



*Representative photograph, actual product appearance may vary.*

## **MLT003N4500B5C**

**MLT Series Linear Position Transducer, 76,2 mm [3.0 in] Electrical Travel, 0.1 % Linearity, Item Number F38000203**

### **Features**

- MystR® plastic element - Tested up to one billion operations
- 3/8 inch diameter - Fits in tight spaces and clamps easily to cylinders
- Dual wiper design - Improves shock and vibration performance
- Extruded wiper block guides - Smooth quiet motion, extends operating life
- Internal spring loaded ball joint - Less error from shaft misalignment
- Anodized extruded aluminum housing - Tolerates clamping loads
- Stainless steel shaft - Full performance in hostile environments
- Precious metal contact - Low noise level over entire life
- Absolute continuous measurement - Accurate position at power up

### **Typical Applications**

- Medical equipment
- Hospital beds
- Linear actuators
- Animated characters
- Gauging
- Woodworking guides
- Fluid flow meters
- Seismology
- Semiconductor Processing

### **Description**

The MLT Series is a small-diameter linear position transducer that is rugged enough to withstand hostile factory environments. Using a proprietary dual wiper, internal ball joint and the MystR® conductive plastic film the MLT provides a usable output at high vibration levels over long periods of time. MLT transducers use precious metal wipers to further enhance reliability.

The MLT's 3/8 inch diameter is among the smallest available and can be used to replace LVDT's in many applications.

Intrinsically safe for Class I, II and III Division I, Groups A, B, C, D, E, F and G for hazardous (indoor/outdoor) NEMA 4 locations. V max.=30 V, I max.=100 mA, Ci=0, Li.=0mH.

Product Specifications	
<b>Supply Voltage</b>	30 Vdc max.
<b>Measurement Type</b>	Linear
<b>Housing Size</b>	106,68 mm [4.2 in]
<b>Total Mechanical Travel</b>	77,47 mm [3.05 in]
<b>Electrical Travel</b>	76,2 mm [3.0 in]
<b>Starting Force (max.)</b>	28,35 g max. [1.0 oz max.]
<b>Linearity</b>	± 0.1 %
<b>Backlash</b>	0,0127 mm max. [0.0005 in max.]
<b>Bearing Type</b>	Sleeve
<b>Shaft Material</b>	Stainless Steel
<b>Shaft Diameter</b>	1/8 in - #4-40 UNC-2A thread
<b>Type of Element</b>	MystR® conductive plastic film
<b>Housing Style</b>	Anodized Aluminum
<b>Termination</b>	26 awg, 3 cond. - 305,0 mm [12.0 in] cable
<b>Wiper Current</b>	<1 µA
<b>Resolution</b>	Infinite
<b>Operating Temperature Range</b>	-40 °C to 80 °C [-40 °F to 176 °F]
<b>Vibration</b>	20 g / 0,75 mm (rms) 5 hz to 2 khz
<b>Shock</b>	50 g 11 ms half sine
<b>Operating Life</b>	one billion dither operations
<b>Total Resistance</b>	4,500 Ohms
<b>Resistance Tolerance</b>	± 20 %
<b>Insulation Resistance</b>	500 MOhm @ 500 Vdc
<b>Dielectric Strength</b>	1000 V rms
<b>Weight (Ranges)</b>	23 g [0.81 oz]
<b>Sealing</b>	NEMA 4
<b>UNSPSC Code</b>	41111945
<b>UNSPSC Commodity</b>	41111945 Linear position sensors
<b>Availability</b>	Global
<b>Comments</b>	Options; Electrical Travel, Total Resistance, Rod End Bearing, Metric Shaft Adapter
<b>Series Name</b>	MLT Series

*Due to regional agency approval requirements, some products may not be available in your area.  
Please contact your regional Honeywell office regarding your product of choice.*