

Precision Linear Transducers, Designed for Mounting in Hydraulic or Pneumatic Cylinder, Conductive Plastic Element (Unsealed Series/Ø 16 mm)


FEATURES

- Large range of strokes from 25 to 2000 mm
- High accuracy
- Very good repeatability
- Continuous resolution
- Easy mounting


RoHS
COMPLIANT

These unsealed sensors are suitable for installation in the high pressure chamber of cylinders.

ELECTRICAL SPECIFICATIONS	
Theoretical Electrical Travel (TET) = E	From 25 mm to 2000 mm in increments of 25 mm
Independent Linearity (over TET) On Request	$\leq \pm 1\%$; $\leq \pm 0.1\%$ $\leq \pm 0.05\%$ if $E \geq 100$ mm, $\leq \pm 0.025\%$ if $E \geq 200$ mm
Actual Electrical Travel (AET)	TET + 6 mm \pm 0.5
Total Resistance R_T	150 Ω /cm
Resistance Tolerance at 20 °C	$\pm 20\%$
Repeatability	$\leq 0.01\%$
Maximum Power Rating	0.05 W/cm at 70 °C, 0 W at 125 °C
Wiper Current	Recommended: a few μ A - 1 mA max. (continuous)
Load Impedance	1000 times R_T minimum
Insulation Resistance	> 1000 M Ω , 500 V _{DC}
Dielectric Strength	> 300 V _{RMS} at 50 Hz

MECHANICAL SPECIFICATIONS	
Mechanical Travel (MT)	MT = TET
Body	Anodized aluminum
Rod Internal Diameter	16 LH: Ø 18 mm
Support	2 screws
Operating Force	1 N typical
Electrical Outputs	Wires 300 mm long
Oil	Insulating mineral hydraulic
Pressure	300 bars continuous, 1000 bars accidentally
Wiper	Precious metal multifinger

PERFORMANCE	
Life	25 million cycles typical/1 Hz/T° = 20 °C \pm 5 °C/80 % TET
Temperature Limits	- 20 °C to + 80 °C
Speed at 20 °C	1.5 m/s max.



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