

Linear Motion Potentiometer PL2S

- **Excellent Linearity**
- **Stroke 50 mm to 500 mm**
- **Infinite Resolution**
- **Two Ball Joints**
- **Conductive Plastic resistance element**



Linear motion potentiometers series PL2S change mechanical linear motions into the corresponding electrical signals. Accurate, stout and reliable, they solve any problem linked to measuring and positioning control on any kind of industrial machine. Ball joints are provided at both ends for air fixing, which allows to compensate slight mis-alignments in the application.

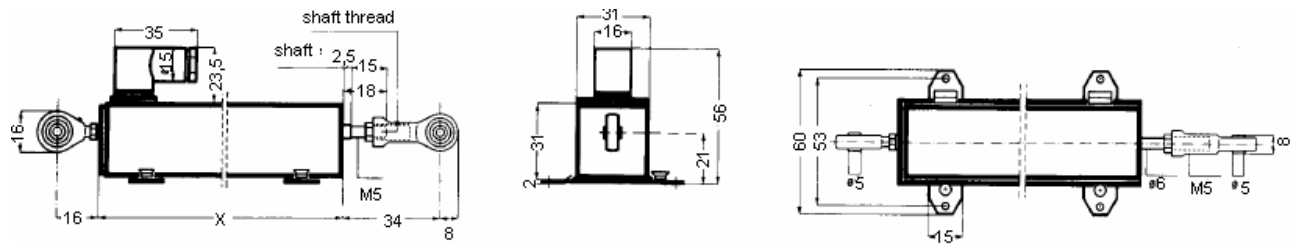
More Features:

- 20 Mio. operations life
- Moving speed up to 1 m/s
- Shaft diameter mm
- stout aluminium case
- easy clamping by movable feet or ball joints
- electrical connections by orientable connector
- IP65 protection

Specifications

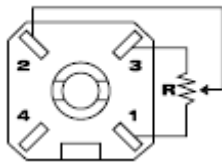
Strokes nom.	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm	400 mm	500 mm
Electrical stroke	nom. stroke ± 1 mm							
Mecanica stroke	nom. stroke ± 3 mm							
Resistive element	conductive plastic							
Resistive value	standard: 5 kOhm on request: 2 kOhm, 10 kOhm, 20 kOhm							
Total resistance tolerance	standard ± 20 % on request: ± 10 %							
independant linearity	$\pm 0,075$ %							$\pm 0,1$ %
Resolution	infinite							
Output smoothness	<0,1 % against input voltage							
Contact resistance variation	<2 % C.R.V.							
Power rating	0,5 W	1 W	1,75 W	2 W	2,25 W	2,5 W	3 W	4 W
Resistance temperature coefficient	± 400 ppm/ $^{\circ}$ C							
Insulation resistance	>1000 MOhm at 500 VDC							
electrical connection	freely rotating connector							
Case material	anodised aluminium with nylon and glas closing flanges							
Shaft material	stainless steel on auto-lubricating alebox – free rotation							
Sliding friction	0,1 kg							
Max. strain on closing stranges	10 kg							
Fixing	freely movable clamping feet or ball joints							
Life	20 Mio. motions, no load							
Protection degree	IP65							
Operating temperature	-25...+85 $^{\circ}$ C							
Stem max. linear speed	1 m/s							
Vibration (10...2000 Hz)	15 g							
Shock (11 ms)	50 g							

■ Dimensions



nom. stroke	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm	400 mm	500 mm
X	127 mm	177 mm	227 mm	277 mm	327 mm	377 mm	477 mm	577 mm

■ Connection Diagram



Pin 1: resistance 0 Ohm with stem in

■ Ordering Information

Model	Stroke in mm	Resistance in Ohm	Resistance Tolerance
PL2S	50	5K	±20 %

Our policy is to improve specification of our products continuously, so technical and production details can be changed without any notice.