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

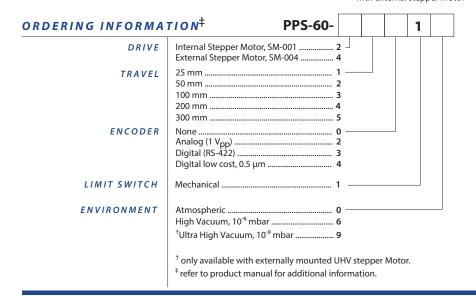
- Travel ranges up to 300 mm (longer travel available on request)
- 50 nm closed loop encoder resolution
- Load capacity up to 15 kg
- Recirculating Ball Bearings
- Integrated mechanical limit switches
- Vacuum, non-magnetic versions available

## TECHNICAL DATA

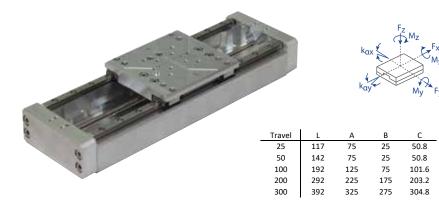
Travel range [mm]	25	50		100	200	)	300	
Straightness / Flatness [µm]	± 2.5	± 4	±	6	± 8		± 10	
Pitch [μrad]	± 50	± 75	±	100 ± 125		5	± 150	
Yaw [µrad]	± 50	± 75	±	100 ± 125		5	± 150	
Motor option	2-Phase Stepper Motor							
Speed, max [mm/s]	5 (*15)							
Encoder option	Open Loop	Analog (1	V <sub>pp</sub> )	Digital (RS-422)		Digital Low Cost		
Resolution, typical [µm]	0.1	0.1		0.05		0.5		
Repeatability, bi-directional [μm]	± 4	± 0.2		± 0.2		± 1		
Repeatability, uni-directional [μm]	0.2	0.2	0.2		0.2		1	
Materials	aluminum body, steel bearing							

(other materials i.e. stainless steel, titanium, etc. available upon request)

\*with external stepper motor



Load, max	F <sub>X</sub> [N]	F <sub>y</sub> [N]	F <sub>Z</sub> [N]	<i>M<sub>X</sub></i> [N·m]	M <sub>y</sub> [N·m]	M <sub>Z</sub> [N·m]	k <sub>αχ</sub> [μrad/N·m]	k <sub>αy</sub> [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
- All dimensions are in millimeters

