## **RP12 Multi-Turn**

Vishay MCB



## FEATURES

- Conductive plastic potentiometer technology
- Big flexibility to adjust the number of turns to the request
- Anodized light alloy housing
- · Stainless steel shaft
- Flange mounting
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

QUICK REFERENCE DATA					
Sensor type	ROTATIONAL - multi-turns				
Output type	Output by wires				
Market appliance	Avionics, industrial				
Dimensions	Diameter 1/2" (12.7 mm)				

Parts in a series of the serie

ELECTRICAL SPECIFICATIONS					
PARAMETER					
Useful electrical travel	1800° to 72 000° ± 5 %				
Rated resistance	2 k $\Omega$ ± 20 % to 4.7 k $\Omega$ ± 20 % (more on request)				
Independent linearity	± 2 % (less on request)				
Insulation resistance	> 1 GΩ, 500 V <sub>CC</sub>				
Test voltage	500 V <sub>AC</sub> / 50 Hz, 1 min				
Rated dissipation at 40 °C	0.5 W				
Resolution	Infinite				
Wiper current	< 1 mA				

MECHANICAL SPECIFICATIONS					
PARAMETER					
Mechanical travel	Useful electrical travel $\pm$ 1080° (up to $\pm$ 180° on request)				
Starting and operating torque	< 50 cN cm				
Backlash	< 50° (< 25° on request)				
Mounting specification	Flexible coupling between motor element (customer) and potentiometer shaft				
Shaft end play	< 0.25 mm				
Shaft radial play	< 0.25 mm				

PERFORMANCE					
PARAMETER					
Operating temperature range	-15 °C to +55 °C				
Storage temperature range	-55 °C to +85 °C				
Life at 250 tr/min	10M rotations (more on request), resistance variation: 5 % max.				
Maximum rotation speed	250 rpm (more on request)				
Vibration	10 g				
Shock	50 <i>g</i>				

Note

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

For technical questions, contact: mcbprecisionpot@vishay.com

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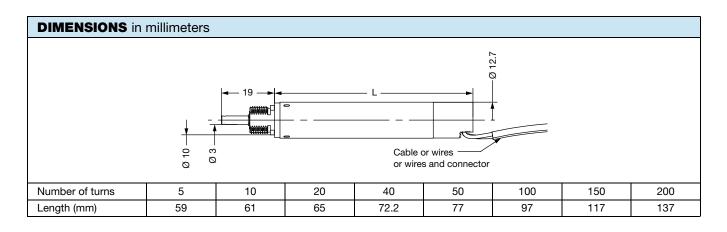


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SAP PART NUMBERING GUIDELINES									
MODEL	USEFUL ELECTRICAL TRAVEL (TURNS)	TYPE	VALUE	LINEARITY	LEADS	PACKAGING			
RP12	050 100	T = turns	472 = 4K7	X = 2 %	W = wire	B = bulk			



## **OPTIONS** (on request)

- Clutching system at the ends of travel
- Bigger number of turns
- Other ohmic value and tolerance on this ohmic value
- Other linearity
- Other shaft and flange designs
- Other temperature ranges
- Starting temperature range: -40 °C / +70 °C (-40 °C = survival temperature operating without performance criterion)



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