Precision Gonio Stage | PG-50SM

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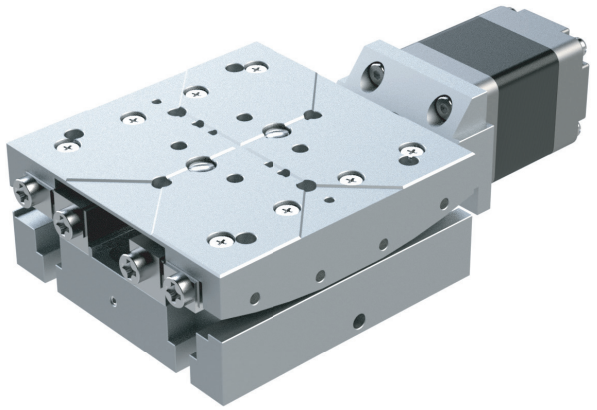
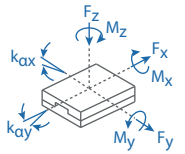
The PG-50 gonio stage performs best in limited space applications due to its compact design. High stiffness motion is achieved through pre-loaded cross-roller bearings and a precision worm drive. These stages may be mounted in an orthogonal, space-saving arrangement to achieve pitch and roll adjustment. Versions capable of operation in vacuum (10^{-6} mbar) are available. The PG-50SM is compatible with the MMC-200 controller.

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]
SM-001	15	15	20	0.75	4	4	80	80



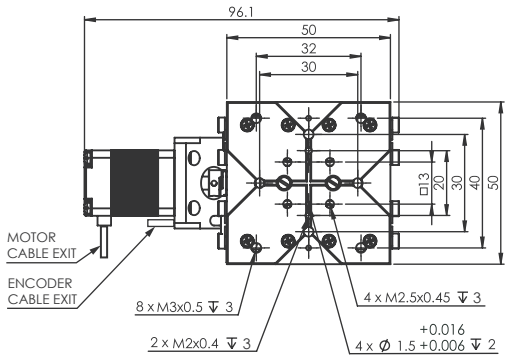


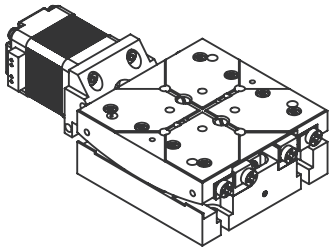
KEY FEATURES

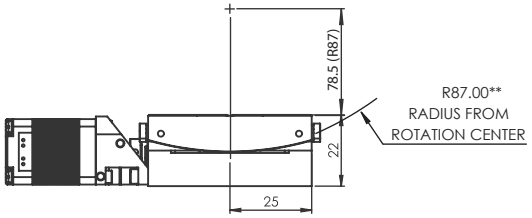
- Smooth, continuous ± 5° motion
- 0.001° encoder resolution
- Load capacity up to 2 kg
- Crossed roller bearings
- Low profile, 22mm height
- Vacuum versions available
- Other center of rotations are available on request (70 mm and 103 mm)

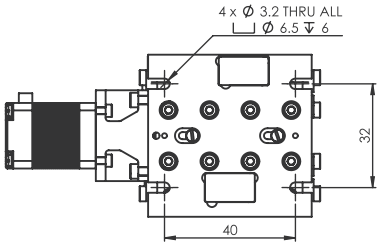
TECHNICAL DATA

Travel range about center of rotation [°]	± 5		
Rotational Center Accuracy [mm]	< 0.1		
Wobble (Bearings) [µrad]	± 120		
Weight [g], Open Loop	225		
Weight [g], Closed Loop	235		
Motor option	**Stepper Motor (2 phase)**		
Speed, max [°/s]	5		
Encoder option	**None (open loop)**	**Analog (1 Vpp)**	**Digital (RS-422)**
Resolution, typical [m°]	1	1	1
Repeatability, bi-directional [m°]	± 10	± 2	± 2
Repeatability, uni-directional[m°]	10	2	2
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)		









* all dimensions are in millimeters
** Additional center of rotations are available

ORDERING INFORMATION

PG-50- [2] [1] [ ] [1] [ ]

DRIVE	Stepper Motor, SM-001	2
TRAVEL	± 5°	1
ENCODER	None	0
	Analog (1 Vpp)	2
	Digital (RS-422)	3
LIMIT SWITCH	Magnetic	1
ENVIRONMENT	Atmospheric	0
	High Vacuum, 10^{-6} mbar	6