

Model PTA

General Purpose Pressure Transducer

Description

PTA 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 ~ 150MPa
- ▶ 0.5%FS accuracy
- ▶ Piezoresistive silicon cell
- ▶ Zero, Span Adjustable
- ▶ Stainless steel, Titanium media-wetted materials

Applications

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



Specifications

Range

-100 ~ 0 ~ 100, 200, 500kPa / 1, 2, 3, 5, 10, 20, 30, 50, 100, 150MPa (Gauge)

Performance

Accuracy	±0.5%FS(RSS)
Thermal Effect on Zero	±0.05%FS/°C (≤200kPa : ±0.1%FS/°C)
Thermal Effect on Span	±0.05%FS/°C (≤200kPa : ±0.1%FS/°C)
Compensated Temperature Range	-10 ~ 70°C
Operating Temperature Range	-30 ~ 100°C

Electrical

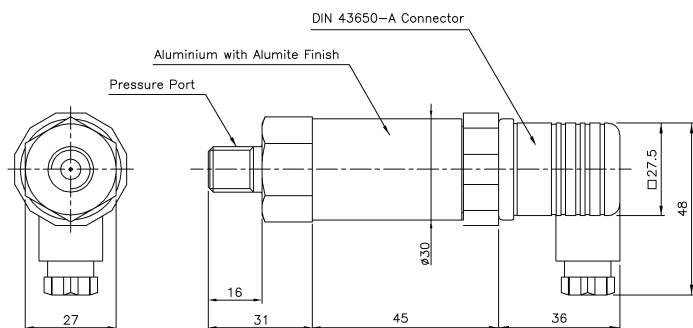
Excitation	11 ~ 28VDC(PTAA 12VDC Max.)
Output	10~20mV/V(Din Type Only) 0~5VDC, 1~5VDC, 0~10VDC(3, 4Wire), 4~20mA(2, 3 Wire)
Electrical Connection	Connector, Head, Din Connector

Physical

Proof Pressure	150%FS Max.
Burst Pressure	200%FS Min.
Vibration	49.1m/s ² {5G}, 10~500Hz
Shock	490m/s ² {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 304, Titanium 87%
Weight	Connector type : Approx. 140g (Sensor Only)

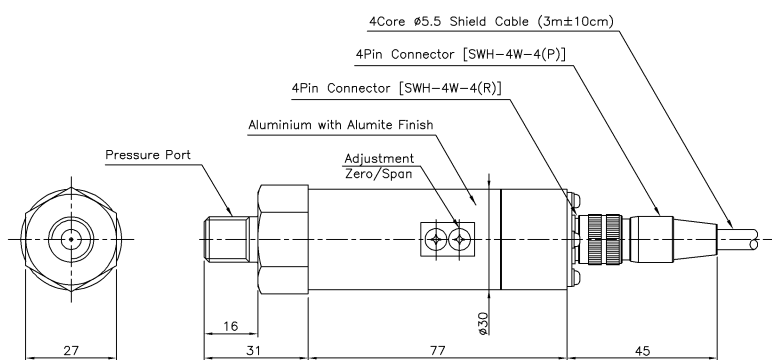
Dimension

► mV Output DIN Connector Type



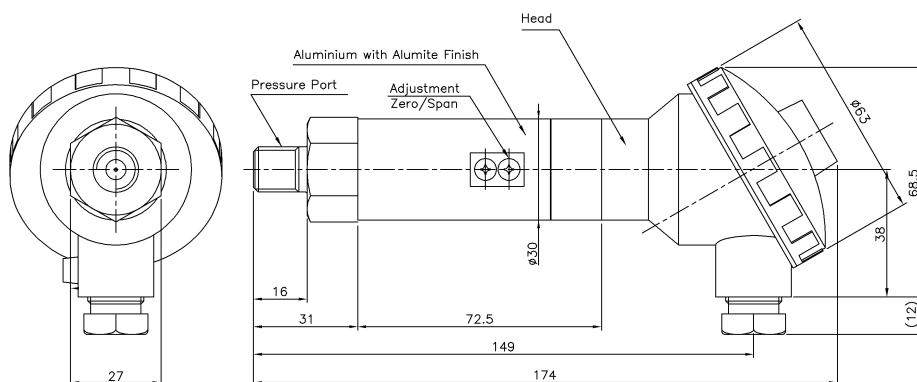
Pin No.	Connections
1	Input ⊕
2	Input ⊖
3	Output ⊕
⊕	Output ⊖

► Connector Type



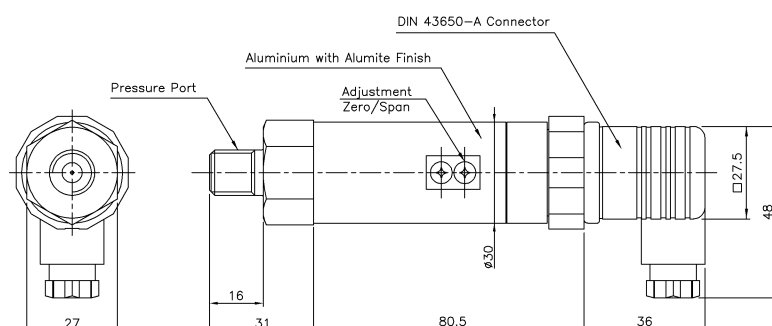
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

► Head Type



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

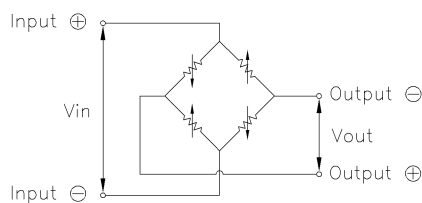
► Din connector Type



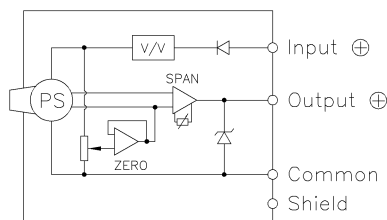
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊕	Earth	Earth

Internal Circuit Diagram

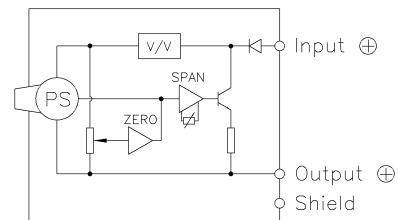
► mV Output Type



► 2Wire mA Output Type



► 3, 4Wire VDC Output Type



Ordering Information

Model Name	PTA	B	0100	R	A	P	A	Option
Output	A : mV/V	F : 4Wire 4~20mA						A : Normal
	B : 4Wire 0~5V	G : 3Wire 4~20mA						Connecting Methods
	C : 3Wire 0~5V	H : 2Wire 4~20mA						P : Connector
	D : 4Wire 1~5V	J : 3Wire 0~10V						H : Head
	E : 3Wire 1~5V	K : 4Wire 0~10V						I : Din 43650-A connector
Pressure Range	XXXX : Pressure							Pressure port
	CXXX : Compound Pressure							A : R(PT)3/8" D : G(PF)1/4"
								B : G(PF)3/8" E : R(PT)1/2"
								C : R(PT)1/4" Q : G(PF)1/2"
								Pressure Unit
								R : kPa M : MPa
								B : bar K : kgf/cm ²
								P : psi H : mmHg