

MTP41

Compact Rotary Potentiometer

MeasureX

Features

- High Accuracy of up to 0.1%
- 90°, 180°, 345° angular position sensor with 360° rotation angle
- Extreme Life Time of 5 x 10⁶ Cycles
- High quality conductive plastic track with multi-finger Metal Wiper
- Low Noise Potentiometric output



Description

MTP41 is a compact dust proof rotary potentiometer with excellent accuracy and durability for industrial angle measurement. Thanks to conductive plastic resistance track technology and multi-fingered precision metal wipers, MTP41 brings high accuracy low noise output with life time of more than 50 million cycles. Due to its high resistance to abrasion, the sensors are particularly suitable for measurements and quality assurance in ongoing production, where a long service life and large number of rotations are required. In addition, it is possible to obtain 4-20mA output with an external converter. MTP41 is available for measurement range of 90°, 180° and 345° angular position sensor with 360° mechanical rotation angle. While the standard accuracy is 0.5% FS, you can optionally get an accuracy of 0.1% FS.

Applications

- Position feedback in servo systems
- Pendulum weighing machines
- Cam and butterfly flap positions
- Jockey roller controllers
- measuring the tension of threads and tape
- Trigonometric measurement at joints

Technical Specifications

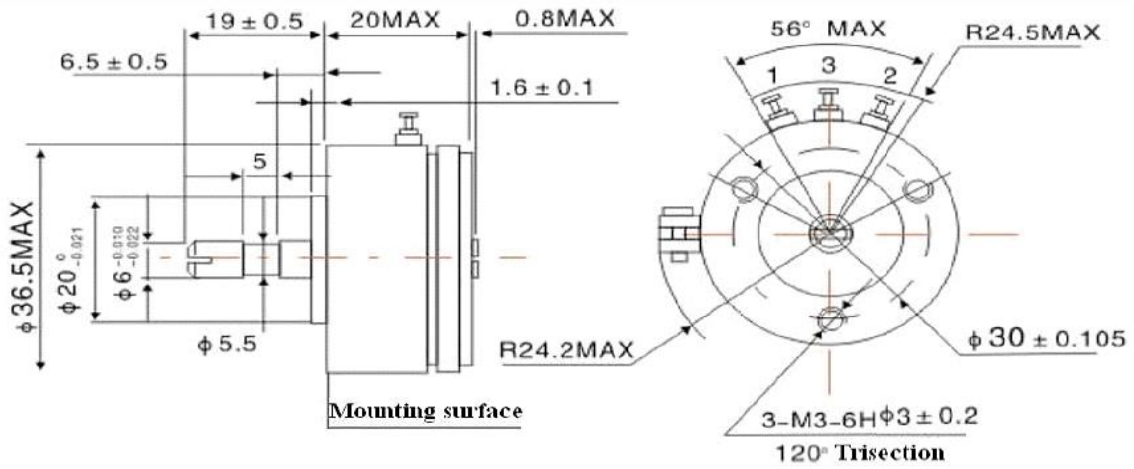
- **Effective electrical Angle:** 90°, 180°, 345°
- **Total Resistance:** 1kΩ (Standard), 5kΩ (Optional)
- **Resistance Tolerance:** ±20%
- **Insulation Resistance:** 100MΩ at 500VDC
- **Burst Voltage:** 500VAC/1min
- **Independent Linearity:** ±0.5% (Standard), ±0.1% (Optional)
- **Output Smoothness:** ±0.1%
- **Operating temp range:** -55°C ~+ 125°C
- **Vibration:** 10g / 500Hz
- **Shock:** 50g / 11ms
- **Rotational Life:** 5 x 10⁶ cycles
- **Weight:** 30g
- **Rated Power:** 1W/70°
- **Rotational Torque:** 0.002N.m
- **Mechanical Angle:** 360°

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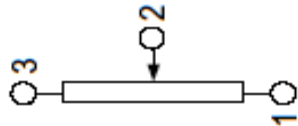
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Dimensions



MTP41 Drawing

Connection Diagram



MTP41 wiring connection

Ordering Code

MTP41			
	Range	90°, 180°, 345° (Optional)	
		Accuracy	
		0.5% (Standard)	
		0.1%	
		Total Resistance	
		1kΩ (Standard)	
		5kΩ	
MTP41	90	0.5%	1k

Note: All specifications are subject to change without prior notice

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