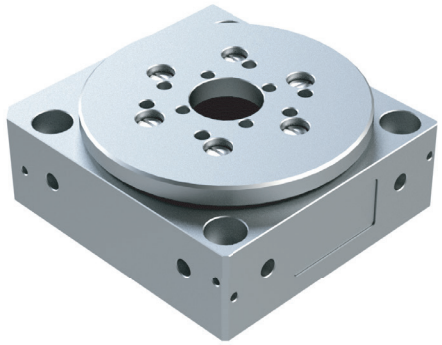
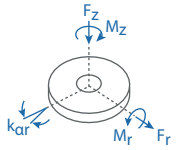
Piezo Rotation Stage | PR-32L

www.micronixusa.com | info@micronixusa.com | phone: +1 (949) 480 0538 | fax: +1 (949) 480 0538

The PR-32L is a compact rotation stage with unlimited travel. Two pre-loaded ball bearings ensure smooth motion and high stability. It utilizes our patented multi-phase piezo motor resulting in high speed (> 20 °/s) and high blocking torque. The PR-32L 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-32L is compatible with the MMC-100 and MMC-110 controllers.

Load, max	F_r [N]	F_Z [N]	M_r [N·m]	M_Z [N·m]	k_{ar} [µrad/N·m]
PM-002R	10	10	0.5	0.025	-





KEY FEATURES

- 1/2" clear aperture (Open Loop)
- 10 µ° closed loop encoder resolution
- Load capacity up to 1 kg
- Mutually pre-loaded ball bearings
- Vacuum versions available
- Continuous 360° motion

TECHNICAL DATA

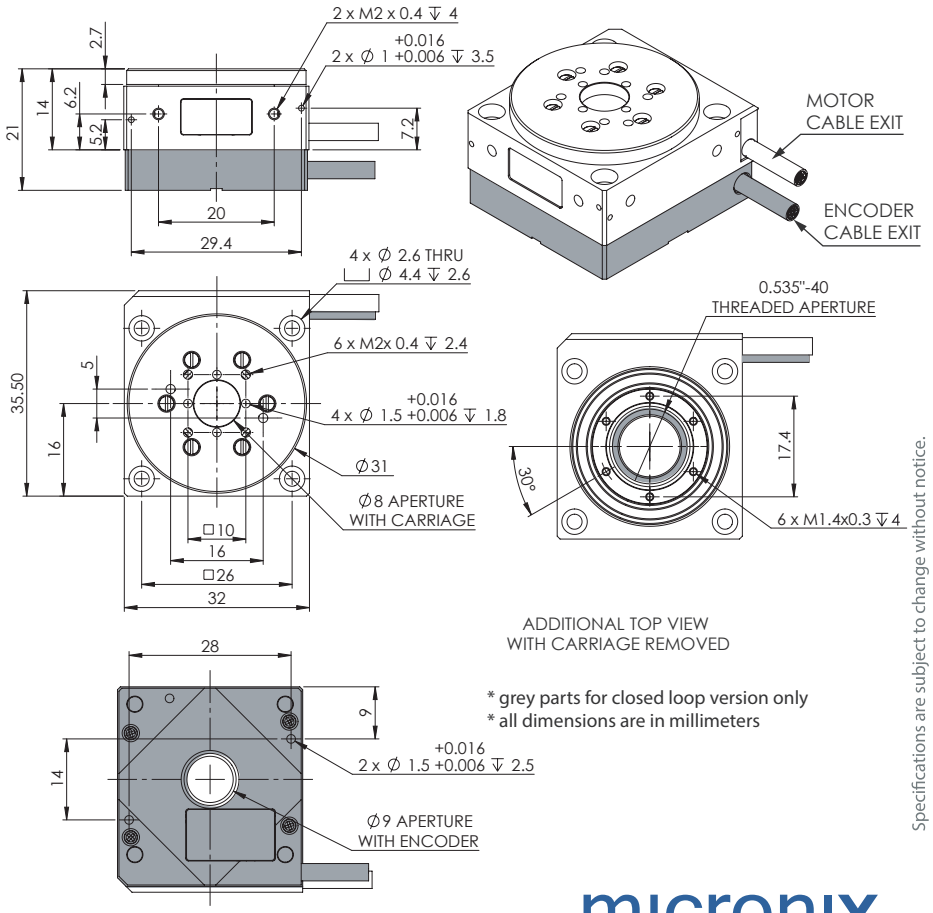
Travel range [°]	**360, Continuous**		
Flatness (bearings) [µm]	± 5		
Eccentricity (bearings) [µm]	± 5		
Wobble [µrad]	± 400		
Weight [g], Open Loop	40		
Weight [g], Closed Loop	55		
Motor option	**Piezo Motor**		
Speed, max [°/s]	>5 (MMC-100), 20 (MMC-110)		
Encoder option	**None (open loop)**	**Analog (1 V_{pp})**	**Digital (RS-422)**
Resolution, typical [µ°]	1	50	10
Repeatability, bi-directional [µ°]	n/a	± 200	± 200
Repeatability, uni-directional [µ°]	n/a	200	200
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)		

ORDERING INFORMATION

PR-32L- [1] [1] [ ] [ ] [ ]

DRIVE	Piezo Motor, PM-002R	**1**
TRAVEL	360°, Continuous	**1**
ENCODER	None	**0**
	Analog (1 V_{pp})	**2**
	Digital (RS-422)	**3**
HOME SWITCH	None	**0**
	Magnetic†	**1**
ENVIRONMENT	Atmospheric	**0**
	High Vacuum, 10^{-6} mbar	**6**
	Ultra High Vacuum, 10^{-9} mbar	**9**

† Only available in open loop



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

micronix USA PRECISION MOTION SOLUTIONS