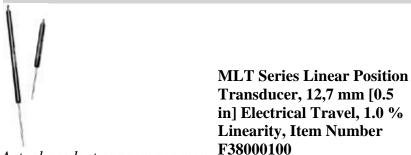
MLT0R5N0750F5C

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Actual product appearance may vary.



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 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.

Features

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

Potential Applications

Potential Applications

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

 Absolute continuous measurement -Accurate position at power up

Product Specifications

Function Level 1 Presence/Absence Speed and Positioning

Function Level 2 Contacting
Technology Level 1 Thick Film
Supply Voltage 30 Vdc max.

Measurement Type Linear

Housing Size 43,18 mm [1.7 in]

Total Mechanical

Travel 13,97 mm [0.55 in]

Electrical Travel 12,7 mm [0.5 in]

Starting Force (max.) 28,35 g max. [1.0 oz max.]

Linearity $\pm 1.0 \%$

Backlash 0,0127 mm max. [0.0005 in max.]

Bearing Type Sleeve

Shaft Material Stainless Steel

Shaft Diameter 1/8 in - #4-40 UNC-2A thread Element Type MystR[®] conductive plastic film

Housing Type Anodized Aluminum

Termination 26 awg, 3 cond. - 305,0 mm [12.0 in] cable

Wiper Current <1 µA Resolution Infinite

Operating Temperature -40 °C to 80 °C [-40 °F to 176 °F] Vibration 20 g / 0.75 mm (rms) 5 hz to 2 khz

Shock 50 g 11 ms half sine

Operating Life one billion dither operations

Resistance Tolerance ± 20 %

Insulation Resistance 500 MOhm @ 500 Vdc

Dielectric Strength 1000 V rms
Weight 11 g [0.39 oz]

Sealing NEMA 4 UNSPSC Code 41111945

UNSPSC Commodity 41111945 Linear position sensors

Availability Global

Comments Options; Electrical Travel, Total Resistance,

Rod End Bearing, Metric Shaft Adapter

Series Name MLT

Dimensions
Documentation Page
Circuitry
Product Range Guide
Product Line Guide
Application Note Library