

Piezo Positioner | PP-12

The PP-12 is an ultra-compact linear piezo stage. Low profile and high load capacity are achieved through the use of a multi-phase piezo motor combined with a ball slide, which allows for smooth travel up to 4mm. The PP-12 can be directly X-Y mounted without the use of adapter plates. Vacuum versions are available. The PP-12 is compatible with the MMC-100 and the MMC-110 controllers.

KEY FEATURES

- Travel range of up to 4 mm
- Closed loop encoder resolution of 20 nm
- Load capacity up to 0.1 kg
- Ball slide
- Low profile, 7 mm height
- Vacuum versions available

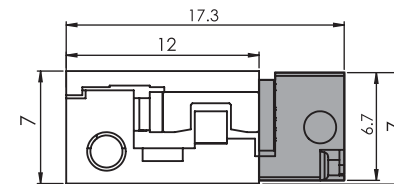
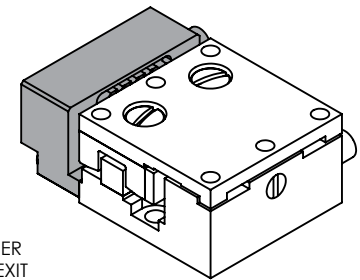
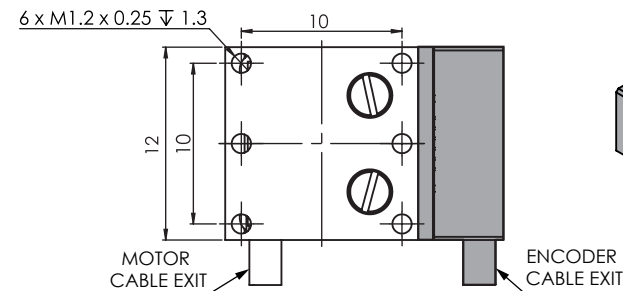
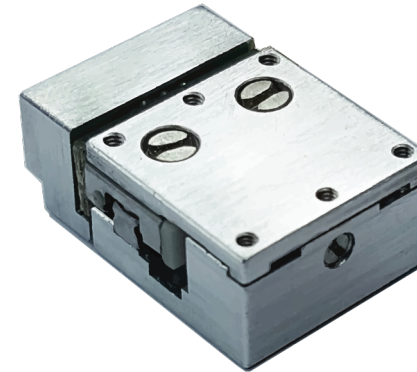
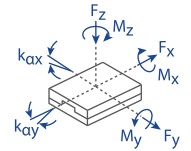
TECHNICAL DATA

Travel range [mm]	4	
Straightness / Flatness [μm]	± 2	
Pitch [μrad]	± 150	
Yaw [μrad]	± 150	
Weight [g], Open Loop	4	
Weight [g], Closed Loop	5	
Motor option	Piezo Motor	
Speed, max [mm/s]	1 (MMC-100), 3 (MMC-110)	
Encoder option	None (open loop)	Digital (RS-422)
Resolution, typical [nm]	1	20
Repeatability, bi-directional [nm]	n/a	± 200
Repeatability, uni-directional [nm]	n/a	200
Materials	aluminum body, steel bearing (other materials, i.e. stainless steel, titanium, etc. available upon request)	

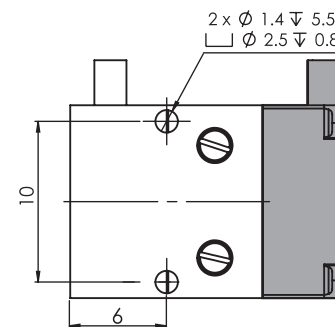
ORDERING INFORMATION

	PP-12-	1	1	0	
DRIVE	Piezo Motor, PM-002	1			
TRAVEL	4 mm	1			
ENCODER	None		0		
	Digital		3		
LIMIT SWITCH	None		0		
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} [$\mu\text{rad/N-m}$]	k_{ay} [$\mu\text{rad/N-m}$]
PM-002	1	1	1	0.1	0.1	0.1	-	-



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



Specifications are subject to change without notice.