Multi-Turn Potentiometer from 5 Turns to 200 Turns (More on Request)

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 www.vishay.com/doc?99912

RoHS COMPLIANT

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

ELECTRICAL SPECIFICATIONS	
PARAMETER	
Useful electrical travel	1800° to 72 000° ± 5 %
Rated resistance	2 kΩ ± 20 % to 4.7 kΩ ± 20 % (more on request)
Independent linearity	± 2 % (less on request)
Insulation resistance	> 1 GΩ, 500 V_{CC}
Test voltage	500 V_{AC} / 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 ± 1080° (up to ± 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 *g*

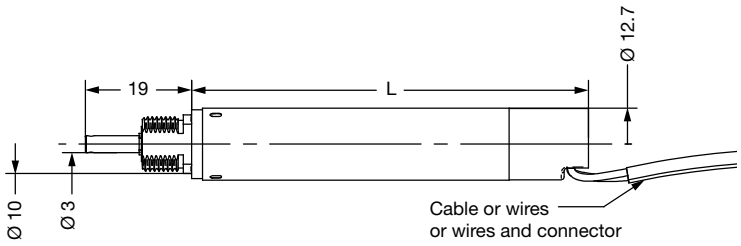
Note

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

For technical questions, contact: mcbprecisionpot@vishay.com

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

DIMENSIONS in millimeters



Number of turns	5	10	20	50	100	150	200
Length	59	61	65	77	97	117	137

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

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