

# Model PSI

## Zero, Span Adjustable Low Pressure Transducer

### Description

PSI sensing element is suitable for low pressure measurement below 1MPa by applying the piezoresistive cells. It is applied to non-corrosion gas measurement such as the air, gas at a low cost.

### Features

- ▶ Built-in amplifier circuit(VDC, mA)
- ▶ Measuring range -100~1000kPa
- ▶ 0.5%FS accuracy
- ▶ Piezoresistive silicon cell
- ▶ Zero, Span Adjustable
- ▶ Use with non-corrosive, non-ionic media

### Applications

- ▶ Gas leak detection
- ▶ Gas monitoring
- ▶ Gas & Air process control
- ▶ Vacuum system



### Specifications

#### Range

0 ~ 10 ... 1000kPa (Gauge)  
-100 ~ 0, 10 ... 1000kPa (Gauge)

#### Performance

Accuracy	±0.5%FS(RSS)
Thermal Effect on Zero	±0.06%FS/°C
Thermal Effect on Span	±0.06%FS/°C
Compensated Temperature Range	-10 ~ 70°C
Operating Temperature Range	-20 ~ 80°C

#### Electrical

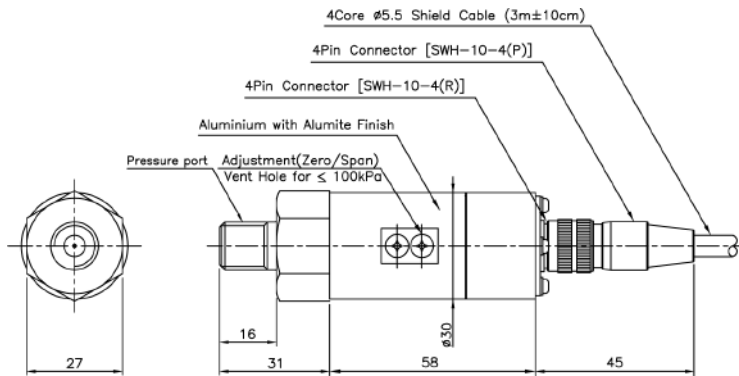
Excitation	11 ~ 28VDC
Output	0~5, 1~5, 0~10VDC, 4~20mA(2, 3Wire)
Electrical Connection	Connector, Cable, Head, DIN Connector

#### Physical

Proof Pressure	150%FS Max.
Burst Pressure	200%FS Min.
Vibration	49.1m/s <sup>2</sup> {5G}, 10~500Hz
Shock	490m/s <sup>2</sup> {50G}
Pressure port	R(PT)1/8", G(PF)1/8", R(PT)1/4", G(PF)1/4", R(PT)3/8", G(PF)3/8"
Media-Wetted Materials	Stainless Steel 303, SiO <sub>2</sub> , VITON
Weight	Connector type : Approx. 110g (Sensor Only)

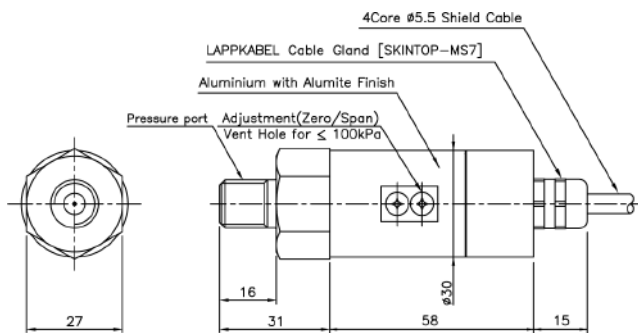
## Dimension

### ► Connector Type



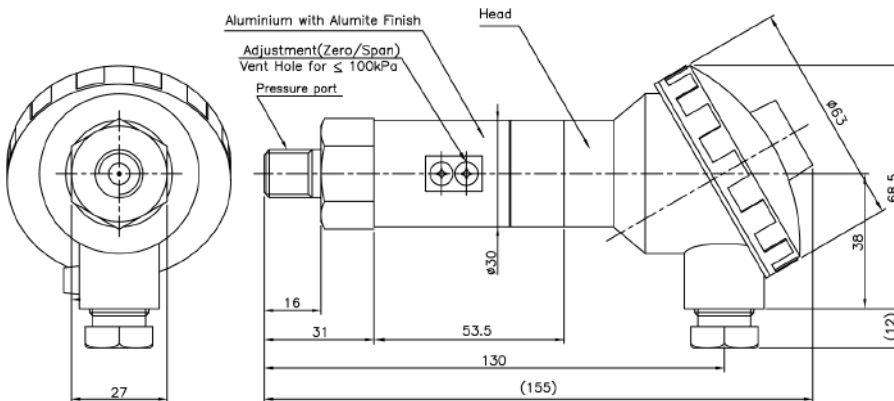
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

### ► Cable Gland Type



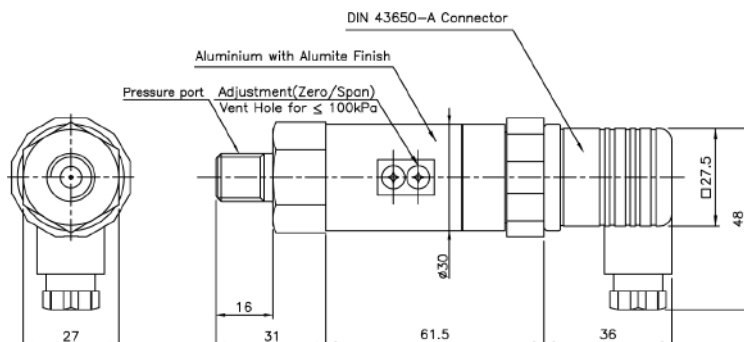
Wire Color	Connections		
	4Wire	3Wire	2Wire
Red	Input ⊕	Input ⊕	Input ⊕
White	Output ⊖	Common ⊖	×
Black	Input ⊖	×	Output ⊕
Green	Output ⊕	Output ⊕	×
Shield	Earth	Earth	Earth

### ► Head Type



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

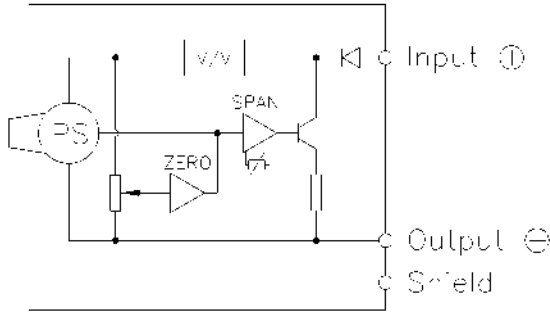
### ► Din Connector Type



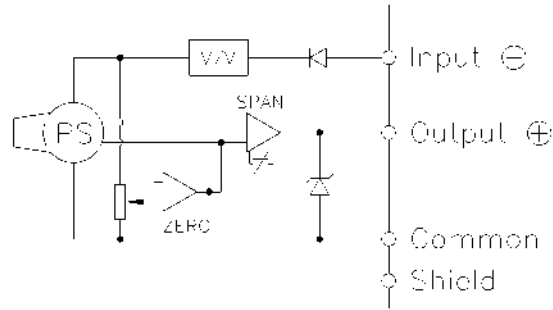
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊕	Earth	Earth

## Internal Circuit Diagram

### ▶ 2Wire mA Output Type



### ▶ 3, 4Wire mA, VDC Output Type



## Ordering Information

Model Name		PSI		E		0010		R		A		P		A	
<b>Output</b>														<b>Option</b>	
B : 4Wire 0~5V		G : 3Wire 4~20mA												A : Normal	
C : 3Wire 0~5V		H : 2Wire 4~20mA												<b>Connecting Methods</b>	
D : 4Wire 1~5V		J : 3Wire 0~10V												P : Connector	
E : 3Wire 1~5V		K : 4Wire 0~10V												S : Cable Gland	
F : 4Wire 4~20mA														H : Head	
<b>Pressure Range</b>														I : Din Connector	
XXXX : Pressure														<b>Pressure port</b>	
CXXX : Compound Pressure														A : R(PT)3/8"	
														D : G(PF)1/4"	
														B : G(PF)3/8"	
														G : R(PT)1/8"	
														C : R(PT)1/4"	
														H : G(PF)1/8"	
														<b>Pressure Unit</b>	
														R : kPa	
														M : MPa	
														B : bar	
														K : kgf/cm <sup>2</sup>	
														P : psi	
														H : mmHg	