

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

Electrical

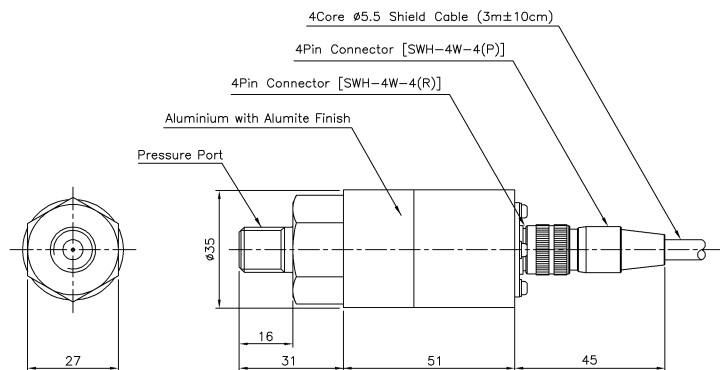
Excitation	11 ~ 28VDC
Output	0~5VDC, 1~5VDC, 0~10VDC, 4~20mA(2Wire)
Electrical Connection	Connector, Head, Din Connector

Physical

Proof Pressure	150%FS Max.
Burst Pressure	200%FS Min.
Vibration	$49.1\text{m/s}^2\{5\text{G}\}$, 10~500Hz
Shock	$490\text{m/s}^2\{50\text{G}\}$
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)

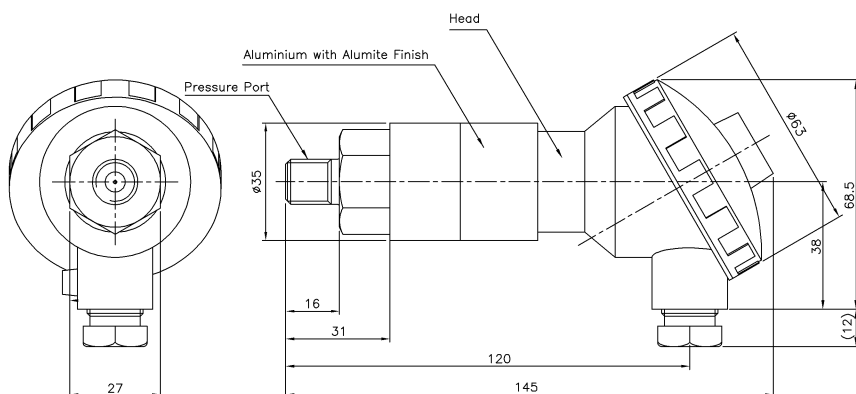
Dimension

► Connector Type



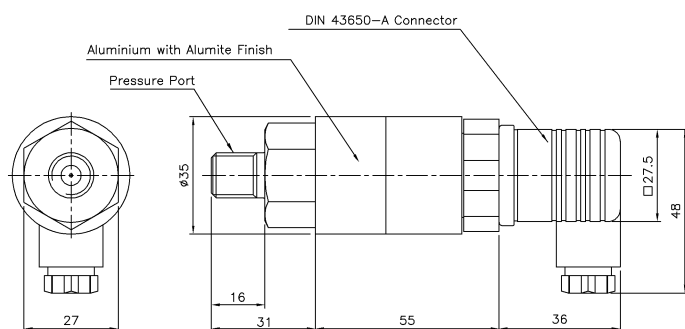
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

► Head Type



No.	Connections
	2Wire
1	Input ⊕
2	Earth
3	Output ⊕

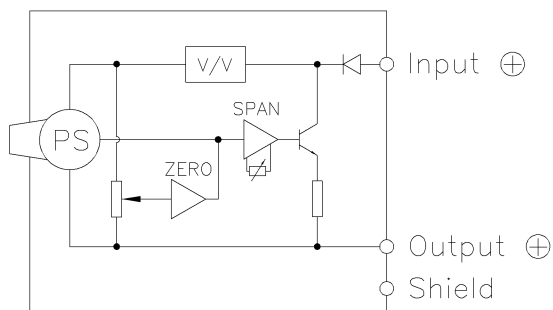
► Din connector Type



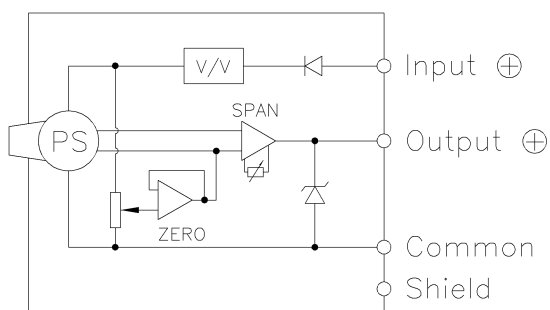
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊕	Earth	Earth

Internal Circuit Diagram

► 2Wire mA Output Type



► 3, 4Wire VDC Output Type



Ordering Information

Model Name	PTD	B	0100	R	A	P	A	Option
								A : Normal
								B : Temperature Range -20~100℃
Output								Connecting Methods
B : 4Wire 0~5V								P : Connector
C : 3Wire 0~5V								B : Water proof connector
D : 4Wire 1~5V								H : Head
E : 3Wire 1~5V								I : Din 43650-A connector
Pressure Range								Pressure port
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"
								Pressure Unit
								R : kPa M : MPa
								B : bar K : kgf/cm ²
								P : psi H : mmHg