



PVTVM's Transmitter Selection Guide

Model Number	TR1101	TR3101 TR3102	TR4101 TR4102 TR4105	TR5102
				
Acceleration (g's)	•			
Velocity (ips/sec, mm/sec)	•			
Displacement (mils, um)	•	•	•	
Vibration Measurements				
Radial Vibration		TR3101	TR4101	
Axial Position		TR3102	TR4102	
Phase Reference			TR4102 TR4105	•
Speed			TR4105	•
Case Vibration	•			
Sensor Interfaces				
Built in Accelerometer				
Proximity Probe (5mm, 8mm, and 11mm)		•	•	•
Accelerometer	•			
Velocity Transducer	•			
Available Outputs				
4-20mA Output	•	•	•	•
Buffered Output (3 meters)			•	
Buffered Output (300 meters)	•	•		•
Available Features				
Loop Powered (2- Wire) Transmitter			•	
3-Wire Transmitter	•	•		•
Hazardous Rating (CSA, ATEX) Explosion Proof, Class I, Class II, Div.1, Groups (A-G), EExdIICT4				
Hazardous Rating (CSA, ATEX) Intrinsically Safe, EExiaIICT4			•	
Hazardous Rating (CSA), non-incendive, Class I, Div.2, Groups (A-D, T4)			•	
Environmental Rating- NEMA 4 or IP65				
Low Pass and High Pass Filter				
Warranty- 5 years	•	•	•	•

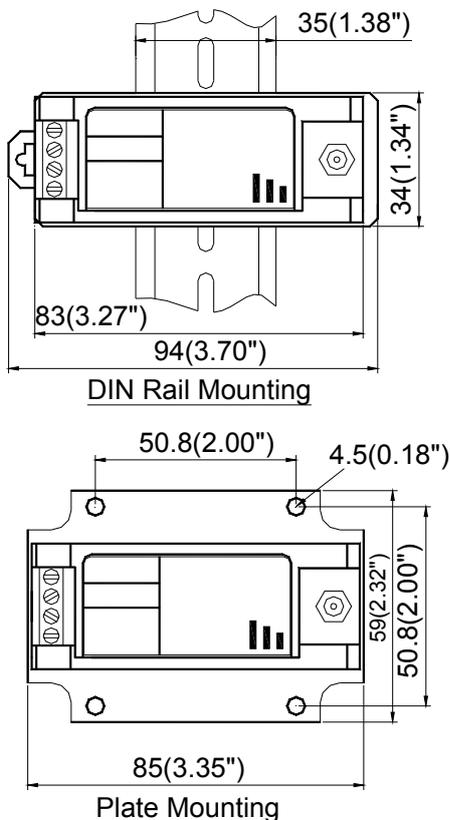
• = Complete Offering

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)
- ✓ Compatible 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)

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
- E16: 3000, 190 Probe, 15 Feet Cable
- E17: 3000, 190 Probe, 20 Feet Cable
- E18: 3000, 300 Probe, 15 Feet Cable
- E19: 3000, 300 Probe, 20 Feet Cable
- E20: 7200, 5mm Probe, 5m Cable
- E21: 7200, 5mm Probe, 9m Cable

GXX: Mount/ Function

- G00: DIN rail mount, measure position
- G01: Plate mount, measure position

SXX: Approval

- S00*: CE
- TR CU: № TC RU C-US.ГБ05.B.00479

TR3102 Accessories

The TR3102 works with a proximity probe and extension cable.

- TM0180**: 8mm probe
- TM0105**: 5mm probe
- TM0110**: 11mm probe
- TM0181**: Extension cable
- TM900A**: Din Rail Mounted Power Supply
- TM0200**: 3-1/2 digit display unit
- BNC-3**: BNC adaptor for portable data collector



Field-Wiring Diagram

