

# RAINFORD PRECISION

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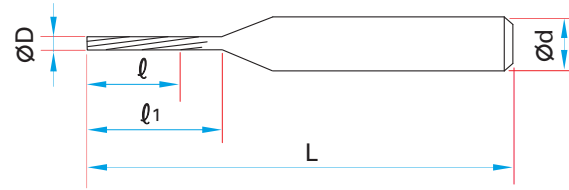


## Reamers

Size Dia 0.2 - 2.39 mm  
Flutes 4



## MR34 Reamers



**Designed for increased bore depth**

**Kyocera solid carbide micro reamers for precise micro hole formation**

Flute length can be optimised for your applications and coatings are available on request

10 degree left hand spiral right hand cut for through hole reaming

0.01 mm diameter increments from 0.2 mm to 2.01 mm, diameter tolerance of 0/+0.003 mm

units = mm

Kyocera Part Number	Diameter	No of Flutes	Effective Length	Flute Length	Overall Length	Shank Diameter
	<b>D</b>		$l_1$	$l$	<b>L</b>	<b>d</b>
MR34-0079.281	0.20	4	3.0	1.5	50	3
MR34-0083.281	0.21	4	3.0	1.5	50	3
MR34-0087.281	0.22	4	3.0	1.5	50	3
MR34-0091.281	0.23	4	3.0	1.5	50	3
MR34-0094.281	0.24	4	3.0	1.5	50	3
MR34-0098.281	0.25	4	3.0	1.5	50	3
MR34-0102.281	0.26	4	3.0	1.5	50	3
MR34-0106.281	0.27	4	3.0	1.5	50	3
MR34-0110.281	0.28	4	3.0	1.5	50	3
MR34-0114.281	0.29	4	3.0	1.5	50	3
MR34-0118.281	0.30	4	4.0	2.0	50	3
MR34-0122.281	0.31	4	4.0	2.0	50	3
MR34-0126.281	0.32	4	4.0	2.0	50	3
MR34-0130.281	0.33	4	4.0	2.0	50	3
MR34-0134.281	0.34	4	4.0	2.0	50	3
MR34-0138.281	0.35	4	4.0	2.0	50	3
MR34-0142.281	0.36	4	4.0	2.0	50	3
MR34-0146.281	0.37	4	4.0	2.0	50	3
MR34-0150.281	0.38	4	4.0	2.0	50	3
MR34-0154.281	0.39	4	4.0	2.0	50	3
MR34-0157.281	0.40	4	5.0	2.5	50	3
MR34-0161.281	0.41	4	5.0	2.5	50	3
MR34-0165.281	0.42	4	5.0	2.5	50	3
MR34-0169.281	0.43	4	5.0	2.5	50	3
MR34-0173.281	0.44	4	5.0	2.5	50	3
MR34-0177.281	0.45	4	5.0	2.5	50	3
MR34-0181.281	0.46	4	5.0	2.5	50	3
MR34-0185.281	0.47	4	5.0	2.5	50	3

units = mm

Kyocera Part Number	Diameter	No of Flutes	Effective Length	Flute Length	Overall Length	Shank Diameter
	<b>D</b>		$\ell_1$	$\ell$	<b>L</b>	<b>d</b>
MR34-0189.281	0.48	4	5.0	2.5	50	3
MR34-0193.281	0.49	4	5.0	2.5	50	3
MR34-0197.281	0.50	4	6.0	3.0	50	3
MR34-0201.281	0.51	4	6.0	3.0	50	3
MR34-0205.281	0.52	4	6.0	3.0	50	3
MR34-0209.281	0.53	4	6.0	3.0	50	3
MR34-0213.281	0.54	4	6.0	3.0	50	3
MR34-0216.281	0.55	4	6.0	3.0	50	3
MR34-0220.281	0.56	4	6.0	3.0	50	3
MR34-0224.281	0.57	4	6.0	3.0	50	3
MR34-0228.281	0.58	4	6.0	3.0	50	3
MR34-0232.281	0.59	4	6.0	3.0	50	3
MR34-0236.281	0.60	4	18.0	7.0	50	3
MR34-0240.281	0.61	4	18.0	7.0	50	3
MR34-0244.281	0.62	4	18.0	7.0	50	3
MR34-0248.281	0.63	4	18.0	7.0	50	3
MR34-0252.281	0.64	4	18.0	7.0	50	3
MR34-0256.281	0.65	4	18.0	7.0	50	3
MR34-0260.281	0.66	4	18.0	7.0	50	3
MR34-0264.281	0.67	4	18.0	7.0	50	3
MR34-0268.281	0.68	4	18.0	7.0	50	3
MR34-0272.281	0.69	4	18.0	7.0	50	3
MR34-0276.281	0.70	4	18.0	7.0	50	3
MR34-0279.281	0.71	4	18.0	7.0	50	3
MR34-0283.281	0.72	4	18.0	7.0	50	3
MR34-0287.281	0.73	4	18.0	7.0	50	3
MR34-0291.281	0.74	4	18.0	7.0	50	3
MR34-0295.281	0.75	4	18.0	7.0	50	3
MR34-0299.281	0.76	4	18.0	7.0	50	3
MR34-0303.281	0.77	4	18.0	7.0	50	3
MR34-0307.281	0.78	4	18.0	7.0	50	3
MR34-0311.281	0.79	4	18.0	7.0	50	3
MR34-0315.281	0.80	4	18.0	7.0	50	3
MR34-0319.281	0.81	4	18.0	7.0	50	3
MR34-0323.281	0.82	4	18.0	7.0	50	3
MR34-0327.281	0.83	4	18.0	7.0	50	3
MR34-0331.281	0.84	4	18.0	7.0	50	3
MR34-0335.281	0.85	4	18.0	7.0	50	3
MR34-0338.281	0.86	4	18.0	7.0	50	3

units = mm

Kyocera Part Number	Diameter	No of Flutes	Effective Length	Flute Length	Overall Length	Shank Diameter
	<b>D</b>		$\ell_1$	$\ell$	<b>L</b>	<b>d</b>
MR34-0342.281	0.87	4	18.0	7.0	50	3
MR34-0346.281	0.88	4	18.0	7.0	50	3
MR34-0350.281	0.89	4	18.0	7.0	50	3
MR34-0354.281	0.90	4	18.0	7.0	50	3
MR34-0358.281	0.91	4	18.0	7.0	50	3
MR34-0362.281	0.92	4	18.0	7.0	50	3
MR34-0366.281	0.93	4	18.0	7.0	50	3
MR34-0370.281	0.94	4	18.0	7.0	50	3
MR34-0374.281	0.95	4	18.0	7.0	50	3
MR34-0378.281	0.96	4	18.0	7.0	50	3
MR34-0382.281	0.97	4	18.0	7.0	50	3
MR34-0386.281	0.98	4	18.0	7.0	50	3
MR34-0390.281	0.99	4	18.0	7.0	50	3
MR34-0394.281	1.00	4	18.0	7.0	50	3
MR34-0398.281	1.01	4	18.0	7.0	50	3
MR34-0401.281	1.02	4	18.0	7.0	50	3
MR34-0405.281	1.03	4	18.0	7.0	50	3
MR34-0409.281	1.04	4	18.0	7.0	50	3
MR34-0413.281	1.05	4	18.0	7.0	50	3
MR34-0417.406	1.06	4	18.0	10.0	50	3
MR34-0421.406	1.07	4	18.0	10.0	50	3
MR34-0425.406	1.08	4	18.0	10.0	50	3
MR34-0429.406	1.09	4	18.0	10.0	50	3
MR34-0433.406	1.10	4	18.0	10.0	50	3
MR34-0437.406	1.11	4	18.0	10.0	50	3
MR34-0441.406	1.12	4	18.0	10.0	50	3
MR34-0445.406	1.13	4	18.0	10.0	50	3
MR34-0449.406	1.14	4	18.0	10.0	50	3
MR34-0453.406	1.15	4	18.0	10.0	50	3
MR34-0457.406	1.16	4	18.0	10.0	50	3
MR34-0461.406	1.17	4	18.0	10.0	50	3
MR34-0464.406	1.18	4	18.0	10.0	50	3
MR34-0468.406	1.19	4	18.0	10.0	50	3
MR34-0472.406	1.20	4	18.0	10.0	50	3
MR34-0476.406	1.21	4	18.0	10.0	50	3
MR34-0480.406	1.22	4	18.0	10.0	50	3
MR34-0484.406	1.23	4	18.0	10.0	50	3
MR34-0488.406	1.24	4	18.0	10.0	50	3
MR34-0492.406	1.25	4	18.0	10.0	50	3

units = mm

Kyocera Part Number	Diameter	No of Flutes	Effective Length	Flute Length	Overall Length	Shank Diameter
	<b>D</b>		$\ell_1$	$\ell$	<b>L</b>	<b>d</b>
MR34-0496.406	1.26	4	18.0	10.0	50	3
MR34-0500.406	1.27	4	18.0	10.0	50	3
MR34-0504.406	1.28	4	18.0	10.0	50	3
MR34-0508.406	1.29	4	18.0	10.0	50	3
MR34-0512.406	1.30	4	18.0	10.0	50	3
MR34-0516.406	1.31	4	18.0	10.0	50	3
MR34-0520.406	1.32	4	18.0	10.0	50	3
MR34-0523.406	1.33	4	18.0	10.0	50	3
MR34-0527.406	1.34	4	18.0	10.0	50	3
MR34-0531.406	1.35	4	18.0	10.0	50	3
MR34-0535.406	1.36	4	18.0	10.0	50	3
MR34-0539.406	1.37	4	18.0	10.0	50	3
MR34-0543.406	1.38	4	18.0	10.0	50	3
MR34-0547.406	1.39	4	18.0	10.0	50	3
MR34-0551.406	1.40	4	18.0	10.0	50	3
MR34-0555.406	1.41	4	18.0	10.0	50	3
MR34-0559.406	1.42	4	18.0	10.0	50	3
MR34-0563.406	1.43	4	18.0	10.0	50	3
MR34-0567.406	1.44	4	18.0	10.0	50	3
MR34-0571.406	1.45	4	18.0	10.0	50	3
MR34-0575.406	1.46	4	18.0	10.0	50	3
MR34-0579.406	1.47	4	18.0	10.0	50	3
MR34-0583.406	1.48	4	18.0	10.0	50	3
MR34-0586.406	1.49	4	18.0	10.0	50	3
MR34-0590.406	1.50	4	18.0	10.0	50	3
MR34-0594.406	1.51	4	18.0	10.0	50	3
MR34-0598.406	1.52	4	18.0	10.0	50	3
MR34-0602.406	1.53	4	18.0	10.0	50	3
MR34-0606.406	1.54	4	18.0	10.0	50	3
MR34-0610.406	1.55	4	18.0	10.0	50	3
MR34-0614.406	1.56	4	18.0	10.0	50	3
MR34-0618.406	1.57	4	18.0	10.0	50	3
MR34-0622.406	1.58	4	18.0	10.0	50	3
MR34-0626.406	1.59	4	18.0	10.0	50	3
MR34-0630.406	1.60	4	18.0	10.0	50	3
MR34-0634.406	1.61	4	18.0	10.0	50	3
MR34-0638.406	1.62	4	18.0	10.0	50	3
MR34-0642.406	1.63	4	18.0	10.0	50	3
MR34-0646.406	1.64	4	18.0	10.0	50	3

units = mm

Kyocera Part Number	Diameter	No of Flutes	Effective Length	Flute Length	Overall Length	Shank Diameter
	<b>D</b>		$\ell_1$	$\ell$	<b>L</b>	<b>d</b>
MR34-0649.406	1.65	4	18.0	10.0	50	3
MR34-0653.406	1.66	4	18.0	10.0	50	3
MR34-0657.406	1.67	4	18.0	10.0	50	3
MR34-0661.406	1.68	4	18.0	10.0	50	3
MR34-0665.406	1.69	4	18.0	10.0	50	3
MR34-0669.406	1.70	4	18.0	10.0	50	3
MR34-0673.406	1.71	4	18.0	10.0	50	3
MR34-0677.406	1.72	4	18.0	10.0	50	3
MR34-0681.406	1.73	4	18.0	10.0	50	3
MR34-0685.406	1.74	4	18.0	10.0	50	3
MR34-0689.406	1.75	4	18.0	10.0	50	3
MR34-0693.406	1.76	4	18.0	10.0	50	3
MR34-0697.406	1.77	4	18.0	10.0	50	3
MR34-0701.406	1.78	4	18.0	10.0	50	3
MR34-0705.406	1.79	4	18.0	10.0	50	3
MR34-0708.406	1.80	4	18.0	10.0	50	3
MR34-0712.406	1.81	4	18.0	10.0	50	3
MR34-0716.406	1.82	4	18.0	10.0	50	3
MR34-0720.406	1.83	4	18.0	10.0	50	3
MR34-0724.406	1.84	4	18.0	10.0	50	3
MR34-0728.406	1.85	4	18.0	10.0	50	3
MR34-0732.406	1.86	4	18.0	10.0	50	3
MR34-0736.406	1.87	4	18.0	10.0	50	3
MR34-0740.406	1.88	4	18.0	10.0	50	3
MR34-0744.406	1.89	4	18.0	10.0	50	3
MR34-0748.406	1.90	4	18.0	10.0	50	3
MR34-0752.406	1.91	4	18.0	10.0	50	3
MR34-0756.406	1.92	4	18.0	10.0	50	3
MR34-0760.406	1.93	4	18.0	10.0	50	3
MR34-0764.406	1.94	4	18.0	10.0	50	3
MR34-0768.406	1.95	4	18.0	10.0	50	3
MR34-0771.438	1.96	4	18.0	10.0	50	3
MR34-0775.438	1.97	4	18.0	10.0	50	3
MR34-0779.438	1.98	4	18.0	10.0	50	3
MR34-0783.438	1.99	4	18.0	10.0	50	3
MR34-0787.438	2.00	4	18.0	10.0	50	3
MR34-0791.438	2.01	4	18.0	10.0	50	3
MR34-0799.438	2.03	4	18.0	10.0	50	3
MR34-0811.438	2.06	4	18.0	10.0	50	3

units = mm

Kyocera Part Number	Diameter	No of Flutes	Effective Length	Flute Length	Overall Length	Shank Diameter
	<b>D</b>		$l_1$	$l$	<b>L</b>	<b>d</b>
MR34-0819.438	2.08	4	18.0	10.0	50	3
MR34-0830.438	2.11	4	18.0	10.0	50	3
MR34-0838.438	2.13	4	18.0	10.0	50	3
MR34-0850.438	2.16	4	18.0	10.0	50	3
MR34-0858.438	2.18	4	18.0	10.0	50	3
MR34-0870.438	2.21	4	18.0	10.0	50	3
MR34-0878.438	2.23	4	18.0	10.0	50	3
MR34-0890.438	2.26	4	18.0	10.0	50	3
MR34-0901.438	2.29	4	18.0	10.0	50	3
MR34-0909.438	2.31	4	18.0	10.0	50	3
MR34-0917.438	2.33	4	18.0	10.0	50	3
MR34-0929.438	2.36	4	18.0	10.0	50	3
MR34-0933.438	2.37	4	18.0	10.0	50	3
MR34-0937.438	2.38	4	18.0	10.0	50	3
MR34-0941.438	2.39	4	18.0	10.0	50	3

Size Dia 2.41 - 3.10 mm  
Flutes 4



## MR46 Reamers



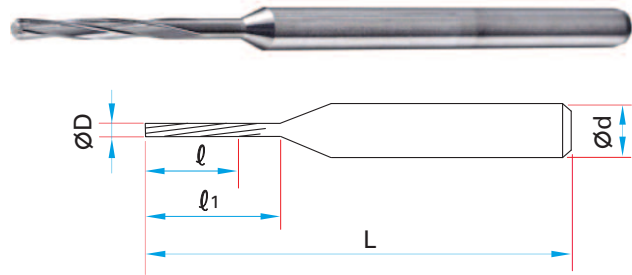
**Designed for increased bore depth**

Kyocera solid carbide micro reamers for precise micro hole formation

Flute length can be optimised for your applications and coatings are available on request

10 degree left hand spiral right hand cut for through hole reaming, Diameter tolerance of  $0/+0.003$  mm

units = mm



Kyocera Part Number	Diameter	No of Flutes	Effective Length	Flute Length	Overall Length	Shank Diameter
	D		$l_1$	$l$	L	d
MR46-0949.563	2.41	6	51.0	14.0	75	4
MR46-0960.563	2.44	6	51.0	14.0	75	4
MR46-0968.563	2.46	6	51.0	14.0	75	4
MR46-0980.563	2.49	6	51.0	14.0	75	4
MR46-0988.563	2.51	6	51.0	14.0	75	4
MR46-0996.563	2.53	6	51.0	14.0	75	4
MR46-1000.563	2.54	6	51.0	14.0	75	4
MR46-1012.563	2.57	6	51.0	14.0	75	4
MR46-1015.563	2.58	6	51.0	14.0	75	4
MR46-1019.563	2.59	6	51.0	14.0	75	4
MR46-1031.563	2.62	6	51.0	14.0	75	4
MR46-1039.563	2.64	6	51.0	14.0	75	4
MR46-1051.563	2.67	6	51.0	14.0	75	4
MR46-1059.563	2.69	6	51.0	14.0	75	4
MR46-1063.563	2.70	6	51.0	14.0	75	4
MR46-1071.563	2.72	6	51.0	14.0	75	4
MR46-1078.563	2.74	6	51.0	14.0	75	4
MR46-1090.563	2.77	6	51.0	14.0	75	4
MR46-1094.563	2.78	6	51.0	14.0	75	4
MR46-1102.563	2.80	6	51.0	14.0	75	4
MR46-1110.563	2.82	6	51.0	14.0	75	4
MR46-1118.563	2.84	6	51.0	14.0	75	4
MR46-1130.563	2.87	6	51.0	14.0	75	4
MR46-1149.563	2.92	6	51.0	14.0	75	4
MR46-1161.625	2.95	6	51.0	16.0	75	4
MR46-1169.625	2.97	6	51.0	16.0	75	4
MR46-1181.625	3.00	6	51.0	16.0	75	4
MR46-1189.625	3.02	6	51.0	16.0	75	4
MR46-1200.625	3.05	6	51.0	16.0	75	4
MR46-1220.625	3.10	6	51.0	16.0	75	4