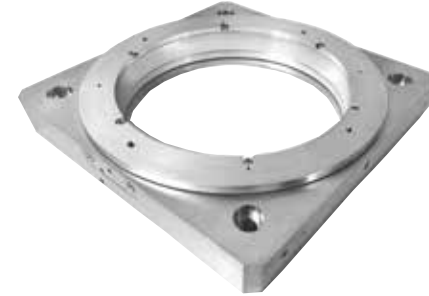
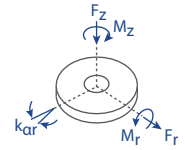


Rotation Stage | PR-160PM

The PR-160 is a rotation stage with unlimited travel and a 120 mm aperture. The crossed roller bearing ensures smooth motion and high stability. It utilizes our patented multi-phase piezo motor resulting in high speed (> 10 °/s) and high blocking torque. The PR-160 can be combined with the linear PPS-110 stage with an adapter bracket. Versions capable of operation in vacuum (10⁻⁹ mbar) are available. The PR-160 is compatible with the MMC-103 and MMC-110 controllers.

Load, max	F _r [N]	F _z [N]	M _r [N-m]	M _z [N-m]	k _{qr} [μrad/N-m]
PM-005R	20	100	5	0.3	150



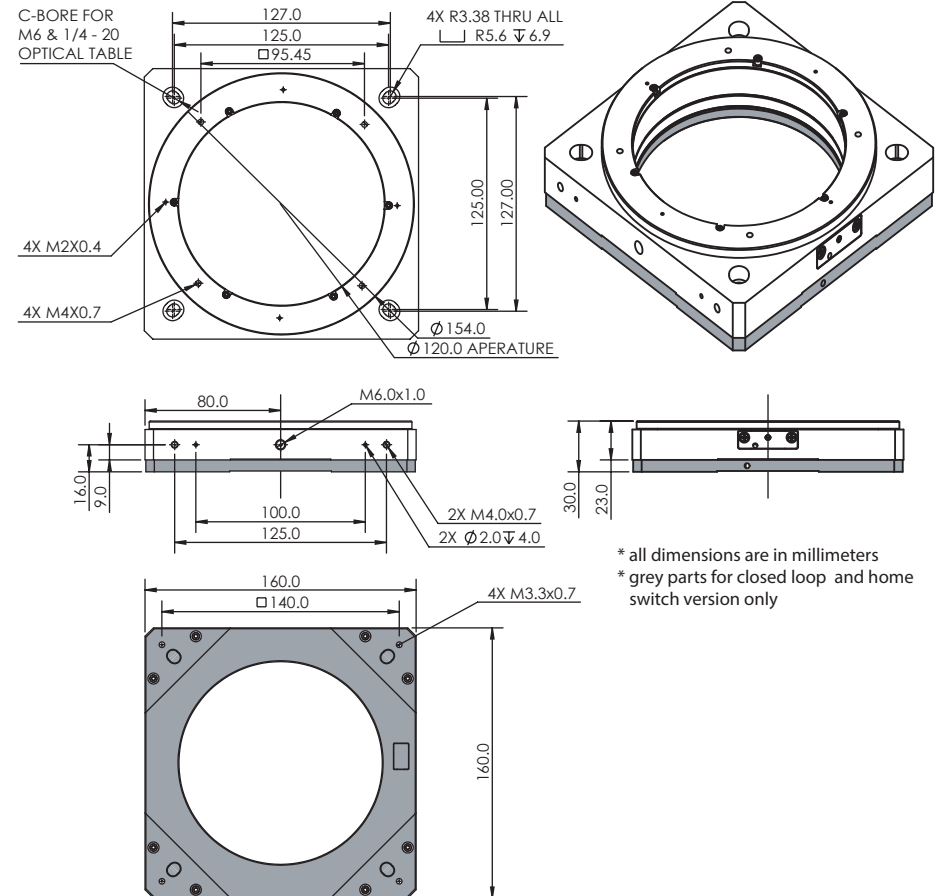
* Closed carriage option available

KEY FEATURES

- Continuous 360° motion
- 10 μ° closed loop encoder resolution
- Load capacity up to 10 kg
- 120 mm clear aperture
- Crossed roller bearing
- Low profile, 23 mm height in open loop, 30 mm closed loop
- Vacuum versions available
- Available with closed aperture

TECHNICAL DATA

Travel range [°]	360°, limitless		
Flatness (bearings) [μm]	± 3		
Eccentricity (bearings) [μm]	± 3		
Wobble [μrad]	± 50		
Weight [g]	135		
Motor option	Piezo Motor		
Speed, max [°/s]	5 (MMC-103), 10 (MMC-110)		
Encoder option	None (open loop)	Analog (1 V _{pp})	Digital (RS-422)
Resolution, typical [μ°]	5	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)		



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

ORDERING INFORMATION

PR-160- 1 1

DRIVE	Piezo Motor, PM-005R	1
TRAVEL	360°	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

Specifications are subject to change without notice.