

Piezo Rotation Stage | PR-70PM

NEW

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Preliminary

The PR-70PM is a compact piezo rotation stage with unlimited travel and a 1 inch aperture. Steel crossed roller bearings ensure smooth motion and high stability. It uses our patented multi-phase piezo motor resulting in high resolution and high blocking torque. The PR-70PM can be combined with the linear PPX-50 or PPS-70 (51mm travel and up) stages without an adapter bracket. Versions capable of operation in vacuum (10^{-9} mbar) are available. The PR-70PM is compatible with the MMC-100, MMC-110, and NanoDrive controllers.

KEY FEATURES

- Continuous 360° motion
- 5 μ closed loop digital encoder resolution
- Load capacity up to 3 kg
- 1" aperture
- Crossed roller bearing
- 28.2mm height
- Vacuum versions available

TECHNICAL DATA

Travel range [°]	360, limitless		
Flatness (bearings) [μm]	± 10		
Eccentricity (bearings) [μm]	± 10		
Wobble [μrad]	± 300		
Weight [g], Open Loop	300		
Weight [g], Closed Loop	330		
Motor option	Piezo Motor		
Speed, max [°/s]	5 (MMC-100), 15 (MMC-110 and NanoDrive)		
Encoder option	None (Open Loop)	Digital (RS-422)	Absolute (BiSS C)
Resolution, typical [μ°]	1	5	<50
Repeatability, bi-directional [μ°]	n/a	± 200	± 500
Repeatability, uni-directional [μ°]	n/a	200	500
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)		

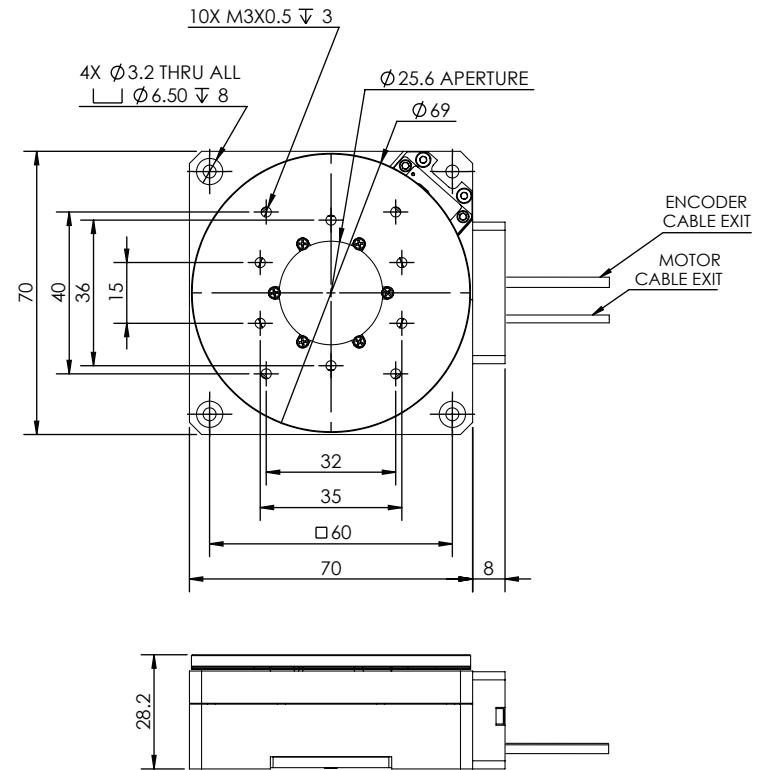
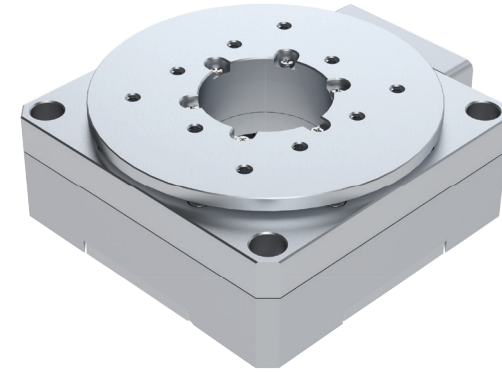
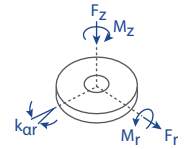
ORDERING INFORMATION

PR-70- **1** | | | |

DRIVE	Piezo Motor	1				
	Piezo Motor, High Force*	5				
TRAVEL	360°	1				
ENCODER	None	0				
	Digital (RS-422)	3				
	Absolute (BiSS C)	5				
HOME SWITCH	None	0				
	Magnetic**	1				
ENVIRONMENT	Atmospheric	0				
	High Vacuum, 10^6 mbar	6				
	Ultra High Vacuum, 10^9 mbar	9				

* MMC-110 only
** Only available in open loop

Load, max	F_r [N]	F_z [N]	M_r [N-m]	M_z [N-m]	k_{qr} [μ rad/N-m]
PM-003R	20	30	5	0.05	150
PM-High Force	20	30	5	0.10	150



• all dimensions are in millimeters

Specifications are subject to change without notice.