Conductive Plastic Rotative Transducer Elements (KIT)



The RMF is a precision rotative motion transducer designed for easy mounting into your equipment.

FEATURES

- Reduced dimensions and weight
- Cost effective solution
- Easy mounting
- Model dedicated to custom design requirements

It is made of 2 parts:

- A sensing element in a housing
- A wiper

On request, their shapes and sizes can be custom-designed to fit your equipment.

QUICK REFERENCE DATA	
Sensor type	ROTATIONAL, conductive plastic
Output type	Various
Market appliance	Industrial
Dimensions	Various sizes

ELECTRICAL SPECIFICATIONS	
Theoretical electrical angle (TEA = E)	AEA - 2°
Independent linearity Over TEA On request (depending on size)	A ≤ ± 1 %; B ≤ ± 0.5 % C ≤ ± 0.25 %; D ≤ ± 0.1 % down to E ≤ ± 0.05 %
Actual electrical angle (AEA)	340 ± 3° or 350 ± 2° according to the model
Total resistance R_T On request	1 kΩ, 2 kΩ, 5 kΩ, 10 kΩ other values
Total resistance tolerance at 20 °C	± 20 %
Repeatability	< 0.01 %
Wiper current	1 mA max. continuous, recommended: a few µA
Loadimpedance	1000 times R_T minimum
Insulation resistance	> 1000 MΩ 500 V_{DC}
Dielectric strength	> 500 V_{RMS} at 50 Hz

MECHANICAL SPECIFICATIONS	
Mechanical angle MA	360° continuous
Substrate	Thermosetting resin
Termination On request	Turrets wires, cables
Wiper	Multi-finger precious metal alloy

PERFORMANCE	
Life	25 million cycles typical
Temperature limits	-30 °C at +85 °C

Note

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

For technical questions, contact: sferprecisionpot@vishay.com

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EXAMPLES OF SPECIAL DESIGNS



ORDERING INFORMATION/DESCRIPTION

KIT	RM	F	116	D	103
SERIES	MODEL	TYPE	SIZE	LINEARITY	RESISTANCE
		F: Plastic S: Serigraphy		A: ≤ ± 1 % B: ≤ ± 0.5 % C: ≤ ± 0.25 % D: ≤ ± 0.1 % E: ≤ ± 0.05 %	First 2 digits are significant numbers 3rd indicates number of zeros

SAP PART NUMBERING GUIDELINES

RMS	200	A	502
MODEL	SIZE	LINEARITY	OHMIC VALUE

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