

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

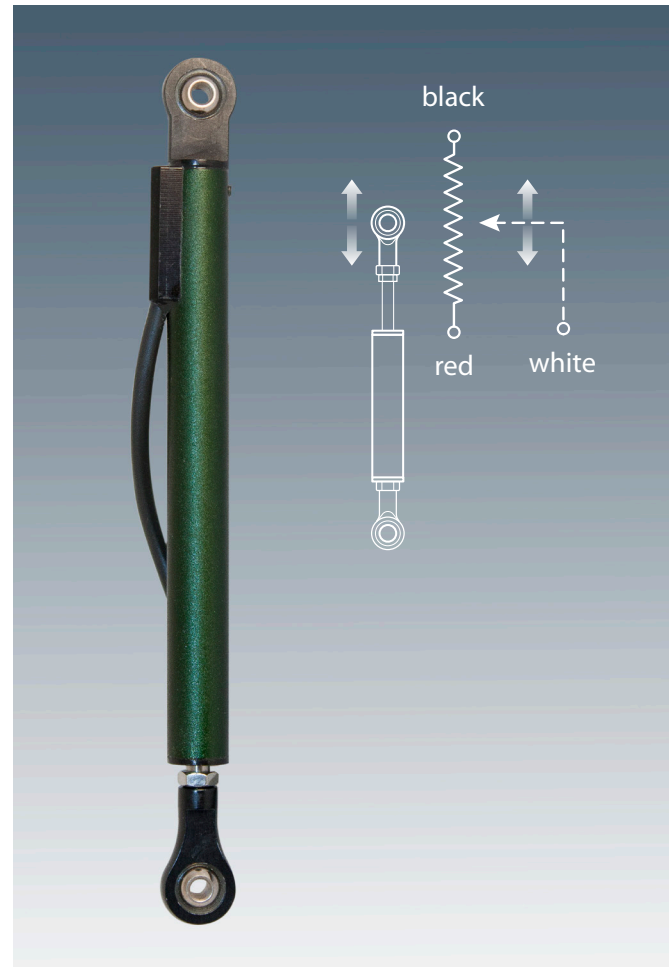
Input Resistance	see ordering information
Recommended Maximum Input Voltage	42 VDC
Recommended Operating Wiper Current	< 10 μ A
Electrical Cable	24 AWG Raychem 55M wire with VITON sleeve
Electrical Cable Length	19 inches (500mm)

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

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]

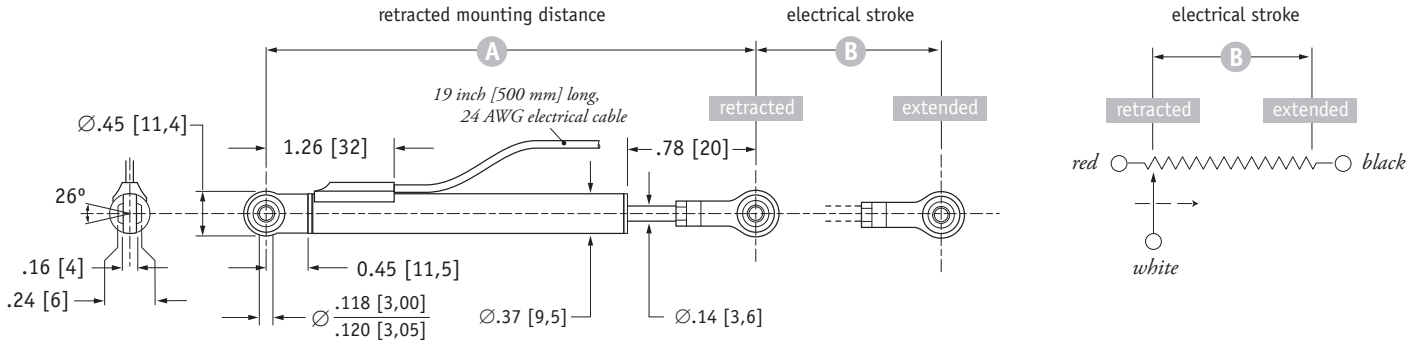


Our miniature MLP series linear potentiometers offer unrivaled performance in an amazingly small size. Though small, the MLP is environmentally robust (IP67), operates over a broad temperature range (-22° to 300°F) and is long lasting (>25 million cycles).

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



Outline Drawing



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



version: 4.0 last updated: August 11, 2014