



## 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)  $\pm$  4%

##### Temperature Sensitivity:

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

##### Linearity (deviation from straight line):

Within  $\pm$ 0.25mm ( $\pm$ 10 mil) of a straight line

##### Frequency Response ( $\pm$ 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

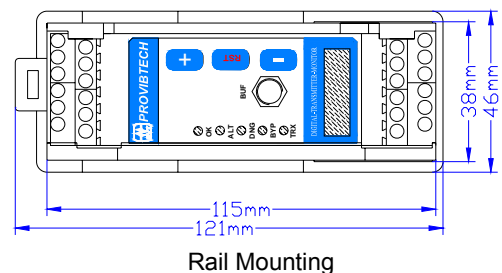
##### Humidity:

100% non-condensing

#### Physical

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

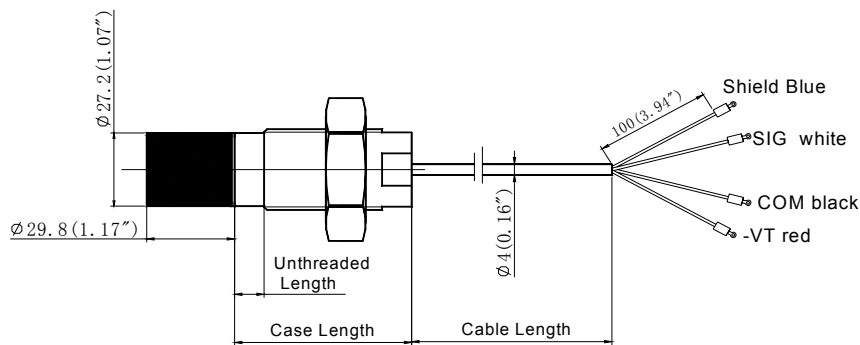
Weight: 2.0lbs (1.0kg).





**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)	90 (9.0m)
1.25-12 UNF; armor with FEP jacket	-033		Maximum: 95 (9.5 in)	
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)	
M30×2; armor with FEP jacket	-013		Maximum: 25 (250 mm)	
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**

