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^{o} closed loop encoder resolution
- Load capacity up to 1 kg
- Mutually pre-loaded ball bearings
- Vacuum versions available
- Continuous 360º 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 [º/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 INFORMA	TON PR-32L-	1	1		
DRIVE	Piezo Motor, PM-002R	1			
TRAVEL	360°, Continuous	1 —			
ENCODER	None Analog (1 V _{pp}) Digital (RS-422)	2			
HOME SWITCH	None Magnetic [†]	. 0 — . 1			
ENVIRONMENT	Atmospheric High Vacuum, 10 ⁻⁶ mbar Ultra High Vacuum, 10 ⁻⁹ mbar	6			

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



