



PT270DN Series



Features

- Pressure signal via a 4 byte polled I/O message
- Watch dog alarms
- Better than +/- 0.5% combined error
- 0 - 15 to 0 - 10,000 psi
- Metric and conventional process connections

Benefits

- Standard DeviceNet™ protocol
- Output supplied digitally to controller
- Internal transmitter diagnostics
- Precise pressure measurements
- Customer-defined pressure ranges

Description

The PT270DN industrial pressure transmitters are designed to be easily integrated directly into sophisticated DeviceNet™ control systems. The sensor functions and communication software is in accordance with the standard DeviceNet™ Version 2.0 protocol. The digital pressure value is available via a 4 byte polled I/O message. The bi-directional bus-communication is combined with internal functions such as transducer set up and calibration, open gage detection, over-range notification, CPU watch dog control, et. al. to provide more versatile operating conditions and security functions compared to a standard analog transmitter.

Specifications

PERFORMANCE CHARACTERISTICS

Output: DeviceNet™
Input Voltage: 11 - 25 Vdc
Combined Error: +/- 0.5% FSO
 (Including Linearity, Repeatability & Hysteresis)
Repeatability: +/- 0.2% FSO
Burst Pressure: 5 X FSO or 30,000 psi which ever is less
Isolation Resistance: > 1 MOhm @ +/- 500 Vdc,
 > 100 MOhms @ 50 Vdc
Sampling Rate: 20 mS
Alarms: 2 High & 2 Low User Selectable Alarm Points
Message Types: Polled & Explicit
Node ID & Communication Rate: Software Selectable
Communication Rates: 125, 250 & 500 kbits/second

TEMPERATURE & MECHANICAL CHARACTERISTICS

Max Diaphragm Temperature: 185°F (85°C)
Zero Shift (due to temperature change):
 +/- 0.1% FSO/10°C
Electronics Operating Temperature:
 -20° to 185°F (-29° to 85°C)
Sensitivity Shift Due to Temperature Change:
 +/- 0.2% FSO/10°C
Predefined Master/Slave Connection SFT:
 Group 2 Only Slave
DeviceNet Device Profile: Generic
Standard Wetted Parts: 17-4 PH, 15-5 PH Stainless Steel



Ordering Guide

PT270DN-XX-XXX

Option

Pressure Range			
15	= 0 – 15 psi	1M	= 0 – 1,000 psi
25	= 0 – 25 psi	1.5M	= 0 – 1,500 psi
50	= 0 – 50 psi	2M	= 0 – 2,000 psi
1C	= 0 – 100 psi	3M	= 0 – 3,000 psi
2.5C	= 0 – 250 psi	5M	= 0 – 5,000 psi
5C	= 0 – 500 psi	7.5M	= 0 – 7,500 psi
7.5C	= 0 – 750 psi	10M	= 0 – 10,000 psi

Shaded sections refer to standard configurations. Standard units are supplied with 1/4-18 NPT External. For additional options please consult factory.

