

# MLP

## Miniature Linear Potentiometer

Absolute Linear Position to 6 inches (150 mm)  
 1.25K - 10K ohms • High Cycle Applications  
 Industrial Automation, Test and Robotics Applications  
 IP67 Protection • Extended Temperature Range

### GENERAL

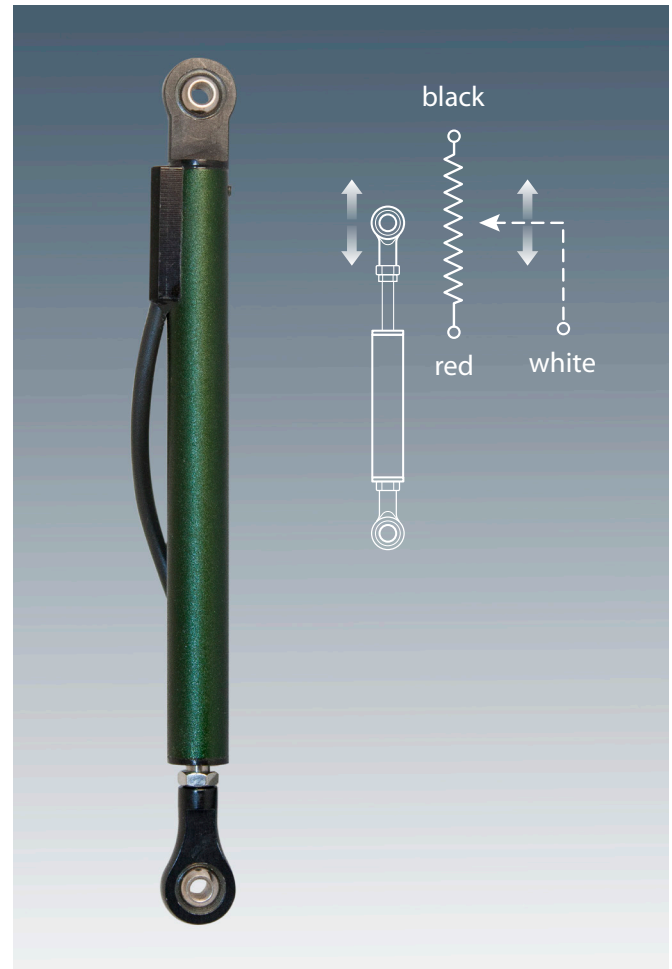
Full Stroke Ranges	0-0.5 to 0-6 in. (0-12.5 to 0-150 mm)
Output Signal	voltage divider (potentiometer)
Linearity	see ordering information
Repeatability	0.01 mm
Resolution	essentially infinite
Life Expectancy	> 25 million cycles
Operating Speed	400 inches (10 M) per second max.
Enclosure Material	aluminum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

### ELECTRICAL

Input Resistance	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 to 2000 Hz maximum



Our 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:

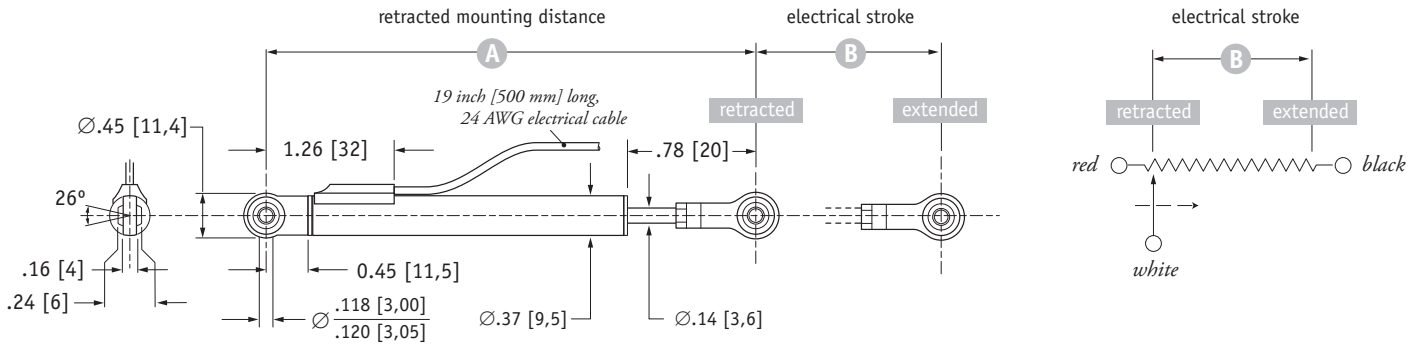
Item Number:	MLP-12	MLP-25	MLP-50	MLP-75	MLP-100	MLP-125	MLP-150
measurement range, in. [mm]:	0.5 [12.5]	1 [25]	2 [50]	3 [75]	4 [100]	5 [125]	6 [150]
resistance, ohms ( $\pm$ 20%):	1.25K	2.5K	5K	7.5K	10K	10K	10K
linearity, %:	$\pm$ 1%	$\pm$ 1%	$\pm$ 1%	$\pm$ 0.5%	$\pm$ 0.5%	$\pm$ 0.5%	$\pm$ 0.5%
weight,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

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# Outline Drawing



Measurement Range	0.5 12.5	1 25	2 50	3 75	4 100	5 125	6 150	in mm
<b>A</b>	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>B</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

version: 4.0 last updated: August 11, 2014