

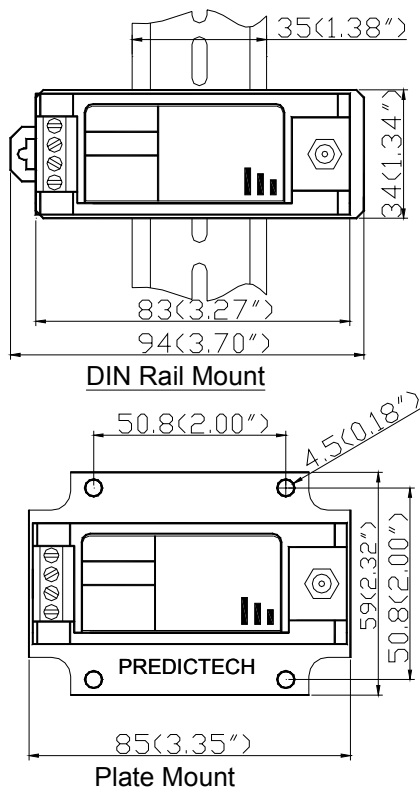


## TR3102 Proximity 3-Wire Transmitter for Axial Position/ Phase Reference

The TR3102 is a cost-effective solution for monitoring the axial position or phase reference on balance of plant machines. The TR3102 combines the proximity probe driver and the signal conditioning circuit into one package. It works with the proximity probe and extension cable as a system.

### Features

- ✓ Does not require proximity probe driver
- ✓ Buffered output/GAP will transmit 300 meters (1,000 feet)
- ✓ Compatible with other manufacturers' proximity probes (5mm, 8mm and 11mm)
- ✓ Aluminum casted case (copper free) with epoxy potting for better environmental protection and reliability
- ✓ Same size as a proximity probe driver



### Specifications

#### Electrical

DCS or PLC Power Supply:

20-30VDC

Sensor Interface:

Connection:

Special 95  $\Omega$  coaxial cable with connector

Probe:

5 meter or 9 meter proximity probe and extension cable works with 5mm, 8mm, and 11mm probes

Proximity probe includes: TM0180, TM0105, TM0110, 3300, 7200, 990 series.

Sensor Linear Range (reference with AISI 4140 steel):

5mm, 8mm probe: 2.0 mm (80mil)

Approximately 0.25mm (10mil) to 2.25mm (90mil)

11mm probe: 4.0mm (160mil)

Approximately 0.4mm (15mil) to 4.4mm (175mil)

4-20mA Transmission:

2-wire, source

Buffered Output (GAP V):

Raw position signal

Nominal 2-18VDC

Impedance: 1,000  $\Omega$

Maximum cable distance: 300m (1,000ft)

Sensitivity: +8.0mV/ $\mu$ m (200mV/mil) nominal

Frequency response: 0 - 10 KHz

Maximum Load:

500  $\Omega$

System Self-test:

System OK: output 4-20mA

System Not OK: output < 3.0mA



### Physical

Height: 75mm (2.95")  
Weight: 1.0kg (2.0 lbs)

### Environmental

Temperature:  
Operation: -40°C to +70°C  
Storage: -40°C to +100°C  
Humidity:  
90% non-condensing

### Order Information

\* Factory Default  
Standard Configuration:  
**TR3102-E00-G00-S00**  
8mm Probe:  
**TM0180-07-00-05-10**  
Extension Cable:  
**TM0181-040-000**

### TR3102-EXX-GXX-SXX

#### EXX: Probe and Cable (not included)

- E00\*: TM0180, 8mm Probe, 5m Cable
- E01: TM0180, 8mm Probe, 9m Cable
- E02: 3300, 8mm Probe, 5m Cable
- E03: 3300, 8mm Probe, 9m Cable
- E04: 7200, 8mm Probe, 5m Cable
- E05: 7200, 8mm Probe, 9m Cable
- E06: TM0105, 5mm Probe, 5m Cable
- E07: TM0105, 5mm Probe, 9m Cable
- E08: TM0110, 11mm Probe, 5m Cable
- E09: TM0110, 11mm Probe, 9m Cable
- E10: 3300, 11mm Probe, 5m Cable
- E11: 3300, 11mm Probe, 9m Cable
- E12: 7200, 11mm Probe, 5m Cable
- E13: 7200, 11mm Probe, 9m Cable
- E14: 3309 Probe, 5m Cable
- E15: 3309 Probe, 7m Cable

### Order Information Continued TR3102-EXX-GXX-SXX

**GXX: Mount**  
G00: DIN rail mount  
G01: Plate mount  
**SXX: Approval**  
S00\*: CE

### TR3102 Accessories

The TR3102 works with a proximity probe and extension cable.

- TM0180:** 8mm probe
- TM0105:** 5mm probe
- TM0110:** 11mm probe
- TM0181:** Extension cable
- TM900:** Power converter
- TM0200:** 3-1/2 digit display unit
- BNC-3:** BNC adaptor for portable data collector



### Field-Wiring Diagram

