

## APPLICATIONS

- MEDICAL EQUIPMENT
- HOSPITAL BEDS
- LINEAR ACTUATORS
- ANIMATED CHARACTERS
- GAUGING
- WOODWORKING GUIDES
- FLUID FLOW METERS
- SEISMOLOGY
- SEMI CONDUCTOR 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, Ci = 0, uF, Li = 0 mH.



# MLT SERIES

## SMALL DIAMETER LINEAR POSITION TRANSDUCER

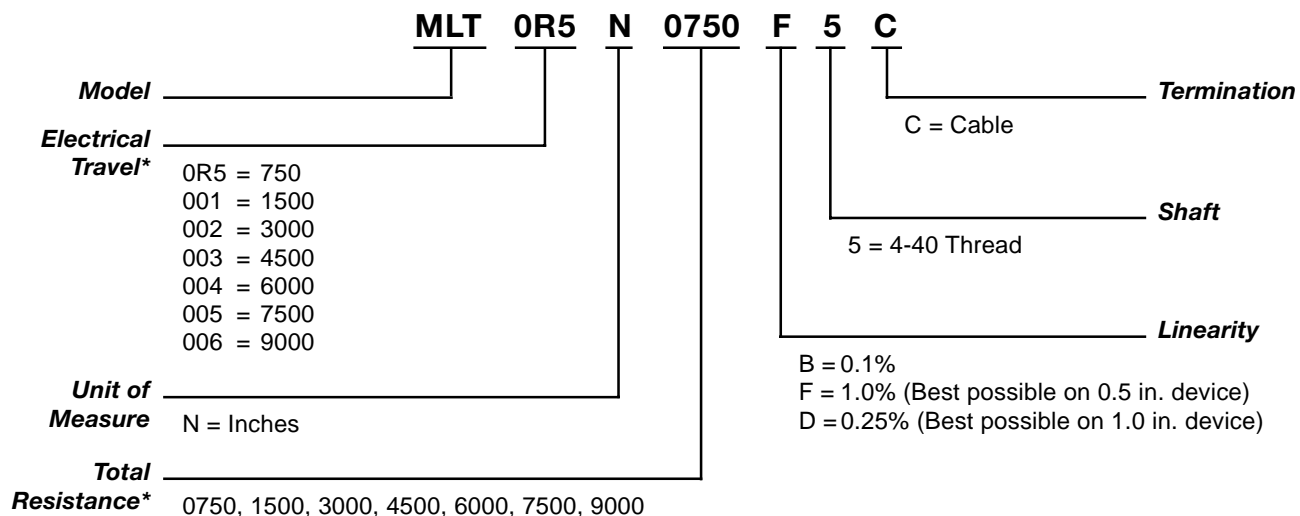
## FEATURES

- 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



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)*.

# MLT SERIES • SMALL DIAMETER LINEAR POSITION TRANSDUCER

## 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

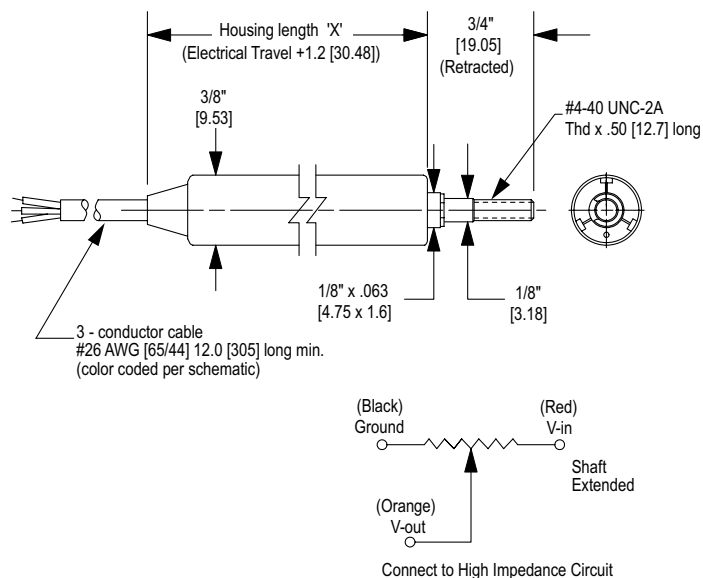
Caution: Do not test on an Ohm Meter on the Rx 1 scale or other current devices.

Caution: Excessive Wiper Current can cause Output errors or damage.

Caution: Zero shaft side load is recommended to achieve maximum life.

### DIMENSIONS

xx.xx = inches  
(xx.x) = mm



Model	Electrical Travel in inches	Total Resistance Ohms	Housing Length 'X' in inches	Weight in grams
MLT0R5	0.5	750	1.7	11
MLT001	1.0	1500	2.2	14
MLT002	2.0	3000	3.2	20
MLT003	3.0	4500	4.2	23
MLT004	4.0	6000	5.2	28
MLT005	5.0	7500	6.2	30
MLT006	6.0	9000	7.2	31

## SPECIALS AND ACCESSORIES

- Other Mechanical Travels
- Other Resistance Values
- Other Electrical Travels
- 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.

Item # 1124900 M.G. 10/01 Rev. A

**Honeywell**

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