

MDP41

Rod End Potentiometer

MeasureX

Features

- High Measuring Accuracy
- Measurement Range of 50 to 600mm
- Compact and Rugged Model
- Wide Range of Applications
- Low Static and Thermal Errors
- Suitable for Static Measurement



Description

MDP41 series with rod end connection is a rugged potentiometer based displacement sensor suitable for static measurement in harsh environments. This compact displacement sensor offers great flexibility and reliability for a wide range of applications with highly competitive pricing.

MDP41 is available in measuring ranges from 50 to 600mm with a Voltage output (relative to supplied input voltage). It is suitable for industrial measurements that require non-lateral movement or quick installation. Standard Nonlinearity is $\pm 0.1\%$ FS for 50-150mm and $\pm 0.05\%$ FS for 150-600mm.

The robust construction of MDP41 with its high performance makes it ideal for demanding long term applications.

Applications

- Automation applications
- Hydraulic cylinder positioning
- Construction and mining industry
- Aerospace, automotive and rail applications
- Gap and tolerance control systems
- Industrial machinery positioning
- Valve position control
- Inspection and quality control systems

Technical Specifications

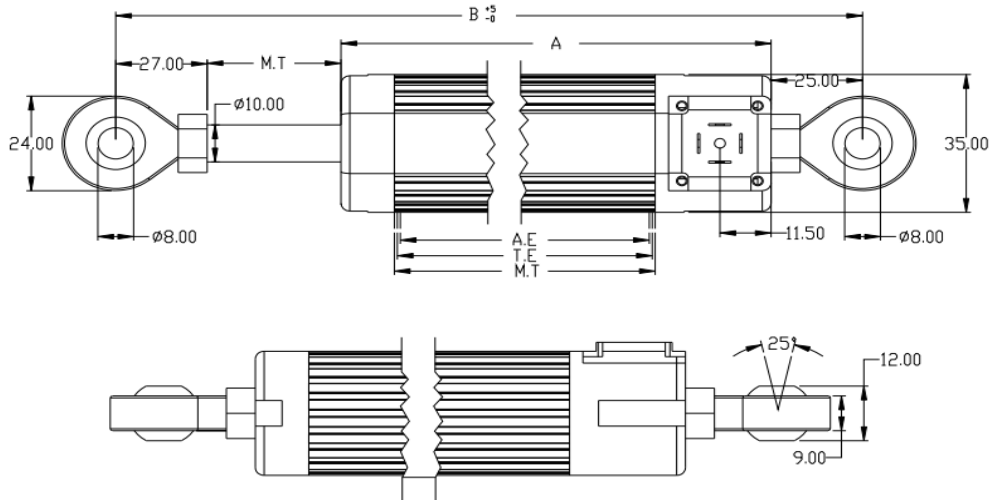
- **Ranges:** 50 to 600mm
- **Input voltage:** 5-36VDC
- **Operating current:** $\leq 10\text{mA}$
- **Output:** Nearly same as input voltage
- **Maximum operating speed:** 10m/s
- **Linearity:** $\pm 0.1\%$ FS for range 50-150mm
 $\pm 0.05\%$ FS for range 150-600mm
- **Repeatability:** $\leq 0.01\text{mm}$
- **Shock rating:** 50g
- **Vibration rating:** 20g
- **Operating temp. range:** -30 to $+100^\circ\text{C}$
- **Temp. coefficient of span:** $\leq 1.5\text{ppm FS}/^\circ\text{C}$
- **Relative humidity:** 90%, no condensation
- **Resistance:** $5\text{k}\Omega \pm 10\%$
- **Electrical connection:** pin connection
- **Body material:** Aluminium
- **Core extension rod material:** Stainless Steel
- **Core extension rod size:** Refer dimension drawing, other options available
- **Protection level:** IP65

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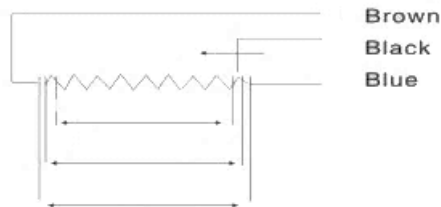
Dimensions



MDP41 with $\phi 8$ end joint and pin electrical connector

Range (mm)	50	100	130	150	200	250	300	400	500	600
Mechanical Travel (MT)	59	109	139	159	210	260	310	412	518	619
Body Length (A)	185	235	265	285	336	386	436	538	644	745
Distance between two eye bolts(B)	237	287	317	337	388	438	488	590	696	797

Wiring



Ordering Code

MDP41		
Range	50,100, 130, 150,200, 225,275,300, 375, 400,450, 500,600mm or other ranges in mm	
	Electrical Connection	
	Pin Connector	
MDP41	50mm	PIN

Note: (1) All specifications are subject to change without prior notice
 (2) Different cable lengths are available on request for pin connector (1m, 3m, 5m are standard)

Ver. 5.6-17/12