Series KIT LMF



Vishay Sfernice

Conductive Plastic Motion Transducer Elements (KIT), Up to 1000 mm



The LMF is a reduced bulk, precision motion transducer, designed for easy integration into equipment.

FEATURES

- Measurement range 25 mm to 1000 mm
- High accuracy \pm 1 % down to \pm 0.025 %
- Good repeatability
- Simple and flexible mounting
- Essentially infinite resolution Made in two separate parts:
 - the sensing element
- the wiper

Special designs available on request

 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	Solder pads			
Market appliance	Industrial			
Dimensions	L x 15 mm x 1.6 mm (with L = TET + 18 mm)			

ELECTRICAL SPECIFICATIONS					
Theoretical electrical angle (TEA = E)	From 25 mm to 1000 mm in increments of 25 mm				
Independent linearity (over TET)	≤ ± 1 %; ≤ ± 0.1 %				
On request	\leq ± 0.05 % for E \geq 100 mm	$\leq \pm \ 0.025 \ \%$ for E $\geq 200 \ mm$			
Actual electrical travel (AET)	AET = TET + 2 mm				
Ohmic value	From 400 Ω/cm to 2 kΩ/cm				
Resistance tolerance at 20 °C	± 20 %				
Repeatability	≤ 0.01 %				
Maximum power rating	0.05 W/cm at 40 °C	0 W at 85 °C			
Wiper current	Recommended: a few µA - 1 mA max. (continuous)				
Load resistance	Minimum 10 ³ x R _T				
Insulation resistance	≥ 1000 MΩ, 500 V _{DC}				
Dielectric strength	≥ 750 V _{RMS} , 50 Hz				

MECHANICAL SPECIFICATIONS					
Support of element	Fiberglass epoxy				
On request	Plastic molding				
Wiper (non insulated)	Precious metal multifinger				
On request	Insulated				
Terminals	Soldering pads				
On request	By wires				
Fixing	Glued: double face Isotac				
On request	Screwed: holes in the support				

PERFORMANCE				
Operating life	25 million cycles typical/1 Hz/T° = 20 °C \pm 5 °C/80 % TET			
Temperature range	-55 °C to +125 °C			

Note

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

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2 westions contact: sferprecision Document Number: 54009

For technical questions, contact: <u>sferprecisionpot@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>



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ORDERING INFORMATION / DESCRIPTION							
КІТ	LM	F	3	D	103	W2851	е.
SERIES	MODEL	CONDUCTOR	THEORETICAL ELECTRICAL TRAVEL	LINEARITY	OHMIC VALUE	MODIFICATIONS	LEAD FINISH
		F: plastic S: serigraphy	Times 25 mm	A: ± 1 % D: ± 0.1 % E: ± 0.05 % F: ± 0.025 %	First 2 digits are significant numbers 3rd digit indicates number of zeros	W2851: up to 575 mm max. length Wxxxx: special feature code number for length > 575 mm	

SAP PART NUMBERING GUIDELINES					
LMF	3	D	103	W2851	
MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES	



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