R95014.8	R96014.8	R97014.8
	15.00	0.5906	11.0	R95015.0	R96015.0	R97015.0
	15.08	0.5938	11.0	R95019/32	R96019/32	R97019/32
39/64	15.10	0.5945	11.0	R95015.1	R96015.1	R97015.1
	15.20	0.5984	11.0	R95015.2	R96015.2	R97015.2
	15.48	0.6094	11.0	R95039/64	R96039/64	R97039/64
5/8	15.50	0.6102	11.0	R95015.5	R96015.5	R97015.5
	15.60	0.6142	11.6	R95015.6	R96015.6	R97015.6
	15.70	0.6181	11.6	R95015.7	R96015.7	R97015.7
41/64	15.88	0.6250	11.6	R9505/8	R9605/8	R9705/8
	16.00	0.6299	11.6	R95016.0	R96016.0	R97016.0
	16.10	0.6339	11.6	R95016.1	R96016.1	R97016.1
21/32	16.20	0.6378	11.6	R95016.2	R96016.2	R97016.2
	16.27	0.6406	11.6	R95041/64	R96041/64	R97041/64
	16.50	0.6496	11.6	R95016.5	R96016.5	R97016.5
43/64	16.60	0.6535	12.2	R95016.6	R96016.6	R97016.6
	16.67	0.6563	12.2	R95021/32	R96021/32	R97021/32
	16.70	0.6575	12.2	R95016.7	R96016.7	R97016.7
11/16	17.00	0.6693	12.2	R95017.0	R96017.0	R97017.0
	17.07	0.6719	12.2	R95043/64	R96043/64	R97043/64
	17.10	0.6732	12.2	R95017.1	R96017.1	R97017.1
45/64	17.20	0.6772	12.2	R95017.2	R96017.2	R97017.2
	17.46	0.6875	12.2	R95011/16	R96011/16	R97011/16
	17.50	0.6890	12.2	R95017.5	R96017.5	R97017.5
23/32	17.60	0.6929	12.9	R95017.6	R96017.6	R97017.6
	17.70	0.6969	12.9	R95017.7	R96017.7	R97017.7
	17.86	0.7031	12.9	R95045/64	R96045/64	R97045/64
47/64	18.00	0.7087	12.9	R95018.0	R96018.0	R97018.0
	18.10	0.7126	12.9	R95018.1	R96018.1	R97018.1
	18.20	0.7165	12.9	R95018.2	R96018.2	R97018.2
3/4	18.26	0.7188	12.9	R95023/32	R96023/32	R97023/32
	18.50	0.7283	12.9	R95018.5	R96018.5	R97018.5
	18.60	0.7323	13.5	R95018.6	R96018.6	R97018.6
49/64	18.65	0.7344	13.5	R95047/64	R96047/64	R97047/64
	18.70	0.7362	13.5	R95018.7	R96018.7	R97018.7
	18.90	0.7441	13.5	R95018.9	R96018.9	R97018.9
13/16	19.00	0.7480	13.5	R95019.0	R96019.0	R97019.0
	19.05	0.7500	13.5	R9503/4	R9603/4	R9703/4
	19.10	0.7520	13.5	R95019.1	R96019.1	R97019.1
51/64	19.20	0.7559	13.5	R95019.2	R96019.2	R97019.2
	19.25	0.7579	13.5	R95019.25	R96019.25	R97019.25
	19.45	0.7656	13.5	R95049/64	R96049/64	R97049/64
25/32	19.50	0.7677	13.5	R95019.5	R96019.5	R97019.5
	19.60	0.7717	14.1	R95019.6	R96019.6	R97019.6
	19.70	0.7756	14.1	R95019.7	R96019.7	R97019.7
53/64	19.84	0.7813	14.1	R95025/32	R96025/32	R97025/32
	20.00	0.7874	14.1	R95020.0	R96020.0	R97020.0
	20.24	0.7969	14.1	R95051/64	R96051/64	R97051/64
27/32	20.50	0.8071	14.1	R95020.5	R96020.5	R97020.5
	20.64	0.8125	14.8	R95013/16	R96013/16	R97013/16
	21.00	0.8268	14.8	R95021.0	R96021.0	R97021.0
55/64	21.03	0.8281	14.8	R95053/64	R96053/64	R97053/64
	21.43	0.8438	14.8	R95027/32	R96027/32	R97027/32
	21.50	0.8465	14.8	R95021.5	R96021.5	R97021.5
7/8	21.83	0.8594	15.0	R95055/64	R96055/64	R97055/64
	22.00	0.8661	15.0	R95022.0	R96022.0	R97022.0
	22.22	0.8750	15.0	R9507/8	R9607/8	R9707/8
57/64	22.50	0.8858	15.0	R95022.5	R96022.5	R97022.5
	22.62	0.8906	15.0	R95057/64	R96057/64	R97057/64
	22.70	0.8937	15.0	R95022.7	R96022.7	R97022.7
	23.00	0.9055	15.1	R95023.0	R96023.0	R97023.0

d ₁ øh ₇ Inch	d ₁ øh ₇ mm	d ₁ decimal Inch	l ₁ mm	R950	R960	R970
29/32	23.02	0.9063	15.1	R95029/32	R96029/32	R97029/32
59/64	23.42	0.9219	15.1	R95059/64	R96059/64	R97059/64
	23.50	0.9252	15.1	R95023.5	R96023.5	R97023.5
15/16	23.81	0.9375	15.4	R95015/16	R96015/16	R97015/16
	24.00	0.9449	15.4	R95024.0	R96024.0	R97024.0
61/64	24.21	0.9531	15.4	R95061/64	R96061/64	R97061/64
	24.50	0.9646	15.4	R95024.5	R96024.5	R97024.5
31/32	24.61	0.9688	15.4	R95031/32	R96031/32	R97031/32
	25.00	0.9844	15.8	R95025.0	R96025.0	R97025.0
63/64	25.00	0.9844	15.8	R95063/64	R96063/64	R97063/64
1"	25.40	1.0000	15.8	R9501	R9601	R9701
	25.50	1.0039	15.8	R95025.5	R96025.5	R97025.5
	25.65	1.0098	15.8	R95025.65	R96025.65	R97025.65
1.1/64	25.80	1.0156	15.8	R9501.1/64	R9601.1/64	R9701.1/64
	26.00	1.0236	16.4	R95026.0	R96026.0	R97026.0
1.1/32	26.19	1.0313	16.4	R9501.1/32	R9601.1/32	R9701.1/32
	26.50	1.0433	16.4	R95026.5	R96026.5	R97026.5
1.3/64	26.59	1.0469	16.4	R9501.3/64	R9601.3/64	R9701.3/64
1.1/16	26.99	1.0625	17.1	R9501.1/16	R9601.1/16	R9701.1/16
	27.00	1.0630	17.1	R95027.0	R96027.0	R97027.0
1.5/64	27.38	1.0781	17.1	R9501.5/64	R9601.5/64	R9701.5/64
	27.50	1.0827	17.1	R95027.5	R96027.5	R97027.5
1.3/32	27.78	1.0938	17.1	R9501.3/32	R9601.3/32	R9701.3/32
	28.00	1.1024	17.7	R95028.0	R96028.0	R97028.0
1.7/64	28.18	1.1094	17.7	R9501.7/64	R9601.7/64	R9701.7/64
	28.50	1.1220	17.7	R95028.5	R96028.5	R97028.5
1.1/8	28.58	1.1250	17.7	R9501.1/8	R9601.1/8	R9701.1/8
1.9/64	28.97	1.1406	18.3	R9501.9/64	R9601.9/64	R9701.9/64
	29.00	1.1417	18.3	R95029.0	R96029.0	R97029.0
1.5/32	29.37	1.1563	18.3	R9501.5/32	R9601.5/32	R9701.5/32
	29.50	1.1614	18.3	R95029.5	R96029.5	R97029.5
1.11/64	29.77	1.1719	18.3	R9501.11/64	R9601.11/64	R9701.11/64
	30.00	1.1811	19.0	R95030.0	R96030.0	R97030.0
1.3/16	30.16	1.1875	19.0	R9501.3/16	R9601.3/16	R9701.3/16
	30.50	1.2008	19.0	R95030.5	R96030.5	R97030.5
1.7/32	30.96	1.2188	21.0	R9501.7/32		R9701.7/32
	31.00	1.2205	21.0	R95031.0		R97031.0
1.1/4	31.75	1.2500	21.0	R9501.1/4		R9701.1/4
	32.00	1.2598	21.0	R95032.0		R97032.0
	32.50	1.2795	21.0	R95032.5		R97032.5
1.19/64	32.94	1.2969	21.0	R9501.19/64		R9701.19/64
	33.00	1.2992	21.0	R95033.0		R97033.0
	33.50	1.3189	21.0	R95033.5		R97033.5
	34.00	1.3386	23.0	R95034.0		R97034.0
1.11/32	34.13	1.3438	23.0	R9501.11/32		R9701.11/32
	34.50	1.3583	23.0	R95034.5		R97034.5
1.3/8	34.93	1.3750	23.0	R9501.3/8		R9701.3/8
	35.00	1.3780	23.0	R95035.0		R97035.0
	36.00	1.4173	23.0	R95036.0		R97036.0
1.27/64	36.12	1.4219	23.0	R9501.27/64		R9701.27/64
	36.50	1.4370	23.0	R95036.5		R97036.5
	37.00	1.4567	25.0	R95037.0		R97037.0
1.15/32	37.31	1.4688	25.0	R9501.15/32		R9701.15/32
	37.50	1.4764	25.0	R95037.5		R97037.5
	38.00	1.4961	25.0	R95038.0		R97038.0
1.1/2	38.10	1.5000	25.0	R9501.1/2		R9701.1/2
	38.50	1.5157	25.0	R95038.5		R97038.5
1.17/32	38.89	1.5313	25.0	R9501.17/32		R9701.17/32
	39.00	1.5354	25.0	R95039.0		R97039.0
	39.50	1.5551	25.0	R95039.5		R97039.5
1.9/16	39.69	1.5625	27.0	R9501.9/16		R9701.9/16
	40.00	1.5748	27.0	R95040.0		R97040.0
	41.00	1.6142	27.0	R95041.0		R97041.0
1.5/8	41.28	1.6250	27.0	R9501.5/8		R9701.5/8
	42.00	1.6535	27.0	R95042.0		R97042.0

H853

- Hydra Body 3 x D
- Cuerpo Hydra 3 x D
- Corpos Hydra 3 x D
- Corps Hydra 3 x D

Four (4) screws H860 and one (1) screwdriver H861 are included with a drill body
 Cuatro (4) tornillos H860 y un (1) destornillador H861 incluidos con cada cuerpo
 Quatro (4) parafusos H860 e uma (1) chave H861 estão incluídos com o corpo da broca
 Quatre (4) vis H860 et un (1) tournevis H861 sont inclus avec le corps

H855

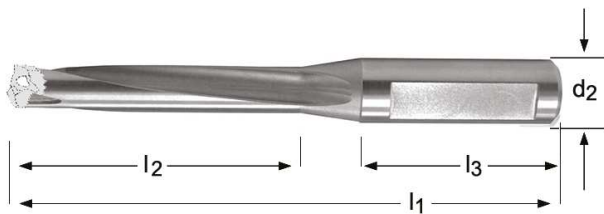
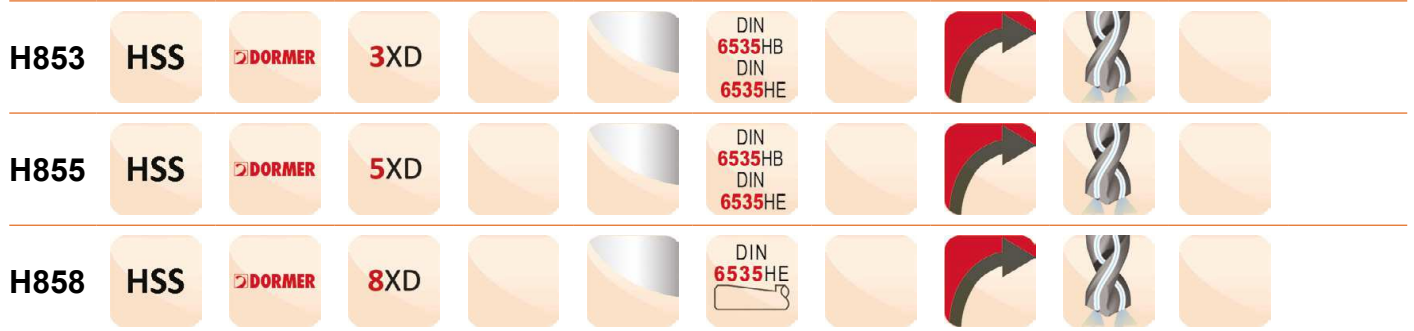
- Hydra Body 5 x D
- Cuerpo Hydra 5 x D
- Corpos Hydra 5 x D
- Corps Hydra 5 x D

Four (4) screws H860 and one (1) screwdriver H861 are included with a drill body
 Cuatro (4) tornillos H860 y un (1) destornillador H861 incluidos con cada cuerpo
 Quatro (4) parafusos H860 e uma (1) chave H861 estão incluídos com o corpo da broca
 Quatre (4) vis H860 et un (1) tournevis H861 sont inclus avec le corps

H858

- Hydra Body 8 x D
- Cuerpo Hydra 8 x D
- Corpos Hydra 8 x D
- Corps Hydra 8 x D

Four (4) screws H860 and one (1) screwdriver H861 are included with a drill body
 Cuatro (4) tornillos H860 y un (1) destornillador H861 incluidos con cada cuerpo
 Quatro (4) parafusos H860 e uma (1) chave H861 estão incluídos com o corpo da broca
 Quatre (4) vis H860 et un (1) tournevis H861 sont inclus avec le corps



d_2 $\varnothing h_6$ Inch	d_2 $\varnothing h_6$ mm	l_2 mm	l_1 mm	l_3 mm	DIN 6535HB DIN 6535HE	H853	H855	H858
	16.00	44.0	105.0	48.0	DIN6535HE	H85312.0		
	16.00	69.0	130.0	48.0	DIN6535HE		H85512.0	
5/8	15.88	44.0	105.0	48.0	DIN6535HE	H85331/64		
5/8	15.88	69.0	130.0	48.0	DIN6535HE		H85531/64	
	16.00	44.0	105.0	48.0	DIN6535HE	H85312.5		
	16.00	69.0	130.0	48.0	DIN6535HE		H85512.5	
5/8	15.88	44.0	105.0	48.0	DIN6535HE	H8531/2		
5/8	15.88	69.0	130.0	48.0	DIN6535HE		H8551/2	
	16.00	47.0	110.0	48.0	DIN6535HE	H85313.0		
	16.00	74.0	140.0	48.0	DIN6535HE		H85513.0	
5/8	15.88	47.0	110.0	48.0	DIN6535HE	H85317/32		
5/8	15.88	74.0	140.0	48.0	DIN6535HE		H85517/32	
	16.00	124.5	191.5	48.0	DIN6535HE			H85814.0
	16.00	52.5	116.5	48.0	DIN6535HE	H85314.0		
	16.00	81.5	146.5	48.0	DIN6535HE		H85514.0	
3/4	19.05	52.5	116.5	48.0	DIN6535HE	H8539/16		
3/4	19.05	81.5	146.5	48.0	DIN6535HE		H8559/16	
	20.00	133.5	201.5	50.0	DIN6535HE			H85815.0
	20.00	55.5	126.5	50.0	DIN6535HE	H85315.0		
	20.00	86.5	156.5	50.0	DIN6535HE		H85515.0	
3/4	19.05	55.5	126.5	50.0	DIN6535HE	H85339/64		
3/4	19.05	86.5	156.5	50.0	DIN6535HE		H85539/64	

d ₂ Øh ₆ Inch	d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	DIN 6535HB DIN 6535HE	H853	H855	H858
	20.00	141.5	211.5	50.0	DIN6535HE			H85816.0
	20.00	59.5	131.5	50.0	DIN6535HE	H85316.0		
	20.00	92.5	166.5	50.0	DIN6535HE		H85516.0	
3/4	19.05	59.5	131.5	50.0	DIN6535HE	H85341/64		
3/4	19.05	92.5	166.5	50.0	DIN6535HE		H85541/64	
	20.00	150.5	221.5	50.0	DIN6535HE			H85817.0
	20.00	62.5	136.5	50.0	DIN6535HE	H85317.0		
	20.00	97.5	171.5	50.0	DIN6535HE		H85517.0	
3/4	19.05	62.5	136.5	50.0	DIN6535HE	H85311/16		
3/4	19.05	97.5	171.5	50.0	DIN6535HE		H85511/16	
	20.00	158.5	226.5	50.0	DIN6535HE			H85818.0
	20.00	103.5	176.5	50.0	DIN6535HE		H85518.0	
	20.00	66.5	141.5	50.0	DIN6535HE	H85318.0		
3/4	19.05	103.5	176.5	50.0	DIN6535HE		H85523/32	
3/4	19.05	66.5	141.5	50.0	DIN6535HE	H85323/32		
	25.00	167.5	251.5	56.0	DIN6535HE			H85819.0
	25.00	108.5	191.5	56.0	DIN6535HE		H85519.0	
	25.00	69.5	156.5	56.0	DIN6535HE	H85319.0		
1"	25.40	108.5	191.5	56.0	DIN6535HE		H85549/64	
1"	25.40	69.5	156.5	56.0	DIN6535HE	H85349/64		
	25.00	175.5	264.5	56.0	DIN6535HE			H85820.0
	25.00	114.5	196.5	56.0	DIN6535HE		H85520.0	
	25.00	73.5	156.5	56.0	DIN6535HE	H85320.0		
1"	25.40	114.5	196.5	56.0	DIN6535HE		H85551/64	
1"	25.40	73.5	156.5	56.0	DIN6535HE	H85351/64		
	25.00	184.5	266.5	56.0	DIN6535HE			H85821.0
	25.00	119.5	196.5	56.0	DIN6535HE		H85521.0	
	25.00	76.5	156.5	56.0	DIN6535HE	H85321.0		
1"	25.40	119.5	196.5	56.0	DIN6535HE		H85527/32	
1"	25.40	76.5	156.5	56.0	DIN6535HE	H85327/32		
	25.00	192.1	271.1	56.0	DIN6535HE			H85822.0
	25.00	125.1	201.1	56.0	DIN6535HE		H85522.0	
	25.00	80.1	161.5	56.0	DIN6535HE	H85322.0		
1"	25.40	125.1	201.1	56.0	DIN6535HE		H85557/64	
1"	25.40	80.1	161.5	56.0	DIN6535HE	H85357/64		
	25.00	200.5	280.5	56.0	DIN6535HE			H85823.0
	25.00	129.5	210.5	56.0	DIN6535HE		H85523.0	
	25.00	82.5	160.5	56.0	DIN6535HE	H85323.0		
1"	25.40	129.5	210.5	56.0	DIN6535HE		H85559/64	
1"	25.40	82.5	160.5	56.0	DIN6535HE	H85359/64		
	32.00	208.2	295.2	60.0	DIN6535HE			H85824.0
	32.00	135.2	220.2	60.0	DIN6535HE		H85524.0	
	32.00	86.2	170.2	60.0	DIN6535HE	H85324.0		
1"	25.40	135.2	220.2	60.0	DIN6535HE		H85531/32	
1"	25.40	86.2	170.2	60.0	DIN6535HE	H85331/32		
	32.00	217.0	300.0	60.0	DIN6535HE			H85825.0
	32.00	140.0	225.0	60.0	DIN6535HE		H85525.0	
	32.00	88.0	170.0	60.0	DIN6535HE	H85325.0		
1.1/4	31.75	140.0	225.0	60.0	DIN6535HE		H8551.1/64	
1.1/4	31.75	88.0	170.0	60.0	DIN6535HE	H8531.1/64		
	32.00	225.0	310.0	60.0	DIN6535HE			H85826.0
	32.00	146.0	230.0	60.0	DIN6535HE		H85526.0	
	32.00	92.0	175.0	60.0	DIN6535HE	H85326.0		
1.1/4	31.75	146.0	230.0	60.0	DIN6535HE		H8551.3/64	
1.1/4	31.75	92.0	175.0	60.0	DIN6535HE	H8531.3/64		
	32.00	234.0	320.0	60.0	DIN6535HE			H85827.0
	32.00	151.0	235.0	60.0	DIN6535HE		H85527.0	
	32.00	94.0	175.0	60.0	DIN6535HE	H85327.0		
1.1/4	31.75	151.0	235.0	60.0	DIN6535HE		H8551.3/32	
1.1/4	31.75	94.0	175.0	60.0	DIN6535HE	H8531.3/32		
	32.00	242.0	325.0	60.0	DIN6535HE			H85828.0
	32.00	157.0	240.0	60.0	DIN6535HE		H85528.0	
	32.00	97.0	180.0	60.0	DIN6535HE	H85328.0		
1.1/4	31.75	157.0	240.0	60.0	DIN6535HE		H8551.1/8	
1.1/4	31.75	97.0	180.0	60.0	DIN6535HE	H8531.1/8		
	32.00	251.0	335.0	60.0	DIN6535HE			H85829.0
	32.00	100.0	185.0	60.0	DIN6535HE	H85329.0		
	32.00	162.0	245.0	60.0	DIN6535HE		H85529.0	
1.1/4	31.75	100.0	185.0	60.0	DIN6535HE	H8531.11/64		
1.1/4	31.75	162.0	245.0	60.0	DIN6535HE		H8551.11/64	
	32.00	259.0	345.0	60.0	DIN6535HE			H85830.0
	32.00	104.0	185.0	60.0	DIN6535HE	H85330.0		
	32.00	167.0	255.0	60.0	DIN6535HE		H85530.0	
1.1/4	31.75	104.0	185.0	60.0	DIN6535HE	H8531.3/16		
1.1/4	31.75	167.0	255.0	60.0	DIN6535HE		H8551.3/16	
	32.00	176.5	261.5	60.0	DIN6535HE		H85532.0	

d_2 $\varnothing h_6$ Inch	d_2 $\varnothing h_6$ mm	l_2 mm	l_1 mm	l_3 mm	DIN 6535HB DIN 6535HE	H853	H855	H858
	32.00	271.5	356.5	60.0	DIN6535HE			H85832.0
	32.00	111.5	196.5	60.0	DIN6535HE	H85332.0		
	40.00	186.5	271.5	60.0	DIN6535HB		H85533.5	
	40.00	286.5	371.5	60.0	DIN6535HB			H85833.5
	40.00	116.5	201.5	60.0	DIN6535HB	H85333.5		
	40.00	196.5	291.5	70.0	DIN6535HB		H85535.0	
	40.00	301.5	396.5	70.0	DIN6535HB			H85835.0
	40.00	121.5	216.5	70.0	DIN6535HB	H85335.0		
	40.00	201.5	296.5	70.0	DIN6535HB		H85536.5	
	40.00	311.5	406.5	70.0	DIN6535HB			H85836.5
	40.00	125.5	221.5	70.0	DIN6535HB	H85336.5		
	40.00	211.5	306.5	70.0	DIN6535HB		H85538.0	
	40.00	326.5	421.5	70.0	DIN6535HB			H85838.0
	40.00	131.5	226.5	70.0	DIN6535HB	H85338.0		
	40.00	221.5	316.5	70.0	DIN6535HB		H85539.5	
	40.00	336.5	431.5	70.0	DIN6535HB			H85839.5
	40.00	136.5	231.5	70.0	DIN6535HB	H85339.5		
	40.00	226.5	325.6	70.0	DIN6535HB		H85541.0	
	40.00	351.5	451.5	70.0	DIN6535HB			H85841.0
	40.00	146.5	246.5	70.0	DIN6535HB	H85341.0		
	40.00	236.5	336.5	70.0	DIN6535HB		H85542.5	
	40.00	361.5	461.5	70.0	DIN6535HB			H85842.5
	40.00	151.6	251.6	70.0	DIN6535HB	H85342.5		

H860

- Hydra Screws
- Hydra tornillos
- Hydra parafusos
- Hydra vis

Four (4) screws and one (1) screwdriver are included with a drill body
 Cuatro (4) tornillos y un (1) destornillador incluidos con cada cuerpo
 Quatro (4) parafusos e uma (1) chave estão incluídos com o corpo da broca
 Quatre (4) vis et un (1) tournevis sont inclus avec le corps

H861

- Hydra Screwdriver
- Hydra destornillador
- Hydra chave
- Hydra tournevis

Four (4) screws and one (1) screwdriver are included with a drill body
 Cuatro (4) tornillos y un (1) destornillador incluidos con cada cuerpo
 Quatro (4) parafusos e uma (1) chave estão incluídos com o corpo da broca
 Quatre (4) vis et un (1) tournevis sont inclus avec le corps



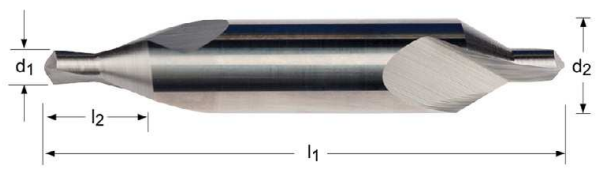
H860	H861
H860N7	H861N6
H860N6	H861N5
H860N5	H861N4
H860N4	H861N3
H860N3	H861N2
H860N2	H861N1
H860N1	H861N1

R200

- Centre Drill - 60°
- Brocas de Centrar - 60°
- Broca de Centrar - 60°
- Foret à centrer - 60°

R200 ■ 1.1 1.2 1.3 1.4 1.5 1.6 3.1 3.2 3.3 3.4 6.1 6.2 6.3 6.4 7.1 7.2 7.3 7.4

R200 **HM** **DIN 333A** **1XD** **118°**



d_1 Ø mm	d_1 decimal Inch	l_2 max/min mm	l_1 mm	d_2 Ø mm	R200
1.00	0.0394	1.7 - 1.3	31	3.15	R2001.0X3.15
1.25	0.0492	2.0 - 1.6	31	3.15	R2001.25X3.15
1.60	0.0630	2.6 - 2.0	35	4.00	R2001.6X4.0
2.00	0.0787	3.1 - 2.5	40	5.00	R2002.0X5.0
2.50	0.0984	3.8 - 3.1	45	6.30	R2002.5X6.3
3.15	0.1240	4.6 - 3.9	50	8.00	R2003.15X8.0
4.00	0.1575	5.9 - 5.0	55	10.00	R2004.0X10.0
5.00	0.1969	7.2 - 6.3	63	12.50	R2005.0X12.5

- ## R122
- Short Spotting Drill - 120°
 - Broca corta para centrados - 120°
 - Broca Extra Curta - 120°
 - Foret extra court de pointage NC - 120°

Four Facet Point upto 10,0mm
 Punta de cuatro caras hasta 10,0mm
 Ponta de 4 planos até 10.0mm
 Pointe à 4 facettes jusqu'au Ø 10,0 mm

- ## R123
- Short Spotting Drill - 90°
 - Broca corta para centrados - 90°
 - Broca Extra Curta - 90°
 - Foret extra court de pointage NC - 90°

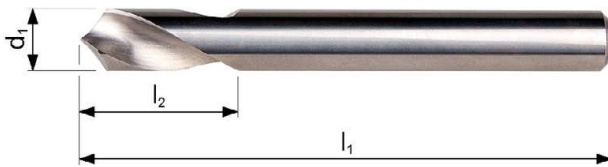
Four Facet Point upto 10,0mm
 Punta de cuatro caras hasta 10,0mm
 Ponta de 4 planos até 10.0mm
 Pointe à 4 facettes jusqu'au Ø 10,0 mm

- ## R6011
- Spotting Drill - 90°
 - Broca para centrados - 90°
 - Broca Extra Curta - 90°
 - Foret de pointage nc - 90°

TiAIN Coated
 Recibimiento TiAIN
 Revestimento TiAIN
 Revêtu de TiAIN

R122; R123; R6011	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.1	2.2	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		

R122	HM	DORMER	1XD	120°			N			
R123	HM	DORMER	1XD	90°			N			
R6011	HM	DORMER	1XD	90°	TiAIN	DIN 6535HA	N			



R122	R123	R6011
5.00 - 20.00	5.00 - 20.00	6.00 - 16.00

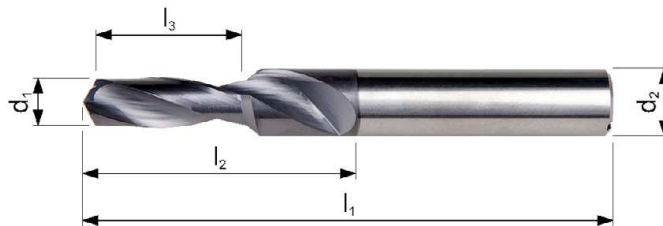
d ₁ Øh ₆ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	R122	R123	R6011
5.00	0.1969	16	62	R1225.0	R1235.0	
6.00	0.2362	16	50			R60116.0
6.00	0.2362	17	66	R1226.0	R1236.0	
8.00	0.3150	22	79	R1228.0	R1238.0	
10.00	0.3937	25	70			R601110.0
10.00	0.3937	26	89	R12210.0	R12310.0	
12.00	0.4724	30	102	R12212.0	R12312.0	
16.00	0.6299	26	90			R601116.0
16.00	0.6299	34	115	R12216.0	R12316.0	
20.00	0.7874	40	131	R12220.0	R12320.0	

R7131

- Chamfer drill for pre-tapping holes
- Broca con chafilán para agujero previo
- Broca de chanfro para furos de pré-rosca gem
- Foret étagé pour perçage avant taraudage

R7131	▪	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.1	6.2	6.3	6.4	7.1	7.2
		7.3	7.4																

R7131 **HM** **3XD**



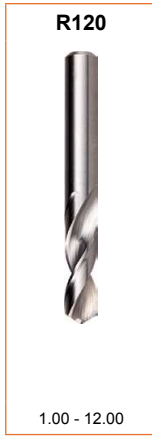
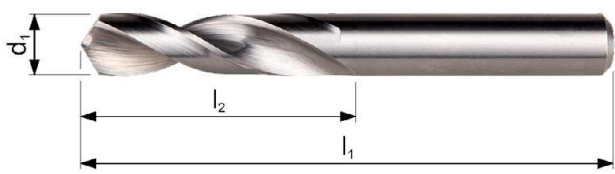
d_1 $\varnothing m_7$ mm	d_1 decimal Inch	l_3 mm	l_2 mm	l_1 mm	d_2 $\varnothing h_6$ mm	M	R7131
3.30	0.1299	11.4	20	66	6	M4	R71313.3
4.20	0.1654	13.6	24	66	6	M5	R71314.2
5.00	0.1969	16.5	28	79	8	M6	R71315.0
6.80	0.2677	21.0	34	89	10	M8	R71316.8
8.50	0.3346	25.5	47	102	12	M10	R71318.5
10.20	0.4016	30.0	55	107	14	M12	R713110.2
10.40	0.4094	30.0	55	107	14	M12	R713110.4

R120

- Stub Drill
- Broca extra corta
- Broca Extra Curta
- Foret extra-court

R120	▪	4.1	5.1	6.1	7.1	8.1	8.2															
	•	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	3.1	3.2	3.3	3.4	4.2	4.3	5.2	5.3	6.2	6.3	6.4	7.2	
		7.3	7.4																			

R120 **HM** **DIN 6539** **2.5XD** **120°**   **N**   



d_1 \varnothing_{h_7} mm	d_1 decimal Inch	l_2 mm	l_1 mm	R120
1.00	0.0394	6	26	R1201.0
1.10	0.0433	7	28	R1201.1
1.20	0.0472	8	30	R1201.2
1.30	0.0512	8	30	R1201.3
1.40	0.0551	9	32	R1201.4
1.50	0.0591	9	32	R1201.5
1.60	0.0630	10	34	R1201.6
1.70	0.0669	10	34	R1201.7
1.80	0.0709	11	36	R1201.8
1.90	0.0748	11	36	R1201.9
2.00	0.0787	12	38	R1202.0
2.10	0.0827	12	38	R1202.1
2.20	0.0866	13	40	R1202.2
2.30	0.0906	13	40	R1202.3
2.40	0.0945	14	43	R1202.4
2.50	0.0984	14	43	R1202.5
2.60	0.1024	14	43	R1202.6
2.70	0.1063	16	46	R1202.7
2.80	0.1102	16	46	R1202.8
2.90	0.1142	16	46	R1202.9
3.00	0.1181	16	46	R1203.0
3.10	0.1220	18	49	R1203.1
3.20	0.1260	18	49	R1203.2
3.30	0.1299	18	49	R1203.3
3.40	0.1339	20	52	R1203.4
3.50	0.1378	20	52	R1203.5
3.60	0.1417	20	52	R1203.6
3.70	0.1457	20	52	R1203.7
3.80	0.1496	22	55	R1203.8
3.90	0.1535	22	55	R1203.9
4.00	0.1575	22	55	R1204.0
4.10	0.1614	22	55	R1204.1
4.20	0.1654	22	55	R1204.2
4.30	0.1693	24	58	R1204.3
4.40	0.1732	24	58	R1204.4
4.50	0.1772	24	58	R1204.5
4.60	0.1811	24	58	R1204.6
4.70	0.1850	24	58	R1204.7

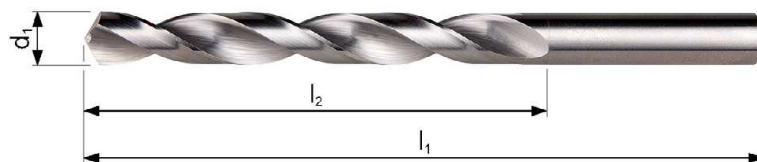
d₁ Øh₇ mm	d₁ decimal Inch	l₂ mm	l₁ mm	R120
4.80	0.1890	26	62	R1204.8
4.90	0.1929	26	62	R1204.9
5.00	0.1969	26	62	R1205.0
5.10	0.2008	26	62	R1205.1
5.20	0.2047	26	62	R1205.2
5.30	0.2087	26	62	R1205.3
5.40	0.2126	28	66	R1205.4
5.50	0.2165	28	66	R1205.5
5.60	0.2205	28	66	R1205.6
5.70	0.2244	28	66	R1205.7
5.80	0.2283	28	66	R1205.8
5.90	0.2323	28	66	R1205.9
6.00	0.2362	28	66	R1206.0
6.10	0.2402	31	70	R1206.1
6.20	0.2441	31	70	R1206.2
6.30	0.2480	31	70	R1206.3
6.40	0.2520	31	70	R1206.4
6.50	0.2559	31	70	R1206.5
6.60	0.2598	31	70	R1206.6
6.70	0.2638	31	70	R1206.7
6.80	0.2677	34	74	R1206.8
6.90	0.2717	34	74	R1206.9
7.00	0.2756	34	74	R1207.0
7.10	0.2795	34	74	R1207.1
7.20	0.2835	34	74	R1207.2
7.30	0.2874	34	74	R1207.3
7.40	0.2913	34	74	R1207.4
7.50	0.2953	34	74	R1207.5
7.60	0.2992	37	79	R1207.6
7.70	0.3031	37	79	R1207.7
7.80	0.3071	37	79	R1207.8
7.90	0.3110	37	79	R1207.9
8.00	0.3150	37	79	R1208.0
8.10	0.3189	37	79	R1208.1
8.20	0.3228	37	79	R1208.2
8.30	0.3268	37	79	R1208.3
8.40	0.3307	37	79	R1208.4
8.50	0.3346	37	79	R1208.5
8.60	0.3386	40	84	R1208.6
8.70	0.3425	40	84	R1208.7
8.80	0.3465	40	84	R1208.8
8.90	0.3504	40	84	R1208.9
9.00	0.3543	40	84	R1209.0
9.10	0.3583	40	84	R1209.1
9.20	0.3622	40	84	R1209.2
9.30	0.3661	40	84	R1209.3
9.40	0.3701	40	84	R1209.4
9.50	0.3740	40	84	R1209.5
9.60	0.3780	43	89	R1209.6
9.70	0.3819	43	89	R1209.7
9.80	0.3858	43	89	R1209.8
9.90	0.3898	43	89	R1209.9
10.00	0.3937	43	89	R12010.0
10.20	0.4016	43	89	R12010.2
10.50	0.4134	43	89	R12010.5
11.00	0.4331	47	95	R12011.0
11.50	0.4528	47	95	R12011.5
12.00	0.4724	51	102	R12012.0

R100

- Jobber Drill
- Broca , serie corta
- Broca Curta
- Foret court

R100	▪	6.2	6.3	8.1	8.2														
	•	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	3.1	3.2	3.3	3.4	7.1	7.2	7.3	7.4		

R100 **HM** **DIN 338** **4XD** **120°**   **N**   



R100



1.00 - 14.00

d_1 \varnothing_{h_7} mm	d_1 decimal inch	l_2 mm	l_1 mm	R100
1.00	0.0394	12	34	R1001.0
1.10	0.0433	14	36	R1001.1
1.20	0.0472	16	38	R1001.2
1.30	0.0512	16	38	R1001.3
1.40	0.0551	18	40	R1001.4
1.50	0.0591	18	40	R1001.5
1.60	0.0630	20	43	R1001.6
1.70	0.0669	20	43	R1001.7
1.80	0.0709	22	46	R1001.8
1.90	0.0748	22	46	R1001.9
2.00	0.0787	24	49	R1002.0
2.10	0.0827	24	49	R1002.1
2.20	0.0866	27	53	R1002.2
2.30	0.0906	27	53	R1002.3
2.40	0.0945	30	57	R1002.4
2.50	0.0984	30	57	R1002.5
2.60	0.1024	30	57	R1002.6
2.70	0.1063	33	61	R1002.7
2.80	0.1102	33	61	R1002.8
2.90	0.1142	33	61	R1002.9
3.00	0.1181	33	61	R1003.0
3.10	0.1220	36	65	R1003.1
3.20	0.1260	36	65	R1003.2
3.30	0.1299	36	65	R1003.3
3.40	0.1339	39	70	R1003.4
3.50	0.1378	39	70	R1003.5
3.60	0.1417	39	70	R1003.6
3.70	0.1457	39	70	R1003.7
3.80	0.1496	43	75	R1003.8
3.90	0.1535	43	75	R1003.9
4.00	0.1575	43	75	R1004.0
4.10	0.1614	43	75	R1004.1
4.20	0.1654	43	75	R1004.2
4.30	0.1693	47	80	R1004.3
4.40	0.1732	47	80	R1004.4
4.50	0.1772	47	80	R1004.5
4.60	0.1811	47	80	R1004.6
4.70	0.1850	47	80	R1004.7

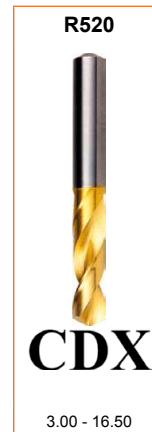
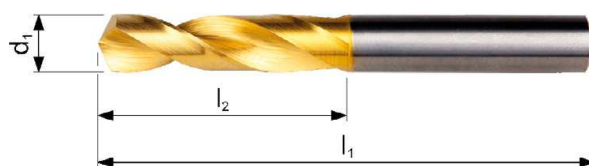
d₁ Øh₇ mm	d₁ decimal Inch	l₂ mm	l₁ mm	R100
4.80	0.1890	52	86	R1004.8
4.90	0.1929	52	86	R1004.9
5.00	0.1969	52	86	R1005.0
5.10	0.2008	52	86	R1005.1
5.20	0.2047	52	86	R1005.2
5.30	0.2087	52	86	R1005.3
5.40	0.2126	57	93	R1005.4
5.50	0.2165	57	93	R1005.5
5.60	0.2205	57	93	R1005.6
5.70	0.2244	57	93	R1005.7
5.80	0.2283	57	93	R1005.8
5.90	0.2323	57	93	R1005.9
6.00	0.2362	57	93	R1006.0
6.10	0.2402	63	101	R1006.1
6.20	0.2441	63	101	R1006.2
6.30	0.2480	63	101	R1006.3
6.40	0.2520	63	101	R1006.4
6.50	0.2559	63	101	R1006.5
6.60	0.2598	63	101	R1006.6
6.70	0.2638	63	101	R1006.7
6.80	0.2677	69	109	R1006.8
6.90	0.2717	69	109	R1006.9
7.00	0.2756	69	109	R1007.0
7.10	0.2795	69	109	R1007.1
7.20	0.2835	69	109	R1007.2
7.30	0.2874	69	109	R1007.3
7.40	0.2913	69	109	R1007.4
7.50	0.2953	69	109	R1007.5
7.60	0.2992	75	117	R1007.6
7.70	0.3031	75	117	R1007.7
7.80	0.3071	75	117	R1007.8
7.90	0.3110	75	117	R1007.9
8.00	0.3150	75	117	R1008.0
8.10	0.3189	75	117	R1008.1
8.20	0.3228	75	117	R1008.2
8.30	0.3268	75	117	R1008.3
8.40	0.3307	75	117	R1008.4
8.50	0.3346	75	117	R1008.5
8.60	0.3386	81	125	R1008.6
8.70	0.3425	81	125	R1008.7
8.80	0.3465	81	125	R1008.8
8.90	0.3504	81	125	R1008.9
9.00	0.3543	81	125	R1009.0
9.10	0.3583	81	125	R1009.1
9.20	0.3622	81	125	R1009.2
9.30	0.3661	81	125	R1009.3
9.40	0.3701	81	125	R1009.4
9.50	0.3740	81	125	R1009.5
9.60	0.3780	87	133	R1009.6
9.70	0.3819	87	133	R1009.7
9.80	0.3858	87	133	R1009.8
9.90	0.3898	87	133	R1009.9
10.00	0.3937	87	133	R10010.0
10.20	0.4016	87	133	R10010.2
10.50	0.4134	87	133	R10010.5
11.00	0.4331	94	142	R10011.0
11.50	0.4528	94	142	R10011.5
12.00	0.4724	101	151	R10012.0
13.00	0.5118	101	151	R10013.0
14.00	0.5512	108	160	R10014.0

R520

- CDX Stub Drill
- Broca CDX , serie extra corta
- Broca CDX Extra Curta
- Foret CDX extra-court

R520	▪	1.1	1.2	1.3	1.4	1.5	1.6	3.1	3.2	3.3	3.4	5.1	7.1	7.2	7.3	7.4	8.1	8.2
	•	1.7	1.8	2.1	4.1	4.2	4.3											

R520	HM	DIN 6539	2.5XD	130°	TiN		N			
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d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	R520
1/8	3.00	0.1181	16	46	R5203.0
	3.10	0.1220	18	49	R5203.1
	3.18	0.1252	18	49	R5201/8
	3.20	0.1260	18	49	R5203.2
	3.30	0.1299	18	49	R5203.3
	3.40	0.1339	20	52	R5203.4
	3.50	0.1378	20	52	R5203.5
	3.60	0.1417	20	52	R5203.6
	3.70	0.1457	20	52	R5203.7
	3.80	0.1496	22	55	R5203.8
	3.90	0.1535	22	55	R5203.9
	4.00	0.1575	22	55	R5204.0
	4.10	0.1614	22	55	R5204.1
	4.20	0.1654	22	55	R5204.2
	4.30	0.1693	24	58	R5204.3
	4.40	0.1732	24	58	R5204.4
	4.50	0.1772	24	58	R5204.5
	4.60	0.1811	24	58	R5204.6
4.70	0.1850	24	58	R5204.7	
4.80	0.1890	26	62	R5204.8	
4.90	0.1929	26	62	R5204.9	
5.00	0.1969	26	62	R5205.0	
5.10	0.2008	26	62	R5205.1	
5.20	0.2047	26	62	R5205.2	
5.30	0.2087	26	62	R5205.3	
5.40	0.2126	28	66	R5205.4	
5.50	0.2165	28	66	R5205.5	
5.60	0.2205	28	66	R5205.6	
5.70	0.2244	28	66	R5205.7	
5.80	0.2283	28	66	R5205.8	
5.90	0.2323	28	66	R5205.9	
6.00	0.2362	28	66	R5206.0	
6.10	0.2402	31	70	R5206.1	
6.20	0.2441	31	70	R5206.2	
6.30	0.2480	31	70	R5206.3	
1/4	6.35	0.2500	31	70	R5201/4
	6.40	0.2520	31	70	R5206.4
	6.50	0.2559	31	70	R5206.5

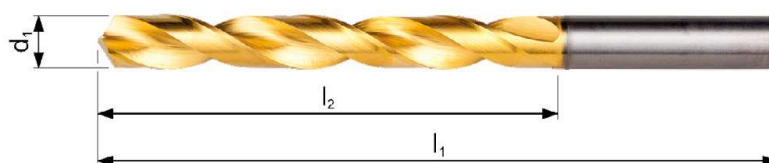
d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	R520
	6.60	0.2598	31	70	R5206.6
	6.70	0.2638	31	70	R5206.7
	6.80	0.2677	34	74	R5206.8
	6.90	0.2717	34	74	R5206.9
	7.00	0.2756	34	74	R5207.0
	7.10	0.2795	34	74	R5207.1
	7.20	0.2835	34	74	R5207.2
	7.30	0.2874	34	74	R5207.3
	7.40	0.2913	34	74	R5207.4
	7.50	0.2953	34	74	R5207.5
	7.60	0.2992	37	79	R5207.6
	7.70	0.3031	37	79	R5207.7
	7.80	0.3071	37	79	R5207.8
	7.90	0.3110	37	79	R5207.9
5/16	7.94	0.3126	37	79	R5205/16
	8.00	0.3150	37	79	R5208.0
	8.10	0.3189	37	79	R5208.1
	8.20	0.3228	37	79	R5208.2
	8.30	0.3268	37	79	R5208.3
	8.40	0.3307	37	79	R5208.4
	8.50	0.3346	37	79	R5208.5
	8.60	0.3386	40	84	R5208.6
	8.70	0.3425	40	84	R5208.7
	8.80	0.3465	40	84	R5208.8
	8.90	0.3504	40	84	R5208.9
	9.00	0.3543	40	84	R5209.0
	9.10	0.3583	40	84	R5209.1
	9.20	0.3622	40	84	R5209.2
	9.30	0.3661	40	84	R5209.3
	9.40	0.3701	40	84	R5209.4
	9.50	0.3740	40	84	R5209.5
3/8	9.52	0.3748	43	89	R5203/8
	9.60	0.3780	43	89	R5209.6
	9.70	0.3819	43	89	R5209.7
	9.80	0.3858	43	89	R5209.8
	9.90	0.3898	43	89	R5209.9
	10.00	0.3937	43	89	R52010.0
	10.10	0.3976	43	89	R52010.1
	10.20	0.4016	43	89	R52010.2
	10.30	0.4055	43	89	R52010.3
	10.40	0.4094	43	89	R52010.4
	10.50	0.4134	43	89	R52010.5
	11.00	0.4331	47	95	R52011.0
7/16	11.11	0.4374	47	95	R5207/16
	11.20	0.4409	47	95	R52011.2
	11.50	0.4528	47	95	R52011.5
	12.00	0.4724	51	102	R52012.0
	12.50	0.4921	51	102	R52012.5
1/2	12.70	0.5000	51	102	R5201/2
	13.00	0.5118	51	102	R52013.0
	13.50	0.5315	54	107	R52013.5
	14.00	0.5512	54	107	R52014.0
	14.20	0.5591	56	111	R52014.2
	14.25	0.5610	56	111	R52014.25
	14.50	0.5709	56	111	R52014.5
	15.00	0.5906	56	111	R52015.0
	15.10	0.5945	58	115	R52015.1
5/8	15.88	0.6252	58	115	R5205/8
	16.00	0.6299	58	115	R52016.0
	16.50	0.6496	60	119	R52016.5

R510

- CDX Jobber Drill
- Broca CDX , serie corta
- Broca CDX Curta
- Foret CDX court

R510	▪	1.1	1.2	1.3	1.4	1.5	1.6	3.1	3.2	3.3	3.4	7.1	7.2	7.3	7.4	8.1	8.2
	•	1.7	1.8	2.1	4.1	5.1											

R510 **HM** **DIN 338** **4XD** **130°** **TiN** **N**



d_1 \varnothing_{h_7} Inch	d_1 \varnothing_{h_7} mm	d_1 decimal Inch	l_2 mm	l_1 mm	R510
1/8	3.00	0.1181	33	61	R5103.0
	3.18	0.1252	36	65	R5101/8
	3.20	0.1260	36	65	R5103.2
	3.30	0.1299	36	65	R5103.3
	3.40	0.1339	39	70	R5103.4
	3.50	0.1378	39	70	R5103.5
	3.70	0.1457	39	70	R5103.7
	3.90	0.1535	43	75	R5103.9
	4.00	0.1575	43	75	R5104.0
	4.10	0.1614	43	75	R5104.1
	4.20	0.1654	43	75	R5104.2
	4.30	0.1693	47	80	R5104.3
	4.50	0.1772	47	80	R5104.5
	4.60	0.1811	47	80	R5104.6
3/16	4.70	0.1850	47	80	R5104.7
	4.76	0.1874	52	86	R5103/16
	4.90	0.1929	52	86	R5104.9
	5.00	0.1969	52	86	R5105.0
	5.10	0.2008	52	86	R5105.1
	5.50	0.2165	57	93	R5105.5
	5.60	0.2205	57	93	R5105.6
	5.70	0.2244	57	93	R5105.7
	6.00	0.2362	57	93	R5106.0
	1/4	6.35	0.2500	63	101
6.50		0.2559	63	101	R5106.5
6.60		0.2598	63	101	R5106.6
6.80		0.2677	69	109	R5106.8
6.90		0.2717	69	109	R5106.9
7.00		0.2756	69	109	R5107.0
7.30		0.2874	69	109	R5107.3
7.40		0.2913	69	109	R5107.4
7.50		0.2953	69	109	R5107.5
7.80		0.3071	75	117	R5107.8
7.90		0.3110	75	117	R5107.9
5/16		7.94	0.3126	75	117
	8.00	0.3150	75	117	R5108.0

d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	R510
	8.50	0.3346	75	117	R5108.5
	8.70	0.3425	81	125	R5108.7
	8.80	0.3465	81	125	R5108.8
	9.00	0.3543	81	125	R5109.0
	9.20	0.3622	81	125	R5109.2
	9.30	0.3661	81	125	R5109.3
	9.40	0.3701	81	125	R5109.4
	9.50	0.3740	81	125	R5109.5
3/8	9.52	0.3748	87	133	R5103/8
	9.90	0.3898	87	133	R5109.9
	10.00	0.3937	87	133	R51010.0
	10.20	0.4016	87	133	R51010.2
	10.30	0.4055	87	133	R51010.3
	10.40	0.4094	87	133	R51010.4
	10.50	0.4134	87	133	R51010.5
	10.80	0.4252	94	142	R51010.8
	11.00	0.4331	94	142	R51011.0
7/16	11.11	0.4374	94	142	R5107/16
	11.20	0.4409	94	142	R51011.2
	11.50	0.4528	94	142	R51011.5
	12.00	0.4724	101	151	R51012.0
1/2	12.70	0.5000	101	151	R5101/2
	13.00	0.5118	101	151	R51013.0
	14.00	0.5512	108	160	R51014.0
	14.25	0.5610	114	169	R51014.25

R458

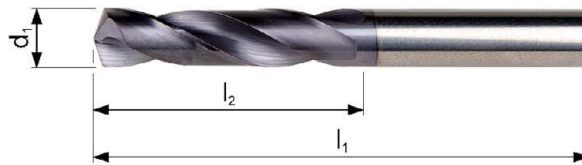
- Force X Drill 3XD
- Broca corta - Force-X 3XD
- Broca Force-X curta 3XD
- Foret Force-X 3XD

R457

- Force X Drill Oil Feed 3XD
- Broca - Force-X - Refrigeración interna 3XD
- Broca Force-X com Lubrificação interna, 3XD
- Foret Force-X - à trous d'huile 3XD

R458	▪	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.1	6.2	6.3	7.1	7.2
		7.3	7.4																		
	•	2.4	4.1	4.2	4.3	6.4															
R457	▪	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	6.1	6.2
		6.3	6.4	7.1	7.2	7.3	7.4														

R458	HM	DIN 6537 K	3XD	140°	TiAlN	DIN 6535HA	CTW			
R457	HM	DIN 6537 K	3XD	140°	TiAlN	DIN 6535HA	CTW			



d_1 Ø "/Nr.	d_1 Ø _{m7} mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø _{h6} mm	R458	R457
	3.00	0.1181	20	62	36	6	R4583.0	R4573.0
	3.10	0.1220	20	62	36	6	R4583.1	R4573.1
1/8	3.18	0.1252	20	62	36	6	R4581/8	R4571/8
	3.20	0.1260	20	62	36	6	R4583.2	R4573.2
30	3.26	0.1283	20	62	36	6	R458N30	R457N30
	3.30	0.1299	20	62	36	6	R4583.3	R4573.3
	3.40	0.1339	20	62	36	6	R4583.4	R4573.4
29	3.45	0.1358	20	62	36	6	R458N29	R457N29
	3.50	0.1378	20	62	36	6	R4583.5	R4573.5
28	3.57	0.1406	20	62	36	6	R458N28	R457N28
9/64	3.57	0.1406	20	62	36	6	R4589/64	R4579/64
	3.60	0.1417	20	62	36	6	R4583.6	R4573.6
27	3.66	0.1441	20	62	36	6	R458N27	R457N27
	3.70	0.1457	20	62	36	6	R4583.7	R4573.7
	3.73	0.1469	24	66	36	6	R4583.73	
26	3.73	0.1469	24	66	36	6	R458N26	R457N26
	3.80	0.1496	24	66	36	6	R4583.8	R4573.8
25	3.80	0.1496	24	66	36	6	R458N25	R457N25
24	3.86	0.1520	24	66	36	6	R458N24	R457N24
	3.90	0.1535	24	66	36	6	R4583.9	R4573.9
23	3.91	0.1539	24	66	36	6	R458N23	R457N23
5/32	3.97	0.1563	24	66	36	6	R4585/32	R4575/32
22	3.99	0.1571	24	66	36	6	R458N22	R457N22
	4.00	0.1575	24	66	36	6	R4584.0	R4574.0

d ₁ Ø "/Nr.	d ₁ Øm ₇ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Øh ₆ mm	R458	R457
21	4.04	0.1591	24	66	36	6	R458N21	R457N21
	4.05	0.1594	24	66	36	6		R4574.05
20	4.09	0.1610	24	66	36	6	R458N20	R457N20
	4.10	0.1614	24	66	36	6	R4584.1	R4574.1
	4.20	0.1654	24	66	36	6	R4584.2	R4574.2
19	4.22	0.1661	24	66	36	6	R458N19	R457N19
	4.30	0.1693	24	66	36	6	R4584.3	R4574.3
18	4.31	0.1697	24	66	36	6	R458N18	R457N18
11/64	4.37	0.1720	24	66	36	6	R45811/64	R45711/64
17	4.39	0.1728	24	66	36	6	R458N17	R457N17
	4.40	0.1732	24	66	36	6	R4584.4	R4574.4
16	4.50	0.1772	24	66	36	6	R458N16	R457N16
	4.50	0.1772	24	66	36	6	R4584.5	R4574.5
15	4.57	0.1799	24	66	36	6	R458N15	R457N15
	4.60	0.1811	24	66	36	6	R4584.6	R4574.6
14	4.62	0.1819	24	66	36	6	R458N14	R457N14
	4.70	0.1850	24	66	36	6	R4584.7	R4574.7
13	4.70	0.1850	24	66	36	6	R458N13	R457N13
3/16	4.76	0.1874	28	66	36	6	R4583/16	R4573/16
	4.80	0.1890	28	66	36	6	R4584.8	R4574.8
12	4.80	0.1890	28	66	36	6	R458N12	R457N12
11	4.85	0.1909	28	66	36	6	R458N11	R457N11
	4.90	0.1929	28	66	36	6	R4584.9	R4574.9
10	4.92	0.1937	28	66	36	6	R458N10	R457N10
9	4.98	0.1961	28	66	36	6	R458N9	R457N9
	5.00	0.1969	28	66	36	6	R4585.0	R4575.0
	5.05	0.1988	28	66	36	6		R4575.05
8	5.06	0.1992	28	66	36	6	R458N8	R457N8
	5.10	0.2008	28	66	36	6	R4585.1	R4575.1
7	5.11	0.2012	28	66	36	6	R458N7	R457N7
13/64	5.16	0.2031	28	66	36	6	R45813/64	R45713/64
6	5.18	0.2039	28	66	36	6	R458N6	R457N6
	5.20	0.2047	28	66	36	6	R4585.2	R4575.2
5	5.22	0.2055	28	66	36	6	R458N5	R457N5
	5.30	0.2087	28	66	36	6	R4585.3	R4575.3
4	5.31	0.2091	28	66	36	6	R458N4	R457N4
	5.40	0.2126	28	66	36	6	R4585.4	R4575.4
3	5.41	0.2130	28	66	36	6	R458N3	R457N3
	5.50	0.2165	28	66	36	6	R4585.5	R4575.5
7/32	5.56	0.2189	28	66	36	6	R4587/32	R4577/32
	5.60	0.2205	28	66	36	6	R4585.6	R4575.6
2	5.61	0.2209	28	66	36	6	R458N2	R457N2
	5.70	0.2244	28	66	36	6	R4585.7	R4575.7
1	5.79	0.2280	28	66	36	6	R458N1	R457N1
	5.80	0.2283	28	66	36	6	R4585.8	R4575.8
	5.90	0.2323	28	66	36	6	R4585.9	R4575.9
A	5.94	0.2339	28	66	36	6	R458A	R457A
15/64	5.95	0.2343	28	66	36	6	R45815/64	R45715/64
	6.00	0.2362	28	66	36	6	R4586.0	R4576.0
B	6.03	0.2374	34	79	36	8	R458B	R457B
	6.05	0.2382	34	79	36	8		R4576.05
	6.10	0.2402	34	79	36	8	R4586.1	R4576.1
C	6.15	0.2421	34	79	36	8	R458C	R457C
	6.20	0.2441	34	79	36	8	R4586.2	R4576.2
D	6.25	0.2461	34	79	36	8	R458D	R457D
	6.30	0.2480	34	79	36	8	R4586.3	R4576.3
1/4	6.35	0.2500	34	79	36	8	R4581/4	R4571/4
E	6.35	0.2500	34	79	36	8	R458E	R457E
	6.40	0.2520	34	79	36	8	R4586.4	R4576.4
	6.50	0.2559	34	79	36	8	R4586.5	R4576.5
F	6.53	0.2571	34	79	36	8	R458F	R457F
	6.60	0.2598	34	79	36	8	R4586.6	R4576.6
G	6.63	0.2610	34	79	36	8	R458G	R457G
	6.70	0.2638	34	79	36	8	R4586.7	R4576.7
17/64	6.75	0.2657	34	79	36	8	R45817/64	R45717/64
H	6.76	0.2661	34	79	36	8	R458H	R457H
	6.80	0.2677	34	79	36	8	R4586.8	R4576.8
	6.90	0.2717	34	79	36	8	R4586.9	R4576.9
I	6.91	0.2720	34	79	36	8	R458I	R457I
	7.00	0.2756	34	79	36	8	R4587.0	R4577.0

d ₁ Ø "/Nr.	d ₁ Øm ₇ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Øh ₅ mm	R458	R457
J	7.04	0.2772	41	79	36	8	R458J	R457J
	7.10	0.2795	41	79	36	8	R4587.1	R4577.1
K	7.14	0.2811	41	79	36	8	R458K	R457K
9/32	7.14	0.2811	41	79	36	8	R4589/32	R4579/32
	7.20	0.2835	41	79	36	8	R4587.2	R4577.2
	7.30	0.2874	41	79	36	8	R4587.3	R4577.3
L	7.37	0.2902	41	79	36	8	R458L	R457L
	7.40	0.2913	41	79	36	8	R4587.4	R4577.4
M	7.49	0.2949	41	79	36	8	R458M	R457M
	7.50	0.2953	41	79	36	8	R4587.5	R4577.5
19/64	7.54	0.2969	41	79	36	8	R45819/64	R45719/64
	7.60	0.2992	41	79	36	8	R4587.6	R4577.6
N	7.67	0.3020	41	79	36	8	R458N	R457N
	7.70	0.3031	41	79	36	8	R4587.7	R4577.7
	7.80	0.3071	41	79	36	8	R4587.8	R4577.8
	7.90	0.3110	41	79	36	8	R4587.9	R4577.9
5/16	7.94	0.3126	41	79	36	8	R4585/16	R4575/16
	8.00	0.3150	41	79	36	8	R4588.0	R4578.0
O	8.03	0.3161	47	89	40	10	R458O	R457O
	8.05	0.3169	47	89	40	10		R4578.05
	8.10	0.3189	47	89	40	10	R4588.1	R4578.1
	8.20	0.3228	47	89	40	10	R4588.2	R4578.2
P	8.20	0.3228	47	89	40	10	R458P	R457P
	8.30	0.3268	47	89	40	10	R4588.3	R4578.3
21/64	8.33	0.3280	47	89	40	10	R45821/64	R45721/64
	8.40	0.3307	47	89	40	10	R4588.4	R4578.4
Q	8.43	0.3319	47	89	40	10	R458Q	R457Q
	8.50	0.3346	47	89	40	10	R4588.5	R4578.5
	8.60	0.3386	47	89	40	10	R4588.6	R4578.6
R	8.61	0.3390	47	89	40	10	R458R	R457R
	8.70	0.3425	47	89	40	10	R4588.7	R4578.7
11/32	8.73	0.3437	47	89	40	10	R45811/32	R45711/32
	8.80	0.3465	47	89	40	10	R4588.8	R4578.8
S	8.84	0.3480	47	89	40	10	R458S	R457S
	8.90	0.3504	47	89	40	10	R4588.9	R4578.9
	9.00	0.3543	47	89	40	10	R4589.0	R4579.0
T	9.09	0.3579	47	89	40	10	R458T	R457T
	9.10	0.3583	47	89	40	10	R4589.1	R4579.1
23/64	9.13	0.3594	47	89	40	10	R45823/64	R45723/64
	9.20	0.3622	47	89	40	10	R4589.2	R4579.2
	9.30	0.3661	47	89	40	10	R4589.3	R4579.3
U	9.35	0.3681	47	89	40	10	R458U	R457U
	9.40	0.3701	47	89	40	10	R4589.4	R4579.4
	9.50	0.3740	47	89	40	10	R4589.5	R4579.5
3/8	9.52	0.3748	47	89	40	10	R4583/8	R4573/8
V	9.58	0.3772	47	89	40	10	R458V	R457V
	9.60	0.3780	47	89	40	10	R4589.6	R4579.6
	9.70	0.3819	47	89	40	10	R4589.7	R4579.7
	9.80	0.3858	47	89	40	10	R4589.8	R4579.8
W	9.80	0.3858	47	89	40	10	R458W	R457W
	9.90	0.3898	47	89	40	10	R4589.9	R4579.9
25/64	9.92	0.3906	47	89	40	10	R45825/64	R45725/64
	10.00	0.3937	47	89	40	10	R45810.0	R45710.0
	10.05	0.3957	55	102	45	12		R45710.05
X	10.08	0.3969	55	102	45	12	R458X	R457X
	10.10	0.3976	55	102	45	12	R45810.1	R45710.1
	10.20	0.4016	55	102	45	12	R45810.2	R45710.2
Y	10.26	0.4039	55	102	45	12	R458Y	R457Y
	10.30	0.4055	55	102	45	12	R45810.3	R45710.3
13/32	10.32	0.4063	55	102	45	12	R45813/32	R45713/32
	10.40	0.4094	55	102	45	12	R45810.4	R45710.4
Z	10.49	0.4130	55	102	45	12	R458Z	R457Z
	10.50	0.4134	55	102	45	12	R45810.5	R45710.5
	10.60	0.4173	55	102	45	12	R45810.6	R45710.6
	10.70	0.4213	55	102	45	12	R45810.7	
27/64	10.72	0.4220	55	102	45	12	R45827/64	R45727/64
	10.80	0.4252	55	102	45	12	R45810.8	R45710.8
	10.90	0.4291	55	102	45	12	R45810.9	
	11.00	0.4331	55	102	45	12	R45811.0	R45711.0
	11.10	0.4370	55	102	45	12	R45811.1	

d_1 Ø "/Nr.	d_1 Ø m_7 mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø h_6 mm	R458	R457
7/16	11.11	0.4374	55	102	45	12	R4587/16	R4577/16
	11.20	0.4409	55	102	45	12	R45811.2	R45711.2
	11.30	0.4449	55	102	45	12	R45811.3	R45711.3
	11.40	0.4488	55	102	45	12	R45811.4	R45711.4
29/64	11.50	0.4528	55	102	45	12	R45811.5	R45711.5
	11.51	0.4531	55	102	45	12	R45829/64	R45729/64
	11.60	0.4567	55	102	45	12	R45811.6	R45711.6
	11.70	0.4606	55	102	45	12	R45811.7	
	11.80	0.4646	55	102	45	12	R45811.8	R45711.8
15/32	11.90	0.4685	55	102	45	12	R45811.9	
	11.91	0.4689	55	102	45	12	R45815/32	R45715/32
	12.00	0.4724	55	102	45	12	R45812.0	R45712.0
	12.05	0.4744	60	107	45	14		R45712.05
31/64	12.10	0.4764	60	107	45	14	R45812.1	R45712.1
	12.20	0.4803	60	107	45	14	R45812.2	R45712.2
	12.30	0.4843	60	107	45	14	R45831/64	R45731/64
	12.50	0.4921	60	107	45	14	R45812.5	R45712.5
1/2	12.70	0.5000	60	107	45	14	R45812.7	R45712.7
	12.70	0.5000	60	107	45	14	R4581/2	R4571/2
	12.80	0.5039	60	107	45	14	R45812.8	R45712.8
33/64	13.00	0.5118	60	107	45	14	R45813.0	R45713.0
	13.10	0.5157	60	107	45	14	R45833/64	R45733/64
	13.30	0.5236	60	107	45	14	R45813.3	R45713.3
17/32	13.49	0.5311	60	107	45	14	R45817/32	R45717/32
	13.50	0.5315	60	107	45	14	R45813.5	R45713.5
	13.80	0.5433	60	107	45	14	R45813.8	R45713.8
35/64	13.89	0.5469	60	107	45	14	R45835/64	R45735/64
	14.00	0.5512	60	107	45	14	R45814.0	R45714.0
	14.25	0.5610	65	115	48	16	R45814.25	R45714.25
9/16	14.29	0.5626	65	115	48	16	R4589/16	R4579/16
	14.50	0.5709	65	115	48	16	R45814.5	R45714.5
37/64	14.68	0.5780	65	115	48	16	R45837/64	R45737/64
	14.80	0.5827	65	115	48	16	R45814.8	R45714.8
	15.00	0.5906	65	115	48	16	R45815.0	R45715.0
19/32	15.08	0.5937	65	115	48	16	R45819/32	R45719/32
	15.10	0.5945	65	115	48	16	R45815.1	R45715.1
	15.30	0.6024	65	115	48	16	R45815.3	R45715.3
39/64	15.48	0.6094	65	115	48	16	R45839/64	R45739/64
	15.50	0.6102	65	115	48	16	R45815.5	R45715.5
	15.80	0.6220	65	115	48	16	R45815.8	R45715.8
5/8	15.88	0.6252	65	115	48	16	R4585/8	R4575/8
	16.00	0.6299	65	115	48	16	R45816.0	R45716.0
41/64	16.27	0.6406	73	123	48	18	R45841/64	R45741/64
	16.50	0.6496	73	123	48	18	R45816.5	R45716.5
21/32	16.67	0.6563	73	123	48	18	R45821/32	R45721/32
	17.00	0.6693	73	123	48	18	R45817.0	R45717.0
43/64	17.07	0.6720	73	123	48	18	R45843/64	R45743/64
11/16	17.46	0.6874	73	123	48	18	R45811/16	R45711/16
	17.50	0.6890	73	123	48	18	R45817.5	R45717.5
	17.80	0.7008	73	123	48	18	R45817.8	
45/64	17.86	0.7031	73	123	48	18	R45845/64	R45745/64
	18.00	0.7087	73	123	48	18	R45818.0	R45718.0
	18.26	0.7189	79	131	50	20	R45823/32	R45723/32
23/32	18.50	0.7283	79	131	50	20	R45818.5	R45718.5
	18.65	0.7343	79	131	50	20	R45847/64	R45747/64
47/64	18.80	0.7402	79	131	50	20		R45718.8
	19.00	0.7480	79	131	50	20	R45819.0	R45719.0
	19.05	0.7500	79	131	50	20	R4583/4	R4573/4
	19.50	0.7677	79	131	50	20	R45819.5	R45719.5
3/4	19.80	0.7795	79	131	50	20	R45819.8	R45719.8
	20.00	0.7874	79	131	50	20	R45820.0	R45720.0

R454

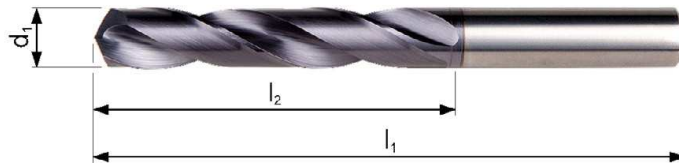
- Force X Drill 5XD
- Broca larga - Force-X 5XD
- Broca Force-X Longa 5XD
- Foret série longue Force-X 5XD

R453

- Force X Drill Oil Feed 5XD
- Broca - Force-X - Refrigeración interna 5XD
- Broca Force-X com Lubrificação interna, 5XD
- Foret Force-X - à trous d'huile 5XD

R454	▪	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.1	2.2	2.3	3.1	3.2	3.3	3.4	6.1	6.2	6.3	7.1	7.2
		7.3	7.4																		
	•	2.4	4.1	4.2	4.3	6.4															
R453	▪	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.1	2.2	3.1	3.2	3.3	3.4	4.1	4.2	4.3	6.1	6.2	6.3
		6.4	7.1	7.2	7.3	7.4															
	•	2.3	2.4																		

R454	HM	DIN 6537 L	5XD	140°	TiAIN	DIN 6535HA	CTW			
R453	HM	DIN 6537 L	5XD	140°	TiAIN	DIN 6535HA	CTW			



d ₁ Ø Inch	d ₁ Ø _{m7} mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Ø _{h6} mm	R454	R453
	3.00	0.1181	28	66	36	6	R4543.0	R4533.0
	3.10	0.1220	28	66	36	6	R4543.1	R4533.1
1/8	3.18	0.1252	28	66	36	6	R4541/8	R4531/8
	3.20	0.1260	28	66	36	6	R4543.2	R4533.2
30	3.26	0.1283	28	66	36	6	R454N30	R453N30
	3.30	0.1299	28	66	36	6	R4543.3	R4533.3
	3.40	0.1339	28	66	36	6	R4543.4	R4533.4
29	3.45	0.1358	28	66	36	6	R454N29	R453N29
	3.50	0.1378	28	66	36	6	R4543.5	R4533.5
28	3.57	0.1406	28	66	36	6	R454N28	R453N28
9/64	3.57	0.1406	28	66	36	6	R4549/64	R4539/64
	3.60	0.1417	28	66	36	6	R4543.6	R4533.6
27	3.66	0.1441	28	66	36	6	R454N27	R453N27
	3.70	0.1457	28	66	36	6	R4543.7	R4533.7
26	3.73	0.1469	36	74	36	6	R454N26	R453N26
	3.80	0.1496	36	74	36	6	R4543.8	R4533.8
25	3.80	0.1496	36	74	36	6	R454N25	R453N25
24	3.86	0.1520	36	74	36	6	R454N24	R453N24
	3.90	0.1535	36	74	36	6	R4543.9	R4533.9
23	3.91	0.1539	36	74	36	6	R454N23	R453N23
5/32	3.97	0.1563	36	74	36	6	R4545/32	R4535/32
22	3.99	0.1571	36	74	36	6	R454N22	R453N22

d_1 Ø Inch	d_1 Ø _{m7} mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø _{h6} mm	R454	R453
	4.00	0.1575	36	74	36	6	R4544.0	R4534.0
21	4.04	0.1591	36	74	36	6	R454N21	R453N21
	4.05	0.1594	36	74	36	6		R4534.05
20	4.09	0.1610	36	74	36	6	R454N20	R453N20
	4.10	0.1614	36	74	36	6	R4544.1	R4534.1
	4.20	0.1654	36	74	36	6	R4544.2	R4534.2
19	4.22	0.1661	36	74	36	6	R454N19	R453N19
	4.30	0.1693	36	74	36	6	R4544.3	R4534.3
18	4.31	0.1697	36	74	36	6	R454N18	R453N18
11/64	4.37	0.1720	36	74	36	6	R45411/64	R45311/64
17	4.39	0.1728	36	74	36	6	R454N17	R453N17
	4.40	0.1732	36	74	36	6	R4544.4	R4534.4
	4.50	0.1772	36	74	36	6	R4544.5	R4534.5
16	4.50	0.1772	36	74	36	6	R454N16	R453N16
15	4.57	0.1799	36	74	36	6	R454N15	R453N15
	4.60	0.1811	36	74	36	6	R4544.6	R4534.6
14	4.62	0.1819	36	74	36	6	R454N14	R453N14
	4.70	0.1850	36	74	36	6	R4544.7	R4534.7
13	4.70	0.1850	36	74	36	6	R454N13	R453N13
3/16	4.76	0.1874	44	82	36	6	R4543/16	R4533/16
	4.80	0.1890	44	82	36	6	R4544.8	R4534.8
12	4.80	0.1890	44	82	36	6	R454N12	R453N12
11	4.85	0.1909	44	82	36	6	R454N11	R453N11
	4.90	0.1929	44	82	36	6	R4544.9	R4534.9
10	4.92	0.1937	44	82	36	6	R454N10	R453N10
9	4.98	0.1961	44	82	36	6	R454N9	R453N9
	5.00	0.1969	44	82	36	6	R4545.0	R4535.0
	5.05	0.1988	44	82	36	6		R4535.05
8	5.06	0.1992	44	82	36	6	R454N8	R453N8
	5.10	0.2008	44	82	36	6	R4545.1	R4535.1
7	5.11	0.2012	44	82	36	6	R454N7	R453N7
13/64	5.16	0.2031	44	82	36	6	R45413/64	R45313/64
6	5.18	0.2039	44	82	36	6	R454N6	R453N6
	5.20	0.2047	44	82	36	6	R4545.2	R4535.2
5	5.22	0.2055	44	82	36	6	R454N5	R453N5
	5.30	0.2087	44	82	36	6		R4535.3
4	5.31	0.2091	44	82	36	6	R454N4	R453N4
	5.40	0.2126	44	82	36	6		R4535.4
3	5.41	0.2130	44	82	36	6	R454N3	R453N3
	5.50	0.2165	44	82	36	6	R4545.5	R4535.5
7/32	5.56	0.2189	44	82	36	6	R4547/32	R4537/32
	5.60	0.2205	44	82	36	6	R4545.6	R4535.6
2	5.61	0.2209	44	82	36	6	R454N2	R453N2
	5.70	0.2244	44	82	36	6	R4545.7	R4535.7
1	5.79	0.2280	44	82	36	6	R454N1	R453N1
	5.80	0.2283	44	82	36	6	R4545.8	R4535.8
	5.90	0.2323	44	82	36	6	R4545.9	R4535.9
A	5.94	0.2339	44	82	36	6	R454A	R453A
15/64	5.95	0.2343	44	82	36	6	R45415/64	R45315/64
	6.00	0.2362	44	82	36	6	R4546.0	R4536.0
B	6.03	0.2374	53	91	36	8	R454B	R453B
	6.05	0.2382	53	91	36	8		R4536.05
	6.10	0.2402	53	91	36	8	R4546.1	R4536.1
C	6.15	0.2421	53	91	36	8	R454C	R453C
	6.20	0.2441	53	91	36	8	R4546.2	R4536.2
D	6.25	0.2461	53	91	36	8	R454D	R453D
	6.30	0.2480	53	91	36	8	R4546.3	R4536.3
1/4	6.35	0.2500	53	91	36	8	R4541/4	R4531/4
E	6.35	0.2500	53	91	36	8	R454E	R453E
	6.40	0.2520	53	91	36	8	R4546.4	R4536.4
	6.50	0.2559	53	91	36	8	R4546.5	R4536.5
F	6.53	0.2571	53	91	36	8	R454F	R453F
	6.60	0.2598	53	91	36	8	R4546.6	R4536.6
G	6.63	0.2610	53	91	36	8	R454G	R453G
	6.70	0.2638	53	91	36	8	R4546.7	R4536.7
17/64	6.75	0.2657	53	91	36	8	R45417/64	R45317/64
H	6.76	0.2661	53	91	36	8	R454H	R453H
	6.80	0.2677	53	91	36	8	R4546.8	R4536.8
	6.90	0.2717	53	91	36	8	R4546.9	R4536.9

d ₁ Ø Inch	d ₁ Øm ₇ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Øh ₅ mm	R454	R453
I	6.91	0.2720	53	91	36	8	R454I	R453I
	7.00	0.2756	53	91	36	8	R4547.0	R4537.0
J	7.04	0.2772	53	91	36	8	R454J	R453J
	7.10	0.2795	53	91	36	8	R4547.1	R4537.1
K	7.14	0.2811	53	91	36	8	R454K	R453K
9/32	7.14	0.2811	53	91	36	8	R4549/32	R4539/32
	7.20	0.2835	53	91	36	8		R4537.2
	7.30	0.2874	53	91	36	8	R4547.3	R4537.3
L	7.37	0.2902	53	91	36	8	R454L	R453L
	7.40	0.2913	53	91	36	8	R4547.4	R4537.4
M	7.49	0.2949	53	91	36	8	R454M	R453M
	7.50	0.2953	53	91	36	8	R4547.5	R4537.5
19/64	7.54	0.2969	53	91	36	8	R45419/64	R45319/64
	7.60	0.2992	53	91	36	8	R4547.6	R4537.6
N	7.67	0.3020	53	91	36	8	R454N	R453N
	7.70	0.3031	53	91	36	8	R4547.7	R4537.7
	7.80	0.3071	53	91	36	8	R4547.8	R4537.8
	7.90	0.3110	53	91	36	8	R4547.9	R4537.9
5/16	7.94	0.3126	53	91	36	8	R4545/16	R4535/16
	8.00	0.3150	53	91	36	8	R4548.0	R4538.0
O	8.03	0.3161	61	103	40	10	R454O	R453O
	8.05	0.3169	61	103	40	10		R4538.05
	8.10	0.3189	61	103	40	10	R4548.1	R4538.1
	8.20	0.3228	61	103	40	10	R4548.2	R4538.2
P	8.20	0.3228	61	103	40	10	R454P	R453P
	8.30	0.3268	61	103	40	10		R4538.3
21/64	8.33	0.3280	61	103	40	10	R45421/64	R45321/64
	8.40	0.3307	61	103	40	10	R4548.4	R4538.4
Q	8.43	0.3319	61	103	40	10	R454Q	R453Q
	8.50	0.3346	61	103	40	10	R4548.5	R4538.5
	8.60	0.3386	61	103	40	10	R4548.6	R4538.6
R	8.61	0.3390	61	103	40	10	R454R	R453R
	8.70	0.3425	61	103	40	10	R4548.7	R4538.7
11/32	8.73	0.3437	61	103	40	10	R45411/32	R45311/32
	8.80	0.3465	61	103	40	10	R4548.8	R4538.8
S	8.84	0.3480	61	103	40	10	R454S	R453S
	8.90	0.3504	61	103	40	10	R4548.9	R4538.9
	9.00	0.3543	61	103	40	10	R4549.0	R4539.0
T	9.09	0.3579	61	103	40	10	R454T	R453T
	9.10	0.3583	61	103	40	10	R4549.1	R4539.1
23/64	9.13	0.3594	61	103	40	10	R45423/64	R45323/64
	9.20	0.3622	61	103	40	10		R4539.2
	9.30	0.3661	61	103	40	10	R4549.3	R4539.3
U	9.35	0.3681	61	103	40	10	R454U	R453U
	9.40	0.3701	61	103	40	10	R4549.4	R4539.4
	9.50	0.3740	61	103	40	10	R4549.5	R4539.5
3/8	9.52	0.3748	61	103	40	10	R4543/8	R4533/8
V	9.58	0.3772	61	103	40	10	R454V	R453V
	9.60	0.3780	61	103	40	10	R4549.6	R4539.6
	9.70	0.3819	61	103	40	10	R4549.7	R4539.7
	9.80	0.3858	61	103	40	10	R4549.8	R4539.8
W	9.80	0.3858	61	103	40	10	R454W	R453W
	9.90	0.3898	61	103	40	10	R4549.9	R4539.9
25/64	9.92	0.3906	61	103	40	10	R45425/64	R45325/64
	10.00	0.3937	61	103	40	10	R45410.0	R45310.0
	10.05	0.3957	70	118	45	12		R45310.05
X	10.08	0.3969	70	118	45	12	R454X	R453X
	10.10	0.3976	70	118	45	12	R45410.1	R45310.1
	10.20	0.4016	70	118	45	12	R45410.2	R45310.2
Y	10.26	0.4039	70	118	45	12	R454Y	R453Y
	10.30	0.4055	70	118	45	12	R45410.3	R45310.3
13/32	10.32	0.4063	70	118	45	12	R45413/32	R45313/32
	10.40	0.4094	70	118	45	12	R45410.4	R45310.4
Z	10.49	0.4130	70	118	45	12	R454Z	R453Z
	10.50	0.4134	70	118	45	12	R45410.5	R45310.5
	10.60	0.4173	70	118	45	12	R45410.6	R45310.6
27/64	10.72	0.4220	70	118	45	12	R45427/64	R45327/64
	10.80	0.4252	70	118	45	12		R45310.8
	11.00	0.4331	70	118	45	12	R45411.0	R45311.0
7/16	11.11	0.4374	70	118	45	12	R4547/16	R4537/16

d_1 Ø Inch	d_1 Ø m_7 mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø h_6 mm	R454	R453
	11.20	0.4409	70	118	45	12	R45411.2	R45311.2
	11.30	0.4449	70	118	45	12		R45311.3
	11.40	0.4488	70	118	45	12	R45411.4	R45311.4
	11.50	0.4528	70	118	45	12	R45411.5	R45311.5
29/64	11.51	0.4531	70	118	45	12	R45429/64	R45329/64
	11.60	0.4567	70	118	45	12	R45411.6	R45311.6
	11.80	0.4646	70	118	45	12	R45411.8	R45311.8
15/32	11.91	0.4689	70	118	45	12	R45415/32	R45315/32
	12.00	0.4724	70	118	45	12	R45412.0	R45312.0
	12.05	0.4744	76	124	45	14		R45312.05
	12.10	0.4764	76	124	45	14	R45412.1	
	12.20	0.4803	76	124	45	14	R45412.2	R45312.2
31/64	12.30	0.4843	76	124	45	14	R45431/64	R45331/64
	12.50	0.4921	76	124	45	14	R45412.5	R45312.5
	12.70	0.5000	76	124	45	14	R45412.7	R45312.7
1/2	12.70	0.5000	76	124	45	14	R4541/2	R4531/2
	12.80	0.5039	76	124	45	14	R45412.8	R45312.8
	13.00	0.5118	76	124	45	14	R45413.0	R45313.0
33/64	13.10	0.5157	76	124	45	14	R45433/64	R45333/64
	13.30	0.5236	76	124	45	14		R45313.3
17/32	13.49	0.5311	76	124	45	14	R45417/32	R45317/32
	13.50	0.5315	76	124	45	14	R45413.5	R45313.5
	13.80	0.5433	76	124	45	14	R45413.8	R45313.8
35/64	13.89	0.5469	76	124	45	14	R45435/64	R45335/64
	14.00	0.5512	76	124	45	14	R45414.0	R45314.0
	14.25	0.5610	82	133	48	16	R45414.25	R45314.25
9/16	14.29	0.5626	82	133	48	16	R4549/16	R4539/16
	14.50	0.5709	82	133	48	16	R45414.5	R45314.5
37/64	14.68	0.5780	82	133	48	16	R45437/64	R45337/64
	14.80	0.5827	82	133	48	16	R45414.8	R45314.8
	15.00	0.5906	82	133	48	16	R45415.0	R45315.0
19/32	15.08	0.5937	82	133	48	16	R45419/32	R45319/32
	15.10	0.5945	82	133	48	16	R45415.1	R45315.1
	15.30	0.6024	82	133	48	16		R45315.3
39/64	15.48	0.6094	82	133	48	16	R45439/64	R45339/64
	15.50	0.6102	82	133	48	16	R45415.5	R45315.5
	15.80	0.6220	82	133	48	16	R45415.8	R45315.8
5/8	15.88	0.6252	82	133	48	16	R4545/8	R4535/8
	16.00	0.6299	82	133	48	16	R45416.0	R45316.0
41/64	16.27	0.6406	91	143	48	18	R45441/64	R45341/64
	16.50	0.6496	91	143	48	18	R45416.5	R45316.5
21/32	16.67	0.6563	91	143	48	18	R45421/32	R45321/32
	17.00	0.6693	91	143	48	18	R45417.0	R45317.0
43/64	17.07	0.6720	91	143	48	18	R45443/64	R45343/64
11/16	17.46	0.6874	91	143	48	18	R45411/16	R45311/16
	17.50	0.6890	91	143	48	18	R45417.5	R45317.5
	17.80	0.7008	91	143	48	18	R45417.8	R45317.8
45/64	17.86	0.7031	91	143	48	18	R45445/64	R45345/64
	18.00	0.7087	91	143	48	18	R45418.0	R45318.0
23/32	18.26	0.7189	99	153	50	20	R45423/32	R45323/32
	18.50	0.7283	99	153	50	20	R45418.5	R45318.5
47/64	18.65	0.7343	99	153	50	20	R45447/64	R45347/64
	19.00	0.7480	99	153	50	20	R45419.0	R45319.0
3/4	19.05	0.7500	99	153	50	20	R4543/4	R4533/4
	19.50	0.7677	99	153	50	20	R45419.5	R45319.5
	19.80	0.7795	99	153	50	20	R45419.8	R45319.8
	20.00	0.7874	99	153	50	20	R45420.0	R45320.0

R459

- Force X Drill Oil Feed 8XD
- Broca - Force-X - Refrigeración interna 8XD
- Broca Force-X com Lubrificação interna, 8XD
- Foret Force-X - à trous d'huile 8XD

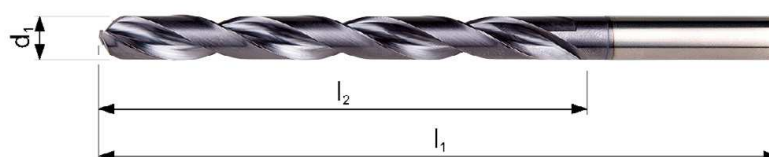
R459	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	3.1	3.2	3.3	3.4	7.2	7.3
	•	2.3	6.1	6.2	6.3	6.4	7.1								

R459

HM

DORMER

8XD



R459



FORCE X

3.00 - 16.00

d_1 \varnothing_{m_7} Inch	d_1 \varnothing_{m_7} mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 \varnothing_{h_6} mm	R459
	3.00	0.1181	37	79	36	6	R4593.0
	3.10	0.1220	37	79	36	6	R4593.1
1/8	3.18	0.1252	37	79	36	6	R4591/8
	3.20	0.1260	37	79	36	6	R4593.2
	3.30	0.1299	37	79	36	6	R4593.3
	3.40	0.1339	37	79	36	6	R4593.4
	3.50	0.1378	37	79	36	6	R4593.5
9/64	3.57	0.1406	37	79	36	6	R4599/64
	3.60	0.1417	37	79	36	6	R4593.6
	3.70	0.1457	37	79	36	6	R4593.7
	3.80	0.1496	48	90	36	6	R4593.8
	3.90	0.1535	48	90	36	6	R4593.9
5/32	3.97	0.1563	48	90	36	6	R4595/32
	4.00	0.1575	48	90	36	6	R4594.0
	4.10	0.1614	48	90	36	6	R4594.1
	4.20	0.1654	48	90	36	6	R4594.2
	4.30	0.1693	48	90	36	6	R4594.3
11/64	4.37	0.1720	48	90	36	6	R45911/64
	4.40	0.1732	48	90	36	6	R4594.4
	4.50	0.1772	48	90	36	6	R4594.5
	4.60	0.1811	48	90	36	6	R4594.6
	4.70	0.1850	62	104	36	6	R4594.7
3/16	4.76	0.1874	62	104	36	6	R4593/16
	4.80	0.1890	62	104	36	6	R4594.8
	4.90	0.1929	62	104	36	6	R4594.9
	5.00	0.1969	62	104	36	6	R4595.0
	5.10	0.2008	62	104	36	6	R4595.1
13/64	5.16	0.2031	62	104	36	6	R45913/64
	5.20	0.2047	62	104	36	6	R4595.2
	5.30	0.2087	62	104	36	6	R4595.3
	5.40	0.2126	62	104	36	6	R4595.4
	5.50	0.2165	62	104	36	6	R4595.5
7/32	5.56	0.2189	62	104	36	6	R4597/32
	5.60	0.2205	62	104	36	6	R4595.6
	5.70	0.2244	62	104	36	6	R4595.7
	5.80	0.2283	62	104	36	6	R4595.8

d_1 $\varnothing m_7$ Inch	d_1 $\varnothing m_7$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 $\varnothing h_6$ mm	R459
	5.90	0.2323	62	104	36	6	R4595.9
15/64	5.95	0.2343	62	104	36	6	R45915/64
	6.00	0.2362	62	104	36	6	R4596.0
	6.10	0.2402	84	126	36	8	R4596.1
	6.20	0.2441	84	126	36	8	R4596.2
	6.30	0.2480	84	126	36	8	R4596.3
1/4	6.35	0.2500	84	126	36	8	R4591/4
	6.40	0.2520	84	126	36	8	R4596.4
	6.50	0.2559	84	126	36	8	R4596.5
	6.60	0.2598	84	126	36	8	R4596.6
	6.70	0.2638	84	126	36	8	R4596.7
17/64	6.75	0.2657	84	126	36	8	R45917/64
	6.80	0.2677	84	126	36	8	R4596.8
	6.90	0.2717	84	126	36	8	R4596.9
	7.00	0.2756	84	126	36	8	R4597.0
	7.10	0.2795	84	126	36	8	R4597.1
9/32	7.14	0.2811	84	126	36	8	R4599/32
	7.20	0.2835	84	126	36	8	R4597.2
	7.30	0.2874	84	126	36	8	R4597.3
	7.40	0.2913	84	126	36	8	R4597.4
	7.50	0.2953	84	126	36	8	R4597.5
19/64	7.54	0.2969	84	126	36	8	R45919/64
	7.60	0.2992	84	126	36	8	R4597.6
	7.70	0.3031	84	126	36	8	R4597.7
	7.80	0.3071	84	126	36	8	R4597.8
	7.90	0.3110	84	126	36	8	R4597.9
5/16	7.94	0.3126	84	126	36	8	R4595/16
	8.00	0.3150	84	126	36	8	R4598.0
	8.10	0.3189	106	152	40	10	R4598.1
	8.20	0.3228	106	152	40	10	R4598.2
	8.30	0.3268	106	152	40	10	R4598.3
21/64	8.33	0.3280	106	152	40	10	R45921/64
	8.40	0.3307	106	152	40	10	R4598.4
	8.50	0.3346	106	152	40	10	R4598.5
	8.60	0.3386	106	152	40	10	R4598.6
	8.70	0.3425	106	152	40	10	R4598.7
11/32	8.73	0.3437	106	152	40	10	R45911/32
	8.80	0.3465	106	152	40	10	R4598.8
	8.90	0.3504	106	152	40	10	R4598.9
	9.00	0.3543	106	152	40	10	R4599.0
	9.10	0.3583	106	152	40	10	R4599.1
23/64	9.13	0.3594	106	152	40	10	R45923/64
	9.20	0.3622	106	152	40	10	R4599.2
	9.30	0.3661	106	152	40	10	R4599.3
	9.40	0.3701	106	152	40	10	R4599.4
	9.50	0.3740	106	152	40	10	R4599.5
3/8	9.53	0.3748	106	152	40	10	R4593/8
	9.60	0.3780	106	152	40	10	R4599.6
	9.70	0.3819	106	152	40	10	R4599.7
	9.80	0.3858	106	152	40	10	R4599.8
	9.90	0.3898	106	152	40	10	R4599.9
25/64	9.92	0.3906	106	152	40	10	R45925/64
	10.00	0.3937	106	152	40	10	R45910.0
	10.20	0.4016	128	180	45	12	R45910.2
	10.30	0.4055	128	180	45	12	R45910.3
13/32	10.32	0.4063	128	180	45	12	R45913/32
	10.40	0.4094	128	180	45	12	R45910.4
	10.50	0.4134	128	180	45	12	R45910.5
27/64	10.72	0.4220	128	180	45	12	R45927/64
	10.80	0.4252	128	180	45	12	R45910.8
	11.00	0.4331	128	180	45	12	R45911.0
7/16	11.11	0.4374	128	180	45	12	R4597/16
	11.20	0.4409	128	180	45	12	R45911.2
	11.30	0.4449	128	180	45	12	R45911.3
	11.50	0.4528	128	180	45	12	R45911.5
29/64	11.51	0.4531	128	180	45	12	R45929/64
	11.80	0.4646	128	180	45	12	R45911.8
15/32	11.91	0.4689	128	180	45	12	R45915/32
	12.00	0.4724	128	180	45	12	R45912.0
	12.20	0.4803	151	202	48	14	R45912.2

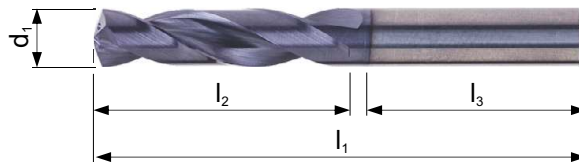
d_1 $\varnothing m_7$ Inch	d_1 $\varnothing m_7$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 $\varnothing h_6$ mm	R459
31/64	12.30	0.4843	151	202	48	14	R45931/64
	12.50	0.4921	151	202	48	14	R45912.5
1/2	12.70	0.5000	151	202	48	14	R4591/2
	12.80	0.5039	151	202	48	14	R45912.8
	13.00	0.5118	151	202	48	14	R45913.0
33/64	13.10	0.5157	151	202	48	14	R45933/64
17/32	13.49	0.5311	151	202	48	14	R45917/32
	13.50	0.5315	151	202	48	14	R45913.5
35/64	13.89	0.5469	151	202	48	14	R45935/64
	14.00	0.5512	151	202	48	14	R45914.0
	14.25	0.5610	172	227	48	16	R45914.25
	14.29	0.5626	172	227	48	16	R4599/16
9/16	14.50	0.5709	172	227	48	16	R45914.5
	14.68	0.5780	172	227	48	16	R45937/64
37/64	15.00	0.5906	172	227	48	16	R45915.0
	15.08	0.5937	172	227	48	16	R45919/32
19/32	15.10	0.5945	172	227	48	16	R45915.1
	15.48	0.6094	172	227	48	16	R45939/64
39/64	15.50	0.6102	172	227	48	16	R45915.5
	15.88	0.6252	172	227	48	16	R4595/8
5/8	15.88	0.6252	172	227	48	16	R4595/8
	16.00	0.6299	172	227	48	16	R45916.0

R467

- Force M Drill Oil Feed 3xD
- Broca corta Force M, refrigeración interna 3xD
- Broca Force M com lub. interna 3xD
- Foret Force M, à trous d'huile 3xD

R467 ■ 2.1 2.2 2.3 2.4 4.1 4.2 4.3
 • 5.1 5.2 5.3

R467



d ₁ Ø "/Nr./letter	d ₁ Øm ₇ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Øh ₆ mm	R467
1/8	3.00	0.1181	20	62	36	6	R4673.0
	3.10	0.1220	20	62	36	6	R4673.1
	3.18	0.1250	20	62	36	6	R4671/8
	3.20	0.1260	20	62	36	6	R4673.2
	3.30	0.1299	20	62	36	6	R4673.3
29	3.40	0.1339	20	62	36	6	R4673.4
	3.45	0.1360	20	62	36	6	R467N29
	3.50	0.1378	20	62	36	6	R4673.5
	3.57	0.1406	20	62	36	6	R4679/64
	3.60	0.1417	20	62	36	6	R4673.6
9/64	3.70	0.1457	20	62	36	6	R4673.7
	3.80	0.1496	24	66	36	6	R4673.8
	3.90	0.1535	24	66	36	6	R4673.9
	3.97	0.1563	24	66	36	6	R4675/32
	4.00	0.1575	24	66	36	6	R4674.0
	4.05	0.1594	24	66	36	6	R4674.05
	4.10	0.1614	24	66	36	6	R4674.1
	4.20	0.1654	24	66	36	6	R4674.2
	4.30	0.1693	24	66	36	6	R4674.3
	4.37	0.1719	24	66	36	6	R46711/64
11/64	4.40	0.1732	24	66	36	6	R4674.4
	4.50	0.1772	24	66	36	6	R4674.5
	4.60	0.1811	24	66	36	6	R4674.6
	4.70	0.1850	24	66	36	6	R4674.7
	4.76	0.1875	28	66	36	6	R4673/16
	4.80	0.1890	28	66	36	6	R4674.8
	4.90	0.1929	28	66	36	6	R4674.9
	5.00	0.1969	28	66	36	6	R4675.0
	5.05	0.1988	28	66	36	6	R4675.05
	5.10	0.2008	28	66	36	6	R4675.1
7	5.11	0.2010	28	66	36	6	R467N7
13/64	5.16	0.2031	28	66	36	6	R46713/64
	5.20	0.2047	28	66	36	6	R4675.2
5	5.22	0.2055	28	66	36	6	R467N5
	5.30	0.2087	28	66	36	6	R4675.3
	5.40	0.2126	28	66	36	6	R4675.4
	5.50	0.2165	28	66	36	6	R4675.5
	7/32	5.56	0.2188	28	66	36	6

d ₁ Ø "/Nr./letter	d ₁ Øm ₇ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Øh ₆ mm	R467
	5.60	0.2205	28	66	36	6	R4675.6
	5.70	0.2244	28	66	36	6	R4675.7
	5.80	0.2283	28	66	36	6	R4675.8
	5.90	0.2323	28	66	36	6	R4675.9
15/64	5.95	0.2344	28	66	36	6	R46715/64
	6.00	0.2362	28	66	36	6	R4676.0
	6.05	0.2382	34	79	36	8	R4676.05
	6.10	0.2402	34	79	36	8	R4676.1
	6.20	0.2441	34	79	36	8	R4676.2
	6.30	0.2480	34	79	36	8	R4676.3
1/4	6.35	0.2500	34	79	36	8	R4671/4
	6.40	0.2520	34	79	36	8	R4676.4
	6.50	0.2559	34	79	36	8	R4676.5
	6.60	0.2598	34	79	36	8	R4676.6
	6.70	0.2638	34	79	36	8	R4676.7
17/64	6.75	0.2656	34	79	36	8	R46717/64
	6.80	0.2677	34	79	36	8	R4676.8
	6.90	0.2717	34	79	36	8	R4676.9
	7.00	0.2756	34	79	36	8	R4677.0
	7.10	0.2795	41	79	36	8	R4677.1
9/32	7.14	0.2813	41	79	36	8	R4679/32
	7.20	0.2835	41	79	36	8	R4677.2
	7.30	0.2874	41	79	36	8	R4677.3
	7.40	0.2913	41	79	36	8	R4677.4
	7.50	0.2953	41	79	36	8	R4677.5
19/64	7.54	0.2969	41	79	36	8	R46719/64
	7.60	0.2992	41	79	36	8	R4677.6
	7.70	0.3031	41	79	36	8	R4677.7
	7.80	0.3071	41	79	36	8	R4677.8
	7.90	0.3110	41	79	36	8	R4677.9
5/16	7.94	0.3125	41	79	36	8	R4675/16
	8.00	0.3150	41	79	36	8	R4678.0
	8.05	0.3169	47	89	40	10	R4678.05
	8.10	0.3189	47	89	40	10	R4678.1
	8.20	0.3228	47	89	40	10	R4678.2
	8.30	0.3268	47	89	40	10	R4678.3
21/64	8.33	0.3281	47	89	40	10	R46721/64
	8.40	0.3307	47	89	40	10	R4678.4
	8.50	0.3346	47	89	40	10	R4678.5
	8.60	0.3386	47	89	40	10	R4678.6
	8.70	0.3425	47	89	40	10	R4678.7
11/32	8.73	0.3438	47	89	40	10	R46711/32
	8.80	0.3465	47	89	40	10	R4678.8
	8.90	0.3504	47	89	40	10	R4678.9
	9.00	0.3543	47	89	40	10	R4679.0
	9.10	0.3583	47	89	40	10	R4679.1
23/64	9.13	0.3594	47	89	40	10	R46723/64
	9.20	0.3622	47	89	40	10	R4679.2
	9.30	0.3661	47	89	40	10	R4679.3
	9.40	0.3701	47	89	40	10	R4679.4
	9.50	0.3740	47	89	40	10	R4679.5
3/8	9.53	0.3750	47	89	40	10	R4673/8
	9.60	0.3780	47	89	40	10	R4679.6
	9.70	0.3819	47	89	40	10	R4679.7
	9.80	0.3858	47	89	40	10	R4679.8
	9.90	0.3898	47	89	40	10	R4679.9
25/64	9.92	0.3906	47	89	40	10	R46725/64
	10.00	0.3937	47	89	40	10	R46710.0
	10.05	0.3957	55	102	45	12	R46710.05
	10.10	0.3976	55	102	45	12	R46710.1
	10.20	0.4016	55	102	45	12	R46710.2
	10.30	0.4055	55	102	45	12	R46710.3
13/32	10.32	0.4063	55	102	45	12	R46713/32
	10.40	0.4094	55	102	45	12	R46710.4
	10.50	0.4134	55	102	45	12	R46710.5
	10.60	0.4173	55	102	45	12	R46710.6
27/64	10.72	0.4219	55	102	45	12	R46727/64
	10.80	0.4252	55	102	45	12	R46710.8
	10.90	0.4291	55	102	45	12	R46710.9
	11.00	0.4331	55	102	45	12	R46711.0

d₁ Ø "/Nr./letter	d₁ Øm₇ mm	d₁ decimal Inch	l₂ mm	l₁ mm	l₃ mm	d₂ Øh₆ mm	R467
7/16	11.11	0.4375	55	102	45	12	R4677/16
	11.20	0.4409	55	102	45	12	R46711.2
	11.30	0.4449	55	102	45	12	R46711.3
	11.40	0.4488	55	102	45	12	R46711.4
29/64	11.50	0.4528	55	102	45	12	R46711.5
	11.51	0.4531	55	102	45	12	R46729/64
	11.60	0.4567	55	102	45	12	R46711.6
	11.80	0.4646	55	102	45	12	R46711.8
15/32	11.91	0.4688	55	102	45	12	R46715/32
	12.00	0.4724	55	102	45	12	R46712.0
	12.05	0.4744	60	107	45	14	R46712.05
	12.10	0.4764	60	107	45	14	R46712.1
31/64	12.20	0.4803	60	107	45	14	R46712.2
	12.30	0.4844	60	107	45	14	R46731/64
	12.50	0.4921	60	107	45	14	R46712.5
	12.70	0.5000	60	107	45	14	R46712.7
1/2	12.70	0.5000	60	107	45	14	R4671/2
	12.80	0.5039	60	107	45	14	R46712.8
	13.00	0.5118	60	107	45	14	R46713.0
33/64	13.10	0.5156	60	107	45	14	R46733/64
	13.30	0.5236	60	107	45	14	R46713.3
17/32	13.49	0.5313	60	107	45	14	R46717/32
	13.50	0.5315	60	107	45	14	R46713.5
35/64	13.80	0.5433	60	107	45	14	R46713.8
	13.89	0.5469	60	107	45	14	R46735/64
	14.00	0.5512	60	107	45	14	R46714.0
	14.25	0.5610	65	115	48	16	R46714.25
9/16	14.29	0.5625	65	115	48	16	R4679/16
	14.50	0.5709	65	115	48	16	R46714.5
37/64	14.68	0.5781	65	115	48	16	R46737/64
	14.80	0.5827	65	115	48	16	R46714.8
	15.00	0.5906	65	115	48	16	R46715.0
19/32	15.08	0.5938	65	115	48	16	R46719/32
	15.10	0.5945	65	115	48	16	R46715.1
	15.30	0.6024	65	115	48	16	R46715.3
39/64	15.48	0.6094	65	115	48	16	R46739/64
	15.50	0.6102	65	115	48	16	R46715.5
	15.80	0.6220	65	115	48	16	R46715.8
5/8	15.88	0.6250	65	115	48	16	R4675/8
	16.00	0.6299	65	115	48	16	R46716.0

R463

- Force M Drill Oil Feed 5×D
- Broca corta Force M, refrigeración interna 5×D
- Broca Force M com lub. interna 5×D
- Foret Force M, à trous d'huile 5×D

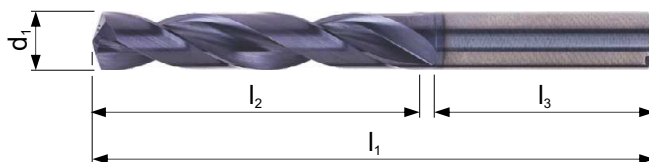
R463 ■ 2.1 2.2 2.3 2.4 4.1 4.2 4.3
 • 5.1 5.2 5.3

R463

HM

DIN
6537
L

5XD



R463



FORCE M
3.00 - 16.00

d ₁ Ø "/Nr./letter	d ₁ Øm ₇ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Øh ₆ mm	R463
	3.00	0.1181	28	66	36	6	R4633.0
	3.10	0.1220	28	66	36	6	R4633.1
1/8	3.18	0.1250	28	66	36	6	R4631/8
	3.20	0.1260	28	66	36	6	R4633.2
	3.30	0.1299	28	66	36	6	R4633.3
	3.40	0.1339	28	66	36	6	R4633.4
29	3.45	0.1360	28	66	36	6	R463N29
	3.50	0.1378	28	66	36	6	R4633.5
9/64	3.57	0.1406	28	66	36	6	R4639/64
	3.60	0.1417	28	66	36	6	R4633.6
	3.70	0.1457	28	66	36	6	R4633.7
	3.80	0.1496	36	74	36	6	R4633.8
	3.90	0.1535	36	74	36	6	R4633.9
5/32	3.97	0.1563	36	74	36	6	R4635/32
	4.00	0.1575	36	74	36	6	R4634.0
	4.05	0.1594	36	74	36	6	R4634.05
	4.10	0.1614	36	74	36	6	R4634.1
	4.20	0.1654	36	74	36	6	R4634.2
	4.30	0.1693	36	74	36	6	R4634.3
11/64	4.37	0.1719	36	74	36	6	R46311/64
	4.40	0.1732	36	74	36	6	R4634.4
	4.50	0.1772	36	74	36	6	R4634.5
	4.60	0.1811	36	74	36	6	R4634.6
	4.70	0.1850	36	74	36	6	R4634.7
3/16	4.76	0.1875	44	82	36	6	R4633/16
	4.80	0.1890	44	82	36	6	R4634.8
	4.90	0.1929	44	82	36	6	R4634.9
	5.00	0.1969	44	82	36	6	R4635.0
	5.05	0.1988	44	82	36	6	R4635.05
	5.10	0.2008	44	82	36	6	R4635.1
7	5.11	0.2010	44	82	36	6	R463N7
13/64	5.16	0.2031	44	82	36	6	R46313/64
	5.20	0.2047	44	82	36	6	R4635.2
5	5.22	0.2055	44	82	36	6	R463N5
	5.30	0.2087	44	82	36	6	R4635.3
	5.40	0.2126	44	82	36	6	R4635.4
	5.50	0.2165	44	82	36	6	R4635.5
7/32	5.56	0.2188	44	82	36	6	R4637/32

d_1 Ø “/Nr./letter	d_1 Ø m_7 mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø h_6 mm	R463
	5.60	0.2205	44	82	36	6	R4635.6
	5.70	0.2244	44	82	36	6	R4635.7
	5.80	0.2283	44	82	36	6	R4635.8
	5.90	0.2323	44	82	36	6	R4635.9
15/64	5.95	0.2344	44	82	36	6	R46315/64
	6.00	0.2362	44	82	36	6	R4636.0
	6.05	0.2382	53	91	36	8	R4636.05
	6.10	0.2402	53	91	36	8	R4636.1
	6.20	0.2441	53	91	36	8	R4636.2
	6.30	0.2480	53	91	36	8	R4636.3
1/4	6.35	0.2500	53	91	36	8	R4631/4
	6.40	0.2520	53	91	36	8	R4636.4
	6.50	0.2559	53	91	36	8	R4636.5
	6.60	0.2598	53	91	36	8	R4636.6
	6.70	0.2638	53	91	36	8	R4636.7
17/64	6.75	0.2656	53	91	36	8	R46317/64
	6.80	0.2677	53	91	36	8	R4636.8
	6.90	0.2717	53	91	36	8	R4636.9
	7.00	0.2756	53	91	36	8	R4637.0
	7.10	0.2795	53	91	36	8	R4637.1
9/32	7.14	0.2813	53	91	36	8	R4639/32
	7.20	0.2835	53	91	36	8	R4637.2
	7.30	0.2874	53	91	36	8	R4637.3
	7.40	0.2913	53	91	36	8	R4637.4
	7.50	0.2953	53	91	36	8	R4637.5
19/64	7.54	0.2969	53	91	36	8	R46319/64
	7.60	0.2992	53	91	36	8	R4637.6
	7.70	0.3031	53	91	36	8	R4637.7
	7.80	0.3071	53	91	36	8	R4637.8
	7.90	0.3110	53	91	36	8	R4637.9
5/16	7.94	0.3125	53	91	36	8	R4635/16
	8.00	0.3150	53	91	36	8	R4638.0
	8.05	0.3169	61	103	40	10	R4638.05
	8.10	0.3189	61	103	40	10	R4638.1
	8.20	0.3228	61	103	40	10	R4638.2
	8.30	0.3268	61	103	40	10	R4638.3
21/64	8.33	0.3281	61	103	40	10	R46321/64
	8.40	0.3307	61	103	40	10	R4638.4
	8.50	0.3346	61	103	40	10	R4638.5
	8.60	0.3386	61	103	40	10	R4638.6
	8.70	0.3425	61	103	40	10	R4638.7
11/32	8.73	0.3438	61	103	40	10	R46311/32
	8.80	0.3465	61	103	40	10	R4638.8
	8.90	0.3504	61	103	40	10	R4638.9
	9.00	0.3543	61	103	40	10	R4639.0
	9.10	0.3583	61	103	40	10	R4639.1
23/64	9.13	0.3594	61	103	40	10	R46323/64
	9.20	0.3622	61	103	40	10	R4639.2
	9.30	0.3661	61	103	40	10	R4639.3
	9.40	0.3701	61	103	40	10	R4639.4
	9.50	0.3740	61	103	40	10	R4639.5
3/8	9.53	0.3750	61	103	40	10	R4633/8
	9.60	0.3780	61	103	40	10	R4639.6
	9.70	0.3819	61	103	40	10	R4639.7
	9.80	0.3858	61	103	40	10	R4639.8
	9.90	0.3898	61	103	40	10	R4639.9
25/64	9.92	0.3906	61	103	40	10	R46325/64
	10.00	0.3937	61	103	40	10	R46310.0
	10.05	0.3957	70	118	45	12	R46310.05
	10.10	0.3976	70	118	45	12	R46310.1
	10.20	0.4016	70	118	45	12	R46310.2
	10.30	0.4055	70	118	45	12	R46310.3
13/32	10.32	0.4063	70	118	45	12	R46313/32
	10.40	0.4094	70	118	45	12	R46310.4
	10.50	0.4134	70	118	45	12	R46310.5
	10.60	0.4173	70	118	45	12	R46310.6
27/64	10.72	0.4219	70	118	45	12	R46327/64
	10.80	0.4252	70	118	45	12	R46310.8
	10.90	0.4291	70	118	45	12	R46310.9
	11.00	0.4331	70	118	45	12	R46311.0

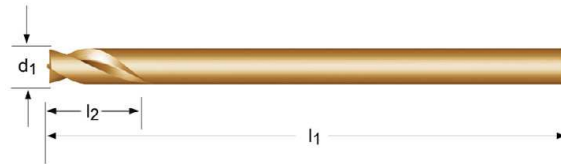
d_1 \emptyset "/Nr./letter	d_1 $\emptyset m_7$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 $\emptyset h_6$ mm	R463
7/16	11.11	0.4375	70	118	45	12	R4637/16
	11.20	0.4409	70	118	45	12	R46311.2
	11.30	0.4449	70	118	45	12	R46311.3
	11.40	0.4488	70	118	45	12	R46311.4
	11.50	0.4528	70	118	45	12	R46311.5
29/64	11.51	0.4531	70	118	45	12	R46329/64
	11.60	0.4567	70	118	45	12	R46311.6
	11.80	0.4646	70	118	45	12	R46311.8
15/32	11.91	0.4688	70	118	45	12	R46315/32
	12.00	0.4724	70	118	45	12	R46312.0
	12.05	0.4744	76	124	45	14	R46312.05
31/64	12.20	0.4803	76	124	45	14	R46312.2
	12.30	0.4844	76	124	45	14	R46331/64
	12.50	0.4921	76	124	45	14	R46312.5
	12.70	0.5000	76	124	45	14	R46312.7
1/2	12.70	0.5000	76	124	45	14	R4631/2
	12.80	0.5039	76	124	45	14	R46312.8
	13.00	0.5118	76	124	45	14	R46313.0
33/64	13.10	0.5156	76	124	45	14	R46333/64
	13.30	0.5236	76	124	45	14	R46313.3
17/32	13.49	0.5313	76	124	45	14	R46317/32
	13.50	0.5315	76	124	45	14	R46313.5
	13.80	0.5433	76	124	45	14	R46313.8
35/64	13.89	0.5469	76	124	45	14	R46335/64
	14.00	0.5512	76	124	45	14	R46314.0
	14.25	0.5610	82	133	48	16	R46314.25
9/16	14.29	0.5625	82	133	48	16	R4639/16
	14.50	0.5709	82	133	48	16	R46314.5
37/64	14.68	0.5781	82	133	48	16	R46337/64
	14.80	0.5827	82	133	48	16	R46314.8
	15.00	0.5906	82	133	48	16	R46315.0
19/32	15.08	0.5938	82	133	48	16	R46319/32
	15.10	0.5945	82	133	48	16	R46315.1
	15.30	0.6024	82	133	48	16	R46315.3
39/64	15.48	0.6094	82	133	48	16	R46339/64
	15.50	0.6102	82	133	48	16	R46315.5
	15.80	0.6220	82	133	48	16	R46315.8
5/8	15.88	0.6250	82	133	48	16	R4635/8
	16.00	0.6299	82	133	48	16	R46316.0

A723

- Spot Weld Drill
- Broca Para Soldaduras
- Broca para pontos de soldadura
- Forets pour points de soudure

A723 ■ 1.1 1.2
 • 1.3 1.4

A723 HSS-E DORMER 1XD Bronze N



d_1 \varnothing_{h_8} mm	d_1 decimal inch	l_2 mm	l_1 mm	A723
6.00	0.2362	18	66	A7236.0X66
6.00	0.2362	18	93	A7236.0X93
8.00	0.3150	24	79	A7238.0X79
8.00	0.3150	24	117	A7238.0X117

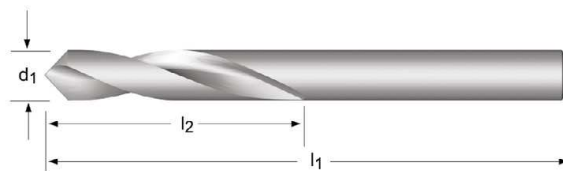
A122

- Spotting Drill
- Broca para centrados
- Broca Extra Curta
- Foret à pointer

Overall Length to DIN 1897
 Longitud total según DIN 1897
 Comprimento Total conforme DIN 1897
 Longueur totale selon la DIN 1897

A122	▪	1.1	1.2	1.3	6.1	6.2	6.3	6.4	7.1	7.2											
	•	1.4	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	7.3	7.4	8.1	8.2
		8.3	9.1																		

A122 HSS DIN 1897 1XD 90°/120° N



d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A122
6.00	0.2362	30	66	A1226.0X90
6.00	0.2362	30	66	A1226.0X120
8.00	0.3150	33	79	A1228.0X90
8.00	0.3150	33	79	A1228.0X120
10.00	0.3937	35	89	A12210.0X90
10.00	0.3937	35	89	A12210.0X120
12.00	0.4724	40	102	A12212.0X90
12.00	0.4724	40	102	A12212.0X120
16.00	0.6299	40	115	A12216.0X90
16.00	0.6299	40	115	A12216.0X120
20.00	0.7874	55	131	A12220.0X90
20.00	0.7874	55	131	A12220.0X120

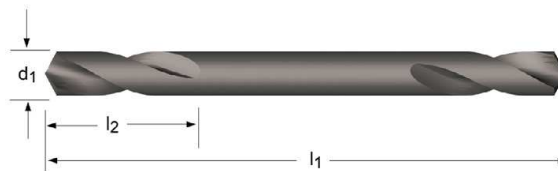
A119

- Stub Drill - Double Ended
- Broca extra corta - Doble punta
- Broca Extra Curta - Dupla
- Foret extra-court - Double

Sheet Metal Drill
 Broca para chapas
 Broca Para Chapas
 Forets pour tôle

A119	▪	1.1	1.2																			
		•	1.3	1.4	1.5	1.6	2.1	2.2	2.3	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																		

A119 HSS DIN 1897 1.25XD 120° ST N



d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A119
3.30	0.1299	11	49	A1193.3
3.60	0.1417	12	52	A1193.6
4.10	0.1614	14	55	A1194.1
4.20	0.1654	14	55	A1194.2
4.90	0.1929	17	62	A1194.9
5.10	0.2008	17	62	A1195.1

A123

- Stub Drill
- Broca extra corta
- Broca Extra Curta
- Foret extra-court

Sheet Metal Drill. Overall Length to DIN 1897

Broca para chapas. Longitud total según DIN 1897

Comprimento total conforme DIN 1987 e broca para chapas metálicas

Foret pour tôle. Longueur hors-tout selon DIN 1897

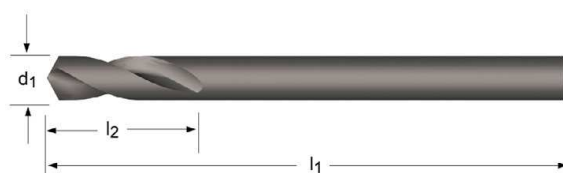
A123	▪	1.1	1.2	1.3	6.1	6.2	6.3	6.4	7.1	7.2										
	•	1.4	1.5	1.6	2.1	2.2	2.3	4.1	4.2	4.3	5.1	5.2	5.3	7.3	7.4	8.1	8.2	8.3	9.1	

A123

HSS

DIN
1897

1.5XD



A123



3/32 - 1/4

d_1 Ø _{h8} Inch	d_1 Ø _{h8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A123
3/32	2.38	0.0937	14	43	A1233/32S
	2.50	0.0984	14	43	A1232.5S
	3.00	0.1181	16	46	A1233.0S
1/8	3.18	0.1252	18	49	A1231/8S
	3.20	0.1260	18	49	A1233.2S
	3.30	0.1299	18	49	A1233.3S
	3.50	0.1378	18	52	A1233.5S
	3.70	0.1457	18	52	A1233.7S
5/32	3.97	0.1563	18	55	A1235/32S
	4.00	0.1575	18	55	A1234.0S
	4.10	0.1614	18	55	A1234.1S
	4.20	0.1654	18	55	A1234.2S
	4.50	0.1772	18	58	A1234.5S
3/16	4.76	0.1874	18	62	A1233/16S
	4.80	0.1890	18	62	A1234.8S
	4.90	0.1929	18	62	A1234.9S
	5.00	0.1969	18	62	A1235.0S
	5.50	0.2165	18	66	A1235.5S
7/32	5.56	0.2189	18	66	A1237/32S
	6.00	0.2362	18	66	A1236.0S
1/4	6.35	0.2500	19	70	A1231/4S

A120

- Stub Drill
- Broca extra corta
- Broca Extra Curta
- Foret extra-court

Bright below 1.0mm. 118° point up to 2.9mm and over 13.0mm
 Brillante por debajo de 1,0mm.punta 118° hasta 2,9 mm y por encima de 13,0 mm
 Brilhante Abaixo de 1.0mm. Ângulo da Ponta 118° até 2,9mm e acima de 13.0mm
 Brillant au dessous de 1,0 mm. Pointe à 118° jusqu'au Ø 2,9 mm et au dessus du Ø 13,0 mm

A022

- 022 Stub Drill
- 022 Broca extra corta
- 022 Broca Extra Curta
- 022 Foret extra-court

Bright below 2.0mm, TiN Tipped and Split Point 2.0mm and above
 Brillante por debajo de 2.0mm, Punta de TiN y rectificado de la punta a partir 2.0mm
 Brilhante Abaixo de 2.0mm. Ponta de TiN afiação em Cruz para 2.0mm e acima
 Brillant en dessous de 2,0mm, TIN en pointe et affutage en croix au dessus de 2,0 mm

A620

- Stub Drill
- Broca extra corta
- Broca Extra Curta
- Foret extra-court

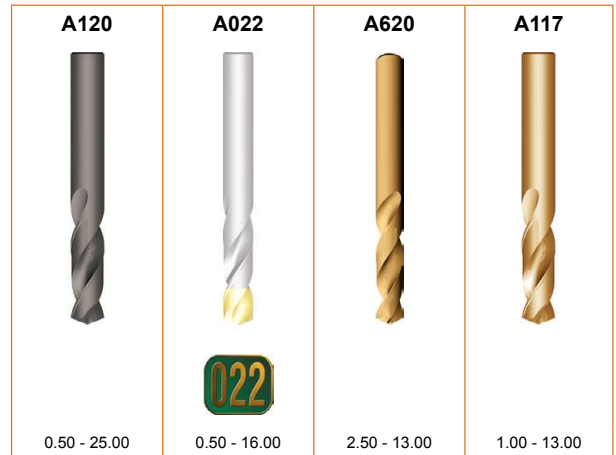
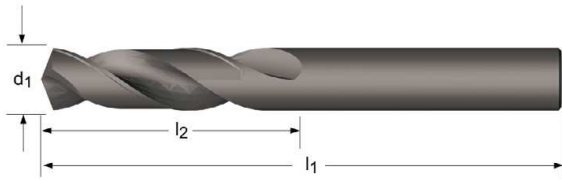
A117

- Stub Drill
- Broca extra corta
- Broca Extra Curta
- Foret extra-court

118° point up to 1.5mm
 punta de 118° hasta 1,5mm
 Ângulo da Ponta 118° até 1.5mm
 Pointe à 118° jusqu'au Ø 1,5 mm

A120	▪	1.1	1.2	1.3	1.4	2.1	3.1	3.2	3.3	4.1																		
	•	1.5	1.6	2.2	2.3	3.4	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	8.3	9.1					
A022	▪	1.1	1.2	1.3	1.4	1.5	2.1	3.1	3.2	3.3	4.1	7.1	7.2	7.3														
	•	1.6	2.2	2.3	3.4	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.4	8.1	8.2	8.3	9.1									
A620	▪	2.1	2.2	2.3																								
	•	1.1	1.2	1.3	1.4	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	8.3
A117	▪	1.5	1.6	2.1	2.2	2.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	9.1														
	•	1.1	1.2	1.3	1.4	3.1	3.2	3.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	8.1	8.2	8.3									

A120	HSS	DIN 1897	2.5XD	135°	ST		N			
A022	HSS	DIN ANSI	2.5XD	135°	TiN		N			
A620	HSS-E	DIN 1897	2.5XD	130°	Bronze		N			
A117	HSS-E	DIN 1897	2.5XD	135°	Bronze		N			



d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A120	A022	A620	A117
	0.50	0.0197	3	20	A120.5	A022.5		
	0.60	0.0236	3.5	21	A120.6	A022.6		
	0.70	0.0276	4.5	23	A120.7	A022.7		
1/32	0.79	0.0311	13	35		A0221/32		
1/32	0.79	0.0311	5	24	A1201/32			
	0.80	0.0315	5	24	A120.8	A022.8		
	0.90	0.0354	5.5	25	A120.9	A022.9		
	1.00	0.0394	6	26	A1201.0	A0221.0		A1171.0
	1.10	0.0433	7	28	A1201.1	A0221.1		A1171.1
3/64	1.19	0.0469	13	35		A0223/64		
3/64	1.19	0.0469	8	30	A1203/64			
	1.20	0.0472	8	30	A1201.2	A0221.2		A1171.2
	1.30	0.0512	8	30	A1201.3	A0221.3		A1171.3
	1.40	0.0551	9	32	A1201.4	A0221.4		A1171.4
	1.50	0.0591	9	32	A1201.5	A0221.5		A1171.5
1/16	1.59	0.0626	10	34	A1201/16			
1/16	1.59	0.0626	16	41		A0221/16		
	1.60	0.0630	10	34	A1201.6	A0221.6		A1171.6
	1.70	0.0669	10	34	A1201.7	A0221.7		A1171.7
	1.80	0.0709	11	36	A1201.8	A0221.8		A1171.8
	1.90	0.0748	11	36	A1201.9	A0221.9		A1171.9
5/64	1.98	0.0780	12	38	A1205/64			
5/64	1.98	0.0780	17	43		A0225/64		
	2.00	0.0787	12	38	A1202.0	A0222.0		A1172.0
	2.10	0.0827	12	38	A1202.1	A0222.1		A1172.1
	2.20	0.0866	13	40	A1202.2	A0222.2		A1172.2
	2.25	0.0886	13	40	A1202.25	A0222.25		
	2.30	0.0906	13	40	A1202.3	A0222.3		A1172.3
3/32	2.38	0.0937	14	43	A1203/32			
3/32	2.38	0.0937	20	45		A0223/32		
	2.40	0.0945	14	43	A1202.4	A0222.4		A1172.4
	2.50	0.0984	14	43	A1202.5	A0222.5	A6202.5	A1172.5
	2.60	0.1024	14	43	A1202.6	A0222.6	A6202.6	A1172.6
	2.65	0.1043	14	43	A1202.65	A0222.65		
	2.70	0.1063	16	46	A1202.7	A0222.7	A6202.7	A1172.7
7/64	2.78	0.1094	16	46	A1207/64			
7/64	2.78	0.1094	22	47		A0227/64		
	2.80	0.1102	16	46	A1202.8	A0222.8	A6202.8	A1172.8
	2.90	0.1142	16	46	A1202.9	A0222.9	A6202.9	A1172.9
	3.00	0.1181	16	46	A1203.0	A0223.0	A6203.0	A1173.0
	3.10	0.1220	18	49	A1203.1	A0223.1	A6203.1	A1173.1
1/8	3.18	0.1252	18	49	A1201/8			A1171/8
1/8	3.18	0.1252	23	49		A0221/8		
	3.20	0.1260	18	49	A1203.2	A0223.2	A6203.2	A1173.2
	3.25	0.1280	18	49	A1203.25	A0223.25		
	3.30	0.1299	18	49	A1203.3	A0223.3	A6203.3	A1173.3
	3.40	0.1339	20	52	A1203.4	A0223.4	A6203.4	A1173.4
	3.50	0.1378	20	52	A1203.5	A0223.5	A6203.5	A1173.5
9/64	3.57	0.1406	20	52	A1209/64			
9/64	3.57	0.1406	25	50		A0229/64		
	3.60	0.1417	20	52	A1203.6	A0223.6	A6203.6	A1173.6
	3.70	0.1457	20	52	A1203.7	A0223.7	A6203.7	A1173.7
	3.80	0.1496	22	55	A1203.8	A0223.8	A6203.8	A1173.8
	3.90	0.1535	22	55	A1203.9	A0223.9	A6203.9	A1173.9

d ₁ Øh ₈ Inch	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	A120	A022	A620	A117
5/32	3.97	0.1563	22	55	A1205/32			A1175/32
5/32	3.97	0.1563	26	53		A0225/32		
	4.00	0.1575	22	55	A1204.0	A0224.0	A6204.0	A1174.0
	4.10	0.1614	22	55	A1204.1	A0224.1	A6204.1	A1174.1
	4.20	0.1654	22	55	A1204.2	A0224.2	A6204.2	A1174.2
	4.30	0.1693	24	58	A1204.3	A0224.3	A6204.3	A1174.3
11/64	4.37	0.1720	24	58	A12011/64			
11/64	4.37	0.1720	28	55		A02211/64		
	4.40	0.1732	24	58	A1204.4	A0224.4	A6204.4	A1174.4
	4.50	0.1772	24	58	A1204.5	A0224.5	A6204.5	A1174.5
	4.60	0.1811	24	58	A1204.6	A0224.6	A6204.6	A1174.6
	4.70	0.1850	24	58	A1204.7	A0224.7	A6204.7	A1174.7
3/16	4.76	0.1874	26	62	A1203/16			A1173/16
3/16	4.76	0.1874	30	57		A0223/16		
	4.80	0.1890	26	62	A1204.8	A0224.8	A6204.8	A1174.8
	4.90	0.1929	26	62	A1204.9	A0224.9	A6204.9	A1174.9
	5.00	0.1969	26	62	A1205.0	A0225.0	A6205.0	A1175.0
	5.10	0.2008	26	62	A1205.1	A0225.1	A6205.1	A1175.1
13/64	5.16	0.2031	26	62	A12013/64			
13/64	5.16	0.2031	31	58		A02213/64		
	5.20	0.2047	26	62	A1205.2	A0225.2	A6205.2	A1175.2
	5.30	0.2087	26	62	A1205.3	A0225.3	A6205.3	A1175.3
	5.40	0.2126	28	66	A1205.4	A0225.4	A6205.4	A1175.4
	5.50	0.2165	28	66	A1205.5	A0225.5	A6205.5	A1175.5
7/32	5.56	0.2189	28	66	A1207/32			
7/32	5.56	0.2189	33	61		A0227/32		
	5.60	0.2205	28	66	A1205.6	A0225.6	A6205.6	A1175.6
	5.70	0.2244	28	66	A1205.7	A0225.7	A6205.7	A1175.7
	5.80	0.2283	28	66	A1205.8	A0225.8	A6205.8	A1175.8
	5.90	0.2323	28	66	A1205.9	A0225.9	A6205.9	A1175.9
15/64	5.95	0.2343	28	66	A12015/64			
15/64	5.95	0.2343	34	63		A02215/64		
	6.00	0.2362	28	66	A1206.0	A0226.0	A6206.0	A1176.0
	6.10	0.2402	31	70	A1206.1	A0226.1	A6206.1	A1176.1
	6.20	0.2441	31	70	A1206.2	A0226.2	A6206.2	A1176.2
	6.30	0.2480	31	70	A1206.3	A0226.3	A6206.3	A1176.3
1/4	6.35	0.2500	31	70	A1201/4			A1171/4
1/4	6.35	0.2500	36	65		A0221/4		
	6.40	0.2520	31	70	A1206.4	A0226.4	A6206.4	A1176.4
	6.50	0.2559	31	70	A1206.5	A0226.5	A6206.5	A1176.5
	6.60	0.2598	31	70	A1206.6	A0226.6	A6206.6	A1176.6
	6.70	0.2638	31	70	A1206.7	A0226.7	A6206.7	A1176.7
	6.80	0.2677	34	74	A1206.8	A0226.8	A6206.8	A1176.8
	6.90	0.2717	34	74	A1206.9	A0226.9	A6206.9	A1176.9
	7.00	0.2756	34	74	A1207.0	A0227.0	A6207.0	A1177.0
	7.10	0.2795	34	74	A1207.1	A0227.1	A6207.1	A1177.1
9/32	7.14	0.2811	34	74	A1209/32			
9/32	7.14	0.2811	40	70		A0229/32		
	7.20	0.2835	34	74	A1207.2	A0227.2	A6207.2	A1177.2
	7.30	0.2874	34	74	A1207.3	A0227.3	A6207.3	A1177.3
	7.40	0.2913	34	74	A1207.4	A0227.4	A6207.4	A1177.4
	7.50	0.2953	34	74	A1207.5	A0227.5	A6207.5	A1177.5
	7.60	0.2992	37	79	A1207.6	A0227.6	A6207.6	A1177.6
	7.70	0.3031	37	79	A1207.7	A0227.7	A6207.7	A1177.7
	7.80	0.3071	37	79	A1207.8	A0227.8	A6207.8	A1177.8
	7.90	0.3110	37	79	A1207.9	A0227.9	A6207.9	A1177.9
5/16	7.94	0.3126	37	79	A1205/16			A1175/16
5/16	7.94	0.3126	43	73		A0225/16		
	8.00	0.3150	37	79	A1208.0	A0228.0	A6208.0	A1178.0
	8.10	0.3189	37	79	A1208.1	A0228.1	A6208.1	A1178.1
	8.20	0.3228	37	79	A1208.2	A0228.2	A6208.2	A1178.2
	8.30	0.3268	37	79	A1208.3	A0228.3	A6208.3	A1178.3
	8.40	0.3307	37	79	A1208.4	A0228.4	A6208.4	A1178.4
	8.50	0.3346	37	79	A1208.5	A0228.5	A6208.5	A1178.5
	8.60	0.3386	40	84	A1208.6	A0228.6	A6208.6	A1178.6
	8.70	0.3425	40	84	A1208.7	A0228.7	A6208.7	A1178.7
11/32	8.73	0.3437	40	84	A12011/32			
11/32	8.73	0.3437	45	78		A02211/32		
	8.80	0.3465	40	84	A1208.8	A0228.8	A6208.8	A1178.8
	8.90	0.3504	40	84	A1208.9	A0228.9	A6208.9	A1178.9
	9.00	0.3543	40	84	A1209.0	A0229.0	A6209.0	A1179.0
	9.10	0.3583	40	84	A1209.1	A0229.1	A6209.1	A1179.1

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A120	A022	A620	A117
	9.20	0.3622	40	84	A1209.2	A0229.2	A6209.2	A1179.2
	9.30	0.3661	40	84	A1209.3	A0229.3	A6209.3	A1179.3
	9.40	0.3701	40	84	A1209.4	A0229.4	A6209.4	A1179.4
	9.50	0.3740	40	84	A1209.5	A0229.5	A6209.5	A1179.5
3/8	9.52	0.3748	43	89	A1203/8			A1173/8
3/8	9.52	0.3748	48	81		A0223/8		
	9.60	0.3780	43	89	A1209.6	A0229.6	A6209.6	A1179.6
	9.70	0.3819	43	89	A1209.7	A0229.7	A6209.7	A1179.7
	9.80	0.3858	43	89	A1209.8	A0229.8	A6209.8	A1179.8
	9.90	0.3898	43	89	A1209.9	A0229.9	A6209.9	A1179.9
	10.00	0.3937	43	89	A12010.0	A02210.0	A62010.0	A11710.0
	10.10	0.3976	43	89	A12010.1	A02210.1		
	10.20	0.4016	43	89	A12010.2	A02210.2	A62010.2	A11710.2
	10.30	0.4055	43	89	A12010.3	A02210.3	A62010.3	
13/32	10.32	0.4063	43	89	A12013/32			
13/32	10.32	0.4063	51	86		A02213/32		
	10.40	0.4094	43	89	A12010.4	A02210.4	A62010.4	
	10.50	0.4134	43	89	A12010.5	A02210.5	A62010.5	A11710.5
	10.60	0.4173	43	89	A12010.6	A02210.6		
	10.70	0.4213	47	95	A12010.7	A02210.7		
	10.80	0.4252	47	95	A12010.8	A02210.8	A62010.8	
	10.90	0.4291	47	95	A12010.9	A02210.9		
	11.00	0.4331	47	95	A12011.0	A02211.0	A62011.0	A11711.0
	11.10	0.4370	47	95	A12011.1	A02211.1		
7/16	11.11	0.4374	47	95	A1207/16			
7/16	11.11	0.4374	54	89		A0227/16		
	11.20	0.4409	47	95	A12011.2	A02211.2		
	11.30	0.4449	47	95	A12011.3	A02211.3		
	11.50	0.4528	47	95	A12011.5	A02211.5	A62011.5	A11711.5
	11.60	0.4567	47	95	A12011.6	A02211.6		
	11.70	0.4606	47	95	A12011.7	A02211.7		
	11.80	0.4646	47	95	A12011.8	A02211.8		
	11.90	0.4685	51	102	A12011.9	A02211.9		
	12.00	0.4724	51	102	A12012.0	A02212.0	A62012.0	A11712.0
	12.10	0.4764	51	102	A12012.1	A02212.1		
	12.20	0.4803	51	102	A12012.2	A02212.2	A62012.2	
	12.50	0.4921	51	102	A12012.5	A02212.5	A62012.5	
1/2	12.70	0.5000	51	102	A1201/2			A1171/2
1/2	12.70	0.5000	60	98		A0221/2		
	12.80	0.5039	51	102			A62012.8	
	13.00	0.5118	51	102	A12013.0	A02213.0	A62013.0	A11713.0
	13.50	0.5315	54	107	A12013.5	A02213.5		
	14.00	0.5512	54	107	A12014.0	A02214.0		
9/16	14.29	0.5626	56	111	A1209/16			
9/16	14.29	0.5626	67	105		A0229/16		
	14.50	0.5709	56	111	A12014.5	A02214.5		
	15.00	0.5906	56	111	A12015.0	A02215.0		
	15.50	0.6102	58	115	A12015.5	A02215.5		
5/8	15.88	0.6252	58	115	A1205/8			
5/8	15.88	0.6252	73	111		A0225/8		
	16.00	0.6299	58	115	A12016.0	A02216.0		
	16.50	0.6496	60	119	A12016.5			
	17.00	0.6693	60	119	A12017.0			
11/16	17.46	0.6874	62	123	A12011/16			
	17.50	0.6890	62	123	A12017.5			
	18.00	0.7087	62	123	A12018.0			
	18.50	0.7283	64	127	A12018.5			
	19.00	0.7480	64	127	A12019.0			
3/4	19.05	0.7500	66	131	A1203/4			
	19.50	0.7677	66	131	A12019.5			
	20.00	0.7874	66	131	A12020.0			
	20.50	0.8071	68	136	A12020.5			
13/16	20.64	0.8126	68	136	A12013/16			
	21.00	0.8268	68	136	A12021.0			
	22.00	0.8661	70	141	A12022.0			
7/8	22.22	0.8748	70	141	A1207/8			
	23.00	0.9055	72	146	A12023.0			
15/16	23.81	0.9374	75	151	A12015/16			
	24.00	0.9449	75	151	A12024.0			
	25.00	0.9843	75	151	A12025.0			

A520

- ADX Stub Drill
- Broca ADX , serie extra corta
- Broca ADX Extra Curta
- Foret extra-court ADX

A520	▪	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	6.2	6.3	7.2	7.3	7.4	8.2	
		8.3																				
	•	1.6	4.3	5.1	5.2	5.3	6.1	6.4	7.1	8.1												

A520

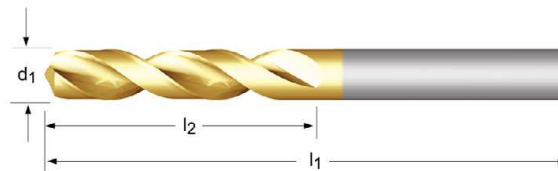
HSS

DIN 1897

2.5XD

130°

TiN



d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A520
1/8	3.00	0.1181	16	46	A5203.0
	3.10	0.1220	18	49	A5203.1
	3.18	0.1252	18	49	A5201/8
	3.20	0.1260	18	49	A5203.2
	3.30	0.1299	18	49	A5203.3
9/64	3.40	0.1339	20	52	A5203.4
	3.50	0.1378	20	52	A5203.5
	3.57	0.1406	20	52	A5209/64
	3.60	0.1417	20	52	A5203.6
	3.70	0.1457	20	52	A5203.7
	3.80	0.1496	22	55	A5203.8
	3.90	0.1535	22	55	A5203.9
5/32	3.97	0.1563	22	55	A5205/32
	4.00	0.1575	22	55	A5204.0
	4.10	0.1614	22	55	A5204.1
	4.20	0.1654	22	55	A5204.2
	4.30	0.1693	24	58	A5204.3
	4.37	0.1720	24	58	A52011/64
	4.40	0.1732	24	58	A5204.4
3/16	4.50	0.1772	24	58	A5204.5
	4.60	0.1811	24	58	A5204.6
	4.70	0.1850	24	58	A5204.7
	4.76	0.1874	26	62	A5203/16
	4.80	0.1890	26	62	A5204.8
	4.90	0.1929	26	62	A5204.9
	5.00	0.1969	26	62	A5205.0
13/64	5.10	0.2008	26	62	A5205.1
	5.16	0.2031	26	62	A52013/64
	5.20	0.2047	26	62	A5205.2
	5.30	0.2087	26	62	A5205.3
	5.40	0.2126	28	66	A5205.4
	5.50	0.2165	28	66	A5205.5
	5.56	0.2189	28	66	A5207/32
7/32	5.60	0.2205	28	66	A5205.6
	5.70	0.2244	28	66	A5205.7
	5.80	0.2283	28	66	A5205.8
	5.90	0.2323	28	66	A5205.9
	5.95	0.2343	28	66	A52015/64

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A520
	6.00	0.2362	28	66	A5206.0
	6.10	0.2402	31	70	A5206.1
	6.20	0.2441	31	70	A5206.2
	6.30	0.2480	31	70	A5206.3
1/4	6.35	0.2500	31	70	A5201/4
	6.40	0.2520	31	70	A5206.4
	6.50	0.2559	31	70	A5206.5
	6.60	0.2598	31	70	A5206.6
	6.70	0.2638	31	70	A5206.7
17/64	6.75	0.2657	34	74	A52017/64
	6.80	0.2677	34	74	A5206.8
	6.90	0.2717	34	74	A5206.9
	7.00	0.2756	34	74	A5207.0
	7.10	0.2795	34	74	A5207.1
9/32	7.14	0.2811	34	74	A5209/32
	7.20	0.2835	34	74	A5207.2
	7.30	0.2874	34	74	A5207.3
	7.40	0.2913	34	74	A5207.4
	7.50	0.2953	34	74	A5207.5
19/64	7.54	0.2969	37	79	A52019/64
	7.60	0.2992	37	79	A5207.6
	7.70	0.3031	37	79	A5207.7
	7.80	0.3071	37	79	A5207.8
	7.90	0.3110	37	79	A5207.9
5/16	7.94	0.3126	37	79	A5205/16
	8.00	0.3150	37	79	A5208.0
	8.10	0.3189	37	79	A5208.1
	8.20	0.3228	37	79	A5208.2
	8.30	0.3268	37	79	A5208.3
21/64	8.33	0.3280	37	79	A52021/64
	8.40	0.3307	37	79	A5208.4
	8.50	0.3346	37	79	A5208.5
	8.60	0.3386	40	84	A5208.6
	8.70	0.3425	40	84	A5208.7
11/32	8.73	0.3437	40	84	A52011/32
	8.80	0.3465	40	84	A5208.8
	8.90	0.3504	40	84	A5208.9
	9.00	0.3543	40	84	A5209.0
	9.10	0.3583	40	84	A5209.1
23/64	9.13	0.3594	40	84	A52023/64
	9.20	0.3622	40	84	A5209.2
	9.30	0.3661	40	84	A5209.3
	9.40	0.3701	40	84	A5209.4
	9.50	0.3740	40	84	A5209.5
3/8	9.52	0.3748	43	89	A5203/8
	9.60	0.3780	43	89	A5209.6
	9.70	0.3819	43	89	A5209.7
	9.80	0.3858	43	89	A5209.8
	9.90	0.3898	43	89	A5209.9
25/64	9.92	0.3906	43	89	A52025/64
	10.00	0.3937	43	89	A52010.0
	10.10	0.3976	43	89	A52010.1
	10.20	0.4016	43	89	A52010.2
	10.30	0.4055	43	89	A52010.3
13/32	10.32	0.4063	43	89	A52013/32
	10.40	0.4094	43	89	A52010.4
	10.50	0.4134	43	89	A52010.5
	10.60	0.4173	43	89	A52010.6
	10.70	0.4213	47	95	A52010.7
27/64	10.72	0.4220	47	95	A52027/64
	10.80	0.4252	47	95	A52010.8
	10.90	0.4291	47	95	A52010.9
	11.00	0.4331	47	95	A52011.0
	11.10	0.4370	47	95	A52011.1
7/16	11.11	0.4374	47	95	A5207/16
	11.20	0.4409	47	95	A52011.2
	11.30	0.4449	47	95	A52011.3
	11.40	0.4488	47	95	A52011.4
	11.50	0.4528	47	95	A52011.5
29/64	11.51	0.4531	47	95	A52029/64

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A520
	11.60	0.4567	47	95	A52011.6
	11.70	0.4606	47	95	A52011.7
	11.80	0.4646	47	95	A52011.8
	11.90	0.4685	51	102	A52011.9
15/32	11.91	0.4689	51	102	A52015/32
	12.00	0.4724	51	102	A52012.0
	12.10	0.4764	51	102	A52012.1
	12.20	0.4803	51	102	A52012.2
	12.30	0.4843	51	102	A52012.3
31/64	12.30	0.4843	51	102	A52031/64
	12.40	0.4882	51	102	A52012.4
	12.50	0.4921	51	102	A52012.5
	12.60	0.4961	51	102	A52012.6
	12.70	0.5000	51	102	A52012.7
1/2	12.70	0.5000	51	102	A5201/2
	12.80	0.5039	51	102	A52012.8
	12.90	0.5079	51	102	A52012.9
	13.00	0.5118	51	102	A52013.0

A124

- Stub Drill with 4 facet ground Brazed Carbide Tip
- Broca extra corta 4 caras con punta soldada de metal duro
- Broca Extra Curta 4 faces com Pastilha Soldada de MD
- Foret extra-court avec partie carbure rectifiée et brasée sur 4 facettes

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

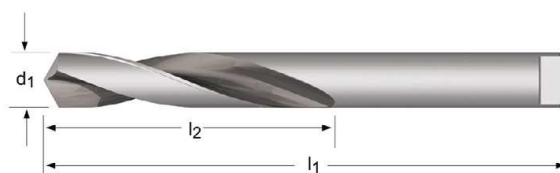
A124	▪	3.1	3.2	3.3	3.4										
	•	1.5	1.6	2.2	2.3	4.1	4.2	4.3	5.1	5.2	5.3	6.2	6.3	6.4	8.2

A124

HSS
HM

DIN
8037

2.5XD



A124



3.00 - 16.00

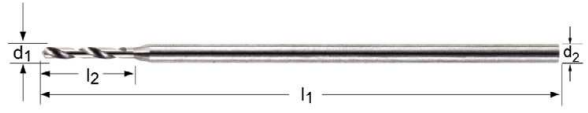
d_1 Ø mm	d_1 decimal Inch	l_2 mm	l_1 mm	A124
3.00	0.1181	20	50	A1243.0
3.20	0.1260	25	56	A1243.2
3.50	0.1378	25	56	A1243.5
4.00	0.1575	25	56	A1244.0
4.20	0.1654	28	63	A1244.2
4.50	0.1772	28	63	A1244.5
4.80	0.1890	28	63	A1244.8
5.00	0.1969	28	63	A1245.0
5.20	0.2047	32	71	A1245.2
5.50	0.2165	32	71	A1245.5
5.80	0.2283	32	71	A1245.8
6.00	0.2362	32	71	A1246.0
6.50	0.2559	32	71	A1246.5
6.80	0.2677	40	80	A1246.8
7.00	0.2756	40	80	A1247.0
7.50	0.2953	40	80	A1247.5
8.00	0.3150	40	80	A1248.0
8.50	0.3346	50	90	A1248.5
9.00	0.3543	50	90	A1249.0
9.50	0.3740	50	90	A1249.5
10.00	0.3937	56	100	A12410.0
10.50	0.4134	56	100	A12410.5
11.00	0.4331	56	100	A12411.0
11.50	0.4528	63	112	A12411.5
12.00	0.4724	63	112	A12412.0
13.00	0.5118	63	112	A12413.0
14.00	0.5512	71	125	A12414.0
15.00	0.5906	71	125	A12415.0
16.00	0.6299	80	140	A12416.0

A720

- Micro Drill
- Micro Broca
- Micro Brocas
- Micro foret

A720	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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																	

A720 HSS-E **DIN 1899** 2.5XD **118°** N

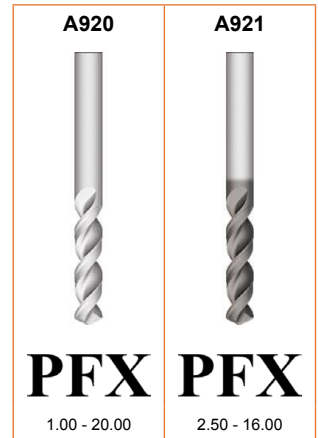
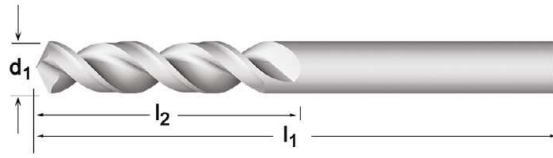
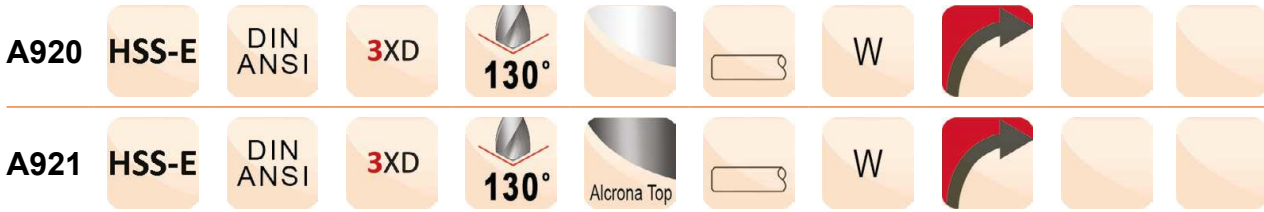


d_1 Ø mm	d_1 decimal Inch	l_2 mm	l_1 mm	d_2 Ø mm	A720
0.15	0.0059	1.0	25	1	A720.15
0.16	0.0063	1.4	25	1	A720.16
0.17	0.0067	1.4	25	1	A720.17
0.18	0.0070	1.4	25	1	A720.18
0.20	0.0078	1.8	25	1	A720.2
0.22	0.0087	1.8	25	1	A720.22
0.25	0.0098	2.2	25	1	A720.25
0.27	0.0106	2.2	25	1	A720.27
0.28	0.0110	2.2	25	1	A720.28
0.30	0.0118	2.2	25	1	A720.3
0.35	0.0138	2.8	25	1	A720.35
0.38	0.0150	2.8	25	1	A720.38
0.39	0.0154	3.6	25	1	A720.39
0.40	0.0157	3.6	25	1	A720.4
0.45	0.0177	3.6	25	1	A720.45
0.50	0.0197	4.0	25	1	A720.5
0.55	0.0217	4.5	25	1	A720.55
0.60	0.0236	4.5	25	1	A720.6
0.62	0.0244	5.0	25	1	A720.62
0.65	0.0256	5.0	25	1	A720.65
0.70	0.0276	5.6	25	1	A720.7
0.75	0.0295	5.6	25	1	A720.75
0.80	0.0315	6.3	25	1.5	A720.8
0.85	0.0335	6.3	25	1.5	A720.85
0.90	0.0354	7.1	25	1.5	A720.9
0.95	0.0374	7.1	25	1.5	A720.95
1.00	0.0394	8.0	25	1.5	A720.10
1.05	0.0413	8.0	25	1.5	A720.105
1.10	0.0433	9.0	25	1.5	A720.11
1.20	0.0472	10.0	25	1.5	A720.12
1.30	0.0512	10.0	25	1.5	A720.13
1.40	0.0551	11.2	25	1.5	A720.14

A920 A921

- PFX Stub Drill
- Broca PFX Extra Corta
- Broca Extra Curta PFX
- Foret PFX extra-court

A920	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	4.1	4.2	4.3	5.1	5.2	5.3	7.2
	•	3.1	3.2	3.3	3.4	6.1	6.2	6.3	6.4	7.1	7.3	7.4	8.1	8.2			
A921	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	7.4		
	•	4.1	4.2	4.3	5.1	5.2	5.3	6.3	6.4								



d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A920	A921
	1.00	0.0394	6	26	A9201.0	
	1.10	0.0433	7	28	A9201.1	
3/64	1.19	0.0469	13	35	A9203/64	
	1.20	0.0472	8	30	A9201.2	
	1.25	0.0492	8	30	A9201.25	
	1.30	0.0512	8	30	A9201.3	
	1.35	0.0531	9	32	A9201.35	
	1.40	0.0551	9	32	A9201.4	
	1.50	0.0591	9	32	A9201.5	
	1.55	0.0610	10	34	A9201.55	
1/16	1.59	0.0626	16	41	A9201/16	
	1.60	0.0630	10	34	A9201.6	
	1.70	0.0669	10	34	A9201.7	
	1.75	0.0689	11	36	A9201.75	
	1.80	0.0709	11	36	A9201.8	
	1.90	0.0748	11	36	A9201.9	
5/64	1.98	0.0780	17	43	A9205/64	
	2.00	0.0787	12	38	A9202.0	
	2.10	0.0827	12	38	A9202.1	
	2.15	0.0846	13	40	A9202.15	
	2.20	0.0866	13	40	A9202.2	
	2.30	0.0906	13	40	A9202.3	
	2.35	0.0925	14	43	A9202.35	
3/32	2.38	0.0937	19	41	A9203/32	
	2.40	0.0945	14	43	A9202.4	
	2.50	0.0984	14	43	A9202.5	A9212.5
	2.60	0.1024	14	43	A9202.6	A9212.6
	2.70	0.1063	16	46	A9202.7	A9212.7
7/64	2.78	0.1094	21	46	A9207/64	A9217/64
	2.80	0.1102	16	46	A9202.8	
	2.90	0.1142	16	46	A9202.9	A9212.9
	3.00	0.1181	16	46	A9203.0	A9213.0

d_1 Ø _{h8} Inch	d_1 Ø _{h8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A920	A921
1/8	3.10	0.1220	18	49	A9203.1	A9213.1
	3.18	0.1252	22	48	A9201/8	A9211/8
	3.20	0.1260	18	49	A9203.2	A9213.2
	3.30	0.1299	18	49	A9203.3	A9213.3
9/64	3.40	0.1339	20	52	A9203.4	A9213.4
	3.50	0.1378	20	52	A9203.5	A9213.5
	3.57	0.1406	24	49	A9209/64	A9219/64
	3.60	0.1417	20	52	A9203.6	A9213.6
	3.70	0.1457	20	52	A9203.7	A9213.7
	3.80	0.1496	22	55	A9203.8	A9213.8
5/32	3.90	0.1535	22	55	A9203.9	A9213.9
	3.97	0.1563	25	52	A9205/32	A9215/32
	4.00	0.1575	22	55	A9204.0	A9214.0
	4.10	0.1614	22	55	A9204.1	A9214.1
	4.20	0.1654	22	55	A9204.2	A9214.2
11/64	4.30	0.1693	24	58	A9204.3	A9214.3
	4.37	0.1720	27	54	A92011/64	A92111/64
	4.40	0.1732	24	58	A9204.4	A9214.4
	4.50	0.1772	24	58	A9204.5	A9214.5
	4.60	0.1811	24	58	A9204.6	A9214.6
	4.70	0.1850	24	58	A9204.7	A9214.7
3/16	4.76	0.1874	29	56	A9203/16	A9213/16
	4.80	0.1890	26	62	A9204.8	A9214.8
	4.90	0.1929	26	62	A9204.9	A9214.9
	5.00	0.1969	26	62	A9205.0	A9215.0
	5.10	0.2008	26	62	A9205.1	A9215.1
13/64	5.16	0.2031	30	57	A92013/64	A92113/64
	5.20	0.2047	26	62	A9205.2	A9215.2
	5.30	0.2087	26	62	A9205.3	A9215.3
	5.40	0.2126	28	66	A9205.4	A9215.4
	5.50	0.2165	28	66	A9205.5	A9215.5
7/32	5.56	0.2189	32	60	A9207/32	A9217/32
	5.60	0.2205	28	66	A9205.6	A9215.6
	5.70	0.2244	28	66	A9205.7	A9215.7
	5.80	0.2283	28	66	A9205.8	A9215.8
	5.90	0.2323	28	66	A9205.9	A9215.9
15/64	5.95	0.2343	33	62	A92015/64	A92115/64
	6.00	0.2362	28	66	A9206.0	A9216.0
	6.10	0.2402	31	70	A9206.1	A9216.1
	6.20	0.2441	31	70	A9206.2	A9216.2
	6.30	0.2480	31	70	A9206.3	A9216.3
1/4	6.35	0.2500	35	64	A9201/4	A9211/4
	6.40	0.2520	31	70	A9206.4	A9216.4
	6.50	0.2559	31	70	A9206.5	A9216.5
	6.60	0.2598	31	70	A9206.6	A9216.6
	6.70	0.2638	31	70	A9206.7	A9216.7
17/64	6.75	0.2657	37	67	A92017/64	A92117/64
	6.80	0.2677	34	74	A9206.8	A9216.8
	6.90	0.2717	34	74	A9206.9	A9216.9
	7.00	0.2756	34	74	A9207.0	A9217.0
	7.10	0.2795	34	74	A9207.1	A9217.1
9/32	7.14	0.2811	38	68	A9209/32	A9219/32
	7.20	0.2835	34	74	A9207.2	A9217.2
	7.30	0.2874	34	74	A9207.3	A9217.3
	7.40	0.2913	34	74	A9207.4	A9217.4
	7.50	0.2953	34	74	A9207.5	A9217.5
19/64	7.54	0.2969	40	70	A92019/64	A92119/64
	7.60	0.2992	37	79	A9207.6	A9217.6
	7.70	0.3031	37	79	A9207.7	A9217.7
	7.80	0.3071	37	79	A9207.8	A9217.8
	7.90	0.3110	37	79	A9207.9	A9217.9
5/16	7.94	0.3126	41	71	A9205/16	A9215/16
	8.00	0.3150	37	79	A9208.0	A9218.0
	8.10	0.3189	37	79	A9208.1	A9218.1
	8.20	0.3228	37	79	A9208.2	A9218.2
	8.30	0.3268	37	79	A9208.3	A9218.3
21/64	8.33	0.3280	43	75	A92021/64	A92121/64
	8.40	0.3307	37	79	A9208.4	A9218.4
	8.50	0.3346	37	79	A9208.5	A9218.5
	8.60	0.3386	40	84	A9208.6	A9218.6

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A920	A921
11/32	8.70	0.3425	40	84	A9208.7	A9218.7
	8.73	0.3437	43	76	A92011/32	A92111/32
	8.80	0.3465	40	84	A9208.8	A9218.8
	8.90	0.3504	40	84	A9208.9	A9218.9
	9.00	0.3543	40	84	A9209.0	A9219.0
23/64	9.10	0.3583	40	84	A9209.1	A9219.1
	9.13	0.3594	44	78	A92023/64	A92123/64
	9.20	0.3622	40	84	A9209.2	A9219.2
	9.30	0.3661	40	84	A9209.3	A9219.3
	9.40	0.3701	40	84	A9209.4	A9219.4
3/8	9.50	0.3740	40	84	A9209.5	A9219.5
	9.52	0.3748	46	79	A9203/8	A9213/8
	9.60	0.3780	43	89	A9209.6	A9219.6
	9.70	0.3819	43	89	A9209.7	A9219.7
	9.80	0.3858	43	89	A9209.8	A9219.8
25/64	9.90	0.3898	43	89	A9209.9	A9219.9
	9.92	0.3906	48	83	A92025/64	A92125/64
	10.00	0.3937	43	89	A92010.0	A92110.0
	10.20	0.4016	43	89	A92010.2	A92110.2
	10.30	0.4055	43	89	A92010.3	A92110.3
13/32	10.32	0.4063	49	84	A92013/32	A92113/32
	10.50	0.4134	43	89	A92010.5	A92110.5
	10.72	0.4220	51	86	A92027/64	A92127/64
27/64	10.80	0.4252	47	95	A92010.8	A92110.8
	11.00	0.4331	47	95	A92011.0	A92111.0
	11.11	0.4374	52	87	A9207/16	A9217/16
7/16	11.50	0.4528	47	95	A92011.5	A92111.5
	11.51	0.4531	54	90	A92029/64	A92129/64
	11.80	0.4646	47	95	A92011.8	A92111.8
15/32	11.91	0.4689	54	92	A92015/32	A92115/32
	12.00	0.4724	51	102	A92012.0	A92112.0
	12.20	0.4803	51	102	A92012.2	
31/64	12.30	0.4843	56	94	A92031/64	A92131/64
	12.50	0.4921	51	102	A92012.5	A92112.5
	12.70	0.5000	57	95	A9201/2	A9211/2
1/2	13.00	0.5118	51	102	A92013.0	A92113.0
	13.10	0.5157	60	98	A92033/64	A92133/64
33/64	13.50	0.5315	54	107	A92013.5	A92113.5
	13.89	0.5469	64	102	A92035/64	A92135/64
	14.00	0.5512	54	107	A92014.0	A92114.0
9/16	14.29	0.5626	64	102	A9209/16	A9219/16
	14.50	0.5709	56	111	A92014.5	A92114.5
37/64	14.68	0.5780	67	105	A92037/64	A92137/64
	14.75	0.5807	56	111	A92014.75	A92114.75
	15.00	0.5906	56	111	A92015.0	A92115.0
19/32	15.08	0.5937	67	105	A92019/32	A92119/32
39/64	15.48	0.6094	70	108	A92039/64	A92139/64
	15.50	0.6102	58	115	A92015.5	A92115.5
5/8	15.88	0.6252	70	108	A9205/8	A9215/8
	16.00	0.6299	58	115	A92016.0	A92116.0
41/64	16.27	0.6406	73	114	A92041/64	
	16.50	0.6496	60	119	A92016.5	
21/32	16.67	0.6563	73	114	A92021/32	
	16.75	0.6594	60	119	A92016.75	
	17.00	0.6693	60	119	A92017.0	
43/64	17.07	0.6720	73	117	A92043/64	
11/16	17.46	0.6874	73	117	A92011/16	
	17.50	0.6890	62	123	A92017.5	
45/64	17.86	0.7031	76	121	A92045/64	
	18.00	0.7087	62	123	A92018.0	
23/32	18.26	0.7189	76	121	A92023/32	
	18.50	0.7283	64	127	A92018.5	
47/64	18.65	0.7343	79	127	A92047/64	
	19.00	0.7480	64	127	A92019.0	
3/4	19.05	0.7500	79	127	A9203/4	
49/64	19.45	0.7657	83	130	A92049/64	
	19.50	0.7677	66	131	A92019.5	
25/32	19.84	0.7811	83	130	A92025/32	
	20.00	0.7874	66	131	A92020.0	

A002

- 002 Jobber Drill Split Point
- 002 Brocas serie corta autocentrante
- 002 Broca Curta Autocentrante
- Foret court avec affûtage en croix

Bright below 2.0mm, TiN Tipped and Split Point 2.0mm and above
 Brillante por debajo de 2.0mm, Punta de TiN y rectificado de la punta a partir 2.0mm
 Brilhante Abaixo de 2.0mm. Ponta de TiN afiação em Cruz para 2.0mm e acima
 Brillant en dessous de 2,0mm, TIN en pointe et affutage en croix au dessus de 2,0 mm

A002S

- 002 Jobber Drill Split Point - Pouch Pack
- 002 Brocas serie corte autocentrante - Blister
- 002 Broca Curta Autocentrante - Blister
- Foret court avec affûtage en croix - en blister

TiN Tipped
 Punta de TiN
 Ponta de TiN
 TIN en pointe

A100

- Jobber Drill
- Broca , serie corta
- Broca Curta
- Foret court

Bright below 1.0mm, 3/64", N60
 Brillante por debajo de 1,0 mm, 3/64".N60
 Brilhante Abaixo de 1.0mm, 3/64", Nr.60
 Brillant au dessous de 1,0, 3/64, N60

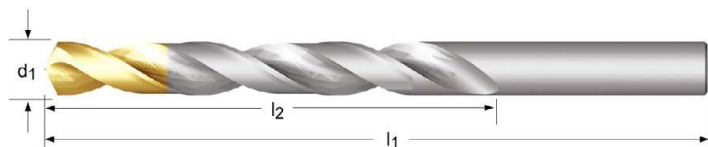
A101

- Jobber Drill - LH
- Broca , serie corta - Izquierdas
- Broca Curta Standard - LH
- Foret court - à gauche

Bright below 3.0mm
 Brillante por debajo de 3,0 mm
 Brilhante Abaixo de 3.0mm
 Brillant au dessous de 3,0 mm

A002; A002S	▪	1.1	1.2	1.3	1.4	3.1	3.2	7.1	7.2	8.1	8.2								
	•	1.5	1.6	2.1	2.2	2.3	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.3
		9.1																	
A100; A101	▪	1.1	1.2	1.3	1.4	3.1	3.2												
	•	1.5	1.6	2.1	2.2	2.3	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
			7.4	8.1	8.2	8.3	9.1												

A002	HSS	DIN 338	4XD	118°	TiN		N				
	126	128	127	125	129	336	337	338	333	334	335
A002S	HSS	DIN 338	4XD	118°	TiN		N				
A100	HSS	DIN 338	4XD	118°	ST		N				
									132	133	130
A101	HSS	DIN 338	4XD	118°	ST		N				



d_1 $\varnothing h_8$ "/Nr./letter	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A002	A002S	A100	A101
	0.20	0.0079	2.5	19			A100.2	
	0.25	0.0098	3	19			A100.25	
	0.30	0.0118	3	19			A100.3	
	0.32	0.0126	4	19			A100.32	
80	0.34	0.0134	4	19			A100N80	
	0.35	0.0138	4	19			A100.35	
79	0.37	0.0146	4	19			A100N79	
	0.38	0.0150	4	19			A100.38	
1/64	0.40	0.0157	5	20			A1001/64	
	0.40	0.0157	5	20			A100.4	
78	0.41	0.0161	5	20			A100N78	
	0.42	0.0165	5	20			A100.42	
	0.45	0.0177	5	20			A100.45	
77	0.46	0.0181	5	20			A100N77	
	0.48	0.0189	5	20			A100.48	
	0.50	0.0197	6	22			A100.5	
76	0.51	0.0201	6	22			A100N76	
	0.52	0.0205	6	22			A100.52	
75	0.53	0.0209	6	22			A100N75	
	0.55	0.0217	7	24			A100.55	
74	0.57	0.0224	7	24			A100N74	
	0.58	0.0228	7	24			A100.58	
	0.60	0.0236	7	24			A100.6	
73	0.61	0.0240	8	26			A100N73	
	0.62	0.0244	8	26			A100.62	
72	0.64	0.0252	8	26			A100N72	
	0.65	0.0256	8	26			A100.65	
71	0.66	0.0260	8	26			A100N71	
	0.68	0.0268	9	28			A100.68	
	0.70	0.0276	9	28			A100.7	
70	0.71	0.0280	9	28			A100N70	
	0.72	0.0283	9	28			A100.72	
69	0.74	0.0291	9	28			A100N69	
	0.75	0.0295	9	28			A100.75	
68	0.79	0.0311	10	30			A100N68	
	0.78	0.0307	10	30			A100.78	
1/32	0.79	0.0311	10	30			A1001/32	
	0.80	0.0315	10	30			A100.8	
67	0.81	0.0319	10	30			A100N67	
	0.82	0.0323	10	30			A100.82	
66	0.84	0.0331	10	30			A100N66	
	0.85	0.0335	10	30			A100.85	
	0.88	0.0346	11	32			A100.88	
65	0.89	0.0350	11	32			A100N65	
	0.90	0.0354	11	32			A100.9	
64	0.91	0.0358	11	32			A100N64	
	0.92	0.0362	11	32			A100.92	
63	0.94	0.0370	11	32			A100N63	

d_1 $\varnothing h_8$ "/Nr./letter	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A002	A002S	A100	A101
	0.95	0.0374	11	32			A100.95	
62	0.97	0.0382	12	34			A100N62	
	0.98	0.0386	12	34			A100.98	
61	0.99	0.0390	12	34			A100N61	
	1.00	0.0394	12	34	A0021.0		A1001.0	A1011.0
60	1.02	0.0402	12	34			A100N60	
59	1.04	0.0409	12	34			A100N59	
	1.05	0.0413	12	34			A1001.05	
58	1.07	0.0421	14	36			A100N58	
57	1.09	0.0429	14	36			A100N57	
	1.10	0.0433	14	36	A0021.1		A1001.1	A1011.1
	1.15	0.0453	14	36			A1001.15	
56	1.18	0.0465	14	36			A100N56	
3/64	1.19	0.0469	16	38	A0023/64		A1003/64	
	1.20	0.0472	16	38	A0021.2		A1001.2	A1011.2
	1.25	0.0492	16	38			A1001.25	A1011.25
	1.30	0.0512	16	38	A0021.3		A1001.3	A1011.3
55	1.32	0.0520	16	38			A100N55	
	1.35	0.0531	18	40			A1001.35	
	1.40	0.0551	18	40	A0021.4		A1001.4	A1011.4
54	1.40	0.0551	18	40			A100N54	
	1.45	0.0571	18	40			A1001.45	
	1.50	0.0591	18	40	A0021.5		A1001.5	A1011.5
53	1.51	0.0594	20	43			A100N53	
	1.55	0.0610	20	43			A1001.55	
1/16	1.59	0.0626	20	43	A0021/16		A1001/16	
	1.60	0.0630	20	43	A0021.6		A1001.6	A1011.6
52	1.61	0.0634	20	43			A100N52	
	1.65	0.0650	20	43			A1001.65	
	1.70	0.0669	20	43	A0021.7		A1001.7	A1011.7
51	1.70	0.0669	22	46			A100N51	
	1.75	0.0689	22	46			A1001.75	
50	1.78	0.0701	22	46			A100N50	
	1.80	0.0709	22	46	A0021.8		A1001.8	A1011.8
	1.85	0.0728	22	46			A1001.85	
49	1.85	0.0728	22	46			A100N49	
	1.90	0.0748	22	46	A0021.9		A1001.9	A1011.9
48	1.93	0.0760	24	49			A100N48	
	1.95	0.0768	24	49			A1001.95	
5/64	1.98	0.0780	24	49	A0025/64		A1005/64	
47	1.99	0.0783	24	49			A100N47	
	2.00	0.0787	24	49	A0022.0	A002S2.0 ²⁾	A1002.0	A1012.0
	2.05	0.0807	24	49			A1002.05	
46	2.06	0.0811	24	49			A100N46	
45	2.08	0.0819	24	49			A100N45	
	2.10	0.0827	24	49	A0022.1		A1002.1	A1012.1
	2.15	0.0846	27	53			A1002.15	
44	2.18	0.0858	27	53			A100N44	
	2.20	0.0866	27	53	A0022.2		A1002.2	A1012.2
	2.25	0.0886	27	53			A1002.25	
43	2.26	0.0890	27	53			A100N43	
	2.30	0.0906	27	53	A0022.3		A1002.3	A1012.3
	2.35	0.0925	27	53			A1002.35	
42	2.38	0.0937	30	57			A100N42	
3/32	2.38	0.0937	30	57	A0023/32		A1003/32	
	2.40	0.0945	30	57	A0022.4		A1002.4	A1012.4
41	2.44	0.0961	30	57			A100N41	
	2.45	0.0965	30	57			A1002.45	
40	2.49	0.0980	30	57			A100N40	
	2.50	0.0984	30	57	A0022.5	A002S2.5 ²⁾	A1002.5	A1012.5
39	2.53	0.0996	30	57			A100N39	
	2.55	0.1004	30	57			A1002.55	
38	2.58	0.1016	30	57			A100N38	
	2.60	0.1024	30	57	A0022.6		A1002.6	A1012.6
37	2.64	0.1039	30	57			A100N37	
	2.65	0.1043	30	57			A1002.65	
	2.70	0.1063	33	61	A0022.7		A1002.7	A1012.7
36	2.71	0.1067	33	61			A100N36	

²⁾ Sold in packs of 2 / 2 por blister / Duas por embalagem / Deux par blister

d ₁ Øh ₈ "Nr./letter	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	A002	A002S	A100	A101
	2.75	0.1083	33	61			A1002.75	
7/64	2.78	0.1094	33	61	A0027/64		A1007/64	
35	2.79	0.1098	33	61			A100N35	
	2.80	0.1102	33	61	A0022.8		A1002.8	A1012.8
34	2.82	0.1110	33	61			A100N34	
	2.85	0.1122	33	61			A1002.85	
33	2.87	0.1130	33	61			A100N33	
	2.90	0.1142	33	61	A0022.9		A1002.9	A1012.9
	2.95	0.1161	33	61			A1002.95	
32	2.95	0.1161	33	61			A100N32	
	3.00	0.1181	33	61	A0023.0	A002S3.0 ²⁾	A1003.0	A1013.0
31	3.05	0.1201	36	65			A100N31	
	3.10	0.1220	36	65	A0023.1		A1003.1	
	3.15	0.1240	36	65			A1003.15	
1/8	3.18	0.1252	36	65	A0021/8	A002S1/8 ²⁾	A1001/8	
	3.20	0.1260	36	65	A0023.2	A002S3.2 ²⁾	A1003.2	A1013.2
	3.25	0.1280	36	65	A0023.25		A1003.25	
30	3.26	0.1283	36	65			A100N30	
	3.30	0.1299	36	65	A0023.3	A002S3.3 ²⁾	A1003.3	A1013.3
	3.40	0.1339	39	70	A0023.4		A1003.4	
29	3.45	0.1358	39	70			A100N29	
	3.50	0.1378	39	70	A0023.5	A002S3.5 ²⁾	A1003.5	A1013.5
28	3.57	0.1406	39	70			A100N28	
9/64	3.57	0.1406	39	70	A0029/64		A1009/64	
	3.60	0.1417	39	70	A0023.6		A1003.6	
27	3.66	0.1441	39	70			A100N27	
	3.70	0.1457	39	70	A0023.7		A1003.7	
26	3.73	0.1469	39	70			A100N26	
	3.75	0.1476	39	70			A1003.75	
	3.80	0.1496	43	75	A0023.8		A1003.8	A1013.8
25	3.80	0.1496	43	75			A100N25	
24	3.86	0.1520	43	75			A100N24	
	3.90	0.1535	43	75	A0023.9		A1003.9	
23	3.91	0.1539	43	75			A100N23	
5/32	3.97	0.1563	43	75	A0025/32	A002S5/32 ²⁾	A1005/32	
22	3.99	0.1571	43	75			A100N22	
	4.00	0.1575	43	75	A0024.0	A002S4.0 ²⁾	A1004.0	A1014.0
21	4.04	0.1591	43	75			A100N21	
20	4.09	0.1610	43	75			A100N20	
	4.10	0.1614	43	75	A0024.1	A002S4.1 ²⁾	A1004.1	
	4.20	0.1654	43	75	A0024.2	A002S4.2 ²⁾	A1004.2	A1014.2
19	4.22	0.1661	43	75			A100N19	
	4.25	0.1673	43	75			A1004.25	
	4.30	0.1693	47	80	A0024.3		A1004.3	
18	4.31	0.1697	47	80			A100N18	
11/64	4.37	0.1720	47	80	A00211/64		A10011/64	
17	4.39	0.1728	47	80			A100N17	
	4.40	0.1732	47	80	A0024.4		A1004.4	
	4.50	0.1772	47	80	A0024.5	A002S4.5 ²⁾	A1004.5	A1014.5
16	4.50	0.1772	47	80			A100N16	
15	4.57	0.1799	47	80			A100N15	
	4.60	0.1811	47	80	A0024.6		A1004.6	
14	4.62	0.1819	47	80			A100N14	
	4.70	0.1850	47	80	A0024.7		A1004.7	
13	4.70	0.1850	47	80			A100N13	
	4.75	0.1870	47	80			A1004.75	
3/16	4.76	0.1874	52	86	A0023/16	A002S3/16 ²⁾	A1003/16	
	4.80	0.1890	52	86	A0024.8		A1004.8	A1014.8
12	4.80	0.1890	52	86			A100N12	
11	4.85	0.1909	52	86			A100N11	
	4.90	0.1929	52	86	A0024.9		A1004.9	
10	4.92	0.1937	52	86			A100N10	
9	4.98	0.1961	52	86			A100N9	
	5.00	0.1969	52	86	A0025.0	A002S5.0 ²⁾	A1005.0	A1015.0
8	5.06	0.1992	52	86			A100N8	
	5.10	0.2008	52	86	A0025.1		A1005.1	A1015.1
7	5.11	0.2012	52	86			A100N7	
13/64	5.16	0.2031	52	86	A00213/64	A002S13/64	A10013/64	

d_1 $\varnothing h_8$ "/Nr./letter	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A002	A002S	A100	A101
6	5.18	0.2039	52	86			A100N6	
	5.20	0.2047	52	86	A0025.2		A1005.2	A1015.2
5	5.22	0.2055	52	86			A100N5	
	5.25	0.2067	52	86			A1005.25	
	5.30	0.2087	52	86	A0025.3		A1005.3	
4	5.31	0.2091	57	93			A100N4	
	5.40	0.2126	57	93	A0025.4		A1005.4	
3	5.41	0.2130	57	93			A100N3	
	5.50	0.2165	57	93	A0025.5	A002S5.5	A1005.5	A1015.5
7/32	5.56	0.2189	57	93	A0027/32	A002S7/32	A1007/32	
	5.60	0.2205	57	93	A0025.6		A1005.6	
2	5.61	0.2209	57	93			A100N2	
	5.70	0.2244	57	93	A0025.7		A1005.7	
	5.75	0.2264	57	93			A1005.75	
1	5.79	0.2280	57	93			A100N1	
	5.80	0.2283	57	93	A0025.8		A1005.8	
	5.90	0.2323	57	93	A0025.9		A1005.9	
A	5.94	0.2339	57	93			A100A	
15/64	5.95	0.2343	57	93	A00215/64		A10015/64	
	6.00	0.2362	57	93	A0026.0	A002S6.0	A1006.0	A1016.0
B	6.03	0.2374	63	101			A100B	
	6.10	0.2402	63	101	A0026.1		A1006.1	
C	6.15	0.2421	63	101			A100C	
	6.20	0.2441	63	101	A0026.2		A1006.2	
	6.25	0.2461	63	101			A1006.25	
D	6.25	0.2461	63	101			A100D	
	6.30	0.2480	63	101	A0026.3		A1006.3	
1/4	6.35	0.2500	63	101	A0021/4	A002S1/4	A1001/4	
E	6.35	0.2500	63	101			A100E	
	6.40	0.2520	63	101	A0026.4		A1006.4	
	6.50	0.2559	63	101	A0026.5	A002S6.5	A1006.5	A1016.5
F	6.53	0.2571	63	101			A100F	
	6.60	0.2598	63	101	A0026.6		A1006.6	
G	6.63	0.2610	63	101			A100G	
	6.70	0.2638	63	101	A0026.7		A1006.7	
17/64	6.75	0.2657	69	109	A00217/64	A002S17/64	A10017/64	
	6.75	0.2657	69	109			A1006.75	
H	6.76	0.2661	69	109			A100H	
	6.80	0.2677	69	109	A0026.8	A002S6.8	A1006.8	
	6.90	0.2717	69	109	A0026.9		A1006.9	
I	6.91	0.2720	69	109			A100I	
	7.00	0.2756	69	109	A0027.0	A002S7.0	A1007.0	A1017.0
J	7.04	0.2772	69	109			A100J	
	7.10	0.2795	69	109	A0027.1		A1007.1	
K	7.14	0.2811	69	109			A100K	
9/32	7.14	0.2811	69	109	A0029/32		A1009/32	
	7.20	0.2835	69	109	A0027.2		A1007.2	
	7.25	0.2854	69	109			A1007.25	
	7.30	0.2874	69	109	A0027.3		A1007.3	
L	7.37	0.2902	69	109			A100L	
	7.40	0.2913	69	109	A0027.4		A1007.4	
M	7.49	0.2949	69	109			A100M	
	7.50	0.2953	69	109	A0027.5	A002S7.5	A1007.5	A1017.5
19/64	7.54	0.2969	75	117	A00219/64		A10019/64	
	7.60	0.2992	75	117	A0027.6		A1007.6	
N	7.67	0.3020	75	117			A100N	
	7.70	0.3031	75	117	A0027.7		A1007.7	
	7.75	0.3051	75	117			A1007.75	
	7.80	0.3071	75	117	A0027.8		A1007.8	
	7.90	0.3110	75	117	A0027.9		A1007.9	
5/16	7.94	0.3126	75	117	A0025/16	A002S5/16	A1005/16	
	8.00	0.3150	75	117	A0028.0	A002S8.0	A1008.0	A1018.0
O	8.03	0.3161	75	117			A100O	
	8.10	0.3189	75	117	A0028.1		A1008.1	
	8.20	0.3228	75	117	A0028.2	A002S8.2	A1008.2	
P	8.20	0.3228	75	117			A100P	
	8.25	0.3248	75	117			A1008.25	
	8.30	0.3268	75	117	A0028.3		A1008.3	
21/64	8.33	0.3280	75	117	A00221/64		A10021/64	
	8.40	0.3307	75	117	A0028.4		A1008.4	

d ₁ Øh ₈ "/Nr./letter	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	A002	A002S	A100	A101
Q	8.43	0.3319	75	117			A100Q	
	8.50	0.3346	75	117	A0028.5	A002S8.5	A1008.5	A1018.5
	8.60	0.3386	81	125	A0028.6		A1008.6	
R	8.61	0.3390	81	125			A100R	
	8.70	0.3425	81	125	A0028.7		A1008.7	
11/32	8.73	0.3437	81	125	A00211/32		A10011/32	
	8.75	0.3445	81	125			A1008.75	
	8.80	0.3465	81	125	A0028.8		A1008.8	
S	8.84	0.3480	81	125			A100S	
	8.90	0.3504	81	125	A0028.9		A1008.9	
	9.00	0.3543	81	125	A0029.0	A002S9.0	A1009.0	A1019.0
T	9.09	0.3579	81	125			A100T	
	9.10	0.3583	81	125	A0029.1		A1009.1	
23/64	9.13	0.3594	81	125	A00223/64		A10023/64	
	9.20	0.3622	81	125	A0029.2		A1009.2	
	9.25	0.3642	81	125			A1009.25	
	9.30	0.3661	81	125	A0029.3		A1009.3	
U	9.35	0.3681	81	125			A100U	
	9.40	0.3701	81	125	A0029.4		A1009.4	
	9.50	0.3740	81	125	A0029.5	A002S9.5	A1009.5	
3/8	9.52	0.3748	87	133	A0023/8	A002S3/8	A1003/8	
V	9.58	0.3772	87	133			A100V	
	9.60	0.3780	87	133	A0029.6		A1009.6	
	9.70	0.3819	87	133	A0029.7		A1009.7	
	9.75	0.3839	87	133			A1009.75	
	9.80	0.3858	87	133	A0029.8		A1009.8	
W	9.80	0.3858	87	133			A100W	
	9.90	0.3898	87	133	A0029.9		A1009.9	
25/64	9.92	0.3906	87	133	A00225/64		A10025/64	
	10.00	0.3937	87	133	A00210.0	A002S10.0	A10010.0	A10110.0
X	10.08	0.3969	87	133			A100X	
	10.10	0.3976	87	133	A00210.1		A10010.1	
	10.20	0.4016	87	133	A00210.2	A002S10.2	A10010.2	
	10.25	0.4035	87	133			A10010.25	
Y	10.26	0.4039	87	133			A100Y	
	10.30	0.4055	87	133	A00210.3		A10010.3	
13/32	10.32	0.4063	87	133	A00213/32		A10013/32	
	10.40	0.4094	87	133	A00210.4		A10010.4	
Z	10.49	0.4130	87	133			A100Z	
	10.50	0.4134	87	133	A00210.5	A002S10.5	A10010.5	
	10.60	0.4173	87	133	A00210.6		A10010.6	
	10.70	0.4213	94	142	A00210.7		A10010.7	
27/64	10.72	0.4220	94	142	A00227/64		A10027/64	
	10.75	0.4232	94	142			A10010.75	
	10.80	0.4252	94	142	A00210.8		A10010.8	
	10.90	0.4291	94	142	A00210.9		A10010.9	
	11.00	0.4331	94	142	A00211.0	A002S11.0	A10011.0	A10111.0
	11.10	0.4370	94	142	A00211.1		A10011.1	
7/16	11.11	0.4374	94	142	A0027/16		A1007/16	
	11.20	0.4409	94	142	A00211.2		A10011.2	
	11.25	0.4429	94	142			A10011.25	
	11.30	0.4449	94	142	A00211.3		A10011.3	
	11.40	0.4488	94	142	A00211.4		A10011.4	
	11.50	0.4528	94	142	A00211.5	A002S11.5	A10011.5	
29/64	11.51	0.4531	94	142	A00229/64		A10029/64	
	11.60	0.4567	94	142	A00211.6		A10011.6	
	11.70	0.4606	94	142	A00211.7		A10011.7	
	11.75	0.4626	94	142			A10011.75	
	11.80	0.4646	94	142	A00211.8		A10011.8	
	11.90	0.4685	101	151	A00211.9		A10011.9	
15/32	11.91	0.4689	101	151	A00215/32		A10015/32	
	12.00	0.4724	101	151	A00212.0	A002S12.0	A10012.0	A10112.0
	12.10	0.4764	101	151	A00212.1		A10012.1	
	12.20	0.4803	101	151	A00212.2		A10012.2	
	12.25	0.4823	101	151			A10012.25	
	12.30	0.4843	101	151	A00212.3		A10012.3	
31/64	12.30	0.4843	101	151	A00231/64		A10031/64	
	12.40	0.4882	101	151	A00212.4		A10012.4	
	12.50	0.4921	101	151	A00212.5	A002S12.5	A10012.5	
	12.60	0.4961	101	151	A00212.6		A10012.6	

d_1 $\varnothing h_8$ "/Nr./letter	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A002	A002S	A100	A101
1/2	12.70	0.5000	101	151	A00212.7		A10012.7	
	12.70	0.5000	101	151	A0021/2	A002S1/2	A1001/2	
	12.75	0.5020	101	151			A10012.75	
	12.80	0.5039	101	151	A00212.8		A10012.8	
	12.90	0.5079	101	151	A00212.9		A10012.9	
33/64	13.00	0.5118	101	151	A00213.0	A002S13.0	A10013.0	
	13.10	0.5157	101	151	A00233/64		A10033/64	
	13.10	0.5157	101	151	A00213.1		A10013.1	
	13.20	0.5197	101	151	A00213.2		A10013.2	
	13.25	0.5217	108	160	A00213.25		A10013.25	
	13.30	0.5236	108	160	A00213.3		A10013.3	
	13.40	0.5276	108	160	A00213.4		A10013.4	
17/32	13.49	0.5311	108	160	A00217/32		A10017/32	
	13.50	0.5315	108	160	A00213.5		A10013.5	
	13.60	0.5354	108	160	A00213.6		A10013.6	
	13.70	0.5394	108	160	A00213.7		A10013.7	
	13.75	0.5413	108	160	A00213.75		A10013.75	
	13.80	0.5433	108	160	A00213.8		A10013.8	
35/64	13.89	0.5469	108	160	A00235/64		A10035/64	
	13.90	0.5472	108	160	A00213.9		A10013.9	
	14.00	0.5512	108	160	A00214.0		A10014.0	
	14.25	0.5610	114	169	A00214.25		A10014.25	
9/16	14.29	0.5626	114	169	A0029/16		A1009/16	
	14.50	0.5709	114	169	A00214.5		A10014.5	
37/64	14.68	0.5780	114	169	A00237/64		A10037/64	
	14.75	0.5807	114	169	A00214.75		A10014.75	
	15.00	0.5906	114	169	A00215.0		A10015.0	
19/32	15.08	0.5937	120	178	A00219/32		A10019/32	
	15.25	0.6004	120	178	A00215.25		A10015.25	
39/64	15.48	0.6094	120	178	A00239/64		A10039/64	
	15.50	0.6102	120	178	A00215.5		A10015.5	
	15.75	0.6201	120	178	A00215.75		A10015.75	
5/8	15.88	0.6252	120	178	A0025/8		A1005/8	
	16.00	0.6299	120	178	A00216.0		A10016.0	
	16.27	0.6406	125	184			A10041/64	
41/64	16.50	0.6496	125	184			A10016.5	
	16.67	0.6563	125	184			A10021/32	
21/32	17.00	0.6693	125	184			A10017.0	
	17.07	0.6720	130	191			A10043/64	
43/64	17.46	0.6874	130	191			A10011/16	
11/16	17.50	0.6890	130	191			A10017.5	
	18.00	0.7087	130	191			A10018.0	
	18.50	0.7283	135	198			A10018.5	
	19.00	0.7480	135	198			A10019.0	
	19.50	0.7677	140	205			A10019.5	
	20.00	0.7874	140	205			A10020.0	

A108

- Jobber Drill Split Point
- Broca , serie corta Punta afilada
- Broca Curta Afiamento em Cruz
- Foret court à hélice rapide

Split Point 1.6mm, 1/16" and above
 Afilado en cruz desde 1,6mm, 1/16"
 Afiamento em Cruz a partir de 1,6mm, 1/16" (inclusivé)
 Affûtage en croix au dessus de 1,6 mm, 1/16

A147

- Jobber Drill
- Broca , serie corta
- Broca Curta
- Foret court

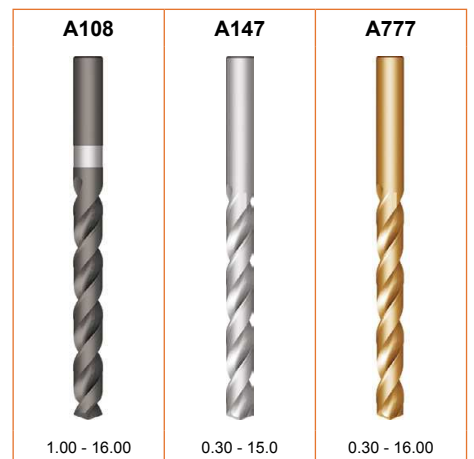
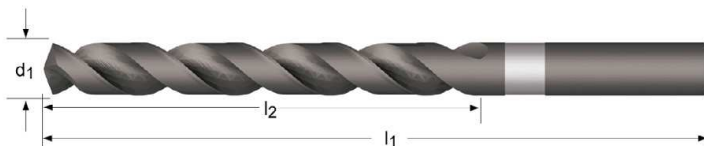
A777

- Jobber Drill Split Point
- Broca , serie corta Punta afilada
- Broca Curta Afiamento em Cruz
- Foret court (8% cobalt)

4 Facet Point up to 1.4mm.
 Punta de 4 caras hasta 1,4 mm
 Ponta 4 Faces até 1.4mm.
 Pointe à 4 facettes jusqu'au Ø 1,4 mm

A108	▪	2.2	2.3	4.1	4.2																	
	•	1.1	1.2	1.3	1.4	1.5	1.6	2.1	3.1	3.2	3.3	3.4	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	8.3	9.1														
A147	▪	2.1	2.2	2.3	4.1	4.2	5.1															
	•	1.1	1.2	1.3	1.4	1.5	1.6	2.4	3.1	3.2	3.3	3.4	4.3	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	
		7.3	7.4	8.1	8.2	8.3	9.1															
A777	▪	1.5	1.6	3.4	4.1	4.2	4.3	5.2														
	•	1.1	1.2	1.3	1.4	2.1	2.2	2.3	3.1	3.2	3.3	5.1	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	
		9.1																				

A108	HSS	DIN 338	4XD	135°	ST		W			A188 134	L114 334
A147	HSS-E	DIN 338	4XD	130°			VA				
A777	HSS-E	DIN 338	4XD	135°	Bronze		N		NAS 907J	A295 135	



d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A108	A147	A777
	0.30	0.0118	3	19		A147.3	A777.3
	0.35	0.0138	4	19			A777.35
	0.40	0.0157	5	20		A147.4	A777.4
	0.45	0.0177	5	20			A777.45
	0.50	0.0197	6	22		A147.5	A777.5
	0.55	0.0217	7	24			A777.55

d ₁ Øh ₈ Inch	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	A108	A147	A777
	0.60	0.0236	7	24		A147.6	A777.6
	0.65	0.0256	8	26			A777.65
	0.70	0.0276	9	28		A147.7	A777.7
	0.80	0.0315	10	30		A147.8	A777.8
	0.90	0.0354	11	32		A147.9	A777.9
	0.95	0.0374	11	32			A777.95
	1.00	0.0394	12	34	A1081.0	A1471.0	A7771.0
	1.10	0.0433	14	36	A1081.1	A1471.1	A7771.1
	1.20	0.0472	16	38	A1081.2	A1471.2	A7771.2
	1.30	0.0512	16	38	A1081.3	A1471.3	A7771.3
	1.40	0.0551	18	40	A1081.4	A1471.4	A7771.4
	1.50	0.0591	18	40	A1081.5	A1471.5	A7771.5
1/16	1.59	0.0626	20	43	A1081/16	A1471/16	A7771/16
	1.60	0.0630	20	43	A1081.6	A1471.6	A7771.6
	1.70	0.0669	20	43	A1081.7	A1471.7	A7771.7
	1.80	0.0709	22	46	A1081.8	A1471.8	A7771.8
	1.90	0.0748	22	46	A1081.9	A1471.9	A7771.9
5/64	1.98	0.0780	24	49	A1085/64		A7775/64
	2.00	0.0787	24	49	A1082.0	A1472.0	A7772.0
	2.10	0.0827	24	49	A1082.1	A1472.1	A7772.1
	2.20	0.0866	27	53	A1082.2	A1472.2	A7772.2
	2.30	0.0906	27	53	A1082.3	A1472.3	A7772.3
3/32	2.38	0.0937	30	57	A1083/32	A1473/32	A7773/32
	2.40	0.0945	30	57	A1082.4	A1472.4	A7772.4
	2.50	0.0984	30	57	A1082.5	A1472.5	A7772.5
	2.60	0.1024	30	57	A1082.6	A1472.6	A7772.6
	2.70	0.1063	33	61	A1082.7	A1472.7	A7772.7
7/64	2.78	0.1094	33	61	A1087/64		A7777/64
	2.80	0.1102	33	61	A1082.8	A1472.8	A7772.8
	2.90	0.1142	33	61	A1082.9	A1472.9	A7772.9
	3.00	0.1181	33	61	A1083.0	A1473.0	A7773.0
	3.10	0.1220	36	65	A1083.1	A1473.1	A7773.1
1/8	3.18	0.1252	36	65	A1081/8	A1471/8	A7771/8
	3.20	0.1260	36	65	A1083.2	A1473.2	A7773.2
	3.30	0.1299	36	65	A1083.3	A1473.3	A7773.3
	3.40	0.1339	39	70	A1083.4	A1473.4	A7773.4
	3.50	0.1378	39	70	A1083.5	A1473.5	A7773.5
9/64	3.57	0.1406	39	70	A1089/64		A7779/64
	3.60	0.1417	39	70	A1083.6	A1473.6	A7773.6
	3.70	0.1457	39	70	A1083.7	A1473.7	A7773.7
	3.80	0.1496	43	75	A1083.8	A1473.8	A7773.8
	3.90	0.1535	43	75	A1083.9	A1473.9	A7773.9
5/32	3.97	0.1563	43	75	A1085/32	A1475/32	A7775/32
	4.00	0.1575	43	75	A1084.0	A1474.0	A7774.0
	4.10	0.1614	43	75	A1084.1	A1474.1	A7774.1
	4.20	0.1654	43	75	A1084.2	A1474.2	A7774.2
	4.30	0.1693	47	80	A1084.3	A1474.3	A7774.3
11/64	4.37	0.1720	47	80	A10811/64		A77711/64
	4.40	0.1732	47	80	A1084.4	A1474.4	A7774.4
	4.50	0.1772	47	80	A1084.5	A1474.5	A7774.5
	4.60	0.1811	47	80	A1084.6	A1474.6	A7774.6
	4.70	0.1850	47	80	A1084.7	A1474.7	A7774.7
3/16	4.76	0.1874	52	86	A1083/16	A1473/16	A7773/16
	4.80	0.1890	52	86	A1084.8	A1474.8	A7774.8
	4.90	0.1929	52	86	A1084.9	A1474.9	A7774.9
N10	4.92	0.1935	52	86	A108N10		
	5.00	0.1969	52	86	A1085.0	A1475.0	A7775.0
	5.10	0.2008	52	86	A1085.1	A1475.1	A7775.1
13/64	5.16	0.2031	52	86	A10813/64		A77713/64
	5.20	0.2047	52	86	A1085.2	A1475.2	A7775.2
	5.30	0.2087	52	86	A1085.3	A1475.3	A7775.3
	5.40	0.2126	57	93	A1085.4	A1475.4	A7775.4
	5.50	0.2165	57	93	A1085.5	A1475.5	A7775.5
7/32	5.56	0.2189	57	93	A1087/32		A7777/32
	5.60	0.2205	57	93	A1085.6	A1475.6	A7775.6
	5.70	0.2244	57	93	A1085.7	A1475.7	A7775.7
	5.80	0.2283	57	93	A1085.8	A1475.8	A7775.8
	5.90	0.2323	57	93	A1085.9	A1475.9	A7775.9
15/64	5.95	0.2343	57	93	A10815/64		A77715/64
	6.00	0.2362	57	93	A1086.0	A1476.0	A7776.0

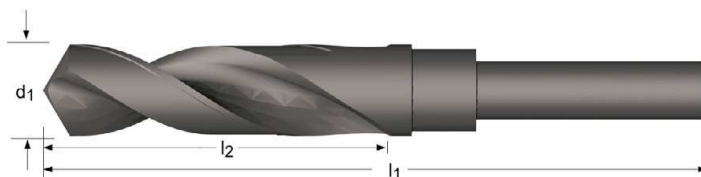
d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A108	A147	A777
	6.10	0.2402	63	101	A1086.1	A1476.1	A7776.1
	6.20	0.2441	63	101	A1086.2	A1476.2	A7776.2
	6.30	0.2480	63	101	A1086.3	A1476.3	A7776.3
1/4	6.35	0.2500	63	101	A1081/4	A1471/4	A7771/4
	6.40	0.2520	63	101	A1086.4	A1476.4	A7776.4
	6.50	0.2559	63	101	A1086.5	A1476.5	A7776.5
	6.60	0.2598	63	101	A1086.6	A1476.6	A7776.6
	6.70	0.2638	63	101	A1086.7	A1476.7	A7776.7
17/64	6.75	0.2657	69	109	A10817/64		A77717/64
	6.80	0.2677	69	109	A1086.8	A1476.8	A7776.8
	6.90	0.2717	69	109	A1086.9	A1476.9	A7776.9
	7.00	0.2756	69	109	A1087.0	A1477.0	A7777.0
	7.10	0.2795	69	109	A1087.1	A1477.1	A7777.1
9/32	7.14	0.2811	69	109	A1089/32		A7779/32
	7.20	0.2835	69	109	A1087.2	A1477.2	A7777.2
	7.30	0.2874	69	109	A1087.3	A1477.3	A7777.3
	7.40	0.2913	69	109	A1087.4	A1477.4	A7777.4
	7.50	0.2953	69	109	A1087.5	A1477.5	A7777.5
19/64	7.54	0.2969	75	117	A10819/64		A77719/64
	7.60	0.2992	75	117	A1087.6	A1477.6	A7777.6
	7.70	0.3031	75	117	A1087.7	A1477.7	A7777.7
	7.80	0.3071	75	117	A1087.8	A1477.8	A7777.8
	7.90	0.3110	75	117	A1087.9	A1477.9	A7777.9
5/16	7.94	0.3126	75	117	A1085/16		A7775/16
	8.00	0.3150	75	117	A1088.0	A1478.0	A7778.0
	8.10	0.3189	75	117	A1088.1	A1478.1	A7778.1
	8.20	0.3228	75	117	A1088.2	A1478.2	A7778.2
	8.30	0.3268	75	117	A1088.3	A1478.3	A7778.3
21/64	8.33	0.3280	75	117	A10821/64		A77721/64
	8.40	0.3307	75	117	A1088.4	A1478.4	A7778.4
	8.50	0.3346	75	117	A1088.5	A1478.5	A7778.5
	8.60	0.3386	81	125	A1088.6	A1478.6	A7778.6
	8.70	0.3425	81	125	A1088.7	A1478.7	A7778.7
11/32	8.73	0.3437	81	125	A10811/32		A77711/32
	8.80	0.3465	81	125	A1088.8	A1478.8	A7778.8
	8.90	0.3504	81	125	A1088.9	A1478.9	A7778.9
	9.00	0.3543	81	125	A1089.0	A1479.0	A7779.0
	9.10	0.3583	81	125	A1089.1	A1479.1	A7779.1
23/64	9.13	0.3594	81	125	A10823/64		A77723/64
	9.20	0.3622	81	125	A1089.2	A1479.2	A7779.2
	9.30	0.3661	81	125	A1089.3	A1479.3	A7779.3
	9.40	0.3701	81	125	A1089.4	A1479.4	A7779.4
	9.50	0.3740	81	125	A1089.5	A1479.5	A7779.5
3/8	9.52	0.3748	87	133	A1083/8		A7773/8
	9.60	0.3780	87	133	A1089.6	A1479.6	A7779.6
	9.70	0.3819	87	133	A1089.7	A1479.7	A7779.7
	9.80	0.3858	87	133	A1089.8	A1479.8	A7779.8
	9.90	0.3898	87	133	A1089.9	A1479.9	A7779.9
25/64	9.92	0.3906	87	133	A10825/64		A77725/64
	10.00	0.3937	87	133	A10810.0	A14710.0	A77710.0
	10.10	0.3976	87	133			A77710.1
	10.20	0.4016	87	133	A10810.2	A14710.2	A77710.2
13/32	10.32	0.4063	87	133	A10813/32		A77713/32
	10.50	0.4134	87	133	A10810.5	A14710.5	A77710.5
27/64	10.72	0.4220	94	142	A10827/64		A77727/64
	10.80	0.4252	94	142	A10810.8		A77710.8
	11.00	0.4331	94	142	A10811.0	A14711.0	A77711.0
7/16	11.11	0.4374	94	142	A1087/16		A7777/16
	11.20	0.4409	94	142		A14711.2	A77711.2
	11.50	0.4528	94	142	A10811.5	A14711.5	A77711.5
29/64	11.51	0.4531	94	142	A10829/64		A77729/64
	11.80	0.4646	94	142	A10811.8		A77711.8
15/32	11.91	0.4689	101	151	A10815/32		A77715/32
	12.00	0.4724	101	151	A10812.0	A14712.0	A77712.0
	12.20	0.4803	101	151	A10812.2		A77712.2
31/64	12.30	0.4843	101	151	A10831/64		A77731/64
	12.50	0.4921	101	151	A10812.5	A14712.5	A77712.5
1/2	12.70	0.5000	101	151	A1081/2		A7771/2
	12.80	0.5039	101	151	A10812.8		A77712.8
	12.90	0.5079	101	151	A10812.9		

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A108	A147	A777
	13.00	0.5118	101	151	A10813.0	A14713.0	A77713.0
	13.50	0.5315	108	160	A10813.5	A14713.5	A77713.5
	14.00	0.5512	108	160	A10814.0	A14714.0	A77714.0
	14.50	0.5709	114	169	A10814.5	A14714.5	A77714.5
	15.00	0.5906	114	169	A10815.0	A14715.0	A77715.0
	15.25	0.6004	120	178	A10815.25		
	15.50	0.6102	120	178	A10815.5		A77715.5
	16.00	0.6299	120	178	A10816.0		A77716.0

- A170**
- 1/2" Reduced Parallel Shank Drill
 - Brocas de mango cilíndrico, Mango rebajado 1/2"
 - Broca Cilíndrica c/ Haste de 12,7mm
 - Foret queue dégaagée de 12,7 mm

A170	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1										

A170 HSS DORMER 4XD 118° ST N



d ₁ Øh ₈ Inch	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ Inch	l ₁ Inch	l ₂ mm	l ₁ mm	A170
33/64	13.00	0.5118					A17013.0
17/32	13.10	0.5157	3.1/8	6"			A17033/64
	13.49	0.5311	3.1/8	6"			A17017/32
	13.50	0.5315			83	156	A17013.5
35/64	13.89	0.5469	3.1/8	6"			A17035/64
	14.00	0.5512			83	156	A17014.0
9/16	14.29	0.5626	3.1/8	6"			A1709/16
	14.50	0.5709			83	156	A17014.5
37/64	14.68	0.5780	3.1/8	6"			A17037/64
	15.00	0.5906			83	156	A17015.0
19/32	15.08	0.5937	3.1/8	6"			A17019/32
39/64	15.48	0.6094	3.1/8	6"			A17039/64
	15.50	0.6102			83	156	A17015.5
5/8	15.88	0.6252	3.1/8	6"			A1705/8
	16.00	0.6299			84	157	A17016.0
41/64	16.27	0.6406	3.1/8	6"			A17041/64
	16.50	0.6496			84	157	A17016.5
21/32	16.67	0.6563	3.1/8	6"			A17021/32
	17.00	0.6693			84	157	A17017.0
43/64	17.07	0.6720	3.1/8	6"			A17043/64
11/16	17.46	0.6874	3.1/8	6"			A17011/16
	17.50	0.6890			84	157	A17017.5
45/64	17.86	0.7031	3.1/8	6"			A17045/64
	18.00	0.7087			84	157	A17018.0
23/32	18.26	0.7189	3.1/8	6"			A17023/32
	18.50	0.7283			84	157	A17018.5
47/64	18.65	0.7343	3.1/8	6"			A17047/64
	19.00	0.7480			84	157	A17019.0
3/4	19.05	0.7500	3.1/8	6"			A1703/4
49/64	19.45	0.7657	3"	6"			A17049/64
	19.50	0.7677			81	158	A17019.5
25/32	19.84	0.7811	3"	6"			A17025/32
	20.00	0.7874			81	158	A17020.0
51/64	20.24	0.7969	3"	6"			A17051/64
13/16	20.64	0.8126	3"	6"			A17013/16
	21.00	0.8268			82	158	A17021.0
53/64	21.03	0.8280	3"	6"			A17053/64
27/32	21.43	0.8437	3"	6"			A17027/32

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 Inch	l_1 Inch	l_2 mm	l_1 mm	A170
55/64	21.83	0.8594	3"	6"			A17055/64
	22.00	0.8661			82	158	A17022.0
7/8	22.22	0.8748	3"	6"			A1707/8
57/64	22.62	0.8906	3"	6"			A17057/64
	23.00	0.9055			82	158	A17023.0
29/32	23.02	0.9063	3"	6"			A17029/32
59/64	23.42	0.9220	3"	6"			A17059/64
15/16	23.81	0.9374	3"	6"			A17015/16
	24.00	0.9449			83	159	A17024.0
61/64	24.21	0.9531	3"	6"			A17061/64
31/32	24.61	0.9689	3"	6"			A17031/32
	25.00	0.9843			83	159	A17025.0
63/64	25.00	0.9843	3"	6"			A17063/64
1"	25.40	1.0000	3"	6"			A1701
1.1/32	26.19	1.0311	3"	6"			A1701.1/32
1.1/16	26.99	1.0626	3"	6"			A1701.1/16
1.7/64	28.18	1.1094	3"	6"			A1701.7/64
1.1/8	28.58	1.1252	3"	6"			A1701.1/8
1.9/64	28.97	1.1406	3"	6"			A1701.9/64
1.5/32	29.37	1.1563	3"	6"			A1701.5/32
1.3/16	30.16	1.1874	3"	6"			A1701.3/16
1.7/32	30.96	1.2189	3"	6"			A1701.7/32
1.1/4	31.75	1.2500	3"	6"			A1701.1/4
1.5/16	33.34	1.3126	3"	6"			A1701.5/16
1.3/8	34.93	1.3752	3"	6"			A1701.3/8
1.7/16	36.51	1.4374	3"	6"			A1701.7/16
1.1/2	38.10	1.5000	3"	6"			A1701.1/2

A160

- Jobber Drill with 4 facet ground Brazed Carbide Tip
- Broca serie corta 4 caras con punta soldada de metal duro
- Broca Curta 4 faces com Pastilha Soldada de MD
- Foret court avec partie carbure rectifiée et brasée sur 4 facettes

A160	▪	3.1	3.2	3.3	3.4																
	•	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	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	8.2	9.1															

A160

HSS HM	DIN 338	4XD	118°	ST		N		
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d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A160
4.00	0.1575	43	75	A1604.0
4.50	0.1772	47	80	A1604.5
5.00	0.1969	52	86	A1605.0
5.50	0.2165	57	93	A1605.5
6.00	0.2362	57	93	A1606.0
6.50	0.2559	63	101	A1606.5
6.80	0.2677	69	109	A1606.8
7.00	0.2756	69	109	A1607.0
7.50	0.2953	69	109	A1607.5
8.00	0.3150	75	117	A1608.0
8.50	0.3346	75	117	A1608.5
9.00	0.3543	81	125	A1609.0
9.50	0.3740	81	125	A1609.5
10.00	0.3937	87	133	A16010.0
10.20	0.4016	87	133	A16010.2
10.50	0.4134	87	133	A16010.5
11.00	0.4331	94	142	A16011.0
11.50	0.4528	94	142	A16011.5
12.00	0.4724	101	151	A16012.0
13.00	0.5118	101	151	A16013.0
14.00	0.5512	108	160	A16014.0
15.00	0.5906	114	169	A16015.0
16.00	0.6299	120	178	A16016.0

A510

- ADX Jobber Drill
- Broca ADX , serie curta
- Broca ADX Curta
- Foret court ADX

A510	▪	1.1	1.2	1.3	1.4	1.5	2.1	2.2	3.1	3.2	3.3	3.4	6.2	6.3	7.2	7.3	7.4	8.1	8.2	8.3
	•	1.6	2.3	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.4	7.1								

A510 **HSS** **DIN 338** **4XD** **130°** **TIN**



d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A510
	3.00	0.1181	33	61	A5103.0
	3.10	0.1220	36	65	A5103.1
1/8	3.18	0.1252	36	65	A5101/8
	3.20	0.1260	36	65	A5103.2
	3.30	0.1299	36	65	A5103.3
	3.40	0.1339	39	70	A5103.4
	3.50	0.1378	39	70	A5103.5
9/64	3.57	0.1406	39	70	A5109/64
	3.60	0.1417	39	70	A5103.6
	3.70	0.1457	39	70	A5103.7
	3.80	0.1496	43	75	A5103.8
	3.90	0.1535	43	75	A5103.9
5/32	3.97	0.1563	43	75	A5105/32
	4.00	0.1575	43	75	A5104.0
	4.10	0.1614	43	75	A5104.1
	4.20	0.1654	43	75	A5104.2
	4.30	0.1693	47	80	A5104.3
11/64	4.37	0.1720	47	80	A51011/64
	4.40	0.1732	47	80	A5104.4
	4.50	0.1772	47	80	A5104.5
	4.60	0.1811	47	80	A5104.6
	4.70	0.1850	47	80	A5104.7
3/16	4.76	0.1874	52	86	A5103/16
	4.80	0.1890	52	86	A5104.8
	4.90	0.1929	52	86	A5104.9
	5.00	0.1969	52	86	A5105.0
	5.10	0.2008	52	86	A5105.1
13/64	5.16	0.2031	52	86	A51013/64
	5.20	0.2047	52	86	A5105.2
	5.30	0.2087	52	86	A5105.3
	5.40	0.2126	57	93	A5105.4
	5.50	0.2165	57	93	A5105.5
7/32	5.56	0.2189	57	93	A5107/32
	5.60	0.2205	57	93	A5105.6
	5.70	0.2244	57	93	A5105.7
	5.80	0.2283	57	93	A5105.8

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A510
15/64	5.90	0.2323	57	93	A5105.9
	5.95	0.2343	57	93	A51015/64
	6.00	0.2362	57	93	A5106.0
	6.10	0.2402	63	101	A5106.1
1/4	6.20	0.2441	63	101	A5106.2
	6.30	0.2480	63	101	A5106.3
	6.35	0.2500	63	101	A5101/4
	6.40	0.2520	63	101	A5106.4
	6.50	0.2559	63	101	A5106.5
	6.60	0.2598	63	101	A5106.6
17/64	6.70	0.2638	63	101	A5106.7
	6.75	0.2657	69	109	A51017/64
	6.80	0.2677	69	109	A5106.8
	6.90	0.2717	69	109	A5106.9
	7.00	0.2756	69	109	A5107.0
9/32	7.10	0.2795	69	109	A5107.1
	7.14	0.2811	69	109	A5109/32
	7.20	0.2835	69	109	A5107.2
	7.30	0.2874	69	109	A5107.3
	7.40	0.2913	69	109	A5107.4
19/64	7.50	0.2953	69	109	A5107.5
	7.54	0.2969	75	117	A51019/64
	7.60	0.2992	75	117	A5107.6
	7.70	0.3031	75	117	A5107.7
	7.80	0.3071	75	117	A5107.8
5/16	7.90	0.3110	75	117	A5107.9
	7.94	0.3126	75	117	A5105/16
	8.00	0.3150	75	117	A5108.0
	8.10	0.3189	75	117	A5108.1
	8.20	0.3228	75	117	A5108.2
21/64	8.30	0.3268	75	117	A5108.3
	8.33	0.3280	75	117	A51021/64
	8.40	0.3307	75	117	A5108.4
	8.50	0.3346	75	117	A5108.5
	8.60	0.3386	81	125	A5108.6
11/32	8.70	0.3425	81	125	A5108.7
	8.73	0.3437	81	125	A51011/32
	8.80	0.3465	81	125	A5108.8
	8.90	0.3504	81	125	A5108.9
	9.00	0.3543	81	125	A5109.0
23/64	9.10	0.3583	81	125	A5109.1
	9.13	0.3594	81	125	A51023/64
	9.20	0.3622	81	125	A5109.2
	9.30	0.3661	81	125	A5109.3
	9.40	0.3701	81	125	A5109.4
3/8	9.50	0.3740	81	125	A5109.5
	9.52	0.3748	87	133	A5103/8
	9.60	0.3780	87	133	A5109.6
	9.70	0.3819	87	133	A5109.7
	9.80	0.3858	87	133	A5109.8
25/64	9.90	0.3898	87	133	A5109.9
	9.92	0.3906	87	133	A51025/64
	10.00	0.3937	87	133	A51010.0
	10.10	0.3976	87	133	A51010.1
	10.20	0.4016	87	133	A51010.2
13/32	10.30	0.4055	87	133	A51010.3
	10.32	0.4063	87	133	A51013/32
	10.40	0.4094	87	133	A51010.4
	10.50	0.4134	87	133	A51010.5
	10.60	0.4173	87	133	A51010.6
27/64	10.70	0.4213	94	142	A51010.7
	10.72	0.4220	94	142	A51027/64
	10.80	0.4252	94	142	A51010.8
	10.90	0.4291	94	142	A51010.9
	11.00	0.4331	94	142	A51011.0
7/16	11.10	0.4370	94	142	A51011.1
	11.11	0.4374	94	142	A5107/16
	11.20	0.4409	94	142	A51011.2
	11.30	0.4449	94	142	A51011.3
	11.40	0.4488	94	142	A51011.4

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A510
29/64	11.50	0.4528	94	142	A51011.5
	11.51	0.4531	94	142	A51029/64
	11.60	0.4567	94	142	A51011.6
	11.70	0.4606	94	142	A51011.7
	11.80	0.4646	94	142	A51011.8
15/32	11.90	0.4685	101	151	A51011.9
	11.91	0.4689	101	151	A51015/32
	12.00	0.4724	101	151	A51012.0
	12.10	0.4764	101	151	A51012.1
	12.20	0.4803	101	151	A51012.2
31/64	12.30	0.4843	101	151	A51012.3
	12.30	0.4843	101	151	A51031/64
	12.40	0.4882	101	151	A51012.4
	12.50	0.4921	101	151	A51012.5
	12.60	0.4961	101	151	A51012.6
1/2	12.70	0.5000	101	151	A51012.7
	12.70	0.5000	101	151	A5101/2
	12.80	0.5039	101	151	A51012.8
	12.90	0.5079	101	151	A51012.9
	13.00	0.5118	101	151	A51013.0
	14.00	0.5512	108	160	A51014.0

- ADX Drill Oil Feed
- Broca ADX - refrigeración interna
- Broca ADX - Lubrificação interna
- Foret ADX - à trous d'huile

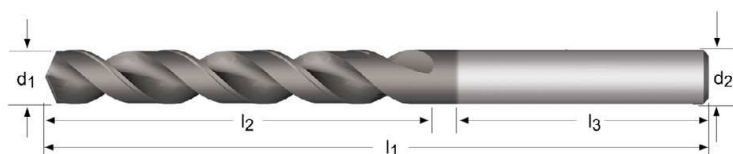
A553

A553	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	3.1	3.2	3.3	3.4	4.1	6.2	6.3	7.2	7.3	7.4	8.1
	•	2.3	4.2	4.3	5.1	5.2	5.3	6.1	6.4	7.1										

A553 HSS-E



5XD



A553



ADX

5.00 - 20.00

d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Øh ₆ mm	A553
5.00	0.1969	36	79	36	6	A5535.0
5.20	0.2047	38	79	36	6	A5535.2
5.50	0.2165	40	79	36	6	A5535.5
6.00	0.2362	43	79	36	6	A5536.0
6.30	0.2480	46	87	36	8	A5536.3
6.50	0.2559	47	87	36	8	A5536.5
6.80	0.2677	48	87	36	8	A5536.8
6.90	0.2717	48	87	36	8	A5536.9
7.00	0.2756	48	87	36	8	A5537.0
7.40	0.2913	54	94	36	8	A5537.4
7.50	0.2953	54	94	36	8	A5537.5
8.00	0.3150	58	94	36	8	A5538.0
8.50	0.3346	75	130	40	10	A5538.5
8.70	0.3425	75	130	40	10	A5538.7
9.00	0.3543	75	130	40	10	A5539.0
9.50	0.3740	75	130	40	10	A5539.5
10.00	0.3937	75	130	40	10	A55310.0
10.20	0.4016	87	150	45	12	A55310.2
10.30	0.4055	87	150	45	12	A55310.3
10.50	0.4134	87	150	45	12	A55310.5
11.00	0.4331	94	150	45	12	A55311.0
11.30	0.4449	94	150	45	12	A55311.3
11.50	0.4528	94	150	45	12	A55311.5
12.00	0.4724	94	150	45	12	A55312.0
12.50	0.4921	101	160	45	14	A55312.5
13.00	0.5118	101	160	45	14	A55313.0
13.50	0.5315	101	160	45	14	A55313.5
14.00	0.5512	101	160	45	14	A55314.0
14.25	0.5610	108	170	48	16	A55314.25
14.50	0.5709	108	170	48	16	A55314.5
15.00	0.5906	108	170	48	16	A55315.0
15.25	0.6004	108	170	48	16	A55315.25
15.50	0.6102	108	170	48	16	A55315.5
16.00	0.6299	108	170	48	16	A55316.0
16.50	0.6496	125	190	48	18	A55316.5
17.00	0.6693	125	190	48	18	A55317.0

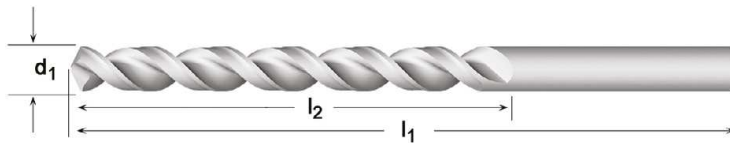
d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 $\varnothing h_6$ mm	A553
17.50	0.6890	130	190	48	18	A55317.5
17.75	0.6988	130	190	48	18	A55317.75
18.00	0.7087	130	190	48	18	A55318.0
19.00	0.7480	135	200	50	20	A55319.0
19.25	0.7579	140	200	50	20	A55319.25
20.00	0.7874	140	200	50	20	A55320.0

A900 A901

- PFX Jobber Drill
- Broca PFX Serie Corta
- Broca Curta PFX
- Foret PFX court

A900	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	4.1	4.2	4.3	5.1	5.2	5.3	7.2
	•	3.1	3.2	3.3	3.4	6.1	6.2	6.3	6.4	7.1	7.3	7.4	8.1	8.2			
A901	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	7.4		
	•	4.1	4.2	4.3	5.1	5.2	5.3	6.3	6.4								

A900	HSS-E	DIN ANSI	6XD	130°			W			
A901	HSS-E	DIN ANSI	6XD	130°	Alcrona Top		W			



d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A900	A901
	1.00	0.0394	12	34	A9001.0	
	1.10	0.0433	14	36	A9001.1	
3/64	1.19	0.0469	19	44	A9003/64	
	1.20	0.0472	16	38	A9001.2	
	1.25	0.0492	16	36	A9001.25	
	1.30	0.0512	16	38	A9001.3	
	1.40	0.0551	18	40	A9001.4	
	1.50	0.0591	18	40	A9001.5	A9011.5
	1.55	0.0610	20	43	A9001.55	A9011.55
1/16	1.59	0.0626	22	48	A9001/16	A9011/16
	1.60	0.0630	20	43	A9001.6	A9011.6
	1.70	0.0669	20	43	A9001.7	
	1.75	0.0689	22	46	A9001.75	A9011.75
	1.80	0.0709	22	46	A9001.8	A9011.8
	1.90	0.0748	22	46	A9001.9	A9011.9
5/64	1.98	0.0780	25	51	A9005/64	A9015/64
	2.00	0.0787	24	49	A9002.0	A9012.0
	2.10	0.0827	24	49	A9002.1	A9012.1
	2.15	0.0846	27	53	A9002.15	A9012.15
	2.20	0.0866	27	53	A9002.2	
	2.30	0.0906	27	53	A9002.3	
3/32	2.38	0.0937	32	57	A9003/32	A9013/32
	2.40	0.0945	30	57	A9002.4	A9012.4
	2.50	0.0984	30	57	A9002.5	A9012.5
	2.60	0.1024	30	57	A9002.6	A9012.6
	2.70	0.1063	33	61	A9002.7	A9012.7
7/64	2.78	0.1094	38	67	A9007/64	A9017/64
	2.80	0.1102	33	61	A9002.8	

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A900	A901
	2.90	0.1142	33	61	A9002.9	A9012.9
	3.00	0.1181	33	61	A9003.0	A9013.0
	3.10	0.1220	36	65	A9003.1	A9013.1
1/8	3.18	0.1252	41	70	A9001/8	A9011/8
	3.20	0.1260	36	65	A9003.2	A9013.2
	3.30	0.1299	36	65	A9003.3	A9013.3
	3.40	0.1339	39	70	A9003.4	A9013.4
	3.50	0.1378	39	70	A9003.5	A9013.5
9/64	3.57	0.1406	44	73	A9009/64	A9019/64
	3.60	0.1417	39	70	A9003.6	A9013.6
	3.70	0.1457	39	70	A9003.7	A9013.7
	3.80	0.1496	43	75	A9003.8	A9013.8
	3.90	0.1535	43	75	A9003.9	A9013.9
5/32	3.97	0.1563	51	79	A9005/32	A9015/32
	4.00	0.1575	43	75	A9004.0	A9014.0
	4.10	0.1614	43	75	A9004.1	A9014.1
	4.20	0.1654	43	75	A9004.2	A9014.2
	4.30	0.1693	47	80	A9004.3	A9014.3
11/64	4.37	0.1720	54	83	A90011/64	A9011/64
	4.40	0.1732	47	80	A9004.4	A9014.4
	4.50	0.1772	47	80	A9004.5	A9014.5
	4.60	0.1811	47	80	A9004.6	A9014.6
	4.70	0.1850	47	80	A9004.7	A9014.7
3/16	4.76	0.1874	59	89	A9003/16	A9013/16
	4.80	0.1890	52	86	A9004.8	A9014.8
	4.90	0.1929	52	86	A9004.9	A9014.9
	5.00	0.1969	52	86	A9005.0	A9015.0
	5.10	0.2008	52	86	A9005.1	A9015.1
13/64	5.16	0.2031	62	92	A90013/64	A90113/64
	5.20	0.2047	52	86	A9005.2	A9015.2
	5.30	0.2087	52	86	A9005.3	A9015.3
	5.40	0.2126	57	93	A9005.4	A9015.4
	5.50	0.2165	57	93	A9005.5	A9015.5
7/32	5.56	0.2189	64	95	A9007/32	A9017/32
	5.60	0.2205	57	93	A9005.6	A9015.6
	5.70	0.2244	57	93	A9005.7	A9015.7
	5.80	0.2283	57	93	A9005.8	A9015.8
	5.90	0.2323	57	93	A9005.9	A9015.9
15/64	5.95	0.2343	67	98	A90015/64	A90115/64
	6.00	0.2362	57	93	A9006.0	A9016.0
	6.10	0.2402	63	101	A9006.1	A9016.1
	6.20	0.2441	63	101	A9006.2	A9016.2
	6.30	0.2480	63	101	A9006.3	A9016.3
1/4	6.35	0.2500	70	102	A9001/4	A9011/4
	6.40	0.2520	63	101	A9006.4	A9016.4
	6.50	0.2559	63	101	A9006.5	A9016.5
	6.60	0.2598	63	101	A9006.6	A9016.6
	6.70	0.2638	63	101	A9006.7	A9016.7
17/64	6.75	0.2657	73	105	A90017/64	A90117/64
	6.80	0.2677	69	109	A9006.8	A9016.8
	6.90	0.2717	69	109	A9006.9	A9016.9
	7.00	0.2756	69	109	A9007.0	A9017.0
	7.10	0.2795	69	109	A9007.1	A9017.1
9/32	7.14	0.2811	75	108	A9009/32	A9019/32
	7.20	0.2835	69	109	A9007.2	A9017.2
	7.30	0.2874	69	109	A9007.3	A9017.3
	7.40	0.2913	69	109	A9007.4	A9017.4
	7.50	0.2953	69	109	A9007.5	A9017.5
19/64	7.54	0.2969	78	111	A90019/64	A90119/64
	7.60	0.2992	75	117	A9007.6	A9017.6
	7.70	0.3031	75	117	A9007.7	A9017.7
	7.80	0.3071	75	117	A9007.8	A9017.8
	7.90	0.3110	75	117	A9007.9	A9017.9
5/16	7.94	0.3126	81	114	A9005/16	A9015/16
	8.00	0.3150	75	117	A9008.0	A9018.0
	8.10	0.3189	75	117	A9008.1	A9018.1
	8.20	0.3228	75	117	A9008.2	A9018.2
	8.30	0.3268	75	117	A9008.3	A9018.3
21/64	8.33	0.3280	84	117	A90021/64	A90121/64
	8.40	0.3307	75	117	A9008.4	A9018.4

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A900	A901
	8.50	0.3346	75	117	A9008.5	A9018.5
	8.60	0.3386	81	125	A9008.6	A9018.6
	8.70	0.3425	81	125	A9008.7	A9018.7
11/32	8.73	0.3437	87	121	A90011/32	A90111/32
	8.80	0.3465	81	125	A9008.8	A9018.8
	8.90	0.3504	81	125	A9008.9	A9018.9
	9.00	0.3543	81	125	A9009.0	A9019.0
	9.10	0.3583	81	125	A9009.1	A9019.1
23/64	9.13	0.3594	89	124	A90023/64	A90123/64
	9.20	0.3622	81	125	A9009.2	A9019.2
	9.30	0.3661	81	125	A9009.3	A9019.3
	9.40	0.3701	81	125	A9009.4	A9019.4
	9.50	0.3740	81	125	A9009.5	A9019.5
3/8	9.52	0.3748	92	127	A9003/8	A9013/8
	9.60	0.3780	87	133	A9009.6	A9019.6
	9.70	0.3819	87	133	A9009.7	A9019.7
	9.80	0.3858	87	133	A9009.8	A9019.8
	9.90	0.3898	87	133	A9009.9	A9019.9
25/64	9.92	0.3906	95	130	A90025/64	A90125/64
	10.00	0.3937	87	133	A90010.0	A90110.0
	10.20	0.4016	87	133	A90010.2	A90110.2
	10.30	0.4055	87	133	A90010.3	A90110.3
13/32	10.32	0.4063	98	133	A90013/32	A90113/32
	10.40	0.4094	87	133	A90010.4	A90110.4
	10.50	0.4134	87	133	A90010.5	A90110.5
27/64	10.72	0.4220	100	137	A90027/64	A90127/64
	10.80	0.4252	94	142	A90010.8	A90110.8
	11.00	0.4331	94	142	A90011.0	A90111.0
7/16	11.11	0.4374	103	140	A9007/16	A9017/16
	11.50	0.4528	94	142	A90011.5	A90111.5
29/64	11.51	0.4531	106	143	A90029/64	A90129/64
	11.80	0.4646	94	142	A90011.8	A90111.8
15/32	11.91	0.4689	110	146	A90015/32	A90115/32
	12.00	0.4724	101	151	A90012.0	A90112.0
31/64	12.30	0.4843	111	149	A90031/64	A90131/64
	12.50	0.4921	101	151	A90012.5	A90112.5
1/2	12.70	0.5000	101	151	A9001/2	A9011/2
	13.00	0.5118	101	151	A90013.0	A90113.0
33/64	13.10	0.5157	122	168	A90033/64	A90133/64
	13.50	0.5315	108	160	A90013.5	A90113.5
35/64	13.89	0.5469	122	168	A90035/64	A90135/64
	14.00	0.5512	108	160	A90014.0	A90114.0
9/16	14.29	0.5626	122	168	A9009/16	A9019/16
	14.50	0.5709	114	169	A90014.5	A90114.5
37/64	14.68	0.5780	122	168	A90037/64	A90137/64
	15.00	0.5906	114	169	A90015.0	A90115.0
19/32	15.08	0.5937	132	181	A90019/32	A90119/32
39/64	15.48	0.6094	132	181	A90039/64	A90139/64
	15.50	0.6102	120	178	A90015.5	A90115.5
5/8	15.88	0.6252	132	181	A9005/8	A9015/8
	16.00	0.6299	120	178	A90016.0	A90116.0
41/64	16.27	0.6406	132	181	A90041/64	
	16.50	0.6496	125	184	A90016.5	
21/32	16.67	0.6563	132	181	A90021/32	
	17.00	0.6693	125	184	A90017.0	
43/64	17.07	0.6720	143	194	A90043/64	
11/16	17.46	0.6874	143	194	A90011/16	
	17.50	0.6890	130	191	A90017.5	
45/64	17.86	0.7031	130	191	A90045/64	
	18.00	0.7087	130	191	A90018.0	
23/32	18.26	0.7189	130	191	A90023/32	
	18.50	0.7283	135	198	A90018.5	
47/64	18.65	0.7343	135	198	A90047/64	
	19.00	0.7480	135	198	A90019.0	
3/4	19.05	0.7500	135	198	A9003/4	
49/64	19.45	0.7657	135	198	A90049/64	
	19.50	0.7677	140	205	A90019.5	
25/32	19.84	0.7811	140	205	A90025/32	
	20.00	0.7874	140	205	A90020.0	

A243

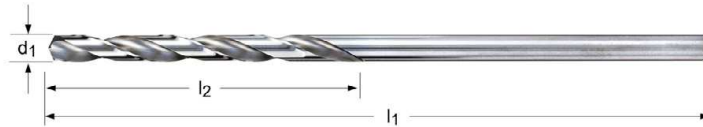
A244

- Aircraft Extension Drill
- Broca extralarga para la industria Aeronáutica
- Broca p/ Aviação Haste Longa
- Foret aéronautique à queue cylindrique rallongée

6" Overall Length
 Longitud Total 150 mm
 Comprimento Total 150mm
 Longueur totale de 150 mm

A243; A244	▪	1.5	1.6	2.2	2.3	3.4	4.1	4.2	4.3	5.1	6.4	7.4
	•	1.3	1.4	2.1	3.1	3.2	3.3	5.2	5.3	6.3	9.1	

A243	HSS	NAS 907	4XD	135°			N			
A244	HSS	NAS 907	4XD	118°			N			



d_1 $\varnothing h_8$ Inch	d_1 decimal Inch	l_2 Inch	l_1 Inch	A243	A244
3/32	0.0938	1.1/4	6"	A2433/32X6	
40	0.0980	1.3/8	6"	A243N40X6	
1/8	0.1250	1.5/8	6"	A2431/8X6	A2441/8X6
30	0.1285	1.5/8	6"	A243N30X6	
5/32	0.1563	2"	6"	A2435/32X6	A2445/32X6
21	0.1590	2.1/8	6"	A243N21X6	
20	0.1610	2.1/8	6"	A243N20X6	
3/16	0.1875	2.5/16	6"	A2433/16X6	A2443/16X6
11	0.1910	2.5/16	6"	A243N11X6	
10	0.1935	2.7/16	6"	A243N10X6	
1/4	0.2500	2.3/4	6"	A2431/4X6	A2441/4X6

A110

- Long Series Drill
- Broca, serie larga
- Broca Longa
- Foret série longue

Bright below 1.0mm, 1/16"
 Brillante por debajo de 1,0mm, 1/16"
 Brillante abaixo de 1.0mm, 1/16"
 Brillant au dessous de 1,0 mm, 1/16"

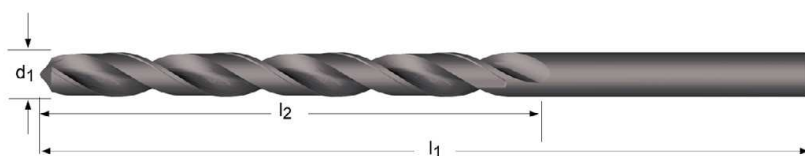
A110	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1
	6.2	6.3	6.4	7.1	7.2	7.3	7.4	8.1	8.2	8.3	9.1									

A110

HSS

DIN
340

6XD



A110



0.50 - 1"

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A110
	0.50	0.0197	12	32	A110.5
	0.60	0.0236	15	35	A110.6
	0.70	0.0276	21	42	A110.7
1/32	0.79	0.0311	25	46	A1101/32
	0.80	0.0315	25	46	A110.8
	0.90	0.0354	29	51	A110.9
	1.00	0.0394	33	56	A1101.0
	1.10	0.0433	37	60	A1101.1
	1.20	0.0472	41	65	A1101.2
	1.30	0.0512	41	65	A1101.3
	1.40	0.0551	45	70	A1101.4
1/16	1.50	0.0591	45	70	A1101.5
	1.59	0.0626	50	76	A1101/16
	1.60	0.0630	50	76	A1101.6
	1.70	0.0669	50	76	A1101.7
	1.75	0.0689	53	80	A1101.75
	1.80	0.0709	53	80	A1101.8
	1.90	0.0748	53	80	A1101.9
5/64	1.98	0.0780	56	85	A1105/64
	2.00	0.0787	56	85	A1102.0
	2.05	0.0807	56	85	A1102.05
	2.10	0.0827	56	85	A1102.1
	2.20	0.0866	59	90	A1102.2
	2.25	0.0886	59	90	A1102.25
	2.30	0.0906	59	90	A1102.3
3/32	2.38	0.0937	62	95	A1103/32
	2.40	0.0945	62	95	A1102.4
	2.50	0.0984	62	95	A1102.5
	2.60	0.1024	62	95	A1102.6
	2.70	0.1063	66	100	A1102.7
7/64	2.78	0.1094	66	100	A1107/64
	2.80	0.1102	66	100	A1102.8
	2.90	0.1142	66	100	A1102.9
	3.00	0.1181	66	100	A1103.0
	3.10	0.1220	69	106	A1103.1
1/8	3.18	0.1252	69	106	A1101/8
	3.20	0.1260	69	106	A1103.2
	3.25	0.1280	69	106	A1103.25

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A110
	3.30	0.1299	69	106	A1103.3
	3.40	0.1339	73	112	A1103.4
	3.50	0.1378	73	112	A1103.5
9/64	3.57	0.1406	73	112	A1109/64
	3.60	0.1417	73	112	A1103.6
	3.70	0.1457	73	112	A1103.7
	3.75	0.1476	73	112	A1103.75
	3.80	0.1496	78	119	A1103.8
	3.90	0.1535	78	119	A1103.9
5/32	3.97	0.1563	78	119	A1105/32
	4.00	0.1575	78	119	A1104.0
	4.10	0.1614	78	119	A1104.1
	4.20	0.1654	78	119	A1104.2
	4.25	0.1673	78	119	A1104.25
	4.30	0.1693	82	126	A1104.3
11/64	4.37	0.1720	82	126	A11011/64
	4.40	0.1732	82	126	A1104.4
	4.50	0.1772	82	126	A1104.5
	4.60	0.1811	82	126	A1104.6
	4.70	0.1850	82	126	A1104.7
	4.75	0.1870	82	126	A1104.75
3/16	4.76	0.1874	87	132	A1103/16
	4.80	0.1890	87	132	A1104.8
	4.90	0.1929	87	132	A1104.9
	5.00	0.1969	87	132	A1105.0
13/64	5.10	0.2008	87	132	A1105.1
	5.16	0.2031	87	132	A11013/64
	5.20	0.2047	87	132	A1105.2
	5.25	0.2067	87	132	A1105.25
	5.30	0.2087	87	132	A1105.3
	5.40	0.2126	91	139	A1105.4
	5.50	0.2165	91	139	A1105.5
7/32	5.56	0.2189	91	139	A1107/32
	5.60	0.2205	91	139	A1105.6
	5.70	0.2244	91	139	A1105.7
	5.75	0.2264	91	139	A1105.75
	5.80	0.2283	91	139	A1105.8
	5.90	0.2323	91	139	A1105.9
15/64	5.95	0.2343	91	139	A11015/64
	6.00	0.2362	91	139	A1106.0
	6.10	0.2402	97	148	A1106.1
	6.20	0.2441	97	148	A1106.2
	6.25	0.2461	97	148	A1106.25
	6.30	0.2480	97	148	A1106.3
1/4	6.35	0.2500	97	148	A1101/4
	6.40	0.2520	97	148	A1106.4
	6.50	0.2559	97	148	A1106.5
	6.60	0.2598	97	148	A1106.6
	6.70	0.2638	97	148	A1106.7
17/64	6.75	0.2657	102	156	A11017/64
	6.75	0.2657	102	156	A1106.75
	6.80	0.2677	102	156	A1106.8
	6.90	0.2717	102	156	A1106.9
	7.00	0.2756	102	156	A1107.0
	7.10	0.2795	102	156	A1107.1
9/32	7.14	0.2811	102	156	A1109/32
	7.20	0.2835	102	156	A1107.2
	7.25	0.2854	102	156	A1107.25
	7.30	0.2874	102	156	A1107.3
	7.40	0.2913	102	156	A1107.4
	7.50	0.2953	102	156	A1107.5
	7.60	0.2992	109	165	A1107.6
	7.70	0.3031	109	165	A1107.7
	7.75	0.3051	109	165	A1107.75
	7.80	0.3071	109	165	A1107.8
	7.90	0.3110	109	165	A1107.9
5/16	7.94	0.3126	109	165	A1105/16
	8.00	0.3150	109	165	A1108.0
	8.10	0.3189	109	165	A1108.1
	8.20	0.3228	109	165	A1108.2

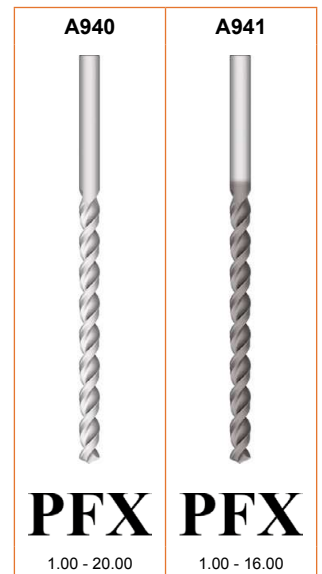
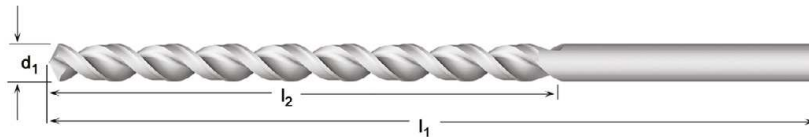
d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A110
	8.25	0.3248	109	165	A1108.25
	8.30	0.3268	109	165	A1108.3
	8.40	0.3307	109	165	A1108.4
	8.50	0.3346	109	165	A1108.5
	8.60	0.3386	115	175	A1108.6
	8.70	0.3425	115	175	A1108.7
11/32	8.73	0.3437	115	175	A11011/32
	8.75	0.3445	115	175	A1108.75
	8.80	0.3465	115	175	A1108.8
	8.90	0.3504	115	175	A1108.9
	9.00	0.3543	115	175	A1109.0
	9.10	0.3583	115	175	A1109.1
	9.20	0.3622	115	175	A1109.2
	9.25	0.3642	115	175	A1109.25
	9.30	0.3661	115	175	A1109.3
	9.40	0.3701	115	175	A1109.4
	9.50	0.3740	115	175	A1109.5
3/8	9.52	0.3748	121	184	A1103/8
	9.60	0.3780	121	184	A1109.6
	9.70	0.3819	121	184	A1109.7
	9.75	0.3839	121	184	A1109.75
	9.80	0.3858	121	184	A1109.8
	9.90	0.3898	121	184	A1109.9
	10.00	0.3937	121	184	A11010.0
	10.10	0.3976	121	184	A11010.1
	10.20	0.4016	121	184	A11010.2
	10.25	0.4035	121	184	A11010.25
	10.30	0.4055	121	184	A11010.3
13/32	10.32	0.4063	121	184	A11013/32
	10.50	0.4134	121	184	A11010.5
	10.75	0.4232	128	195	A11010.75
	10.80	0.4252	128	195	A11010.8
	11.00	0.4331	128	195	A11011.0
7/16	11.11	0.4374	128	195	A1107/16
	11.25	0.4429	128	195	A11011.25
	11.40	0.4488	128	195	A11011.4
	11.50	0.4528	128	195	A11011.5
	11.75	0.4626	128	195	A11011.75
	12.00	0.4724	134	205	A11012.0
	12.10	0.4764	134	205	A11012.1
	12.25	0.4823	134	205	A11012.25
	12.50	0.4921	134	205	A11012.5
1/2	12.70	0.5000	134	205	A1101/2
	13.00	0.5118	134	205	A11013.0
17/32	13.49	0.5311	140	214	A11017/32
	13.50	0.5315	140	214	A11013.5
	14.00	0.5512	140	214	A11014.0
9/16	14.29	0.5626	144	220	A1109/16
	14.50	0.5709	144	220	A11014.5
	15.00	0.5906	144	220	A11015.0
	15.50	0.6102	149	227	A11015.5
5/8	15.88	0.6252	149	227	A1105/8
	16.00	0.6299	149	227	A11016.0
	16.50	0.6496	154	235	A11016.5
	17.00	0.6693	154	235	A11017.0
11/16	17.46	0.6874	158	241	A11011/16
	17.50	0.6890	158	241	A11017.5
	18.00	0.7087	158	241	A11018.0
	18.50	0.7283	162	247	A11018.5
	19.00	0.7480	162	247	A11019.0
3/4	19.05	0.7500	166	254	A1103/4
	19.50	0.7677	166	254	A11019.5
	20.00	0.7874	166	254	A11020.0
	21.00	0.8268	171	261	A11021.0
	22.00	0.8661	176	268	A11022.0
7/8	22.22	0.8748	176	268	A1107/8
15/16	23.81	0.9374	185	282	A11015/16
1"	25.40	1.0000	190	290	A1101

A940 A941

- PFX Long Series Drill
- Broca PFX, série larga
- Broca Longa PFX
- Foret PFX série longue

A940	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	4.1	4.2	4.3	7.2	
	•	3.2	3.3	3.4	6.1	6.2	6.3	6.4	7.1	7.3	7.4	8.1	8.2		
A941	▪	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	7.4
	•	4.1	4.2	4.3	6.3	6.4									

A940	HSS-E	DIN ANSI	10XD	130°			W			
A941	HSS-E	DIN ANSI	10XD	130°	Alcrona Top		W			



d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A940	A941
3/64	1.00	0.0394	33	56	A9401.0	A9411.0
	1.10	0.0433	37	60	A9401.1	
	1.19	0.0469	29	57	A9403/64	A9413/64
	1.20	0.0472	41	65	A9401.2	
	1.30	0.0512	41	65	A9401.3	
1/16	1.40	0.0551	45	70	A9401.4	
	1.50	0.0591	45	70	A9401.5	A9411.5
	1.59	0.0626	44	76	A9401/16	A9411/16
	1.60	0.0630	50	76	A9401.6	
	1.70	0.0669	50	76	A9401.7	
5/64	1.80	0.0709	53	80	A9401.8	
	1.90	0.0748	53	80	A9401.9	
	1.98	0.0780	51	95	A9405/64	A9415/64
	2.00	0.0787	56	85	A9402.0	A9412.0
	2.10	0.0827	56	85	A9402.1	
3/32	2.20	0.0866	59	90	A9402.2	
	2.30	0.0906	59	90	A9402.3	
	2.38	0.0937	57	108	A9403/32	A9413/32
	2.40	0.0945	62	95	A9402.4	
	2.50	0.0984	62	95	A9402.5	A9412.5
7/64	2.60	0.1024	62	95	A9402.6	
	2.70	0.1063	66	100	A9402.7	
	2.78	0.1094	64	117	A9407/64	A9417/64
	2.80	0.1102	66	100	A9402.8	
	2.90	0.1142	66	100	A9402.9	
	3.00	0.1181	66	100	A9403.0	A9413.0

d ₁ Øh ₈ Inch	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	A940	A941
1/8	3.10	0.1220	69	106	A9403.1	A9413.1
	3.18	0.1252	70	130	A9401/8	A9411/8
	3.20	0.1260	69	106	A9403.2	A9413.2
	3.30	0.1299	69	106	A9403.3	A9413.3
	3.40	0.1339	73	112	A9403.4	A9413.4
9/64	3.50	0.1378	73	112	A9403.5	A9413.5
	3.57	0.1406	76	137	A9409/64	A9419/64
	3.60	0.1417	73	112	A9403.6	A9413.6
	3.70	0.1457	73	112	A9403.7	A9413.7
	3.80	0.1496	78	119	A9403.8	A9413.8
5/32	3.90	0.1535	78	119	A9403.9	A9413.9
	3.97	0.1563	76	137	A9405/32	A9415/32
	4.00	0.1575	78	119	A9404.0	A9414.0
	4.10	0.1614	78	119	A9404.1	A9414.1
	4.20	0.1654	78	119	A9404.2	A9414.2
11/64	4.30	0.1693	82	126	A9404.3	A9414.3
	4.37	0.1720	86	146	A94011/64	A94111/64
	4.40	0.1732	82	126	A9404.4	A9414.4
	4.50	0.1772	82	126	A9404.5	A9414.5
	4.60	0.1811	82	126	A9404.6	A9414.6
3/16	4.70	0.1850	82	126	A9404.7	A9414.7
	4.76	0.1874	86	146	A9403/16	A9413/16
	4.80	0.1890	87	132	A9404.8	A9414.8
	4.90	0.1929	87	132	A9404.9	A9414.9
	5.00	0.1969	87	132	A9405.0	A9415.0
13/64	5.10	0.2008	87	132	A9405.1	A9415.1
	5.16	0.2031	92	152	A94013/64	A94113/64
	5.20	0.2047	87	132	A9405.2	A9415.2
	5.30	0.2087	87	132	A9405.3	A9415.3
	5.40	0.2126	91	139	A9405.4	A9415.4
7/32	5.50	0.2165	91	139	A9405.5	A9415.5
	5.56	0.2189	92	152	A9407/32	A9417/32
	5.60	0.2205	91	139	A9405.6	A9415.6
	5.70	0.2244	91	139	A9405.7	A9415.7
	5.80	0.2283	91	139	A9405.8	A9415.8
15/64	5.90	0.2323	91	139	A9405.9	A9415.9
	5.95	0.2343	95	156	A94015/64	A94115/64
	6.00	0.2362	91	139	A9406.0	A9416.0
	6.10	0.2402	97	148	A9406.1	A9416.1
	6.20	0.2441	97	148	A9406.2	A9416.2
1/4	6.30	0.2480	97	148	A9406.3	A9416.3
	6.35	0.2500	95	156	A9401/4	A9411/4
	6.40	0.2520	97	148	A9406.4	A9416.4
	6.50	0.2559	97	148	A9406.5	A9416.5
	6.60	0.2598	97	148	A9406.6	A9416.6
17/64	6.70	0.2638	97	148	A9406.7	A9416.7
	6.75	0.2657	98	159	A94017/64	A94117/64
	6.80	0.2677	102	156	A9406.8	A9416.8
	6.90	0.2717	102	156	A9406.9	A9416.9
	7.00	0.2756	102	156	A9407.0	A9417.0
9/32	7.10	0.2795	102	156	A9407.1	A9417.1
	7.14	0.2811	98	159	A9409/32	A9419/32
	7.20	0.2835	102	156	A9407.2	A9417.2
	7.30	0.2874	102	156	A9407.3	A9417.3
	7.40	0.2913	102	156	A9407.4	A9417.4
19/64	7.50	0.2953	102	156	A9407.5	A9417.5
	7.54	0.2969	102	162	A94019/64	A94119/64
	7.60	0.2992	109	165	A9407.6	A9417.6
	7.70	0.3031	109	165	A9407.7	A9417.7
	7.80	0.3071	109	165	A9407.8	A9417.8
5/16	7.90	0.3110	109	165	A9407.9	A9417.9
	7.94	0.3126	102	162	A9405/16	A9415/16
	8.00	0.3150	109	165	A9408.0	A9418.0
	8.10	0.3189	109	165	A9408.1	A9418.1
	8.20	0.3228	109	165	A9408.2	A9418.2
21/64	8.30	0.3268	109	165	A9408.3	A9418.3
	8.33	0.3280	105	165	A94021/64	A94121/64
	8.40	0.3307	109	165	A9408.4	A9418.4
	8.50	0.3346	109	165	A9408.5	A9418.5
	8.60	0.3386	115	175	A9408.6	A9418.6

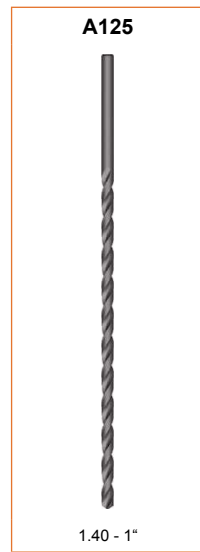
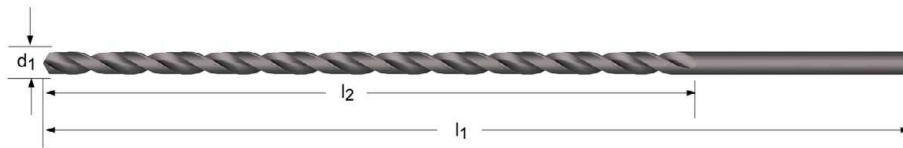
d ₁ Øh ₈ Inch	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	A940	A941
11/32	8.70	0.3425	115	175	A9408.7	A9418.7
	8.73	0.3437	105	165	A94011/32	A94111/32
	8.80	0.3465	115	175	A9408.8	A9418.8
	8.90	0.3504	115	175	A9408.9	A9418.9
	9.00	0.3543	115	175	A9409.0	A9419.0
23/64	9.10	0.3583	115	175	A9409.1	A9419.1
	9.13	0.3594	108	171	A94023/64	A94123/64
	9.20	0.3622	115	175	A9409.2	A9419.2
	9.30	0.3661	115	175	A9409.3	A9419.3
	9.40	0.3701	115	175	A9409.4	A9419.4
3/8	9.50	0.3740	115	175	A9409.5	A9419.5
	9.52	0.3748	108	171	A9403/8	A9413/8
	9.60	0.3780	121	184	A9409.6	A9419.6 ³⁾
	9.70	0.3819	121	184	A9409.7	A9419.7 ³⁾
	9.80	0.3858	121	184	A9409.8	A9419.8 ³⁾
25/64	9.90	0.3898	121	184	A9409.9	A9419.9 ³⁾
	9.92	0.3906	111	178	A94025/64	A94125/64 ³⁾
	10.00	0.3937	121	184	A94010.0	A94110.0 ³⁾
	10.20	0.4016	121	184	A94010.2	A94110.2 ³⁾
	10.30	0.4055	121	184	A94010.3	A94110.3 ³⁾
13/32	10.32	0.4063	111	178	A94013/32	A94113/32 ³⁾
	10.50	0.4134	121	184	A94010.5	A94110.5 ³⁾
27/64	10.72	0.4220	117	184	A94027/64	A94127/64 ³⁾
	11.00	0.4331	128	195	A94011.0	A94111.0 ³⁾
7/16	11.11	0.4374	117	184	A9407/16	A9417/16 ³⁾
	11.20	0.4409	128	195	A94011.2	A94111.2 ³⁾
	11.50	0.4528	128	195	A94011.5	A94111.5 ³⁾
29/64	11.51	0.4531	121	190	A94029/64	A94129/64 ³⁾
	11.80	0.4646	128	195	A94011.8	A94111.8 ³⁾
15/32	11.91	0.4689	121	190	A94015/32	A94115/32 ³⁾
	12.00	0.4724	134	205	A94012.0	A94112.0 ³⁾
31/64	12.20	0.4803	134	205	A94012.2	A94112.2 ³⁾
	12.30	0.4843	121	197	A94031/64	A94131/64 ³⁾
	12.50	0.4921	134	205	A94012.5	A94112.5 ³⁾
1/2	12.70	0.5000	121	197	A9401/2	A9411/2 ³⁾
	13.00	0.5118	134	205	A94013.0	A94113.0 ³⁾
33/64	13.10	0.5157	121	203	A94033/64	A94133/64 ³⁾
17/32	13.49	0.5311	121	203	A94017/32	
	13.50	0.5315	140	214	A94013.5	A94113.5 ³⁾
35/64	13.89	0.5469	124	210	A94035/64	A94135/64 ³⁾
	14.00	0.5512	140	214	A94014.0	A94114.0 ³⁾
9/16	14.29	0.5626	124	210	A9409/16	A9419/16 ³⁾
	14.50	0.5709	144	220	A94014.5	A94114.5 ³⁾
37/64	14.68	0.5780	124	222	A94037/64	A94137/64 ³⁾
	15.00	0.5906	144	220	A94015.0	A94115.0 ³⁾
19/32	15.08	0.5937	124	222	A94019/32	A94119/32 ³⁾
39/64	15.48	0.6094	124	222	A94039/64	A94139/64 ³⁾
	15.50	0.6102	149	227	A94015.5	A94115.5 ³⁾
5/8	15.88	0.6252	124	222	A9405/8	A9415/8 ³⁾
	16.00	0.6299	149	227	A94016.0	A94116.0 ³⁾
41/64	16.27	0.6406	130	229	A94041/64	
	16.50	0.6496	154	235	A94016.5	
21/32	16.67	0.6563	130	229	A94021/32	
	17.00	0.6693	154	235	A94017.0	
43/64	17.07	0.6720	137	235	A94043/64	
11/16	17.46	0.6874	137	235	A94011/16	
	17.50	0.6890	158	241	A94017.5	
45/64	17.86	0.7031	143	241	A94045/64	
	18.00	0.7087	158	241	A94018.0	
23/32	18.26	0.7189	143	241	A94023/32	
47/64	18.65	0.7343	149	248	A94047/64	
	19.00	0.7480	162	247	A94019.0	
3/4	19.05	0.7500	149	248	A9403/4	
49/64	19.45	0.7657	152	251	A94049/64	
25/32	19.84	0.7811	152	251	A94025/32	
	20.00	0.7874	166	254	A94020.0	

- ## A125
- Extra Length Drill
 - Broca serie extra larga
 - Broca Extra Longa
 - Foret queue cône morse - Extra long

Bright below 2.2mm, 5/64"
 Brillante por debajo de 2,2 mm, 5/64"
 Brilhante Abaixo de 2.2 mm, 5/64"
 Brillant au dessous de 2,2 mm, 5/64"

A125	▪	1.1	1.2																		
	•	1.3	1.4	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1											

A125 HSS BS 328 10XD 118° ST N



d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A125
	1.40	0.0551	100	160	A1251.4X160
	1.50	0.0591	80	125	A1251.5X125
	1.50	0.0591	100	160	A1251.5X160
1/16	1.59	0.0626	80	125	A1251/16X125
1/16	1.59	0.0626	100	160	A1251/16X160
	1.80	0.0709	100	160	A1251.8X160
5/64	1.98	0.0780	80	125	A1255/64X125
5/64	1.98	0.0780	100	160	A1255/64X160
	2.00	0.0787	80	125	A1252.0X125
	2.00	0.0787	100	160	A1252.0X160
	2.20	0.0866	100	160	A1252.2X160
3/32	2.38	0.0937	80	125	A1253/32X125
3/32	2.38	0.0937	100	160	A1253/32X160
	2.50	0.0984	80	125	A1252.5X125
	2.50	0.0984	100	160	A1252.5X160
7/64	2.78	0.1094	80	125	A1257/64X125
7/64	2.78	0.1094	100	160	A1257/64X160
	3.00	0.1181	100	160	A1253.0X160
	3.00	0.1181	150	200	A1253.0X200
	3.00	0.1181	200	250	A1253.0X250
1/8	3.18	0.1252	100	160	A1251/8X160
1/8	3.18	0.1252	150	200	A1251/8X200
1/8	3.18	0.1252	200	250	A1251/8X250
1/8	3.18	0.1252	250	310	A1251/8X315
	3.30	0.1299	100	160	A1253.3X160
	3.50	0.1378	100	160	A1253.5X160
	3.50	0.1378	150	200	A1253.5X200
	3.50	0.1378	200	250	A1253.5X250
9/64	3.57	0.1406	100	160	A1259/64X160
9/64	3.57	0.1406	150	200	A1259/64X200
9/64	3.57	0.1406	250	310	A1259/64X315
5/32	3.97	0.1563	100	160	A1255/32X160
5/32	3.97	0.1563	150	200	A1255/32X200
5/32	3.97	0.1563	200	250	A1255/32X250

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A125
5/32	3.97	0.1563	250	310	A1255/32X315
	4.00	0.1575	100	160	A1254.0X160
	4.00	0.1575	150	200	A1254.0X200
	4.00	0.1575	200	250	A1254.0X250
	4.00	0.1575	250	310	A1254.0X315
11/64	4.37	0.1720	100	160	A12511/64X160
11/64	4.37	0.1720	150	200	A12511/64X200
11/64	4.37	0.1720	250	310	A12511/64X315
	4.50	0.1772	100	160	A1254.5X160
	4.50	0.1772	150	200	A1254.5X200
	4.50	0.1772	200	250	A1254.5X250
	4.50	0.1772	250	310	A1254.5X315
3/16	4.76	0.1874	100	160	A1253/16X160
3/16	4.76	0.1874	150	200	A1253/16X200
3/16	4.76	0.1874	200	250	A1253/16X250
3/16	4.76	0.1874	250	310	A1253/16X315
3/16	4.76	0.1874	300	400	A1253/16X400
	5.00	0.1969	100	160	A1255.0X160
	5.00	0.1969	150	200	A1255.0X200
	5.00	0.1969	200	250	A1255.0X250
	5.00	0.1969	250	310	A1255.0X315
	5.00	0.1969	300	400	A1255.0X400
13/64	5.16	0.2031	150	200	A12513/64X200
13/64	5.16	0.2031	200	250	A12513/64X250
13/64	5.16	0.2031	250	310	A12513/64X315
	5.50	0.2165	150	200	A1255.5X200
	5.50	0.2165	200	250	A1255.5X250
	5.50	0.2165	250	310	A1255.5X315
7/32	5.56	0.2189	150	200	A1257/32X200
7/32	5.56	0.2189	200	250	A1257/32X250
7/32	5.56	0.2189	250	310	A1257/32X315
15/64	5.95	0.2343	150	200	A12515/64X200
15/64	5.95	0.2343	200	250	A12515/64X250
15/64	5.95	0.2343	250	310	A12515/64X315
	6.00	0.2362	150	200	A1256.0X200
	6.00	0.2362	200	250	A1256.0X250
	6.00	0.2362	250	310	A1256.0X315
	6.00	0.2362	300	400	A1256.0X400
1/4	6.35	0.2500	150	200	A1251/4X200
1/4	6.35	0.2500	200	250	A1251/4X250
1/4	6.35	0.2500	250	310	A1251/4X315
1/4	6.35	0.2500	300	400	A1251/4X400
1/4	6.35	0.2500	400	460	A1251/4X500
	6.50	0.2559	150	200	A1256.5X200
	6.50	0.2559	200	250	A1256.5X250
	6.50	0.2559	250	310	A1256.5X315
17/64	6.75	0.2657	150	200	A12517/64X200
17/64	6.75	0.2657	200	250	A12517/64X250
17/64	6.75	0.2657	400	460	A12517/64X500
	7.00	0.2756	150	200	A1257.0X200
	7.00	0.2756	200	250	A1257.0X250
	7.00	0.2756	250	310	A1257.0X315
9/32	7.14	0.2811	150	200	A1259/32X200
9/32	7.14	0.2811	200	250	A1259/32X250
9/32	7.14	0.2811	250	310	A1259/32X315
9/32	7.14	0.2811	400	460	A1259/32X500
	7.50	0.2953	150	200	A1257.5X200
	7.50	0.2953	200	250	A1257.5X250
	7.50	0.2953	250	310	A1257.5X315
19/64	7.54	0.2969	250	310	A12519/64X315
19/64	7.54	0.2969	400	460	A12519/64X500
5/16	7.94	0.3126	150	200	A1255/16X200
5/16	7.94	0.3126	200	250	A1255/16X250
5/16	7.94	0.3126	250	310	A1255/16X315
5/16	7.94	0.3126	300	400	A1255/16X400
5/16	7.94	0.3126	400	460	A1255/16X500
	8.00	0.3150	200	250	A1258.0X250
	8.00	0.3150	250	310	A1258.0X315
	8.00	0.3150	300	400	A1258.0X400
21/64	8.33	0.3280	250	310	A12521/64X315

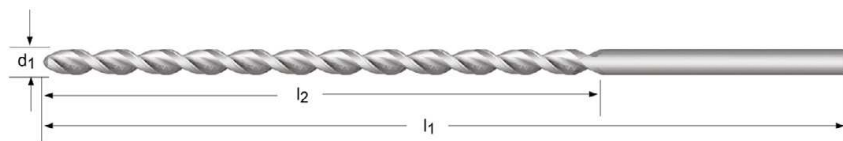
d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A125
21/64	8.33	0.3280	400	460	A12521/64X500
	8.50	0.3346	200	250	A1258.5X250
	8.50	0.3346	250	310	A1258.5X315
11/32	8.73	0.3437	200	250	A12511/32X250
11/32	8.73	0.3437	250	310	A12511/32X315
11/32	8.73	0.3437	300	400	A12511/32X400
11/32	8.73	0.3437	400	460	A12511/32X500
	9.00	0.3543	200	250	A1259.0X250
	9.00	0.3543	250	310	A1259.0X315
	9.00	0.3543	300	400	A1259.0X400
23/64	9.13	0.3594	250	310	A12523/64X315
23/64	9.13	0.3594	400	460	A12523/64X500
	9.50	0.3740	200	250	A1259.5X250
	9.50	0.3740	250	310	A1259.5X315
3/8	9.52	0.3748	200	250	A1253/8X250
3/8	9.52	0.3748	250	310	A1253/8X315
3/8	9.52	0.3748	300	400	A1253/8X400
3/8	9.52	0.3748	400	460	A1253/8X500
25/64	9.92	0.3906	250	310	A12525/64X315
25/64	9.92	0.3906	400	460	A12525/64X500
	10.00	0.3937	200	250	A12510.0X250
	10.00	0.3937	250	310	A12510.0X315
	10.00	0.3937	300	400	A12510.0X400
13/32	10.32	0.4063	200	250	A12513/32X250
13/32	10.32	0.4063	250	310	A12513/32X315
13/32	10.32	0.4063	400	460	A12513/32X500
	10.50	0.4134	200	250	A12510.5X250
	10.50	0.4134	250	310	A12510.5X315
	10.50	0.4134	300	400	A12510.5X400
27/64	10.72	0.4220	250	310	A12527/64X315
	11.00	0.4331	200	250	A12511.0X250
	11.00	0.4331	250	310	A12511.0X315
	11.00	0.4331	300	400	A12511.0X400
7/16	11.11	0.4374	200	250	A1257/16X250
7/16	11.11	0.4374	250	310	A1257/16X315
7/16	11.11	0.4374	300	400	A1257/16X400
7/16	11.11	0.4374	400	460	A1257/16X500
29/64	11.51	0.4531	250	310	A12529/64X315
29/64	11.51	0.4531	400	460	A12529/64X500
15/32	11.91	0.4689	200	250	A12515/32X250
15/32	11.91	0.4689	250	310	A12515/32X315
15/32	11.91	0.4689	400	460	A12515/32X500
	12.00	0.4724	200	250	A12512.0X250
	12.00	0.4724	250	310	A12512.0X315
	12.00	0.4724	300	400	A12512.0X400
31/64	12.30	0.4843	250	310	A12531/64X315
31/64	12.30	0.4843	400	460	A12531/64X500
1/2	12.70	0.5000	200	250	A1251/2X250
1/2	12.70	0.5000	250	310	A1251/2X315
1/2	12.70	0.5000	300	400	A1251/2X400
1/2	12.70	0.5000	400	460	A1251/2X500
	13.00	0.5118	250	310	A12513.0X315
	13.00	0.5118	300	400	A12513.0X400
33/64	13.10	0.5157	250	310	A12533/64X315
33/64	13.10	0.5157	400	460	A12533/64X500
17/32	13.49	0.5311	250	310	A12517/32X315
17/32	13.49	0.5311	400	460	A12517/32X500
35/64	13.89	0.5469	250	310	A12535/64X315
35/64	13.89	0.5469	400	460	A12535/64X500
	14.00	0.5512	250	310	A12514.0X315
	14.00	0.5512	300	400	A12514.0X400
9/16	14.29	0.5626	250	310	A1259/16X315
9/16	14.29	0.5626	400	460	A1259/16X500
37/64	14.68	0.5780	250	310	A12537/64X315
19/32	15.08	0.5937	250	310	A12519/32X315
19/32	15.08	0.5937	400	460	A12519/32X500
39/64	15.48	0.6094	250	310	A12539/64X315
39/64	15.48	0.6094	400	460	A12539/64X500
5/8	15.88	0.6252	250	310	A1255/8X315
5/8	15.88	0.6252	400	460	A1255/8X500

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A125
21/32	16.67	0.6563	250	310	A12521/32X315
21/32	16.67	0.6563	400	460	A12521/32X500
11/16	17.46	0.6874	250	310	A12511/16X315
11/16	17.46	0.6874	400	460	A12511/16X500
23/32	18.26	0.7189	250	310	A12523/32X315
23/32	18.26	0.7189	400	460	A12523/32X500
3/4	19.05	0.7500	250	310	A1253/4X315
3/4	19.05	0.7500	400	460	A1253/4X500
25/32	19.84	0.7811	400	460	A12525/32X500
13/16	20.64	0.8126	400	460	A12513/16X500
7/8	22.22	0.8748	400	460	A1257/8X500
15/16	23.81	0.9374	400	460	A12515/16X500
1"	25.40	1.0000	400	460	A1251X500

- A976** • PFX Extra Length Drill
- A977** • Broca PFX Extra Larga
- A978** • Broca Extra Longa PFX
- Foret PFX extra-long

A976; A977; A978	▪	1.3	1.4	1.5	1.6	1.1	1.2	2.1	2.2	2.3	3.2	3.3	3.4	4.1	4.2	4.3	6.3	6.4	7.4
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A976	HSS-E	DIN 1869/1	15XD	130°			W			
A977	HSS-E	DIN 1869/2	20XD	130°			W			
A978	HSS-E	DIN 1869/3	25XD	130°			W			



A976	A977	A978
PFX	PFX	PFX
1.50 - 14.00	1.50 - 14.00	3.00 - 10.00

d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	A976	A977	A978
	1.50	0.0591	75	115	A9761.5		
1/16	1.50	0.0591	100	150		A9771.5 ⁴⁾	
	1.59	0.0626	100	150		A9771/16 ⁴⁾	
	2.00	0.0787	110	160		A9772.0 ⁴⁾	
	2.00	0.0787	85	125	A9762.0X125		
3/32	2.10	0.0827	85	125	A9762.1X125		
	2.20	0.0866	90	135	A9762.2X135		
	2.30	0.0906	90	135	A9762.3X135		
	2.38	0.0937	115	170		A9773/32 ⁴⁾	
	2.40	0.0945	95	140	A9762.4X140		
	2.50	0.0984	95	140	A9762.5X140		
	2.60	0.1024	95	140	A9762.6X140		
	2.70	0.1063	100	150	A9762.7X150		
	2.80	0.1102	100	150	A9762.8X150		
	2.90	0.1142	100	150	A9762.9X150		
	3.00	0.1181	100	150	A9763.0X150		
	3.00	0.1181	130	190		A9773.0X190	
1/8	3.00	0.1181	160	240			A9783.0 ⁴⁾
	3.10	0.1220	105	155	A9763.1X155		
	3.18	0.1252	105	155	A9761/8		

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A976	A977	A978	
1/8	3.18	0.1252	135	200				
	3.20	0.1260	105	155	A9763.2X155	A9771/8		
	3.30	0.1299	105	155	A9763.3X155			
	3.40	0.1339	115	165	A9763.4X165			
	3.50	0.1378	115	165	A9763.5X165			
	3.50	0.1378	145	210		A9773.5X210		
	3.50	0.1378	180	265			A9783.5X265	
	3.60	0.1417	115	165	A9763.6X165			
	3.70	0.1457	115	165	A9763.7X165			
	3.80	0.1496	120	175	A9763.8X175			
5/32	3.90	0.1535	120	175	A9763.9X175			
	3.97	0.1563	120	175	A9765/32			
	4.00	0.1575	120	175	A9764.0X175			
	4.00	0.1575	150	220		A9774.0X220		
	4.00	0.1575	190	280			A9784.0X280	
	4.10	0.1614	120	175	A9764.1X175			
	4.20	0.1654	120	175	A9764.2X175			
	4.30	0.1693	125	185	A9764.3X185			
	4.40	0.1732	125	185	A9764.4X185			
	4.50	0.1772	125	185	A9764.5X185			
3/16	4.50	0.1772	160	235		A9774.5X235		
	4.50	0.1772	200	295			A9784.5X295	
	4.60	0.1811	125	185	A9764.6X185			
	4.70	0.1850	125	185	A9764.7X185			
	4.76	0.1874	135	195	A9763/16			
	3/16	4.76	0.1874	170	245		A9773/16	
		4.80	0.1890	135	195	A9764.8X195		
		4.90	0.1929	135	195	A9764.9X195		
		5.00	0.1969	135	195	A9765.0X195		
		5.00	0.1969	170	245		A9775.0X245	
5.00		0.1969	210	315			A9785.0X315	
5.10		0.2008	135	195	A9765.1X195			
5.20		0.2047	135	195	A9765.2X195			
5.30		0.2087	135	195	A9765.3X195			
5.40		0.2126	140	205	A9765.4X205			
1/4	5.50	0.2165	140	205	A9765.5X205			
	5.50	0.2165	180	260		A9775.5X260		
	5.50	0.2165	225	330			A9785.5X330	
	5.60	0.2205	140	205	A9765.6X205			
	5.70	0.2244	140	205	A9765.7X205			
	5.80	0.2283	140	205	A9765.8X205			
	5.90	0.2323	140	205	A9765.9X205			
	6.00	0.2362	140	205	A9766.0X205			
	6.00	0.2362	180	260		A9776.0X260		
	6.00	0.2362	225	330			A9786.0X330	
1/4	6.10	0.2402	150	215	A9766.1X215			
	6.20	0.2441	150	215	A9766.2X215			
	6.30	0.2480	150	215	A9766.3X215			
	6.35	0.2500	150	215	A9761/4			
	1/4	6.35	0.2500	190	275		A9771/4	
		6.35	0.2500	235	350			A9781/4
		6.40	0.2520	150	215	A9766.4X215		
		6.50	0.2559	150	215	A9766.5X215		
		6.50	0.2559	190	275		A9776.5X275	
		6.50	0.2559	235	350			A9786.5X350
6.60		0.2598	150	215	A9766.6X215			
6.70		0.2638	150	215	A9766.7X215			
6.80		0.2677	155	225	A9766.8X225			
6.90		0.2717	155	225	A9766.9X225			
1/4	7.00	0.2756	155	225	A9767.0X225			
	7.00	0.2756	200	290		A9777.0X290		
	7.00	0.2756	250	370			A9787.0X370	
	7.50	0.2953	155	225	A9767.5X225			
	7.50	0.2953	200	290		A9777.5X290		
	7.50	0.2953	250	370			A9787.5X370	
	5/16	7.94	0.3126	165	240	A9765/16		
		8.00	0.3150	165	240	A9768.0X240		
		8.00	0.3150	210	305		A9778.0X305	
		8.00	0.3150	265	390			A9788.0X390
	8.50	0.3346	165	240	A9768.5X240			

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	A976	A977	A978
	8.50	0.3346	210	305		A9778.5X305	
	8.50	0.3346	265	390			A9788.5X390
11/32	8.73	0.3437	175	250	A97611/32		
11/32	8.73	0.3437	220	320		A97711/32	
	9.00	0.3543	175	250	A9769.0X250		
	9.00	0.3543	220	320		A9779.0X320	
	9.00	0.3543	280	410			A9789.0X410
	9.50	0.3740	175	250	A9769.5X250		
	9.50	0.3740	220	320		A9779.5X320	
	9.50	0.3740	280	410			A9789.5X410
3/8	9.52	0.3748	185	265	A9763/8		
	10.00	0.3937	185	265	A97610.0X265		
	10.00	0.3937	235	340		A97710.0X340	
	10.00	0.3937	295	430			A97810.0X430
	10.50	0.4134	185	265	A97610.5		
	10.50	0.4134	235	340		A97710.5	
	11.00	0.4331	195	280	A97611.0		
	11.00	0.4331	250	365		A97711.0	
7/16	11.11	0.4374	195	280	A9767/16		
	11.50	0.4528	195	280	A97611.5		
	11.50	0.4528	250	365		A97711.5	
	12.00	0.4724	205	295	A97612.0		
	12.00	0.4724	260	375		A97712.0	
	12.50	0.4921	205	295	A97612.5		
	12.50	0.4921	260	375		A97712.5	
1/2	12.70	0.5000	205	295	A9761/2		
	13.00	0.5118	205	295	A97613.0		
	13.00	0.5118	260	375		A97713.0	
	14.00	0.5512	215	310	A97614.0		
	14.00	0.5512	270	390		A97714.0	

A130 A530

- Taper Shank Drill
- Broca de mango cónico
- Broca de Haste Cónica
- Foret queue cône morse

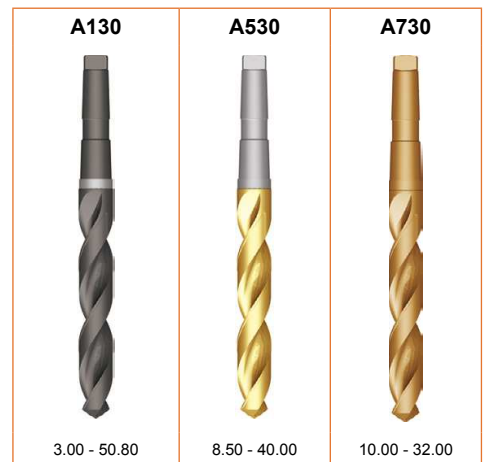
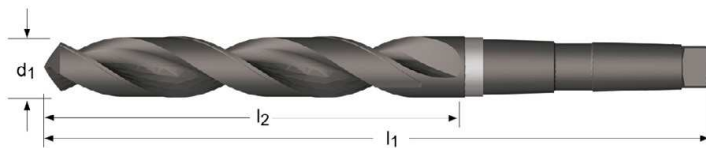
Above 14.0mm - Point Thinned
 Por encima de 14,0 mm - Punta adelgazada
 Acima de 14.0mm - Alma Corrigida
 Au dessus du Ø 14,0 mm - Pointe amincie

A730

- Taper Shank Drill
- Broca de mango cónico
- Broca de Haste Cónica
- Foret queue cône morse

A130	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1															
A530	▪	1.1	1.2	1.3	1.4	3.2	3.3	6.3													
	•	1.5	1.6	2.1	2.2	2.3	3.1	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.4	7.1	7.2	7.3	7.4
		8.1	8.2	8.3	9.1																
A730	▪	1.5	1.6	2.2	2.3	3.4															
	•	1.1	1.2	1.3	1.4	2.1	3.1	3.2	3.3	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	8.3	9.1														

A130	HSS	DIN 345	4XD	118°	ST		N			
A530	HSS	DIN 345	4XD	118°	TiN		N			
A730	HSS-E	DIN 345	4XD	118°	Bronze		N			



d ₁ Øh ₈ Inch	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	MK	A130	A530	A730
1/8	3.00	0.1181	33	114	1	A1303.0		
	3.18	0.1252	36	117	1	A1301/8		
	3.20	0.1260	36	117	1	A1303.2		
	3.25	0.1280	36	117	1	A1303.25		
	3.30	0.1299	36	117	1	A1303.3		
9/64	3.50	0.1378	39	120	1	A1303.5		
	3.57	0.1406	39	120	1	A1309/64		
	3.75	0.1476	39	120	1	A1303.75		
5/32	3.97	0.1563	43	124	1	A1305/32		
	4.00	0.1575	43	124	1	A1304.0		
	4.10	0.1614	43	124	1	A1304.1		
	4.20	0.1654	43	124	1	A1304.2		

d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A130	A530	A730
11/64	4.25	0.1673	43	124	1	A1304.25		
	4.37	0.1720	47	128	1	A13011/64		
	4.50	0.1772	47	128	1	A1304.5		
3/16	4.75	0.1870	52	128	1	A1304.75		
	4.76	0.1874	52	133	1	A1303/16		
	4.80	0.1890	52	133	1	A1304.8		
	4.90	0.1929	52	133	1	A1304.9		
	5.00	0.1969	52	133	1	A1305.0		
13/64	5.10	0.2008	52	133	1	A1305.1		
	5.16	0.2031	52	133	1	A13013/64		
	5.20	0.2047	52	133	1	A1305.2		
	5.25	0.2067	52	133	1	A1305.25		
	5.40	0.2126	57	138	1	A1305.4		
7/32	5.50	0.2165	57	138	1	A1305.5		
	5.56	0.2189	57	138	1	A1307/32		
	5.70	0.2244	57	138	1	A1305.7		
	5.75	0.2264	57	138	1	A1305.75		
	5.80	0.2283	57	138	1	A1305.8		
15/64	5.90	0.2323	57	138	1	A1305.9		
	5.95	0.2343	57	138	1	A13015/64		
	6.00	0.2362	57	138	1	A1306.0		
	6.10	0.2402	63	144	1	A1306.1		
	6.20	0.2441	63	144	1	A1306.2		
1/4	6.25	0.2461	63	144	1	A1306.25		
	6.30	0.2480	63	144	1	A1306.3		
	6.35	0.2500	63	144	1	A1301/4		
	6.40	0.2520	63	144	1	A1306.4		
	6.50	0.2559	63	144	1	A1306.5		
	6.60	0.2598	63	144	1	A1306.6		
	6.70	0.2638	63	144	1	A1306.7		
17/64	6.75	0.2657	69	150	1	A13017/64		
	6.75	0.2657	69	150	1	A1306.75		
	6.80	0.2677	69	150	1	A1306.8		
	6.90	0.2717	69	150	1	A1306.9		
	7.00	0.2756	69	150	1	A1307.0		
9/32	7.14	0.2811	69	150	1	A1309/32		
	7.20	0.2835	69	150	1	A1307.2		
	7.25	0.2854	69	150	1	A1307.25		
	7.30	0.2874	69	150	1	A1307.3		
	7.40	0.2913	69	150	1	A1307.4		
19/64	7.50	0.2953	69	150	1	A1307.5		
	7.54	0.2969	75	156	1	A13019/64		
	7.70	0.3031	75	156	1	A1307.7		
	7.75	0.3051	75	156	1	A1307.75		
	7.80	0.3071	75	156	1	A1307.8		
5/16	7.90	0.3110	75	156	1	A1307.9		
	7.94	0.3126	75	156	1	A1305/16		
	8.00	0.3150	75	156	1	A1308.0		
	8.10	0.3189	75	156	1	A1308.1		
	8.20	0.3228	75	156	1	A1308.2		
	8.25	0.3248	75	156	1	A1308.25		
21/64	8.30	0.3268	75	156	1	A1308.3		
	8.33	0.3280	75	156	1	A13021/64		
	8.40	0.3307	75	156	1	A1308.4		
	8.50	0.3346	75	156	1	A1308.5	A5308.5	
	8.60	0.3386	81	162	1	A1308.6		
11/32	8.70	0.3425	81	162	1	A1308.7		
	8.73	0.3437	81	162	1	A13011/32		
	8.75	0.3445	81	162	1	A1308.75		
	8.80	0.3465	81	162	1	A1308.8		
	8.90	0.3504	81	162	1	A1308.9		
23/64	9.00	0.3543	81	162	1	A1309.0	A5309.0	
	9.10	0.3583	81	162	1	A1309.1		
	9.13	0.3594	81	162	1	A13023/64		
	9.20	0.3622	81	162	1	A1309.2		
	9.25	0.3642	81	162	1	A1309.25		
	9.30	0.3661	81	162	1	A1309.3		
3/8	9.50	0.3740	81	162	1	A1309.5		
	9.52	0.3748	87	168	1	A1303/8		
	9.60	0.3780	87	168	1	A1309.6		

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A130	A530	A730
	9.70	0.3819	87	168	1	A1309.7		
	9.75	0.3839	87	168	1	A1309.75		
	9.80	0.3858	87	168	1	A1309.8		
	9.90	0.3898	87	168	1	A1309.9		
25/64	9.92	0.3906	87	168	1	A13025/64		
	10.00	0.3937	87	168	1	A13010.0	A53010.0	A73010.0
	10.10	0.3976	87	168	1	A13010.1		
	10.20	0.4016	87	168	1	A13010.2	A53010.2	A73010.2
	10.25	0.4035	87	168	1	A13010.25		
	10.30	0.4055	87	168	1	A13010.3		
13/32	10.32	0.4063	87	168	1	A13013/32		
	10.50	0.4134	87	168	1	A13010.5	A53010.5	A73010.5
27/64	10.72	0.4220	94	175	1	A13027/64		
	10.75	0.4232	94	175	1	A13010.75		
	10.80	0.4252	94	175	1	A13010.8		A73010.8
	10.90	0.4291	94	175	1	A13010.9		
	11.00	0.4331	94	175	1	A13011.0	A53011.0	A73011.0
	11.10	0.4370	94	175	1	A13011.1		
7/16	11.11	0.4374	94	175	1	A1307/16		
	11.20	0.4409	94	175	1	A13011.2		
	11.25	0.4429	94	175	1	A13011.25		
	11.30	0.4449	94	175	1	A13011.3		
	11.40	0.4488	94	175	1	A13011.4		
	11.50	0.4528	94	175	1	A13011.5	A53011.5	A73011.5
29/64	11.51	0.4531	94	175	1	A13029/64		
	11.60	0.4567	94	175	1	A13011.6		
	11.70	0.4606	94	175	1	A13011.7		
	11.75	0.4626	94	175	1	A13011.75	A53011.75	
	11.80	0.4646	94	175	1	A13011.8		A73011.8
	11.90	0.4685	101	182	1	A13011.9		
15/32	11.91	0.4689	101	182	1	A13015/32		
	12.00	0.4724	101	182	1	A13012.0	A53012.0	A73012.0
	12.10	0.4764	101	182	1	A13012.1		
	12.20	0.4803	101	182	1	A13012.2		A73012.2
	12.25	0.4823	101	182	1	A13012.25		
	12.30	0.4843	101	182	1	A13012.3		
31/64	12.30	0.4843	101	182	1	A13031/64		
	12.40	0.4882	101	182	1	A13012.4		
	12.50	0.4921	101	182	1	A13012.5	A53012.5	A73012.5
	12.60	0.4961	101	182	1	A13012.6		
	12.70	0.5000	101	182	1	A13012.7		
1/2	12.70	0.5000	101	182	1	A1301/2		
	12.75	0.5020	101	182	1	A13012.75		
	12.80	0.5039	101	182	1	A13012.8		A73012.8
	12.90	0.5079	101	182	1	A13012.9		
	13.00	0.5118	101	182	1	A13013.0	A53013.0	A73013.0
33/64	13.10	0.5157	101	182	1	A13033/64		
	13.20	0.5197	101	182	1	A13013.2		
	13.25	0.5217	108	189	1	A13013.25		
17/32	13.49	0.5311	108	189	1	A13017/32		
	13.50	0.5315	108	189	1	A13013.5	A53013.5	A73013.5
	13.60	0.5354	108	189	1	A13013.6		
	13.70	0.5394	108	189	1	A13013.7		
	13.75	0.5413	108	189	1	A13013.75		
	13.80	0.5433	108	189	1	A13013.8		A73013.8
35/64	13.89	0.5469	108	189	1	A13035/64		
	13.90	0.5472	108	189	1	A13013.9		
	14.00	0.5512	108	189	1	A13014.0	A53014.0	A73014.0
	14.10	0.5551	114	212	2	A13014.1		
	14.20	0.5591	114	212	2	A13014.2		
	14.25	0.5610	114	212	2	A13014.25		A73014.25
9/16	14.29	0.5626	114	212	2	A1309/16		
	14.30	0.5630	114	212	2	A13014.3		
	14.40	0.5669	114	212	2	A13014.4		
	14.50	0.5709	114	212	2	A13014.5	A53014.5	A73014.5
	14.60	0.5748	114	212	2	A13014.6		
37/64	14.68	0.5780	114	212	2	A13037/64		
	14.70	0.5787	114	212	2	A13014.7		
	14.75	0.5807	114	212	2	A13014.75		A73014.75
	14.80	0.5827	114	212	2	A13014.8		

d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A130	A530	A730
	14.90	0.5866	114	212	2	A13014.9		
19/32	15.00	0.5906	114	212	2	A13015.0	A53015.0	A73015.0
	15.08	0.5937	120	218	2	A13019/32		
	15.10	0.5945	120	218	2	A13015.1		
	15.20	0.5984	120	218	2	A13015.2		
39/64	15.25	0.6004	120	218	2	A13015.25	A53015.25	A73015.25
	15.48	0.6094	120	218	2	A13039/64		
	15.50	0.6102	120	218	2	A13015.5	A53015.5	A73015.5
	15.70	0.6181	120	218	2	A13015.7		
	15.75	0.6201	120	218	2	A13015.75		A73015.75
5/8	15.80	0.6220	120	218	2	A13015.8		
	15.88	0.6252	120	218	2	A1305/8		
	15.90	0.6260	120	218	2	A13015.9		
	16.00	0.6299	120	218	2	A13016.0	A53016.0	A73016.0
	16.10	0.6339	125	223	2	A13016.1		
	16.20	0.6378	125	223	2	A13016.2		
	16.25	0.6398	120	218	2			A73016.25
41/64	16.25	0.6398	125	223	2	A13016.25		
	16.27	0.6406	125	223	2	A13041/64		
21/32	16.50	0.6496	125	223	2	A13016.5	A53016.5	A73016.5
	16.67	0.6563	125	223	2	A13021/32		
	16.75	0.6594	125	223	2	A13016.75		
43/64	17.00	0.6693	125	223	2	A13017.0	A53017.0	A73017.0
	17.07	0.6720	130	228	2	A13043/64		
	17.25	0.6791	130	228	2	A13017.25		A73017.25
11/16	17.46	0.6874	130	228	2	A13011/16		
	17.50	0.6890	130	228	2	A13017.5	A53017.5	A73017.5
	17.75	0.6988	130	228	2	A13017.75		A73017.75
45/64	17.86	0.7031	130	228	2	A13045/64		
	18.00	0.7087	130	228	2	A13018.0	A53018.0	A73018.0
	18.25	0.7185	135	233	2	A13018.25		A73018.25
23/32	18.26	0.7189	135	233	2	A13023/32		
	18.50	0.7283	135	233	2	A13018.5	A53018.5	A73018.5
47/64	18.65	0.7343	135	233	2	A13047/64		
	18.75	0.7382	135	233	2	A13018.75		A73018.75
	19.00	0.7480	135	233	2	A13019.0	A53019.0	A73019.0
3/4	19.05	0.7500	140	238	2	A1303/4		
	19.25	0.7579	140	238	2	A13019.25		A73019.25
49/64	19.45	0.7657	140	238	2	A13049/64		
	19.50	0.7677	140	238	2	A13019.5	A53019.5	A73019.5
	19.75	0.7776	140	238	2	A13019.75		A73019.75
25/32	19.84	0.7811	140	238	2	A13025/32		
	20.00	0.7874	140	238	2	A13020.0	A53020.0	A73020.0
51/64	20.24	0.7969	145	243	2	A13051/64		
	20.25	0.7972	145	243	2	A13020.25		A73020.25
	20.40	0.8031	145	243	2	A13020.4		
	20.50	0.8071	145	243	2	A13020.5	A53020.5	A73020.5
13/16	20.64	0.8126	145	243	2	A13013/16		
	20.75	0.8169	145	243	2	A13020.75		A73020.75
53/64	21.00	0.8268	145	243	2	A13021.0	A53021.0	A73021.0
	21.03	0.8280	145	243	2	A13053/64		
	21.25	0.8366	150	248	2	A13021.25		
27/32	21.43	0.8437	150	248	2	A13027/32		
	21.50	0.8465	150	248	2	A13021.5	A53021.5	A73021.5
	21.75	0.8563	150	248	2	A13021.75		
55/64	21.83	0.8594	150	248	2	A13055/64		
	22.00	0.8661	150	248	2	A13022.0	A53022.0	A73022.0
7/8	22.22	0.8748	150	248	2	A1307/8		
	22.25	0.8760	150	248	2	A13022.25		
	22.50	0.8858	155	253	2	A13022.5	A53022.5	A73022.5
57/64	22.62	0.8906	155	253	2	A13057/64		
	22.75	0.8957	155	253	2	A13022.75		
	23.00	0.9055	155	253	2	A13023.0	A53023.0	A73023.0
29/32	23.02	0.9063	155	253	2	A13029/32		
	23.25	0.9154	155	276	3	A13023.25		
59/64	23.42	0.9220	155	276	3	A13059/64		
	23.50	0.9252	155	276	3	A13023.5	A53023.5	A73023.5
	23.75	0.9350	160	281	3	A13023.75		
15/16	23.81	0.9374	160	281	3	A13015/16		
	24.00	0.9449	160	281	3	A13024.0	A53024.0	A73024.0

d_1 $\varnothing_{\frac{1}{8}}$ Inch	d_1 $\varnothing_{\frac{1}{8}}$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A130	A530	A730	
61/64	24.21	0.9531	160	281	3	A13061/64			
	24.25	0.9547	160	281	3	A13024.25			
	24.50	0.9646	160	281	3	A13024.5	A53024.5	A73024.5	
31/32	24.61	0.9689	160	281	3	A13031/32			
	24.75	0.9744	160	281	3	A13024.75			
	25.00	0.9843	160	281	3	A13025.0	A53025.0	A73025.0	
63/64	25.00	0.9843	160	286	3	A13063/64			
	25.25	0.9941	165	286	3	A13025.25			
1"	25.40	1.0000	165	286	3	A1301			
	25.50	1.0039	165	286	3	A13025.5	A53025.5	A73025.5	
	25.75	1.0138	165	286	3	A13025.75			
	26.00	1.0236	165	286	3	A13026.0	A53026.0	A73026.0	
	26.25	1.0335	165	286	3	A13026.25			
	26.50	1.0433	165	286	3	A13026.5	A53026.5	A73026.5	
	26.75	1.0531	170	291	3	A13026.75			
	1.1/16	26.99	1.0626	170	291	3	A1301.1/16		
		27.00	1.0630	170	291	3	A13027.0	A53027.0	A73027.0
27.25		1.0728	170	291	3	A13027.25			
27.50		1.0827	170	291	3	A13027.5	A53027.5	A73027.5	
27.75		1.0925	170	291	3	A13027.75			
28.00		1.1024	170	291	3	A13028.0	A53028.0	A73028.0	
28.25		1.1122	175	296	3	A13028.25			
28.50		1.1220	175	296	3	A13028.5	A53028.5	A73028.5	
1.1/8		28.58	1.1252	175	296	3	A1301.1/8		
	28.75	1.1319	175	296	3	A13028.75			
	29.00	1.1417	175	296	3	A13029.0	A53029.0	A73029.0	
	29.25	1.1516	175	296	3	A13029.25			
	29.37	1.1563	175	296	3	A1301.5/32			
1.5/32	29.50	1.1614	175	296	3	A13029.5	A53029.5		
	29.75	1.1713	175	296	3	A13029.75			
	30.00	1.1811	175	296	3	A13030.0	A53030.0	A73030.0	
	1.3/16	30.16	1.1874	180	301	3	A1301.3/16		
30.25		1.1909	180	301	3	A13030.25			
30.50		1.2008	180	301	3	A13030.5			
30.75		1.2106	180	301	3	A13030.75			
1.7/32	30.96	1.2189	180	301	3	A1301.7/32			
	31.00	1.2205	180	301	3	A13031.0	A53031.0	A73031.0	
	31.25	1.2303	180	301	3	A13031.25			
	31.50	1.2402	180	301	3	A13031.5			
	31.75	1.2500	185	306	3	A13031.75			
1.1/4	31.75	1.2500	185	306	3	A1301.1/4			
	32.00	1.2598	185	334	4	A13032.0	A53032.0	A73032.0	
	32.50	1.2795	185	334	4	A13032.5			
1.9/32	32.54	1.2811	185	334	4	A1301.9/32			
	33.00	1.2992	185	334	4	A13033.0	A53033.0		
1.5/16	33.34	1.3126	185	334	4	A1301.5/16			
	33.50	1.3189	185	334	4	A13033.5			
	34.00	1.3386	190	339	4	A13034.0			
1.11/32	34.13	1.3437	190	339	4	A1301.11/32			
	34.50	1.3583	190	339	4	A13034.5			
1.3/8	34.93	1.3752	190	339	4	A1301.3/8			
	35.00	1.3780	190	339	4	A13035.0	A53035.0		
	35.50	1.3976	190	339	4	A13035.5			
1.13/32	35.72	1.4063	195	344	4	A1301.13/32			
	36.00	1.4173	195	344	4	A13036.0			
	36.50	1.4370	195	344	4	A13036.5			
1.7/16	36.51	1.4374	195	344	4	A1301.7/16			
	37.00	1.4567	195	344	4	A13037.0			
	37.50	1.4764	195	344	4	A13037.5			
	38.00	1.4961	200	349	4	A13038.0			
	1.1/2	38.10	1.5000	200	349	4	A1301.1/2		
38.50		1.5157	200	349	4	A13038.5			
39.00		1.5354	200	349	4	A13039.0			
39.50		1.5551	200	349	4	A13039.5			
1.9/16		39.69	1.5626	200	349	4	A1301.9/16		
	40.00	1.5748	200	349	4	A13040.0	A53040.0		
	40.50	1.5945	205	354	4	A13040.5			
	41.00	1.6142	205	354	4	A13041.0			
	1.5/8	41.28	1.6252	205	354	4	A1301.5/8		
41.50		1.6339	205	354	4	A13041.5			

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A130	A530	A730
	42.00	1.6535	205	354	4	A13042.0		
	42.50	1.6732	205	354	4	A13042.5		
1.11/16	42.86	1.6874	210	359	4	A1301.11/16		
	43.00	1.6929	210	359	4	A13043.0		
	43.50	1.7126	210	359	4	A13043.5		
	44.00	1.7323	210	359	4	A13044.0		
1.3/4	44.45	1.7500	210	359	4	A1301.3/4		
	44.50	1.7520	210	359	4	A13044.5		
	45.00	1.7717	210	359	4	A13045.0		
	45.50	1.7913	215	364	4	A13045.5		
	46.00	1.8110	215	364	4	A13046.0		
	46.50	1.8307	215	364	4	A13046.5		
	47.00	1.8504	215	364	4	A13047.0		
	47.50	1.8701	215	364	4	A13047.5		
	48.00	1.8898	220	369	4	A13048.0		
	48.50	1.9094	220	369	4	A13048.5		
	49.00	1.9291	220	369	4	A13049.0		
	49.50	1.9488	220	369	4	A13049.5		
	50.00	1.9685	220	369	4	A13050.0		
2"	50.80	2.0000	225	374	4	A1302		

A166

- Taper Shank Drill with 4 facet ground Brazed Carbide Tip
- Broca mango cónico 4 caras con punta soldada de metal duro
- Broca Encabadouro Cónico 4 faces com Pastilha Soldada de MD
- Foret queue cône morse avec partie carbure rectifiée et brasée sur 4 facettes

A166	▪	3.1	3.2	3.3	3.4																
	•	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	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	8.2	9.1															

A166 **HSS HM** **DIN 345** **4XD** **118°** **ST** **N**



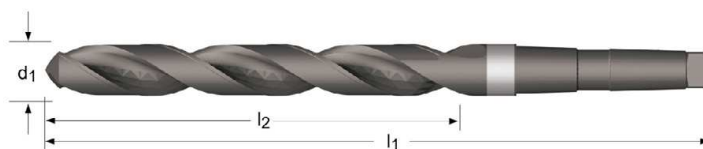
d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A166
10.00	0.3937	87	168	1	A16610.0
10.50	0.4134	87	168	1	A16610.5
11.00	0.4331	94	175	1	A16611.0
11.50	0.4528	94	175	1	A16611.5
12.00	0.4724	101	182	1	A16612.0
13.00	0.5118	101	182	1	A16613.0
13.50	0.5315	108	189	1	A16613.5
14.00	0.5512	108	189	1	A16614.0
15.00	0.5906	114	212	2	A16615.0
16.00	0.6299	120	218	2	A16616.0
17.00	0.6693	125	223	2	A16617.0
17.50	0.6890	130	228	2	A16617.5
18.00	0.7087	130	228	2	A16618.0
19.00	0.7480	135	233	2	A16619.0
20.00	0.7874	140	238	2	A16620.0
21.00	0.8268	145	243	2	A16621.0
22.00	0.8661	150	248	2	A16622.0
22.50	0.8858	155	253	2	A16622.5
23.00	0.9055	155	253	2	A16623.0
24.00	0.9449	160	281	3	A16624.0
25.00	0.9843	160	281	3	A16625.0
26.00	1.0236	165	286	3	A16626.0
27.00	1.0630	170	291	3	A16627.0
28.00	1.1024	170	291	3	A16628.0
29.00	1.1417	175	296	3	A16629.0
30.00	1.1811	175	296	3	A16630.0
32.00	1.2598	185	334	4	A16632.0
33.00	1.2992	185	334	4	A16633.0

A350

- Long Series Tapershank Drill
- Broca de mango cónico, serie larga
- Broca CM Longa
- Foret série longue

A350	▪	1.1	1.2																		
	•	1.3	1.4	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1											

A350 HSS DIN 341 6XD 118° ST N



d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A350
5.00	0.1969	74	155	1	A3505.0
5.50	0.2165	80	161	1	A3505.5
6.00	0.2362	80	161	1	A3506.0
6.70	0.2638	86	167	1	A3506.7
6.80	0.2677	93	174	1	A3506.8
7.00	0.2756	93	174	1	A3507.0
7.50	0.2953	93	174	1	A3507.5
8.00	0.3150	100	181	1	A3508.0
8.40	0.3307	100	181	1	A3508.4
8.50	0.3346	100	181	1	A3508.5
8.75	0.3445	107	188	1	A3508.75
9.00	0.3543	107	188	1	A3509.0
9.50	0.3740	107	188	1	A3509.5
9.80	0.3858	116	197	1	A3509.8
10.00	0.3937	116	197	1	A35010.0
10.20	0.4016	116	197	1	A35010.2
10.50	0.4134	116	197	1	A35010.5
10.70	0.4213	125	206	1	A35010.7
11.00	0.4331	125	206	1	A35011.0
11.50	0.4528	125	206	1	A35011.5
11.75	0.4626	125	206	1	A35011.75
11.80	0.4646	125	206	1	A35011.8
12.00	0.4724	134	215	1	A35012.0
12.50	0.4921	134	215	1	A35012.5
13.00	0.5118	134	215	1	A35013.0
13.50	0.5315	142	223	1	A35013.5
14.00	0.5512	142	223	1	A35014.0
14.25	0.5610	147	245	2	A35014.25
14.50	0.5709	147	245	2	A35014.5
14.75	0.5807	147	245	2	A35014.75
15.00	0.5906	147	245	2	A35015.0
15.25	0.6004	153	251	2	A35015.25
15.50	0.6102	153	251	2	A35015.5
15.75	0.6201	153	251	2	A35015.75

d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A350
16.00	0.6299	153	251	2	A35016.0
16.25	0.6398	159	257	2	A35016.25
16.50	0.6496	159	257	2	A35016.5
16.75	0.6594	159	257	2	A35016.75
17.00	0.6693	159	257	2	A35017.0
17.25	0.6791	165	263	2	A35017.25
17.50	0.6890	165	263	2	A35017.5
18.00	0.7087	165	263	2	A35018.0
18.50	0.7283	171	269	2	A35018.5
19.00	0.7480	171	269	2	A35019.0
19.50	0.7677	177	275	2	A35019.5
19.75	0.7776	177	275	2	A35019.75
20.00	0.7874	177	275	2	A35020.0
20.25	0.7972	184	282	2	A35020.25
20.50	0.8071	184	282	2	A35020.5
21.00	0.8268	184	282	2	A35021.0
21.50	0.8465	191	289	2	A35021.5
22.00	0.8661	191	289	2	A35022.0
22.50	0.8858	198	296	2	A35022.5
23.00	0.9055	198	296	2	A35023.0
23.50	0.9252	198	319	3	A35023.5
24.00	0.9449	206	327	3	A35024.0
24.50	0.9646	206	327	3	A35024.5
25.00	0.9843	206	327	3	A35025.0
25.50	1.0039	214	335	3	A35025.5
26.00	1.0236	214	335	3	A35026.0
26.50	1.0433	214	335	3	A35026.5
27.00	1.0630	222	343	3	A35027.0
27.50	1.0827	222	343	3	A35027.5
28.00	1.1024	222	343	3	A35028.0
29.00	1.1417	230	351	3	A35029.0
30.00	1.1811	230	351	3	A35030.0
30.50	1.2008	239	360	3	A35030.5
31.00	1.2205	239	360	3	A35031.0
31.50	1.2402	239	360	3	A35031.5
32.00	1.2598	248	397	4	A35032.0
33.00	1.2992	248	397	4	A35033.0
34.00	1.3386	257	406	4	A35034.0
35.00	1.3780	257	406	4	A35035.0
36.00	1.4173	267	416	4	A35036.0
37.00	1.4567	267	416	4	A35037.0
38.00	1.4961	277	426	4	A35038.0
39.00	1.5354	277	426	4	A35039.0
40.00	1.5748	277	426	4	A35040.0
41.00	1.6142	287	436	4	A35041.0
42.00	1.6535	287	436	4	A35042.0
43.00	1.6929	298	447	4	A35043.0
44.00	1.7323	298	447	4	A35044.0
45.00	1.7717	298	447	4	A35045.0
46.00	1.8110	310	459	4	A35046.0
47.00	1.8504	310	459	4	A35047.0
48.00	1.8898	321	470	4	A35048.0
50.00	1.9685	321	470	4	A35050.0

A345

- Morse Taper Shank Extra Length Drill
- Broca de mango cónico serie extra larga
- Broca CM - Extra Longa
- Foret queue cône morse - Extra long

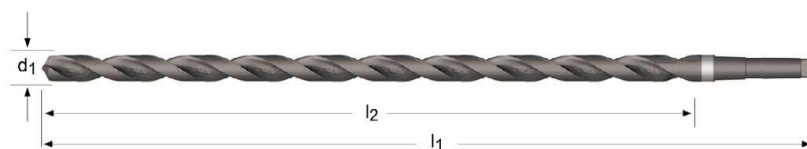
A345	▪	1.1	1.2																		
	•	1.3	1.4	1.5	1.6	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3
		6.4	7.1	7.2	7.3	7.4	8.1	8.2	8.3	9.1											

A345

HSS

DIN
1870/1

10XD



A345



8.00 - 40.00

d_1 Øh ₈ Inch	d_1 Øh ₈ mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A345
	8.00	0.3150	165	265	1	A3458.0
	8.50	0.3346	165	265	1	A3458.5
	9.00	0.3543	175	275	1	A3459.0
	9.50	0.3740	175	275	1	A3459.5
3/8	9.52	0.3748	185	285	1	A3453/8
	10.00	0.3937	185	285	1	A34510.0
13/32	10.32	0.4063	185	285	1	A34513/32
	10.50	0.4134	185	285	1	A34510.5
	11.00	0.4331	195	300	1	A34511.0
7/16	11.11	0.4374	195	300	1	A3457/16
	11.50	0.4528	195	300	1	A34511.5
29/64	11.51	0.4531	205	310	1	A34529/64
	12.00	0.4724	205	310	1	A34512.0
	12.50	0.4921	205	310	1	A34512.5
1/2	12.70	0.5000	205	310	1	A3451/2
	13.00	0.5118	205	310	1	A34513.0
17/32	13.49	0.5311	220	325	1	A34517/32
	13.50	0.5315	220	325	1	A34513.5
	14.00	0.5512	220	325	1	A34514.0
9/16	14.29	0.5626	220	340	2	A3459/16
37/64	14.68	0.5780	220	340	2	A34537/64
	15.00	0.5906	220	340	2	A34515.0
39/64	15.48	0.6094	230	355	2	A34539/64
	15.50	0.6102	230	355	2	A34515.5
5/8	15.88	0.6252	230	355	2	A3455/8
	16.00	0.6299	230	355	2	A34516.0
41/64	16.27	0.6406	230	355	2	A34541/64
	16.50	0.6496	230	355	2	A34516.5
21/32	16.67	0.6563	230	355	2	A34521/32
	17.00	0.6693	230	355	2	A34517.0
11/16	17.46	0.6874	245	370	2	A34511/16
	17.50	0.6890	245	370	2	A34517.5

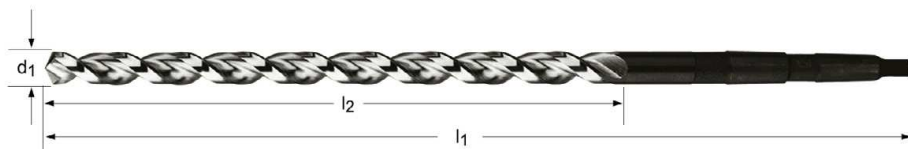
d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A345	
3/4	18.00	0.7087	245	370	2	A34518.0	
	18.50	0.7283	245	370	2	A34518.5	
	19.00	0.7480	245	370	2	A34519.0	
	19.05	0.7500	260	385	2	A3453/4	
	19.50	0.7677	260	385	2	A34519.5	
	20.00	0.7874	260	385	2	A34520.0	
	20.50	0.8071	260	385	2	A34520.5	
	21.00	0.8268	260	385	2	A34521.0	
	21.50	0.8465	270	405	2	A34521.5	
	22.00	0.8661	270	405	2	A34522.0	
7/8	22.22	0.8748	270	405	2	A3457/8	
	22.50	0.8858	270	405	3	A34522.5	
	23.00	0.9055	270	405	3	A34523.0	
	23.50	0.9252	270	425	3	A34523.5	
	24.00	0.9449	290	440	3	A34524.0	
	24.50	0.9646	290	440	3	A34524.5	
	25.00	0.9843	290	440	3	A34525.0	
	25.40	1.0000	290	440	3	A3451	
1"	25.50	1.0039	290	440	3	A34525.5 ³⁾	
	26.00	1.0236	290	440	3	A34526.0 ³⁾	
	26.50	1.0433	290	440	3	A34526.5 ³⁾	
	27.00	1.0630	305	460	3	A34527.0 ³⁾	
	28.00	1.1024	305	460	3	A34528.0 ³⁾	
	29.00	1.1417	305	460	3	A34529.0 ³⁾	
	30.00	1.1811	305	460	3	A34530.0 ³⁾	
	1.1/4	31.75	1.2500	320	480	3	A3451.1/4 ³⁾
		31.00	1.2205	320	480	3	A34531.0 ³⁾
		32.00	1.2598	320	505	4	A34532.0 ³⁾
33.00		1.2992	320	505	4	A34533.0 ³⁾	
34.00		1.3386	340	530	4	A34534.0 ³⁾	
35.00		1.3780	340	530	4	A34535.0 ³⁾	
36.00		1.4173	340	530	4	A34536.0 ³⁾	
37.00		1.4567	340	530	4	A34537.0 ³⁾	
38.00		1.4961	360	555	4	A34538.0 ³⁾	
1.1/2		38.10	1.5000	360	555	4	A3451.1/2 ³⁾
	39.00	1.5354	360	555	4	A34539.0 ³⁾	
	40.00	1.5748	360	555	4	A34540.0 ³⁾	

A951 A952

- Morse Taper Shank Extra Length Drill
- Broca de mango cónico serie extra larga
- Broca CM - Extra Longa
- Foret queue cône morse - Extra long

A951; A952	▪	1.1	1.2	1.3															
	•	1.4	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1								

A951	HSS	DIN 1870/1	15XD	130°			W			
A952	HSS	DIN 1870/2	20XD	130°			W			



d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A951	A952
8.00	0.3150	210	330	1		A9528.0
8.50	0.3346	210	330	1		A9528.5
9.00	0.3543	220	345	1		A9529.0
10.00	0.3937	185	285	1	A95110.0	
10.00	0.3937	235	360	1		A95210.0
10.50	0.4134	235	360	1		A95210.5
11.00	0.4331	195	300	1	A95111.0	
11.00	0.4331	250	375	1		A95211.0
11.50	0.4528	250	375	1		A95211.5
12.00	0.4724	205	310	1	A95112.0	
12.00	0.4724	260	395	1		A95212.0
12.50	0.4921	205	310	1	A95112.5	
12.50	0.4921	260	395	1		A95212.5
13.00	0.5118	205	310	1	A95113.0	
13.00	0.5118	260	395	1		A95213.0
13.50	0.5315	220	325	1	A95113.5	
13.50	0.5315	275	410	1		A95213.5
14.00	0.5512	220	325	1	A95114.0	
14.00	0.5512	275	410	1		A95214.0
14.50	0.5709	220	340	2	A95114.5	⁵⁾
14.50	0.5709	275	425	2		A95214.5 ⁶⁾
15.00	0.5906	220	340	2	A95115.0	⁵⁾
15.00	0.5906	275	425	2		A95215.0 ⁶⁾
15.50	0.6102	230	355	2	A95115.5	⁵⁾
15.50	0.6102	295	445	2		A95215.5 ⁶⁾
16.00	0.6299	230	355	2	A95116.0	⁵⁾
16.00	0.6299	295	445	2		A95216.0 ⁶⁾
16.50	0.6496	230	355	2	A95116.5	⁵⁾

⁵⁾ < 15xD

⁶⁾ < 20xD

d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	MK	A951	A952
16.50	0.6496	295	445	2		A95216.5 ⁶⁾
17.00	0.6693	230	355	2	A95117.0 ⁵⁾	A95217.0 ⁶⁾
17.00	0.6693	295	445	2		A95217.0 ⁶⁾
17.50	0.6890	245	370	2	A95117.5 ⁵⁾	A95217.5 ⁶⁾
17.50	0.6890	310	465	2		A95217.5 ⁶⁾
18.00	0.7087	245	370	2	A95118.0 ⁵⁾	A95218.0 ⁶⁾
18.00	0.7087	310	465	2		A95218.0 ⁶⁾
18.50	0.7283	245	370	2	A95118.5 ⁵⁾	A95218.5 ⁶⁾
18.50	0.7283	310	465	2		A95218.5 ⁶⁾
19.00	0.7480	245	370	2	A95119.0 ⁵⁾	A95219.0 ⁶⁾
19.00	0.7480	310	465	2		A95219.0 ⁶⁾
19.50	0.7677	260	385	2	A95119.5 ⁵⁾	A95219.5 ⁶⁾
19.50	0.7677	325	490	2		A95219.5 ⁶⁾
20.00	0.7874	260	385	2	A95120.0 ⁵⁾	A95220.0 ⁶⁾
20.00	0.7874	325	490	2		A95220.0 ⁶⁾
21.00	0.8268	260	385	2	A95121.0 ⁵⁾	A95221.0 ⁶⁾
21.00	0.8268	325	490	2		A95221.0 ⁶⁾
22.00	0.8661	270	405	2	A95122.0 ⁵⁾	A95222.0 ⁶⁾
22.00	0.8661	345	515	2		A95222.0 ⁶⁾
23.00	0.9055	270	405	2	A95123.0 ⁵⁾	A95223.0 ⁶⁾
23.00	0.9055	345	515	2		A95223.0 ⁶⁾
24.00	0.9449	290	440	3	A95124.0 ⁵⁾	A95224.0 ⁶⁾
24.00	0.9449	365	555	3		A95224.0 ⁶⁾
25.00	0.9843	290	440	3	A95125.0 ⁵⁾	A95225.0 ⁶⁾
25.00	0.9843	365	555	3		A95225.0 ⁶⁾
26.00	1.0236	290	440	3	A95126.0 ⁵⁾	A95226.0 ⁶⁾
26.00	1.0236	365	555	3		A95226.0 ⁶⁾
27.00	1.0630	305	460	3	A95127.0 ⁵⁾	A95227.0 ⁶⁾
27.00	1.0630	385	580	3		A95227.0 ⁶⁾
28.00	1.1024	305	460	3	A95128.0 ⁵⁾	A95228.0 ⁶⁾
28.00	1.1024	385	580	3		A95228.0 ⁶⁾
29.00	1.1417	305	460	3	A95129.0 ⁵⁾	A95229.0 ⁶⁾
29.00	1.1417	385	580	3		A95229.0 ⁶⁾
30.00	1.1811	305	460	3	A95130.0 ⁵⁾	A95230.0 ⁶⁾
30.00	1.1811	385	580	3		A95230.0 ⁶⁾
31.00	1.2205	410	610	3		A95231.0 ⁶⁾
32.00	1.2598	410	635	4		A95232.0 ⁶⁾
33.00	1.2992	410	635	4		A95233.0 ⁶⁾
34.00	1.3386	430	665	4		A95234.0 ⁶⁾
35.00	1.3780	430	665	4		A95235.0 ⁶⁾
38.00	1.4961	460	695	4		A95238.0 ⁶⁾
40.00	1.5748	460	695	4		A95240.0 ⁶⁾

⁵⁾ < 15xD

⁶⁾ < 20xD

- A400**
- Subland Drill - 90°
 - Broca Bidiametral - 90°
 - Broca Escalonada - 90°
 - Foret étagé - 90°

A400	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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																		

A400

HSS

DIN
8374

4XD

118°

ST

N

90°



M	d_1 Ø mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø mm	A400
M3	3.20	0.1260	57	93	9	6	A400M3
M4	4.30	0.1693	75	117	11	8	A400M4
M5	5.30	0.2087	87	133	13	10	A400M5
M6	6.40	0.2520	94	142	15	11.5	A400M6
M8	8.40	0.3307	114	169	19	15	A400M8
M10	10.50	0.4134	135	198	23	19	A400M10

- A402**
- Subland Drill - 180°
 - Broca Bidiametral - 180°
 - Broca Escalonada - 180°
 - Foret étagé - 180°

A402	▪	1.1	1.2	1.3	1.4	3.1	3.2															
		•	1.5	1.6	2.1	2.2	2.3	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																		

A402

HSS

DIN 8376

4XD

118°

ST

N

180°

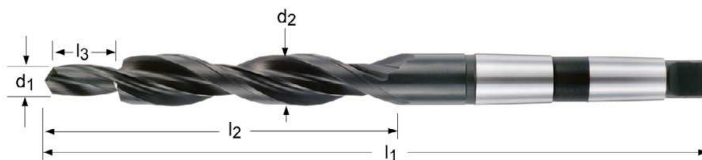


M	d ₁ Ø mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ Ø mm	A402
M3	3.40	0.1339	57	93	9	6	A402M3
M4	4.50	0.1772	75	117	11	8	A402M4
M5	5.50	0.2165	87	133	13	10	A402M5
M6	6.60	0.2598	94	142	15	11	A402M6
M8	9.00	0.3543	114	169	19	15	A402M8
M10	11.00	0.4331	130	191	23	18	A402M10

- A405**
- Morse Taper Shank Subland Drill - 180°
 - Broca Bidiametral de mango cónico - 180°
 - Broca Escolanada CM - 180°
 - Queue cone morse foret étagé - 180°

A405	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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																		

A405 HSS DIN 8377 4XD 118° ST N 180°



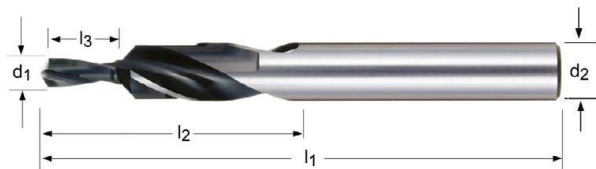
M	d ₁ ∅ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	l ₃ mm	d ₂ ∅ mm	MK	A405
M6	6.60	0.2598	94	175	15	11	1	A405M6
M8	9.00	0.3543	114	212	19	15	2	A405M8
M10	11.00	0.4331	130	228	23	18	2	A405M10
M12	13.50	0.5315	140	238	27	20	2	A405M12
M14	15.50	0.6102	160	281	31	24	3	A405M14
M16	17.50	0.6890	165	286	35	26	3	A405M16
M18	20.00	0.7874	175	296	39	30	3	A405M18

A412

- Step Drill
- Broca escalonada
- Broca Escalonada
- Foret étagé

A412	▪	1.1	1.2	1.3	1.4	2.1	3.1	3.2														
	•	1.5	1.6	2.2	2.3	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																				

A412 HSS DORMER 2.5XD 118° ST



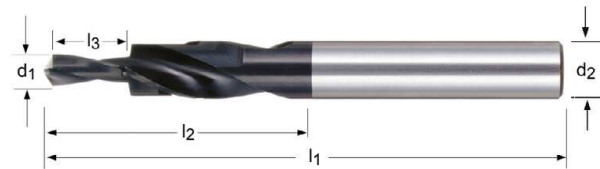
M	d_1 Ø mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø mm	A412
M3	3.40	0.1339	31	70	9	6.6	A412M3
M4	4.50	0.1772	40	84	11	9	A412M4
M5	5.50	0.2165	47	95	13	11	A412M5
M6	6.60	0.2598	51	102	15	13	A412M6
M8	9.00	0.3543	62	123	19	17.2	A412M8
M10	11.00	0.4331	70	141	23	21.5	A412M10

A413

- Step Drill
- Broca escalonada
- Broca Escalonada
- Foret étagé

A413	▪	1.1	1.2	1.3	1.4	2.1	3.1	3.2													
	•	1.5	1.6	2.2	2.3	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																			

A413 HSS DORMER 2.5XD 118° ST



M	d_1 Ø mm	d_1 decimal Inch	l_2 mm	l_1 mm	l_3 mm	d_2 Ø mm	A413
M3	3.40	0.1339	28	66	9	6	A413M3
M4	4.50	0.1772	37	79	11	8	A413M4
M5	5.50	0.2165	43	89	13	10	A413M5
M6	6.60	0.2598	47	95	15	11	A413M6
M8	9.00	0.3543	56	111	19	15	A413M8
M10	11.00	0.4331	62	123	23	18	A413M10

- A200** • Centre Drill - 60°
- A205** • Brocas de Centrar - 60°
- A206** • Broca de Centrar - 60°
- A266** • Foret à centrer - 60°

A200; A205; A206; A266	▪	1.1	1.2	1.3	1.4	3.1	3.2									
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1					

A200	HSS	DIN 333A	1XD	118°							
A205	HSS	DIN 333A	1XD	118°	TiN						
A206	HSS-E	DIN 333A	1XD	118°							
A266	HSS-E	DIN 333A	1XD	118°	TiAIN						



A200	A205	A206	A266
0.50 - 12.50	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00

d ₁ Ø mm	d ₁ decimal Inch	l ₂ max/min mm	l ₁ mm	d ₂ Ø mm	A200	A205	A206	A266
0.50	0.0197	0.9 - 0.6	25	3.15	A200.5X3.15 ⁷⁾			
0.80	0.0315	1.3 - 1.0	25	3.15	A200.8X3.15 ⁷⁾			
1.00	0.0394	1.7 - 1.3	31	3.15	A2001.0X3.15	A2051.0X3.15	A2061.0X3.15	A2661.0X3.15
1.25	0.0492	2.0 - 1.6	31	3.15	A2001.25X3.15	A2051.25X3.15	A2061.25X3.15	A2661.25X3.15
1.60	0.0630	2.6 - 2.0	35	4.00	A2001.6X4.0	A2051.6X4.0	A2061.6X4.0	A2661.6X4.0
2.00	0.0787	3.1 - 2.5	40	5.00	A2002.0X5.0	A2052.0X5.0	A2062.0X5.0	A2662.0X5.0
2.50	0.0984	3.8 - 3.1	45	6.30	A2002.5X6.3	A2052.5X6.3	A2062.5X6.3	A2662.5X6.3
3.15	0.1240	4.6 - 3.9	50	8.00	A2003.15X8.0	A2053.15X8.0	A2063.15X8.0	A2663.15X8.0
4.00	0.1575	5.9 - 5.0	55	10.00	A2004.0X10.0	A2054.0X10.0	A2064.0X10.0	A2664.0X10.0
5.00	0.1969	7.2 - 6.3	63	12.50	A2005.0X12.5	A2055.0X12.5	A2065.0X12.5	A2665.0X12.5
6.30	0.2480	8.9 - 8.0	71	16.00	A2006.3X16.0			
8.00	0.3150	11.1 - 10.1	80	20.00	A2008.0X20.0			
10.00	0.3937	13.8 - 12.8	100	25.00	A20010.0X25.0			
12.50	0.4921	17.5 - 16.5	125	31.50	A20012.5X31.5			

⁷⁾ Single Ended Only / Afilada sólo por una punta / Afiada num só lado / Une pointe seulement

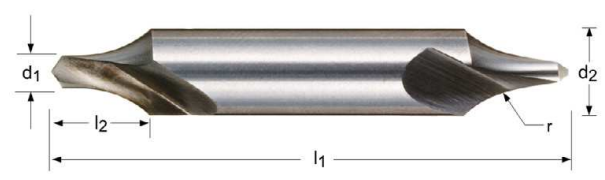
A210

- Centre Drill
- Brocas de Centrar
- Broca de Centrar
- Foret à centrer

- Radius Form
- Radio protegido
- Forma de Raio
- Chanfrein à rayon

A210	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1															

A210 HSS DIN 333R 1XD 118°



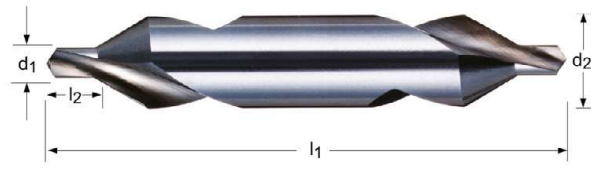
d_1 Ø mm	d_1 decimal Inch	l_2 max/min mm	l_1 mm	r max/min mm	d_2 Ø mm	A210
0.50	0.0197	2.6 - 2.3	25.0	2.50 - 2.00	3.15	A210.5X3.15 ⁷⁾
0.80	0.0315	2.9 - 2.6	25.0	3.15 - 2.50	3.15	A210.8X3.15 ⁷⁾
1.00	0.0394	3.3 - 3.0	31.0	3.65 - 2.90	3.15	A2101.0X3.15
1.25	0.0492	3.6 - 3.3	31.0	3.95 - 3.15	3.15	A2101.25X3.15
1.60	0.0630	4.7 - 4.2	35.0	5.00 - 4.00	4.00	A2101.6X4.0
2.00	0.0787	5.4 - 5.0	40.0	6.25 - 5.00	5.00	A2102.0X5.0
2.50	0.0984	6.8 - 6.3	45.0	7.88 - 6.30	6.30	A2102.5X6.3
3.15	0.1240	8.5 - 8.0	50.0	10.00 - 8.00	8.00	A2103.15X8.0
4.00	0.1575	10.6 - 10.0	55.0	12.50 - 10.00	10.00	A2104.0X10.0
5.00	0.1969	13.1 - 12.5	63.0	15.63 - 12.50	12.50	A2105.0X12.5
6.30	0.2480	16.6 - 16.0	71.0	20.00 - 16.00	16.00	A2106.3X16.0
8.00	0.3150	20.7 - 20.0	80.0	25.00 - 20.00	20.00	A2108.0X20.0
10.00	0.3937	25.7 - 25.0	100.0	31.25 - 25.00	25.00	A21010.0X25.0

A201

- Centre Drill - 60°
- Brocas de Centrar - 60°
- Broca de Centrar - 60°
- Foret à centrer - 60°

A201	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1															

A201 HSS DORMER 1XD 122° 60°



d ₁ Ø mm	d ₁ decimal Inch	l ₂ max/min mm	l ₁ mm	d ₂ Ø mm	A201
0.63	0.0248	1.2 - 0.9	20	3.15	A201.63X3.15 ⁷⁾
0.75	0.0295	1.3 - 1.0	35	3.50	A201.75X3.5
1.00	0.0394	2.1 - 1.5	35	4.00	A2011.0X4.0
1.50	0.0591	2.8 - 2.0	40	5.00	A2011.5X5.0
1.60	0.0630	2.4 - 2.0	40	5.00	A2011.6X5.0
2.00	0.0787	4.0 - 3.0	45	6.00	A2012.0X6.0
2.00	0.0787	2.9 - 2.5	45	6.30	A2012.0X6.3
2.50	0.0984	4.5 - 3.5	50	8.00	A2012.5X8.0
3.00	0.1181	4.4 - 3.9	50	8.00	A2013.0X8.0
3.00	0.1181	5.0 - 4.0	56	10.00	A2013.0X10.0
3.15	0.1240	4.4 - 3.9	56	10.00	A2013.15X10.0
4.00	0.1575	6.2 - 5.0	66	12.00	A2014.0X12.0
5.00	0.1969	7.7 - 6.5	78	14.00	A2015.0X14.0
6.00	0.2362	9.2 - 8.0	90	18.00	A2016.0X18.0

⁷⁾ Single Ended Only / Afilada sólo por una punta / Afiada num só lado / Une pointe seulement

A225

- Centre Drill - 60°
- Brocas de Centrar - 60°
- Broca de Centrar - 60°
- Foret à centrer - 60°

A225	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1															

A225 HSS BS 328 1XD 120° 60° A296 136



Nr.	d_1 Ø Inch	d_1 decimal Inch	l_2 max/min Inch	l_1 Inch	d_2 Ø Inch	A225
BS1	3/64	0.0469	5/64 - 1/16	1.1/2	1/8	A225BS1
BS2	1/16	0.0625	3/32 - 5/64	1.3/4	3/16	A225BS2
BS3	3/32	0.0938	5/32 - 1/8	2"	1/4	A225BS3
BS4	1/8	0.1250	3/16 - 5/32	2.1/4	5/16	A225BS4
BS5	3/16	0.1875	9/32 - 1/4	2.1/2	7/16	A225BS5
BS5A	7/32	0.2188	5/16 - 9/32	2.3/4	1/2	A225BS5A
BS6	1/4	0.2500	3/8 - 5/16	3"	5/8	A225BS6
BS7	5/16	0.3125	15/32 - 13/32	3.1/2	3/4	A225BS7

A237

- Centre Drill - 60°
- Brocas de Centrar - 60°
- Broca de Centrar - 60°
- Foret à centrer - 60°

- Flat Shank
- Mango Plano
- Encabadouro Plano
- Queue avec plat

A237	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1															

A237

HSS-E

DIN
333A

1XD



118°



A237



1.60 - 10.00

d_1 Ø mm	d_1 decimal Inch	l_2 max/min mm	l_1 mm	d_2 Ø mm	d_4 max/min mm	A237
1.60	0.0630	2.6 - 2.0	35	4.00	3.25 - 3.15	A2371.6X4.0
2.00	0.0787	3.1 - 2.5	40	5.00	4.20 - 4.10	A2372.0X5.0
2.50	0.0984	3.8 - 3.1	45	6.30	5.35 - 5.25	A2372.5X6.3
3.15	0.1240	4.6 - 3.9	50	8.00	6.95 - 6.85	A2373.15X8.0
4.00	0.1575	5.9 - 5.0	55	10.00	8.40 - 8.30	A2374.0X10.0
5.00	0.1969	7.2 - 6.3	63	12.50	10.95 - 10.85	A2375.0X12.5
6.30	0.2480	8.9 - 8.0	71	16.00	14.00 - 13.90	A2376.3X16.0
8.00	0.3150	11.1 - 10.1	80	20.00	17.90 - 17.80	A2378.0X20.0
10.00	0.3937	13.8 - 12.8	100	25.00	22.50 - 22.40	A23710.0X25.0

A238

- Centre Drill
- Brocas de Centrar
- Broca de Centrar
- Foret à centrer

- Radius Form and Flat Shank
- Radio Protegido y Mango Plano
- Raio Protegido e Encabadouro Facetado
- Forme rayonnée et queue avec plat

A238	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1															

A238 HSS-E DIN 333R 1XD 118°



d_1 Ø mm	d_1 decimal Inch	l_2 max/min mm	l_1 mm	r max/min mm	d_2 Ø mm	d_4 max/min mm	A238
1.60	0.0630	4.7 - 4.2	35	5.00 - 4.00	4.00	3.25 - 3.15	A2381.6X4.0
2.00	0.0787	5.4 - 5.0	40	6.25 - 5.00	5.00	4.20 - 4.10	A2382.0X5.0
2.50	0.0984	6.8 - 6.3	45	7.88 - 6.30	6.30	5.35 - 5.25	A2382.5X6.3
3.15	0.1240	8.5 - 8.0	50	10.00 - 8.00	8.00	6.95 - 6.85	A2383.15X8.0
4.00	0.1575	10.6 - 10.0	55	12.50 - 10.00	10.00	8.40 - 8.30	A2384.0X10.0
5.00	0.1969	13.1 - 12.5	63	15.63 - 12.50	12.50	10.95 - 10.85	A2385.0X12.5
6.30	0.2480	16.6 - 16.0	71	20.00 - 16.00	16.00	14.00 - 13.90	A2386.3X16.0
8.00	0.3150	20.7 - 20.0	80	25.00 - 20.00	20.00	17.90 - 17.80	A2388.0X20.0

A242

- Centre Drill - 60°
- Brocas de Centrar - 60°
- Broca de Centrar - 60°
- Foret à centrer - 60°

A242	▪	1.1	1.2	1.3	1.4	3.1	3.2														
	•	1.5	1.6	2.1	2.2	2.3	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	8.3	9.1															

A242 HSS-E 1XD



d_1 Ø mm	d_1 decimal Inch	l_2 max/min mm	l_1 mm	d_2 Ø mm	A242
1.00	0.0394	1.7 - 1.3	100	4.00	A2421.0X4.0
1.50	0.0591	2.6 - 2.0	100	5.00	A2421.5X5.0
2.00	0.0787	3.1 - 2.5	100	6.00	A2422.0X6.0
2.50	0.0984	3.8 - 3.1	100	8.00	A2422.5X8.0
3.00	0.1181	4.6 - 3.9	100	8.00	A2423.0X8.0
3.00	0.1181	4.6 - 3.9	100	10.00	A2423.0X10.0
4.00	0.1575	5.9 - 5.0	100	10.00	A2424.0X10.0
4.00	0.1575	5.9 - 5.0	100	12.00	A2424.0X12.0
5.00	0.1969	7.2 - 6.3	100	12.00	A2425.0X12.0

A088

- Stub Drill Set
- Juego de Brocas, serie Extra-corta
- Jogo de Brocas Extra Curtas
- Coffrets de forets extra-court

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



Set	A	B	C	A088
200S	A022	24	1.0 mm - 10.5 mm x 0.5 mm + 3.3 mm, 4.2 mm, 6.8 mm, 10.2 mm	A088200S

A095

- Jobber Drill Set A=Styles in Set, B=No. in Set, C=Diameters in Set
- Juego de Brocas, serie corta A=Tipos en el juego, B=No. en el Juego, C=Diámetros en el Juego
- Jogo de Brocas Curtas A=Tipos no Jogo, B=Quant. por Jogo., C=Diâmetros por Jogo
- Coffret de forets courts A=Types de coffrets, B=Nombre dans le coffret, C=Diamètres dans le coffret



Set	A	B	C	A095
18	A002	29	1/16 inch - 1/2 inch x 1/64 inch	A09518
20	A002	15	1/16 inch - 1/2 inch x 1/32 inch	A09520
200	A002	24	1.0 mm - 10.5 mm x 0.5 mm + 3.3 mm, 4.2 mm, 6.8 mm, 10.2 mm	A095200
201	A002	19	1.0 mm - 10.0 mm x 0.5 mm	A095201
202	A002	51	1.0 mm - 6.0 mm x 0.1 mm	A095202
203	A002	41	6.0 mm - 10.0 mm x 0.1 mm	A095203
204	A002	25	1.0 mm - 13.0 mm x 0.5 mm	A095204
206	A002	29	1.0 mm - 13.0 mm x 0.5 mm + 3.3 mm, 4.2 mm, 6.8 mm, 10.2 mm	A095206
209	A002	91	1.0 mm - 10.0 mm x 0.1 mm	A095209

A087

- Compact Drill Set
- Juego de Brocas Compacto
- Jogo de Brocas Compacto
- Coffret compact de forets

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



Nr.	A	B	C	A087
201	A002	19	1.0 mm - 10.0 mm x 0.5 mm	A087201

A094

- Jobber Drill Set
- Juego de Brocas, serie corta
- Jogo de Brocas Curtas
- Coffret de forets courts

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



Set	A	B	C	A094
413	A002	13	1.5 mm - 6.5 mm x 0.5 mm + 3.3 mm, 4.2 mm	A094413
419	A002	19	1.0 mm - 10.0 mm x 0.5 mm	A094419

A089

- Jobber Drill Set
- Juego de Brocas, serie corta
- Jogo de Brocas Curtas
- Coffret de forets courts

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



A089



Set

Nr.	A	B	C	A089
10	A002	5	A0024.0, A0025.0, A0026.0, A0028.0, A00210.0	A08910

A099

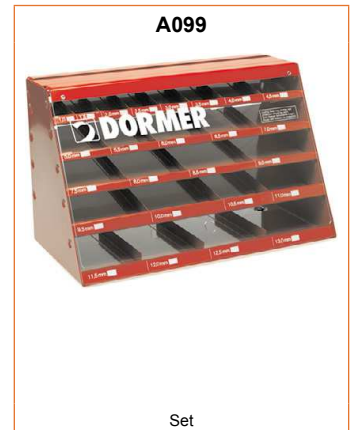
- Counter Dispenser
- Expositor de Brocas
- Jogo de Brocas Curtas
- Présentoir

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



A099

Set

Set	A	B	C
F1	A002	380	5 x (13/32, 7/16, 15/32, 1/2) inch; 10 x (5/64, 7/64, 9/64, 11/64, 13/64, 15/64, 17/64, 9/32, 19/64, 5/16, 21/64, 11/32, 23/64, 3/8) inch; 20 x (1/16, 7/32, 1/4) inch; 30 x 3/32 inch; 40 x (5/32, 3/16) inch; 50 x 1/8 inch
M1	A002	340	5 x (10.50, 11.00, 11.50, 12.00, 12.50, 13.00) mm; 10 x (1.50, 2.50, 3.50, 4.50, 5.50, 6.50, 7.00, 7.50, 8.00, 8.50, 9.00, 9.50, 10.00) mm; 20 x (1.00, 5.00, 6.00) mm; 30 x 2.00 mm; 40 x 4.00 mm; 50 x 3.00 mm

A099

A099F1

A099M1



A099DRILLBOY



Set

Set	A	B	C
DRILLBOY	A002	43	3 x (3.0 mm, 3.3 mm, 3.5 mm, 4.0 mm) 2 x (4.2 mm, 4.5 mm, 5.0 mm, 5.5 mm, 6.0 mm, 6.5 mm, 6.8 mm, 7.0 mm, 7.5 mm, 8.0 mm) + 8.5 mm, 9.0 mm, 9.5 mm, 10.0 mm, 10.2 mm, 10.5 mm, 11.0 mm, 11.5 mm, 12.0 mm, 12.5 mm, 13.0 mm

A099

A099DRILLBOY

A199

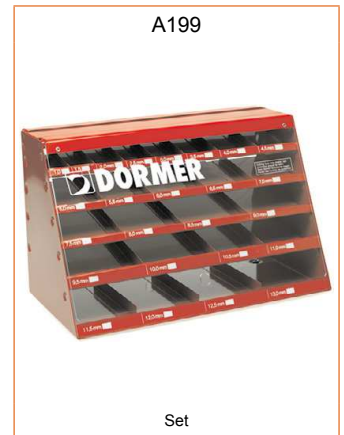
- Counter Dispenser
- Expositor de Brocas
- Jogo de Brocas Curtas
- Présentoir

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

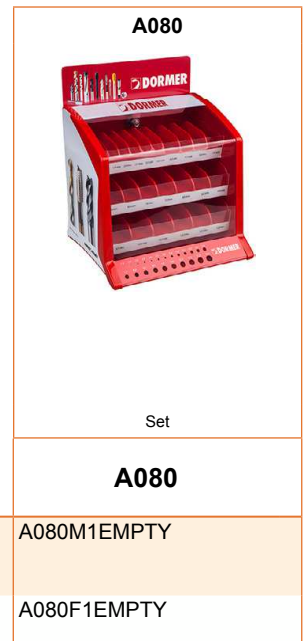


Set	A	B	C	A199
F1	A100	380	5 x (13/32, 7/16, 15/32, 1/2) inch; 10 x (5/64, 7/64, 9/64, 11/64, 13/64, 15/64, 17/64, 9/32, 19/64, 5/16, 21/64, 11/32, 23/64, 3/8) inch; 20 x (1/16, 7/32, 1/4) inch; 30 x 3/32 inch; 40 x (5/32, 3/16) inch; 50 x 1/8 inch	A199F1
M1	A100	340	5 x (10.50, 11.00, 11.50, 12.00, 12.50, 13.00) mm; 10 x (1.50, 2.50, 3.50, 4.50, 5.50, 6.50, 7.00, 7.50, 8.00, 8.50, 9.00, 9.50, 10.00) mm; 20 x (1.00, 5.00, 6.00) mm; 30 x 2.00 mm; 40 x 4.00 mm; 50 x 3.00 mm	A199M1

A080

- Counter Dispenser
- Expositor de Brocas
- Jogo de Brocas Curtas
- Présentoir

- Empty Dispenser
- Dispensador vacío
- Expositor vazio
- Présentoir vide



Nr.	d Ø mm	
M1EMPTY	(1.00, 1.50, 2.00, 2.50, 3.00, 3.50, 4.00, 4.50, 5.00, 5.50, 6.00, 6.50, 7.00, 7.50, 8.00, 8.50, 9.00, 9.50, 10.00, 10.50, 11.00, 11.50, 12.00) mm	A080M1EMPTY
F1EMPTY	(1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 11/64, 3/16, 13/64, 7/32, 15/64, 1/4, 17/64, 9/32, 19/64, 5/16, 21/64, 11/32, 3/8, 13/32, 7/16, 1/2) inch	A080F1EMPTY

A190

- Jobber Drill Set
- Juego de Brocas, serie corta
- Jogo de Brocas Curtas
- Coffret de forets courts

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



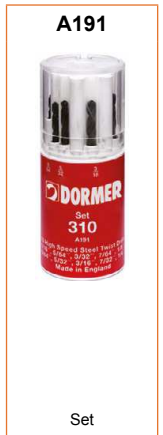
Set	A	B	C	A190
3	A100	21	1/16 inch - 3/8 inch x 1/64 inch	A1903
12	A100	60	No.1 - No.60	A19012
18	A100	29	1/16 inch - 1/2 inch x 1/64 inch	A19018
20	A100	15	1/16 inch - 1/2 inch x 1/32 inch	A19020
201	A100	19	1.0 mm - 10.0 mm x 0.5 mm	A190201
202	A100	51	1.0 mm - 6.0 mm x 0.1 mm	A190202
203	A100	41	6.0 mm - 10.0 mm x 0.1 mm	A190203
204	A100	25	1.0 mm - 13.0 mm x 0.5 mm	A190204
206	A100	29	1.0 mm - 13.0 mm x 0.5 mm + 3.3 mm, 4.2 mm, 6.8 mm, 10.2 mm	A190206
209	A100	91	1.0 mm - 10.0 mm x 0.1 mm	A190209 ⁸⁾

⁸⁾ Sold in 2 boxes: box 1 contains sizes (1.0-5.9 x 0.1mm); box 2 contains sizes (6.0-10.0 x 0.1mm) / A190209 se vende en 2 cajas: caja 1 (1,0-5,9 x 0,1 mm) + caja 2 (6,0-10,0 x 0,1 mm) / O A190209 é vendido em 2 caixas: caixa 1 (1,0-5,9 x 0,1 mm) + caixa 2 (6,0-10,0 x 0,1 mm) / La réf. A190209 est vendue en 2 boîtes : boîte 1 (1,0-5,9 x 0,1 mm) + boîte 2 (6,0-10,0 x 0,1 mm)

A191

- Jobber Drill Set
- Juego de Brocas, serie corta
- Jogo de Brocas Curtas
- Coffret de forets courts

Bright below 1.0mm, 3/64", N60. A=Styles in Set, B=No. in Set, C=Diameters in Set
 Brillante por debajo de 1,0mm, 3/64", N60. A=Tipos en el juego, B=No. Brocas en el Juego, C=Diámetros en el Juego
 Brilhante Abaixo de 1.0mm, 3/64", Nr 60. A=Tipos no Jogo, B=Qtd. de brocas por Jogo, C=Diâmetros por Jogo
 Brillant au dessous de 1,0 mm, 6/64, N60. A=Types de coffrets, B=Nombre de forets dans le coffret, C=Diamètres dans le coffret



Set	A	B	C	A191
31M	A100	20	0.3 mm - 1.0 mm x 0.05 mm + 0.38 mm, 0.52 mm, 0.58 mm, 0.78 mm, 0.82 mm	A19131M
61-80	A100	20	No.61 - No. 80	A19161-80
413	A100	13	1.5 mm - 6.5 mm x 0.5 mm + 3.3 mm, 4.2 mm	A191413
419	A100	19	1.0 mm - 10.0 mm x 0.5 mm	A191419

A188

- Jobber Drill Set
- Juego de Brocas, serie corta
- Jogo de Brocas Curtas
- Coffret de forets courts

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



Nr.	A	B	C	A188
201	A108	19	1.0 mm - 10.0 mm x 0.5 mm	A188201
204	A108	25	1.0 mm - 13.0 mm x 0.5 mm	A188204

A295

- Jobber Drill Set
- Juego de Brocas, serie corta
- Jogo de Brocas Curtas
- Coffret de forets courts

4 Facet Point up to 1.4mm. A=Styles in Set, B=No. in Set, C=Diameters in Set
 Punta de 4 caras hasta 1.4 mm. A=Tipos en el juego, B=No. en el Juego, C=Diámetros en el Juego
 Ponta 4 Faces até 1.4mm. A=Tipos no Jogo, B=Quant. de brocas/Jogo, C=Diâmetros/Jogo
 Pointe à 4 facettes jusqu'au Ø 1,4 mm. A=Types de coffrets, B=Nombre de forets dans le coffret, C=Diâmetros dans le coffret



Set	A	B	C	A295
219	A777	19	1.0 mm - 10.0 mm x 0.5 mm	A295219
225	A777	25	1.0 mm - 13.0 mm x 0.5 mm	A295225