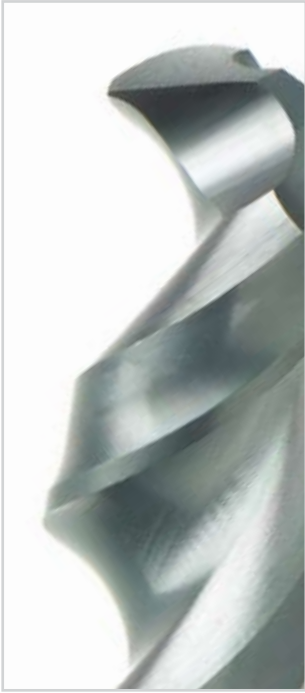


The Right Tool at the Right Time



High Performance HSCo Deep Hole Drills

High Performance HSCo Deep Hole Drills

Features & Benefits

Material

HSCo cobalt alloyed high-speed steel substrate, chosen for its properties of increased hot hardness and toughness to give good machinability.

Surface Treatment

Available in bright finish on all lengths and with Smooth-Flow coating on lengths to DIN 1897, DIN 338 and DIN 340. Smooth-Flow reduces the coefficient of friction, resulting in efficient chip evacuation and as a consequence, extended tool life.

Flute Geometry

The parabolic flute design with quick helix increases chip space and assists in breaking the swarf and facilitating its transportation along the flutes and away from the cutting area, allowing greater hole depths to be achieved without the need for pecking up to 10 x D.

Web Design

The thicker design of the web increases the structural strength of the drill, which results in higher rigidity and therefore minimises the risk of drill breakage.

Shank

Parallel shank on all ranges.

Length

Available in metric sizes in a choice of stub (DIN 1897), jobber (DIN 338), long series (DIN 340) lengths and extra length (DIN 1869/1, 1869/2 and 1869/3), and in fractional sizes to ANSI standard.

Point Geometry

The 130° special point geometry enables good centering capabilities and reduces the thrust force required. It ensures that drilling accuracy is maintained throughout the depth of the hole.

Hole Depth

For drilling up to depths of 3 x D (A920, A921), 6 x D (A900, A901), 10 x D (A940, A941) and 15 x D (A976, A977, A978).

Tool Holding

It is recommended that ER collets are used for each of these ranges.

Range

A920	1.0 - 20.0mm, 1/16" - 1/2"
A921	2.5 - 16.0mm
A900	1.0 - 20.0mm, 1/16" - 1/2"
A901	1.5 - 16.0mm
A940	1.0 - 20.0mm, 1/16" - 3/4"
A941	1.0 - 16.0mm
A976	1.5 - 14.0mm, 1/8" - 1/2"
A977	1.5 - 14.0mm, 1/16" - 11/32"
A978	3.0 - 10.0mm, 1/4"

A921



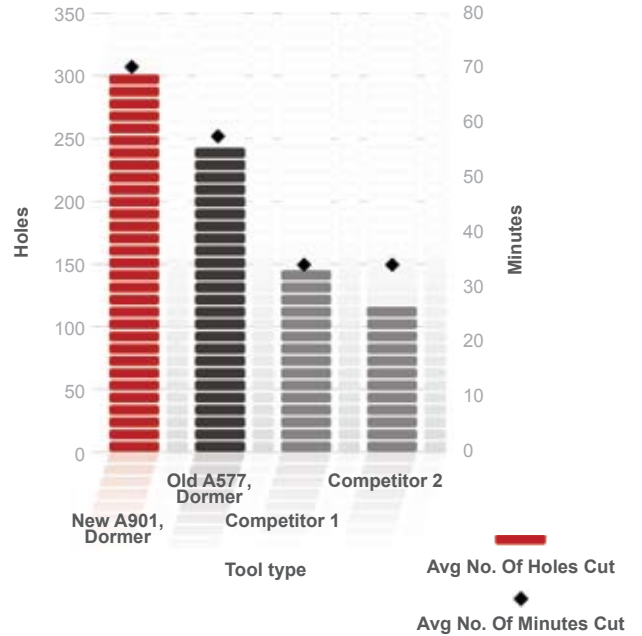
A941



Customer *Benefits*

- Deep hole drilling without the need for pecking up to 10 x D - reduced cycle time.
- High levels of productivity across a wide range of materials.
- Efficient chip evacuation, assisted by parabolic flute geometry and Smooth-Flow coating, results in continuous production process.
- Exceptional tool life, in particular on the Smooth-Flow coated ranges.
- Consistent hole size and hole quality.
- Low thrust force means reduced power requirements.

Test *Results*



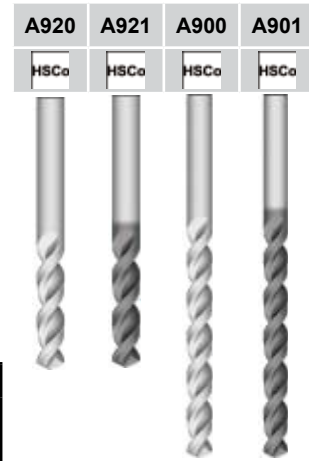
The graph compares the wear on the new Dormer A901 Smooth-Flow coated drill, the old Dormer A577 TiAlN coated drill and 2 competitors' coated drills.

The test was carried out in AMG 1.5 (W.nr. 1.2312). All drills tested are 8mm drills to DIN 338 and with PVD coatings. Drilling depth, 45mm.

It shows the average number of holes cut and minutes cut up to the tool failure criteria. The new Dormer A901 is capable of cutting twice as many holes as the nearest competitor in this material using these pre-determined tool failure criteria.



Application *Material* Groups



■ Excellent for Application

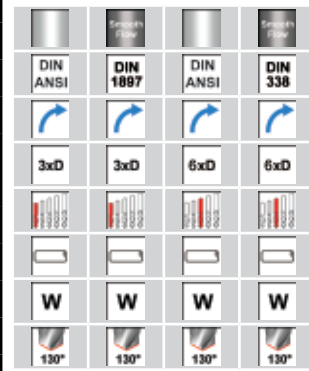
● Good for Application

Example

40 = Peripheral speed in metres/minute +/- 10%

J = Feed range

Fn	Ø mm											
	1	2	3	4	5	6	8	10	12	15	16	20
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
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
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
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
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
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
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
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
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
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
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
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
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
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
	mm/rev +/- 25%											



NEW	NEW	NEW	NEW
2009.09	2009.09	2009.09	2009.09
6	8	10	12
■40J	■60M	■38H	■60J
■34J	■52M	■33H	■50J
■32I	■53J	■26H	■44I
■32I	■53J	■26H	■44I
■23E	■38G	■21E	■33G
■19E	■30G	■16E	■26G
■15F	■17F	■15E	■17E
■7F	■9F	■7E	■9E
■9D	■11D	■9C	■11C
●34L	■53L	●24J	■58I
●26L	■42L	●19J	■47I
●26L	■42L	●19J	■34J
●19J	■36J	●14I	■28I
■30G	●48I	■22E	●35G
■18G	●29I	■15E	●24G
■10C	●16E	■6C	●10E
■15I	●24L	■14G	●22I
■9G	●14I	■7G	●11I
■6E	●10G	■6C	●10E
●65H		●65G	
●66J		●53I	
●40J	●71J	●34H	●56I
●31G	●50I	●30G	●48I
●75L		●60J	
■45N		■45N	
●40N		●40N	
●36J	■48J	●28I	■48I
●55J		●55I	
●40H		●40G	

Application Material Groups (AMG)		Hardness HB	Tensile Strength N/mm ²
1. Steel	1.1 Magnetic soft steel	<120	<400
	1.2 Structural Steel / case carburising steel	<200	<700
	1.3 Plain Carbon steel	<250	<850
	1.4 Alloy steel	<250	<850
	1.5 Alloy steel/ Hardened and tempered steel	>250 <350	>850 <1200
	1.6 Alloy steel/ Hardened and tempered steel	>350	>1200 <1620
	1.7 Alloy steel Hardened	49-55HRC	>1620
	1.8 Alloy steel Hardened	55-63HRC	<1960
2. Stainless Steel	2.1 Free machining Stainless Steel	<250	<850
	2.2 Austenitic	<320	<1100
	2.3 Ferritic + Austenitic, Martensitic	<300	<1000
	2.4 Precipitation Hardened	>320 <410	>1100 <1400
3. Cast Iron	3.1 Lamellar graphite	<150	<500
	3.2 Lamellar graphite	>150 <300	>500 <1000
	3.3 Nodular graphite/ Malleable Cast Iron	<200	<700
	3.4 Nodular graphite/ Malleable Cast Iron	>200 <300	>700 <1000
4. Titanium	4.1 Titanium, unalloyed	<200	<700
	4.2 Titanium, alloyed	<270	<900
	4.3 Titanium, alloyed	>270 <350	>900 <1250
5. Nickel	5.1 Nickel, unalloyed	<150	<500
	5.2 Nickel, alloyed	<270	<900
	5.3 Nickel, alloyed	>270 <350	>900 <1200
6. Copper	6.1 Copper	<100	<350
	6.2 β-Brass, Bronze	<200	<700
	6.3 α-Brass	<200	<700
	6.4 High Strength Bronze	<470	<1500
7. Aluminium Magnesium	7.1 Al, Mg, unalloyed	<100	<350
	7.2 Al alloyed, Si<0.5%	<150	<500
	7.3 Al alloyed, Si>0.5%<10%	<120	<400
	7.4 Al alloyed, Si>10% Whisker reinforced Al-alloys, Mg alloys	<120	<400
8. Synthetic Materials	8.1 Thermoplastics	---	---
	8.2 Thermosetting plastics	---	---
	8.3 Reinforced plastic materials	---	---
9. Hard Materials	9.1 Cermets (Metal-ceramics)	<550	<1700
10. Graphite	10.1 Standard graphite	---	<100

	A940	A941	A976	A977	A978
	HSCo	HSCo	HSCo	HSCo	HSCo
	10XD	10XD	15XD	15XD	15XD
	W	W	W	W	W
	1.0 - 20.0	1.0 - 16.0	1.5 - 14.0	1.5 - 14.0	3.0 - 10.0
	14	16	18	19	19
1.1	■38F	■53G	●31C	●31B	●31A
1.2	■33F	■46G	●26C	●26B	●26A
1.3	■22G	■36G	■22C	■22B	■22A
1.4	■22G	■36G	■22C	■22B	■22A
1.5	■17C	■23D	■12A	■12A	■12A
1.6	■12C	■17D	■10A	■10A	■10A
1.7					
1.8					
2.1	■15C	■17C	●12B	●12B	●12A
2.2	■7E	■9E	●7C	●7B	●7A
2.3	■9B	■11B	●8A	●8A	●8A
2.4					
3.1		■36I			
3.2	●16I	■30I	●23C	●23B	●23A
3.3	●16I	■30I	●16C	●16B	●16A
3.4	●12H	■24H	●11A	●11A	●11A
4.1	■18E	●25F	●15C	●15B	●15A
4.2	■13C	●18D	●11A	●11A	●11A
4.3	■6C	●8D	●5A	●5A	●5A
5.1					
5.2					
5.3					
6.1	●65F				
6.2	●70F				
6.3	●34G	●48H	●30D	●30C	●30B
6.4	●30G	●42H	●27D	●27C	●27B
7.1	●53H				
7.2	■45N				
7.3	●40N				
7.4	●30G	■42H	●27D	●27C	●27B
8.1	●55H				
8.2	●40F				
8.3					
9.1					
10.1					

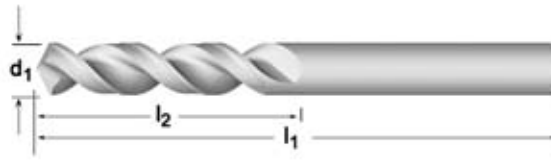
A920 replaces A927
 A921 replaces A597
 A900 replaces A907
 A901 replaces A577
 A940 replaces A916
 A941 replaces A578

A920

- Stub Drill
- Foret extra-court
- Spiralbohrer, kurz
- Broca Extra Corta
- Extra korte boren
- Broca Extra Curta

NEW

2009.09



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

d_1 Ø _{h8} Inch	d_1 Ø _{h8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code	d_1 Ø _{h8} Inch	d_1 Ø _{h8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	1.00	0.0393	6	26	A9201.0		4.30	0.1692	24	58	A9204.3
	1.10	0.0433	7	28	A9201.1	11/64	4.37	0.1720	27	54	A92011/64
	1.20	0.0472	8	30	A9201.2		4.40	0.1732	24	58	A9204.4
	1.30	0.0511	8	30	A9201.3		4.50	0.1771	24	58	A9204.5
	1.40	0.0551	9	32	A9201.4		4.60	0.1811	24	58	A9204.6
	1.50	0.0590	9	32	A9201.5		4.70	0.1850	24	58	A9204.7
1/16	1.59	0.0625	16	41	A9201/16	3/16	4.76	0.1874	29	56	A9203/16
	1.60	0.0629	10	34	A9201.6		4.80	0.1889	26	62	A9204.8
	1.70	0.0669	10	34	A9201.7		4.90	0.1929	26	62	A9204.9
	1.80	0.0708	11	36	A9201.8		5.00	0.1968	26	62	A9205.0
	1.90	0.0748	11	36	A9201.9		5.10	0.2007	26	62	A9205.1
5/64	1.98	0.0779	17	43	A9205/64	13/64	5.16	0.2031	30	57	A92013/64
	2.00	0.0787	12	38	A9202.0		5.20	0.2047	26	62	A9205.2
	2.10	0.0826	12	38	A9202.1		5.30	0.2086	26	62	A9205.3
	2.20	0.0866	13	40	A9202.2		5.40	0.2125	28	66	A9205.4
	2.30	0.0905	13	40	A9202.3		5.50	0.2165	28	66	A9205.5
3/32	2.38	0.0937	19	41	A9203/32	7/32	5.56	0.2188	32	60	A9207/32
	2.40	0.0944	14	43	A9202.4		5.60	0.2204	28	66	A9205.6
	2.50	0.0984	14	43	A9202.5		5.70	0.2244	28	66	A9205.7
	2.60	0.1023	14	43	A9202.6		5.80	0.2283	28	66	A9205.8
	2.70	0.1062	16	46	A9202.7		5.90	0.2322	28	66	A9205.9
7/64	2.78	0.1094	21	46	A9207/64	15/64	5.95	0.2342	33	62	A92015/64
	2.80	0.1102	16	46	A9202.8		6.00	0.2362	28	66	A9206.0
	2.90	0.1141	16	46	A9202.9		6.10	0.2401	31	70	A9206.1
	3.00	0.1181	16	46	A9203.0		6.20	0.2440	31	70	A9206.2
	3.10	0.1220	18	49	A9203.1		6.30	0.2480	31	70	A9206.3
1/8	3.18	0.1251	22	48	A9201/8	1/4	6.35	0.2500	35	64	A9201/4
	3.20	0.1259	18	49	A9203.2		6.40	0.2519	31	70	A9206.4
	3.30	0.1299	18	49	A9203.3		6.50	0.2559	31	70	A9206.5
	3.40	0.1338	20	52	A9203.4		6.60	0.2598	31	70	A9206.6
	3.50	0.1377	20	52	A9203.5		6.70	0.2637	31	70	A9206.7
9/64	3.57	0.1405	24	49	A9209/64	17/64	6.75	0.2657	37	67	A92017/64
	3.60	0.1417	20	52	A9203.6		6.80	0.2677	34	74	A9206.8
	3.70	0.1456	20	52	A9203.7		6.90	0.2716	34	74	A9206.9
	3.80	0.1496	22	55	A9203.8		7.00	0.2755	34	74	A9207.0
	3.90	0.1535	22	55	A9203.9		7.10	0.2795	34	74	A9207.1
5/32	3.97	0.1562	25	52	A9205/32	9/32	7.14	0.2811	38	68	A9209/32
	4.00	0.1574	22	55	A9204.0		7.20	0.2834	34	74	A9207.2
	4.10	0.1614	22	55	A9204.1		7.30	0.2874	34	74	A9207.3
	4.20	0.1653	22	55	A9204.2		7.40	0.2913	34	74	A9207.4

A920

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	7.50	0.2952	34	74	A9207.5
19/64	7.54	0.2968	40	70	A92019/64
	7.60	0.2992	37	79	A9207.6
	7.70	0.3031	37	79	A9207.7
	7.80	0.3070	37	79	A9207.8
	7.90	0.3110	37	79	A9207.9
5/16	7.94	0.3125	41	71	A9205/16
	8.00	0.3149	37	79	A9208.0
	8.10	0.3188	37	79	A9208.1
	8.20	0.3228	37	79	A9208.2
	8.30	0.3267	37	79	A9208.3
21/64	8.33	0.3279	43	75	A92021/64
	8.40	0.3307	37	79	A9208.4
	8.50	0.3346	37	79	A9208.5
	8.60	0.3385	40	84	A9208.6
	8.70	0.3425	40	84	A9208.7
11/32	8.73	0.3437	43	76	A92011/32
	8.80	0.3464	40	84	A9208.8
	8.90	0.3503	40	84	A9208.9
	9.00	0.3543	40	84	A9209.0
	9.10	0.3582	40	84	A9209.1
23/64	9.13	0.3594	44	78	A92023/64
	9.20	0.3622	40	84	A9209.2
	9.30	0.3661	40	84	A9209.3
	9.40	0.3700	40	84	A9209.4
	9.50	0.3740	40	84	A9209.5
3/8	9.53	0.3751	46	79	A9203/8
	9.60	0.3779	43	89	A9209.6
	9.70	0.3818	43	89	A9209.7
	9.80	0.3858	43	89	A9209.8
	9.90	0.3897	43	89	A9209.9
25/64	9.92	0.3905	48	83	A92025/64
	10.00	0.3937	43	89	A92010.0
	10.20	0.4015	43	89	A92010.2

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	10.30	0.4055	43	89	A92010.3
13/32	10.32	0.4062	49	84	A92013/32
	10.40	0.4094	43	89	A92010.4
	10.50	0.4133	43	89	A92010.5
27/64	10.72	0.4220	51	86	A92027/64
	10.80	0.4251	47	95	A92010.8
	11.00	0.4330	47	95	A92011.0
7/16	11.11	0.4374	52	87	A9207/16
	11.20	0.4409	47	95	A92011.2
	11.50	0.4527	47	95	A92011.5
29/64	11.51	0.4531	54	90	A92029/64
	11.80	0.4645	47	95	A92011.8
15/32	11.91	0.4688	54	92	A92015/32
	12.00	0.4724	51	102	A92012.0
	12.20	0.4803	51	102	A92012.2
31/64	12.30	0.4842	56	94	A92031/64
	12.50	0.4921	51	102	A92012.5
1/2	12.70	0.5000	57	95	A9201/2
	12.80	0.5039	51	102	A92012.8
	13.00	0.5118	51	102	A92013.0
	13.50	0.5314	54	107	A92013.5
	14.00	0.5511	54	107	A92014.0
	14.50	0.5708	56	111	A92014.5
	15.00	0.5905	56	111	A92015.0
	15.50	0.6102	58	115	A92015.5
	16.00	0.6299	58	115	A92016.0
	17.00	0.6692	60	119	A92017.0
	17.50	0.6889	62	123	A92017.5
	18.00	0.7086	62	123	A92018.0
	19.00	0.7480	64	127	A92019.0
	20.00	0.7874	66	131	A92020.0

A921

- Stub Drill
- Foret extra-court
- Spiralbohrer, kurz
- Broca Extra Corta
- Extra korte boren
- Broca Extra Curta

NEW

2009.09



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 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
2.50	0.0984	14	43	A9212.5
2.60	0.1023	14	43	A9212.6
3.00	0.1181	16	46	A9213.0
3.10	0.1220	18	49	A9213.1
3.20	0.1259	18	49	A9213.2
3.30	0.1299	18	49	A9213.3
3.40	0.1338	20	52	A9213.4
3.50	0.1377	20	52	A9213.5
3.60	0.1417	20	52	A9213.6
3.70	0.1456	20	52	A9213.7
3.80	0.1496	22	55	A9213.8
3.90	0.1535	22	55	A9213.9
4.00	0.1574	22	55	A9214.0
4.10	0.1614	22	55	A9214.1
4.20	0.1653	22	55	A9214.2
4.30	0.1692	24	58	A9214.3
4.40	0.1732	24	58	A9214.4
4.50	0.1771	24	58	A9214.5
4.60	0.1811	24	58	A9214.6
4.70	0.1850	24	58	A9214.7
4.80	0.1889	26	62	A9214.8
4.90	0.1929	26	62	A9214.9
5.00	0.1968	26	62	A9215.0
5.10	0.2007	26	62	A9215.1
5.20	0.2047	26	62	A9215.2
5.30	0.2086	26	62	A9215.3
5.40	0.2125	28	66	A9215.4
5.50	0.2165	28	66	A9215.5
5.60	0.2204	28	66	A9215.6
5.70	0.2244	28	66	A9215.7
5.80	0.2283	28	66	A9215.8
5.90	0.2322	28	66	A9215.9
6.00	0.2362	28	66	A9216.0
6.10	0.2401	31	70	A9216.1
6.20	0.2440	31	70	A9216.2
6.30	0.2480	31	70	A9216.3
6.40	0.2519	31	70	A9216.4
6.50	0.2559	31	70	A9216.5
6.60	0.2598	31	70	A9216.6
6.70	0.2637	31	70	A9216.7

d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
6.80	0.2677	34	74	A9216.8
6.90	0.2716	34	74	A9216.9
7.00	0.2755	34	74	A9217.0
7.10	0.2795	34	74	A9217.1
7.20	0.2834	34	74	A9217.2
7.30	0.2874	34	74	A9217.3
7.40	0.2913	34	74	A9217.4
7.50	0.2952	34	74	A9217.5
7.60	0.2992	37	79	A9217.6
7.70	0.3031	37	79	A9217.7
7.80	0.3070	37	79	A9217.8
7.90	0.3110	37	79	A9217.9
8.00	0.3149	37	79	A9218.0
8.10	0.3188	37	79	A9218.1
8.20	0.3228	37	79	A9218.2
8.30	0.3267	37	79	A9218.3
8.40	0.3307	37	79	A9218.4
8.50	0.3346	37	79	A9218.5
8.60	0.3385	40	84	A9218.6
8.70	0.3425	40	84	A9218.7
8.80	0.3464	40	84	A9218.8
8.90	0.3503	40	84	A9218.9
9.00	0.3543	40	84	A9219.0
9.10	0.3582	40	84	A9219.1
9.20	0.3622	40	84	A9219.2
9.30	0.3661	40	84	A9219.3
9.40	0.3700	40	84	A9219.4
9.50	0.3740	40	84	A9219.5
9.60	0.3779	43	89	A9219.6
9.70	0.3818	43	89	A9219.7
9.80	0.3858	43	89	A9219.8
9.90	0.3897	43	89	A9219.9
10.00	0.3937	43	89	A92110.0
10.20	0.4015	43	89	A92110.2
10.30	0.4055	43	89	A92110.3
10.40	0.4094	43	89	A92110.4
10.50	0.4133	43	89	A92110.5
10.80	0.4251	47	95	A92110.8
11.00	0.4330	47	95	A92111.0
11.20	0.4409	47	95	A92111.2

A921

d_1 $\varnothing h_3$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
11.50	0.4527	47	95	A92111.5
11.80	0.4645	47	95	A92111.8
12.00	0.4724	51	102	A92112.0
12.20	0.4803	51	102	A92112.2
12.50	0.4921	51	102	A92112.5
12.80	0.5039	51	102	A92112.8
13.00	0.5118	51	102	A92113.0
13.50	0.5314	54	107	A92113.5

d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
14.00	0.5511	54	107	A92114.0
14.50	0.5708	56	111	A92114.5
15.00	0.5905	56	111	A92115.0
15.50	0.6102	58	115	A92115.5
16.00	0.6299	58	115	A92116.0

A900

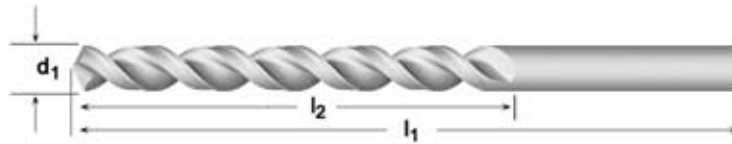
- Jobber Drill
- Foret court

- Spiralbohrer
- Broca Serie Corta

- Boor
- Broca Curta

NEW

2009.09



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

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	1.00	0.0393	12	34	A9001.0
	1.10	0.0433	14	36	A9001.1
	1.20	0.0472	16	38	A9001.2
	1.30	0.0511	16	38	A9001.3
	1.40	0.0551	18	40	A9001.4
	1.50	0.0590	18	40	A9001.5
1/16	1.59	0.0625	22	48	A9001/16
	1.60	0.0629	20	43	A9001.6
	1.70	0.0669	20	43	A9001.7
	1.80	0.0708	22	46	A9001.8
	1.90	0.0748	22	46	A9001.9
5/64	1.98	0.0779	25	51	A9005/64
	2.00	0.0787	24	49	A9002.0
	2.10	0.0826	24	49	A9002.1
	2.20	0.0866	27	53	A9002.2
	2.30	0.0905	27	53	A9002.3
3/32	2.38	0.0937	32	57	A9003/32
	2.40	0.0944	30	57	A9002.4
	2.50	0.0984	30	57	A9002.5
	2.60	0.1023	30	57	A9002.6
	2.70	0.1062	33	61	A9002.7
7/64	2.78	0.1094	38	67	A9007/64
	2.80	0.1102	33	61	A9002.8
	2.90	0.1141	33	61	A9002.9
	3.00	0.1181	33	61	A9003.0
	3.10	0.1220	36	65	A9003.1
1/8	3.18	0.1251	41	70	A9001/8
	3.20	0.1259	36	65	A9003.2
	3.30	0.1299	36	65	A9003.3
	3.40	0.1338	39	70	A9003.4
	3.50	0.1377	39	70	A9003.5
9/64	3.57	0.1405	44	73	A9009/64
	3.60	0.1417	39	70	A9003.6
	3.70	0.1456	39	70	A9003.7
	3.80	0.1496	43	75	A9003.8
	3.90	0.1535	43	75	A9003.9
5/32	3.97	0.1562	51	79	A9005/32
	4.00	0.1574	43	75	A9004.0
	4.10	0.1614	43	75	A9004.1
	4.20	0.1653	43	75	A9004.2

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	4.30	0.1692	47	80	A9004.3
11/64	4.37	0.1720	54	83	A90011/64
	4.40	0.1732	47	80	A9004.4
	4.50	0.1771	47	80	A9004.5
	4.60	0.1811	47	80	A9004.6
	4.70	0.1850	47	80	A9004.7
3/16	4.76	0.1874	59	89	A9003/16
	4.80	0.1889	52	86	A9004.8
	4.90	0.1929	52	86	A9004.9
	5.00	0.1968	52	86	A9005.0
	5.10	0.2007	52	86	A9005.1
N7	5.11	0.2010	62	92	A900N7
13/64	5.16	0.2031	62	92	A90013/64
	5.20	0.2047	52	86	A9005.2
	5.30	0.2086	52	86	A9005.3
	5.40	0.2125	57	93	A9005.4
	5.50	0.2165	57	93	A9005.5
7/32	5.56	0.2188	64	95	A9007/32
	5.60	0.2204	57	93	A9005.6
	5.70	0.2244	57	93	A9005.7
	5.80	0.2283	57	93	A9005.8
	5.90	0.2322	57	93	A9005.9
15/64	5.95	0.2342	67	98	A90015/64
	6.00	0.2362	57	93	A9006.0
	6.10	0.2401	63	101	A9006.1
	6.20	0.2440	63	101	A9006.2
	6.30	0.2480	63	101	A9006.3
1/4	6.35	0.2500	70	102	A9001/4
	6.40	0.2519	63	101	A9006.4
	6.50	0.2559	63	101	A9006.5
F	6.53	0.2570	73	105	A900F
	6.60	0.2598	63	101	A9006.6
	6.70	0.2637	63	101	A9006.7
17/64	6.75	0.2657	73	105	A90017/64
	6.80	0.2677	69	109	A9006.8
	6.90	0.2716	69	109	A9006.9
I	6.91	0.2720	73	105	A900I
	7.00	0.2755	69	109	A9007.0
	7.10	0.2795	69	109	A9007.1
9/32	7.14	0.2811	75	108	A9009/32

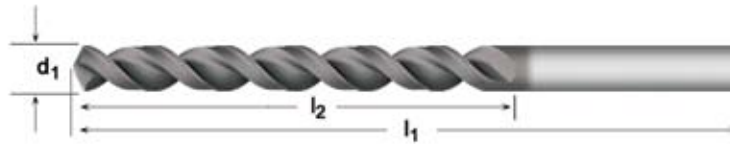
A900

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	7.20	0.2834	69	109	A9007.2
	7.30	0.2874	69	109	A9007.3
	7.40	0.2913	69	109	A9007.4
	7.50	0.2952	69	109	A9007.5
19/64	7.54	0.2968	78	111	A90019/64
	7.60	0.2992	75	117	A9007.6
	7.70	0.3031	75	117	A9007.7
	7.80	0.3070	75	117	A9007.8
	7.90	0.3110	75	117	A9007.9
5/16	7.94	0.3125	81	114	A9005/16
	8.00	0.3149	75	117	A9008.0
	8.10	0.3188	75	117	A9008.1
	8.20	0.3228	75	117	A9008.2
	8.30	0.3267	75	117	A9008.3
21/64	8.33	0.3279	84	117	A90021/64
	8.40	0.3307	75	117	A9008.4
Q	8.43	0.3320	87	121	A9008.Q
	8.50	0.3346	75	117	A9008.5
	8.60	0.3385	81	125	A9008.6
R	8.61	0.3390	87	121	A9008.R
	8.70	0.3425	81	125	A9008.7
11/32	8.73	0.3437	87	121	A90011/32
	8.80	0.3464	81	125	A9008.8
	8.90	0.3503	81	125	A9008.9
	9.00	0.3543	81	125	A9009.0
	9.10	0.3582	81	125	A9009.1
23/64	9.13	0.3594	89	124	A90023/64
	9.20	0.3622	81	125	A9009.2
	9.30	0.3661	81	125	A9009.3
	9.40	0.3700	81	125	A9009.4
	9.50	0.3740	81	125	A9009.5
3/8	9.53	0.3751	92	127	A9003/8
	9.60	0.3779	87	133	A9009.6
	9.70	0.3818	87	133	A9009.7
	9.80	0.3858	87	133	A9009.8
	9.90	0.3897	87	133	A9009.9

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
25/64	9.92	0.3905	95	130	A90025/64
	10.00	0.3937	87	133	A90010.0
	10.20	0.4015	87	133	A90010.2
	10.30	0.4055	87	133	A90010.3
13/32	10.32	0.4062	98	133	A90013/32
	10.40	0.4094	87	133	A90010.4
	10.50	0.4133	87	133	A90010.5
27/64	10.72	0.4220	100	137	A90027/64
	10.80	0.4251	94	142	A90010.8
	11.00	0.4330	94	142	A90011.0
7/16	11.11	0.4374	103	140	A9007/16
	11.20	0.4409	94	142	A90011.2
	11.50	0.4527	94	142	A90011.5
29/64	11.51	0.4531	106	143	A90029/64
	11.80	0.4645	94	142	A90011.8
15/32	11.91	0.4688	110	146	A90015/32
	12.00	0.4724	101	151	A90012.0
	12.20	0.4803	101	151	A90012.2
31/64	12.30	0.4842	111	149	A90031/64
	12.50	0.4921	101	151	A90012.5
1/2	12.70	0.5000	114	152	A9001/2
	12.80	0.5039	101	151	A90012.8
	13.00	0.5118	101	151	A90013.0
	13.50	0.5314	108	160	A90013.5
	14.00	0.5511	108	160	A90014.0
	14.50	0.5708	114	169	A90014.5
	15.00	0.5905	114	169	A90015.0
	15.50	0.6102	120	178	A90015.5
	16.00	0.6299	120	178	A90016.0
	17.00	0.6693	125	184	A90017.0
	17.50	0.6890	130	191	A90017.5
	18.00	0.7087	130	191	A90018.0
	19.00	0.7480	135	198	A90019.0
	20.00	0.7874	140	205	A90020.0

A901

- Jobber Drill
- Foret court
- Spiralbohrer
- Broca Serie Corta
- Boor
- Broca Curta



NEW
2009.09

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

d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	e-Code	d ₁ Øh ₈ mm	d ₁ decimal Inch	l ₂ mm	l ₁ mm	e-Code
1.50	0.0590	18	40	A9011.5	6.60	0.2598	63	101	A9016.6
2.00	0.0787	24	49	A9012.0	6.70	0.2637	63	101	A9016.7
2.50	0.0984	30	57	A9012.5	6.80	0.2677	69	109	A9016.8
2.60	0.1023	30	57	A9012.6	6.90	0.2716	69	109	A9016.9
3.00	0.1181	33	61	A9013.0	7.00	0.2755	69	109	A9017.0
3.10	0.1220	36	65	A9013.1	7.10	0.2795	69	109	A9017.1
3.20	0.1259	36	65	A9013.2	7.20	0.2834	69	109	A9017.2
3.30	0.1299	36	65	A9013.3	7.30	0.2874	69	109	A9017.3
3.40	0.1338	39	70	A9013.4	7.40	0.2913	69	109	A9017.4
3.50	0.1377	39	70	A9013.5	7.50	0.2952	69	109	A9017.5
3.60	0.1417	39	70	A9013.6	7.60	0.2992	75	117	A9017.6
3.70	0.1456	39	70	A9013.7	7.70	0.3031	75	117	A9017.7
3.80	0.1496	43	75	A9013.8	7.80	0.3070	75	117	A9017.8
3.90	0.1535	43	75	A9013.9	7.90	0.3110	75	117	A9017.9
4.00	0.1574	43	75	A9014.0	8.00	0.3149	75	117	A9018.0
4.10	0.1614	43	75	A9014.1	8.10	0.3188	75	117	A9018.1
4.20	0.1653	43	75	A9014.2	8.20	0.3228	75	117	A9018.2
4.30	0.1692	47	80	A9014.3	8.30	0.3267	75	117	A9018.3
4.40	0.1732	47	80	A9014.4	8.40	0.3307	75	117	A9018.4
4.50	0.1771	47	80	A9014.5	8.50	0.3346	75	117	A9018.5
4.60	0.1811	47	80	A9014.6	8.60	0.3385	81	125	A9018.6
4.70	0.1850	47	80	A9014.7	8.70	0.3425	81	125	A9018.7
4.80	0.1889	52	86	A9014.8	8.80	0.3464	81	125	A9018.8
4.90	0.1929	52	86	A9014.9	8.90	0.3503	81	125	A9018.9
5.00	0.1968	52	86	A9015.0	9.00	0.3543	81	125	A9019.0
5.10	0.2007	52	86	A9015.1	9.10	0.3582	81	125	A9019.1
5.20	0.2047	52	86	A9015.2	9.20	0.3622	81	125	A9019.2
5.30	0.2086	52	86	A9015.3	9.30	0.3661	81	125	A9019.3
5.40	0.2125	57	93	A9015.4	9.40	0.3700	81	125	A9019.4
5.50	0.2165	57	93	A9015.5	9.50	0.3740	81	125	A9019.5
5.60	0.2204	57	93	A9015.6	9.60	0.3779	87	133	A9019.6
5.70	0.2244	57	93	A9015.7	9.70	0.3818	87	133	A9019.7
5.80	0.2283	57	93	A9015.8	9.80	0.3858	87	133	A9019.8
5.90	0.2322	57	93	A9015.9	9.90	0.3897	87	133	A9019.9
6.00	0.2362	57	93	A9016.0	10.00	0.3937	87	133	A90110.0
6.10	0.2401	63	101	A9016.1	10.20	0.4015	87	133	A90110.2
6.20	0.2440	63	101	A9016.2	10.30	0.4055	87	133	A90110.3
6.30	0.2480	63	101	A9016.3	10.40	0.4094	87	133	A90110.4
6.40	0.2519	63	101	A9016.4	10.50	0.4133	87	133	A90110.5
6.50	0.2559	63	101	A9016.5	10.80	0.4251	94	142	A90110.8

A901

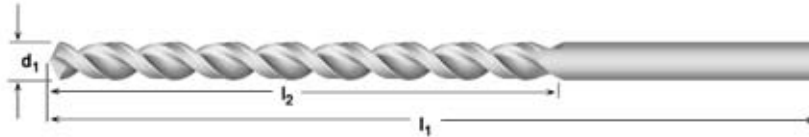
d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
11.00	0.4330	94	142	A90111.0
11.20	0.4409	94	142	A90111.2
11.50	0.4527	94	142	A90111.5
11.80	0.4645	94	142	A90111.8
12.00	0.4724	101	151	A90112.0
12.20	0.4803	101	151	A90112.2
12.50	0.4921	101	151	A90112.5
12.80	0.5039	101	151	A90112.8

d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
13.00	0.5118	101	151	A90113.0
13.50	0.5314	108	160	A90113.5
14.00	0.5511	108	160	A90114.0
14.50	0.5708	114	169	A90114.5
15.00	0.5905	114	169	A90115.0
15.50	0.6102	120	178	A90115.5
16.00	0.6299	120	178	A90116.0

A940

- Long Series Drill
- Spiralbohrer, lang
- Lange boren
- Foret longue
- Broca, serie larga
- Broca Longa

NEW
2009.09



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

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	1.00	0.0393	33	56	A9401.0
	1.10	0.0433	37	60	A9401.1
	1.20	0.0472	41	65	A9401.2
	1.30	0.0511	41	65	A9401.3
	1.40	0.0551	45	70	A9401.4
	1.50	0.0590	45	70	A9401.5
1/16	1.59	0.0625	44	76	A9401/16
	1.60	0.0629	50	76	A9401.6
	1.70	0.0669	50	76	A9401.7
	1.80	0.0708	53	80	A9401.8
	1.90	0.0748	53	80	A9401.9
5/64	1.98	0.0779	51	95	A9405/64
	2.00	0.0787	56	85	A9402.0
	2.10	0.0826	56	85	A9402.1
	2.20	0.0866	59	90	A9402.2
	2.30	0.0905	59	90	A9402.3
3/32	2.38	0.0937	57	108	A9403/32
	2.40	0.0944	62	95	A9402.4
	2.50	0.0984	62	95	A9402.5
	2.60	0.1023	62	95	A9402.6
	2.70	0.1062	66	100	A9402.7
7/64	2.78	0.1094	64	117	A9407/64
	2.80	0.1102	66	100	A9402.8
	2.90	0.1141	66	100	A9402.9
	3.00	0.1181	66	100	A9403.0
	3.10	0.1220	69	106	A9403.1
1/8	3.18	0.1251	70	130	A9401/8
	3.20	0.1259	69	106	A9403.2
	3.30	0.1299	69	106	A9403.3
	3.40	0.1338	73	112	A9403.4
	3.50	0.1377	73	112	A9403.5
9/64	3.57	0.1405	76	137	A9409/64
	3.60	0.1417	73	112	A9403.6
	3.70	0.1456	73	112	A9403.7
	3.80	0.1496	78	119	A9403.8
	3.90	0.1535	78	119	A9403.9
5/32	3.97	0.1562	76	137	A9405/32
	4.00	0.1574	78	119	A9404.0
	4.10	0.1614	78	119	A9404.1
	4.20	0.1653	78	119	A9404.2

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	4.30	0.1692	82	126	A9404.3
11/64	4.37	0.1720	86	146	A94011/64
	4.40	0.1732	82	126	A9404.4
	4.50	0.1771	82	126	A9404.5
	4.60	0.1811	82	126	A9404.6
	4.70	0.1850	82	126	A9404.7
3/16	4.76	0.1874	86	146	A9403/16
	4.80	0.1889	87	132	A9404.8
	4.90	0.1929	87	132	A9404.9
	5.00	0.1968	87	132	A9405.0
	5.10	0.2007	87	132	A9405.1
13/64	5.16	0.2031	92	152	A94013/64
	5.20	0.2047	87	132	A9405.2
	5.30	0.2086	87	132	A9405.3
	5.40	0.2125	91	139	A9405.4
	5.50	0.2165	91	139	A9405.5
7/32	5.56	0.2188	92	152	A9407/32
	5.60	0.2204	91	139	A9405.6
	5.70	0.2244	91	139	A9405.7
	5.80	0.2283	91	139	A9405.8
	5.90	0.2322	91	139	A9405.9
15/64	5.95	0.2342	95	156	A94015/64
	6.00	0.2362	91	139	A9406.0
	6.10	0.2401	97	148	A9406.1
	6.20	0.2440	97	148	A9406.2
	6.30	0.2480	97	148	A9406.3
1/4	6.35	0.2500	95	156	A9401/4
	6.40	0.2519	97	148	A9406.4
	6.50	0.2559	97	148	A9406.5
	6.60	0.2598	97	148	A9406.6
	6.70	0.2637	97	148	A9406.7
17/64	6.75	0.2657	98	159	A94017/64
	6.80	0.2677	102	156	A9406.8
	6.90	0.2716	102	156	A9406.9
	7.00	0.2755	102	156	A9407.0
	7.10	0.2795	102	156	A9407.1
9/32	7.14	0.2811	98	159	A9409/32
	7.20	0.2834	102	156	A9407.2
	7.30	0.2874	102	156	A9407.3
	7.40	0.2913	102	156	A9407.4

A940

d_1 $\varnothing h_3$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	7.50	0.2952	102	156	A9407.5
19/64	7.54	0.2968	102	162	A94019/64
	7.60	0.2992	109	165	A9407.6
	7.70	0.3031	109	165	A9407.7
	7.80	0.3070	109	165	A9407.8
	7.90	0.3110	109	165	A9407.9
5/16	7.94	0.3125	102	162	A9405/16
	8.00	0.3149	109	165	A9408.0
	8.10	0.3188	109	165	A9408.1
	8.20	0.3228	109	165	A9408.2
	8.30	0.3267	109	165	A9408.3
21/64	8.33	0.3279	105	165	A94021/64
	8.40	0.3307	109	165	A9408.4
	8.50	0.3346	109	165	A9408.5
	8.60	0.3385	115	175	A9408.6
	8.70	0.3425	115	175	A9408.7
11/32	8.73	0.3437	105	165	A94011/32
	8.80	0.3464	115	175	A9408.8
	8.90	0.3503	115	175	A9408.9
	9.00	0.3543	115	175	A9409.0
	9.10	0.3582	115	175	A9409.1
23/64	9.13	0.3594	108	171	A94023/64
	9.20	0.3622	115	175	A9409.2
	9.30	0.3661	115	175	A9409.3
	9.40	0.3700	115	175	A9409.4
	9.50	0.3740	115	175	A9409.5
3/8	9.53	0.3751	108	171	A9403/8
	9.60	0.3779	121	184	A9409.6
	9.70	0.3818	121	184	A9409.7
	9.80	0.3858	121	184	A9409.8
	9.90	0.3897	121	184	A9409.9
25/64	9.92	0.3905	111	178	A94025/64
	10.00	0.3937	121	184	A94010.0
	10.20	0.4015	121	184	A94010.2
	10.30	0.4055	121	184	A94010.3
13/32	10.32	0.4062	111	178	A94013/32
	10.40	0.4094	121	184	A94010.4
	10.50	0.4133	121	184	A94010.5
27/64	10.72	0.4220	117	184	A94027/64
	10.80	0.4251	128	195	A94010.8

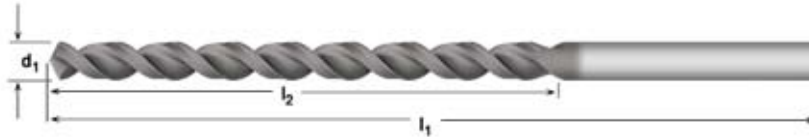
d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	11.00	0.4330	128	195	A94011.0
7/16	11.11	0.4374	117	184	A9407/16
	11.20	0.4409	128	195	A94011.2
	11.50	0.4527	128	195	A94011.5
29/64	11.51	0.4531	121	190	A94029/64
	11.80	0.4645	128	195	A94011.8
15/32	11.91	0.4688	121	190	A94015/32
	12.00	0.4724	134	205	A94012.0
	12.20	0.4803	134	205	A94012.2
31/64	12.30	0.4842	121	197	A94031/64
	12.50	0.4921	134	205	A94012.5
1/2	12.70	0.5000	121	197	A9401/2
	12.80	0.5039	134	205	A94012.8
	13.00	0.5118	134	205	A94013.0
33/64	13.10	0.5156	121	203	A94033/64
17/32	13.49	0.5312	121	203	A94017/32
	13.50	0.5314	140	214	A94013.5
	14.00	0.5511	140	214	A94014.0
9/16	14.29	0.5625	124	210	A9409/16
	14.50	0.5708	144	220	A94014.5
37/64	14.68	0.5781	124	222	A94037/64
	15.00	0.5905	144	220	A94015.0
19/32	15.08	0.5938	124	222	A94019/32
	15.50	0.6102	149	227	A94015.5
5/8	15.88	0.6250	124	222	A9405/8
	16.00	0.6299	149	227	A94016.0
	16.50	0.6496	154	235	A94016.5
21/32	16.67	0.6562	130	229	A94021/32
	17.00	0.6693	154	235	A94017.0
11/16	17.46	0.6875	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	18.27	0.7188	143	241	A94023/32
47/64	18.65	0.7344	149	248	A94047/64
	19.00	0.7480	162	247	A94019.0
3/4	19.05	0.75	149	248	A9403/4
	20.00	0.7874	166	254	A94020.0

A941

- Long Series Drill
- Spiralbohrer, lang
- Lunge boren
- Foret longue
- Broca, serie larga
- Broca Longa

NEW

2009.09



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

d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
1.00	0.0393	33	56	A9411.0	6.60	0.2598	97	148	A9416.6
1.50	0.0590	45	70	A9411.5	6.70	0.2637	97	148	A9416.7
2.00	0.0787	56	85	A9412.0	6.80	0.2677	102	156	A9416.8
2.50	0.0984	62	95	A9412.5	6.90	0.2716	102	156	A9416.9
3.00	0.1181	66	100	A9413.0	7.00	0.2755	102	156	A9417.0
3.10	0.1220	69	106	A9413.1	7.10	0.2795	102	156	A9417.1
3.20	0.1259	69	106	A9413.2	7.20	0.2834	102	156	A9417.2
3.30	0.1299	69	106	A9413.3	7.30	0.2874	102	156	A9417.3
3.40	0.1338	73	112	A9413.4	7.40	0.2913	102	156	A9417.4
3.50	0.1377	73	112	A9413.5	7.50	0.2952	102	156	A9417.5
3.60	0.1417	73	112	A9413.6	7.60	0.2992	109	165	A9417.6
3.70	0.1456	73	112	A9413.7	7.70	0.3031	109	165	A9417.7
3.80	0.1496	78	119	A9413.8	7.80	0.3070	109	165	A9417.8
3.90	0.1535	78	119	A9413.9	7.90	0.3110	109	165	A9417.9
4.00	0.1574	78	119	A9414.0	8.00	0.3149	109	165	A9418.0
4.10	0.1614	78	119	A9414.1	8.10	0.3188	109	165	A9418.1
4.20	0.1653	78	119	A9414.2	8.20	0.3228	109	165	A9418.2
4.30	0.1692	82	126	A9414.3	8.30	0.3267	109	165	A9418.3
4.40	0.1732	82	126	A9414.4	8.40	0.3307	109	165	A9418.4
4.50	0.1771	82	126	A9414.5	8.50	0.3346	109	165	A9418.5
4.60	0.1811	82	126	A9414.6	8.60	0.3385	115	175	A9418.6
4.70	0.1850	82	126	A9414.7	8.70	0.3425	115	175	A9418.7
4.80	0.1889	87	132	A9414.8	8.80	0.3464	115	175	A9418.8
4.90	0.1929	87	132	A9414.9	8.90	0.3503	115	175	A9418.9
5.00	0.1968	87	132	A9415.0	9.00	0.3543	115	175	A9419.0
5.10	0.2007	87	132	A9415.1	9.10	0.3582	115	175	A9419.1
5.20	0.2047	87	132	A9415.2	9.20	0.3622	115	175	A9419.2
5.30	0.2086	87	132	A9415.3	9.30	0.3661	115	175	A9419.3
5.40	0.2125	91	139	A9415.4	9.40	0.3700	115	175	A9419.4
5.50	0.2165	91	139	A9415.5	9.50	0.3740	115	175	A9419.5
5.60	0.2204	91	139	A9415.6	9.60	0.3779	121	184	A9419.6
5.70	0.2244	91	139	A9415.7	9.70	0.3818	121	184	A9419.7
5.80	0.2283	91	139	A9415.8	9.80	0.3858	121	184	A9419.8
5.90	0.2322	91	139	A9415.9	9.90	0.3897	121	184	A9419.9
6.00	0.2362	91	139	A9416.0	10.00	0.3937	121	184	A94110.0
6.10	0.2401	97	148	A9416.1	10.20	0.4015	121	184	A94110.2
6.20	0.2440	97	148	A9416.2	10.30	0.4055	121	184	A94110.3
6.30	0.2480	97	148	A9416.3	10.40	0.4094	121	184	A94110.4
6.40	0.2519	97	148	A9416.4	10.50	0.4133	121	184	A94110.5
6.50	0.2559	97	148	A9416.5	10.80	0.4251	128	195	A94110.8

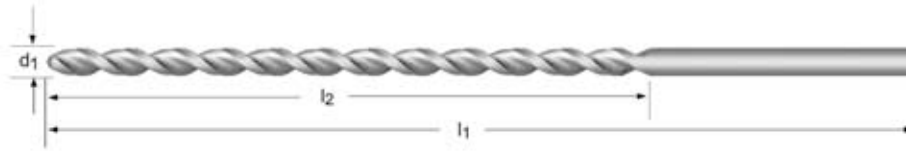
A941

d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
11.00	0.4330	128	195	A94111.0
11.20	0.4409	128	195	A94111.2
11.50	0.4527	128	195	A94111.5
11.80	0.4646	128	195	A94111.8
12.00	0.4724	134	205	A94112.0
12.20	0.4803	134	205	A94112.2
12.50	0.4921	134	205	A94112.5
12.80	0.5039	134	205	A94112.8
13.00	0.5118	134	205	A94113.0

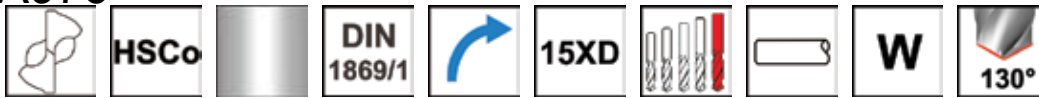
d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
13.50	0.5314	140	214	A94113.5
14.00	0.5511	140	214	A94114.0
14.50	0.5708	144	220	A94114.5
15.00	0.5905	144	220	A94115.0
15.50	0.6102	149	227	A94115.5
16.00	0.6299	149	227	A94116.0

A976

- Extra Length Drill
- Spiralbohrer, extra lang
- Extra lange boren
- Foret extra-long
- Broca Extra Larga
- Broca Extra Longa



A976



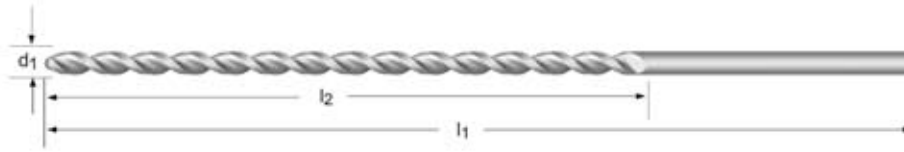
- 1.3 1.4 1.5 1.6
- 1.1 1.2 2.1 2.2 2.3 3.2 3.3 3.4 4.1 4.2 4.3 6.3 6.4 7.4

d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code	d_1 $\varnothing h_8$ Inch	d_1 $\varnothing h_8$ mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	1.50	0.0590	75	115	A9761.5		5.40	0.2125	140	205	A9765.4X205
	2.00	0.0787	85	125	A9762.0X125		5.50	0.2165	140	205	A9765.5X205
	2.10	0.0826	85	125	A9762.1X125		5.60	0.2204	140	205	A9765.6X205
	2.20	0.0866	90	135	A9762.2X135		5.70	0.2244	140	205	A9765.7X205
	2.30	0.0905	90	135	A9762.3X135		5.80	0.2283	140	205	A9765.8X205
	2.40	0.0944	95	140	A9762.4X140		5.90	0.2322	140	205	A9765.9X205
	2.50	0.0984	95	140	A9762.5X140		6.00	0.2362	140	205	A9766.0X205
	2.60	0.1023	95	140	A9762.6X140		6.10	0.2401	150	215	A9766.1X215
	2.70	0.1062	100	150	A9762.7X150		6.20	0.2440	150	215	A9766.2X215
	2.80	0.1102	100	150	A9762.8X150		6.30	0.2480	150	215	A9766.3X215
	2.90	0.1141	100	150	A9762.9X150		6.35	0.2500	140	205	A9761/4 ¹⁾
	3.00	0.1181	100	150	A9763.0X150		6.40	0.2519	150	215	A9766.4X215
	3.10	0.1220	105	155	A9763.1X155		6.50	0.2559	150	215	A9766.5X215
1/8	3.18	0.1251	105	155	A9761/8		6.60	0.2598	150	215	A9766.6X215
	3.20	0.1259	105	155	A9763.2X155		6.70	0.2637	150	215	A9766.7X215
	3.30	0.1299	105	155	A9763.3X155		6.80	0.2677	155	225	A9766.8X225
	3.40	0.1338	115	165	A9763.4X165		6.90	0.2716	155	225	A9766.9X225
	3.50	0.1377	115	165	A9763.5X165		7.00	0.2755	155	225	A9767.0X225
	3.60	0.1417	115	165	A9763.6X165		7.50	0.2952	155	225	A9767.5X225
	3.70	0.1456	115	165	A9763.7X165	5/16	7.94	0.3125	165	240	A9765/16
	3.80	0.1496	120	175	A9763.8X175		8.00	0.3149	165	240	A9768.0X240
	3.90	0.1535	120	175	A9763.9X175		8.50	0.3346	165	240	A9768.5X240
5/32	3.97	0.1562	120	175	A9765/32	11/32	8.73	0.3437	175	250	A97611/32
	4.00	0.1574	120	175	A9764.0X175		9.00	0.3543	175	250	A9769.0X250
	4.10	0.1614	120	175	A9764.1X175		9.50	0.3740	175	250	A9769.5X250
	4.20	0.1653	120	175	A9764.2X175	3/8	9.53	0.3751	185	265	A9763/8
	4.30	0.1692	125	185	A9764.3X185		10.00	0.3937	185	265	A97610.0X265
	4.40	0.1732	125	185	A9764.4X185		10.50	0.4133	185	265	A97610.5
	4.50	0.1771	125	185	A9764.5X185		11.00	0.4330	195	280	A97611.0 ¹⁾
	4.60	0.1811	125	185	A9764.6X185	7/16	11.11	0.4374	195	280	A9767/16 ¹⁾
	4.70	0.1850	125	185	A9764.7X185		11.50	0.4527	195	280	A97611.5 ¹⁾
3/16	4.76	0.1874	135	195	A9763/16		12.00	0.4724	205	295	A97612.0 ¹⁾
	4.80	0.1889	135	195	A9764.8X195		12.50	0.4921	205	295	A97612.5 ¹⁾
	4.90	0.1929	135	195	A9764.9X195	1/2	12.70	0.5000	205	295	A9761/2 ¹⁾
	5.00	0.1968	135	195	A9765.0X195		13.00	0.5118	205	295	A97613.0 ¹⁾
	5.10	0.2007	135	195	A9765.1X195		14.00	0.5511	215	310	A97614.0 ¹⁾
	5.20	0.2047	135	195	A9765.2X195						
	5.30	0.2086	135	195	A9765.3X195						

¹⁾ Dormer Standard / Werksnorm / Spiraalgroef en totale lengte volgens Dormer standaard / Goujure et longueur totale selon la norme usine / Norma Dormer / Standard Dormer

A977

- Extra Length Drill
- Spiralbohrer, extra lang
- Extra lange boren
- Foret extra-long
- Broca Extra Larga
- Broca Extra Longa



A977

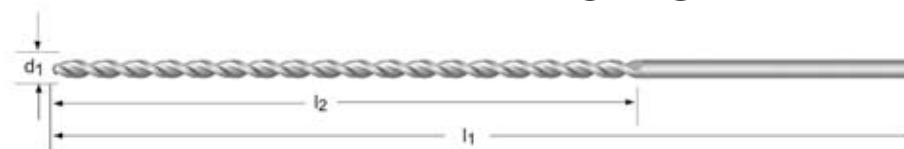


- 1.3 1.4 1.5 1.6
- 1.1 1.2 2.1 2.2 2.3 3.2 3.3 3.4 4.1 4.2 4.3 6.3 6.4 7.4

d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	1.50	0.0590	100	150	A9771.5
1/16	1.59	0.0625	100	150	A9771/16
	2.00	0.0787	110	160	A9772.0
3/32	2.38	0.0937	115	170	A9773/32
	3.00	0.1181	130	190	A9773.0X190
1/8	3.18	0.1251	135	200	A9771/8
	3.50	0.1377	145	210	A9773.5X210
	4.00	0.1574	150	220	A9774.0X220
	4.50	0.1771	160	235	A9774.5X235
3/16	4.76	0.1874	170	245	A9773/16
	5.00	0.1968	170	245	A9775.0X245
	5.50	0.2165	180	260	A9775.5X260
	6.00	0.2362	180	260	A9776.0X260
1/4	6.35	0.2500	180	260	A9771/4
	6.50	0.2559	190	275	A9776.5X275
	7.00	0.2755	200	290	A9777.0X290

d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	7.50	0.2952	200	290	A9777.5X290
	8.00	0.3149	210	305	A9778.0X305
	8.50	0.3346	210	305	A9778.5X305
11/32	8.73	0.3437	220	320	A97711/32
	9.00	0.3543	220	320	A9779.0X320
	9.50	0.3740	220	320	A9779.5X320
	10.00	0.3937	235	340	A97710.0X340
	10.50	0.4133	235	340	A97710.5
	11.00	0.4330	250	365	A97711.0
	11.50	0.4527	250	365	A97711.5
	12.00	0.4724	260	375	A97712.0
	12.50	0.4921	260	375	A97712.5
	13.00	0.5118	260	375	A97713.0
	14.00	0.5511	270	390	A97714.0

A978



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

d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	3.00	0.1181	160	240	A9783.0
	3.50	0.1377	180	265	A9783.5X265
	4.00	0.1574	190	280	A9784.0X280
	4.50	0.1771	200	295	A9784.5X295
	5.00	0.1968	210	315	A9785.0X315
	5.50	0.2165	225	330	A9785.5X330
	6.00	0.2362	225	330	A9786.0X330
1/4	6.35	0.2500	225	330	A9781/4

d_1 \varnothing_{h_8} Inch	d_1 \varnothing_{h_8} mm	d_1 decimal Inch	l_2 mm	l_1 mm	e-Code
	6.50	0.2559	235	350	A9786.5X350
	7.00	0.2755	250	370	A9787.0X370
	7.50	0.2952	250	370	A9787.5X370
	8.00	0.3149	265	390	A9788.0X390
	8.50	0.3346	265	390	A9788.5X390
	9.00	0.3543	280	410	A9789.0X410
	9.50	0.3740	280	410	A9789.5X410
	10.00	0.3937	295	430	A97810.0X430

¹⁾ Dormer Standard / Werksnorm / Spiraalgroef en totale lengte volgens Dormer standaard / Goujure et longueur totale selon la norme usine / Norma Dormer / Standard Dormer

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