

Data Sheet for Precision Potentiometer

Conductive Plastic Potentiometer

Series MHP32



- Space saving housing design ($\varnothing 32 \times 8$ 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 at the same time. The integrated spring in the hub avoids shaft play.

Electrical Data

Effective electrical angle of rotation 1.)	340° $\pm 5^\circ$
Total resistance 1.)	1 kOhm
Resistance tolerance	$\pm 20\%$
Independent linearity (best straight line) 1.)	$\pm 2\%$
Theoretical resolution 1.)	Nearly infinite
Backlash (Hysteresis) 1.)	$\leq 0,5^\circ$
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	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..+105°C
Storage temperature range	-40..+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 options=grey/cursive			
Series	MHP32			
Resistance value: 1 kOhm		R1k		
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

