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 (\(-22^\circ\text{C}\) to \(300^\circ\text{F}\)) 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.

**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 .5% to 1%, 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 < 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\(^\circ\)C to 300\(^\circ\)F (-30\(^\circ\)C to 150\(^\circ\)C)

Operating Temperature, Short Term 350\(^\circ\)F (175\(^\circ\)C)

Vibration up to 10 g to 2000 Hz maximum
Ordering Information

<table>
<thead>
<tr>
<th>Item Number:</th>
<th>MLP-12</th>
<th>MLP-25</th>
<th>MLP-50</th>
<th>MLP-75</th>
<th>MLP-100</th>
<th>MLP-125</th>
<th>MLP-150</th>
</tr>
</thead>
<tbody>
<tr>
<td>measurement range, in. [mm]:</td>
<td>0.5 [12.5]</td>
<td>1 [25]</td>
<td>2 [50]</td>
<td>3 [75]</td>
<td>4 [100]</td>
<td>5 [125]</td>
<td>6 [150]</td>
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<tr>
<td>resistance, ohms (+20%):</td>
<td>1.25K</td>
<td>2.5K</td>
<td>5K</td>
<td>7.5K</td>
<td>10K</td>
<td>10K</td>
<td>10K</td>
</tr>
<tr>
<td>linearity, %:</td>
<td>± 1%</td>
<td>± 1%</td>
<td>± 1%</td>
<td>± 0.5%</td>
<td>± 0.5%</td>
<td>± 0.5%</td>
<td>± 0.5%</td>
</tr>
</tbody>
</table>

Outline Drawing

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