



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 Ω 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 Ω

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

Sensitivity: +8.0mV/ μ m (200mV/mil) nominal

Frequency response: 0 - 10 KHz

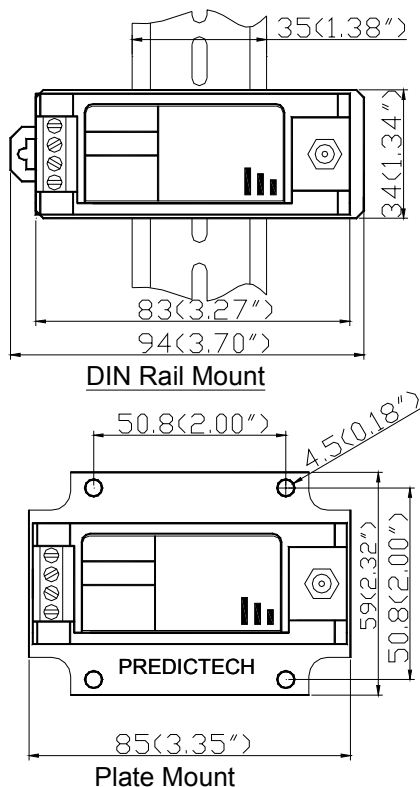
Maximum Load:

500 Ω

System Self-test:

System OK: output 4-20mA

System Not OK: output < 3.0mA





Proximity Transmitters and Seismic Vibration Transmitters

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

