

# 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.....  $\pm 0.5$  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 ( $\pm 20\%$ ), *see ordering information*  
 Recommended Maximum Input Voltage ..... 42 VDC  
 Recommended Operating Wiper Current..... < 10 $\mu$ A  
 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

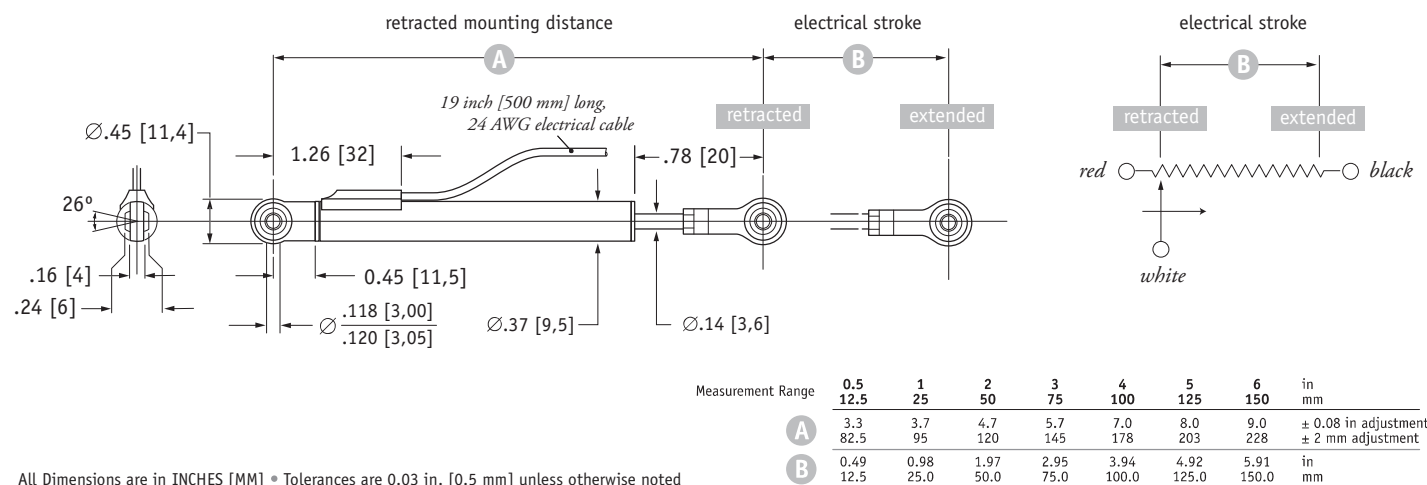


Celeco's miniature MLP series linear potentiometers offer unrivaled performance in an amazingly small size. Though small, the MLP is environmentally robust (IP67), operates over a broad temperature range (-22° to 300°F) and is long lasting (>25 million cycles).

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 ( $\pm 20\%$ ):	1.25K	2.5K	5K	7.5K	10K	10K	10K
linearity, %:	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
weight, oz. [grams]:	.8 [24]	.9 [26]	1 [29]	1.2 [33]	1.3 [37]	1.5 [43]	1.6 [46]



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

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