

Data Sheet for Precision Potentiometer

Conductive Plastic Potentiometer

Series MHP32



- Space saving housing design (Ø32 x 8 mm)
- Quick and simple push on mounting on flatted shaft and anti rotation pin.
- Included spring in the hub avoids shaft play
- Conductive plastic and high quality multi finger wiper (precious metal) gives a reliable signal output

The conductive plastic hollow shaft potentiometer MHP32 allows the easy mounting with adjustment of the zero point alignment, thanks to the anti-rotation fork, at the same time. The integrated spring in the hub avoids shaft play.

Electrical Data

Effective electrical angle of rotation 1.)	340° ±5°
Total resistance 1.)	1, 10 kOhm
Resistance tolerance	±20%
Independent linearity (best straight line) 1.)	±2%
Theoretical resolution 1.)	Nearly infinite
Backlash (Hysteresis) 1.)	≤ 0.5°
Max. / recommended wiper current 1.)	10 µA / 1 µA
Power rating @ 70°C (0W @ 105°C)	1 W
Insulation Voltage 1.)	500 VAC, 1min
Insulation Resistance 1.)	1000 MOhm @ 500 VDC

Mechanical Data, Environmental Conditions, Miscellaneous

Mechanical angle of rotation 1.)	360° without stop
Lifetime (90% el. eff. angle half sine) 2.)	2 Mio. rotations
Max. operational speed	90 rev. / min.
Bearing	Sleeve bearing
Operational torque @ ambient temperature 1.) 2.)	ca. 7 Nmm
Operating temperature range	-40 °C up to +105 °C
Storage temperature range	-40 °C up to +105 °C
Protection grade (IEC 60529)	IP40
Housing diameter	31.5 mm
Housing depth	8 mm
Shaft diameter	8 mm
Shaft type	Hollow shaft

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Mechanical Data, Environmental Conditions, Miscellaneous

Connection type	Gold plated solder pad
Connection position	Radial
Sensor mounting	Anti rotation fork
Mass	7 g
Material hollow shaft hub	Plastic / brass
Material housing	Plastic

1.) According IEC 60393

2.) Determined by climatic conditions according to IEC 68-1, para. 5.3.1 without load collectives

Please note: Max. permissible supply voltage <75 VDC respectively <50 VAC in addition the max. power rating must be observed

Order code

Description	Selection: standard=black/bold , possible <i>options=grey/italic</i>			
Series	MHP32			
Resistance value: 1 kOhm <i>10 kOhm</i>		R1k <i>R10k</i>		
Resistance tolerance: ±20%			W20%	
Independent linearity: ±2%				L2%

For higher quantities or on-going demand, additional options are available as described below

For example:

- Other electrical rotation angles or resistance values
- Special tolerances of independent linearity
- Custom specific housings

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Drawing

