

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 ~ 500MPa
- ▶ 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

0 ~ 100kPa ... 500MPa (Gauge)
-100kPa ~ 0 ~ 100kPa ... 500MPa (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

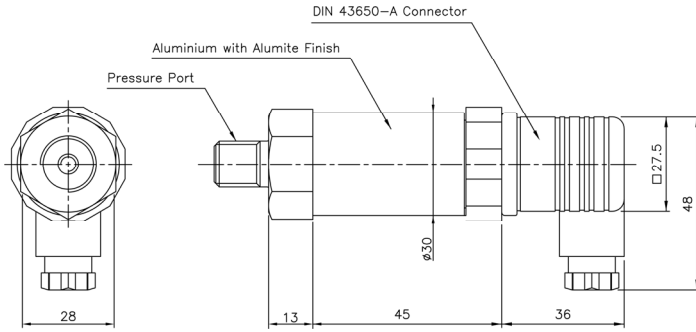
Excitation 11 ~ 28VDC(PTAA 12VDC Max.)
Output 10~20mV/V(Din Type Only)
0~5VDC, 1~5VDC, 0~10VDC(3, 4Wire), 4~20mA(2, 3 Wire)
Electrical Connection Connector, Head, Din Connector

Physical

Proof Pressure ≤ 150 MPa : X1.5 or 150MPa Whichever is less. / > 150MPa : X1.5 or 500MPa Whichever is less.
Burst Pressure ≤ 150 MPa : X2 or 150MPa Whichever is less. / > 150MPa : X2 or 600MPa Whichever is less.
Vibration 49.1m/s²{5G}, 10~500Hz
Shock 490m/s²{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", 9/16UNF Female(Only > 1500bar)
Media-Wetted Materials Stainless Steel 304 + Titanium 87%
Weight `Connector type : Approx. 140g (Sensor Only)

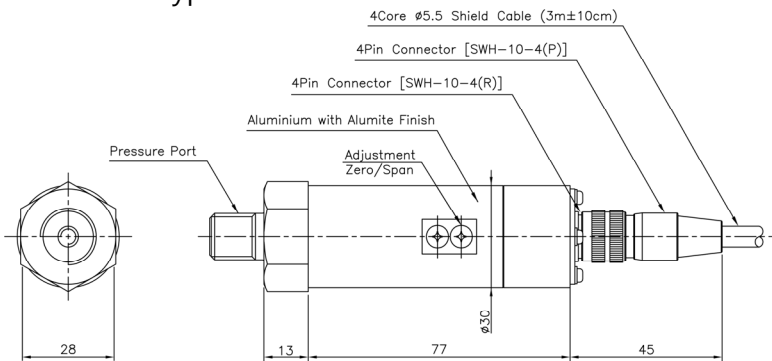
Dimension

► mV Output DIN Connector Type



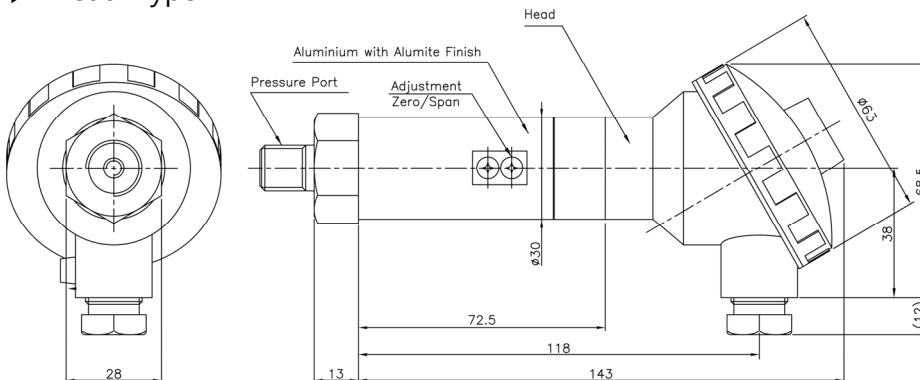
Pin No.	Connections
1	Input ⊕
2	Input ⊖
3	Output ⊕
⊖	Output ⊖

► Connector Type



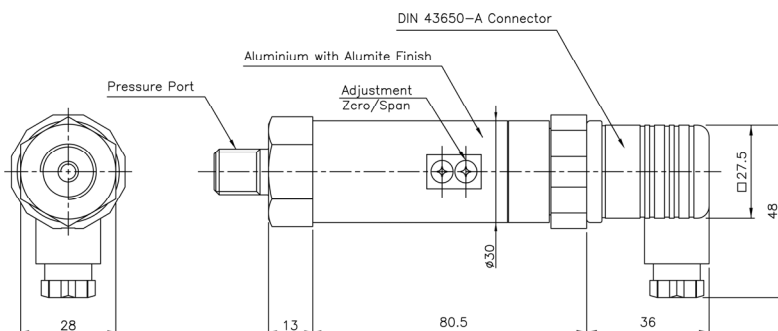
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	x
3	Black	Input ⊖	x	Output ⊕
4	Green	Output ⊕	Output ⊕	x
5	Shield	Earth	Earth	Earth

► Head Type



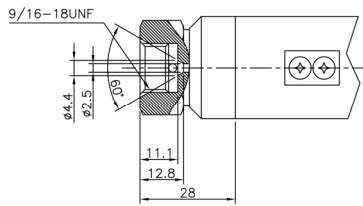
No.	Connections
	2Wire
+	Input ⊕
⊖	Earth
-	Output ⊕

► Din connector Type



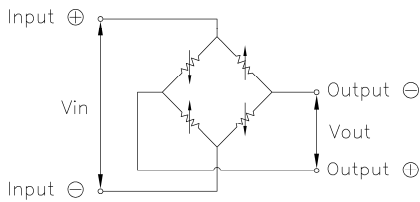
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	x
⊖	Earth	Earth

▶ Pressure Port(> 1500bar)

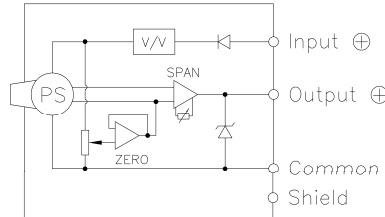


Internal Circuit Diagram

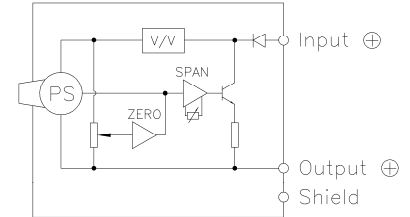
▶ mV Output Type



▶ 2Wire mA Output Type



▶ 3, 4Wire VDC Output Type



Ordering Information

Model Name		PTA	B	0100	R	A	P	A	-	TI
Output										
A : mV/V	F : 4Wire 4~20mA									
B : 4Wire 0~5V	G : 3Wire 4~20mA									
C : 3Wire 0~5V	H : 2Wire 4~20mA									
D : 4Wire 1~5V	J : 3Wire 0~10V									
E : 3Wire 1~5V	K : 4Wire 0~10V									
Pressure Range										
XXXX : Pressure										
CXXX : Compound Pressure										
Pressure Unit										
R : kPa	M : MPa									
B : bar	K : kgf/cm ²									
P : psi	H : mmHg									
		Media-Wetted Materials								
		None : SS304, Ti 87%								
		TI : Ti 87%								
		Option								
		A : Normal								
		Connecting Methods								
		P : Connector								
		H : Head								
		I : Din 43650-A connector								
		Pressure port								
		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"				
		K : 9/16-18 UNF(F) (Only > 1500bar)								