

Introducing the TD390 series
Linear Position Transducer.
Primarily Designed for
Cincinnati Milacron Injection
Molding Machines.



SERIES: TD390 (6 to 56" stroke lengths)

FEATURES

- Vibration damped element
- Extruded wiper carrier guides
- Plastic elements
- High DC level output
- Absolute continuous measurement
- N E M A 4 water resistant shaft seal

BENEFIT

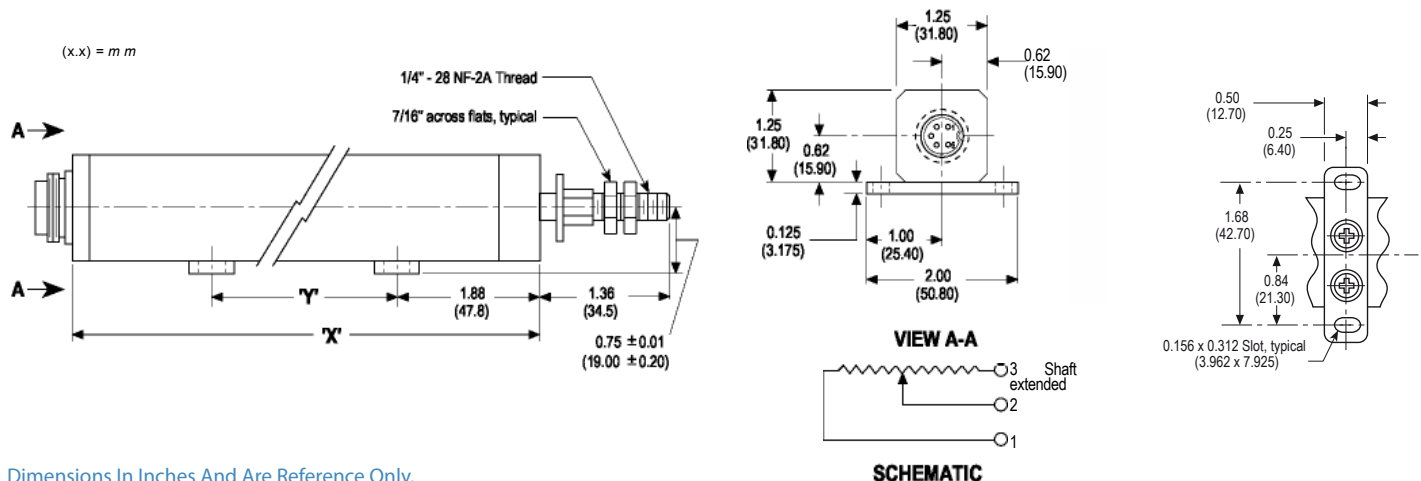
- No wiper bounce in high vibration Environments
- Smooth operation under misalignment
- Works with simple controllers
- Accurate position at power-up
- Protects internal components from environments

DESCRIPTION

The TD390 has a rugged long-life design featuring greater resistance to vibration and a smooth high quality signal. It has a solid stainless steel shaft, longer front-end bearings, a vibration-free damped element and continuous measurement. Carrier guides extruded the full length of the housing

insure smooth operation even under side load conditions. A direct drop-in replacement for Waters, Data Instruments, Novotechnik, Gefran units. The newly designed internal components provide improvements which were developed after worldwide testing and field experience.

DIMENSIONS



Dimensions In Inches And Are Reference Only.

SPECIFICATIONS

MECHANICAL

Total Mechanical Travel	6 to 56 in. (150 to 1420 mm)
Starting Forces*	5.0 lb (2.26 kg)
Total Weight	0.8 to 5.5 lb (0.36 to 2.5 kg)
Vibration**	20 g rms/0.75 mm 5-2 Hz
Shock	50 g, 11 ms half sine
Backlash	0.001 in. (0.025 mm)
Life	100 Million Operations

ELECTRICAL

Theoretical Electrical Travel	6.0 to 56.0 in. (150 to 1420 mm)
Independent Linearity	0.3% Over Theoretical Electrical Travel (6" to 36") 1% Over Theoretical Electrical Travel 48" & 56")
Total Resistance	5K Ohms (6" to 24"), 10K Ohms (30" to 56")
Resistance Tolerance	20%
Operating Temperature	-65° to 105° C (-85° to 221 ° F)
Resolution	Infinite
Insulation Resistance	1000 M Ohms @ 500 Vdc
Dielectric Strength	1000 V rms
Recommended Wiper Current	<1 micro Amp
Electrical Connection	5 Pin Binder 681 Connector or Equivalent
Maximum Applied Voltage	30 Vdc

*Starting force 5lbs. MAX

**For vibration levels up to 50grms and higher additional housing clamps are required

Dimensions For 6" to 48" Units

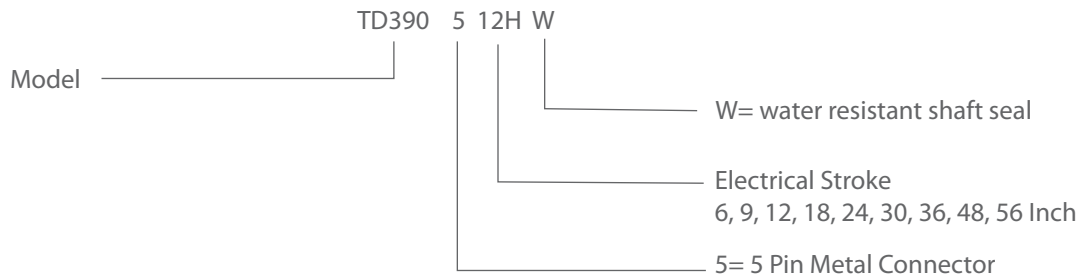
X = Electrical Travel Plus 3.19"
Y = Electrical Travel Minus 1.00"

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.

ORDERING



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

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 Transducers Direct web site, it is up to the customer to determine the suitability of the product in the application.

REV: 8.11