

# Precision Rotation Stage | PR-50SM

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The PR-50 rotary stage excels where fast rotation speeds are needed with limited torque requirements. The stage utilizes a direct drive stepper motor combined with dual mutually pre-loaded ball bearings, which allow for smooth, 360° travel. Vacuum versions are available. The PR-50 is compatible with the MMC-200.

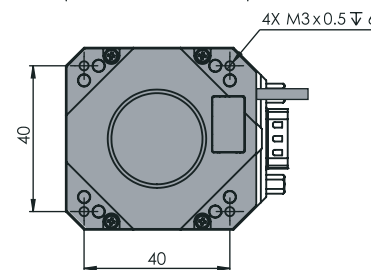
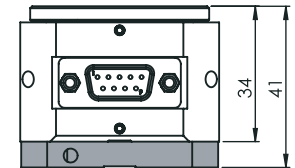
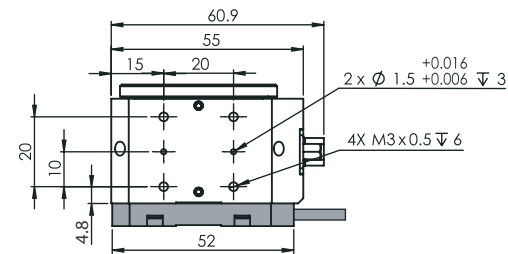
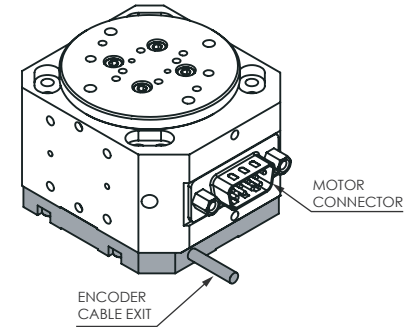
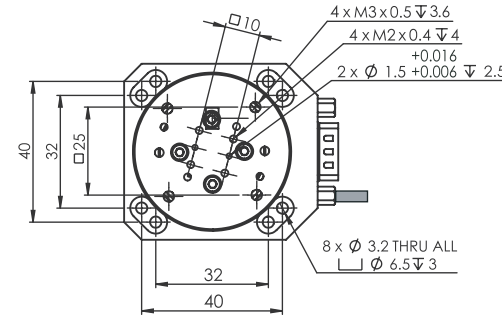
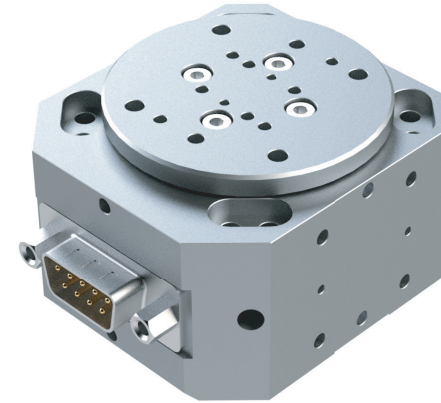
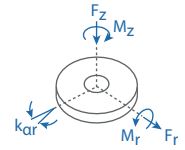
## KEY FEATURES

- Continuous 360° motion
- Load capacity up to 1 kg
- Mutually pre-loaded ball bearings
- Low profile, 34 mm height
- Vacuum versions available

## TECHNICAL DATA

Travel range [°]	360°, limitless		
Flatness (bearings) [μm]	± 3		
Eccentricity (bearings) [μm]	± 3		
Wobble [μrad]	± 50		
Weight [g], Closed Loop	240		
Weight [g], Open Loop	260		
Motor option	Direct Drive Stepper Motor		
Speed, max [°/s]	1800 (5 rev/sec)		
Encoder option	None (open loop)	Analog (1 V <sub>pp</sub> )	Digital (RS-422)
Resolution, typical [m°]	10	5	5
Repeatability, bi-directional [m°]	± 50	± 10	± 10
Repeatability, uni-directional [m°]	50	10	10
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)		

Load, max	F <sub>r</sub> [N]	F <sub>z</sub> [N]	M <sub>r</sub> [N-m]	M <sub>z</sub> [N-m]	k <sub>qr</sub> [μrad/N-m]
SM-006	1	10	5	0.04	150



\* grey parts for closed loop version only  
\* all dimensions are in millimeters

## ORDERING INFORMATION

PR-50- 2 1

<b>DRIVE</b>	Stepper Motor, SM-006.....	2
<b>TRAVEL</b>	360° .....	1
<b>ENCODER</b>	None .....	0
	Analog (1 V <sub>pp</sub> ) .....	2
	Digital (RS-422) .....	3
<b>HOME SWITCH</b>	None .....	0
	Magnetic <sup>†</sup> .....	1
<b>ENVIRONMENT</b>	Atmospheric .....	0
	High Vacuum, 10 <sup>-6</sup> mbar .....	6

<sup>†</sup>only available in open loop

Specifications are subject to change without notice.