

Piezo Rotation Stage | PR-20PM

The PR-20 is an ultra-compact rotational piezo stage. Low profile, high load and high stiffness are achieved through the use of a crossed roller bearing and patented multi-phase piezo motor, which allows for smooth 360° travel. The PR-20 can be fully integrated with high resolution absolute encoder. Vacuum versions are available. The PR-20 is compatible with MMC-100* and MMC-110** controllers.

KEY FEATURES

- Closed loop absolute encoder resolution to <math><1 m^\circ</math>
- Crossed roller bearings
- Continuous 360° motion
- Load capacity up to 0.1 kg
- Low profile, 15 mm height
- Vacuum version available

TECHNICAL DATA

Travel range [°]	360°, limitless	
Flatness (bearings) [μm]	± 20	
Eccentricity (bearings) [μm]	± 20	
Wobble [μrad]	± 500	
Weight [g]	15	
Motor option	Piezo Motor	
Speed, max [°/s]	10 (MMC-100), 25 (MMC-110)	
Encoder option	None (open loop)	Absolute (BiSS C)**
Resolution, typical [m°]	0.01	< 1
Repeatability, bi-directional [m°]	n/a	± 5
Repeatability, uni-directional [m°]	n/a	± 5
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)	

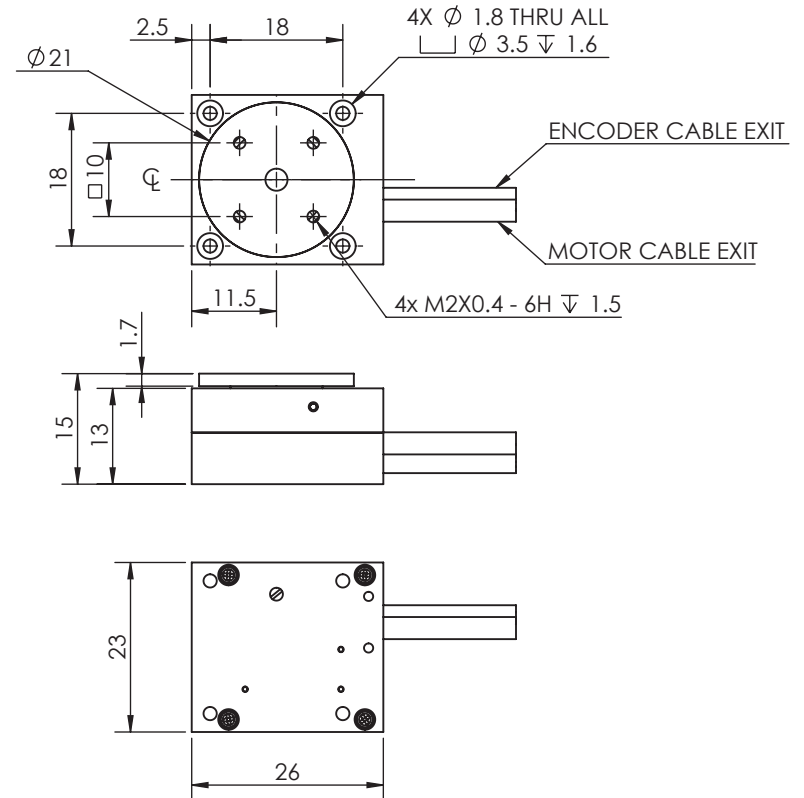
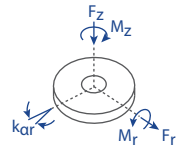
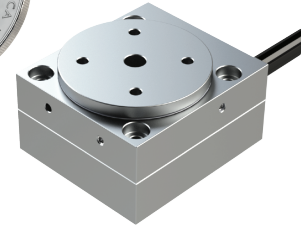
ORDERING INFORMATION

PR-20- 1 1 0

DRIVE	Piezo Motor.....	1
TRAVEL	360°	1
ENCODER	None	0
	Absolute (BiSS C)**	5
LIMIT SWITCH	None	0
ENVIRONMENT	Atmospheric	0
	High Vacuum, 10 ⁻⁶ mbar	6
	Ultra High Vacuum, 10 ⁻⁹ mbar	9

* Open Loop Only
** Only compatible with MMC-110 controller

Load, max	F _r [N]	F _z [N]	M _r [N-m]	M _z [N-m]	k _{cr} [μrad/N-m]
PM-002	1	1	0.01	0.01	-



• all dimensions are in millimeters

Specifications are subject to change without notice.