# PT250/PT251 Pressure Transmitters

# **Typical Applications**

- Pumps & Compressors
- Process Controls
- HVAC & VAV
- Refrigerant Control & Recovery
- Water Management
- Autoclaves
- Hydraulic Systems
- Test & Monitoring Equipment

# Standard Full Scale Pressure Ranges

Low Pressure:

PT250: 0-6, 0-7, 0-10, 0-16, 0-25, 0-30,

0-40 and 0-50 Bar

PT251: 0-100, 0-150, 0-200, 0-300, 0-500

and 0-600 PSI

High Pressure:

PT250: 0-100, 0-250 and 0-400 Bar

PT251: 0-1,500, 0-3,000, 0-4,000 and 0-5,000 PSI

## **Features**

- Welded Stainless Steel Construction
- Absolute or Sealed Gage References
- Packard, M12, 18mm & 9,4mm DIN
- Electrical Connectors
- 4-20 mA Output
- High Vibration Tolerance
- Superior EMI/RFI Rejection
- M10, M12 & M14 Pressure Ports
- Temperature Compensated



# **Description**

The PT250/PT251 series of pressure transmitters incorporate a stainless steel isolation diaphragm and all welded construction to withstand harsh industrial environments.

Pressure ranges from 6 to 400 Bar or 100 to 5,000 PSI can be measured using a supply voltage of 9-32 V. The transmitter provides a 4-20 mA output proportional to applied pressure. The PT250 is specified with pressure ranges measures in Bar while the PT251 pressure ranges are measured in PSI.

The rugged construction of the PT250 allows it to be used safely in environments with large over-pressure spikes. The 304L stainless steel diaphragm is compatible with most industrial fluids and gaseous media.



## **Technical Specifications**

Note: Performance Specifications with 15 Vdc supply at 25°C

Pressure Ranges:	0 - 6 through 0 - 400 Bar
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0 - 100 through 0 - 5,000 PSI

Absolute or Sealed Gage

Proof Pressure: 2x

**Burst Pressure:** 250 Bar - (up to 50 Bar)

1,000 Bar - (above 50 Bar)

Supply Voltage: 9 - 32 Vdc\*
Current Output Span: 4 - 20 mA
Load Resistance: (Vs - 9Vdc) /20 mA

Linearity Error Hysteresis and

Repeatibility:  $\pm 0.5\%$ 

Total Error Band:  $\pm 2\%$  Full Scale Output (-15°C to +85°C)

Response Time: < 2ms

Operating Temperature: -15°C to 125°C\*
Storage Temperature: -40°C to 125°C

Service Life: 1 Million Full Pressure Cycles
Vibration: 10G Sinusoidal from 10 - 2000 Hz

Shock: 75G Sine Wave
Housing Material: 304L Stainless Steel
Electrical Connector: See "How to Order"
Pressure Connection: See "How to Order"

Reverse Polarity Protection: 32 V Maximum Voltage: 36 V

<sup>\*</sup>Supply Voltage is derated for T > 85°C



Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions. Non-compliance can result in serious injury and/or damage to the equipment.

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## How to Order

T250		PT251		
	Pre	ssure Range	Press	ure Range
	6	0 - 6 Bar	100	0 - 100 PSI
	7	0 - 7 Bar	150	0 - 150 PSI
	10	0 - 10 Bar	200	0 - 200 PSI
	16	0 - 16 Bar	250	0 - 250 PSI
	25	0 - 25 Bar	300	0 - 300 PSI
	30	0 - 30 Bar	500	0 - 500 PSI
	40	0 - 40 Bar	600	0 - 600 PSI
	50	0 - 50 Bar	1500	0 - 1500 PSI
	100	0 - 100 Bar	3000	0 - 3000 PSI
	250	0 - 250 Bar	4000	0 - 4000 PSI
	400	0 - 400 Bar	5000	0 - 5000 PSI

## Reference

- A Absolute
- S Gage

#### External Seal/Washer Material (Supplied for Straight Threads Only)

- B Nitrile Butadiene (NBR) (for any port 3 option and port 6, 7, 8 and 9 high pressure options)
- D Fluorocarbon (FPM) (for any port 3 option and port 6, 7, 8 and 9 high pressure options)
- G Aluminum Washer (for any port 6, 7, 8 and 9 low pressure options)
- X None (for any port 1, 2, 4, 5, 10 and 11 option

#### **Pressure Connection (Port)**

- 1 Stud End 1/4 18 NPT
- 2 Port 7/16 20 UNF-2B with Schrader Deflator (1/4" SAE Female Flare)
- 3 Stud End 7/16 20 UNF-2A (SAE J1926-2)
- 4 Stud End 1/8 27 NPT
- 5 Port G 1/4
- 6 Stud End G 1/4
- 7 Stud End M10x1
- 8 Stud End M12x1.5
- 9 Stud End M14x1.5
- 10 Port M10x1.25 with Schrader Deflator
- 11 Stud End R 1/4 (1/4-19 BSPT)

### **Built-in Electrical Connector**

- A Packard Connector with Mating Connector and 35cm Leads
- C Packard Connector
- D M12 with Mating Connector, Straight
- E M12 with Mating Connector, Right Angle
- F M12 Connector Kit, Right Angle, without Wires
- G M12 Connector Kit, Straight, without Wires
- H M12 without Mating Connector
- J 9.4mm, DIN EN 175301-803 Micro-mini with Mating Connector
- K 9.4mm, DIN EN 175301-803 Micro-mini
- L 18mm, DIN EN 175301-803 with Mating Connector
- 18mm, DIN EN 175301-803 without Mating Connector

PT250 -25 - A - X - 1 - A

Example: PT250 - 25 - A - X - 1 - A

Description: PT250 Pressure Sensor, 50 BarA (Absolute),

1/4 - 18 NPT Pressure Port, Packard Connector with Mating Connector



