

## 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.



### **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  $\pm 5\%$  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

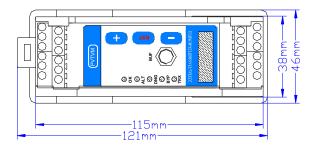
Humidity:

100% non-condensing

## **Physical**

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

Weight: 2.0lbs (1.0kg).



Rail Mounting

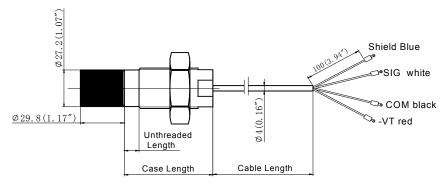




# 25mm TM0120 Proximity Probe Ordering Information

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



TM0120 Probe 25mm

## **TM0122 Probe Driver Ordering Information** TM0122-A0



# 25mm Probe System Field-Wiring Diagram

