

New additions to the high precision *VIOLET* drill series.

- Stable drilling with long tool life
- Consistent hole diameters
- High precision drilling with good chip disposability

■ **VAPDS** **NEW**

Short flute, High precision
Size $\phi 0.5 - \phi 13.0$

■ **VAPDM** **NEW**

Medium flute, High precision
Size $\phi 0.5 - \phi 32.0$



VIOLET DRILLS

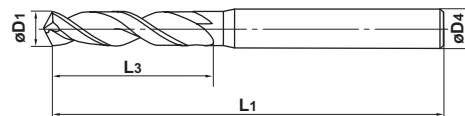
VAPDS

NEW

Short flute, High precision



All drills except those with intervals of 0.1mm and under dia. 2.0mm have a tolerance of 0—-0.009mm.



$D_1 < 2$

$2 \leq D_1$

- Highly efficient drilling and long tool life have been achieved with the newly developed Violet coating.
(Standard drilling depth : 3 x D or less)

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSD0050	0.5	3	50	3	●
NEW D0051	0.51	3	50	3	●
NEW D0052	0.52	3	50	3	●
NEW D0053	0.53	3	50	3	●
NEW D0054	0.54	3	50	3	●
NEW D0055	0.55	3	50	3	●
NEW D0056	0.56	4	50	3	●
NEW D0057	0.57	4	50	3	●
NEW D0058	0.58	4	50	3	●
NEW D0059	0.59	4	50	3	●
D0060	0.6	5	50	3	●
NEW D0061	0.61	5	50	3	●
NEW D0062	0.62	5	50	3	●
NEW D0063	0.63	5	50	3	●
NEW D0064	0.64	5	50	3	●
NEW D0065	0.65	5	50	3	●
NEW D0066	0.66	5	50	3	●
NEW D0067	0.67	5	50	3	●
NEW D0068	0.68	5	50	3	●
NEW D0069	0.69	5	50	3	●
D0070	0.7	5	50	3	●
NEW D0071	0.71	5	50	3	●
NEW D0072	0.72	5	50	3	●
NEW D0073	0.73	5	50	3	●
NEW D0074	0.74	5	50	3	●
NEW D0075	0.75	5	50	3	●
NEW D0076	0.76	5	50	3	●
NEW D0077	0.77	5	50	3	●
NEW D0078	0.78	5	50	3	●
NEW D0079	0.79	5	50	3	●
D0080	0.8	5	50	3	●
NEW D0081	0.81	5	50	3	●
NEW D0082	0.82	5	50	3	●
NEW D0083	0.83	5	50	3	●
NEW D0084	0.84	5	50	3	●
NEW D0085	0.85	5	50	3	●
NEW D0086	0.86	6	50	3	●
NEW D0087	0.87	6	50	3	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
NEW VAPDSD0088	0.88	6	50	3	●
NEW D0089	0.89	6	50	3	●
NEW D0090	0.9	6	50	3	●
NEW D0091	0.91	6	50	3	●
NEW D0092	0.92	6	50	3	●
NEW D0093	0.93	6	50	3	●
NEW D0094	0.94	6	50	3	●
NEW D0095	0.95	6	50	3	●
NEW D0096	0.96	6	50	3	●
NEW D0097	0.97	6	50	3	●
NEW D0098	0.98	6	50	3	●
NEW D0099	0.99	6	50	3	●
D0100	1.0	6	50	3	●
NEW D0101	1.01	6	50	3	●
NEW D0102	1.02	6	50	3	●
NEW D0103	1.03	6	50	3	●
NEW D0104	1.04	6	50	3	●
NEW D0105	1.05	6	50	3	●
NEW D0106	1.06	6	50	3	●
NEW D0107	1.07	8	55	3	●
NEW D0108	1.08	8	55	3	●
NEW D0109	1.09	8	55	3	●
D0110	1.1	8	55	3	●
NEW D0111	1.11	8	55	3	●
NEW D0112	1.12	8	55	3	●
NEW D0113	1.13	8	55	3	●
NEW D0114	1.14	8	55	3	●
NEW D0115	1.15	8	55	3	●
NEW D0116	1.16	8	55	3	●
NEW D0117	1.17	8	55	3	●
NEW D0118	1.18	8	55	3	●
NEW D0119	1.19	8	55	3	●
D0120	1.2	8	55	3	●
NEW D0121	1.21	8	55	3	●
NEW D0122	1.22	8	55	3	●
NEW D0123	1.23	8	55	3	●
NEW D0124	1.24	8	55	3	●
NEW D0125	1.25	8	55	3	●

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
NEW VAPDSD0126	1.26	8	55	3	●
NEW D0127	1.27	8	55	3	●
NEW D0128	1.28	8	55	3	●
NEW D0129	1.29	8	55	3	●
D0130	1.3	9	55	3	●
NEW D0131	1.31	9	55	3	●
NEW D0132	1.32	9	55	3	●
NEW D0133	1.33	9	55	3	●
NEW D0134	1.34	9	55	3	●
NEW D0135	1.35	9	55	3	●
NEW D0136	1.36	9	55	3	●
NEW D0137	1.37	9	55	3	●
NEW D0138	1.38	9	55	3	●
NEW D0139	1.39	9	55	3	●
D0140	1.4	9	55	3	●
NEW D0141	1.41	9	55	3	●
NEW D0142	1.42	9	55	3	●
NEW D0143	1.43	9	55	3	●
NEW D0144	1.44	9	55	3	●
NEW D0145	1.45	9	55	3	●
NEW D0146	1.46	9	55	3	●
NEW D0147	1.47	9	55	3	●
NEW D0148	1.48	9	55	3	●
NEW D0149	1.49	9	55	3	●
D0150	1.5	9	55	3	●
NEW D0151	1.51	11	55	3	●
NEW D0152	1.52	11	55	3	●
NEW D0153	1.53	11	55	3	●
NEW D0154	1.54	11	55	3	●
NEW D0155	1.55	11	55	3	●
NEW D0156	1.56	11	55	3	●
NEW D0157	1.57	11	55	3	●
NEW D0158	1.58	11	55	3	●
NEW D0159	1.59	11	55	3	●
D0160	1.6	11	55	3	●
NEW D0161	1.61	11	55	3	●
NEW D0162	1.62	11	55	3	●
NEW D0163	1.63	11	55	3	●
NEW D0164	1.64	11	55	3	●
NEW D0165	1.65	11	55	3	●
NEW D0166	1.66	11	55	3	●
NEW D0167	1.67	11	55	3	●
NEW D0168	1.68	11	55	3	●
NEW D0169	1.69	11	55	3	●
D0170	1.7	11	55	3	●
NEW D0171	1.71	11	55	3	●
NEW D0172	1.72	11	55	3	●
NEW D0173	1.73	11	55	3	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
NEW VAPDSD0174	1.74	11	55	3	●
NEW D0175	1.75	11	55	3	●
NEW D0176	1.76	11	55	3	●
NEW D0177	1.77	11	55	3	●
NEW D0178	1.78	11	55	3	●
NEW D0179	1.79	11	55	3	●
D0180	1.8	11	55	3	●
NEW D0181	1.81	11	55	3	●
NEW D0182	1.82	11	55	3	●
NEW D0183	1.83	11	55	3	●
NEW D0184	1.84	11	55	3	●
NEW D0185	1.85	11	55	3	●
NEW D0186	1.86	11	55	3	●
NEW D0187	1.87	11	55	3	●
NEW D0188	1.88	11	55	3	●
NEW D0189	1.89	11	55	3	●
D0190	1.9	12	55	3	●
NEW D0191	1.91	12	60	3	●
NEW D0192	1.92	12	60	3	●
NEW D0193	1.93	12	60	3	●
NEW D0194	1.94	12	60	3	●
NEW D0195	1.95	12	60	3	●
NEW D0196	1.96	12	60	3	●
NEW D0197	1.97	12	60	3	●
NEW D0198	1.98	12	60	3	●
NEW D0199	1.99	12	60	3	●
D0200	2.0	12	60	3	●
NEW D0205	2.05	12	60	3	●
D0210	2.1	12	60	3	●
NEW D0215	2.15	12	60	3	●
D0220	2.2	12	60	3	●
NEW D0225	2.25	12	60	3	●
D0230	2.3	13	60	3	●
NEW D0235	2.35	13	60	3	●
D0240	2.4	13	60	3	●
NEW D0245	2.45	13	60	3	●
D0250	2.5	13	60	3	●
NEW D0255	2.55	13	60	3	●
D0260	2.6	15	60	3	●
NEW D0265	2.65	15	60	3	●
D0270	2.7	15	60	3	●
NEW D0275	2.75	15	60	3	●
D0280	2.8	15	60	3	●
NEW D0285	2.85	15	60	3	●
D0290	2.9	15	60	3	●
NEW D0295	2.95	15	60	3	●
D0300	3.0	15	60	3	●
NEW D0305	3.05	17	70	4	●

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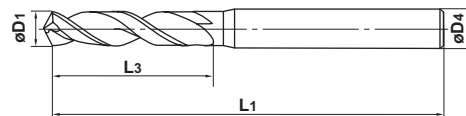
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$D_1 < 2$

$2 \leq D_1$

- Highly efficient drilling and long tool life have been achieved with the newly developed Violet coating.
(Standard drilling depth : 3 x D or less)

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSD0310	3.1	17	70	4	●
NEW D0315	3.15	17	70	4	●
D0320	3.2	17	70	4	●
NEW D0325	3.25	17	70	4	●
D0330	3.3	19	70	4	●
NEW D0335	3.35	19	70	4	●
D0340	3.4	19	70	4	●
NEW D0345	3.45	19	70	4	●
D0350	3.5	19	70	4	●
NEW D0355	3.55	19	70	4	●
D0360	3.6	21	70	4	●
NEW D0365	3.65	21	70	4	●
D0370	3.7	21	70	4	●
NEW D0375	3.75	21	70	4	●
D0380	3.8	21	70	4	●
NEW D0385	3.85	21	70	4	●
D0390	3.9	21	70	4	●
NEW D0395	3.95	21	70	4	●
D0400	4.0	21	70	4	●
NEW D0405	4.05	21	80	6	●
D0410	4.1	21	80	6	●
NEW D0415	4.15	21	80	6	●
D0420	4.2	21	80	6	●
NEW D0425	4.25	21	80	6	●
D0430	4.3	23	80	6	●
NEW D0435	4.35	23	80	6	●
D0440	4.4	23	80	6	●
NEW D0445	4.45	23	80	6	●
D0450	4.5	23	80	6	●
NEW D0455	4.55	23	80	6	●
D0460	4.6	25	80	6	●
NEW D0465	4.65	25	80	6	●
D0470	4.7	25	80	6	●
NEW D0475	4.75	25	80	6	●
D0480	4.8	25	80	6	●
NEW D0485	4.85	25	80	6	●
D0490	4.9	25	80	6	●
NEW D0495	4.95	25	80	6	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSD0500	5.0	25	80	6	●
NEW D0505	5.05	25	80	6	●
D0510	5.1	25	80	6	●
NEW D0515	5.15	25	80	6	●
D0520	5.2	25	80	6	●
NEW D0525	5.25	25	80	6	●
D0530	5.3	25	80	6	●
NEW D0535	5.35	27	80	6	●
D0540	5.4	27	80	6	●
NEW D0545	5.45	27	80	6	●
D0550	5.5	27	80	6	●
NEW D0555	5.55	27	80	6	●
D0560	5.6	27	80	6	●
NEW D0565	5.65	27	80	6	●
D0570	5.7	27	80	6	●
NEW D0575	5.75	27	80	6	●
D0580	5.8	27	80	6	●
NEW D0585	5.85	27	80	6	●
D0590	5.9	27	80	6	●
NEW D0595	5.95	27	80	6	●
D0600	6.0	27	80	6	●
NEW D0605	6.05	30	80	8	●
D0610	6.1	30	80	8	●
NEW D0615	6.15	30	80	8	●
D0620	6.2	30	80	8	●
NEW D0625	6.25	30	80	8	●
D0630	6.3	30	80	8	●
NEW D0635	6.35	30	80	8	●
D0640	6.4	30	80	8	●
NEW D0645	6.45	30	80	8	●
D0650	6.5	30	80	8	●
NEW D0655	6.55	30	80	8	●
D0660	6.6	30	80	8	●
NEW D0665	6.65	30	80	8	●
D0670	6.7	30	80	8	●
NEW D0675	6.75	32	80	8	●
D0680	6.8	32	80	8	●
NEW D0685	6.85	32	80	8	●

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSD0690	6.9	32	80	8	●
NEW D0695	6.95	32	80	8	●
D0700	7.0	32	80	8	●
NEW D0705	7.05	32	80	8	●
D0710	7.1	32	80	8	●
NEW D0715	7.15	32	80	8	●
D0720	7.2	32	80	8	●
NEW D0725	7.25	32	80	8	●
D0730	7.3	32	80	8	●
NEW D0735	7.35	32	80	8	●
D0740	7.4	32	80	8	●
NEW D0745	7.45	32	80	8	●
D0750	7.5	32	80	8	●
NEW D0755	7.55	35	85	8	●
D0760	7.6	35	85	8	●
NEW D0765	7.65	35	85	8	●
D0770	7.7	35	85	8	●
NEW D0775	7.75	35	85	8	●
D0780	7.8	35	85	8	●
NEW D0785	7.85	35	85	8	●
D0790	7.9	35	85	8	●
NEW D0795	7.95	35	85	8	●
D0800	8.0	35	85	8	●
NEW D0805	8.05	35	90	10	●
D0810	8.1	35	90	10	●
NEW D0815	8.15	35	90	10	●
D0820	8.2	35	90	10	●
NEW D0825	8.25	35	90	10	●
D0830	8.3	35	90	10	●
NEW D0835	8.35	35	90	10	●
D0840	8.4	35	90	10	●
NEW D0845	8.45	35	90	10	●
D0850	8.5	35	90	10	●
NEW D0855	8.55	38	93	10	●
D0860	8.6	38	93	10	●
NEW D0865	8.65	38	93	10	●
D0870	8.7	38	93	10	●
NEW D0875	8.75	38	93	10	●
D0880	8.8	38	93	10	●
NEW D0885	8.85	38	93	10	●
D0890	8.9	38	93	10	●
NEW D0895	8.95	38	93	10	●
D0900	9.0	38	93	10	●
NEW D0905	9.05	38	93	10	●
D0910	9.1	38	93	10	●
NEW D0915	9.15	38	93	10	●
D0920	9.2	38	93	10	●
NEW D0925	9.25	38	93	10	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSD0930	9.3	38	93	10	●
NEW D0935	9.35	38	93	10	●
D0940	9.4	38	93	10	●
NEW D0945	9.45	38	93	10	●
D0950	9.5	38	93	10	●
NEW D0955	9.55	41	96	10	●
D0960	9.6	41	96	10	●
NEW D0965	9.65	41	96	10	●
D0970	9.7	41	96	10	●
NEW D0975	9.75	41	96	10	●
D0980	9.8	41	96	10	●
NEW D0985	9.85	41	96	10	●
D0990	9.9	41	96	10	●
NEW D0995	9.95	41	96	10	●
D1000	10.0	41	96	10	●
NEW D1005	10.05	41	101	12	●
D1010	10.1	41	101	12	●
NEW D1015	10.15	41	101	12	●
D1020	10.2	41	101	12	●
NEW D1025	10.25	41	101	12	●
D1030	10.3	41	101	12	●
NEW D1035	10.35	41	101	12	●
D1040	10.4	41	101	12	●
NEW D1045	10.45	41	101	12	●
D1050	10.5	41	101	12	●
NEW D1055	10.55	41	101	12	●
D1060	10.6	41	101	12	●
NEW D1065	10.65	45	105	12	●
D1070	10.70	45	105	12	●
NEW D1075	10.75	45	105	12	●
D1080	10.80	45	105	12	●
NEW D1085	10.85	45	105	12	●
D1090	10.90	45	105	12	●
NEW D1095	10.95	45	105	12	●
D1100	11.00	45	105	12	●
NEW D1105	11.05	45	105	12	●
D1110	11.10	45	105	12	●
NEW D1115	11.15	45	105	12	●
D1120	11.20	45	105	12	●
NEW D1125	11.25	45	105	12	●
D1130	11.30	45	105	12	●
NEW D1135	11.35	45	105	12	●
D1140	11.40	45	105	12	●
NEW D1145	11.45	45	105	12	●
D1150	11.50	45	105	12	●
NEW D1155	11.55	45	105	12	●
D1160	11.60	45	105	12	●
NEW D1165	11.65	45	105	12	●

VIOLET DRILLS

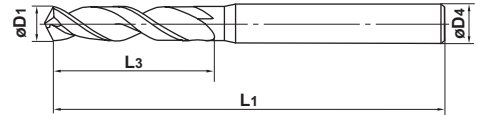
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$D_1 < 2$

$2 \leq D_1$

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(Standard drilling depth : 3 x D or less)

Unit : mm

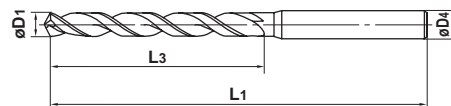
Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSD1170	11.70	45	105	12	●
NEW D1175	11.75	45	105	12	●
D1180	11.80	45	105	12	●
NEW D1185	11.85	49	109	12	●
D1190	11.90	49	109	12	●
NEW D1195	11.95	49	109	12	●
D1200	12.00	49	109	12	●
D1210	12.10	49	109	12	●
D1220	12.20	49	109	12	●
D1230	12.30	49	109	12	●
D1240	12.40	49	109	12	●
D1250	12.50	49	109	12	●
D1260	12.60	49	109	12	●
D1270	12.70	49	109	12	●
D1280	12.80	49	109	12	●
D1290	12.90	49	109	12	●
D1300	13.00	49	109	12	●

VIOLET DRILLS

VAPDM

NEW

Medium flute, High precision



$D_1 < 2$

$2 \leq D_1$

- Highly efficient drilling and long tool life have been achieved with the newly developed Violet coating.

(Standard drilling depth : 5 x D or less)

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
NEW VAPDMD0050	0.5	6	50	3	●
NEW D0055	0.55	6	50	3	●
NEW D0060	0.6	8	50	3	●
NEW D0065	0.65	8	50	3	●
NEW D0070	0.7	10	50	3	●
NEW D0075	0.75	10	50	3	●
NEW D0080	0.8	10	50	3	●
NEW D0085	0.85	10	50	3	●
NEW D0090	0.9	12	50	3	●
NEW D0095	0.95	12	50	3	●
D0100	1.0	12	60	3	●
NEW D0105	1.05	12	60	3	●
D0110	1.1	16	60	3	●
NEW D0115	1.15	16	60	3	●
D0120	1.2	16	60	3	●
NEW D0125	1.25	16	60	3	●
D0130	1.3	16	60	3	●
NEW D0135	1.35	18	60	3	●
D0140	1.4	18	60	3	●
NEW D0145	1.45	18	60	3	●
D0150	1.5	18	60	3	●
NEW D0155	1.55	20	60	3	●
D0160	1.6	20	60	3	●
NEW D0165	1.65	20	60	3	●
D0170	1.7	20	60	3	●
NEW D0175	1.75	20	60	3	●
D0180	1.8	22	60	3	●
NEW D0185	1.85	22	60	3	●
D0190	1.9	22	60	3	●
NEW D0195	1.95	23	60	3	●
D0200	2.0	23	70	3	●
NEW D0205	2.05	23	70	3	●
D0210	2.1	23	70	3	●
NEW D0215	2.15	23	70	3	●
D0220	2.2	26	70	3	●
NEW D0225	2.25	26	70	3	●
D0230	2.3	26	70	3	●
NEW D0235	2.35	26	70	3	●
D0240	2.4	29	70	3	●

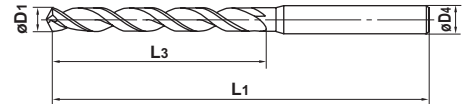
Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
NEW VAPDMD0245	2.45	29	70	3	●
D0250	2.5	29	70	3	●
NEW D0255	2.55	29	70	3	●
D0260	2.6	29	70	3	●
NEW D0265	2.65	29	70	3	●
D0270	2.7	32	70	3	●
NEW D0275	2.75	32	70	3	●
D0280	2.8	32	70	3	●
NEW D0285	2.85	32	70	3	●
D0290	2.9	32	70	3	●
NEW D0295	2.95	32	70	3	●
D0300	3.0	32	70	3	●
NEW D0305	3.05	35	85	4	●
D0310	3.1	35	85	4	●
NEW D0315	3.15	35	85	4	●
D0320	3.2	35	85	4	●
NEW D0325	3.25	35	85	4	●
D0330	3.3	35	85	4	●
NEW D0335	3.35	35	85	4	●
D0340	3.4	38	85	4	●
NEW D0345	3.45	38	85	4	●
D0350	3.5	38	85	4	●
NEW D0355	3.55	38	85	4	●
D0360	3.6	38	85	4	●
NEW D0365	3.65	38	85	4	●
D0370	3.7	38	85	4	●
NEW D0375	3.75	42	85	4	●
D0380	3.8	42	85	4	●
NEW D0385	3.85	42	85	4	●
D0390	3.9	42	85	4	●
NEW D0395	3.95	42	85	4	●
D0400	4.0	42	85	4	●
NEW D0405	4.05	42	100	6	●
D0410	4.1	42	100	6	●
NEW D0415	4.15	42	100	6	●
D0420	4.2	42	100	6	●
NEW D0425	4.25	46	100	6	●
D0430	4.3	46	100	6	●
NEW D0435	4.35	46	100	6	●

VIOLET DRILLS

VAPDM

NEW

Medium flute, High precision



$D_1 < 2$

$2 \leq D_1$

- Highly efficient drilling and long tool life have been achieved with the newly developed Violet coating.
(Standard drilling depth : 5 x D or less)

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDMD0440	4.4	46	100	6	●
NEW D0445	4.45	46	100	6	●
D0450	4.5	46	100	6	●
NEW D0455	4.55	46	100	6	●
D0460	4.6	46	100	6	●
NEW D0465	4.65	46	100	6	●
D0470	4.7	46	100	6	●
NEW D0475	4.75	46	100	6	●
D0480	4.8	51	100	6	●
NEW D0485	4.85	51	100	6	●
D0490	4.9	51	100	6	●
NEW D0495	4.95	51	100	6	●
D0500	5.0	51	100	6	●
NEW D0505	5.05	51	100	6	●
D0510	5.1	51	100	6	●
NEW D0515	5.15	51	100	6	●
D0520	5.2	51	100	6	●
NEW D0525	5.25	51	100	6	●
D0530	5.3	51	100	6	●
NEW D0535	5.35	56	106	6	●
D0540	5.4	56	106	6	●
NEW D0545	5.45	56	106	6	●
D0550	5.5	56	106	6	●
NEW D0555	5.55	56	106	6	●
D0560	5.6	56	106	6	●
NEW D0565	5.65	56	106	6	●
D0570	5.7	56	106	6	●
NEW D0575	5.75	56	106	6	●
D0580	5.8	56	106	6	●
NEW D0585	5.85	56	106	6	●
D0590	5.9	56	106	6	●
NEW D0595	5.95	56	106	6	●
D0600	6.0	56	106	6	●
NEW D0605	6.05	62	112	8	●
D0610	6.1	62	112	8	●
NEW D0615	6.15	62	112	8	●
D0620	6.2	62	112	8	●
NEW D0625	6.25	62	112	8	●
D0630	6.3	62	112	8	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
NEW VAPDMD0635	6.35	62	112	8	●
D0640	6.4	62	112	8	●
NEW D0645	6.45	62	112	8	●
D0650	6.5	62	112	8	●
NEW D0655	6.55	62	112	8	●
D0660	6.6	62	112	8	●
NEW D0665	6.65	62	112	8	●
D0670	6.7	62	112	8	●
NEW D0675	6.75	67	117	8	●
D0680	6.8	67	117	8	●
NEW D0685	6.85	67	117	8	●
D0690	6.9	67	117	8	●
NEW D0695	6.95	67	117	8	●
D0700	7.0	67	117	8	●
NEW D0705	7.05	67	117	8	●
D0710	7.1	67	117	8	●
NEW D0715	7.15	67	117	8	●
D0720	7.2	67	117	8	●
NEW D0725	7.25	67	117	8	●
D0730	7.3	67	117	8	●
NEW D0735	7.35	67	117	8	●
D0740	7.4	67	117	8	●
NEW D0745	7.45	67	117	8	●
D0750	7.5	67	117	8	●
NEW D0755	7.55	73	123	8	●
D0760	7.6	73	123	8	●
NEW D0765	7.65	73	123	8	●
D0770	7.7	73	123	8	●
NEW D0775	7.75	73	123	8	●
D0780	7.8	73	123	8	●
NEW D0785	7.85	73	123	8	●
D0790	7.9	73	123	8	●
NEW D0795	7.95	73	123	8	●
D0800	8.0	73	123	8	●
NEW D0805	8.05	73	128	10	●
D0810	8.1	73	128	10	●
NEW D0815	8.15	73	128	10	●
D0820	8.2	73	128	10	●
NEW D0825	8.25	73	128	10	●

● : Inventory maintained.

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDMD0830	8.3	73	128	10	●
NEW D0835	8.35	73	128	10	●
D0840	8.4	73	128	10	●
NEW D0845	8.45	73	128	10	●
D0850	8.5	73	128	10	●
NEW D0855	8.55	79	134	10	●
D0860	8.6	79	134	10	●
NEW D0865	8.65	79	134	10	●
D0870	8.7	79	134	10	●
NEW D0875	8.75	79	134	10	●
D0880	8.8	79	134	10	●
NEW D0885	8.85	79	134	10	●
D0890	8.9	79	134	10	●
NEW D0895	8.95	79	134	10	●
D0900	9.0	79	134	10	●
D0910	9.1	79	134	10	●
D0920	9.2	79	134	10	●
D0930	9.3	79	134	10	●
D0940	9.4	79	134	10	●
D0950	9.5	79	134	10	●
D0960	9.6	85	140	10	●
D0970	9.7	85	140	10	●
D0980	9.8	85	140	10	●
D0990	9.9	85	140	10	●
D1000	10.0	85	140	10	●
D1010	10.1	85	145	12	●
D1020	10.2	85	145	12	●
D1030	10.3	85	145	12	●
D1040	10.4	85	145	12	●
D1050	10.5	85	145	12	●
D1060	10.6	85	145	12	●
D1070	10.7	92	152	12	●
D1080	10.8	92	152	12	●
D1090	10.9	92	152	12	●
D1100	11.0	92	152	12	●
D1110	11.1	92	152	12	●
D1120	11.2	92	152	12	●
D1130	11.3	92	152	12	●
D1140	11.4	92	152	12	●
D1150	11.5	92	152	12	●
D1160	11.6	92	152	12	●
D1170	11.7	92	152	12	●
D1180	11.8	92	152	12	●
D1190	11.9	99	159	12	●
D1200	12.0	99	159	12	●
D1210	12.1	99	159	12	●
D1220	12.2	99	159	12	●
D1230	12.3	99	159	12	●
D1240	12.4	99	159	12	●
D1250	12.5	99	159	12	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDMD1260	12.6	99	159	12	●
D1270	12.7	99	159	12	●
D1280	12.8	99	159	12	●
D1290	12.9	99	159	12	●
D1300	13.0	99	159	12	●
D1350	13.5	100	160	16	●
D1400	14.0	100	160	16	●
D1410	14.1	105	165	16	●
D1420	14.2	105	165	16	●
D1450	14.5	105	165	16	●
D1500	15.0	105	165	16	●
D1550	15.5	110	170	16	●
D1560	15.6	110	170	16	●
D1570	15.7	110	170	16	●
D1600	16.0	110	170	16	●
D1650	16.5	110	175	20	●
D1700	17.0	110	175	20	●
D1750	17.5	115	180	20	●
D1760	17.6	115	180	20	●
D1770	17.7	115	180	20	●
D1800	18.0	115	180	20	●
D1850	18.5	120	185	20	●
D1900	19.0	120	185	20	●
D1950	19.5	120	185	20	●
D1960	19.6	120	185	20	●
D1970	19.7	120	185	20	●
D2000	20.0	120	185	20	●
D2050	20.5	125	200	25	●
D2100	21.0	125	200	25	●
D2110	21.1	125	200	25	●
D2120	21.2	125	200	25	●
D2150	21.5	125	200	25	●
D2200	22.0	125	200	25	●
D2250	22.5	130	205	25	●
D2300	23.0	130	205	25	●
D2350	23.5	130	205	25	●
D2400	24.0	135	210	25	●
D2450	24.5	135	210	25	●
D2500	25.0	135	210	25	●
D2550	25.5	140	220	32	●
D2600	26.0	140	220	32	●
D2650	26.5	140	220	32	●
D2700	27.0	140	220	32	●
D2800	28.0	140	220	32	●
D2900	29.0	145	225	32	●
D3000	30.0	145	225	32	●
D3100	31.0	150	230	32	●
D3200	32.0	155	235	32	●

VAPDS (Standard drilling depth : 3 x D or less)

Work material	Structural steel		Carbon steel Ck55 Alloy steel 070M55 Cast iron		Alloy tool steel X210Cr12 (Low-hardness materials) Ferritic stainless steel X10CrA118, X10CrA113 Martensitic stainless steel X20Cr13, X10CrA113		Alloy tool steel W. Nr. 1.2344 (H13) (- 40HRC) Precipitation hardening stainless steel X7CrNiAl177	
Dia. (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
0.5	18,000	0.02	16,000	0.02	9,000	0.02	8,200	0.02
1.0	12,000	0.05	10,000	0.05	6,300	0.05	5,500	0.04
2.0	6,400	0.09	5,500	0.09	3,200	0.09	2,900	0.05
3.0	4,300	0.13	3,700	0.13	2,100	0.13	1,900	0.06
4.0	3,200	0.15	2,800	0.15	1,600	0.15	1,400	0.08
5.0	2,600	0.18	2,200	0.18	1,300	0.18	1,100	0.10
6.0	2,100	0.19	1,800	0.19	1,100	0.20	950	0.11
8.0	1,600	0.24	1,400	0.24	800	0.22	720	0.13
10.0	1,300	0.28	1,100	0.28	640	0.25	570	0.15
12.0	1,100	0.34	930	0.34	530	0.30	480	0.17

VAPDM (Standard drilling depth : 5 x D or less)

Work material	Structural steel		Carbon steel Ck55 Alloy steel 070M55 Cast iron		Alloy tool steel X210Cr12 (Low-hardness materials) Ferritic stainless steel X10CrA118, X10CrA113 Martensitic stainless steel X20Cr13, X10CrA113		Alloy tool steel W. Nr. 1.2344 (H13) (- 40HRC) Precipitation hardening stainless steel X7CrNiAl177	
Dia. (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
0.5	17,000	0.01	12,800	0.01	8,000	0.01	6,600	0.01
1.0	11,000	0.05	8,300	0.05	5,000	0.05	4,100	0.04
2.0	6,400	0.09	4,800	0.09	2,900	0.06	2,400	0.05
3.0	4,300	0.13	3,200	0.13	1,900	0.10	1,600	0.06
4.0	3,200	0.15	2,400	0.15	1,400	0.10	1,200	0.08
5.0	2,600	0.18	1,900	0.18	1,100	0.13	950	0.10
6.0	2,100	0.19	1,600	0.20	950	0.15	800	0.11
8.0	1,600	0.24	1,200	0.22	720	0.18	600	0.13
10.0	1,300	0.28	950	0.25	570	0.21	480	0.15
12.0	1,100	0.34	800	0.30	480	0.25	400	0.17
14.0	910	0.39	680	0.35	410	0.30	340	0.21
15.0	850	0.40	640	0.36	380	0.31	320	0.22
16.0	800	0.42	600	0.38	360	0.32	300	0.23
18.0	710	0.44	530	0.40	320	0.34	270	0.24
20.0	570	0.44	450	0.40	250	0.34	220	0.24
22.0	520	0.46	410	0.42	230	0.36	200	0.25
24.0	480	0.48	370	0.44	210	0.37	190	0.26
26.0	440	0.51	340	0.46	200	0.39	170	0.28
28.0	410	0.53	320	0.48	180	0.41	160	0.29
30.0	380	0.55	300	0.50	170	0.43	150	0.30
32.0	360	0.55	280	0.50	160	0.43	140	0.30

- 1) Please reduce the revolution and feed rate depending on the drilling situation when the installation of workpiece or machine lacks rigidity.
- 2) Please use a collet type drill chuck or a milling chuck.
- 3) Use sufficient cutting fluid.
- 4) Do not peck drill when drilling depths exceed 3XD(D:drill diameter).

The above-mentioned cutting condition is standard when using water-soluble cutting fluid. Please reduce the revolution when using non-water-soluble cutting fluid.


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