



PVTVM's Proximity Probe Selection Guide

| Part Number (Initial Prefix) | TM0105 | TM0180 | TM0110 | TM0120 |
|--|---|---|------------------------------|-----------------------|
| Probe Tip Size | 5mm | 8mm | 11mm | 25mm |
| Probe Model Type | Standard, 7200 compatible 3300XL compatible | Standard, 7200 compatible 3300XL compatible | Standard, 7200 compatible | Standard |
| Linear Range | 80 mil, 2mm | 80 mil, 2mm | 160 mil, 4mm | 470 mil, 12mm |
| Probe Lengths | 0.5m or 1.0 m | 0.5m or 1.0 m | 0.5m or 1.0 m | |
| Extension Cable Lengths | 4.0m, 4.5m, 8.0m or 8.5 m | 4.0m, 4.5m, 8.0m or 8.5 m | 4.0m, 4.5m, 8.0m or 8.5 m | |
| Integral Probe Extension Cable (Option) | 5.0 m or 9.0m | 5.0m or 9.0m | 5.0m or 9.0m | Customer Specifies |
| Available with Armored Cable | • | • | • | • |
| Probe Driver | Required | Required | Required | Required |
| Hazardous Rating | • | • | • | |

25mm Proximity Probe TM0120 System

Linear range

The 25mm probe has up to 12mm (470mil) linear range. The probe is designed for measuring differential expansion. The TM0120 integrates the probe, and extension cable into one unit. Together with 25mm probe driver TM0122, they compose of a 25mm proximity probe system.

The TM0120 probe comes in lengths of 1m, 5m and 9m standard cable (2 conductor shielded cable). Non-standard cable length is available upon request.



System Specifications

Electrical

Power Supply:

22-30VDC @ 50mA.
Galvanic isolation

Linear Range:

12mm (470mils) begins at about 2mm (80mils) from probe surface (AISI4140)

Sensitivity:

0.787 mV/um (20mV/mil) ± 4%

Temperature Sensitivity:

Probe and 5 meters cable within the operation temperature range, typical tolerance is within ±5% FS.

Linearity (deviation from straight line):

Within ±0.25mm (±10 mil) of a straight line

Frequency Response (±3db):

0 - 2.0 KHz

Minimum Target Size:

67mm (2.6") in diameter

Environmental

Temperature:

Operation: -35°C to +85°C

Storage: -50°C to +100°C

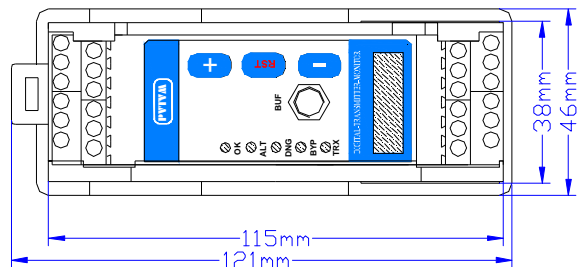
Humidity:

100% non-condensing

Physical

Dimension: Height: 75mm (2.95"), see figuration.

Weight: 2.0lbs (1.0kg).

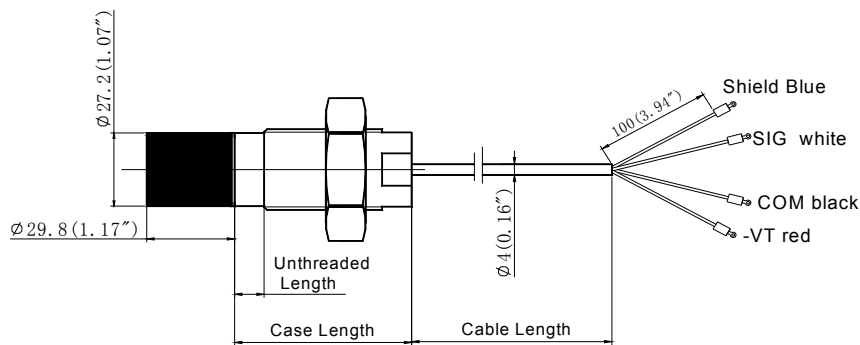


Rail Mounting



25mm TM0120 Proximity Probe Ordering Information

| TM0120 | -XX | -XX | -XX | -XX |
|---|------------|---|---|------------------------|
| 25mm Integral Probe | Probe Type | Unthreaded Length | Case Length | Total Length |
| 1.25-12 UNF; without armor; standard | -02 | Standard: 00 (0.0 in) Increment: 01 (0.1 in) | Standard: 30 (3.0 in) Increment: 01 (0.1 in) | 10 (1.0m) 50 (5.0m) |
| 1.25-12 UNF; with armor; standard | -03 | Maximum: case length- 1.0 in | Minimum: 24 (2.4 in) Maximum: 95 (9.5 in) | 90 (9.0m) |
| 1.25-12 UNF; armor with FEP jacket | -033 | | | |
| M30×2; without armor; standard | -00 | Standard: 00 (0 mm) Increment: 01 (10 mm) | Standard: 07 (70 mm) Increment: 01 (10 mm) | |
| M30×2; with armor; standard | -01 | Maximum: case length- 20 mm | Minimum: 06 (60 mm) Maximum: 25 (250 mm) | |
| M30×2; armor with FEP jacket | -013 | | | |
| Smooth body, side exit; without armor | -04 | Standard: 30 (3.0 in) Increment: 01 (0.1 in) | Same as unthreaded length | |
| Smooth body, side exit; with armor | -05 | Minimum: 30 (3.0 in) Maximum: 95 (9.5 in) | | |
| Smooth body, side exit; armor with FEP jacket | -053 | | | |
| Smooth body, rear exit; without armor | -06 | Standard: 30 (3.0 in) Increment: 01 (0.1 in) | Same as unthreaded length | |
| Smooth body, rear exit; with armor | -07 | Minimum: 20 (2.0 in) Maximum: 95 (9.5 in) | | |
| Smooth body, rear exit; armor with FEP jacket | -073 | | | |



TM0120 Probe 25mm

TM0122 Probe Driver Ordering Information
TM0122-A0

25mm Probe System Field-Wiring Diagram

