

Model PMS/PMH

General Purpose Pressure Transducer

Description

PMS/PMH sensing element has excellent temperature properties by adopting a self temperature compensation foil strain gauge. A diaphragm and a pressure port are configured as one body for the prevention of leakage, and it has excellent durability for an instant over pressure. It builds an amplifier therein to interface with various kinds of controllers.

Features

- ▶ Built-in amplifier Circuit(VDC, mA)
- ▶ Measuring range 0~500MPa
- ▶ 0.25%FS(PMH), 0.5%FS(PMS) accuracy
- ▶ Self temperature compensation foil strain gauge
- ▶ Stainless steel media-wetted materials

Applications

- ▶ Process control
- ▶ Hydraulics & Pneumatic
- ▶ Compressor Control
- ▶ Chillers
- ▶ Refrigeration Equipment

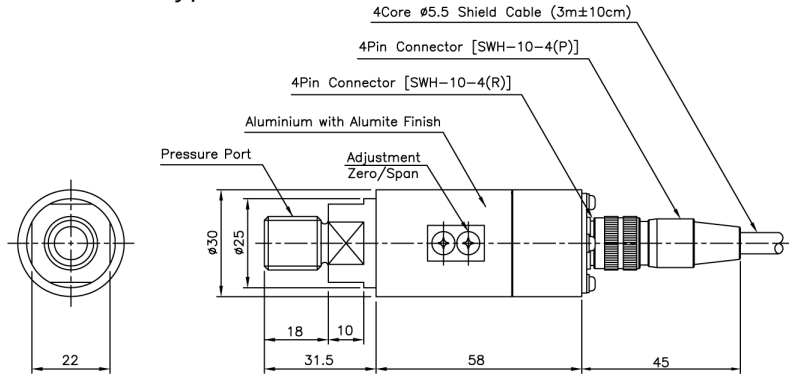
Specifications



	PMS□	PMH□
Range	0~1, 2, 3, 5, 10, 20, 30, 35, 50, 100, 250, 500MPa (Gauge)	0~1, 2, 3, 5, 10, 20, 30, 35, 50, 100, 250, 500MPa (Gauge)
Performance		
Accuracy	±0.5%FS(RSS)	±0.25%FS(RSS)
Thermal Effect on Zero	±0.06%FS/°C	±0.03%FS/°C
Thermal Effect on Span	±0.06%FS/°C	±0.03%FS/°C
Compensated Temperature Range	-10 ~ 70°C	-20 ~ 80°C
Operating Temperature Range	-20 ~ 80°C	-30 ~ 100°C
Electrical		
Excitation	11 ~ 28VDC	
Output	0~5VDC, 1~5VDC, 0~10VDC(3, 4Wire) 4~20mA(2, 3 Wire)	
Electrical Connection	Connector, Head, Din Connector	
Physical		
Proof Pressure	150%FS Max.(≤100MPa), 120%FS Max.(>100MPa)	
Burst Pressure	200%FS Min.(≤100MPa), 130%FS Min.(>100MPa)	
Vibration	49.1m/s ² {5G}, 10~500Hz	
Shock	490m/s ² {50G}	
Pressure Port	R(PT)3/8"(≤100MPa), UNF9/16"Female(>100MPa)	
Media-Wetted Materials	Stainless Steel 630	
Weight	Connector type : Approx. 140g (Sensor Only)	

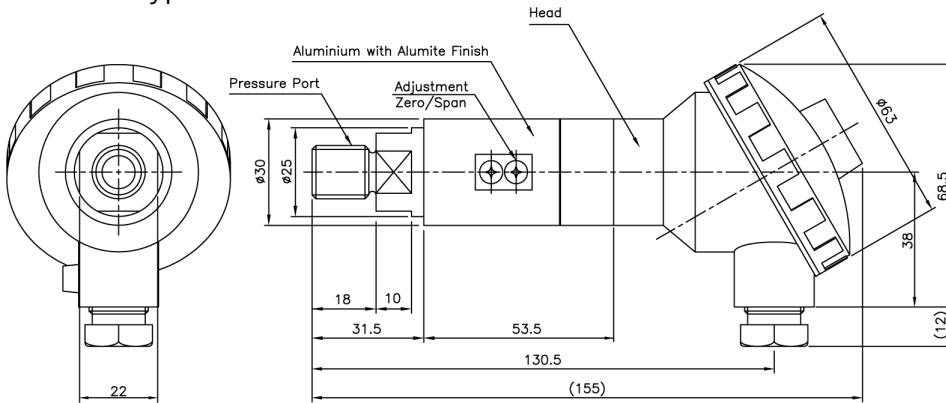
Dimension

► Connector Type



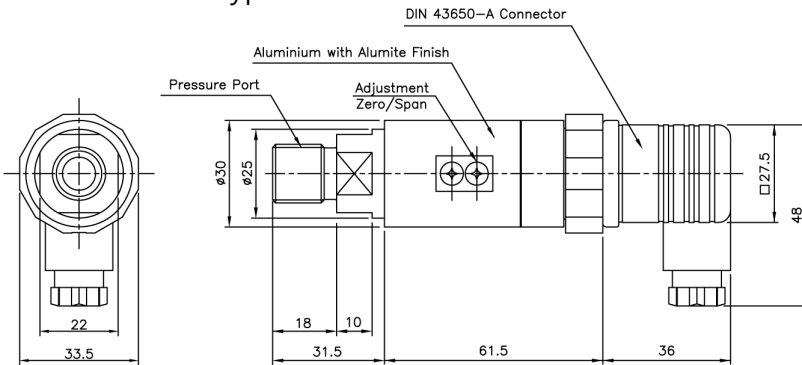
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

► Head Type



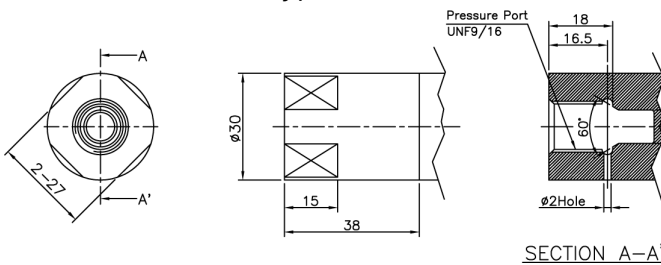
No.	Connections
	2Wire
+	Input ⊕
⊕	Earth
-	Output ⊕

► Din connector Type

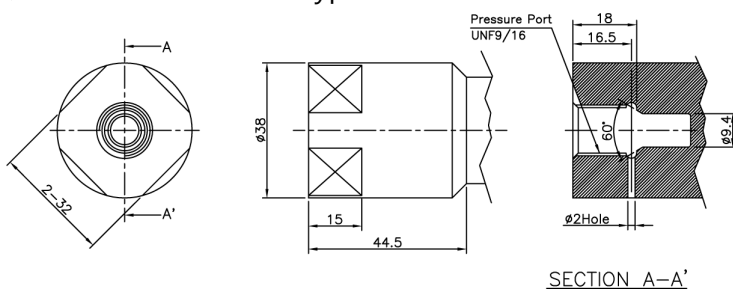


Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊕	Earth	Earth

► Port of 250MPa Type

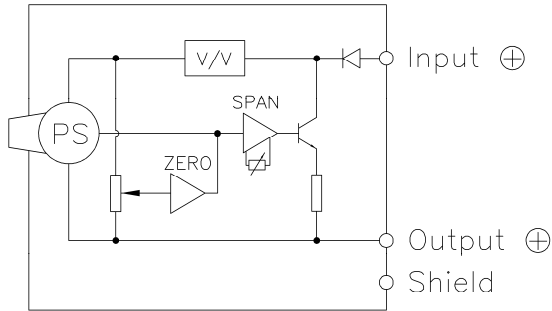


► Port of >400MPa Type

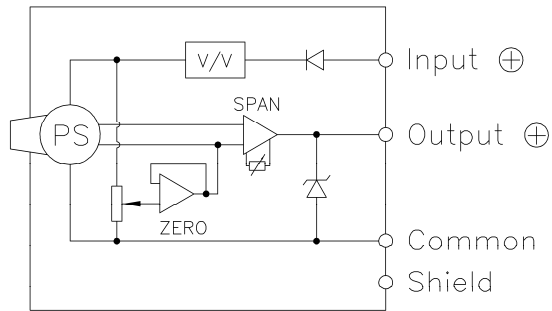


Internal Circuit Diagram

▶ 2Wire mA Output Type



▶ 3, 4Wire mA, VDC Output Type



Ordering Information

PMS B 0001 M A P A

Model Name

PMS : Accuracy 0.5%FS
PMH : Accuracy 0.25%FS

Output

B : 4Wire 0~5V G : 3Wire 4~20mA
C : 3Wire 0~5V H : 2Wire 4~20mA
D : 4Wire 1~5V J : 3Wire 0~10V
E : 3Wire 1~5V K : 4Wire 0~10V
F : 4Wire 4~20mA

Pressure Range

XXXX : Pressure
CXXX : Compound Pressure

Option

A : Normal

Connecting Methods

P : Connector
H : Head
I : Din 43650-A connector

Pressure port

A : R(PT)3/8"
K : UNF9/16"(Female)

Pressure Unit

M : MPa B : bar
K : kgf/cm² P : psi