

# Model PTA

## General Purpose Pressure Transducer

**HNHT** 深圳华南恒泰  
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进口传感器供应商

### 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

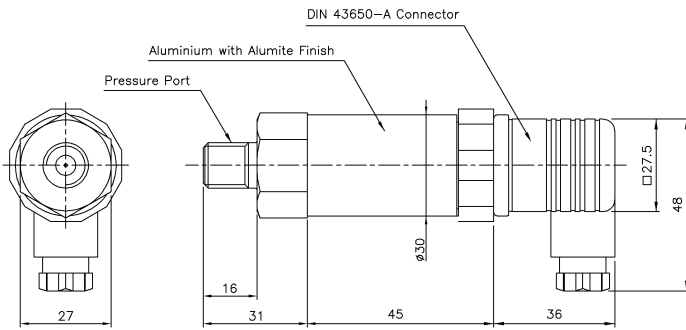


### Specifications

<b>Range</b>	-100 ~ 0 ~ 100, 200, 500kPa / 1, 2, 3, 5, 10, 20, 30, 50, 100, 150MPa (Gauge)
<b>Performance</b>	
<b>Accuracy</b>	±0.5%FS(RSS)
<b>Thermal Effect on Zero</b>	±0.05%FS/°C (≤200kPa : ±0.1%FS/°C)
<b>Thermal Effect on Span</b>	±0.05%FS/°C (≤200kPa : ±0.1%FS/°C)
<b>Compensated Temperature Range</b>	-10 ~ 70°C
<b>Operating Temperature Range</b>	-30 ~ 100°C
<b>Electrical</b>	
<b>Excitation</b>	11 ~ 28VDC(PTAA 12VDC Max.)
<b>Output</b>	10~20mV/V(Din Type Only) 0~5VDC, 1~5VDC, 0~10VDC(3, 4Wire), 4~20mA(2, 3 Wire)
<b>Electrical Connection</b>	Connector, Head, Din Connector
<b>Physical</b>	
<b>Proof Pressure</b>	150%FS Max.
<b>Burst Pressure</b>	200%FS Min.
<b>Vibration</b>	49.1m/s <sup>2</sup> {5G}, 10~500Hz
<b>Shock</b>	490m/s <sup>2</sup> {50G}
<b>Pressure Port</b>	R(PT)1/8", G(PF)1/8", R(PT)1/4", G(PF)1/4", R(PT)3/8", G(PF)3/8"
<b>Media-Wetted Materials</b>	Stainless Steel 304, Titanium 87%
<b>Weight</b>	Connector type : Approx. 140g (Sensor Only)

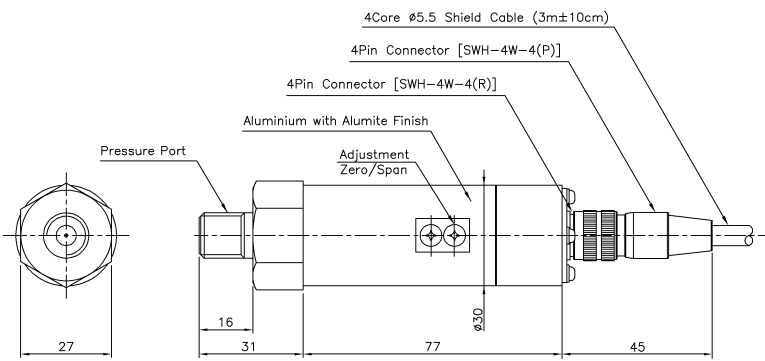
## Dimension

### ► mV Output DIN Connector Type



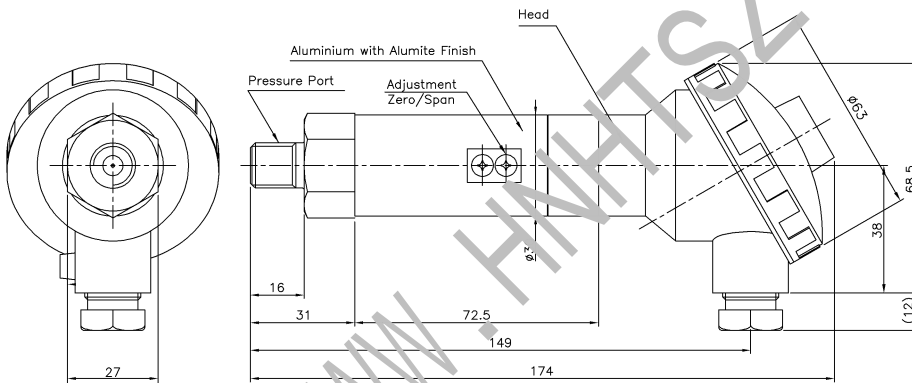
Pin No.	Connections
1	Input ⊕
2	Input ⊖
3	Output ⊕
⊖	Output ⊖

### ► Connector Type



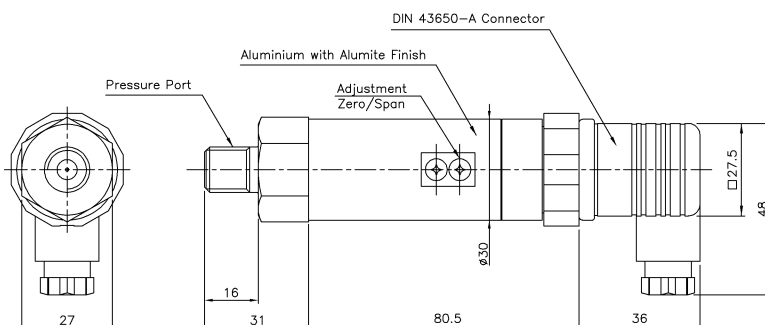
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

### ► Head Type



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

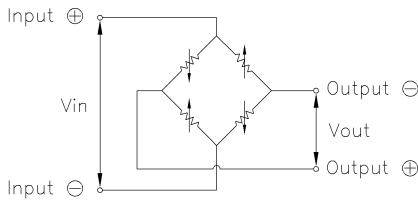
### ► Din connector Type



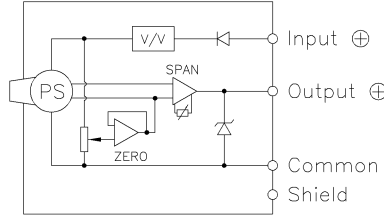
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊖	Earth	Earth

**Internal Circuit Diagram**

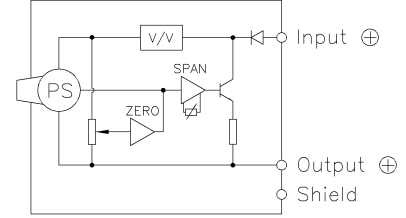
► mV Output Type



► 2Wire mA Output Type



► 3, 4Wire VDC Output Type



**Ordering Information**

**PTA B 0100 R A P A**

**Model Name**

**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

**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" |

**Pressure Unit**

- |         |                         |
|---------|-------------------------|
| R : kPa | M : MPa                 |
| B : bar | K : kgf/cm <sup>2</sup> |
| P : psi | H : mmHg                |

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