Precision Positioning Stage | PPS-60SM

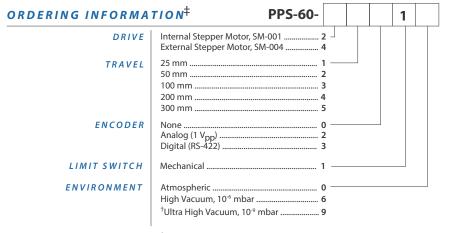
The PPS-60 is high-precision, long travel linear stage. The same stage is available with piezo motor, linear motor or stepper motor drive. Ball bearings assure high stiffness and guiding accuracy for loads up to 150 N. The PPS-60 is available with an optional linear encoder for increased resolution and repeatability. PPS-60 stages can be mounted in XY without any adapter, and a Z-axis can be added with the use of a standard mounting bracket.

KEY FEATURES

- Travel ranges up to 300 mm (longer travel available on request)
- 50 nm closed loop encoder resolution
- Load capacity up to 15 kg
- Recirculating ball bearings
- Integrated mechanical limit switches
- Vacuum versions available

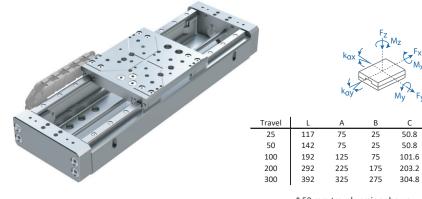
TECHNICAL DATA

Travel range [mm]	25	50	100	200	300		
Straightness / Flatness [µm]	± 2.5	± 4	± 6	±8	± 10		
Pitch [μrad]	± 50	± 75	± 75 ± 100 ± 12:		± 150		
Yaw [µrad]	± 50	± 75	± 75 ± 100		± 150		
Weight [g], Open Loop	600	650	750	950	1200		
Weight [g], Closed Loop	610	660	760	960	1210		
Motor option	2-Phase Stepper Motor						
Speed, max [mm/s]	5 (10 with external stepper motor)						
Encoder option	Open L	оор	Analog (1 V _{pp}) Dig	Digital (RS-422)		
Resolution, typical [μm]	0.1		0.1		0.05		
Repeatability, bi-directional [μm]	± 4		± 0.2		± 0.2		
Repeatability, uni-directional [µm]	0.2		0.2		0.2		
Materials	aluminum body, steel bearing (other materials i.e. stainless steel, titanium, etc. available upon request)						

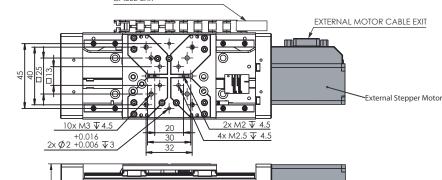


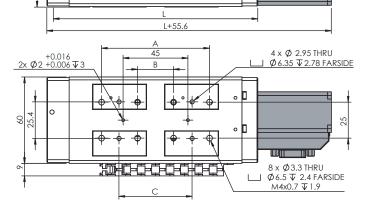
[†] only available with externally mounted UHV stepper Motor.

Load, max	F _X [N]	F _y [N]	F _Z [N]	M _X [N·m]	M _y [N·m]	M _Z [N·m]	k _{αχ} [μrad/N·m]	k _{αy} [μrad/N·m]
SM-001 (Internal)	5	100	150	10	10	10	100	100
SM-004 (External)	10	100	150	10	10	10	100	100



*50 mm travel version shown
INTERNAL MOTOR/ENCODER *All dimensions are in millimeters







[‡] refer to product manual for additional information.