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Vishay MCB

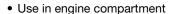
# **Analog Displacement Sensors for Transportation Applications**



QUICK REFERENCE DATA					
Sensor type	ROTATIONAL, conductive plastic				
Output type	Output by wires				
Market appliance	Transportation				
Dimensions	42 mm x 31.5 mm x 23.37 mm				

#### **FEATURES**







- · Hollow shaft coupling
- · Wire outputs
- Device eliminating shaft alignment faults
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912"><u>www.vishay.com/doc?99912</u></a>

ELECTRICAL SPECIFICATIONS				
PARAMETER				
Total electrical travel	94° ± 2°			
Independent linearity standard	± 1.5 %			
Total resistance (R <sub>n</sub> )	$3.85 \text{ k}\Omega \pm 20 \%$			
Output smoothness	< 0.1 % (NFC 93255)			
Power rating at +40 °C	0.5 W			
Power rating at +125 °C	0.05 W			
Wiper current limiting resistance (Rp)	1.7 kΩ ± 20 %			
Recommended wiper current	≤ 100 µA			
Maximum wiper current	15 mA for 1 min			
Recommended load impedance	≥ 100 R <sub>n</sub>			

MECHANICAL SPECIFICATIONS				
PARAMETER				
Mechanical travel	128° ± 4°			
Running torque	< 5 Ncm			
Stop strength	30 Ncm			
Maximum shaft alignment fault: hollow shaft $\emptyset$ 8 - L = 9.5 mm. 6 mm on flat	0.2 mm			
Protection class	IP 64 for 425 type sensor			
	IP 66 for 427 type sensor			
Mounting screw tightening torque 2.3 Nm maximum				

PERFORMANCE				
PARAMETER				
Operating temperature range	-40 °C to +125 °C			
Storage temperature range	-55 °C to +135 °C			
Vibrations: use in engine compartment	Severity 10 Hz to 2000 Hz, 10 mm or 50 g			
Life (on TET)	5M cycles			
Micro-movements (dither stroke)	50M cycles			

#### Note

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



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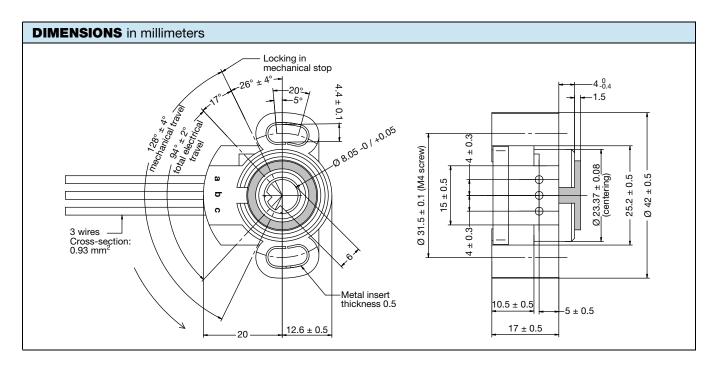
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SAP PART NUMBERING GUIDELINES - PMR427								
MODEL	TYPE	LEVER TYPE	VALUE	ANGLE	LEADS	PACKAGING		
PMR4	27 = hollow shaft	H = hollow shaft	392 = 3K9	094	W = wire (for PMR420)	C = 20 pcs G = 100 pcs P = 500 pcs		

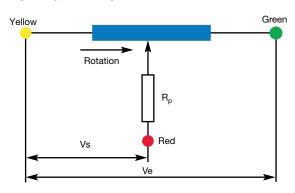
#### **CONNECTIONS**

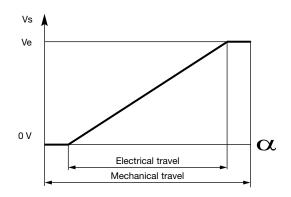
Wire Outputs: -40 °C to +105 °C (3 x 0.93 mm<sup>2</sup>, length 300 mm)

Sheathed Wire Outputs: -40 °C to +125 °C optional



#### **ELECTRICAL DIAGRAM**





#### **OPTIONS** (on request)

- Other total electrical travel
- Other total resistance
- Other linearity
- No protection resistance (R<sub>p</sub>)
- High temperature sheathed wire outputs
- Specific connections



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