

# Model PTC

Car, Building Purpose Pressure Transducer

## Description

PTC model has applied Silicon Piezoresistive cell, which attached High Temperature Glass on Titanium. It is small to be usable by automobiles or heavy equipment and it is also provided at low price. With its output of 1~5V or 4~20mA(2Wire), it may be interfaced with various controllers.

## Features

- ▶ CE Certified
- ▶ Built-in amplifier Circuit(VDC, mA)
- ▶ Measuring range -100kPa~10MPa
- ▶ 0.5%FS accuracy
- ▶ IP55 protection(Cable type)
- ▶ Piezoresistive silicon cell
- ▶ Stainless steel, Titanium, EPDM media-wetted materials

## Applications

- ▶ Off road equipment
- ▶ Hydraulics & Pneumatic
- ▶ Compressor control
- ▶ Industrial engines
- ▶ Pump pressure control



## Specifications

### Range

0 ~ 100, 200, 600kPa / 1, 2, 3, 5, 10MPa (Gauge)  
-100 ~ 0, 100, 200, 600kPa / 1, 2, 3, 5, 10MPa (Gauge)

### Performance

Accuracy	±0.5%FS(RSS)
Thermal Effect on Zero	±0.05%FS/°C
Thermal Effect on Span	±0.05%FS/°C
Compensated Temperature Range	-10 ~ 70°C
Operating Temperature Range	-20 ~ 80°C

### Electrical

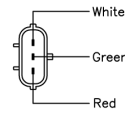
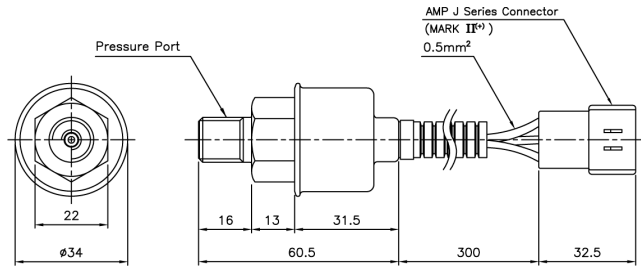
Excitation	11 ~ 28VDC
Output	0~5VDC, 1~5VDC, 0~10VDC, 4~20mA(2Wire)
Electrical Connection	Connector, Cable, AMP Connector(1~5VDC 3Wire Only), Head, Din Connector

### Physical

Proof Pressure	150%FS Max.
Burst Pressure	200%FS Min.
Vibration	49.1m/s <sup>2</sup> {5G}, 10~500Hz
Shock	490m/s <sup>2</sup> {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%, O-ring : EPDM(Optional VITON)
Weight	Approx. 130g (AMP Connector Type)

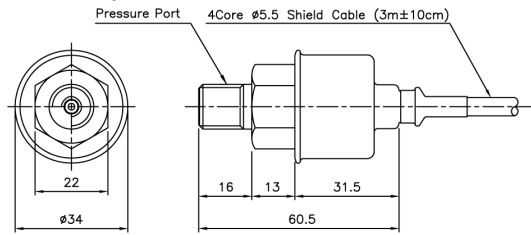
# Dimension

## ▶ AMP Connector Type



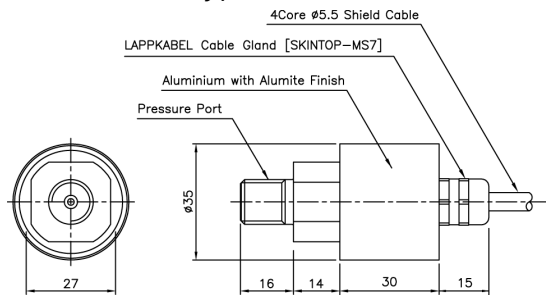
Wire Color	Connections
Red	Input ⊕
White	Common ⊖
Green	Output ⊕

## ▶ Cable Type



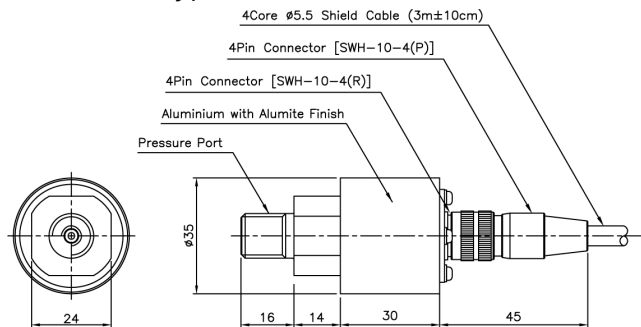
Wire Color	Connections		
	4Wire	3Wire	2Wire
Red	Input ⊕	Input ⊕	Input ⊕
White	Output ⊖	Common ⊖	x
Black	Input ⊖	x	Output ⊕
Green	Output ⊕	Output ⊕	x
Shield	Earth	Earth	Earth

## ▶ Cable Gland Type



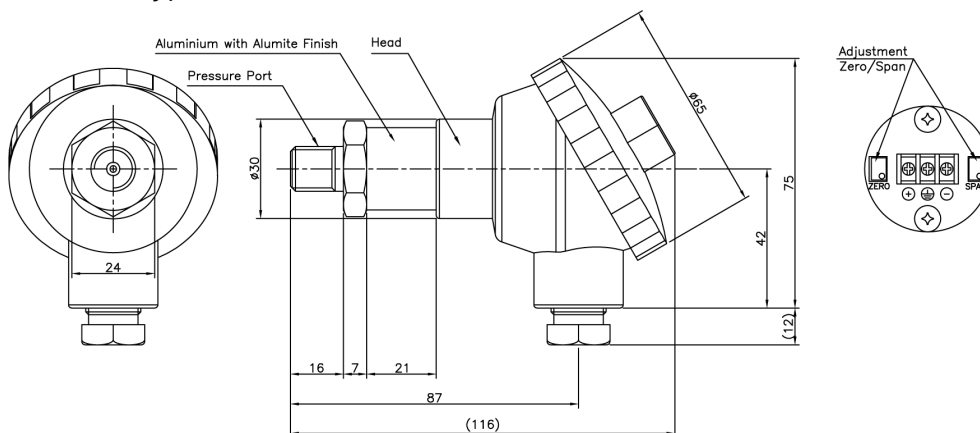
Wire Color	Connections		
	4Wire	3Wire	2Wire
Red	Input ⊕	Input ⊕	Input ⊕
White	Output ⊖	Common ⊖	x
Black	Input ⊖	x	Output ⊕
Green	Output ⊕	Output ⊕	x
Shield	Earth	Earth	Earth

## ▶ Connector Type



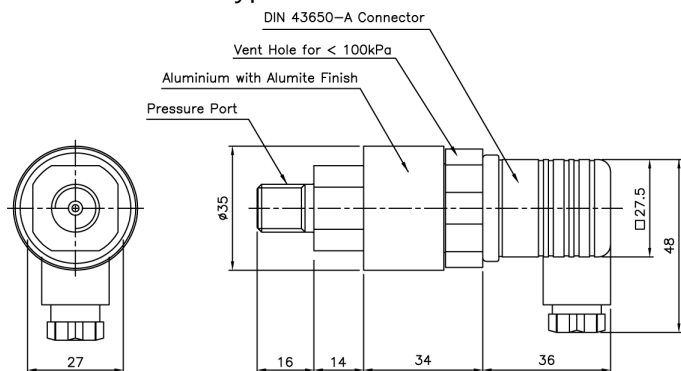
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	x
3	Black	Input ⊖	x	Output ⊕
4	Green	Output ⊕	Output ⊕	x
5	Shield	Earth	Earth	Earth

## ▶ Head Type



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

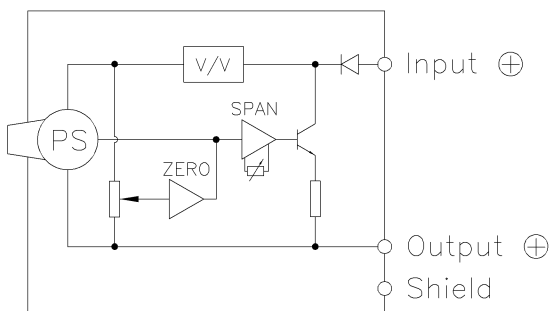
## ► Din connector Type



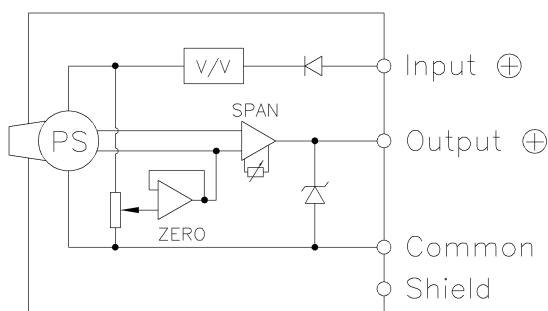
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	x
⊖	Earth	Earth

## Internal Circuit Diagram

### ► 2Wire mA Output Type



### ► 3, 4Wire VDC Output Type



## Ordering Information

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