Precision Gonio Stage | PG-50PM

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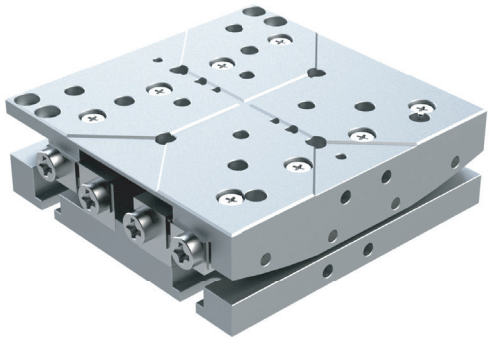
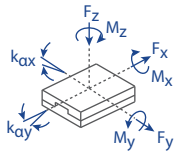
The PG-50 gonio stage performs best in limited space applications due to its compact design. High stiffness and smooth motion is achieved through pre-loaded crossed-roller bearings. These stages may be mounted in an orthogonal, space-saving arrangement to achieve pitch and roll adjustment. Versions capable of operation in vacuum (10^{-9} mbar) are available. The PG-50 is compatible with the MMC-100 and MMC-110 controllers.

Load, max	F_X [N]	F_Y [N]	F_Z [N]	M_X [N·m]	M_Y [N·m]	M_Z [N·m]	$k_{\alpha X}$ [µrad/N·m]	$k_{\alpha Y}$ [µrad/N·m]
PM-004R	1	5	10	0.6	0.1	4	80	80



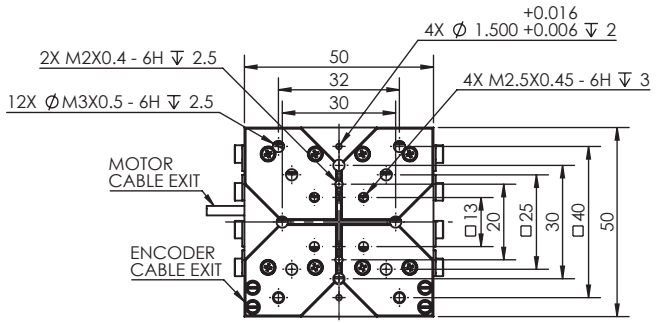


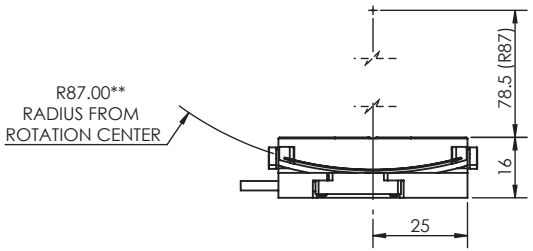
KEY FEATURES

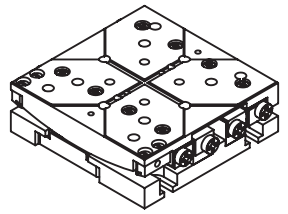
- Smooth, continuous ± 5° motion
- 10 µ° closed loop encoder resolution
- Load capacity up to 1 kg
- Steel crossed roller bearings
- Low profile, 16 mm height
- Vacuum versions available
- Other center radii available upon request (70 mm and 103 mm)

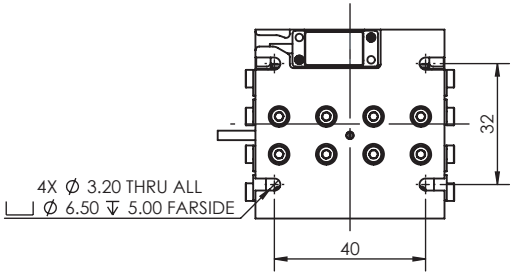
TECHNICAL DATA

Travel range about center of rotation [°]	± 5		
Rotational Center Accuracy [mm]	< 0.1		
Wobble (Bearings) [µrad]	± 120		
Weight [g], Open Loop	130		
Weight [g], Closed Loop	135		
Motor option	**Piezo Motor**		
Speed, max [°/s]	1 (MMC-100), 3 (MMC-110)		
Encoder option	**None (open loop)**	**Analog (1 Vpp)**	**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)		









* all dimensions are in millimeters
** other center radii available

ORDERING INFORMATION

PG-50- | 1 | 1 | | | |

DRIVE	Piezo Motor, PM-004R	1
TRAVEL	± 5°	1
ENCODER	None	0
	Analog (1 Vpp)	2
	Digital (RS-422)	3
LIMIT SWITCH	None	0
	Magnetic†	1
ENVIRONMENT	Atmospheric	0
	High Vacuum, 10^{-6} mbar	6
	Ultra High Vacuum, 10^{-9} mbar	9

† not needed with encoder