Piezo Rotation Stage | PR-32



The PR-32 is a compact rotation stage with unlimited travel. Two pre-loaded steel ball bearings ensure smooth motion and high stability. It utilizes our patent-pending multi-phase piezo motor resulting in high speed (> 6 °/s) and high blocking force. The PR-32 can be combined with the linear PPX-32 or with the PPS-series stages. Versions capable of operation in vacuum (10^{-9} mbar) are available. The PR-32 is compatible with the MMC-100 and MMC-110 controllers.

KEY FEATURES

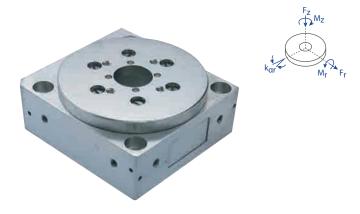
- New reduced height (14 mm Open Loop, 21 mm Closed Loop)
- 1/2" clear aperture (Open Loop)
- Load capacity up to 1 kg
- Steel ball bearings
- Vacuum versions available
- Continuous 360° motion

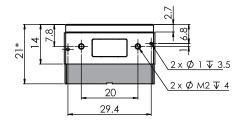
TECHNICAL DATA

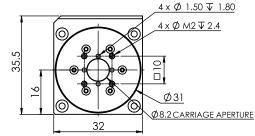
Travel range [º]	360, Continuous				
Flatness (bearings) [µm]	±5				
Eccentricity (bearings) [μm]	±5				
Wobble [µrad]	± 100				
Weight [g]	50				
Motor option	Piezo Motor				
Speed, max [º/s]	6 (MMC-100), 30 (MMC-110)				
Encoder option	None (open loop)	Analog (1 V _{pp})	Digital (RS-422)		
Resolution, typical [μ°]	3.6	50(MMC-100),10(MMC-110)	5 200		
Repeatability, bi-directional [μ°]	n/a	± 200			
Repeatability, uni-directional [µ°]	n/a	200	200		
Accuracy [μ°]	-	-	-		
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)				

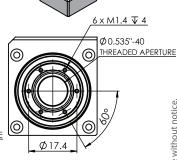
ORDERING INFORMAT	PR-32- 1 1 1
DRIVE	Piezo Motor, PM-002R1
TRAVEL	360°, Continuous1
ENCODER	None
HOME SWITCH*	None 0 —
ENVIRONMENT	Atmospheric
	* Only available in open loop

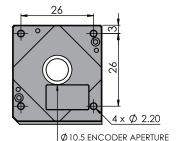
Load, max	F _r [N]	F _Z [N]	M _r [N·m]	M _Z [N·m]	k _{αr} [μrad/N·m]
PM-002R	10	10	0.5	0.025	-











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

* without carriage

MICTONIX USA