## **OPERATION MANUAL**

# PT Series Pressure Transmitter/Transducer

Thank You for selecting **ABUSTEK** products! before operating this instrument, please read this manual carefully and fully understand its contents. In case of any problems, please contact our sales Deptt. or distributors from whom the instrument has been supplied. The manual contents is subject to change without prior notice.

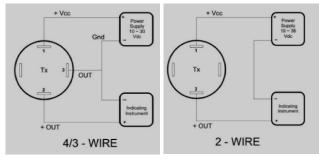
#### **■** Introduction



PT Series of Pressure Transmitters are precision engineered to fit most industrial pressure measurement applications. The compact, rugged design make these instruments suitable for applications including hydraulics and pneumatics, vacuum, test equipment, liquid level measurement, pressure control, compressor control, pump protection and numerous other processing and control operations. A wide range of electrical connection and process connection options are available to meet almost every requirement.

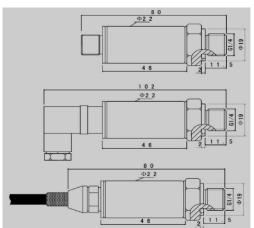
#### Connections

WIRE	SIGNAL OUTPUT	EXCITATION
2-wire	4 ~ 20mA	10 ~ 36 Vdc
3-wire	0 ~ 10 Vdc	12 ~ 18 Vdc



Models	Lead	Color	
	1. Excitation +	Red	$\sqrt{3}$
Output: 1. 0~5V	2. Signal +	Blue	(1-0)
2. 0.5~4.5V 3. 0~10V 4. DIN43650	3. Excitation - / Signal -	White	
Models	Lead	Color	7
Models Output:	Lead  1.Excitation + / Signal +	Color Red	[2(0)-]

# Dimensions



All Dimensions in mm

#### ■ Features

- 1. Stainless steel wetted parts.
- 2. Excellent resistance to corrosive processes.
- 3. Small figure design, any position to install.
- 4. Various optional signal output.
- 5. OEM process to fit application of the customers.

### Specifications

**Accuracy:** ±0.25%FS (BFSL) ±0.5%FS (limit point calibration)

Ranges: Absolute: 0...1 to 0...50 bar, 0...15 to 0...750 psi

Vacuum: 0...-1 bar, 0...-15 psi

Gauge: 0...100mB to 0...1000 bar, 0...1.5 to 0...15000 psi
Output: 0...5 V, 0...10 V, 0.5...4.5 V, 4...20 mA (Customized

On request)

Power Supply: 24Vdc (10~36Vdc)

Maximum Pressure: 1.5 x F.S.

Adjustability Zero / Span: ± 10 using potentiometers inside

the instrument

**Electrical Connections:** M12 connector, Five Pin bendix

connector, Hirschman Type or Direct down-lead.

Process Connection: G1/4, M20 x 1.5, 1/4NPT

(Customized On request)

Pressure Inlet: All media compatible with stainless steel 316

Operating temperature: -40 ~ 85°C (125°C for short

durations) \* Higher range, on request.

Ambient temperature: -20 ~ +80°C

Wetted Parts: SS 316L / Al2O3 / NBR

Case: Stainless steel

Housing: Stainless steel, protection class Ip65.

#### Installation

- 1. Please confirm the configuration for Pressure Transmitter i.e. 2- wire, 3-wire and accordingly follow the wiring procedure. Ensure that the excitation voltage is supplied to the correct points and is with in the specified limits for that particular configuration as mentioned in the table above.
- 2. When installed, ensure that the transmitter is not subjected to the excessive sources, and it should be considered before installing the Transmitter. Use suitable diaphragm if needed.
- Process connection must be properly sealed with material compatible with the process liquid / gas.
- 4. When installing transmitter with diaphragm, seals / process connector should be tightened not the transmitter, otherwise transmitter calibration may get affected.

### Troubleshooting

S. No.	SPECIFICATIONS	ELIMINATE		
1	No output	Check the wiring configuration.     Check the input power supply.		
2	No variation in output	Check for leakage at pressure port / point.     Check the span set of Indicating Instrument.		
3	Pressure not holding at constant input pressure.	Check for leakage pressure point.     Check for the connections ensure they are properly tightened.		

## Ordering Details

	TYPE					DESCRIPTION				
Product	PT		PT Series				eries	Pressure Transmitter		
		1	1 Absolute Pressure				te Pr	0 ~ 25 bar		
Range		2	2 Gauge Pressure					0 ~ 2500 bar		
165		3	Vacuum Pressure						-760 ~ 0 mmHG	
Lower Range			_							Specify Lower Range
Upper Range				_						Specify Upper Range
					D					4 ~ 20 mA
Output					٧					0 ~ 10 V
					Α					Others, specify
						1				G 1/4"
Process						2				G 1/2°
Connection						3				1/4" NPT
						4				Others, specify
							W			DIN Connector (Hirschman Type)
Electrical							Χ			Thread Screw
Connection							Υ			Bendix Connector
							Ζ			Direct Down-lead
Integral Indicator								LPI-PT		Loop Powered Indicator
(Refer LPI- PT)								0		W/O Indicator
Zero and									1	With Internal Z & S
Span Adjustment									0	W/O

#### **Standard Ranges**

STANDARD RANGES FOR PT SERIES							
S.No.	GAUGE PRESSURE	S.No.	COMPOUND				
1	1.00 bar	19	-1 ~ 0.0 bar				
2	1.60 bar	20	-1 ~ 0.6 bar				
3	2.50 bar	21	-1 ~ 1.0 bar				
4	4.00 bar	22	-1 ~ 1.5 bar				
5	6.00 bar	23	-1 ~ 3.0 bar				
6	10.00 bar	24	-1 ~ 5.0 bar				
7	16.00 bar	25	-1 ~ 9.0 bar				
8	20.00 bar						
9	25.00 bar						
10	40.00 bar		VACUUM				
11	60.00 bar	26	-760 ~ 0 mm/Hg				
12	100.00 bar						
13	160.00 bar						
14	200.00 bar						
15	250.00 bar						
16	400.00 bar						
17	600.00 bar						
18	1000.00 bar						

### Limited Warranty

The products are warranted to be free from defects in materials and workmanship for a period of one (1) year from the date of shipment, subject to the following terms and conditions: Without charge, they will repair, replace, or refund the purchase price at option products found to be defective in materials or workmanship within the warranty period; provided that:

- the product has not been subjected to abuse, neglect, accident, incorrect wiring not our own, improper installation or servicing, or use in violation of labels or instructions;
- the product has not been repaired or altered by anyone except us;
- the maximum ratings label and serial number or date code have not been removed, defaced, or otherwise changed;
- examination discloses, in the judgment of us, the defect in materials or workmanship developed under normal installation, use and service; and
- Our system is notified in advance of and the product is returned to us transportation prepaid before expiration of the warranty period.

THIS EXPRESS LIMITED WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER REPRESENTATIONS MADE BY ADVERTISEMENTS OR BY AGENTS AND ALL OTHER WARRANTIES, BOTH EXPRESS AND IMPLIED. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE FOR GOODS COVERED HEREUNDER.

#### **Authorised Distributor:**