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Vishay Sfernice

Precision Linear Transducers, Conductive Plastic, up to 150 mm



The 38 L is a very compact model especially designed for precise measurement of short travels.

FEATURES







- Long life
- · Essentially infinite resolution
- Very small dimension: external diameter = 9.52 mm
- 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	Professional			
Dimensions	9.52 mm dia.			

ELECTRICAL SPECIFICATIONS					
Theoretical electrical travel (TET)	From 12.5 mm to 150 mm see table 1				
Actual electrical travel (AET)	el (AET) AET = TET + 1 mm				
Independent linearity (over TET)	\leq \pm 1 % - \leq \pm 0.5 % \leq \pm 0.25 % for E \geq 25 mm \leq \pm 0.1 % for E \geq 50 mm				
Repeatability	≤ 0.01 %				
Ohmic values (R _T)	From 400 Ω/cm to 4 kΩ/cm				
Resistance tolerance at 20 °C	± 20 %				
Wiper current	Recommended: a few µA - 1 mA max. (continuous)				
Load resistance	Minimum 10 ³ x R _T				
Insulation resistance	\geq 1000 M Ω , 500 V $_{DC}$				
Dielectric strength	≥ 500 V _{RMS} , 50 Hz				

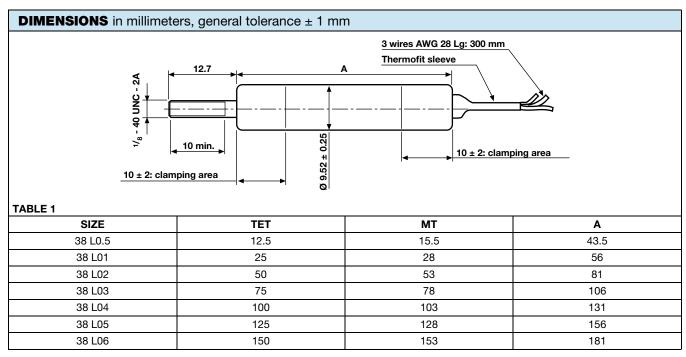
MECHANICAL SPECIFICATIONS					
Mechanical travel (MT)	$MT = TET + 3 \text{ mm} \pm 1 \text{ mm}$				
Housing	Anodized aluminum				
Operating force	0.35 N typical				
Termination 3 wires PTFE AWG 26 length: 300 mm					
Wiper	Precious metal multifinger				

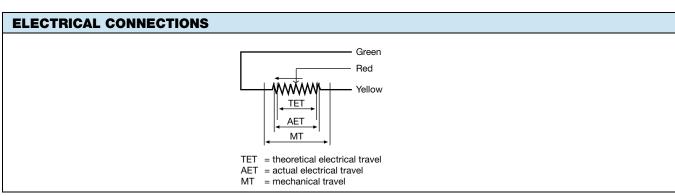
PERFORMANCE				
Operating life	25 million cycles typical/1 Hz/T° = 20 °C ± 5 °C/80 % TET			
Temperature range	-55 °C to +125 °C			
Sine vibration on 3 axes	1.5 mm peak to peak or 15 g - 10 Hz - 2000 Hz			
Mechanical shocks on 3 axes	50 g -11 ms - half sine			

Note

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

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ORDERING INFORMATION/DESCRIPTION								
REC	38	L	0.5	С	102	W	e1	
SERIES	MODEL	NUMBER OF TRACKS	ELECTRICAL TRAVEL	LINEARITY	OHMIC VALUE	MODIFICATIONS	LEAD FINISH	
		L = 1 track	0.5 = 12.5 mm 1 = 25 mm 2 = 50 mm 3 = 75 mm 4 = 100 mm 5 = 125 mm 6 = 150 mm	A: ± 1 % B: ± 0.5 % C: ± 0.25 % D: ± 0.1 %	First 2 digits are significant numbers 3 rd digit indicates number of zeros	Special feature code number	Sn Ag Cu	

SAP PART NUMBERING GUIDELINES						
RE	38 L	0.5	С	102	W	
SERIES	MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES	



Legal Disclaimer Notice

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