

# Linear Potentiometer

Miniature • Extended Temperature Range

Ranges: 0-.5 to 0-6 inches [0-12,5 to 0-150 mm]

1.25K – 10K ohms • IP67

# MLP

**Specification Summary:**

**GENERAL**

Full Stroke Ranges ..... 0-0.5 to 0-6 in. (0-12.5 to 0-150 mm)  
 Output Signal..... voltage divider (potentiometer)  
 Linearity..... ± 0.5 to 1 % full stroke, *see ordering information*  
 Repeatability ..... 0.01 mm  
 Resolution..... essentially infinite  
 Life Expectancy..... > 25 million cycles  
 Operating Speed ..... 400 inches (10 M) per second max.  
 Enclosure Material..... aluminum  
 Sensor..... conductive plastic linear potentiometer  
 Weight ..... 1.6 oz. (46 g) max., *see ordering information*

**ELECTRICAL**

Input Resistance ..... 1.25K to 10K ohms (±20%), *see ordering information*  
 Recommended Maximum Input Voltage ..... 42 VDC  
 Recommended Operating Wiper Current ..... < 10µA  
 Electrical Cable ..... 24 AWG Raychem 55M wire with VITON sleeve  
 Electrical Cable Length ..... 19 inches (500mm)

**ENVIRONMENTAL**

Enclosure Design ..... IP67  
 Operating Temperature, *Continuous* ..... -22° to 300°F (-30° to 150°C)  
 Operating Temperature, *Short Term* ..... 350°F (175°C)  
 Vibration ..... up to 10 G's to 2000 Hz maximum

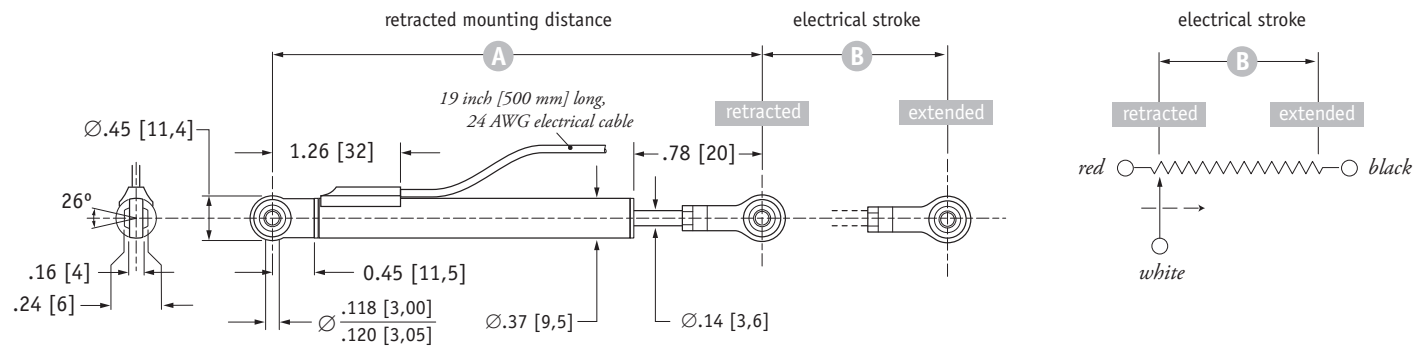


CeleSCO's miniature MLP series linear potentiometers offer unrivaled performance in an amazingly small size. Though small, the MLP is environmentally robust (IP67), operates over a broad temperature range (-22° to 300°F) and is long lasting (>25 million cycles).

These features make our miniature MLP linear potentiometer the perfect solution for many applications including industrial, medical, automotive and motion control.

**Ordering Information:**

Item Number:	MLP-12	MLP-25	MLP-50	MLP-75	MLP-100	MLP-125	MLP-150
measurement range, in. [mm]:	0.5 [12.5]	1 [25]	2 [50]	3 [75]	4 [100]	5 [125]	6 [150]
resistance, ohms (±20%):	1.25K	2.5K	5K	7.5K	10K	10K	10K
linearity, %:	± 1%	± 1%	± 1%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
weight, oz. [grams]:	.8 [24]	.9 [26]	1 [29]	1.2 [33]	1.3 [37]	1.5 [43]	1.6 [46]



Measurement Range	0.5 12.5	1 25	2 50	3 75	4 100	5 125	6 150	in mm
A	3.3 82.5	3.7 95	4.7 120	5.7 145	7.0 178	8.0 203	9.0 228	± 0.08 in adjustment ± 2 mm adjustment
B	0.49 12.5	0.98 25.0	1.97 50.0	2.95 75.0	3.94 100.0	4.92 125.0	5.91 150.0	in mm

All Dimensions are in INCHES [MM] • Tolerances are 0.03 in. [0.5 mm] unless otherwise noted

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