FDPL231

Linear Motion Potentiometer

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

Linear motion potentiometers series FDPL231 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 misalignments in the applications.

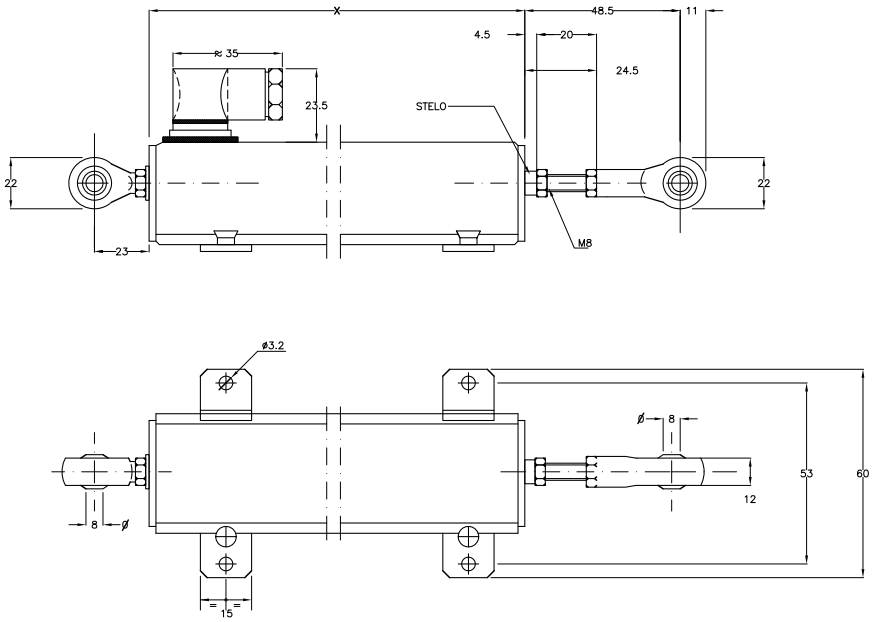
More Features:

- 20 Mio. operations life
- Conductive plastic resistance element
- Moving speed up to 1 m/s
- Shaft diameter 8 mm
- Stout aluminium case
- Easy clamping by movable feet or ball joints
- Electrical connections by orientable connector
- IP65 protection

Specifications

Strokes	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 ±20 % on request: ±10 %								
Independent linearity	±0,075 %							±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/°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°C								
Stem max. linear speed	1 m/s								
Vibration (10…2000 Hz)	15 g								
Shock (11 ms)	50 g								

Dimensions

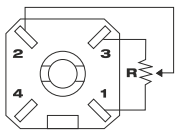


Available strokes

Nominal strokes (mm)	50	100	150	200	250	300	400	500	750
X	187	237	287	337	387	437	537	637	885

Electrical stroke : nominal stroke ± 1 mm
Mechanical stroke : nominal stroke ± 3 mm

Connection Diagram



Pin 1: resistance O Ohm with stem in

Ordering Information

Example

Model	Stroke in mm	Resistance in Ohm	Resistance Tolerance
FDPL231	50	5K	±20 %

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

LEADERS IN SENSORS & HEAVY DUTY JOYSTICKS

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

29/07/2011