

## APPLICATIONS

- MEDICAL EQUIPMENT
- HOSPITAL BEDS
- LINEAR ACTUATORS
- ANIMATED CHARACTERS
- GAUGING
- WOODWORKING GUIDES
- FLUID FLOW METERS
- SEISMOLOGY
- SEMI CONDUCTOR PROCESSING

## LT • HALF INCH DIAMETER LINEAR POSITION TRANSDUCER

The Model LT is a small diameter linear position transducer that is rugged enough to withstand the hostile environment of the factory. Using a proprietary dual wiper and the MystR<sup>®</sup> conductive plastic film the LT provides usable output at high vibration levels for long periods. The LT transducers use precious metal wipers to further enhance reliability. The LT can be provided with shaft seals for spray of hose.

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.  
 $V_{max} = 30\text{ V}$ ,  $I_{max} = 100\text{ mA}$ ,  $C_i = 0, \mu\text{F}$ ,  $L_i = 0\text{ mH}$ .



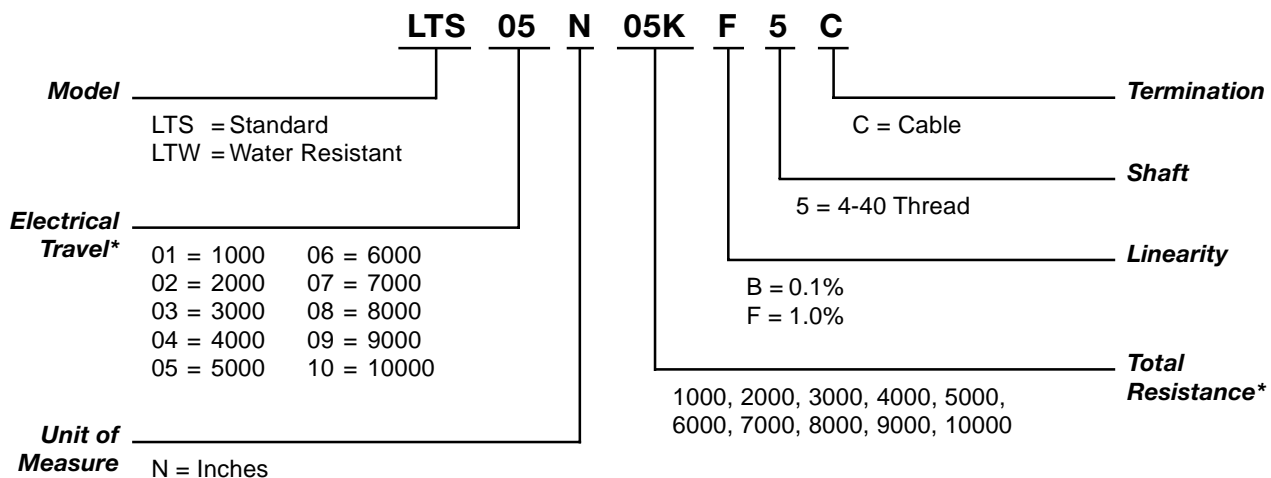
## FEATURES

- 0.50 inch diameter
- Dual wiper design
- Extruded wiper block guides
- MystR<sup>®</sup> plastic element
- Anodized extruded aluminum housing
- Stainless steel shaft
- Precious metal contact
- Absolute continuous measurement

## BENEFIT

- 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
- 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)*.

### TECHNICAL SPECIFICATIONS

#### MECHANICAL

Total Mechanical Travel	1.05 to 10.05 in. (min) 26.7 to 255.3 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

Electrical Travel (1 inch increments)	1 to 10 in. (25.4 to 254.0 mm)
Independent Linearity **	±1.0%
Total Resistance	1000 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	0.0002 in. max
Recommended Wiper Current	<1 µA

\* 12 oz. max. for 'LTW' models rated at IPX5

\*\* From 5% to 95% of theoretical electrical travel

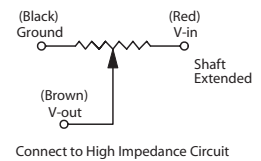
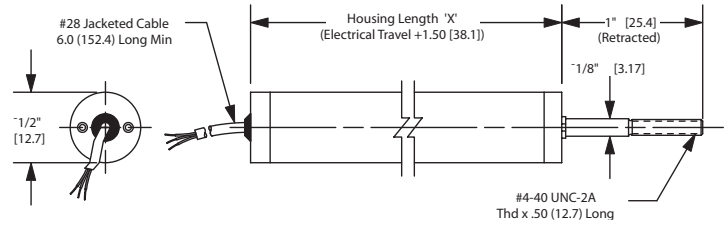
Caution: Do not test on an Ohm Meter on the Rx 1 scale or other current devices.

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
LTS01 or LTW01	1.0	1000	2.5	20
LTS02 or LTW02	2.0	2000	3.5	26
LTS03 or LTW03	3.0	3000	4.5	31
LTS04 or LTW04	4.0	4000	5.5	43
LTS05 or LTW05	5.0	5000	6.5	45
LTS06 or LTW06	6.0	6000	7.5	48
LTS07 or LTW07	7.0	7000	8.5	51
LTS08 or LTW08	8.0	8000	9.5	57
LTS09 or LTW09	9.0	9000	10.5	62
LTS10 or LTW10	10.0	10000	11.5	68

### 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.

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