

Vishay Sfernice

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



This sensor is to be installed in the high pressure chamber of small cylinders and is equipped with glass-sealed electrical outputs.

FEATURES





- · High accuracy
- Very good repeatability
- Continuous resolution
- · Easy mounting
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

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 ± 1 %; \leq ± 0.1 % \leq ± 0.05 % if E \geq 100 mm \leq ± 0.025 % if E \geq 200 mm					
Actual electrical travel (AET)	TET + 6 mm ± 0.5					
Total resistance R _T	150 Ω/cm					
Resistance tolerance at 20 °C	± 20 %					
Repeatability	≤ 0.01 %					
Maximum power rating	0.05 W/cm at 70 °C, 0 W at 125 °C					
Wiper current	Recommended: a few µA - 1 mA max. (continuous)					
Load resistance 1000 times R _T minimum						
Insulation resistance	> 1000 MΩ, 500 V _{DC}					
Dielectric strength	> 300 V _{RMS} at 50 Hz					

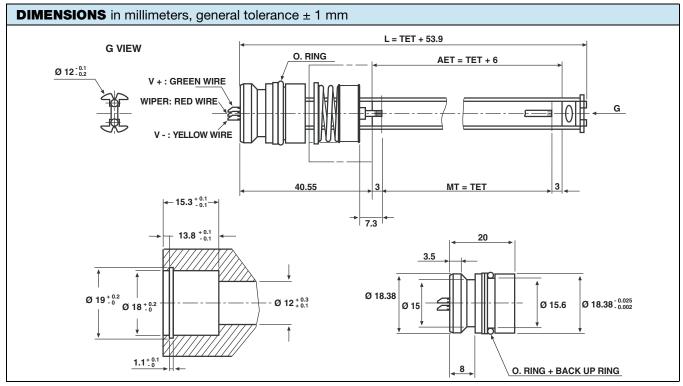
MECHANICAL SPECIFICATIONS					
Mechanical travel (MT)	MT = TET				
Body	Anodized aluminum				
Rod internal diameter	Ø 12 mm				
Support	Stainless steel				
Operating force	1 N typical				
Sealing	Glass-sealing on electrical outputs				
Electrical outputs	Wires AWG 26 L = 300 mm				
Oil	Insulating mineral hydraulic				
Pressure	300 bars continuous, 1000 bars accidentally				
Wiper	Precious metal multifinger				

PERFORMANCE	
Life	25 million cycles typical/1 Hz/T $^{\circ}$ = 20 $^{\circ}$ C ± 5 $^{\circ}$ C/80 $^{\circ}$ TET
Temperature limits	-20 °C to +80 °C
Speed at 20 °C	1.5 m/s max.

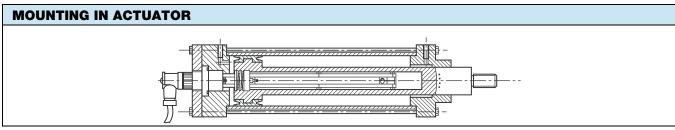
Note

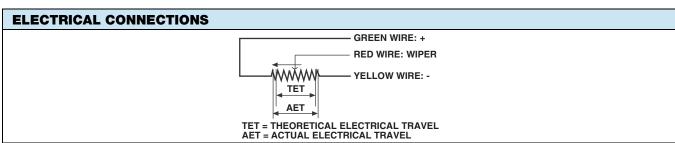
Nothing stated herein shall be construed as a guarantee of quality or durability.





General Tolerance: ± 1 mm





ORDERING INFORMATION/DESCRIPTION							
REC	10	LA	4	D	152	W	e.
SERIES	MODEL	TYPE	THEORETICAL ELECTRICAL TRAVEL	LINEARITY	RESISTANCE	MODIFICATIONS	LEAD FINISH
		Sealed	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	10 LA	4	D	152	W	
SERIES	MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES	



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Vishay

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