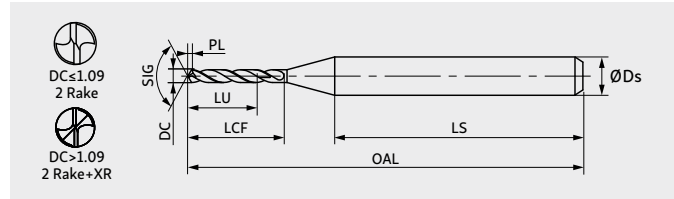


AQRVDM5D AquaREVO Drills Micro 5D



VHM
CARBIDE
REVO
D
h7
120°/135°
30°
h6
0.50-1.99
0.1 2 6 20 45 100

TOOL MATERIAL POINT ANGLE HELIX ANGLE

List: 9878

Article number	Dc	LU	LCF	LS	OAL	Ds	PL	Stock
AQRVDM5D0050	0.50	2.5	3.5	29.3	38	3	0.1	●
AQRVDM5D0051	0.51	2.6	3.8	29.1	38	3	0.1	●
AQRVDM5D0052	0.52	2.6	3.8	29.1	38	3	0.2	●
AQRVDM5D0053	0.53	2.7	3.8	29.1	38	3	0.2	●
AQRVDM5D0054	0.54	2.7	3.8	29.1	38	3	0.2	●
AQRVDM5D0055	0.55	2.8	3.8	29.1	38	3	0.2	●
AQRVDM5D0056	0.56	2.8	4.2	28.8	38	3	0.2	●
AQRVDM5D0057	0.57	2.9	4.2	28.8	38	3	0.2	●
AQRVDM5D0058	0.58	2.9	4.2	28.8	38	3	0.2	●
AQRVDM5D0059	0.59	3.0	4.2	28.8	38	3	0.2	●
AQRVDM5D0060	0.60	3.0	4.2	28.8	38	3	0.2	●
AQRVDM5D0061	0.61	3.1	4.5	28.6	38	3	0.2	●
AQRVDM5D0062	0.62	3.1	4.5	28.6	38	3	0.2	●
AQRVDM5D0063	0.63	3.2	4.5	28.6	38	3	0.2	●
AQRVDM5D0064	0.64	3.2	4.5	28.6	38	3	0.2	●
AQRVDM5D0065	0.65	3.3	4.5	28.6	38	3	0.2	●
AQRVDM5D0066	0.66	3.3	4.9	28.3	38	3	0.2	●
AQRVDM5D0067	0.67	3.4	4.9	28.3	38	3	0.2	●
AQRVDM5D0068	0.68	3.4	4.9	28.3	38	3	0.2	●
AQRVDM5D0069	0.69	3.5	4.9	28.3	38	3	0.2	●
AQRVDM5D0070	0.70	3.5	4.9	28.3	38	3	0.2	●
AQRVDM5D0071	0.71	3.6	5.2	28.1	38	3	0.2	●
AQRVDM5D0072	0.72	3.6	5.2	28.1	38	3	0.2	●
AQRVDM5D0073	0.73	3.7	5.2	28.1	38	3	0.2	●
AQRVDM5D0074	0.74	3.7	5.2	28.1	38	3	0.2	●
AQRVDM5D0075	0.75	3.8	5.2	28.1	38	3	0.2	●
AQRVDM5D0076	0.76	3.8	5.6	27.8	38	3	0.2	●
AQRVDM5D0077	0.77	3.9	5.6	27.8	38	3	0.2	●
AQRVDM5D0078	0.78	3.9	5.6	27.8	38	3	0.2	●
AQRVDM5D0079	0.79	4.0	5.6	27.8	38	3	0.2	●
AQRVDM5D0080	0.80	4.0	5.6	27.8	38	3	0.2	●
AQRVDM5D0081	0.81	4.1	5.9	27.6	38	3	0.2	●
AQRVDM5D0082	0.82	4.1	5.9	27.6	38	3	0.2	●
AQRVDM5D0083	0.83	4.2	5.9	27.6	38	3	0.2	●

unit: mm

Article number	Dc	LU	LCF	LS	OAL	Ds	PL	Stock
AQRVDM5D0084	0.84	4.2	5.9	27.6	38	3	0.2	●
AQRVDM5D0085	0.85	4.3	5.9	27.6	38	3	0.2	●
AQRVDM5D0086	0.86	4.3	6.3	27.3	38	3	0.2	●
AQRVDM5D0087	0.87	4.4	6.3	27.3	38	3	0.3	●
AQRVDM5D0088	0.88	4.4	6.3	27.3	38	3	0.3	●
AQRVDM5D0089	0.89	4.5	6.3	27.3	38	3	0.3	●
AQRVDM5D0090	0.90	4.5	6.3	27.3	38	3	0.3	●
AQRVDM5D0091	0.91	4.6	6.6	27.1	38	3	0.3	●
AQRVDM5D0092	0.92	4.6	6.6	27.1	38	3	0.3	●
AQRVDM5D0093	0.93	4.7	6.6	27.1	38	3	0.3	●
AQRVDM5D0094	0.94	4.7	6.6	27.1	38	3	0.3	●
AQRVDM5D0095	0.95	4.8	6.6	27.1	38	3	0.3	●
AQRVDM5D0096	0.96	4.8	7.0	26.7	38	3	0.3	●
AQRVDM5D0097	0.97	4.9	7.0	26.7	38	3	0.3	●
AQRVDM5D0098	0.98	4.9	7.0	26.7	38	3	0.3	●
AQRVDM5D0099	0.99	5.0	7.0	26.7	38	3	0.3	●
AQRVDM5D0100	1.00	5.0	7.0	26.3	38	3	0.3	●
AQRVDM5D0101	1.01	5.1	7.4	26.0	38	3	0.3	●
AQRVDM5D0102	1.02	5.1	7.4	26.0	38	3	0.3	●
AQRVDM5D0103	1.03	5.2	7.4	26.0	38	3	0.3	●
AQRVDM5D0104	1.04	5.2	7.4	26.0	38	3	0.3	●
AQRVDM5D0105	1.05	5.3	7.4	26.0	38	3	0.3	●
AQRVDM5D0106	1.06	5.3	7.7	25.7	38	3	0.3	●
AQRVDM5D0107	1.07	5.4	7.7	25.7	38	3	0.3	●
AQRVDM5D0108	1.08	5.4	7.7	25.7	38	3	0.3	●
AQRVDM5D0109	1.09	5.5	7.7	25.7	38	3	0.3	●
AQRVDM5D0110	1.10	5.5	7.7	25.8	38	3	0.2	●
AQRVDM5D0111	1.11	5.6	8.1	25.4	38	3	0.2	●
AQRVDM5D0112	1.12	5.6	8.1	25.4	38	3	0.2	●
AQRVDM5D0113	1.13	5.7	8.1	25.4	38	3	0.2	●
AQRVDM5D0114	1.14	5.7	8.1	25.4	38	3	0.2	●
AQRVDM5D0115	1.15	5.8	8.1	25.4	38	3	0.2	●
AQRVDM5D0116	1.16	5.8	8.4	25.2	38	3	0.2	●
AQRVDM5D0117	1.17	5.9	8.4	25.2	38	3	0.2	●

List: 9878

Article number	Dc	LU	LCF	LS	OAL	Ds	PL	Stock
AQRVDM5D0118	1.18	5.9	8.4	25.2	38	3	0.2	●
AQRVDM5D0119	1.19	6.0	8.4	25.2	38	3	0.2	●
AQRVDM5D0120	1.20	6.0	8.4	25.2	38	3	0.2	●
AQRVDM5D0121	1.21	6.1	8.8	24.9	38	3	0.3	●
AQRVDM5D0122	1.22	6.1	8.8	24.9	38	3	0.3	●
AQRVDM5D0123	1.23	6.2	8.8	24.9	38	3	0.3	●
AQRVDM5D0124	1.24	6.2	8.8	24.9	38	3	0.3	●
AQRVDM5D0125	1.25	6.3	8.8	24.9	38	3	0.3	●
AQRVDM5D0126	1.26	6.3	9.1	24.7	38	3	0.3	●
AQRVDM5D0127	1.27	6.4	9.1	24.7	38	3	0.3	●
AQRVDM5D0128	1.28	6.4	9.1	24.7	38	3	0.3	●
AQRVDM5D0129	1.29	6.5	9.1	24.7	38	3	0.3	●
AQRVDM5D0130	1.30	6.5	9.1	24.7	38	3	0.3	●
AQRVDM5D0131	1.31	6.6	9.5	24.4	38	3	0.3	●
AQRVDM5D0132	1.32	6.6	9.5	24.4	38	3	0.3	●
AQRVDM5D0133	1.33	6.7	9.5	24.4	38	3	0.3	●
AQRVDM5D0134	1.34	6.7	9.5	24.4	38	3	0.3	●
AQRVDM5D0135	1.35	6.8	9.5	24.4	38	3	0.3	●
AQRVDM5D0136	1.36	6.8	9.8	24.2	38	3	0.3	●
AQRVDM5D0137	1.37	6.9	9.8	24.2	38	3	0.3	●
AQRVDM5D0138	1.38	6.9	9.8	24.2	38	3	0.3	●
AQRVDM5D0139	1.39	7.0	9.8	24.2	38	3	0.3	●
AQRVDM5D0140	1.40	7.0	9.8	24.2	38	3	0.3	●
AQRVDM5D0141	1.41	7.1	10.2	23.9	38	3	0.3	●
AQRVDM5D0142	1.42	7.1	10.2	23.9	38	3	0.3	●
AQRVDM5D0143	1.43	7.2	10.2	23.9	38	3	0.3	●
AQRVDM5D0144	1.44	7.2	10.2	23.9	38	3	0.3	●
AQRVDM5D0145	1.45	7.3	10.2	23.9	38	3	0.3	●
AQRVDM5D0146	1.46	7.3	10.5	23.7	38	3	0.3	●
AQRVDM5D0147	1.47	7.4	10.5	23.7	38	3	0.3	●
AQRVDM5D0148	1.48	7.4	10.5	23.7	38	3	0.3	●
AQRVDM5D0149	1.49	7.5	10.5	23.7	38	3	0.3	●
AQRVDM5D0150	1.50	7.5	10.5	23.7	38	3	0.3	●
AQRVDM5D0151	1.51	7.6	10.9	23.4	38	3	0.3	●
AQRVDM5D0152	1.52	7.6	10.9	23.4	38	3	0.3	●
AQRVDM5D0153	1.53	7.7	10.9	23.4	38	3	0.3	●
AQRVDM5D0154	1.54	7.7	10.9	23.4	38	3	0.3	●
AQRVDM5D0155	1.55	7.8	10.9	23.4	38	3	0.3	●
AQRVDM5D0156	1.56	7.8	11.3	23.1	38	3	0.3	●
AQRVDM5D0157	1.57	7.9	11.3	23.1	38	3	0.3	●
AQRVDM5D0158	1.58	7.9	11.3	23.1	38	3	0.3	●

Article number	Dc	LU	LCF	LS	OAL	Ds	PL	Stock
AQRVDM5D0159	1.59	8.0	11.3	23.1	38	3	0.3	●
AQRVDM5D0160	1.60	8.0	11.3	23.1	38	3	0.3	●
AQRVDM5D0161	1.61	8.1	11.6	29.9	45	3	0.3	●
AQRVDM5D0162	1.62	8.1	11.6	29.9	45	3	0.3	●
AQRVDM5D0163	1.63	8.2	11.6	29.9	45	3	0.3	●
AQRVDM5D0164	1.64	8.2	11.6	29.9	45	3	0.3	●
AQRVDM5D0165	1.65	8.3	11.6	29.9	45	3	0.3	●
AQRVDM5D0166	1.66	8.3	12.0	29.6	45	3	0.3	●
AQRVDM5D0167	1.67	8.4	12.0	29.6	45	3	0.3	●
AQRVDM5D0168	1.68	8.4	12.0	29.6	45	3	0.3	●
AQRVDM5D0169	1.69	8.5	12.0	29.6	45	3	0.4	●
AQRVDM5D0170	1.70	8.5	12.0	29.6	45	3	0.4	●
AQRVDM5D0171	1.71	8.6	12.3	29.4	45	3	0.4	●
AQRVDM5D0172	1.72	8.6	12.3	29.4	45	3	0.4	●
AQRVDM5D0173	1.73	8.7	12.3	29.4	45	3	0.4	●
AQRVDM5D0174	1.74	8.7	12.3	29.4	45	3	0.4	●
AQRVDM5D0175	1.75	8.8	12.3	29.4	45	3	0.4	●
AQRVDM5D0176	1.76	8.8	12.7	29.1	45	3	0.4	●
AQRVDM5D0177	1.77	8.9	12.7	29.1	45	3	0.4	●
AQRVDM5D0178	1.78	8.9	12.7	29.1	45	3	0.4	●
AQRVDM5D0179	1.79	9.0	12.7	29.1	45	3	0.4	●
AQRVDM5D0180	1.80	9.0	12.7	29.1	45	3	0.4	●
AQRVDM5D0181	1.81	9.1	13.0	28.9	45	3	0.4	●
AQRVDM5D0182	1.82	9.1	13.0	28.9	45	3	0.4	●
AQRVDM5D0183	1.83	9.2	13.0	28.9	45	3	0.4	●
AQRVDM5D0184	1.84	9.2	13.0	28.9	45	3	0.4	●
AQRVDM5D0185	1.85	9.3	13.0	28.9	45	3	0.4	●
AQRVDM5D0186	1.86	9.3	13.3	28.6	45	3	0.4	●
AQRVDM5D0187	1.87	9.4	13.3	28.6	45	3	0.4	●
AQRVDM5D0188	1.88	9.4	13.3	28.6	45	3	0.4	●
AQRVDM5D0189	1.89	9.5	13.3	28.6	45	3	0.4	●
AQRVDM5D0190	1.90	9.5	13.3	28.6	45	3	0.4	●
AQRVDM5D0191	1.91	9.6	13.7	28.3	45	3	0.4	●
AQRVDM5D0192	1.92	9.6	13.7	28.3	45	3	0.4	●
AQRVDM5D0193	1.93	9.7	13.7	28.3	45	3	0.4	●
AQRVDM5D0194	1.94	9.7	13.7	28.3	45	3	0.4	●
AQRVDM5D0195	1.95	9.8	13.7	28.3	45	3	0.4	●
AQRVDM5D0196	1.96	9.8	14.0	28.1	45	3	0.4	●
AQRVDM5D0197	1.97	9.9	14.0	28.1	45	3	0.4	●
AQRVDM5D0198	1.98	9.9	14.0	28.1	45	3	0.4	●
AQRVDM5D0199	1.99	10.0	14.0	28.1	45	3	0.4	●

Note: Tolerance of diameter is 0 to -0.009mm. The point angle is 120° for diameters 0.50 to 1.09mm or less, and 135° for diameters over 1.09 to 1.99mm.

AQRVDM5D/10D

AquaREVO Drills Micro 5D/10D

STANDARD CUTTING CONDITIONS																
Work Material	Structural Steels, Carbon Steels, Cast Irons St37-2, C50E		Alloy Steels, Heat-treated Steels 42CrMo4		Mold Steels, Hardened Steels 1.2344		Hardened Steels		Ductile Cast Irons GG/GGG	Stainless Steels 1.4301 1.4000 1.4016		Stainless Steels 1.4542		AC ADC Aluminium Alloy		
	~200HB		20~30HRC		30~40HRC		40~50HRC			Rotation	Feed	Rotation	Feed		Rotation	Feed
Drill Dia. mm	Rotation min ⁻¹	Feed mm/min	Rotation min ⁻¹	Feed mm/min	Rotation min ⁻¹	Feed mm/min	Rotation min ⁻¹	Feed mm/min	Rotation min ⁻¹	Feed mm/min	Rotation min ⁻¹	Feed mm/min	Rotation min ⁻¹	Feed mm/min		
0.5	25500	770	19100	380	15900	320	12750	250	12600	250	5600	100	5600	95	30000	900
1.0	15000	900	9900	400	8500	340	7500	300	9900	400	4200	120	4200	100	25000	1500
1.1	15000	990	9900	440	8500	370	7500	330	9900	440	4100	120	4100	100	25000	1650
1.6	11940	1150	7900	510	7000	450	6000	380	7900	510	4000	130	3200	100	20000	1910
1.9	10050	1150	6700	510	5900	450	5030	380	6700	510	3350	130	2700	100	16760	1910

Attention on using the cutting condition tables

- Adjust cutting condition according to the rigidity of machine or work clamp state.
- If the machine you are using has restrictions on the number of rotation, reduce the rotation and feed rate by the same ratio.
- Wet Condition are for drilling with water soluble cutting fluid.
- In non-water soluble cutting fluid, reduce the rotation and feed rate by 20%.
- Please step feed regardless of the hole depth.
- Retraction of the step feed is to be returned to the top of the hole.
- Step feed is recommended to 0.2-0.5 x DC.
- Please use the fixture to control the amplitude of the drill bit below 0.005mm.
- Do not pour the cutting fluid directly to the drill, but pour it along the work material.