

PTE216

10:1 Turn-down Ratio

- ABSOLUTE OR GAUGE PRESSURE
- MICROPROCESSOR-BASED ELECTRONICS
- INTRINSICALLY SAFE TO EEx ia IIB, T6, T5, T4
- RANGES UP TO 456 PSI (31.5 BAR)
- 4-DIGIT LCD INDICATOR TO DISPLAY PRESSURE
- AUTOMATIC TEMPERATURE COMPENSATION
- INDICATION OF THE FLUID TEMPERATURE
- EXCELLENT ALTERNATING LOAD RESISTANCE
- LONG-TERM STABILITY AND SERVICE LIFE
- MEDIUM TEMPERATURE UP To 130°C



Integral Diaphragm Seal

INTRODUCTION

Indumart PTE216 Series of Pressure Transmitters are two-wire microprocessor-based instruments complete with 316 stainless steel diaphragm, which can measure gauge, vacuum, compound or absolute pressure in the range of -14.5 to 456 psi (-1 to 31.5 bar). It provides automatic temperature compensation, software linearization and displays the fluid temperature at the sensor.

The pressure sensor is protected from the process fluid by the diaphragm. Due to the materials and technology used in the construction of these pressure transmitters, these instruments are excellent in reliability, resistance to corrosion against the majority of chemically aggressive media and withstanding mechanical shocks.

With a turn-down ratio of 10:1 along with the zero and span adjustments, parameters can be adjusted digitally. The 4-digit LCD indicator displays the measured reading, either in engineering units (psi, bar, mbar) or in percentage.

The heavy-duty PTE216 transmitters are intrinsically safe instruments which meet the electromagnetic compatibility (EMC) requirements of EN50081-2 and EN50082-2.

SPECIFICATIONS

Case	Die cast aluminum alloy, Finished with epoxy resin
Wetted Parts	316 St. Steel
Filling Fluid	Silicon Oil
Cover O-ring	Buna N
Accuracy:	
Linearity	≤0.10% of full scale
Hysteresis	<0.10% of full scale
Repeatability	<0.10% of full scale
Measuring Range	See the Range Table
Overload Limit	See the Range Table
Turn-down Ratio	10:1
Adjustments	Zero & Span
Digital Damping	by means of push button
Output Signals	4...20 mA, 2-wire
Display	4-digit LCD with 4 symbols
Settling Time	150 ms @ 27°C
Self Test	FAIL SAFE STATE selectable
Process Connection	See the Order Code Table
Power Supply	10...30 VDC
Maximum Load	250Ω for 16.7 V, 576Ω for 24 V 844Ω for 30 VDC
Electric Connection	½" NPT and cable gland 13.5 for 7 to 12 mm dia. cable
Mounting	Direct or 2" pipe mounting
Environ. Protection	IP66
Explosion Protection	EEx ia IIB, T6, T5, T4. For Zone 0 groups IIA, IIB.
Temp. Medium	-20...90°C; -20...130°C (option)
Ambient	-20...80°C for T4, 55°C for T5, 40°C for T6
Temp. Influence	±0.2% / 10 k, zero & span
EMC Emission	EN EN50081-2
Susceptibility	EN 50082-2
Weight	1.4 kg (3.1 lb)

Code	Nominal Range	Range Limits	Over Pressure
D	0/0.35 bar (0/5 psi)	-0.367/0.367 bar (-5/5 psi)	2 bar (30 psi)
E	0/1 bar (0/14.5 psi)	-1/1.05 bar (-14.5/15 psi)	6 bar (87 psi)
F	0/2.5 bar (0/36 psi)	-1/2.625 bar (-14.5/38 psi)	10 bar (145 psi)
G	0/5 bar (0/72 psi)	-1/5.25 bar (-14.5/76 psi)	16 bar (230 psi)
H	0/10 bar (0/145 psi)	-1/10.5 bar (-14.5/152 psi)	30 bar (435 psi)
K	0/30 bar (0/435 psi)	-1/31.5 bar (-14.5/456 psi)	75 bar (1090 psi)
1	0/0.35 bar abs. (0/5 psia)	0/0.3675 bar abs. (0/5 psia)	2 bar (30 psi)
2	0/1 bar abs. (0/14.5 psia)	0/1.05 bar abs. (0/15 psia)	6 bar (87 psi)
3	0/2.5 bar abs. (0/36 psia)	0/2.625 bar abs. (0/38 psia)	10 bar (145 psi)
4	0/5 bar abs. (0/72 psia)	0/5.25 bar abs. (0/76 psia)	16 bar (230 psi)
5	0/10 bar abs. (0/145 psia)	0/10.5 bar abs. (0/152 psia)	30 bar (435 psi)

Note: The span may be set as low as 10% of the nominal range.

ORDER CODE

ELECTRONIC PRESSURE TRANSMITTER

Model: PTE216 - - -

PRESSURE CONNECTION

G ½	90°C	1
½ " NPT	90°C	2
½ " NPTF	90°C	3
G ½	130°C	4
½ " NPT	130°C	5
½ " NPTF	130°C	6
G 1	130°C	7
Union nut 65x1/6	130°C	8
Union nut 78x1/6	130°C	9
Clamp 1 ½ "	130°C	A
Clamp 2"	130°C	B
Special		X

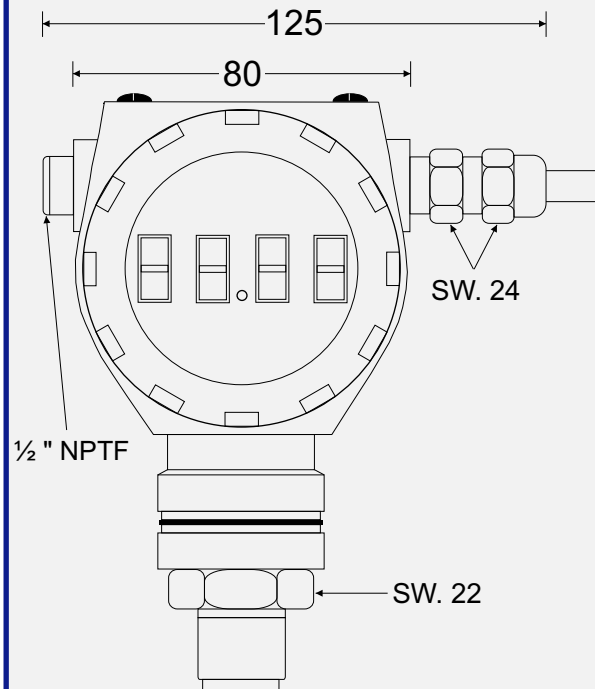
NOMINAL RANGE

0/0.35 bar (0/5 psi)	D
0/1 bar (0/14.5 psi)	E
0/2.5 bar (0/36 psi)	F
0/5 bar (0/72 psi)	G
0/10 bar (0/145 psi)	H
0/30 bar (0/435 psi)	K
0/0.35 bar abs. (0/5 psia)	1
0/1 bar abs. (0/14.5 psia)	2
0/2.5 bar abs. (0/36 psia)	3
0/5 bar abs. (0/72 psia)	4
0/10 bar abs. (0/145 psia)	5

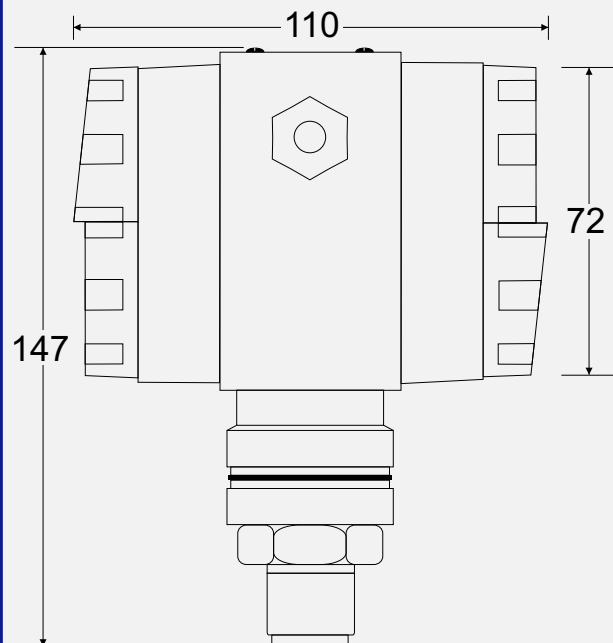
MOUNTING

Direct	0
2" Pipe Mounting	1

DIMENSIONS (mm)



100 mm CLEARANCE TO REMOVE COVER
(BOTH ENDS)



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