



FDPL2S

Linear Motion Potentiometer

- Excellent Linearity
- Stroke 50 to 750 mm
- Infinite Resolution
- Two ball joints



Linear motion potentiometers series FDPL2S 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 applications.

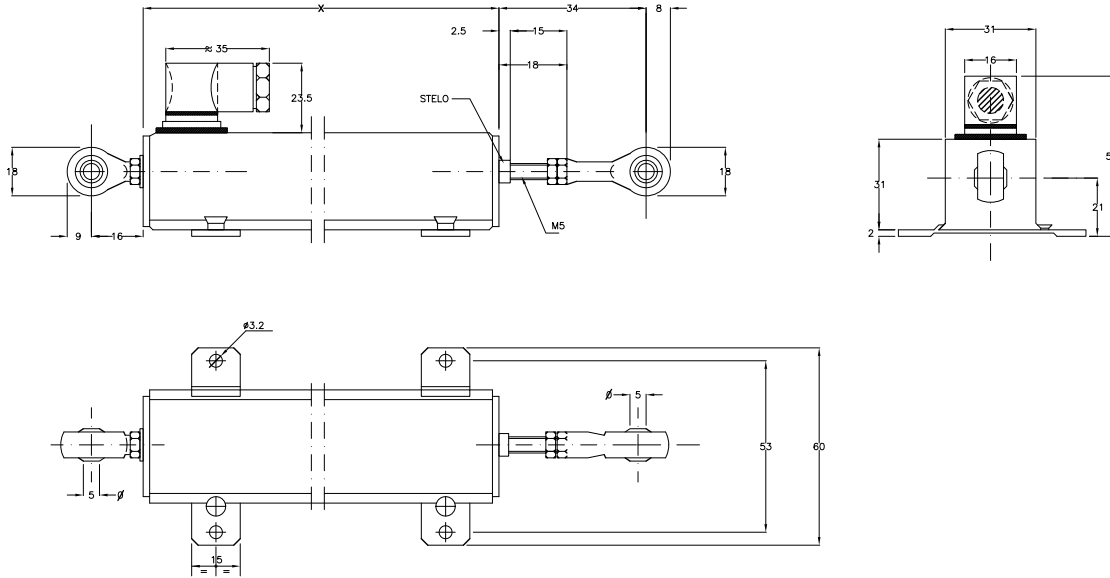
More Features:

- 20 Mio. operations life
- Conductive plastic resistance element
- Moving speed up to 1 m/s
- Shaft diameter 6 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 750 mm
Resistive element	conductive plastic
Resistive value	standard: 5 kOhm on request: 2 kOhm, 10 kOhm, 20 kOhm
Total resistance tolerance	standard $\pm 20\%$ on request: $\pm 10\%$
Independent 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 4 W
Resistance temperature coefficient	± 400 ppm/ $^{\circ}\text{C}$
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	$-25 \dots +85^{\circ}\text{C}$
Stem max. linear speed	1 m/s
Vibration (10...2000 Hz)	15 g
Shock (11 ms)	50 g

■ Dimensions



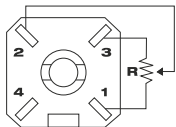
■ Available strokes

Nominal strokes (mm)	50	100	150	200	250	300	400	500	750
X	127	177	227	277	327	377	477	577	827

Electrical stroke : nominal stroke ± 1 mm

Mechanical stroke : nominal stroke ± 3 mm

■ Connection Diagram



Pin 1: resistance 0 Ohm with stem in

■ Ordering Information

Example

Model	Stroke in mm	Ohm	Resistance Tolerance
FDPL2S	50	5K	± 20 %

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

ALTHERIS bv

Scheveningseweg 15
2517 KS DEN HAAG
The Netherlands

+31 (0)70 3924421

+31 (0)70 3644249

Offices in : Benelux | Germany | France | UK | Italy | USA

www.altheris.com

sales@altheris.nl

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