



TR3102 Proximity 3-Wire Transmitter for Axial Position

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)
- ✓ Work with other manufacturers' proximity probes (5mm, 8mm and 11mm)
- ✓ Aluminum cast 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 95Ω 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: 1,000Ω

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

Sensitivity: 8.0mV/um (200mV/mil) nominal

Frequency response: 0 - 10 KHz

Maximum Load:

500Ω

System Self-test:

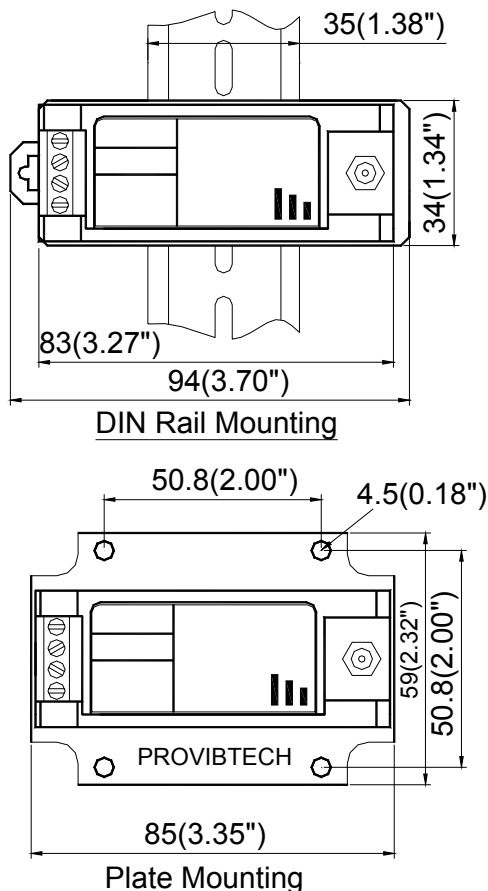
System OK: output 4-20mA

System Not OK: output < 3.0mA

Physical

Height: 75mm (2.95")

Weight: 1.0kg (2.0 lbs)





Proximity Transmitters and Seismic Vibration Transmitters

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:

TM0180-07-00-05-10-02

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

GXX: Mounting/ Function

G00: DIN rail mounting, measure position

G01: Plate mounting, measure position

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

