

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 crossed-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}) are available. The PG-50 is compatible with the MMC-200 controller.

KEY FEATURES

- Smooth, continuous $\pm 5^\circ$ motion
- 0.001° encoder resolution
- Load capacity up to 2 kg
- Crossed roller bearings
- Low profile, 22 mm height
- Vacuum versions available
- Center of rotations are available on request

TECHNICAL DATA

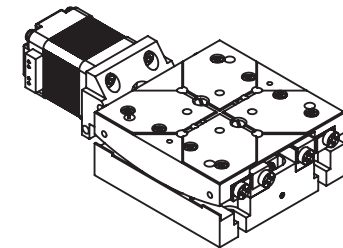
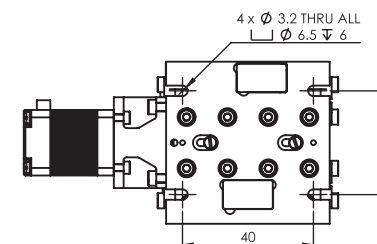
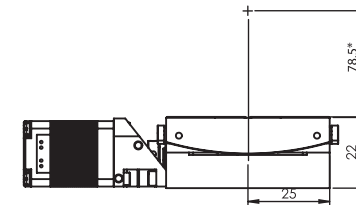
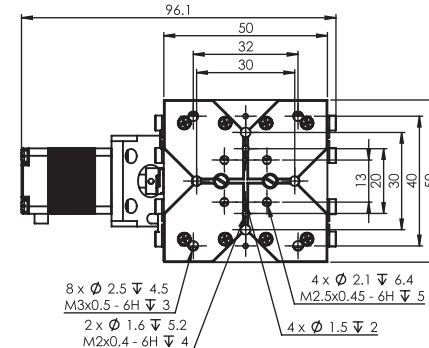
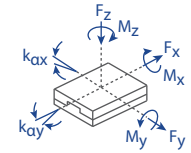
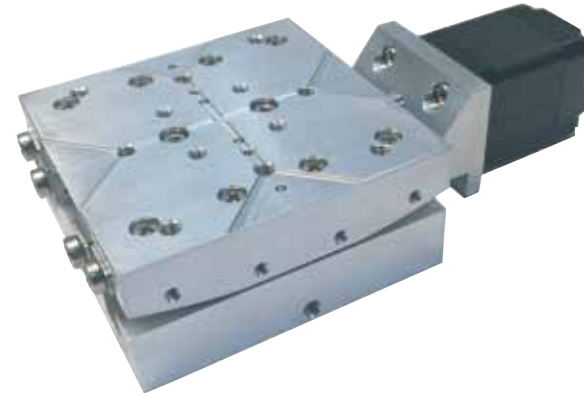
Travel range about center of rotation [°]	± 5		
Rotational Center Accuracy [mm]	< 0.1		
Wobble (Bearings) [μ rad]	± 120		
Weight [g]	70		
Motor option	Stepper Motor (2 phase)		
Speed, max [°/s]	5		
Encoder option	None (open loop)	Analog (1 Vpp)	Digital (RS-422)
Resolution, typical [m°]	1	1	1
Repeatability, 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)		

ORDERING INFORMATION

PG-50- 2 1

DRIVE	Stepper Motor, SM-001.....	2
TRAVEL	$\pm 5^\circ$	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

Load, max	F_x [N]	F_y [N]	F_z [N]	M_x [N-m]	M_y [N-m]	M_z [N-m]	k_{ax} [μ rad/N-m]	k_{ay} [μ rad/N-m]
SM-001	15	15	20	0.75	4	4	80	80



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

Specifications are subject to change without notice.