

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

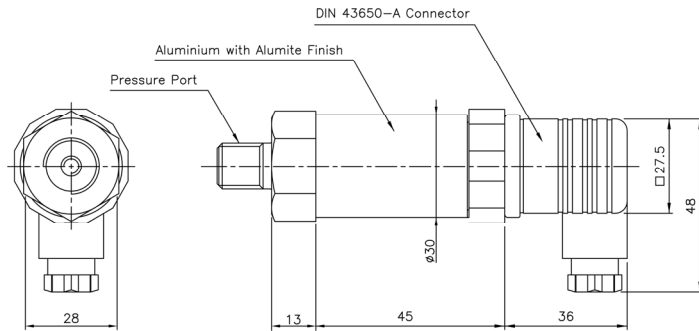
Excitation	11 ~ 28VDC(PTAA 12VDC Max.)
Output	10~20mV/V(Din Type Only) 0~5VDC, 1~5VDC, 0~10VDC(3, 4Wire), 4~20mA(2, 3 Wire)
Electrical Connection	Connector, Head, Din Connector

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/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", 9/16UNF Female(Only >1500bar)
Media-Wetted Materials	Stainless Steel 304 + Titanium 87%
Weight	`Connector type : Approx. 140g (Sensor Only)

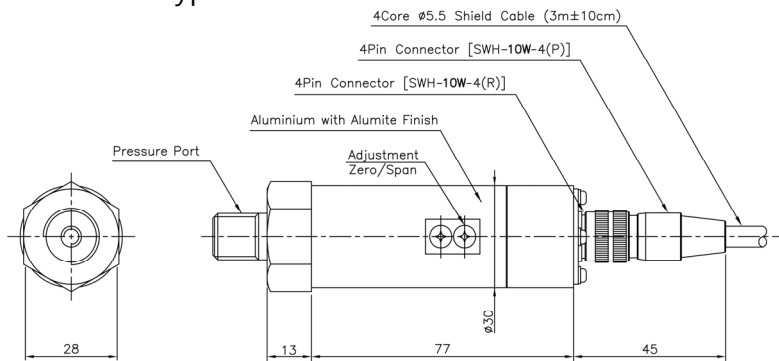
Dimension

► mV Output DIN Connector Type



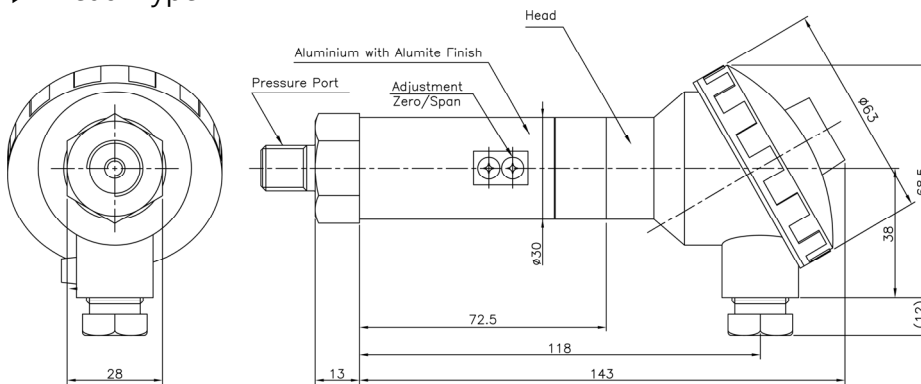
Pin No.	Connections
1	Input ⊕
2	Input ⊖
3	Output ⊕
⊕	Output ⊖

► Connector Type



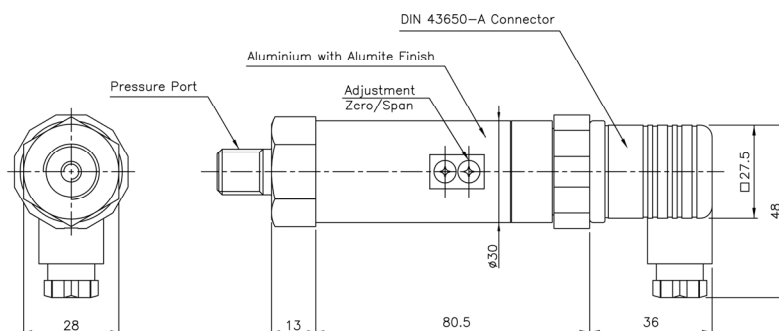
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

► Head Type



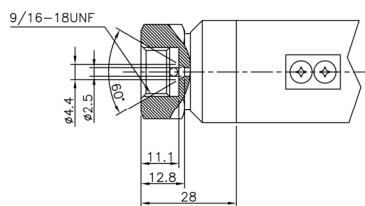
No.	Connections
	2Wire
+	Input ⊕
⊕	Earth
-	Output ⊕

► Din connector Type



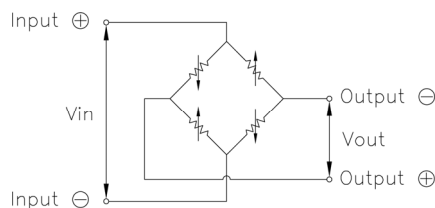
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊕	Earth	Earth

► Pressure Port(> 1500bar)

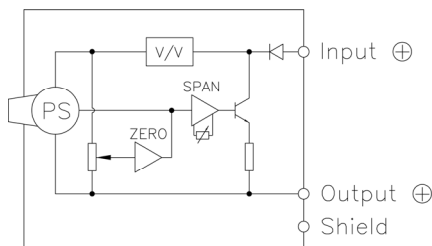


Internal Circuit Diagram

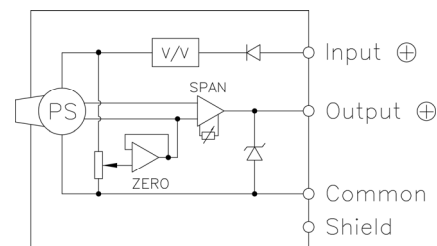
► mV Output Type



► 2Wire mA Output Type



► 3, 4Wire VDC Output Type



Ordering Information

Model Name		Media-Wetted Materials	
PTA B 0100 R A P A - TI		None : SS304, Ti 87% TI : Ti 87%	
Output		Option	
A : mV/V B : 4Wire 0~5V C : 3Wire 0~5V D : 4Wire 1~5V E : 3Wire 1~5V F : 4Wire 4~20mA G : 3Wire 4~20mA H : 2Wire 4~20mA J : 3Wire 0~10V K : 4Wire 0~10V		A : Normal	
Pressure Range		Connecting Methods	
XXXX : Pressure CXXX : Compound Pressure		P : Connector H : Head I : Din 43650-A connector	
Pressure Unit		Pressure port	
R : kPa B : bar P : psi M : MPa K : kgf/cm ² H : mmHg		A : R(PT)3/8" B : G(PF)3/8" C : R(PT)1/4" K : 9/16-18 UNF(F) (Only >1500bar) D : G(PF)1/4" E : R(PT)1/2" Q : G(PF)1/2"	



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