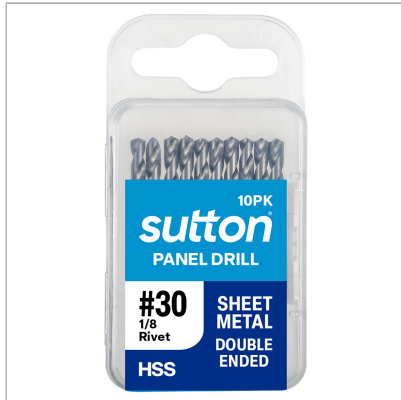




suttontools



D134 -Panel Drills - Double Ended - Silver Bullet - 10 Pack -Sutton Tools -Silver Bullet

Sutton Tools Silver Bullet Panel Drills are developed to drill holes for rivets in flat and curved panels used in sheet metal fabrication. The double ended design doubles the life of the drill bit. Note: Ensure the chuck jaws are fully tightened.

Features:

- 135° self centering point minimises wandering when starting and ideal for thin materials
- Flute length designed for shallow hole drilling no deeper than 1.25mm x diameter
- Double ended design increases drill life. Ensure that the chuck jaws are fully tightened
- Made from M2 High Speed Steel (HSS) offering the best combination of strength, heat & wear resistance
- Bright finish for general purpose applications, non-ferrous metals & plastics

Specifications:

Designation:	N
Material:	HSS
Finish:	Brt
Point Tolerance:	H8
Point Angle:	135°
Point Form:	Standard
Cutting Edges:	ul

Range:

Item #	Diameter d1 (mm)	Diameter d1 (inch)	Diameter d1 (ga)	Length l1 (mm)	Length l2 (mm)	Pieces	Rivet Size
D1340318	3.18	1/8	-	54	15.9	10	3.0mm
D1340326	3.30	-	#30	54	15.9	10	1/8
D1340409	4.10	-	#20	54	15.9	10	4.0mm & 5/32
D1340485	4.90	-	#11	54	15.9	10	3/16

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	300MPa	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	300MPa	1010MPa	○
P	9	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	350MPa	1180MPa	○
P	10	Steel - High alloy, cast & tool	Annealed	200MPa	680MPa	○
P	11	Steel - High alloy, cast & tool	Hardened & Tempered	325MPa	1100MPa	○
P	12	Steel - Corrosion resistant & cast - Ferritic / Martensitic	Annealed	200MPa	680MPa	○
P	13	Steel - Corrosion resistant & cast - Martensitic	Quenched & Tempered	240MPa	810MPa	○
M	14.1	Stainless Steel - Austenitic	Age Hardened	180MPa	610MPa	○
M	14.2	Stainless Steel - Duplex		250MPa	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		260HB	880MPa	
K	17	Cast Iron, Nodular (GGG) - Ferritic		160MPa	570MPa	○
K	18	Cast Iron, Nodular (GGG) - Pearlitic		250HB	840MPa	
K	19	Cast Iron, Malleable - Ferritic		130HB	460MPa	
K	20	Cast Iron, Malleable - Pearlitic		230HB	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		75MPa	270MPa	○
N	24	Aluminum & Magnesium, cast alloy ?12% Si - Heat Treatable	Age Hardened	90MPa	320MPa	○
N	25	Aluminum & Magnesium, cast alloy >12% Si - Non Heat Treatabl		130HB	460MPa	
N	26	Copper & Copper alloys (Brass/Bronze) - Free cutting, Pb > 1%		110MPa	390MPa	○
N	27	Copper & Copper alloys (Brass/Bronze) - Brass (CuZn, CuSnZn)		90HB	320MPa	
N	28	Copper & Copper alloys (Brass/Bronze) - Bronze (CuSn)		100MPa	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



Steel



Stainless



Cast Iron



Non-Ferous Metals



Titanium & Super Alloys



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		

KEY

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

Trade/DIY Applications:

Wood		Metal		Specialty		Masonry	
Soft Wood		Steel	●	PVC Plastic	o	Masonry	
Hard Wood		Hard Steel		Acrylic		Plasterboard	
Wood & Nails		Stainless Steel		mineral rock wool foams (EPS, PUR),		Compressed Fibre Cement	
Chipboard		Aluminium	●	Polystyrene		Cement Sheet	
Plywood		Copper / Brass	●	Leather		Ceramic Tile	
MDF		Cast Iron		Rubber		Hebel	
Green Wood		Sheet Metal	●	Fibreglass		Brick	
Sandwich Construction		Precious Metals		Carbon Fibre		Concrete	
Pallet		Metal Pipe		Glass		Reinforced Concrete	
Window Frame				Laminate		Stone	
						Granite	
						Marble	

KEY

● Optimal o Effective