

Model PTB

General Purpose Pressure Transducer

Description

PTB model has applied Silicon Piezoresistive cell, which attached High Temperature Glass on Titanium. 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 0~100kgf/cm²g
- ▶ 0.5%FS accuracy
- ▶ Piezoresistive silicon cell
- ▶ Zero, Span Adjustable
- ▶ Stainless steel, Titanium, NBR media-wetted materials

Applications

- ▶ Process control
- ▶ Hydraulics & Pneumatic
- ▶ Compressor Control
- ▶ Chillers
- ▶ Refrigeration Equipment

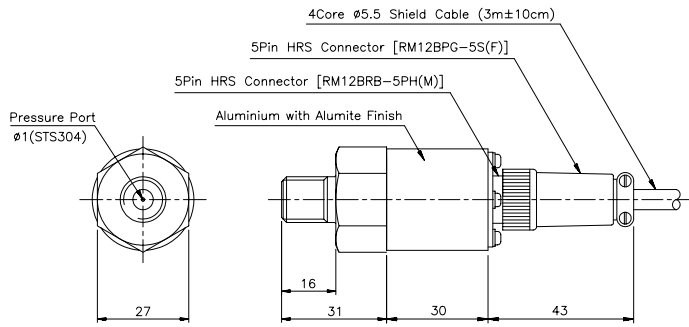


Specifications

Range	1, 2, 6, 10, 20, 30, 50, 100kgf/cm ²
Performance	
Accuracy	±0.5%FS
Linearity	±0.35%FS
Hysteresis	±0.15%FS
Repeatability	±0.15%FS
Thermal Effect on Zero	±0.05%FS/°C
Thermal Effect on Span	±0.05%FS/°C
Compensated Temperature Range	0 ~ 50°C
Operating Temperature Range	-20 ~ 80°C
Electrical	
Excitation	11 ~ 28VDC (PTBA 12VDC Max.)
Output	10~20mV/V (6~100kgf/cm ² Only) 0~5VDC, 1~5VDC, 0~10VDC (3, 4Wire), 4~20mA (2, 3 Wire)
Electrical Connection	Connector, Head, Din Connector
Physical	
Proof Pressure	150%FS Max.
Burst Pressure	200%FS Min.
Vibration	49.1m/s ² {5G}, 10~500Hz
Shock	490m/s ² {50G}
Pressure Port	PT1/8", PF1/8", PT1/4", PF1/4", PT 3/8", PF 3/8"
Media-Wetted Materials	Stainless Steel 304, Titanium 87%, O-ring : EPDM (Optional VITON)
Weight	Connector type : Approx. 140g (Sensor Only)

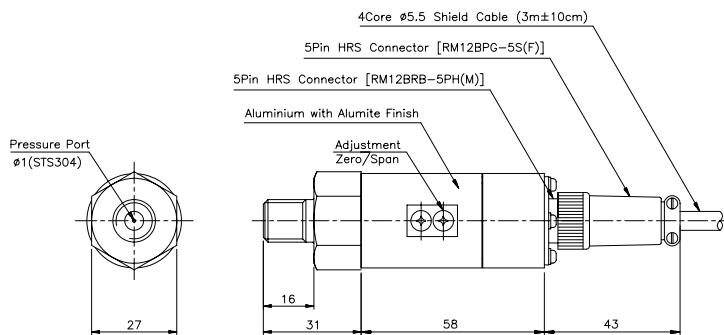
Dimension

► mV Output Connector Type



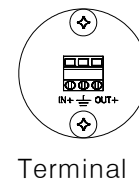
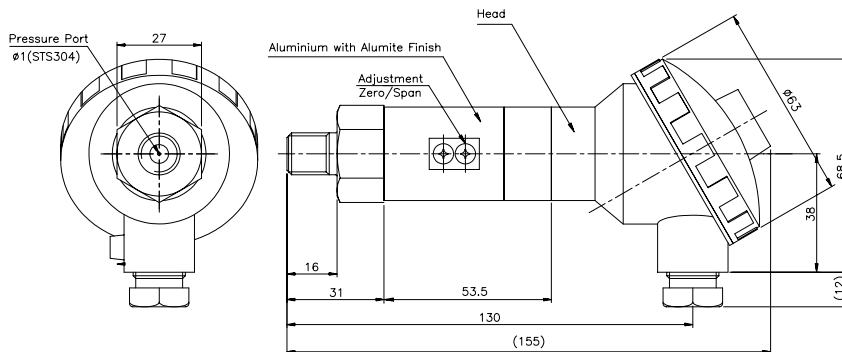
Pin No.	Connections
1	Input ⊕
2	Output ⊖
3	Input ⊖
4	Output ⊕
5	Earth

► Connector Type



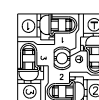
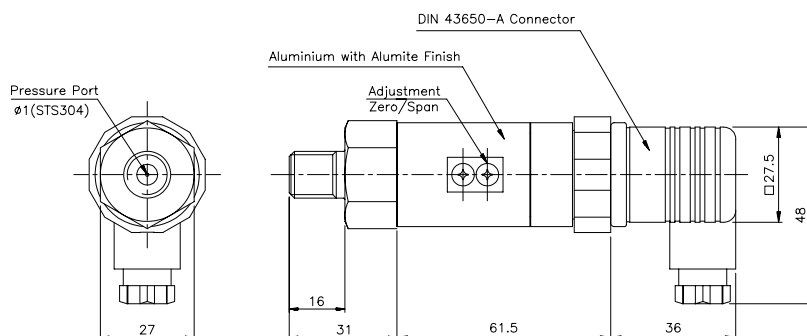
Pin No.	Wire Color	Connections		
		4Wire	3Wire	2Wire
1	Red	Input ⊕	Input ⊕	Input ⊕
2	White	Output ⊖	Common ⊖	×
3	Black	Input ⊖	×	Output ⊕
4	Green	Output ⊕	Output ⊕	×
5	Shield	Earth	Earth	Earth

► Head Type



No.	Connections
	2Wire
1	Input ⊕
2	Earth
3	Output ⊕

► Din connector Type

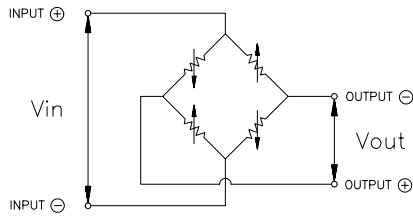


Terminal

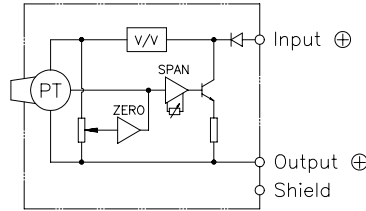
Pin No.	Connections	
	3Wire	2Wire
1	Input ⊕	Input ⊕
2	Common ⊖	Output ⊕
3	Output ⊕	×
⊥	Earth	Earth

Internal Circuit Diagram

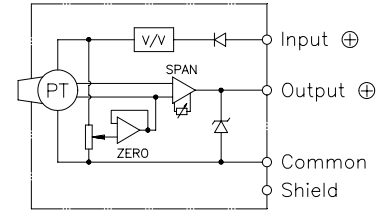
► mV Output Type



► 2Wire mA Output Type



► 3, 4Wire VDC Output Type



Ordering Information

Model Name	PTB	B	0010	K	A	A	A	Option
Output	A : mV/V	F : 4Wire 4~20mA	G : 3Wire 4~20mA	H : 2Wire 4~20mA	J : 3Wire 0~10V	K : 4Wire 0~10V		Connecting Methods
	B : 4Wire 0~5V							A : Connector
	C : 3Wire 0~5V							B : Water proof connector
	D : 4Wire 1~5V							H : Head
	E : 3Wire 1~5V							I : Din 43650-A connector
Pressure Range								Pressure port
	0001 : 0~1kgf/cm ²							A : PT3/8" D : PF1/4"
	0002 : 0~2kgf/cm ²							B : PF3/8" E : PT1/2"
	0006 : 0~6kgf/cm ²							C : PT1/4" Q : PF1/2"
	0010 : 0~10kgf/cm ²							
	0020 : 0~20kgf/cm ²							Pressure Unit
	0030 : 0~30kgf/cm ²							K : kgf/cm ² B : bar
	0050 : 0~50kgf/cm ²							P : psi M : MPa
	0100 : 0~100kgf/cm ²							
	CXXX : Compound Pressure							