# PYTYM Proximity Transmitters and Seismic Vibration Transmitters

# **PVTVM's Transmitter Selection Guide**

Model Number	TR1101	TR3101 TR3102	TR4101 TR4102 TR4105	TR5102
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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, EExialICT4			•	
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

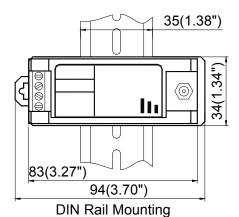


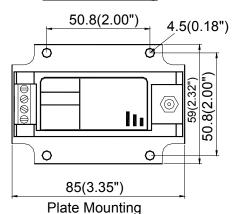
# **TR4105 Proximity Loop Powered Transmitter for Speed and Phase** Reference

The TR4105 is a cost-effective solution for monitoring the speed on your balance of plant machines. The TR4105 combines the proximity probe driver and the signal conditioning circuit into one package. It works with a proximity probe and extension cable as a system.

#### **Features**

- Loop powered transmitter
- Does not require proximity probe driver
- **Buffered output/ GAP**
- ✓ Compatible with other manufacturers' proximity probes (5mm, 8mm)
- 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:

16-30VDC

Speed Response:

0 - 50,000 pulse per minute

Overall Vibration:

4-20mA

Connection:

Special  $95\Omega$  coaxial cable with connector.

Buffered Output/ GAP:

Raw speed and phase reference signal

Nominal: 2-18VDC Impedance: 20 kΩ

Maximum cable distance: 3.0m (10ft) Sensitivity: 8.0mV/um (200mV/mil) nominal Electrical specifications continued

Maximum Load:

50×(Vs-16)

Where Vs is the system power supply

## **Physical**

Height: 75mm (2.95") Weight: 0.5 kg (1.0 lb)

### **Environmental**

Temperature:

Operation: -40°C to +70°C Storage: -40°C to +100°C

Humidity:

90% non-condensing



# Proximity Transmitters and Seismic Vibration Transmitters

### **Order Information**

\* Factory default

Standard configuration:

TR4105-A01-E00-F00-G00

8mm probe:

TM0180-A07-B00-C05-D10

Extension cable:

TM0181-A40-B00

TR4105-AXX-EXX-FXX-GXX-SXX

**AXX: Full Scale** 

A00: 0 ~ 1,000 rpm

A01\*: 0 ~ 3,600 rpm

A02: 0 ~ 6,000 rpm

A03: 0 ~ 10,000 rpm A04: 0 ~ 30,000 rpm

A05: 0 ~ 50,000 rpm

Axxxxx: Customer Specify rpm

A99\*\*: phase reference output

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

E00\*: TM0180, 5m Cable

E01: TM0180, 9m Cable

E02: 8mm Probe, 3300, 5m Cable

E03: 8mm Probe, 3300, 9m Cable

E04: 8mm Probe, 7200, 5m Cable

E05: 8mm Probe, 7200, 9m Cable

E06: TM0105, 5m Cable

E07: TM0105, 9m 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

**FXX:** Teeth per Revolution.

F00\*: 1

F02: Customer specify, number of teeth =XX

**GXX: Mount** 

G00\*: DIN rail mount G01: Plate mount SXX: Hazardous Area

S00\*: Without approval. CE

\*\* This option has buffer output only for phase reference. All other options will have 4-20mA and buffer output

#### TR4105 Accessories

The TR4105 requires a proximity probe and extension cable to work as a system.

TM0180: 8mm probe TM0105: 5mm probe TM0181: Extension cable

### **Field-Wiring Diagram**

