

## Precision Linear Transducers, Designed for Mounting in Hydraulic or Pneumatic Cylinder, Conductive Plastic Element (Unsealed Series/Ø 10 mm)



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

**FEATURES**

- Large range of strokes from 25 mm to 500 mm
- High accuracy
- Very good repeatability
- Continuous resolution
- Easy mounting
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS  
COMPLIANT**
**QUICK REFERENCE DATA**

Sensor type	LINEAR, conductive plastic
Output type	Wires
Market appliance	Industrial
Dimensions	10 mm dia.

**ELECTRICAL SPECIFICATIONS**

Theoretical electrical travel (TET) = E	From 25 mm to 500 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 $\Omega$ /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	1 mA max. continuous, recommended: a few $\mu$ A
Load impedance	1000 times $R_T$ minimum
Insulation resistance	> 1000 M $\Omega$ , 500 V <sub>DC</sub>
Dielectric strength	> 300 V <sub>RMS</sub> at 50 Hz

**MECHANICAL SPECIFICATIONS**

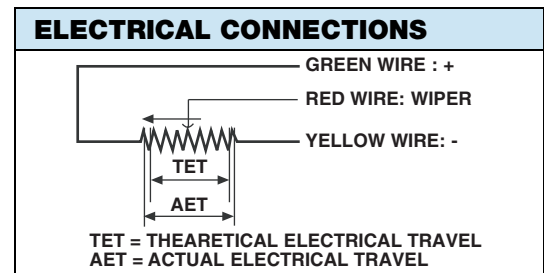
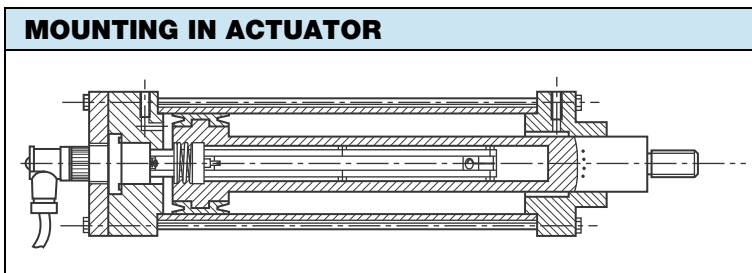
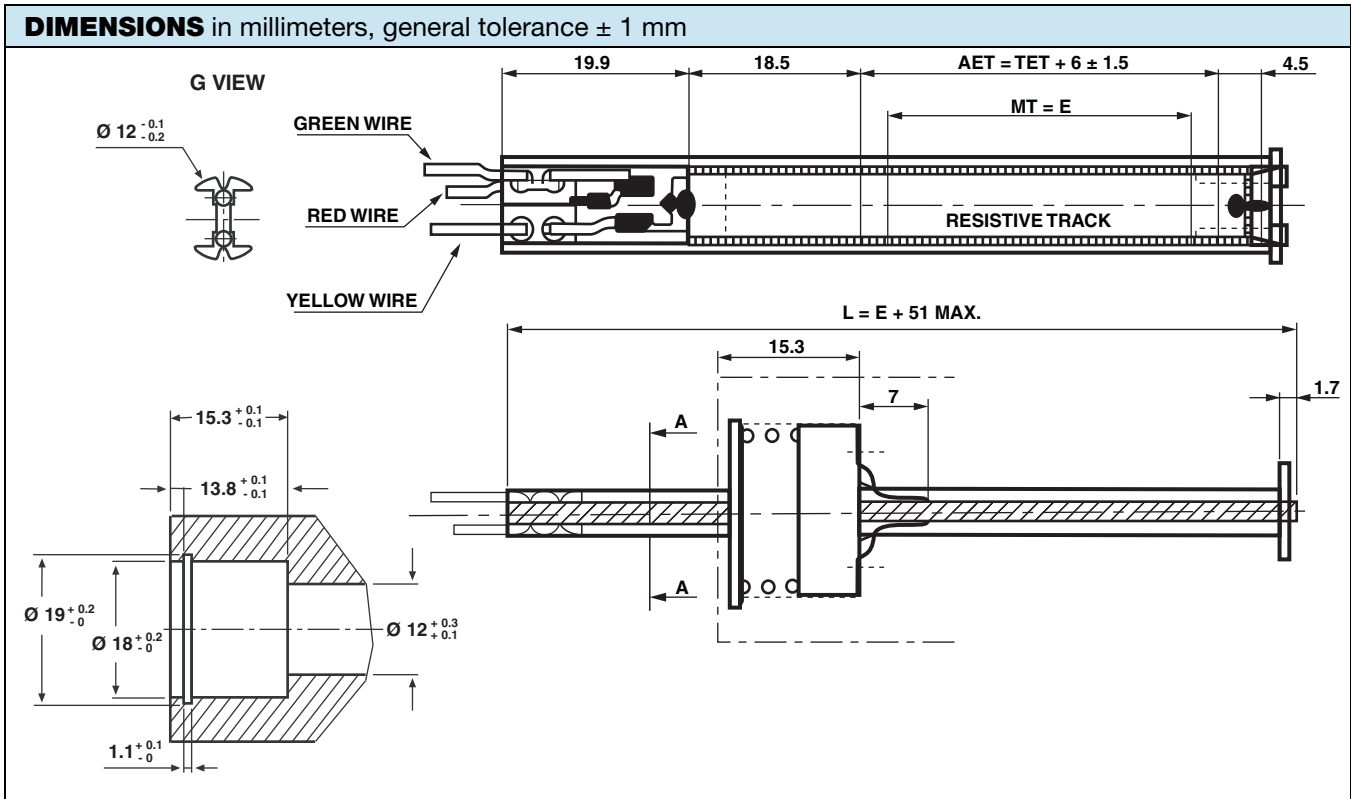
Mechanical travel (MT)	MT = TET
Body	Anodized aluminum
Rod internal diameter	10 LH: Ø 12 mm
Operating force	1 N typical
Electrical outputs	Wires, L = 300 mm
Oil	Insulating mineral hydraulic
Pressure	300 bars continuous, 1000 bars accidentally
Wiper	Precious metal multifinger

**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.



**ORDERING INFORMATION/DESCRIPTION**

REC	10	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 third indicates number of zeros	Special feature code number	

**SAP PART NUMBERING GUIDELINES**

RE	10 LH	4	D	152	W...
SERIES	MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES



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