

MDP43

Threaded End Potentiometer

MeasureX

Features

- Measuring range of 75 to 1250mm
- Compact and Rugged Model
- Wide Range of Applications
- Low Static and Thermal Errors
- Suitable for Static Measurement



Description

MDP43 series with threaded end for easy screw 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.

MDP43 is available in measuring ranges from 75 to 1250mm with a Voltage output (relative to supplied input voltage). It is suitable for industrial measurements where screw mounting is required. Standard Nonlinearity is $\pm 0.1\%$ FS for range of 70-150mm and $\pm 0.05\%$ FS for range of 150-1250mm.

The robust construction of MDP43 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

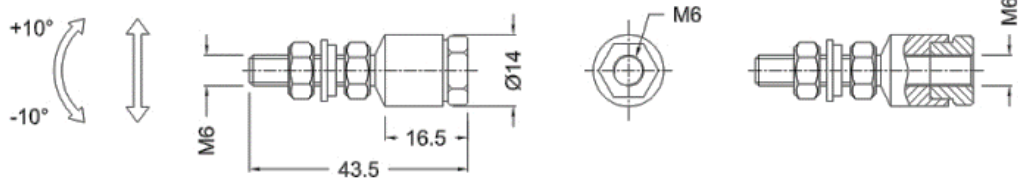
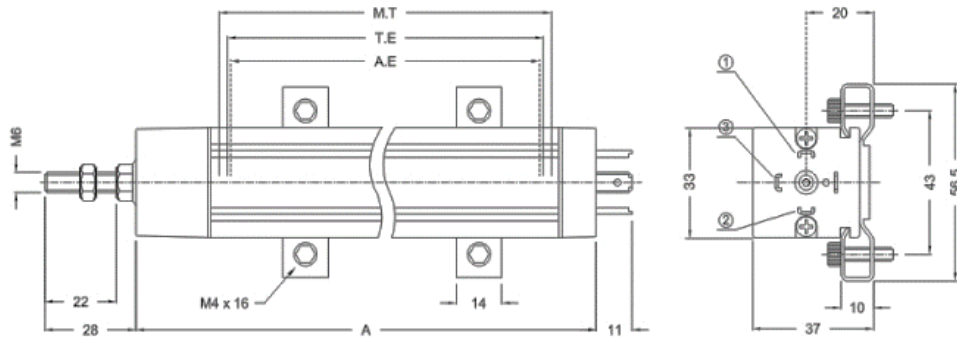
Technical Specifications

- Ranges:** 75 to 1250mm
- 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, range 75-150mm
 $\pm 0.05\%$ FS, range 150-1250mm
- Repeatability:** $\leq 0.01\text{mm}$
- Shock rating:** 50g
- Vibration rating:** 20g
- Protection level:** IP67
- Operating temp. range:** -60 to +100°C
- Temp. coefficient of span:** $\leq 1.5\text{ppm FS}/^\circ\text{C}$
- Relative humidity:** 90%, no condensation
- Resistance:** 5k Ω $\pm 10\%$ for range < 600mm
10k Ω $\pm 10\%$ for 600 \leq range < 1000mm
20k Ω $\pm 10\%$ for range $\geq 1000\text{mm}$
- Electrical connection:** DIN connection
- Body material:** Aluminium
- Core extension rod material:** Stainless Steel
- Core extension rod size:** Refer dimension drawing, other options available

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Dimensions



MDP43 with Thread or Rod End optional probe tips

Definition	Size (mm)
Range	Selectable based on ordering table (below table)
Mechanical stroke	Range +7mm
Total Body Length (A)	Range + 80mm

Ordering Code

MDP43			
	Range	75, 100, 125, 150, 200, 250, 300, 400, 500, 600, 800, 1000, 1250mm or other ranges in mm	
		Probe Tip Shape	
		M6 Thread	
		D6 Rod End	
		Electrical Connection	
		DIN connector	
MDP43	1000mm	M6	DIN

Note: (1) All specifications are subject to change without prior notice