

Piezo Positioner | PP-18

The PP-18 is a low cost linear piezo stage. Miniature crossed roller bearings assure high stiffness. It utilizes our patent-pending multi-phase piezo motor resulting in high speed (> 2 mm/s) and high blocking force (> 1.5 N)

KEY FEATURES

- Travel range of up to 26 mm
- 40 nm closed loop resolution standard
- Load capacity up to 0.5 kg horizontally, 0.15 Kg vertically
- Steel crossed roller bearing
- Low profile, 10 mm height, 17mm wide
- Uses MMC-10 low cost controller

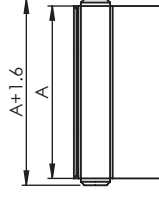
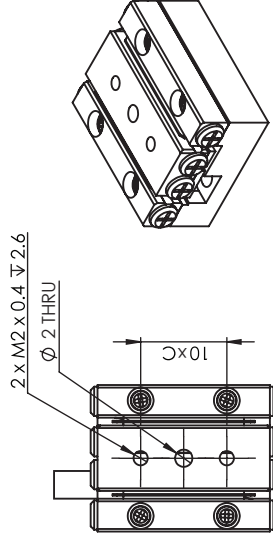
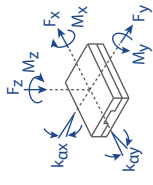
TECHNICAL DATA

Travel range [mm]	12	18	26
Straightness / Flatness [μm]	± 5	± 10	± 15
Pitch [μrad]	± 100	± 200	± 300
Yaw [μrad]	± 100	± 200	± 300
Weight [g]	17	24	34
Motor option	Piezo Motor		
Speed, max [mm/s]	2 mm/s		
Encoder option	Digital (RS-422)		
Resolution, typical [nm]	40		
Repeatability, bi-directional [nm]	± 200		
Repeatability, uni-directional [nm]	200		
Accuracy [μm]	± 10		
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)		

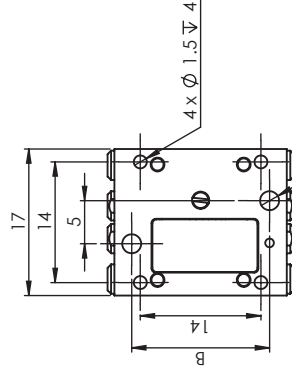
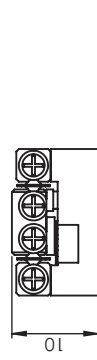
ORDERING INFORMATION

DRIVE	Piezo Motor, PM-002	1	3	0	0
TRAVEL	12 mm	1	1	1	1
	18 mm	2	2	2	2
	26 mm	3	3	3	3
ENCODER	Digital (RS-422)	3	3	3	3
	None	0	0	0	0
LIMIT SWITCH	Atmospheric	0	0	0	0
ENVIRONMENT					

Load, max	F_x [N]	F_y [N]	F_z [N]	M_x [Nm]	M_y [Nm]	M_z [Nm]	k_{ax} [$\mu\text{rad}/\text{N}\cdot\text{m}$]	k_{ay} [$\mu\text{rad}/\text{N}\cdot\text{m}$]	k_{az} [$\mu\text{rad}/\text{N}\cdot\text{m}$]
PM-002	1.5	5	5	0.2	0.2	0.2	-	-	-



Travel	A	B	C
12	20	16	1
18	30	16	2
26	40	36	3



* 12 mm travel version shown
* all dimensions are in millimeters

2 x ϕ 2.2 THRU
4 x ϕ 1.5 ∇ 4
2.4 FAR SIDE

Specifications are subject to change without notice.