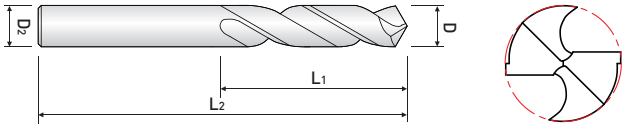


SOLID SPIRAL DRILL - LONG

SSDL ...series

MG FINE GRAIN
30° HELIX
118°

EDP. No.	Dia.	L1	L2	STOCK
SSDL030	3.0	42	73	•
SSDL031	3.1			•
SSDL032	3.2			•
SSDL033	3.3			•
SSDL034	3.4			•
SSDL035	3.5			•
SSDL036	3.6	45	80	•
SSDL037	3.7			•
SSDL038	3.8	48	80	•
SSDL039	3.9	50	80	•
SSDL040	4.0	54	85	•
SSDL041	4.1			•
SSDL042	4.2			•
SSDL043	4.3			•
SSDL044	4.4			•
SSDL045	4.5			•
SSDL046	4.6	59	90	•
SSDL047	4.7			•
SSDL048	4.8			•
SSDL049	4.9			•
SSDL050	5.0			•
SSDL051	5.1	63	95	•
SSDL052	5.2			•
SSDL053	5.3			•
SSDL054	5.4			•
SSDL055	5.5			•
SSDL056	5.6	66	100	•
SSDL057	5.7			•
SSDL058	5.8			•
SSDL059	5.9			•
SSDL060	6.0			•
SSDL061	6.1	70	105	•
SSDL062	6.2			•
SSDL063	6.3			•
SSDL064	6.4			•
SSDL065	6.5			•

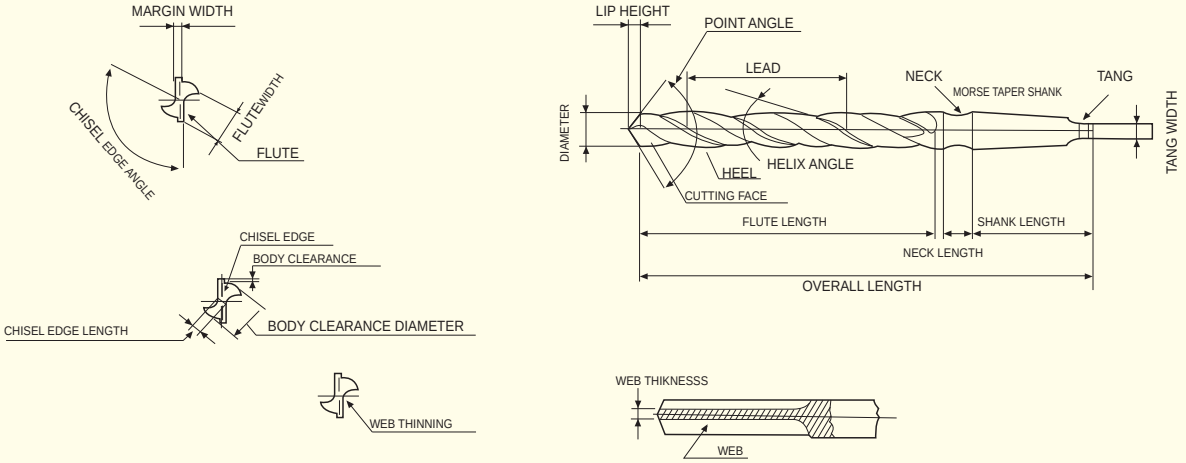
EDP. No.	Dia.	L1	L2	STOCK
SSDL066	6.6	73	105	•
SSDL067	6.7			•
SSDL068	6.8			•
SSDL069	6.9			•
SSDL070	7.0			•
SSDL071	7.1	76	110	•
SSDL072	7.2			•
SSDL073	7.3			•
SSDL074	7.4			•
SSDL075	7.5			•
SSDL076	7.6	80	115	•
SSDL077	7.7			•
SSDL078	7.8			•
SSDL079	7.9			•
SSDL080	8.0			•
SSDL081	8.1	85	125	•
SSDL082	8.2			•
SSDL083	8.3			•
SSDL084	8.4			•
SSDL085	8.5			•
SSDL086	8.6			•
SSDL087	8.7			•
SSDL088	8.8			•
SSDL089	8.9			•
SSDL090	9.0			•
SSDL091	9.1	88	130	•
SSDL092	9.2			•
SSDL093	9.3			•
SSDL094	9.4			•
SSDL095	9.5			•
SSDL096	9.6	90	130	•
SSDL097	9.7			•
SSDL098	9.8			•
SSDL099	9.9			•
SSDL100	10.0			•

■ Tolerance

㎛=1/1000㎜

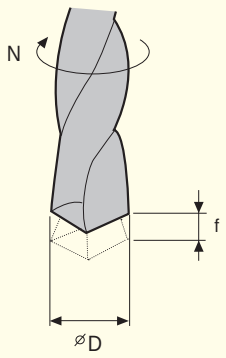
Tolerance \ Dia.	from 1 to 3	over 3 to 6	over 6 to 10	over 10 to 18
Cutting Edge(h8)	0 -14	0 -18	0 -22	0 -27
Shank(h6)	0 -10	0 -12	0 -15	0 -18

Nomenclature of Drill



Working of Main Angle

POINT ANGLE	HELIX ANGLE	LIP RELIEF ANGLE
70° 118° 140°	10° 38° 40°	7° 10° 12° 15°
Large → Torque → Small Small → Thrust → Large	Bad → Cutting Capacity → Good Good → Chip Ejection → Bad Large → Rigidity of tool → Small	Small → Tool Wear → Large Small → Vibration → Large



•Cutting Speed

$$V = \frac{\pi \times D \times N}{1000} \text{ (m/min)}$$

- V : cutting Speed (m/min)
- D : Diameter of drill (mm)
- N : revolution (rpm)
- π : (3.14)

•Feed

$$f = \frac{S}{N} \text{ (m/rev)}$$

- f : feed (mm/rev)
- S : depth of cut per min (mm/min)
- N : revolution(rpm) (rpm)

•Helix Angle

$$\delta^\circ = \text{Tan}^{-1}\left(\frac{\pi D}{L}\right)$$

- δ : helix angle
- D : Diameter of drill (mm)
- L : lead (mm)
- π : (3.14)