

Model PTA/범용 압력센서

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

0 ~ 100kPa ... 150MPa (Gauge)
 -100kPa ~ 0 ~ 100kPa ... 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

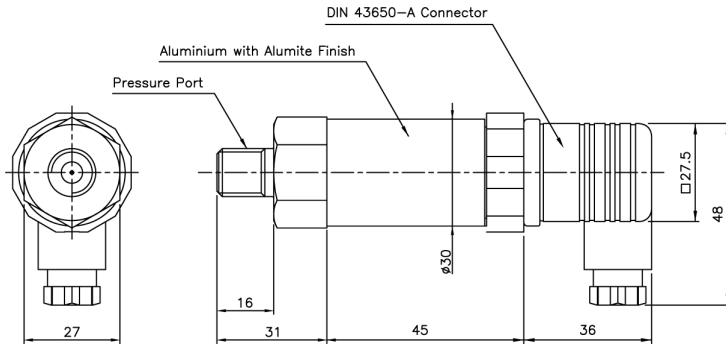
Excitation	11 ~ 28VDC(PTAA 12VDC Max.)
Output	10~20mV/V(Din Type Only) 0~5VDC, 1~5VDC, 0~10VDC(3, 4Wire), 4~20mA(2, 3 Wire)
Electrical Connection	Connector, Head, Din Connector

Physical

Proof Pressure	X1.5 or 150MPa, Whichever is less.
Burst Pressure	X2 or 150MPa, 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"
Media-Wetted Materials	Stainless Steel 304 + Titanium 87% or Titanium 87%
Weight	Connector type : Approx. 140g (Sensor Only)

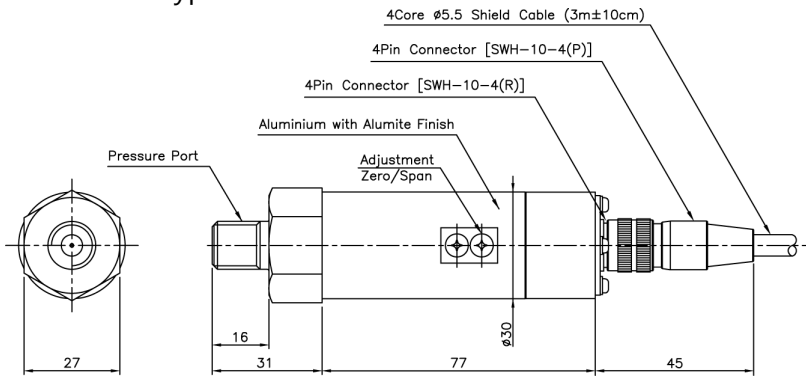
Dimension

► mV Output DIN Connector Type



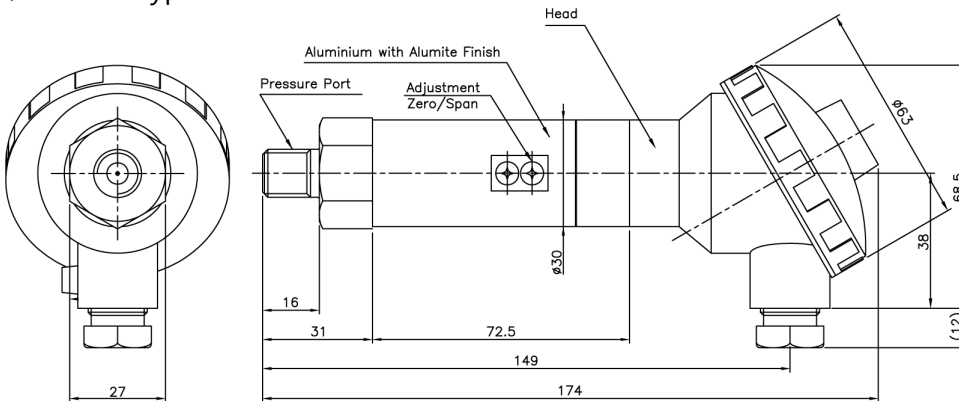
Pin No.	Connections
1	Input ⊕
2	Input ⊖
3	Output ⊕
⊖	Output ⊖

► Connector Type



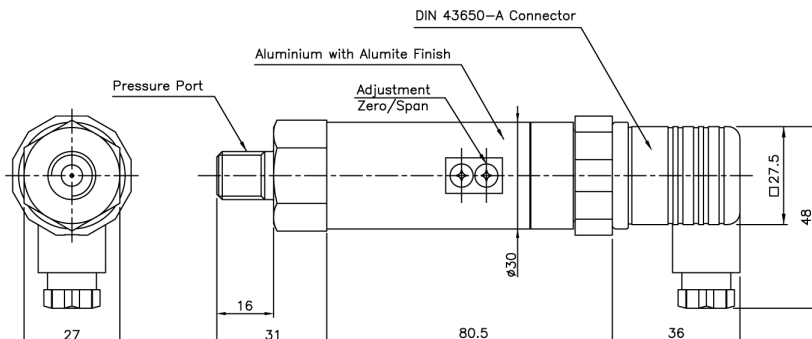
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

► Head Type



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

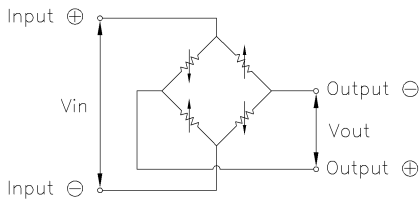
► Din connector Type



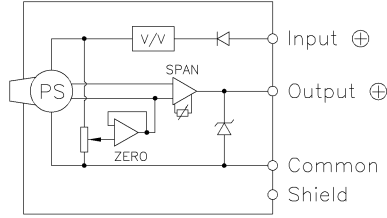
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊖	Earth	Earth

Internal Circuit Diagram

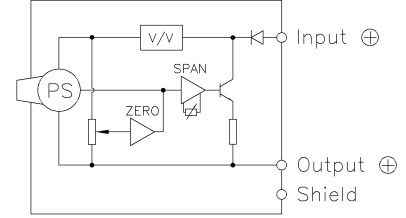
► mV Output Type



► 2Wire mA Output Type



► 3, 4Wire VDC Output Type



Ordering Information

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