

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



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

FEATURES

- Large range of strokes from 25 mm to 2000 mm
- High accuracy
- Very good repeatability
- Continuous resolution
- Easy mounting
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT

QUICK REFERENCE DATA

Sensor type	LINEAR, conductive plastic
Output type	Wires
Market appliance	Industrial
Dimensions	L x 16 mm dia. (with L = TET + 70 mm)

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

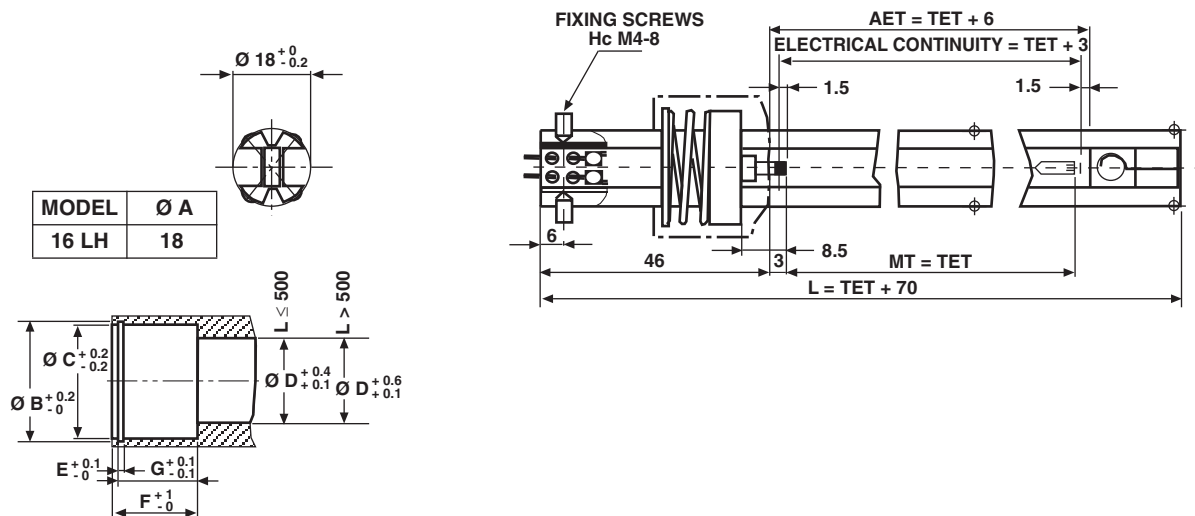
PERFORMANCE

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.

Note

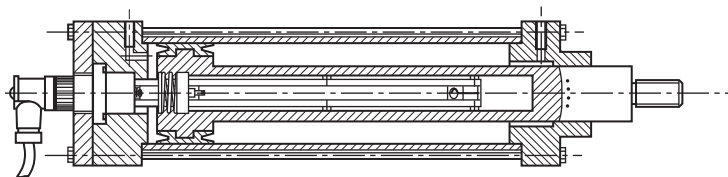
- Nothing stated herein shall be construed as a guarantee of quality or durability.

DIMENSIONS in millimeters, general tolerance ± 1 mm



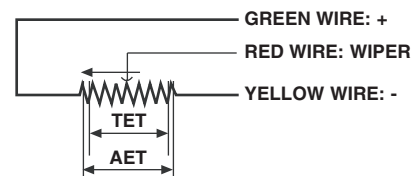
MODEL	B	C	D	E	F	G
16 LH	25.2	24	18	1.3	17.8	16.3

MOUNTING IN ACTUATOR



On these models:
Cylinder sealing and electrical connections required

ELECTRICAL CONNECTIONS



TET = THEORETICAL ELECTRICAL TRAVEL
AET = ACTUAL ELECTRICAL TRAVEL

ORDERING INFORMATION/DESCRIPTION

REC	16	LH	4	D	152	W...	e.
SERIES	MODEL	TYPE	THEORETICAL ELECTRICAL TRAVEL	LINEARITY	RESISTANCE	MODIFICATIONS	LEAD FINISH
		Unsealed	Times 25 mm	A: $\leq \pm 1\%$ D: $\leq \pm 0.1\%$ E: $\leq \pm 0.05\%$ F: $\leq \pm 0.025\%$	First 2 digits are significant numbers 3 rd digit indicates number of zeros	Special feature code number	

SAP PART NUMBERING GUIDELINES

RE	16 LH	4	D	152	W...
SERIES	MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES



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