

Introducing the TD390 series Low Profile, Short Length, Linear Position Transducer.



SERIES: TD390 (1 to 6" stroke lengths)

FEATURES

- 0.25 inch shaft
- IP65 shaft seal
- Absolute continuous measurement
- High performance bearings
- High level DC output
- 0.3% Linearity
- Repeatability 0.0004 inches
- Rugged construction for manufacturing environment
- Protects internal components from factory environment
- Accurate position at power up
- Works with simple controls

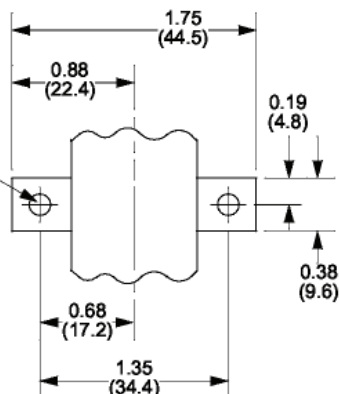
DESCRIPTION

The Model 390 is frequently used for measuring linear position or displacement up to 6 inches on a wide variety of manufacturing and process equipment. The mechanical design of the unit's front and rear bearings, anodized extruded aluminum housing, stainless steel shaft and

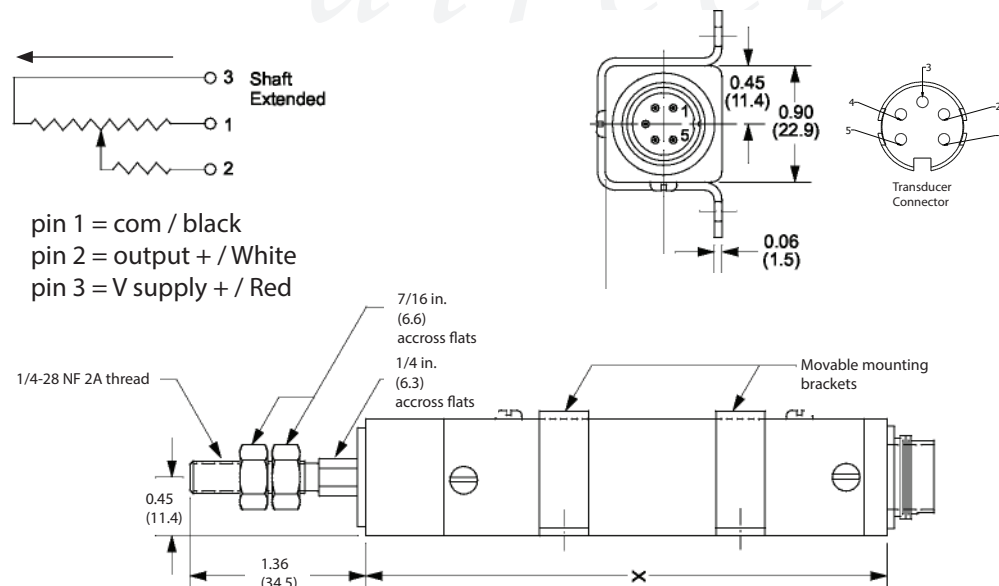
IP65 shaft seal are suitable for a factory's harsh environment. Based on the proprietary conductive plastic film, it provides a high resolution, absolute position measurement without external signal conditioners.

DIMENSIONS

0.154 (3.91)
(2 holes per bracket)



MOUNTING BRACKETS



Dimensions In Inches And Are Reference Only.

SPECIFICATIONS

MECHANICAL

| | |
|-------------------------|------------------------------|
| Total Mechanical Travel | See table below |
| Starting Force* | 5 lb (2.3 kg) |
| Total Weight | 0.26 to 0.49 lb |
| Vibration | 20 g / 0.75 mm (rms) 5-2 kHz |
| Shock | 50 g, 11 ms half sine |
| Backlash | 0.001 in. |
| Life | 100 Million operations |

ELECTRICAL

| | |
|-------------------------------|--|
| Theoretical Electrical Travel | See table below |
| Independent Linearity** | 0.3 % |
| Total Resistance | 1.5 to 9K Ohms (depending on stroke length) |
| Resistance Tolerance | 20% |
| Operating Temperature | -65 to 105 C |
| Resolution | Infinite |
| Maximum Applied Voltage | 40 Vdc |
| Recommended Wiper Current | <1 micro Amp |
| Electrical Connection | Binder Series 681 Connector or equivalent (5 pin) |

* Starting Force for "W" Seal 5 lbs. (2.3 kg)

** 5-95% of Theoretical Electrical Travel

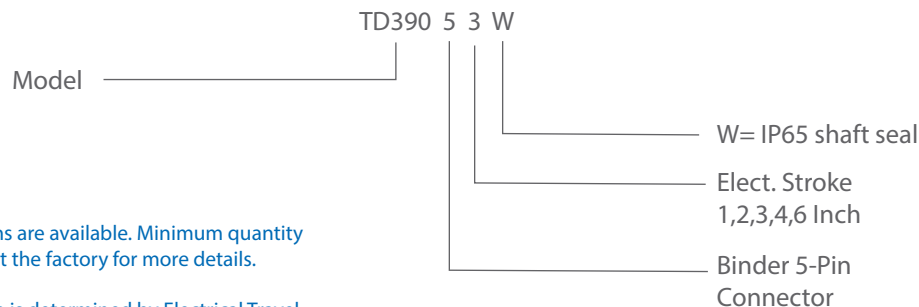
Caution: Do not test on an OhmMeter on the Rx 1 scale or other current devices.

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

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

| | Electrical Travel | Mechanical Travel | Total Resistance | Body Length 'X' |
|-------------|-------------------|-------------------|------------------|-----------------|
| TD390-5-1-W | 1.0" | 1.20" | 1.5K Ohms | 4.05" |
| TD390-5-2-W | 2.0" | 2.20" | 3K Ohms | 5.05" |
| TD390-5-3-W | 3.0" | 3.15" | 4.5K Ohms | 5.95" |
| TD390-5-4-W | 4.0" | 4.15" | 6K Ohms | 6.95" |
| TD390-5-6-W | 6.0" | 6.15" | 9K Ohms | 8.95" |

ORDERING



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

Note: The Total Resistance is determined by Electrical Travel, at 1500 Ohms per inch.