



suttontools

D110 -Long Series Drills -Sutton Tools

Sutton Tools Long Series Drills offer longer flute & overall length than standard drill bits. Ideal for drilling deeper holes.

Features:

- 118° Standard Point - For general purpose applications
- Precision Ground Flute - Designed for fast chip removal
- Made from M2 High Speed Steel (HSS) - Offering the best combination of strength, heat & wear resistance

Specifications:

Designation:	N
Material:	HSS
Finish:	Bright
Max Cut Depth:	8xD
Shank Form:	A
Helix Angle:	R30
Point Tolerance:	H8
Point Angle:	118°
Point Form:	Form A
Cutting Edges:	ul
Standard:	ANSI B94-11

Range:

Item #	Diameter d1 (mm)	Diameter d1 (inch)	Length l1 (mm)	Length l2 (mm)
D1101349	13.49	17/32	203	121
D1101588	15.88	5/8	222	125
D1101905	19.05	3/4	234	149
D1100318	3.18	1/8	137	70
D1100357	3.57	9/64	137	76
D1100397	3.97	5/32	137	76
D1100437	4.37	11/64	146	86
D1100476	4.76	3/16	152	92
D1100516	5.16	13/64	152	92
D1100556	5.56	7/32	152	92
D1100595	5.95	15/64	156	95
D1100635	6.35	1/4	156	95
D1100676	6.75	17/64	159	98
D1100714	7.14	9/32	159	98
D1100754	7.54	19/64	162	102
D1100794	7.94	5/16	162	102
D1100833	8.33	21/64	165	105
D1100873	8.73	11/32	165	105
D1100913	9.13	23/64	171	108
D1100953	9.53	3/8	171	108
D1100992	9.92	25/64	178	111
D1101032	10.32	13/32	178	111
D1101072	10.72	27/64	184	117
D1101111	11.11	7/16	184	117
D1101151	11.51	29/64	184	117
D1101191	11.91	15/32	184	117
D1101231	12.30	31/64	197	121
D1101269	12.70	1/2	197	121
D1100300	3.00	-	130	70
D1100330	3.30	-	137	76
D1100350	3.50	-	137	76
D1100400	4.00	-	146	86
D1100450	4.50	-	146	86
D1100500	5.00	-	152	92
D1100550	5.50	-	152	92

Range:

Item #	Diameter d1 (mm)	Diameter d1 (inch)	Length l1 (mm)	Length l2 (mm)
D1100600	6.00	-	156	95
D1100650	6.50	-	159	98
D1100700	7.00	-	159	98
D1100750	7.50	-	159	102
D1100800	8.00	-	162	105
D1100850	8.50	-	165	105
D1100900	9.00	-	171	105
D1100950	9.50	-	171	105
D1101000	10.00	-	178	111
D1101050	10.50	-	184	117
D1101100	11.00	-	184	117
D1101150	11.50	-	184	117
D1101200	12.00	-	197	121
D1101250	12.50	-	197	121
D1101300	13.00	-	203	121
D1100159	1.59	1/16	76	44
D1100198	1.98	5/64	95	51
D1100238	2.38	3/32	117	57
D1100278	2.78	7/64	130	64
D1100200	2.00	-	108	57
D1100250	2.50	-	117	64

Applications:

ISO	VDI	Description	Condition	Hardness	Strength	Optimal
P	1	Steel - Non-alloy, cast & free cutting (~ 0.15 %C)	Annealed	125MPa	440MPa	●
P	2	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Annealed	190MPa	640MPa	●
P	3	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Quenched & Tempered	250MPa	840MPa	●
P	4	Steel - Non-alloy, cast & free cutting (~ 0.75 %C)	Annealed	270MPa	910MPa	●
P	5	Steel - Non-alloy, cast & free cutting (~ 0.75 %C)	Quenched & Tempered	300HB	1010MPa	
P	6	Steel - Low alloy & cast < 5% of alloying elements	Annealed	180MPa	610MPa	●
P	7	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	275MPa	930MPa	○
P	8	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	300HB	1010MPa	
P	9	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	350HB	1180MPa	
P	10	Steel - High alloy, cast & tool	Annealed	200MPa	680MPa	○
P	11	Steel - High alloy, cast & tool	Hardened & Tempered	325HB	1100MPa	
P	12	Steel - Corrosion resistant & cast - Ferritic / Martensitic	Annealed	200HB	680MPa	
P	13	Steel - Corrosion resistant & cast - Martensitic	Quenched & Tempered	240HB	810MPa	
M	14.1	Stainless Steel - Austenitic	Age Hardened	180MPa	610MPa	○
M	14.2	Stainless Steel - Duplex		250HB	840MPa	
M	14.3	Stainless Steel - Precipitation Hardening		250HB	840MPa	
K	15	Cast Iron, Grey (GG) - Ferritic / Pearlitic		180MPa	610MPa	○
K	16	Cast Iron, Grey (GG) - Pearlitic		260MPa	880MPa	○
K	17	Cast Iron, Nodular (GGG) - Ferritic		160MPa	570MPa	○
K	18	Cast Iron, Nodular (GGG) - Pearlitic		250MPa	840MPa	○
K	19	Cast Iron, Malleable - Ferritic		130MPa	460MPa	○
K	20	Cast Iron, Malleable - Pearlitic		230MPa	780MPa	○
N	21	Aluminum & Magnesium, wrought alloy - Non Heat Treatable		60MPa	210MPa	○
N	22	Aluminum & Magnesium, wrought alloy - Heat Treatable	Age Hardened	100MPa	360MPa	○
N	23	Aluminum & Magnesium, cast alloy ≤12% Si - Non Heat Treatable		75HB	270MPa	
N	24	Aluminum & Magnesium, cast alloy ≤12% Si - Heat Treatable	Age Hardened	90HB	320MPa	
N	25	Aluminum & Magnesium, cast alloy >12% Si - Non Heat Treatable		130HB	460MPa	
N	26	Copper & Copper alloys (Brass/Bronze) - Free cutting, Pb > 1		110HB	390MPa	
N	27	Copper & Copper alloys (Brass/Bronze) - Brass (CuZn, CuSnZn)		90HB	320MPa	
N	28	Copper & Copper alloys (Brass/Bronze) - Bronze (CuSn)		100HB	360MPa	
N	29	Non-metallic - Thermosetting & fiber-reinforced plastics				
N	30	Non-metallic - Hard rubber, wood etc.				
S	31	High temperature alloys - Fe based	Annealed	200HB	680MPa	
S	32	High temperature alloys - Fe based	Age Hardened	280HB	950MPa	
S	33	High temperature alloys - Ni / Co based	Annealed	250HB	840MPa	
S	34	High temperature alloys - Ni / Co based	Age Hardened	350HB	1180MPa	
S	35	High temperature alloys - Ni / Co based	Cast	320HB	1080MPa	
S	36	Titanium & Titanium alloys - CP Titanium			400MPa	
S	37.1	Titanium & Titanium alloys - Alpha alloys			860MPa	
S	37.2	Titanium & Titanium alloys - Alpha / Beta alloys	Annealed		960MPa	
S	37.3	Titanium & Titanium alloys - Alpha / Beta alloys	Age Hardened		1170MPa	
S	37.4	Titanium & Titanium alloys - Beta alloys	Annealed		830MPa	
S	37.5	Titanium & Titanium alloys - Beta alloys	Age Hardened		1400MPa	
H	38.1	Hardened steel	Hardened & Tempered	45HRC		
H	38.2	Hardened steel	Hardened & Tempered	55HRC		

KEY

● Optimal ○ Effective | **P** Steel **M** Stainless **K** Cast Iron **N** Non-Ferous Metals **S** Titanium & Super Alloys **H** Hard Materials

Applications:

ISO	VDI	Description	Condition	Hardness	Strength	Optimal
H	39.1	Hardened steel	Hardened & Tempered	58HRC		
H	39.2	Hardened steel	Hardened & Tempered	62HRC		
H	40	Cast Iron - Chilled	Cast	400MPa	1350MPa	o
H	41	Cast Iron	Hardened & Tempered	55HRC		

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Trade/DIY Applications:

Wood	Metal	Specialty	Masonry
Soft Wood	Steel	<ul style="list-style-type: none"> • PVC Plastic 	<ul style="list-style-type: none"> o Masonry
Hard Wood	Hard Steel	Acrylic	Plasterboard
Wood & Nails	Stainless Steel	mineral rock wool foams (EPS, PUR),	Compressed Fibre Cement
Chipboard	Aluminium	<ul style="list-style-type: none"> • Polystyrene 	Cement Sheet
Plywood	Copper / Brass	<ul style="list-style-type: none"> • Leather 	Ceramic Tile
MDF	Cast Iron	<ul style="list-style-type: none"> o Rubber 	Hebel
Green Wood	Sheet Metal	<ul style="list-style-type: none"> o Fibreglass 	Brick
Sandwich Construction	Precious Metals	Carbon Fibre	Concrete
Pallet	Metal Pipe	<ul style="list-style-type: none"> o Glass 	Reinforced Concrete
Window Frame		Laminate	Stone
			Granite
			Marble

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