

GD13

METRIC & INCH



Gold-P Drills



Gold-P Drills

www.yg1.kr



YG-1 CO., LTD.
www.yg1.kr

Wonders

Price | *Why pay more for coated drill?*

Performance | *Higher productivity
same quality with general full TiN coating*


















【Gold-P Drill】



【Uncoated Drill】

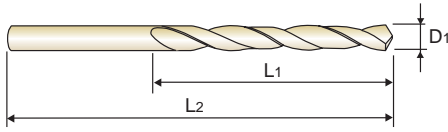
Which will you **choose?**

Gold-P Drill? or **Uncoated Drill?**

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HSS Straight Shank Jobber Length Gold-P Coated (DIN338)



DIN 338
HSS
N
≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D1GP125

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP125010	1.0	12	34
D1GP125011	1.1	14	36
D1GP125012	1.2	16	38
D1GP125013	1.3	16	38
D1GP125014	1.4	18	40
D1GP125015	1.5	18	40
D1GP125016	1.6	20	43
D1GP125017	1.7	20	43
D1GP125018	1.8	22	46
D1GP125019	1.9	22	46
D1GP125020	2.0	24	49
D1GP125021	2.1	24	49
D1GP125022	2.2	27	53
D1GP125023	2.3	27	53
D1GP125024	2.4	30	57
D1GP125025	2.5	30	57
D1GP125026	2.6	30	57
D1GP125027	2.7	33	61
D1GP125028	2.8	33	61
D1GP125029	2.9	33	61
D1GP125030	3.0	33	61
D1GP125031	3.1	36	65
D1GP125032	3.2	36	65
D1GP125033	3.3	36	65
D1GP125034	3.4	39	70
D1GP125035	3.5	39	70
D1GP125036	3.6	39	70
D1GP125037	3.7	39	70
D1GP125038	3.8	43	75
D1GP125039	3.9	43	75
D1GP125040	4.0	43	75

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP125041	4.1	43	75
D1GP125042	4.2	43	75
D1GP125043	4.3	47	80
D1GP125044	4.4	47	80
D1GP125045	4.5	47	80
D1GP125046	4.6	47	80
D1GP125047	4.7	47	80
D1GP125048	4.8	52	86
D1GP125049	4.9	52	86
D1GP125050	5.0	52	86
D1GP125051	5.1	52	86
D1GP125052	5.2	52	86
D1GP125053	5.3	52	86
D1GP125054	5.4	57	93
D1GP125055	5.5	57	93
D1GP125056	5.6	57	93
D1GP125057	5.7	57	93
D1GP125058	5.8	57	93
D1GP125059	5.9	57	93
D1GP125060	6.0	57	93
D1GP125061	6.1	63	101
D1GP125062	6.2	63	101
D1GP125063	6.3	63	101
D1GP125064	6.4	63	101
D1GP125065	6.5	63	101
D1GP125066	6.6	63	101
D1GP125067	6.7	63	101
D1GP125068	6.8	69	109
D1GP125069	6.9	69	109
D1GP125070	7.0	69	109
D1GP125071	7.1	69	109

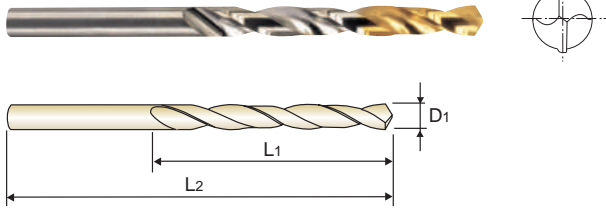
● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSS Straight Shank Jobber Length

Gold-P Coated (DIN338)



DIN 338
HSS
N ≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D1GP125

Unit : mm

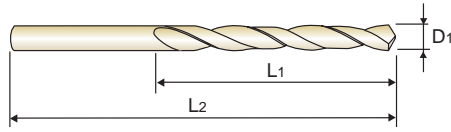
EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D1GP125072	7.2	69	109	D1GP125102	10.2	87	133
D1GP125073	7.3	69	109	D1GP125103	10.3	87	133
D1GP125074	7.4	69	109	D1GP125104	10.4	87	133
D1GP125075	7.5	69	109	D1GP125105	10.5	87	133
D1GP125076	7.6	75	117	D1GP125106	10.6	87	133
D1GP125077	7.7	75	117	D1GP125107	10.7	94	142
D1GP125078	7.8	75	117	D1GP125108	10.8	94	142
D1GP125079	7.9	75	117	D1GP125109	10.9	94	142
D1GP125080	8.0	75	117	D1GP125110	11.0	94	142
D1GP125081	8.1	75	117	D1GP125111	11.1	94	142
D1GP125082	8.2	75	117	D1GP125112	11.2	94	142
D1GP125083	8.3	75	117	D1GP125113	11.3	94	142
D1GP125084	8.4	75	117	D1GP125114	11.4	94	142
D1GP125085	8.5	75	117	D1GP125115	11.5	94	142
D1GP125086	8.6	81	125	D1GP125116	11.6	94	142
D1GP125087	8.7	81	125	D1GP125117	11.7	94	142
D1GP125088	8.8	81	125	D1GP125118	11.8	94	142
D1GP125089	8.9	81	125	D1GP125119	11.9	101	151
D1GP125090	9.0	81	125	D1GP125120	12.0	101	151
D1GP125091	9.1	81	125	D1GP125121	12.1	101	151
D1GP125092	9.2	81	125	D1GP125122	12.2	101	151
D1GP125093	9.3	81	125	D1GP125123	12.3	101	151
D1GP125094	9.4	81	125	D1GP125124	12.4	101	151
D1GP125095	9.5	81	125	D1GP125125	12.5	101	151
D1GP125096	9.6	87	133	D1GP125126	12.6	101	151
D1GP125097	9.7	87	133	D1GP125127	12.7	101	151
D1GP125098	9.8	87	133	D1GP125128	12.8	101	151
D1GP125099	9.9	87	133	D1GP125129	12.9	101	151
D1GP125100	10.0	87	133	D1GP125130	13.0	101	151
D1GP125101	10.1	87	133				

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSS Straight Shank Jobber Length Gold-P Coated (DIN338)



DIN 338
HSS
N ≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Split point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D1GP165

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP165016	1.6	20	43
D1GP165017	1.7	20	43
D1GP165018	1.8	22	46
D1GP165019	1.9	22	46
D1GP165020	2.0	24	49
D1GP165021	2.1	24	49
D1GP165022	2.2	27	53
D1GP165023	2.3	27	53
D1GP165024	2.4	30	57
D1GP165025	2.5	30	57
D1GP165026	2.6	30	57
D1GP165027	2.7	33	61
D1GP165028	2.8	33	61
D1GP165029	2.9	33	61
D1GP165030	3.0	33	61
D1GP165031	3.1	36	65
D1GP165032	3.2	36	65
D1GP165033	3.3	36	65
D1GP165034	3.4	39	70
D1GP165035	3.5	39	70
D1GP165036	3.6	39	70
D1GP165037	3.7	39	70
D1GP165038	3.8	43	75
D1GP165039	3.9	43	75
D1GP165040	4.0	43	75
D1GP165041	4.1	43	75
D1GP165042	4.2	43	75
D1GP165043	4.3	47	80
D1GP165044	4.4	47	80
D1GP165045	4.5	47	80

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP165046	4.6	47	80
D1GP165047	4.7	47	80
D1GP165048	4.8	52	86
D1GP165049	4.9	52	86
D1GP165050	5.0	52	86
D1GP165051	5.1	52	86
D1GP165052	5.2	52	86
D1GP165053	5.3	52	86
D1GP165054	5.4	57	93
D1GP165055	5.5	57	93
D1GP165056	5.6	57	93
D1GP165057	5.7	57	93
D1GP165058	5.8	57	93
D1GP165059	5.9	57	93
D1GP165060	6.0	57	93
D1GP165061	6.1	63	101
D1GP165062	6.2	63	101
D1GP165063	6.3	63	101
D1GP165064	6.4	63	101
D1GP165065	6.5	63	101
D1GP165066	6.6	63	101
D1GP165067	6.7	63	101
D1GP165068	6.8	69	109
D1GP165069	6.9	69	109
D1GP165070	7.0	69	109
D1GP165071	7.1	69	109
D1GP165072	7.2	69	109
D1GP165073	7.3	69	109
D1GP165074	7.4	69	109
D1GP165075	7.5	69	109

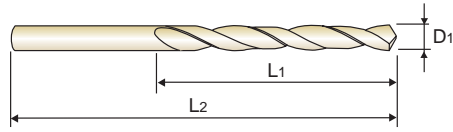
● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSS Straight Shank Jobber Length

Gold-P Coated (DIN338)



DIN 338
HSS
N $\approx 30^\circ$
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Split point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D1GP165

Unit : mm

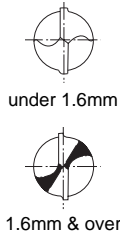
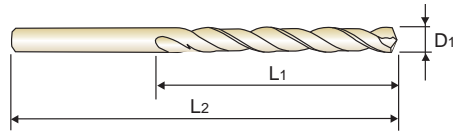
EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D1GP165076	7.6	75	117	D1GP165104	10.4	87	133
D1GP165077	7.7	75	117	D1GP165105	10.5	87	133
D1GP165078	7.8	75	117	D1GP165106	10.6	87	133
D1GP165079	7.9	75	117	D1GP165107	10.7	94	142
D1GP165080	8.0	75	117	D1GP165108	10.8	94	142
D1GP165081	8.1	75	117	D1GP165109	10.9	94	142
D1GP165082	8.2	75	117	D1GP165110	11.0	94	142
D1GP165083	8.3	75	117	D1GP165111	11.1	94	142
D1GP165084	8.4	75	117	D1GP165112	11.2	94	142
D1GP165085	8.5	75	117	D1GP165113	11.3	94	142
D1GP165086	8.6	81	125	D1GP165114	11.4	94	142
D1GP165087	8.7	81	125	D1GP165115	11.5	94	142
D1GP165088	8.8	81	125	D1GP165116	11.6	94	142
D1GP165089	8.9	81	125	D1GP165117	11.7	94	142
D1GP165090	9.0	81	125	D1GP165118	11.8	94	142
D1GP165091	9.1	81	125	D1GP165119	11.9	101	151
D1GP165092	9.2	81	125	D1GP165120	12.0	101	151
D1GP165093	9.3	81	125	D1GP165121	12.1	101	151
D1GP165094	9.4	81	125	D1GP165122	12.2	101	151
D1GP165095	9.5	81	125	D1GP165123	12.3	101	151
D1GP165096	9.6	87	133	D1GP165124	12.4	101	151
D1GP165097	9.7	87	133	D1GP165125	12.5	101	151
D1GP165098	9.8	87	133	D1GP165126	12.6	101	151
D1GP165099	9.9	87	133	D1GP165127	12.7	101	151
D1GP165100	10.0	87	133	D1GP165128	12.8	101	151
D1GP165101	10.1	87	133	D1GP165129	12.9	101	151
D1GP165102	10.2	87	133	D1GP165130	13.0	101	151
D1GP165103	10.3	87	133				

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSS-E Straight Shank Jobber Length Gold-P Coated (DIN338)



DIN 338
HSS-E
N ≈ 33°
h8
135°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°
- under 1.6mm : Normal point
- 1.6mm & over : Split point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

DLGP195

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP195010	1.0	12	34
DLGP195011	1.1	14	36
DLGP195012	1.2	16	38
DLGP195013	1.3	16	38
DLGP195014	1.4	18	40
DLGP195015	1.5	18	40
DLGP195016	1.6	20	43
DLGP195017	1.7	20	43
DLGP195018	1.8	22	46
DLGP195019	1.9	22	46
DLGP195020	2.0	24	49
DLGP195021	2.1	24	49
DLGP195022	2.2	27	53
DLGP195023	2.3	27	53
DLGP195024	2.4	30	57
DLGP195025	2.5	30	57
DLGP195026	2.6	30	57
DLGP195027	2.7	33	61
DLGP195028	2.8	33	61
DLGP195029	2.9	33	61
DLGP195030	3.0	33	61
DLGP195031	3.1	36	65
DLGP195032	3.2	36	65
DLGP195033	3.3	36	65
DLGP195034	3.4	39	70
DLGP195035	3.5	39	70
DLGP195036	3.6	39	70
DLGP195037	3.7	39	70
DLGP195038	3.8	43	75
DLGP195039	3.9	43	75
DLGP195040	4.0	43	75

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP195041	4.1	43	75
DLGP195042	4.2	43	75
DLGP195043	4.3	47	80
DLGP195044	4.4	47	80
DLGP195045	4.5	47	80
DLGP195046	4.6	47	80
DLGP195047	4.7	47	80
DLGP195048	4.8	52	86
DLGP195049	4.9	52	86
DLGP195050	5.0	52	86
DLGP195051	5.1	52	86
DLGP195052	5.2	52	86
DLGP195053	5.3	52	86
DLGP195054	5.4	57	93
DLGP195055	5.5	57	93
DLGP195056	5.6	57	93
DLGP195057	5.7	57	93
DLGP195058	5.8	57	93
DLGP195059	5.9	57	93
DLGP195060	6.0	57	93
DLGP195061	6.1	63	101
DLGP195062	6.2	63	101
DLGP195063	6.3	63	101
DLGP195064	6.4	63	101
DLGP195065	6.5	63	101
DLGP195066	6.6	63	101
DLGP195067	6.7	63	101
DLGP195068	6.8	69	109
DLGP195069	6.9	69	109
DLGP195070	7.0	69	109
DLGP195071	7.1	69	109

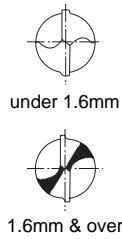
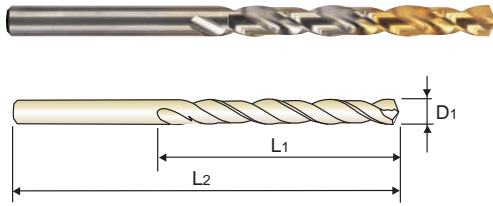
● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSS-E Straight Shank Jobber Length

Gold-P Coated (DIN338)



- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°
- ▶ **Surface Treatment** : under 1.6mm : Normal point
1.6mm & over : Split point
- ▶ **Application** : Bright body, TiN coating on working area
: Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

DLGP195

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
DLGP195072	7.2	69	109	DLGP195102	10.2	87	133
DLGP195073	7.3	69	109	DLGP195103	10.3	87	133
DLGP195074	7.4	69	109	DLGP195104	10.4	87	133
DLGP195075	7.5	69	109	DLGP195105	10.5	87	133
DLGP195076	7.6	75	117	DLGP195106	10.6	87	133
DLGP195077	7.7	75	117	DLGP195107	10.7	94	142
DLGP195078	7.8	75	117	DLGP195108	10.8	94	142
DLGP195079	7.9	75	117	DLGP195109	10.9	94	142
DLGP195080	8.0	75	117	DLGP195110	11.0	94	142
DLGP195081	8.1	75	117	DLGP195111	11.1	94	142
DLGP195082	8.2	75	117	DLGP195112	11.2	94	142
DLGP195083	8.3	75	117	DLGP195113	11.3	94	142
DLGP195084	8.4	75	117	DLGP195114	11.4	94	142
DLGP195085	8.5	75	117	DLGP195115	11.5	94	142
DLGP195086	8.6	81	125	DLGP195116	11.6	94	142
DLGP195087	8.7	81	125	DLGP195117	11.7	94	142
DLGP195088	8.8	81	125	DLGP195118	11.8	94	142
DLGP195089	8.9	81	125	DLGP195119	11.9	101	151
DLGP195090	9.0	81	125	DLGP195120	12.0	101	151
DLGP195091	9.1	81	125	DLGP195121	12.1	101	151
DLGP195092	9.2	81	125	DLGP195122	12.2	101	151
DLGP195093	9.3	81	125	DLGP195123	12.3	101	151
DLGP195094	9.4	81	125	DLGP195124	12.4	101	151
DLGP195095	9.5	81	125	DLGP195125	12.5	101	151
DLGP195096	9.6	87	133	DLGP195126	12.6	101	151
DLGP195097	9.7	87	133	DLGP195127	12.7	101	151
DLGP195098	9.8	87	133	DLGP195128	12.8	101	151
DLGP195099	9.9	87	133	DLGP195129	12.9	101	151
DLGP195100	10.0	87	133	DLGP195130	13.0	101	151
DLGP195101	10.1	87	133				

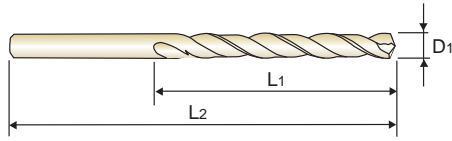
● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSS-E Straight Shank Jobber Length DH100 Type

Gold-P Coated Drills for Deep Hole(DIN338)



DIN 338
HSS-E
N ≈ 38°
h8
130°
P.21

- ▶ **Flute Geometry** : Right hand, 38° helix, DH100 worm pattern type
- ▶ **Point Angle** : 130°, Split point giving higher chip removal
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling deep holes in non alloy steels, alloy steels, grey cast iron, malleable cast iron, Special aluminum or magnesium alloys

DLGP506

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506020	2.0	24	49
DLGP506021	2.1	24	49
DLGP506022	2.2	27	53
DLGP506023	2.3	27	53
DLGP506024	2.4	30	57
DLGP506025	2.5	30	57
DLGP506026	2.6	30	57
DLGP506027	2.7	33	61
DLGP506028	2.8	33	61
DLGP506029	2.9	33	61
DLGP506030	3.0	33	61
DLGP506031	3.1	36	65
DLGP506032	3.2	36	65
DLGP506033	3.3	36	65
DLGP506034	3.4	39	70
DLGP506035	3.5	39	70
DLGP506036	3.6	39	70
DLGP506037	3.7	39	70
DLGP506038	3.8	43	75
DLGP506039	3.9	43	75
DLGP506040	4.0	43	75
DLGP506041	4.1	43	75
DLGP506042	4.2	43	75
DLGP506043	4.3	47	80
DLGP506044	4.4	47	80
DLGP506045	4.5	47	80
DLGP506046	4.6	47	80
DLGP506047	4.7	47	80
DLGP506048	4.8	52	86

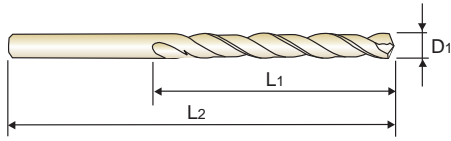
EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506049	4.9	52	86
DLGP506050	5.0	52	86
DLGP506051	5.1	52	86
DLGP506052	5.2	52	86
DLGP506053	5.3	52	86
DLGP506054	5.4	57	93
DLGP506055	5.5	57	93
DLGP506056	5.6	57	93
DLGP506057	5.7	57	93
DLGP506058	5.8	57	93
DLGP506059	5.9	57	93
DLGP506060	6.0	57	93
DLGP506061	6.1	63	101
DLGP506062	6.2	63	101
DLGP506063	6.3	63	101
DLGP506064	6.4	63	101
DLGP506065	6.5	63	101
DLGP506066	6.6	63	101
DLGP506067	6.7	63	101
DLGP506068	6.8	69	109
DLGP506069	6.9	69	109
DLGP506070	7.0	69	109
DLGP506071	7.1	69	109
DLGP506072	7.2	69	109
DLGP506073	7.3	69	109
DLGP506074	7.4	69	109
DLGP506075	7.5	69	109
DLGP506076	7.6	75	117
DLGP506077	7.7	75	117

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●				○	○			○		



HSS-E Straight Shank Jobber Length DH100 Type Gold-P Coated Drills for Deep Hole(DIN338)



DIN 338
HSS-E
N ≈ 38°
h8
130°
P.21

- ▶ **Flute Geometry** : Right hand, 38° helix, DH100 worm pattern type
- ▶ **Point Angle** : 130°, Split point giving higher chip removal
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling deep holes in non alloy steels, alloy steels, grey cast iron, malleable cast iron, Special aluminum or magnesium alloys

DLGP506

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
DLGP506078	7.8	75	117	DLGP506105	10.5	87	133
DLGP506079	7.9	75	117	DLGP506106	10.6	87	133
DLGP506080	8.0	75	117	DLGP506107	10.7	94	142
DLGP506081	8.1	75	117	DLGP506108	10.8	94	142
DLGP506082	8.2	75	117	DLGP506109	10.9	94	142
DLGP506083	8.3	75	117	DLGP506110	11.0	94	142
DLGP506084	8.4	75	117	DLGP506111	11.1	94	142
DLGP506085	8.5	75	117	DLGP506112	11.2	94	142
DLGP506086	8.6	81	125	DLGP506113	11.3	94	142
DLGP506087	8.7	81	125	DLGP506114	11.4	94	142
DLGP506088	8.8	81	125	DLGP506115	11.5	94	142
DLGP506089	8.9	81	125	DLGP506116	11.6	94	142
DLGP506090	9.0	81	125	DLGP506117	11.7	94	142
DLGP506091	9.1	81	125	DLGP506118	11.8	94	142
DLGP506092	9.2	81	125	DLGP506119	11.9	101	151
DLGP506093	9.3	81	125	DLGP506120	12.0	101	151
DLGP506094	9.4	81	125	DLGP506121	12.1	101	151
DLGP506095	9.5	81	125	DLGP506122	12.2	101	151
DLGP506096	9.6	87	133	DLGP506123	12.3	101	151
DLGP506097	9.7	87	133	DLGP506124	12.4	101	151
DLGP506098	9.8	87	133	DLGP506125	12.5	101	151
DLGP506099	9.9	87	133	DLGP506126	12.6	101	151
DLGP506100	10.0	87	133	DLGP506127	12.7	101	151
DLGP506101	10.1	87	133	DLGP506128	12.8	101	151
DLGP506102	10.2	87	133	DLGP506129	12.9	101	151
DLGP506103	10.3	87	133	DLGP506130	13.0	101	151
DLGP506104	10.4	87	133				

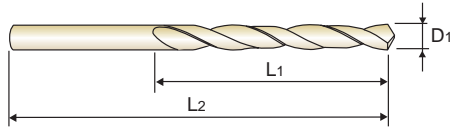
● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●				○	○			○		



HSS Straight Shank Regular Length

Gold-P Coated Drills(JIS)



HSS
N
≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, gray cast iron, graphite, malleable cast iron

D1GP103

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP103010	1.0	18	40
D1GP103011	1.1	20	42
D1GP103012	1.2	20	42
D1GP103013	1.3	22	45
D1GP103014	1.4	23	48
D1GP103015	1.5	23	48
D1GP103016	1.6	25	50
D1GP103017	1.7	25	50
D1GP103018	1.8	28	52
D1GP103019	1.9	28	52
D1GP103020	2.0	29	55
D1GP103021	2.1	29	55
D1GP103022	2.2	33	58
D1GP103023	2.3	33	58
D1GP103024	2.4	35	61
D1GP103025	2.5	35	61
D1GP103026	2.6	37	64
D1GP103027	2.7	37	64
D1GP103028	2.8	39	67
D1GP103029	2.9	42	71
D1GP103030	3.0	42	71
D1GP103031	3.1	42	71
D1GP103032	3.2	42	71
D1GP103033	3.3	45	73
D1GP103034	3.4	45	73
D1GP103035	3.5	45	73
D1GP103036	3.6	48	76
D1GP103037	3.7	48	76
D1GP103038	3.8	48	76
D1GP103039	3.9	51	79
D1GP103040	4.0	54	83

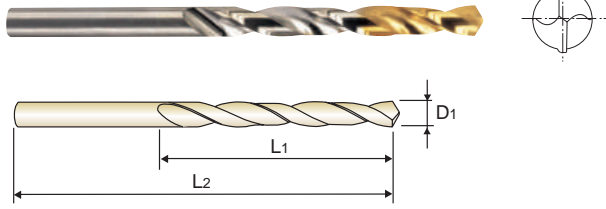
EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP103041	4.1	54	83
D1GP103042	4.2	54	83
D1GP103043	4.3	54	83
D1GP103044	4.4	56	86
D1GP103045	4.5	56	86
D1GP103046	4.6	56	86
D1GP103047	4.7	59	89
D1GP103048	4.8	59	89
D1GP103049	4.9	62	92
D1GP103050	5.0	62	92
D1GP103051	5.1	62	92
D1GP103052	5.2	64	95
D1GP103053	5.3	64	95
D1GP103054	5.4	64	95
D1GP103055	5.5	64	95
D1GP103056	5.6	67	98
D1GP103057	5.7	67	98
D1GP103058	5.8	67	98
D1GP103059	5.9	67	98
D1GP103060	6.0	70	102
D1GP103061	6.1	70	102
D1GP103062	6.2	70	102
D1GP103063	6.3	70	102
D1GP103064	6.4	73	105
D1GP103065	6.5	73	105
D1GP103066	6.6	73	105
D1GP103067	6.7	73	105
D1GP103068	6.8	73	105
D1GP103069	6.9	73	105
D1GP103070	7.0	73	105
D1GP103071	7.1	75	108

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●				○	○	○	○	●		



HSS Straight Shank Regular Length Gold-P Coated Drills(JIS)



- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, gray cast iron, graphite, malleable cast iron

D1GP103

Unit : mm

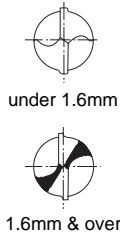
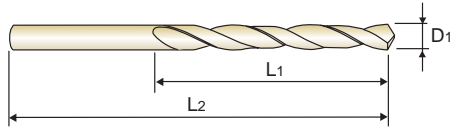
EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D1GP103072	7.2	75	108	D1GP103102	10.2	98	133
D1GP103073	7.3	75	108	D1GP103103	10.3	98	133
D1GP103074	7.4	78	111	D1GP103104	10.4	98	133
D1GP103075	7.5	78	111	D1GP103105	10.5	100	137
D1GP103076	7.6	78	111	D1GP103106	10.6	100	137
D1GP103077	7.7	81	114	D1GP103107	10.7	100	137
D1GP103078	7.8	81	114	D1GP103108	10.8	103	140
D1GP103079	7.9	81	114	D1GP103109	10.9	103	140
D1GP103080	8.0	81	114	D1GP103110	11.0	103	140
D1GP103081	8.1	84	117	D1GP103111	11.1	103	140
D1GP103082	8.2	84	117	D1GP103112	11.2	106	143
D1GP103083	8.3	84	117	D1GP103113	11.3	106	143
D1GP103084	8.4	87	121	D1GP103114	11.4	106	143
D1GP103085	8.5	87	121	D1GP103115	11.5	106	143
D1GP103086	8.6	87	121	D1GP103116	11.6	109	146
D1GP103087	8.7	87	121	D1GP103117	11.7	109	146
D1GP103088	8.8	89	124	D1GP103118	11.8	109	146
D1GP103089	8.9	89	124	D1GP103119	11.9	109	146
D1GP103090	9.0	89	124	D1GP103120	12.0	111	149
D1GP103091	9.1	89	124	D1GP103121	12.1	111	149
D1GP103092	9.2	92	127	D1GP103122	12.2	111	149
D1GP103093	9.3	92	127	D1GP103123	12.3	111	149
D1GP103094	9.4	92	127	D1GP103124	12.4	114	152
D1GP103095	9.5	92	127	D1GP103125	12.5	114	152
D1GP103096	9.6	95	130	D1GP103126	12.6	114	152
D1GP103097	9.7	95	130	D1GP103127	12.7	114	152
D1GP103098	9.8	95	130	D1GP103128	12.8	114	152
D1GP103099	9.9	95	130	D1GP103129	12.9	114	152
D1GP103100	10.0	95	130	D1GP103130	13.0	114	152
D1GP103101	10.1	98	133				

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●				○	○	○	○	●		



HSSCo8 Straight Shank Regular Length Gold-P Coated Drills(JIS)



HSS Co8
N 33°
h8
135°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°
- under 1.6mm : Normal point
- 1.6mm & over : Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in stainless steels, materials of difficult machinability such as titanium alloy and inconel

D2GP191

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D2GP191010	1.0	18	40
D2GP191011	1.1	20	42
D2GP191012	1.2	20	42
D2GP191013	1.3	22	45
D2GP191014	1.4	23	48
D2GP191015	1.5	23	48
D2GP191016	1.6	25	50
D2GP191017	1.7	25	50
D2GP191018	1.8	28	52
D2GP191019	1.9	28	52
D2GP191020	2.0	29	55
D2GP191021	2.1	29	55
D2GP191022	2.2	33	58
D2GP191023	2.3	33	58
D2GP191024	2.4	35	61
D2GP191025	2.5	35	61
D2GP191026	2.6	37	64
D2GP191027	2.7	37	64
D2GP191028	2.8	39	67
D2GP191029	2.9	42	71
D2GP191030	3.0	42	71
D2GP191031	3.1	42	71
D2GP191032	3.2	42	71
D2GP191033	3.3	45	73
D2GP191034	3.4	45	73
D2GP191035	3.5	45	73
D2GP191036	3.6	48	76
D2GP191037	3.7	48	76
D2GP191038	3.8	48	76
D2GP191039	3.9	51	79
D2GP191040	4.0	54	83

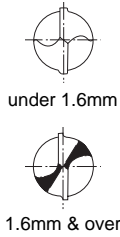
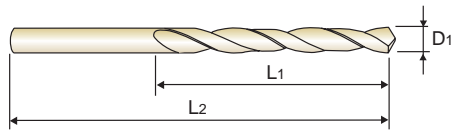
EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D2GP191041	4.1	54	83
D2GP191042	4.2	54	83
D2GP191043	4.3	54	83
D2GP191044	4.4	56	86
D2GP191045	4.5	56	86
D2GP191046	4.6	56	86
D2GP191047	4.7	59	89
D2GP191048	4.8	59	89
D2GP191049	4.9	62	92
D2GP191050	5.0	62	92
D2GP191051	5.1	62	92
D2GP191052	5.2	64	95
D2GP191053	5.3	64	95
D2GP191054	5.4	64	95
D2GP191055	5.5	64	95
D2GP191056	5.6	67	98
D2GP191057	5.7	67	98
D2GP191058	5.8	67	98
D2GP191059	5.9	67	98
D2GP191060	6.0	70	102
D2GP191061	6.1	70	102
D2GP191062	6.2	70	102
D2GP191063	6.3	70	102
D2GP191064	6.4	73	105
D2GP191065	6.5	73	105
D2GP191066	6.6	73	105
D2GP191067	6.7	73	105
D2GP191068	6.8	73	105
D2GP191069	6.9	73	105
D2GP191070	7.0	73	105
D2GP191071	7.1	75	108

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●				○	○	○	○	○		



HSSCo8 Straight Shank Regular Length Gold-P Coated Drills(JIS)



HSS Co8
N 33°
h8
135°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°
- ▶ **Surface Treatment** : under 1.6mm : Normal point
1.6mm & over : Split point
- ▶ **Application** : Bright body TiN coating on working part
: Drilling in stainless steels, materials of difficult machinability such as titanium alloy and inconel

D2GP191

Unit : mm

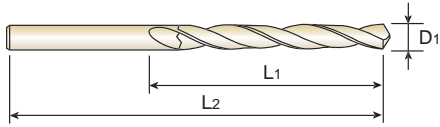
EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D2GP191072	7.2	75	108	D2GP191102	10.2	98	133
D2GP191073	7.3	75	108	D2GP191103	10.3	98	133
D2GP191074	7.4	78	111	D2GP191104	10.4	98	133
D2GP191075	7.5	78	111	D2GP191105	10.5	100	137
D2GP191076	7.6	78	111	D2GP191106	10.6	100	137
D2GP191077	7.7	81	114	D2GP191107	10.7	100	137
D2GP191078	7.8	81	114	D2GP191108	10.8	103	140
D2GP191079	7.9	81	114	D2GP191109	10.9	103	140
D2GP191080	8.0	81	114	D2GP191110	11.0	103	140
D2GP191081	8.1	84	117	D2GP191111	11.1	103	140
D2GP191082	8.2	84	117	D2GP191112	11.2	106	143
D2GP191083	8.3	84	117	D2GP191113	11.3	106	143
D2GP191084	8.4	87	121	D2GP191114	11.4	106	143
D2GP191085	8.5	87	121	D2GP191115	11.5	106	143
D2GP191086	8.6	87	121	D2GP191116	11.6	109	146
D2GP191087	8.7	87	121	D2GP191117	11.7	109	146
D2GP191088	8.8	89	124	D2GP191118	11.8	109	146
D2GP191089	8.9	89	124	D2GP191119	11.9	109	146
D2GP191090	9.0	89	124	D2GP191120	12.0	111	149
D2GP191091	9.1	89	124	D2GP191121	12.1	111	149
D2GP191092	9.2	92	127	D2GP191122	12.2	111	149
D2GP191093	9.3	92	127	D2GP191123	12.3	111	149
D2GP191094	9.4	92	127	D2GP191124	12.4	114	152
D2GP191095	9.5	92	127	D2GP191125	12.5	114	152
D2GP191096	9.6	95	130	D2GP191126	12.6	114	152
D2GP191097	9.7	95	130	D2GP191127	12.7	114	152
D2GP191098	9.8	95	130	D2GP191128	12.8	114	152
D2GP191099	9.9	95	130	D2GP191129	12.9	114	152
D2GP191100	10.0	95	130	D2GP191130	13.0	114	152
D2GP191101	10.1	98	133				

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●				○	○	○	○	○		



HSS Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



under 1/16



1/16 & over



- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°
under 1/16 : Normal point
1/16 & over : Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D1GP182 D1GP139

▶ Fractional sizes

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Fractional D1	Decimal		
D1GP113003	3/64	.0469	3/4	1-3/4
D1GP182004	1/16	.0625	7/8	1-7/8
D1GP182005	5/64	.0781	1	2
D1GP182006	3/32	.0938	1-1/4	2-1/4
D1GP182007	7/64	.1094	1-1/2	2-5/8
D1GP182008	1/8	.1250	1-5/8	2-3/4
D1GP182009	9/64	.1406	1-3/4	2-7/8
D1GP182010	5/32	.1563	2	3-1/8
D1GP182011	11/64	.1719	2-1/8	3-1/4
D1GP182012	3/16	.1875	2-5/16	3-1/2
D1GP182013	13/64	.2031	2-7/16	3-5/8
D1GP182014	7/32	.2188	2-1/2	3-3/4
D1GP182015	15/64	.2344	2-5/8	3-7/8
D1GP182016	1/4	.2500	2-3/4	4
D1GP182017	17/64	.2656	2-7/8	4-1/8
D1GP182018	9/32	.2813	2-15/16	4-1/4
D1GP182019	19/64	.2969	3-1/16	4-3/8
D1GP182020	5/16	.3125	3-3/16	4-1/2
D1GP182021	21/64	.3281	3-5/16	4-5/8
D1GP182022	11/32	.3438	3-7/16	4-3/4
D1GP182023	23/64	.3594	3-1/2	4-7/8
D1GP182024	3/8	.3750	3-5/8	5
D1GP182025	25/64	.3906	3-3/4	5-1/8
D1GP182026	13/32	.4063	3-7/8	5-1/4
D1GP182027	27/64	.4219	3-15/16	5-3/8
D1GP182028	7/16	.4375	4-1/16	5-1/2
D1GP182029	29/64	.4531	4-3/16	5-5/8
D1GP182030	15/32	.4688	4-5/16	5-3/4
D1GP182031	31/64	.4844	4-3/8	5-7/8
D1GP182032	1/2	.5000	4-1/2	6

▶ Letter sizes

Unit : Inch

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Letter D1	Decimal		
D1GP139101	A	.2340	2-5/8	3-7/8
D1GP139102	B	.2380	2-3/4	4
D1GP139103	C	.2420	2-3/4	4
D1GP139104	D	.2460	2-3/4	4
D1GP139105	E	.2500	2-3/4	4
D1GP139106	F	.2570	2-7/8	4-1/8
D1GP139107	G	.2610	2-7/8	4-1/8
D1GP139108	H	.2660	2-7/8	4-1/8
D1GP139109	I	.2720	2-7/8	4-1/8
D1GP139110	J	.2770	2-7/8	4-1/8
D1GP139111	K	.2810	2-15/16	4-1/4
D1GP139112	L	.2900	2-15/16	4-1/4
D1GP139113	M	.2950	3-1/16	4-3/8
D1GP139114	N	.3020	3-1/16	4-3/8
D1GP139115	O	.3160	3-3/16	4-1/2
D1GP139116	P	.3230	3-5/16	4-5/8
D1GP139117	Q	.3320	3-7/16	4-3/4
D1GP139118	R	.3390	3-7/16	4-3/4
D1GP139119	S	.3480	3-1/2	4-7/8
D1GP139120	T	.3580	3-1/2	4-7/8
D1GP139121	U	.3680	3-5/8	5
D1GP139122	V	.3770	3-5/8	5
D1GP139123	W	.3860	3-3/4	5-1/8
D1GP139124	X	.3970	3-3/4	5-1/8
D1GP139125	Y	.4040	3-7/8	5-1/4
D1GP139126	Z	.4130	3-7/8	5-1/4

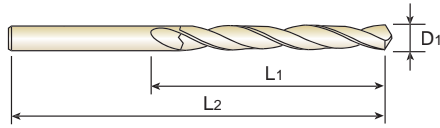
Tolerance Diameter (Inch)	
up to 1/8(.1250)	0 ~ -.0005
over 1/8(.1250) up to 1/4(.2500)	0 ~ -.0007
over 1/4(.2500) up to 1/2(.5000)	0 ~ -.0010

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSS Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



#53~56



#1~#52

ANSI HSS $N \approx 30^\circ$ h8 135° 118° P.22
 #53~56 #1~#52

- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°, Split point
Wire gauge size #53~#56: Normal point
Wire gauge size #1~#52: Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D1GP138

▶ Wire gauge sizes

Unit : Inch

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Wire gauge D1	Decimal		
D1GP138256	1	.2280	2-5/8	3-7/8
D1GP138255	2	.2210	2-5/8	3-7/8
D1GP138254	3	.2130	2-1/2	3-3/4
D1GP138253	4	.2090	2-1/2	3-3/4
D1GP138252	5	.2055	2-1/2	3-3/4
D1GP138251	6	.2040	2-1/2	3-3/4
D1GP138250	7	.2010	2-7/16	3-5/8
D1GP138249	8	.1990	2-7/16	3-5/8
D1GP138248	9	.1960	2-7/16	3-5/8
D1GP138247	10	.1935	2-7/16	3-5/8
D1GP138246	11	.1910	2-5/16	3-1/2
D1GP138245	12	.1890	2-5/16	3-1/2
D1GP138244	13	.1850	2-5/16	3-1/2
D1GP138243	14	.1820	2-3/16	3-3/8
D1GP138242	15	.1800	2-3/16	3-3/8
D1GP138241	16	.1770	2-3/16	3-3/8
D1GP138240	17	.1730	2-3/16	3-3/8
D1GP138239	18	.1695	2-1/8	3-1/4
D1GP138238	19	.1660	2-1/8	3-1/4
D1GP138237	20	.1610	2-1/8	3-1/4
D1GP138236	21	.1590	2-1/8	3-1/4
D1GP138235	22	.1570	2	3-1/8
D1GP138234	23	.1540	2	3-1/8
D1GP138233	24	.1520	2	3-1/8
D1GP138232	25	.1495	1-7/8	3
D1GP138231	26	.1470	1-7/8	3
D1GP138230	27	.1440	1-7/8	3
D1GP138229	28	.1405	1-3/4	2-7/8

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Wire gauge D1	Decimal		
D1GP138228	29	.1360	1-3/4	2-7/8
D1GP138227	30	.1285	1-5/8	2-3/4
D1GP138226	31	.1200	1-5/8	2-3/4
D1GP138225	32	.1160	1-5/8	2-3/4
D1GP138224	33	.1130	1-1/2	2-5/8
D1GP138223	34	.1110	1-1/2	2-5/8
D1GP138222	35	.1100	1-1/2	2-5/8
D1GP138221	36	.1065	1-7/16	2-1/2
D1GP138220	37	.1040	1-7/16	2-1/2
D1GP138219	38	.1015	1-7/16	2-1/2
D1GP138218	39	.0995	1-3/8	2-3/8
D1GP138217	40	.0980	1-3/8	2-3/8
D1GP138216	41	.0960	1-3/8	2-3/8
D1GP138215	42	.0935	1-1/4	2-1/4
D1GP138214	43	.0890	1-1/4	2-1/4
D1GP138213	44	.0860	1-1/8	2-1/8
D1GP138212	45	.0820	1-1/8	2-1/8
D1GP138211	46	.0810	1-1/8	2-1/8
D1GP138210	47	.0785	1	2
D1GP138209	48	.0760	1	2
D1GP138208	49	.0730	1	2
D1GP138207	50	.0700	1	2
D1GP138206	51	.0670	1	2
D1GP138205	52	.0635	7/8	1-7/8
D1GP134204	53	.0595	7/8	1-7/8
D1GP134203	54	.0550	7/8	1-7/8
D1GP134202	55	.0520	7/8	1-7/8
D1GP134201	56	.0465	3/4	1-3/4

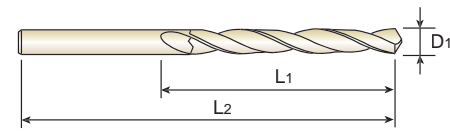
Tolerance Diameter (Inch)	
up to 1/8(.1250)	0 ~ -.0005
over 1/8(.1250) up to 1/4(.2500)	0 ~ -.0007
over 1/4(.2500) up to 1/2(.5000)	0 ~ -.0010

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSSCo8 Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



under 1/16



1/16 & over

ANSI
HSS Co8
N ≈ 30°
h8
135°
P.22

- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°
under 1/16 : Normal point
1/16 & over : Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D2GP185 D2GP186

▶ Fractional sizes

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Fractional D1	Decimal		
D2GP185003	3/64	.0469	3/4	1-3/4
D2GP185004	1/16	.0625	7/8	1-7/8
D2GP185005	5/64	.0781	1	2
D2GP185006	3/32	.0938	1-1/4	2-1/4
D2GP185007	7/64	.1094	1-1/2	2-5/8
D2GP185008	1/8	.1250	1-5/8	2-3/4
D2GP185009	9/64	.1406	1-3/4	2-7/8
D2GP185010	5/32	.1563	2	3-1/8
D2GP185011	11/64	.1719	2-1/8	3-1/4
D2GP185012	3/16	.1875	2-5/16	3-1/2
D2GP185013	13/64	.2031	2-7/16	3-5/8
D2GP185014	7/32	.2188	2-1/2	3-3/4
D2GP185015	15/64	.2344	2-5/8	3-7/8
D2GP185016	1/4	.2500	2-3/4	4
D2GP185017	17/64	.2656	2-7/8	4-1/8
D2GP185018	9/32	.2813	2-15/16	4-1/4
D2GP185019	19/64	.2969	3-1/16	4-3/8
D2GP185020	5/16	.3125	3-3/16	4-1/2
D2GP185021	21/64	.3281	3-5/16	4-5/8
D2GP185022	11/32	.3438	3-7/16	4-3/4
D2GP185023	23/64	.3594	3-1/2	4-7/8
D2GP185024	3/8	.3750	3-5/8	5
D2GP185025	25/64	.3906	3-3/4	5-1/8
D2GP185026	13/32	.4063	3-7/8	5-1/4
D2GP185027	27/64	.4219	3-15/16	5-3/8
D2GP185028	7/16	.4375	4-1/16	5-1/2
D2GP185029	29/64	.4531	4-3/16	5-5/8
D2GP185030	15/32	.4688	4-5/16	5-3/4
D2GP185031	31/64	.4844	4-3/8	5-7/8
D2GP185032	1/2	.5000	4-1/2	6

▶ Letter sizes

Unit : Inch

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Letter D1	Decimal		
D2GP186101	A	.2340	2-5/8	3-7/8
D2GP186102	B	.2380	2-3/4	4
D2GP186103	C	.2420	2-3/4	4
D2GP186104	D	.2460	2-3/4	4
D2GP185105	E	.2500	2-3/4	4
D2GP186106	F	.2570	2-7/8	4-1/8
D2GP186107	G	.2610	2-7/8	4-1/8
D2GP186108	H	.2660	2-7/8	4-1/8
D2GP186109	I	.2720	2-7/8	4-1/8
D2GP186110	J	.2770	2-7/8	4-1/8
D2GP186111	K	.2810	2-15/16	4-1/4
D2GP186112	L	.2900	2-15/16	4-1/4
D2GP186113	M	.2950	3-1/16	4-3/8
D2GP186114	N	.3020	3-1/16	4-3/8
D2GP186115	O	.3160	3-3/16	4-1/2
D2GP186116	P	.3230	3-5/16	4-5/8
D2GP186117	Q	.3320	3-7/16	4-3/4
D2GP186118	R	.3390	3-7/16	4-3/4
D2GP186119	S	.3480	3-1/2	4-7/8
D2GP186120	T	.3580	3-1/2	4-7/8
D2GP186121	U	.3680	3-5/8	5
D2GP186122	V	.3770	3-5/8	5
D2GP186123	W	.3860	3-3/4	5-1/8
D2GP186124	X	.3970	3-3/4	5-1/8
D2GP186125	Y	.4040	3-7/8	5-1/4
D2GP186126	Z	.4130	3-7/8	5-1/4

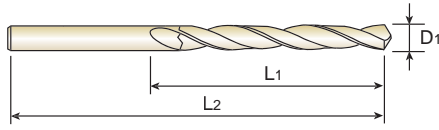
Tolerance Diameter (Inch)	
up to 1/8(.1250)	0 ~ -.0005
over 1/8(.1250) up to 1/4(.2500)	0 ~ -.0007
over 1/4(.2500) up to 1/2(.5000)	0 ~ -.0010

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC20~40	HRC45~55	HRC55~							
●	●					○	○	○	○		



HSSCo8 Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



#53-56



#1-52

ANSI HSS Co8 N ≈ 30° h8 135° P.22

- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°, Split point
Wire gauge size #53-#56: Normal point
Wire gauge size #1-#52: Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

D2GP187

▶ Wire gauge sizes

Unit : Inch

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Wire gauge D1	Decimal		
D2GP187256	1	.2280	2-5/8	3-7/8
D2GP187255	2	.2210	2-5/8	3-7/8
D2GP187254	3	.2130	2-1/2	3-3/4
D2GP187253	4	.2090	2-1/2	3-3/4
D2GP187252	5	.2055	2-1/2	3-3/4
D2GP187251	6	.2040	2-1/2	3-3/4
D2GP187250	7	.2010	2-7/16	3-5/8
D2GP187249	8	.1990	2-7/16	3-5/8
D2GP187248	9	.1960	2-7/16	3-5/8
D2GP187247	10	.1935	2-7/16	3-5/8
D2GP187246	11	.1910	2-5/16	3-1/2
D2GP187245	12	.1890	2-5/16	3-1/2
D2GP187244	13	.1850	2-5/16	3-1/2
D2GP187243	14	.1820	2-3/16	3-3/8
D2GP187242	15	.1800	2-3/16	3-3/8
D2GP187241	16	.1770	2-3/16	3-3/8
D2GP187240	17	.1730	2-3/16	3-3/8
D2GP187239	18	.1695	2-1/8	3-1/4
D2GP187238	19	.1660	2-1/8	3-1/4
D2GP187237	20	.1610	2-1/8	3-1/4
D2GP187236	21	.1590	2-1/8	3-1/4
D2GP187235	22	.1570	2	3-1/8
D2GP187234	23	.1540	2	3-1/8
D2GP187233	24	.1520	2	3-1/8
D2GP187232	25	.1495	1-7/8	3
D2GP187231	26	.1470	1-7/8	3
D2GP187230	27	.1440	1-7/8	3
D2GP187229	28	.1405	1-3/4	2-7/8

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Wire gauge D1	Decimal		
D2GP187228	29	.1360	1-3/4	2-7/8
D2GP187227	30	.1285	1-5/8	2-3/4
D2GP187226	31	.1200	1-5/8	2-3/4
D2GP187225	32	.1160	1-5/8	2-3/4
D2GP187224	33	.1130	1-1/2	2-5/8
D2GP187223	34	.1110	1-1/2	2-5/8
D2GP187222	35	.1100	1-1/2	2-5/8
D2GP187221	36	.1065	1-7/16	2-1/2
D2GP187220	37	.1040	1-7/16	2-1/2
D2GP187219	38	.1015	1-7/16	2-1/2
D2GP187218	39	.0995	1-3/8	2-3/8
D2GP187217	40	.0980	1-3/8	2-3/8
D2GP187216	41	.0960	1-3/8	2-3/8
D2GP187215	42	.0935	1-1/4	2-1/4
D2GP187214	43	.0890	1-1/4	2-1/4
D2GP187213	44	.0860	1-1/8	2-1/8
D2GP187212	45	.0820	1-1/8	2-1/8
D2GP187211	46	.0810	1-1/8	2-1/8
D2GP187210	47	.0785	1	2
D2GP187209	48	.0760	1	2
D2GP187208	49	.0730	1	2
D2GP187207	50	.0700	1	2
D2GP187206	51	.0670	1	2
D2GP187205	52	.0635	7/8	1-7/8
D2GP187204	53	.0595	7/8	1-7/8
D2GP187203	54	.0550	7/8	1-7/8
D2GP187202	55	.0520	7/8	1-7/8
D2GP187201	56	.0465	3/4	1-3/4

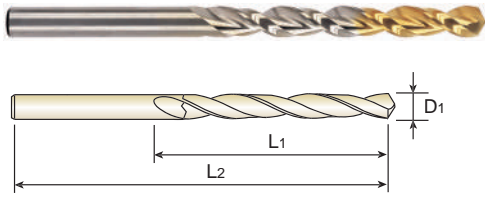
Tolerance Diameter (Inch)	
up to 1/8(.1250)	0 ~ -.0005
over 1/8(.1250) up to 1/4(.2500)	0 ~ -.0007
over 1/4(.2500) up to 1/2(.5000)	0 ~ -.0010

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225-325	HRC20-40	HRC45-55	HRC55-							
●	●					○	○	○	○		



HSS-E Straight Shank Jobber Length DH100 Type Gold-P Coated Drills(ANSI)



- ▶ **Flute Geometry** : Right hand helix, 38° helix, parabolic flute
- ▶ **Point Angle** : 130°, Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Improved chip removal in most materials, especially in deep drilling applications

DLGP511 DLGP513

▶ Fractional sizes

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Fractional D1	Decimal		
DLGP511005	5/64	.0781	1	2
DLGP511006	3/32	.0938	1-1/4	2-1/4
DLGP511007	7/64	.1094	1-1/2	2-5/8
DLGP511008	1/8	.1250	1-5/8	2-3/4
DLGP511009	9/64	.1406	1-3/4	2-7/8
DLGP511010	5/32	.1563	2	3-1/8
DLGP511011	11/64	.1719	2-1/8	3-1/4
DLGP511012	3/16	.1875	2-5/16	3-1/2
DLGP511013	13/64	.2031	2-7/16	3-5/8
DLGP511014	7/32	.2188	2-1/2	3-3/4
DLGP511015	15/64	.2344	2-5/8	3-7/8
DLGP511016	1/4	.2500	2-3/4	4
DLGP511017	17/64	.2656	2-7/8	4-1/8
DLGP511018	9/32	.2813	2-15/16	4-1/4
DLGP511019	19/64	.2969	3-1/16	4-3/8
DLGP511020	5/16	.3125	3-3/16	4-1/2
DLGP511021	21/64	.3281	3-5/16	4-5/8
DLGP511022	11/32	.3438	3-7/16	4-3/4
DLGP511023	23/64	.3594	3-1/2	4-7/8
DLGP511024	3/8	.3750	3-5/8	5
DLGP511025	25/64	.3906	3-3/4	5-1/8
DLGP511026	13/32	.4063	3-7/8	5-1/4
DLGP511027	27/64	.4219	3-15/16	5-3/8
DLGP511028	7/16	.4375	4-1/16	5-1/2
DLGP511029	29/64	.4531	4-3/16	5-5/8
DLGP511030	15/32	.4688	4-5/16	5-3/4
DLGP511031	31/64	.4844	4-3/8	5-7/8
DLGP511032	1/2	.5000	4-1/2	6

▶ Letter sizes

Unit : Inch

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Letter D1	Decimal		
DLGP513101	A	.2340	2-5/8	3-7/8
DLGP513102	B	.2380	2-3/4	4
DLGP513103	C	.2420	2-3/4	4
DLGP513104	D	.2460	2-3/4	4
DLGP511105	E	.2500	2-3/4	4
DLGP513106	F	.2570	2-7/8	4-1/8
DLGP513107	G	.2610	2-7/8	4-1/8
DLGP513108	H	.2660	2-7/8	4-1/8
DLGP513109	I	.2720	2-7/8	4-1/8
DLGP513110	J	.2770	2-7/8	4-1/8
DLGP513111	K	.2810	2-15/16	4-1/4
DLGP513112	L	.2900	2-15/16	4-1/4
DLGP513113	M	.2950	3-1/16	4-3/8
DLGP513114	N	.3020	3-1/16	4-3/8
DLGP513115	O	.3160	3-3/16	4-1/2
DLGP513116	P	.3230	3-5/16	4-5/8
DLGP513117	Q	.3320	3-7/16	4-3/4
DLGP513118	R	.3390	3-7/16	4-3/4
DLGP513119	S	.3480	3-1/2	4-7/8
DLGP513120	T	.3580	3-1/2	4-7/8
DLGP513121	U	.3680	3-5/8	5
DLGP513122	V	.3770	3-5/8	5
DLGP513123	W	.3860	3-3/4	5-1/8
DLGP513124	X	.3970	3-3/4	5-1/8
DLGP513125	Y	.4040	3-7/8	5-1/4
DLGP513126	Z	.4130	3-7/8	5-1/4

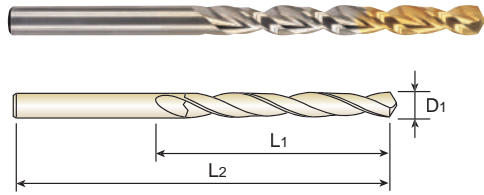
Tolerance Diameter (Inch)	
up to 1/8(.1250)	0 ~ -.0005
over 1/8(.1250) up to 1/4(.2500)	0 ~ -.0007
over 1/4(.2500) up to 1/2(.5000)	0 ~ -.0010

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225-325	HRC20-40	HRC45-55	HRC55~							
●	●				○	○			○		



HSS-E Straight Shank Jobber Length DH100 Type Gold-P Coated Drills(ANSI)



- ▶ **Flute Geometry** : Right hand helix, 38° helix, parabolic flute
- ▶ **Point Angle** : 130°, Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Improved chip removal in most materials, especially in deep drilling applications

DLGP512

▶ Wire gauge sizes

Unit : Inch

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Wire gauge	Decimal		
	D1			
DLGP512247	1	.2280	2-5/8	3-7/8
DLGP512246	2	.2210	2-5/8	3-7/8
DLGP512245	3	.2130	2-1/2	3-3/4
DLGP512244	4	.2090	2-1/2	3-3/4
DLGP512243	5	.2055	2-1/2	3-3/4
DLGP512242	6	.2040	2-1/2	3-3/4
DLGP512241	7	.2010	2-7/16	3-5/8
DLGP512240	8	.1990	2-7/16	3-5/8
DLGP512239	9	.1960	2-7/16	3-5/8
DLGP512238	10	.1935	2-7/16	3-5/8
DLGP512237	11	.1910	2-5/16	3-1/2
DLGP512236	12	.1890	2-5/16	3-1/2
DLGP512235	13	.1850	2-5/16	3-1/2
DLGP512234	14	.1820	2-3/16	3-3/8
DLGP512233	15	.1800	2-3/16	3-3/8
DLGP512232	16	.1770	2-3/16	3-3/8
DLGP512231	17	.1730	2-3/16	3-3/8
DLGP512230	18	.1695	2-1/8	3-1/4
DLGP512229	19	.1660	2-1/8	3-1/4
DLGP512228	20	.1610	2-1/8	3-1/4
DLGP512227	21	.1590	2-1/8	3-1/4
DLGP512226	22	.1570	2	3-1/8
DLGP512225	23	.1540	2	3-1/8
DLGP512224	24	.1520	2	3-1/8

EDP No.	Diameter		Flute Length L1	Overall Length L2
	Wire gauge	Decimal		
	D1			
DLGP512223	25	.1495	1-7/8	3
DLGP512222	26	.1470	1-7/8	3
DLGP512221	27	.1440	1-7/8	3
DLGP512220	28	.1405	1-3/4	2-7/8
DLGP512219	29	.1360	1-3/4	2-7/8
DLGP512218	30	.1285	1-5/8	2-3/4
DLGP512217	31	.1200	1-5/8	2-3/4
DLGP512216	32	.1160	1-5/8	2-3/4
DLGP512215	33	.1130	1-1/2	2-5/8
DLGP512214	34	.1110	1-1/2	2-5/8
DLGP512213	35	.1100	1-1/2	2-5/8
DLGP512212	36	.1065	1-7/16	2-1/2
DLGP512211	37	.1040	1-7/16	2-1/2
DLGP512210	38	.1015	1-7/16	2-1/2
DLGP512209	39	.0995	1-3/8	2-3/8
DLGP512208	40	.0980	1-3/8	2-3/8
DLGP512207	41	.0960	1-3/8	2-3/8
DLGP512206	42	.0935	1-1/4	2-1/4
DLGP512205	43	.0890	1-1/4	2-1/4
DLGP512204	44	.0860	1-1/8	2-1/8
DLGP512203	45	.0820	1-1/8	2-1/8
DLGP512202	46	.0810	1-1/8	2-1/8
DLGP512201	47	.0785	1	2

Tolerance Diameter (Inch)	
up to 1/8(.1250)	0 ~ -.0005
over 1/8(.1250) up to 1/4(.2500)	0 ~ -.0007
over 1/4(.2500) up to 1/2(.5000)	0 ~ -.0010

● : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225-325	HRC20-40	HRC45-55	HRC55-							
●	●				○	○			○		



Gold-P Coated Drills Set



DIN338 DRILL SETS JOBBER LENGTH

SET No.	DESCRIPTON	SIZE	Q'TY
D1GP165SET1	HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.0x0.5mm step	19 pcs
D1GP165SET2	HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-13.0x0.5mm step	25 pcs
D1GP165SET3	HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.5x0.5mm step +3.3 +4.2 +6.8 +10.2	24 pcs
DLGP195SET1	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.0x0.5mm step	19 pcs
DLGP195SET2	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-13.0x0.5mm step	25 pcs
DLGP195SET3	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.5x0.5mm step +3.3 +4.2 +6.8 +10.2	24 pcs
NEW DLGPSET982	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.0x0.1mm step	91 pcs

JIS DRILL SETS REGULAR LENGTH

SET No.	DESCRIPTON	SIZE	Q'TY
D1GP103SET1	HSS Straight Shank, Normal Point	1.0-10.0x0.5mm step	19 pcs
D1GP103SET2	HSS Straight Shank, Normal Point	1.0-13.0x0.5mm step	25 pcs
D2GP191SET1	HSSCo8 Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.0x0.5mm step	19 pcs
D2GP191SET2	HSSCo8 Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-13.0x0.5mm step	25 pcs

ANSI DRILL SETS JOBBER LENGTH

SET No.	Series No.	DESCRIPTON	SIZE	Q'TY
D1GP138 SET	D1GP SET924	HSS Straight Shank, Split Point (# 53 ~ # 56 : NORMAL point)	# 1~#56(Wire gauge)	56 pcs
D1GP139 SET	D1GP SET925	HSS Straight Shank, Split Point	A~Z(Letter)	26 pcs
D1GP182 SET	D1GP SET926	HSS Straight Shank, Split Point	Ø1/16~Ø1/2(Fracitional)	29 pcs
D2GP185 SET	D2GP SET927	HSSCo8 Straight Shank, Split Point	Ø1/16~Ø1/2(Fracitional)	29 pcs
D2GP186 SET	D2GP SET928	HSSCo8 Straight Shank, Split Point	A~Z(Letter)	26 pcs
D2GP187 SET	D2GP SET930	HSSCo8 Straight Shank, Split Point (# 53 ~ # 56 : NORMAL point)	# 1~#56(Wire gauge)	56 pcs
DLGP511 SET	DLGP SET931	HSSCo5 Straight Shank, Split Point	Ø5/64~Ø1/2(Fracitional)	28 pcs
DLGP512 SET	DLGP SET932	HSSCo5 Straight Shank, Split Point	# 1~#47(Wire gauge)	47 pcs
DLGP513 SET	DLGP SET933	HSSCo5 Straight Shank, Split Point	A~Z(Letter)	26 pcs



RECOMMENDED CUTTING CONDITIONS

D1GP125, D1GP165, DLGP195, D1GP103, D2GP191 SERIES

Unit : mm

WORK MATERIAL	CARBON STEELS		CARBON STEELS		ALLOY STEELS		STAINLESS STEELS		TITANIUM ALLOYS		ALUMINUM ALLOYS, ZINC ALLOYS		MAGNESIUM ALLOYS	
HARDNESS			~ HRc23		~ HRc23 ~ 34		HRc23							
STRENGTH	~ 570 N/mm ²		~ 830 N/mm ²		810 ~ 1110 N/mm ²		~ 830 N/mm ²		~ 410 N/mm ²					
DRILLING SPEED	35 ~ 45 m/min		30 ~ 40 m/min		20 ~ 25 m/min		20 ~ 25 m/min		20 ~ 25 m/min		85 ~ 95 m/min		30 ~ 35 m/min	
DIAMETER	N	S	N	S	N	S	N	S	N	S	N	S	N	S
1	14000	0.02	12500	0.02	7700	0.02	7000	0.02	8050	0.02	30000	0.02	11500	0.03
2	7000	0.06	6100	0.06	3850	0.06	3500	0.06	4050	0.06	15000	0.06	5800	0.09
3	4650	0.10	4100	0.08	2550	0.08	2350	0.08	2700	0.08	9900	0.10	3850	0.13
4	3500	0.11	3050	0.11	1950	0.10	1750	0.10	2000	0.09	7450	0.11	2900	0.15
5	2800	0.12	2450	0.11	1550	0.10	1400	0.10	1600	0.10	5950	0.12	2300	0.17
6	2350	0.14	2050	0.13	1300	0.12	1150	0.12	1350	0.12	4950	0.14	1950	0.19
7	2000	0.16	1750	0.15	1100	0.14	1000	0.14	1150	0.14	4250	0.16	1650	0.22
8	1750	0.18	1550	0.18	960	0.15	875	0.15	1000	0.15	3700	0.18	1450	0.24
9	1550	0.20	1350	0.22	855	0.18	780	0.18	895	0.17	3300	0.20	1280	0.27
10	1400	0.21	1250	0.22	770	0.18	700	0.18	805	0.18	3000	0.23	1150	0.29
11	1250	0.22	1100	0.22	700	0.18	650	0.18	730	0.18	2700	0.23	1050	0.30
12	1150	0.23	1000	0.22	650	0.20	585	0.20	670	0.20	2480	0.23	960	0.31
13	1050	0.23	950	0.22	595	0.20	540	0.20	620	0.20	2300	0.23	890	0.31

N = R.P.M

S = Feed per Revolution (mm/rev.)

DLGP506 SERIES

Unit : mm

WORK MATERIAL	CARBON STEELS ALLOY STEELS		TOOL STEELS HARDENED STEELS		SOFT GREY CAST IRON		HARD GREY CAST IRON	
HARDNESS	HRc15 ~ 30		HRc20 ~ 40					
STRENGTH	700 ~ 1000 N/mm ²		800 ~ 1200 N/mm ²					
DRILLING SPEED	23 ~ 28 m/min		15 ~ 20 m/min		40 ~ 50 m/min		25 ~ 30 m/min	
DIAMETER	N	S	N	S	N	S	N	S
1	8750	0.02	6300	0.02	16000	0.02	9800	0.02
2	4400	0.06	3150	0.06	7900	0.07	4900	0.07
3	2900	0.08	2100	0.08	5250	0.11	3250	0.11
4	2200	0.09	1600	0.09	3950	0.14	2450	0.14
5	1750	0.10	1250	0.10	3150	0.14	1950	0.14
6	1450	0.12	1050	0.12	2650	0.18	1650	0.18
7	1250	0.14	900	0.14	2250	0.20	1400	0.20
8	1100	0.15	790	0.15	1950	0.22	1250	0.22
9	975	0.17	700	0.17	1750	0.24	1100	0.24
10	875	0.18	630	0.18	1600	0.28	980	0.28
11	800	0.20	575	0.20	1450	0.28	890	0.28
12	730	0.20	525	0.20	1300	0.28	815	0.28
13	675	0.20	485	0.20	1200	0.28	755	0.28

N = R.P.M

S = Feed per Revolution (mm/rev.)



RECOMMENDED CUTTING CONDITIONS

D1GP182, D1GP139, D1GP138, D2GP185, D2GP186, D2GP187 SERIES

WORK MATERIAL			CARBON STEELS		CARBON STEELS		ALLOY STEELS		STAINLESS STEELS	
HARDNESS					~ HRc23		HRc23 ~ 34		~ HRc23	
STRENGTH			~ 570N/mm ²		~ 830N/mm ²		830~1110N/mm ²		~ 830N/mm ²	
DIAMETER			N	S	N	S	N	S	N	S
Inch	Decimal	Metric								
3/64	.0469	1.0	14000	0.0008	12500	0.0008	7700	0.0008	7000	0.0008
#47	.0785	2.0	7000	0.0023	6100	0.0024	3850	0.0024	3500	0.0024
#32	.1160	3.0	4650	0.0038	4100	0.0031	2550	0.0031	2350	0.0031
#22	.1570	4.0	3500	0.0044	3050	0.0043	1950	0.0039	1750	0.0039
#9	.1960	5.0	2800	0.0049	2450	0.0043	1550	0.0039	1400	0.0039
B	.2380	6.0	2350	0.0056	2050	0.0051	1300	0.0047	1150	0.0047
J	.2770	7.0	2000	0.0064	1750	0.0059	1100	0.0055	1000	0.0055
O	.3160	8.0	1750	0.0072	1550	0.0071	960	0.0059	875	0.0059
T	.3580	9.0	1550	0.0077	1350	0.0087	855	0.0071	780	0.0071
X	.3970	10.0	1400	0.0084	1250	0.0087	770	0.0071	700	0.0071
7/16	.4375	11.0	1250	0.0087	1100	0.0087	700	0.0071	650	0.0071
15/32	.4688	12.0	1150	0.0090	1000	0.0087	650	0.0079	585	0.0079
1/2	.5000	13.0	1050	0.0090	950	0.0087	595	0.0079	540	0.0079

WORK MATERIAL			TITANIUM ALLOYS		ALUMINUM ALLOYS, ZINC ALLOYS		MAGNESIUM ALLOYS	
HARDNESS								
STRENGTH			~410N/mm ²					
DIAMETER			N	S	N	S	N	S
Inch	Decimal	Metric						
3/64	.0469	1.0	8050	0.0008	30000	0.0008	11500	0.0012
#47	.0785	2.0	4050	0.0024	15000	0.0023	5800	0.0035
#32	.1160	3.0	2700	0.0031	9900	0.0038	3850	0.0051
#22	.1570	4.0	2000	0.0035	7450	0.0044	2900	0.0059
#9	.1960	5.0	1600	0.0039	5950	0.0049	2300	0.0067
B	.2380	6.0	1350	0.0047	4950	0.0056	1950	0.0075
J	.2770	7.0	1150	0.0055	4250	0.0064	1650	0.0087
O	.3160	8.0	1000	0.0059	3700	0.0072	1450	0.0094
T	.3580	9.0	895	0.0067	3300	0.0079	1280	0.0106
X	.3970	10.0	805	0.0071	3000	0.0090	1150	0.0114
7/16	.4375	11.0	730	0.0071	2700	0.0090	1050	0.0118
15/32	.4688	12.0	670	0.0079	2480	0.0090	960	0.0122
1/2	.5000	13.0	620	0.0079	2300	0.0090	890	0.0122

N = R.P.M
S = Inch per Revolution(inch/rev.)



RECOMMENDED CUTTING CONDITIONS

DLGP511, DLGP513, DLGP512 SERIES

WORK MATERIAL			CARBON STEELS ALLOY STEELS		TOOL STEELS HARDENED STEELS		SOFT GREY CAST IRON		HARD GREY CAST IRON	
HARDNESS			HRc15 ~ 30		HRc20 ~ 40					
STRENGTH			700 ~ 1000N/mm ²		800~1200N/mm ²					
DIAMETER			N	S	N	S	N	S	N	S
Inch	Decimal	Metric								
3/64	.0469	1.0	8750	0.0008	6300	0.0008	16000	0.0008	9800	0.0008
#47	.0785	2.0	4400	0.0022	3150	0.0022	7900	0.0027	4900	0.0027
#32	.1160	3.0	2900	0.0032	2100	0.0032	5250	0.0043	3250	0.0043
#22	.1570	4.0	2200	0.0036	1600	0.0036	3950	0.0054	2450	0.0054
#9	.1960	5.0	1750	0.0041	1250	0.0041	3150	0.0054	1950	0.0054
B	.2380	6.0	1450	0.0047	1050	0.0047	2650	0.0069	1650	0.0069
J	.2770	7.0	1250	0.0054	900	0.0054	2250	0.0078	1400	0.0078
O	.3160	8.0	1100	0.0060	790	0.0060	1950	0.0087	1250	0.0087
T	.3580	9.0	975	0.0066	700	0.0066	1750	0.0095	1100	0.0095
X	.3970	10.0	875	0.0071	630	0.0071	1600	0.0108	980	0.0108
7/16	.4375	11.0	800	0.0077	575	0.0077	1450	0.0108	890	0.0108
15/32	.4688	12.0	730	0.0077	525	0.0077	1300	0.0108	815	0.0108
1/2	.5000	13.0	675	0.0077	485	0.0077	1200	0.0108	755	0.0108


N = R.P.M
S = Inch per Revolution(inch/rev.)

MEMO



MEMO





Gold-P Drills

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Tool specifications are subject to change without notice.