

Piezo Rotation Stage | PR-32L

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.

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)		

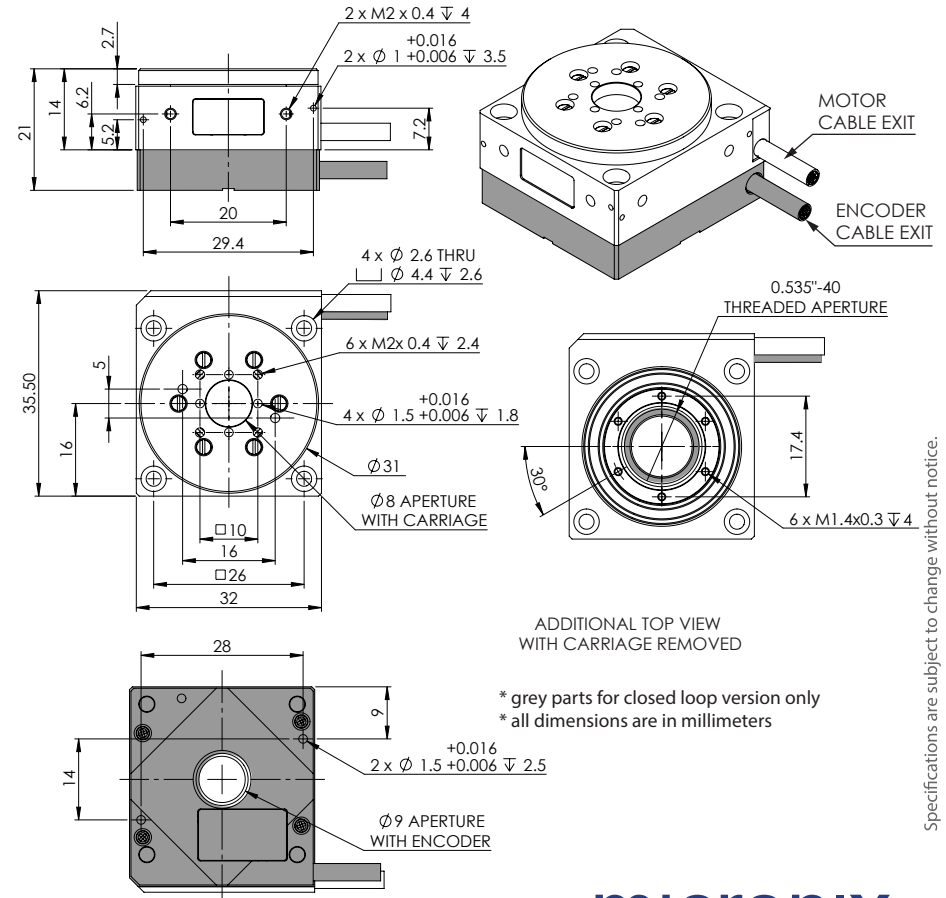
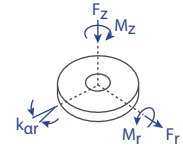
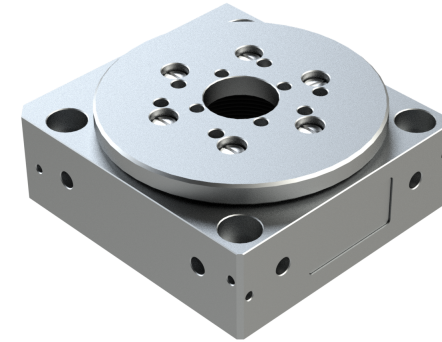
ORDERING INFORMATION

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

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



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

Specifications are subject to change without notice.