

# Model PTD

## General Purpose Pressure Transducer

### Description

PTD model has applied Silicon Piezoresistive cell, which attached High Temperature Glass on Titanium. Since it does not use O-ring, there is no possibility of corrosion and leak. Its low price makes it suitable for industrial uses. With its various outputs, it may be interfaced with various controllers.

### Features

- ▶ CE Certified
- ▶ Built-in amplifier Circuit(VDC, mA)
- ▶ Measuring range  $-0.1 \sim 150\text{MPa}$
- ▶ 0.5%FS accuracy
- ▶ Piezoresistive silicon cell
- ▶ Stainless steel, Titanium media-wetted materials

### Applications

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



### Specifications

#### Range

$-100 \sim 0 \sim 100, 200, 500\text{kPa}$  / 1, 2, 3, 5, 10, 20, 30, 50, 100, 150MPa (Gauge)

#### Performance

Accuracy	$\pm 0.5\%FS(RSS)$
Thermal Effect on Zero	$\pm 0.05\%FS/^{\circ}C$ ( $\leq 200\text{kPa}$ : $\pm 0.1\%FS/^{\circ}C$ )
Thermal Effect on Span	$\pm 0.05\%FS/^{\circ}C$ ( $\leq 200\text{kPa}$ : $\pm 0.1\%FS/^{\circ}C$ )
Compensated Temperature Range	$-10 \sim 70^{\circ}C$
Operating Temperature Range	$-20 \sim 80^{\circ}C$ (Optional $-20 \sim 100^{\circ}C$ )

#### Electrical

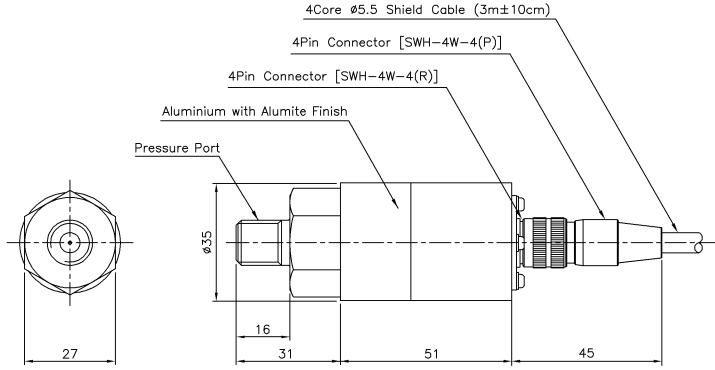
Excitation	11 ~ 28VDC
Output	0~5VDC, 1~5VDC, 0~10VDC, 4~20mA(2Wire)
Electrical Connection	Connector, Head, Din Connector

#### Physical

Proof Pressure	150%FS Max.
Burst Pressure	200%FS Min.
Vibration	$49.1\text{m/s}^2\{5G\}$ , 10~500Hz
Shock	$490\text{m/s}^2\{50G\}$
Pressure Port	R(PT)1/8", G(PF)1/8", R(PT)1/4"(Stock), G(PF)1/4", R(PT)3/8"(Stock), G(PF)3/8"
Media-Wetted Materials	Stainless Steel 304, Titanium 87%
Weight	Connector type : Approx. 140g (Sensor Only)

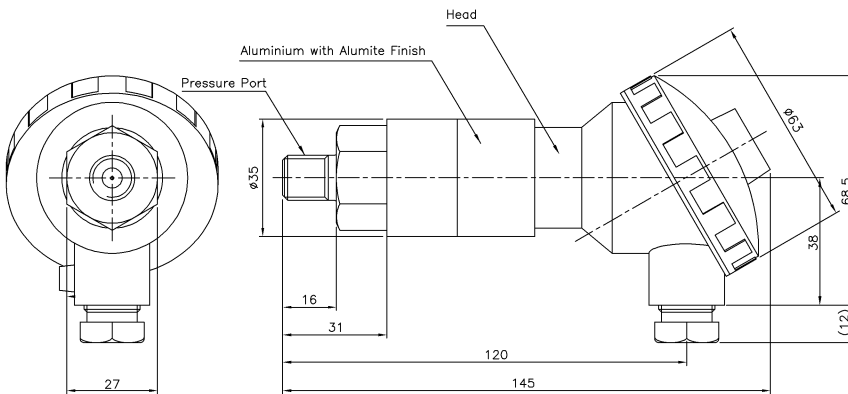
## Dimension

### ► Connector Type



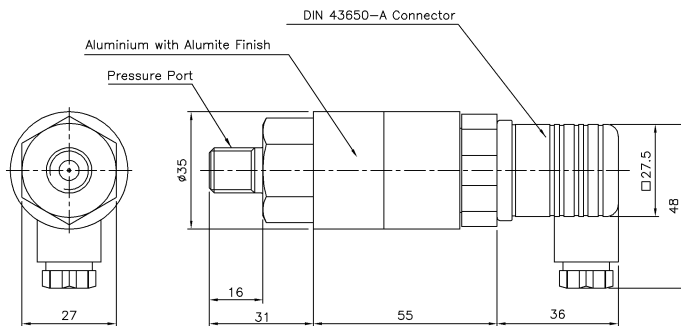
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input $\oplus$	Input $\oplus$	Input $\oplus$
2	White	Output $\ominus$	Common $\ominus$	×
3	Black	Input $\ominus$	×	Output $\oplus$
4	Green	Output $\oplus$	Output $\oplus$	×
5	Shield	Earth	Earth	Earth

### ► Head Type



No.	Connections
	2Wire
1	Input $\oplus$
2	Earth
3	Output $\oplus$

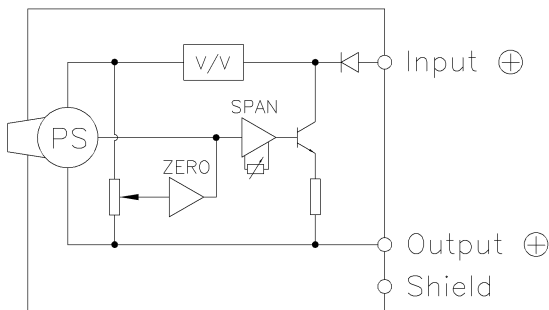
### ► Din connector Type



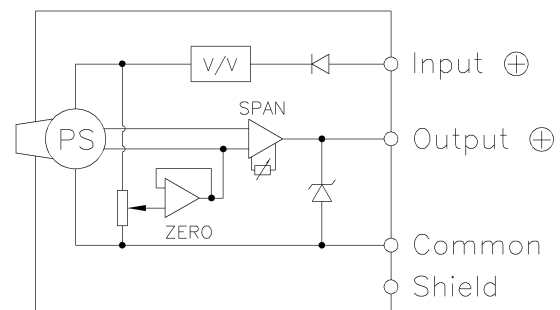
Pin No.	Connections	
	3Wire	2Wire
1	Input $\oplus$	Input $\oplus$
2	Common $\ominus$	Output $\oplus$
3	Output $\oplus$	×
$\oplus$	Earth	Earth

## Internal Circuit Diagram

### ► 2Wire mA Output Type



### ► 3, 4Wire VDC Output Type



## Ordering Information

		<b>PTD</b>	<b>B</b>	<b>0100</b>	<b>R</b>	<b>A</b>	<b>P</b>	<b>A</b>		
<b>Model Name</b>								<b>Option</b>		
								A : Normal		
								B : Temperature Range -20~100℃		
<b>Output</b>								<b>Connecting Methods</b>		
B : 4Wire 0~5V		H : 2Wire 4~20mA						P : Connector		
C : 3Wire 0~5V		J : 3Wire 0~10V						B : Water proof connector		
D : 4Wire 1~5V		K : 4Wire 0~10V						H : Head		
E : 3Wire 1~5V								I : Din 43650-A connector		
<b>Pressure Range</b>								<b>Pressure port</b>		
XXXX : Pressure								A : R(PT)3/8"		D : G(PF)1/4"
CXXX : Compound Pressure								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