

COMPARISON DOCUMENT

4TH AXIS TABLES

TORMACH CNC MILL 4TH AXIS TABLES	microARC 4	MOTORIZED ROTARY TABLE		TILTING MOTORIZED ROTARY TABLE		SUPER SPACER MOTORIZED ROTARY TABLE	
SIZE	3.9 in. (100 mm)	6 in. (152 mm)	8 in. (203 mm)	6 in. (152 mm)	8 in. (203 mm)	6 in. (152 mm)	8 in. (203 mm)
PART NUMBER	38412	30267	30194	31847	31848	33089	33264
SPECIFICATIONS							
Height (without Handle)	5.7 in. (145 mm)	9.5 in. (240 mm)	11.7 in. (295 mm)	10.5 in. (265 mm)	11.875 in. (300 mm)	10.25 in. (260 mm)	11.2 in. (285 mm)
Height (with Handle)	7 in. (178 mm)	N/A					
Weight	38 lbs. (17 kg)	76 lbs. (31 kg)	94 lbs. (43 kg)	97 lbs. (44 kg)	148 lbs. (67 kg)	110 lbs. (50 kg)	141 lbs. (64 kg)
Diameter of Table	4 in. (100 mm) Chuck	6.3 in. (160 mm)	7.9 in. (200 mm)	6.3 in. (160 mm)	7.9 in. (200 mm)	6.3 in. (160 mm)	7.9 in. (200 mm)
Table to Centerline	3.15 in. (80 mm)	4.9 in. (125 mm)	5.9 in. (150 mm)	4.125 in. (105 mm)	4.75 in. (120 mm)	4.6 in. (116 mm)	5.9 in. (150 mm)
Horizontal Height for C-Axis Operation (without Chuck)	10.2 in. (260 mm)	3.2 in. (82 mm)	4.4 in. (112 mm)	6.5 in. (165 mm)	7.25 in. (185 mm)	6.0 in. (152 mm)	6.25 in. (160 mm)
T-Slot Width	N/A	.39 in. (10 mm)	.47 in. (12 mm)	.39 in. (10 mm)	.47 in. (12 mm)	.48 in. (12 mm)	.47 in. (12 mm)
Gear Ratio	1:50	1:90					
Motor Phase Current	4 Amps	2.8 Amps	5.5 Amps	5.5 Amps	5.5 Amps	5.5 Amps	5.5 Amps
Motor Mount	Custom	NEMA 23	NEMA 34	NEMA 34	NEMA 34	NEMA 34	NEMA 34
Through Bore Diameter	0.79 in. (20 mm)	MT-2 Morse Taper	MT-3 Morse Taper	MT-2 Morse Taper	MT-3 Morse Taper	1.55 in. (39 mm)	2.47 in. (63 mm)
Angular Resolution	26 arc-sec (0.0072°)	7.2 arc-sec. (0.002°)					
Angular Resolution Examples*	0.00025" @ 4" diameter	0.0001 inch @ 6-inch diameter 0.00015 inch @ 8-inch diameter					
Backlash	18 arc-sec (0.005°)	Setting Table to 60 - 80 Arc-Seconds (0.01667° - 0.02222°) is Recommended for Oil Penetration Between the Worm and Gear					
Backlash Example*	0.00017" @ 4" diameter						
Maximum Holding Torque	28 ft-lb (39 Nm)	90 ft-lb (122 Nm)	90 ft-lb (122 Nm)	90 ft-lb (122 Nm)	90 ft-lb (122 Nm)	90 ft-lb (122 Nm)	90 ft-lb (122 Nm)

***To convert rotational motion to linear distance:**

$$2 \times \pi \times r \left(\frac{\theta}{360} \right) = \text{Linear Motion}$$

Examples (These are both the same example):

$$\sin[26 \text{ arc-seconds}] \times 2" \text{ radius} = 0.00025"$$

$$\sin[0.0072^\circ] \times 2" \text{ radius} = 0.00025"$$

All prices subject to change without notice.

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