

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.



RoHS
COMPLIANT

ELECTRICAL SPECIFICATIONS	
Theoretical Electrical Angle (TEA = E)	From 25 mm to 1000 mm in increments of 25 mm
Independent Linearity (over TET) On Request	$\leq \pm 1\%$; $\leq \pm 0.1\%$ $\leq \pm 0.05\%$ 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 k Ω /cm
Resistance Tolerance at 20 °C	$\pm 20\%$
Repeatability	$\leq 0.01\%$
Maximum Power Rating	0.05 W/cm at 40 °C 0 W at 85 °C
Wiper Current	Recommended: a few μ A - 1 mA max. (continuous)
Load Resistance	Minimum $10^3 \times R_T$
Insulation Resistance	≥ 1000 M Ω , 500 V _{DC}
Dielectric Strength	≥ 750 V _{RMS} , 50 Hz

MECHANICAL SPECIFICATIONS	
Support of Element On Request	Fiberglass epoxy Plastic moulding
Wiper (Non Insulated) On Request	Precious metal multifinger Insulated
Terminals On Request	Soldering pads By wires
Fixing On Request	Glued: Double face Isotac 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

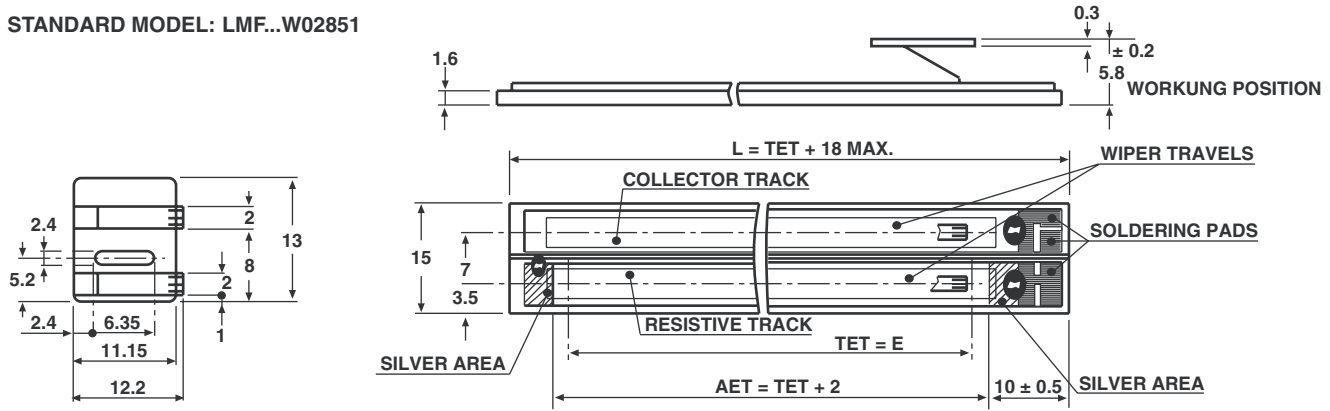
Series KIT LMF



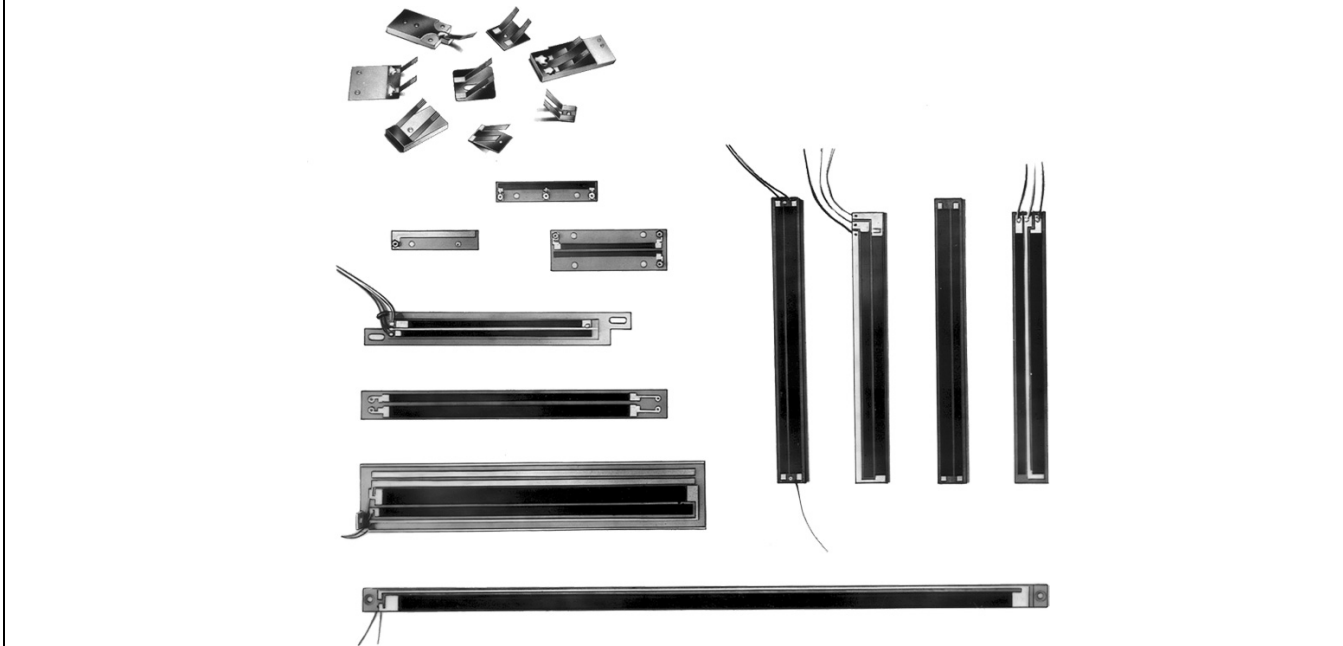
Vishay Sfernice Conductive Plastic Motion Transducer Elements (KIT),
up to 1000 mm

DIMENSIONS in millimeters, general tolerance ± 0.2 mm

STANDARD MODEL: LMF...W02851



EXAMPLES OF SPECIAL DESIGNS



ORDERING INFORMATION/DESCRIPTION

KIT SERIES	LM MODEL	F CONDUCTOR	3 THEORETICAL ELECTRICAL TRAVEL	D LINEARITY	103 OHMIC VALUE	W... MODIFICATIONS	e. LEAD FINISH
		F: Plastic S: Serigraphy	Times 25 mm	A: $\pm 1\%$ D: $\pm 0.1\%$ E: $\pm 0.05\%$ F: $\pm 0.025\%$	First 2 digits are significant numbers 3rd digit indicates number of zeros	Special feature code number	

SAP PART NUMBERING GUIDELINES

LMF MODEL	3 TET	D LINEARITY	103 OHMIC VALUE	W... SPECIAL FEATURES
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Disclaimer

All product specifications and data are subject to change without notice.

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