

Model PSH(Flush Diaphragm)

High Performance Pressure Transducer

Description

PSH(Flush Diaphragm) model is designed as a flush diaphragm suitable for sanitary use and is high precise for tank levels. Media-wetted materials there are composed by stainless steel 316L to have superior corrosion-resistant properties. It is applied to precise measurement and builds an inner amplifier to interface with various kinds of controllers.

Features

- ▶ CE Certified
- ▶ VDC, mA output
- ▶ Measuring range 0~3.5MPa
- ▶ 0.15%FS accuracy
- ▶ Gauge and absolute measurement
- ▶ Piezoresistive silicon cell
- ▶ Stainless steel(316L) media-wetted materials

Applications

- ▶ Food Process control
- ▶ Water Resource management
- ▶ Sewage Water & Slurry
- ▶ Glues & Resins
- ▶ Oils & Lubricants
- ▶ Cosmetics & Pulp
- ▶ Abrasive Liquids



Specifications

Range

0 ~ 5kPa ... 3.5MPa(Gauge)
 -100kPa ~ 0 ... 3.5MPa (Gauge)
 0 ~ 35kPa ... 3.5MPa (Absolute)

Performance

| | |
|-------------------------------|---------------|
| Accuracy | ±0.15%FS(RSS) |
| Thermal Effect on Zero | ±0.03%FS/°C |
| Thermal Effect on Span | ±0.03%FS/°C |
| Compensated Temperature Range | -10 ~ 70°C |
| Operating Temperature Range | -20 ~ 80°C |

Electrical

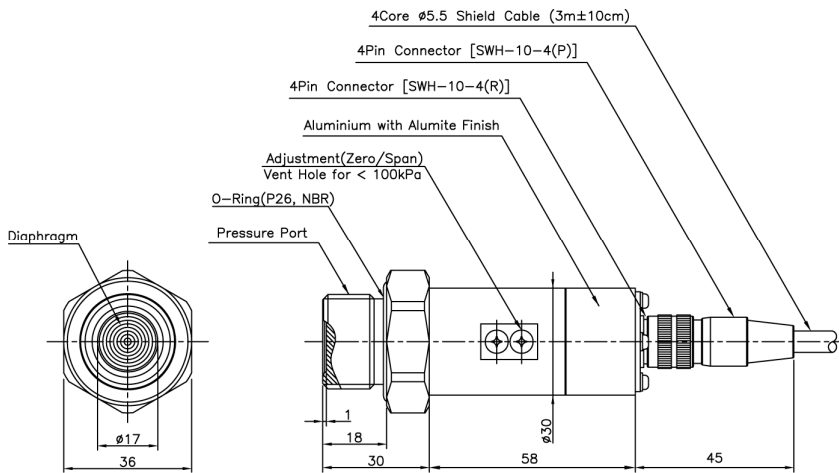
| | |
|-----------------------|--|
| Excitation | 11 ~ 28VDC |
| Output | 0~5VDC, 1~5VDC, 0~10VDC(3, 4Wire) 4~20mA(2, 3 Wire) |
| Electrical Connection | Connector, Head, Din Connector |

Physical

| | |
|------------------------|---|
| Proof Pressure | X3 |
| Burst Pressure | X4 |
| Vibration | 49.1m/s ² {5G}, 10~500Hz |
| Shock | 490m/s ² {50G} |
| Pressure port | R(PT)3/4", G(PF)3/4" |
| Media-Wetted Materials | Stainless Steel 316L, Viton |
| Weight | Connector type : Approx. 180g (Sensor Only) |

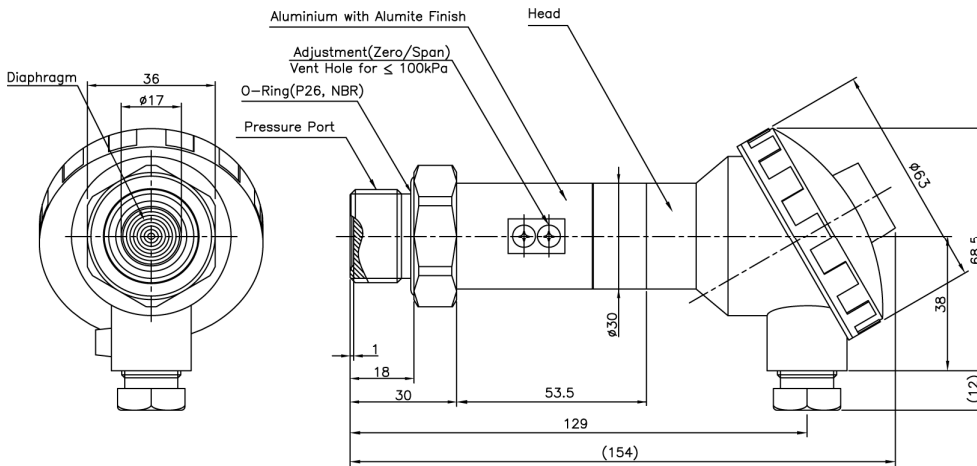
Dimension

► Connector Type



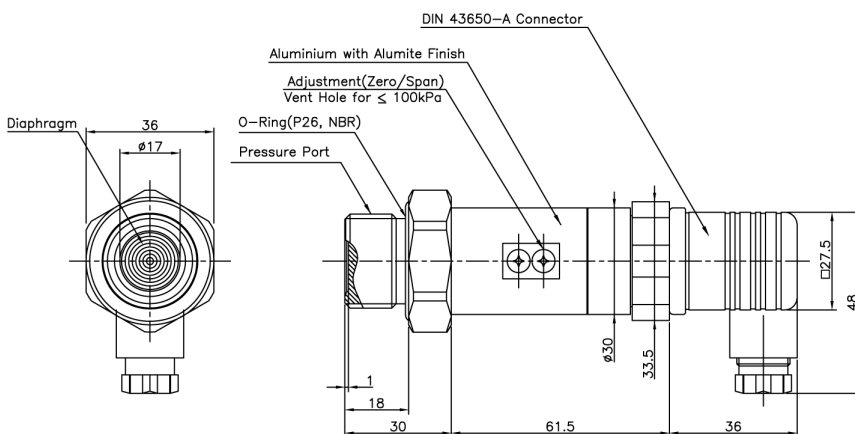
| Pin No. | Wire Color | Connections | | |
|---------|------------|-------------|----------|----------|
| | | 4Wire | 3Wire | 2Wire |
| 1 | Red | Input ⊕ | Input ⊕ | Input ⊕ |
| 2 | White | Output ⊖ | Common ⊖ | × |
| 3 | Black | Input ⊖ | × | Output ⊕ |
| 4 | Green | Output ⊕ | Output ⊕ | × |
| 5 |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

► Head Type



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

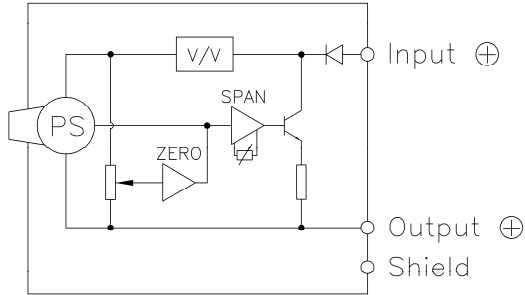
► Din connector Type



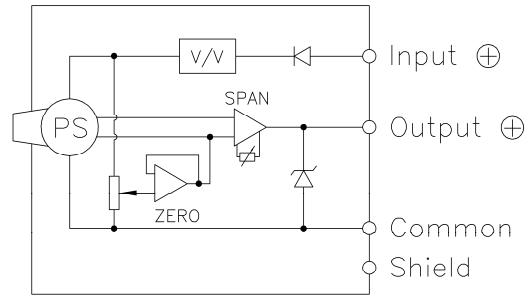
| Pin No. | Connections | |
|---------|-------------|----------|
| | 3Wire | 2Wire |
| 1 | Input ⊕ | Input ⊕ |
| 2 | Common ⊖ | Output ⊕ |
| 3 | Output ⊕ | × |
| ⊕ | Earth | Earth |

Internal Circuit Diagram

▶ 2Wire mA Output Type



▶ 3, 4Wire mA, VDC Output Type



Ordering Information

| Model Name | PSH B 0005 R I P G | Type of Pressure Measurement |
|--|--|--|
| Output | | G : Gauge J : Absolute |
| B : 4Wire 0~5V C : 3Wire 0~5V D : 4Wire 1~5V E : 3Wire 1~5V F : 4Wire 4~20mA | | Connecting Methods |
| | G : 3Wire 4~20mA H : 2Wire 4~20mA J : 3Wire 0~10V K : 4Wire 0~10V | P : Connector H : Head I : Din 43650-A connector |
| Pressure Range | | Pressure port |
| XXXX : Pressure | | W : R(PT)3/4"(Flush Diaphragm) I : G(PF)3/4"(Flush Diaphragm) |
| | | Pressure Unit |
| | | R : kPa B : bar P : psi C : cmH ₂ O |
| | | M : MPa K : kgf/cm ² H : mmHg |