**APPLICATIONS**
- Medical Equipment
- Hospital Beds
- Linear Actuators
- Animated Characters
- Gauging
- Woodworking Guides
- Fluid Flow Meters
- Seismology
- Semiconductor Processing

**MLT • 3/8 INCH DIAMETER LINEAR POSITION TRANSDUCER**

The Models MLT are small diameter linear position transducers rugged enough to withstand the hostile environment of the factory. Using a proprietary dual wiper, internal ball joint and the MystR® conductive plastic film the MLT provides usable output at high vibration levels for long periods. MLT Transducers use precious metal wipers to further enhance reliability.

Intrinsically Safe for Class I, II, and III Division 1, Groups A, B, C, D, E, F and G for Hazardous (indoor/outdoor) NEMA 4 locations. V max = 30 V, I max = 100 mA, C i = 0. uF, L i = 0 mH.

**FEATURES**
- 0.375 inch diameter
- Dual wiper design
- Extruded wiper block guides
- MystR® plastic element
- Internal spring loaded ball joint
- Anodized extruded aluminum housing
- Stainless steel shaft
- Precious metal contact
- Absolute continuous measurement

**BENEFITS**
- Fits into tight spaces, clamps easily to cylinders
- Improves shock and vibration performance
- Smooth quiet motion; extends operating life
- Tested up to one billion operations
- Less error from shaft misalignment
- Tolerates clamping loads
- Full performance in hostile environments
- Low noise level over entire life
- Accurate position at power up

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>Model</th>
<th>MLT</th>
<th>0R5</th>
<th>N</th>
<th>0750</th>
<th>F</th>
<th>5</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Travel*</td>
<td>0R5 = 750</td>
<td>001 = 1500</td>
<td>002 = 3000</td>
<td>003 = 4500</td>
<td>004 = 6000</td>
<td>005 = 7500</td>
<td>006 = 9000</td>
</tr>
</tbody>
</table>

Termination
- C = Cable

Shaft
- 5 = 4-40 Thread

Linearity
- B = 0.1%
- F = 1.0% (Best possible on 0.5 in. device)
- D = 0.25% (Best possible on 1.0 in. device)

Note: Not all combinations are available. Minimum quantity orders apply. Contact the factory for more details.

*Note: The Electrical Travel correlates to the Total Resistance (Ohms).
TECHNICAL SPECIFICATIONS

MECHANICAL

Total Mechanical Travel 0.55 to 6.05 in. (min)
13.9 to 153.7 mm (min)

Starting Force 1.0 oz (max)

Shock 50 g 11 ms half sine

Vibration 20 g rms 5 Hz to 2 KHz

Life One Billion dither operations

ELECTRICAL

Theoretical Electrical Travel (1 inch increments) 0.5 to 6 in.
(12.7 to 152.4 mm)

Independent Linearity See How to Order

Total Resistance 1500 Ohms per inch electrical travel

Resistance Tolerance ±20%

Operating Temperature -40° to 80°C
(-40° to 176°F)

Resolution Infinite

Insulation Resistance 500 M Ohms @ 500 Vdc

Dielectric Strength 1000 V rms

Max. Applied Voltage 30 Vdc

Backlash 0.0005 in. max

Recommended Wiper Current <1 μA

Caution: Do not test on an Ohm Meter on the Rx 1 scale or other current devices.
Caution: Excessive Wiper Current can cause Output errors or damage.
Caution: Zero shaft side load is recommended to achieve maximum life.

SPECIALS AND ACCESSORIES

• Other Mechanical Travels
• Other Electrical Travels
• Other Resistance Values
• Rod-end bearing
• Metric Shaft Adapter

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer’s sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

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