

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
Load impedance	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.



EXAMPLES OF SPECIAL DESIGNS



ORDERING INFORMATION/DESCRIPTION					
KIT	RM	F	116	D	103
SERIES	MODEL	TYPE	SIZE	LINEARITY	RESISTANCE
		F: Plastic S: Serigraphy		A: $\leq \pm 1\%$ B: $\leq \pm 0.5\%$ C: $\leq \pm 0.25\%$ D: $\leq \pm 0.1\%$ E: $\leq \pm 0.05\%$	First 2 digits are significant numbers 3 rd indicates number of zeros

SAP PART NUMBERING GUIDELINES			
RMS	200	A	502
MODEL	SIZE	LINEARITY	OHMIC VALUE



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.