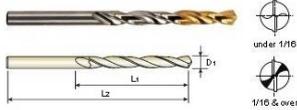




HSS Straight Shank Jobber Length
 Gold-P Coated Drills(ANSI)



- ANSI HSS $\approx 30^\circ$ h8 135° P.22
- Flute Geometry : Right hand helix, wider flutes
- Point Angle : 135°
- Point Angle : under 1/16
- Point Angle : 1/16 & over
- 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

D10P182 D10P133

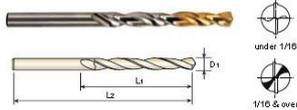
EDP No.	Diameter		Flute Length	Overall Length	EDP No.	Diameter		Flute Length	Overall Length
	Fractional	Decimal				Letter	Decimal		
D1GP113003	3/64	.0469	3/4	1-3/4	D1GP139101	A	.2340	2-5/8	3-7/8
D1GP182004	1/16	.0625	7/8	1-7/8	D1GP139102	B	.2380	2-3/4	4
D1GP182005	5/64	.0781	1	2	D1GP139103	C	.2420	2-3/4	4
D1GP182006	3/32	.0938	1-1/4	2-1/4	D1GP139104	D	.2460	2-3/4	4
D1GP182007	7/64	.1094	1-1/2	2-5/8	D1GP139105	E	.2500	2-3/4	4
D1GP182008	1/8	.1250	1-5/8	2-3/4	D1GP139106	F	.2570	2-7/8	4-1/8
D1GP182009	9/64	.1406	1-3/4	2-7/8	D1GP139107	G	.2610	2-7/8	4-1/8
D1GP182010	5/32	.1563	2	3-1/8	D1GP139108	H	.2660	2-7/8	4-1/8
D1GP182011	11/64	.1719	2-1/8	3-1/4	D1GP139109	I	.2720	2-7/8	4-1/8
D1GP182012	3/16	.1875	2-5/16	3-1/2	D1GP139110	J	.2770	2-7/8	4-1/8
D1GP182013	13/64	.2031	2-7/16	3-5/8	D1GP139111	K	.2810	2-15/16	4-1/4
D1GP182014	7/32	.2188	2-1/2	3-3/4	D1GP139112	L	.2900	2-15/16	4-1/4
D1GP182015	15/64	.2344	2-5/8	3-7/8	D1GP139113	M	.2950	3-1/16	4-3/8
D1GP182016	1/4	.2500	2-3/4	4	D1GP139114	N	.3020	3-1/16	4-3/8
D1GP182017	17/64	.2656	2-7/8	4-1/8	D1GP139115	O	.3160	3-3/16	4-1/2
D1GP182018	9/32	.2813	2-15/16	4-1/4	D1GP139116	P	.3230	3-5/16	4-5/8
D1GP182019	19/64	.2969	3-1/16	4-3/8	D1GP139117	Q	.3320	3-7/16	4-3/4
D1GP182020	5/16	.3125	3-5/16	4-1/2	D1GP139118	R	.3390	3-7/16	4-3/4
D1GP182021	21/64	.3281	3-5/16	4-5/8	D1GP139119	S	.3480	3-1/2	4-7/8
D1GP182022	11/32	.3438	3-7/16	4-3/4	D1GP139120	T	.3580	3-1/2	4-7/8
D1GP182023	23/64	.3594	3-1/2	4-7/8	D1GP139121	U	.3680	3-5/8	5
D1GP182024	3/8	.3750	3-5/8	5	D1GP139122	V	.3770	3-5/8	5
D1GP182025	25/64	.3906	3-3/4	5-1/8	D1GP139123	W	.3860	3-3/4	5-1/8
D1GP182026	13/32	.4063	3-7/8	5-1/4	D1GP139124	X	.3960	3-3/4	5-1/8
D1GP182027	27/64	.4219	3-15/16	5-3/8	D1GP139125	Y	.4040	3-7/8	5-1/4
D1GP182028	7/16	.4375	4-1/16	5-1/2	D1GP139126	Z	.4130	3-7/8	5-1/4
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					

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

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels	Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HR225	HR225-325	HR20-40	HR45-65 HR65-							



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



- ANSI HSS Co8 $\approx 30^\circ$ h8 135° P.22
- Flute Geometry : Right hand helix, wider flutes
- Point Angle : 135°
- Point Angle : under 1/16
- Point Angle : 1/16 & over
- 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

D20P188 D20P188

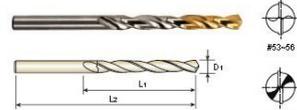
EDP No.	Diameter		Flute Length	Overall Length	EDP No.	Diameter		Flute Length	Overall Length
	Fractional	Decimal				Letter	Decimal		
D2GP185003	3/64	.0469	3/4	1-3/4	D2GP186101	A	.2340	2-5/8	3-7/8
D2GP185004	1/16	.0625	7/8	1-7/8	D2GP186102	B	.2380	2-3/4	4
D2GP185005	5/64	.0781	1	2	D2GP186103	C	.2420	2-3/4	4
D2GP185006	3/32	.0938	1-1/4	2-1/4	D2GP186104	D	.2460	2-3/4	4
D2GP185007	7/64	.1094	1-1/2	2-5/8	D2GP186105	E	.2500	2-3/4	4
D2GP185008	1/8	.1250	1-5/8	2-3/4	D2GP186106	F	.2570	2-7/8	4-1/8
D2GP185009	9/64	.1406	1-3/4	2-7/8	D2GP186107	G	.2610	2-7/8	4-1/8
D2GP185010	5/32	.1563	2	3-1/8	D2GP186108	H	.2660	2-7/8	4-1/8
D2GP185011	11/64	.1719	2-1/8	3-1/4	D2GP186109	I	.2720	2-7/8	4-1/8
D2GP185012	3/16	.1875	2-5/16	3-1/2	D2GP186110	J	.2770	2-7/8	4-1/8
D2GP185013	13/64	.2031	2-7/16	3-5/8	D2GP186111	K	.2810	2-15/16	4-1/4
D2GP185014	7/32	.2188	2-1/2	3-3/4	D2GP186112	L	.2900	2-15/16	4-1/4
D2GP185015	15/64	.2344	2-5/8	3-7/8	D2GP186113	M	.2950	3-1/16	4-3/8
D2GP185016	1/4	.2500	2-3/4	4	D2GP186114	N	.3020	3-1/16	4-3/8
D2GP185017	17/64	.2656	2-7/8	4-1/8	D2GP186115	O	.3160	3-3/16	4-1/2
D2GP185018	9/32	.2813	2-15/16	4-1/4	D2GP186116	P	.3230	3-5/16	4-5/8
D2GP185019	19/64	.2969	3-1/16	4-3/8	D2GP186117	Q	.3320	3-7/16	4-3/4
D2GP185020	5/16	.3125	3-5/16	4-1/2	D2GP186118	R	.3390	3-7/16	4-3/4
D2GP185021	21/64	.3281	3-5/16	4-5/8	D2GP186119	S	.3480	3-1/2	4-7/8
D2GP185022	11/32	.3438	3-7/16	4-3/4	D2GP186120	T	.3580	3-1/2	4-7/8
D2GP185023	23/64	.3594	3-1/2	4-7/8	D2GP186121	U	.3680	3-5/8	5
D2GP185024	3/8	.3750	3-5/8	5	D2GP186122	V	.3770	3-5/8	5
D2GP185025	25/64	.3906	3-3/4	5-1/8	D2GP186123	W	.3860	3-3/4	5-1/8
D2GP185026	13/32	.4063	3-7/8	5-1/4	D2GP186124	X	.3960	3-3/4	5-1/8
D2GP185027	27/64	.4219	3-15/16	5-3/8	D2GP186125	Y	.4040	3-7/8	5-1/4
D2GP185028	7/16	.4375	4-1/16	5-1/2	D2GP186126	Z	.4130	3-7/8	5-1/4
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					

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

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels	Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HR225	HR225-325	HR20-40	HR45-65 HR65-							



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



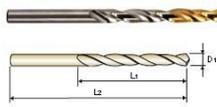
- ANSI HSS $\approx 30^\circ$ h8 135° 118° P.22
- Flute Geometry : Right hand helix, wider flutes
- Point Angle : 135° Split point
- Point Angle : 118° Split point
- Point Angle : Wire gauge size #3-#50 Normal point
- Point Angle : Wire gauge size #1-#52 Split point
- Surface Treatment : Bright body TiN coating on working part
- Application : Drilling in steel, cast steel alloyed and Non alloyed, grey cast iron, graphite, malleable cast iron

D10P138

EDP No.	Diameter		Flute Length	Overall Length	EDP No.	Diameter		Flute Length	Overall Length
	Wire gauge	Decimal				Wire gauge	Decimal		
D1GP138256	1	.2280	2-5/8	3-7/8	D1GP138228	29	.1360	1-3/4	2-7/8
D1GP138255	2	.2210	2-5/8	3-7/8	D1GP138227	30	.1285	1-5/8	2-3/4
D1GP138254	3	.2130	2-1/2	3-3/4	D1GP138226	31	.1200	1-5/8	2-3/4
D1GP138253	4	.2090	2-1/2	3-3/4	D1GP138225	32	.1160	1-5/8	2-3/4
D1GP138252	5	.2055	2-1/2	3-3/4	D1GP138224	33	.1130	1-1/2	2-5/8
D1GP138251	6	.2040	2-1/2	3-3/4	D1GP138223	34	.1110	1-1/2	2-5/8
D1GP138250	7	.2010	2-7/16	3-5/8	D1GP138222	35	.1100	1-1/2	2-5/8
D1GP138249	8	.1990	2-7/16	3-5/8	D1GP138221	36	.1065	1-7/16	2-1/2
D1GP138248	9	.1960	2-7/16	3-5/8	D1GP138220	37	.1040	1-7/16	2-1/2
D1GP138247	10	.1935	2-7/16	3-5/8	D1GP138219	38	.1015	1-7/16	2-1/2
D1GP138246	11	.1910	2-5/16	3-1/2	D1GP138218	39	.0995	1-3/8	2-3/8
D1GP138245	12	.1890	2-5/16	3-1/2	D1GP138217	40	.0980	1-3/8	2-3/8
D1GP138244	13	.1850	2-5/16	3-1/2	D1GP138216	41	.0960	1-3/8	2-3/8
D1GP138243	14	.1820	2-3/16	3-3/8	D1GP138215	42	.0935	1-1/4	2-1/4
D1GP138242	15	.1800	2-3/16	3-3/8	D1GP138214	43	.0890	1-1/4	2-1/4
D1GP138241	16	.1770	2-3/16	3-3/8	D1GP138213	44	.0860	1-1/8	2-1/8
D1GP138240	17	.1730	2-3/16	3-3/8	D1GP138212	45	.0820	1-1/8	2-1/8
D1GP138239	18	.1695	2-1/8	3-1/4	D1GP138211	46	.0810	1-1/8	2-1/8
D1GP138238	19	.1660	2-1/8	3-1/4	D1GP138210	47	.0785	1	2
D1GP138237	20	.1610	2-1/8	3-1/4	D1GP138209	48	.0760	1	2
D1GP138236	21	.1590	2-1/8	3-1/4	D1GP138208	49	.0730	1	2
D1GP138235	22	.1570	2	3-1/8	D1GP138207	50	.0700	1	2
D1GP138234	23	.1540	2	3-1/8	D1GP138206	51	.0670	1	2
D1GP138233	24	.1520	2	3-1/8	D1GP138205	52	.0635	7/8	1-7/8
D1GP138232									



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



- HSS Co8** N 33 h8 135° P.21
- ▶ Flute Geometry : Right hand helix : 135°
- ▶ Point Angle : 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

D2QP101

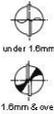
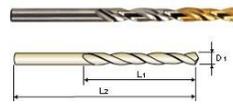
Unit : mm

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2	EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2
D2GP191010	1.0	19	40	D2GP191041	4.1	54	83
D2GP191011	1.1	20	42	D2GP191042	4.2	54	83
D2GP191012	1.2	20	42	D2GP191043	4.3	54	83
D2GP191013	1.3	22	45	D2GP191044	4.4	56	86
D2GP191014	1.4	23	48	D2GP191045	4.5	56	86
D2GP191015	1.5	23	48	D2GP191046	4.6	56	86
D2GP191016	1.6	25	50	D2GP191047	4.7	59	89
D2GP191017	1.7	25	50	D2GP191048	4.8	59	89
D2GP191018	1.8	28	52	D2GP191049	4.9	62	92
D2GP191019	1.9	28	52	D2GP191050	5.0	62	92
D2GP191020	2.0	29	55	D2GP191051	5.1	62	92
D2GP191021	2.1	29	55	D2GP191052	5.2	64	95
D2GP191022	2.2	33	58	D2GP191053	5.3	64	95
D2GP191023	2.3	33	58	D2GP191054	5.4	64	95
D2GP191024	2.4	35	61	D2GP191055	5.5	64	95
D2GP191025	2.5	35	61	D2GP191056	5.6	67	98
D2GP191026	2.6	37	64	D2GP191057	5.7	67	98
D2GP191027	2.7	37	64	D2GP191058	5.8	67	98
D2GP191028	2.8	39	67	D2GP191059	5.9	67	98
D2GP191029	2.9	42	71	D2GP191060	6.0	70	102
D2GP191030	3.0	42	71	D2GP191061	6.1	70	102
D2GP191031	3.1	42	71	D2GP191062	6.2	70	102
D2GP191032	3.2	42	71	D2GP191063	6.3	70	102
D2GP191033	3.3	45	73	D2GP191064	6.4	73	105
D2GP191034	3.4	45	73	D2GP191065	6.5	73	105
D2GP191035	3.5	45	73	D2GP191066	6.6	73	105
D2GP191036	3.6	48	76	D2GP191067	6.7	73	105
D2GP191037	3.7	48	76	D2GP191068	6.8	73	105
D2GP191038	3.8	48	76	D2GP191069	6.9	73	105
D2GP191039	3.9	51	79	D2GP191070	7.0	73	105
D2GP191040	4.0	54	83	D2GP191071	7.1	75	108

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mid Steels	Copper	Bronze
-HE225	HE225-325	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 : 135°
- ▶ Point Angle : 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

D2QP101

Unit : mm

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2	EDP No.	Drill Diameter D1	Flute Length L1	Overall Length 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	99	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	99	133				

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mid Steels	Copper	Bronze
-HE225	HE225-325	HRc20-40	HRc45-55	HRc55-							
●	●				○	○	○	○	○		