

SERIES: PTF110

EXTREMELY LOW PRESSURE APPLICATIONS

- 0.25% OR 0.5% ACCURACY
- ZERO AND SPAN ADJUSTMENTS
- TEMPERATURE COMPENSATION
- ST. STEEL HOUSING & PROCESS CONNECTION
- LONG SERVICE LIFE AND GREAT STABILITY
- EXCELLENT ALTERNATING LOAD RESISTANCE
- RANGES FROM 2.5 kPa (10 in.H2O) UP TO 400 MPa (58,000 PSI)
- LOCAL INDICATOR WITHOUT OR WITH TWO OPTO CONTACTS (OPTION)

With local indicator;
available as option



INTRODUCTION

Indumart PTF110 Pressure Transmitters are very accurate and reliable instruments which convert pressure inputs to current or voltage signals.

The case and wetted parts of the *PTF110* transmitters comprise stainless steel and are thus resistant to chemically aggressive media. The pressure connection and the measuring element of these precision instruments are welded together, making the measuring system particularly resistant to mechanical shocks or vibrations.

The *PTF110* is equipped with the adjustability feature. The zero and span of the transmitter can be adjusted by the user to accommodate any pressure offset or the exact range setting.

The *PTF110* pressure transmitters are available in various ranges, as low as 10 in.H2O to the maximum of 400 MPa (4000 bar).

Optionally the *PTF110* with current output can be combined with the DIS100 indicator (IP65). This combination can have no contact or two opto contacts.

Output	Load Resistance	U _{supply}
4 - 20 mA	(U _{supply} - 10V) / 0.2 A	10 - 30 VDC
0 - 5 VDC	≥5.0 kΩ	10 - 30 VDC
0 - 10 VDC	≥10.0 kΩ	14 - 30 VDC
0 - 100 mVDC	≥1000 kΩ	10 - 30 VDC
0 - 20 mA	(U _{supply} - 10V) / 0.2 A	10 - 30 VDC

SPECIFICATIONS

Accuracy	0.5% of span; 0.25% (option)
Housing	AISI 304
Process Connection	AISI 304; ½" NPT or BSP
Wetted Parts	AISI 316
Sensor Element	≤1,600 kPa piezoresistive; >1,600 kPa thin film
Measuring Range	0...10 kPa to 0...100 MPa (std) 0...2.5 kPa to 0...6 kPa* 0...160 MPa to 0...400 MPa*
Pressure Type	Absolute, vacuum, compound and positive pressures
Adjustability	Zero and span adjustments ±5% of the full scale
Response time	≤1 ms (10...90% of scale)
Output Signals	4-20 mA, 0-20 mA, 0-5 V, 0-10 V, and 0-100 mV
Power Supply (V_s)	10...30 VDC 14...30 VDC (for 0-10 V output)
Electric Connection	Plug with junction box
Electrical Protection	Reverse polarity, over-voltage and short circuit protections
Temp. Compensation	0...80°C
Temp. Coefficient	0.02% / k
Medium Temperature	-30...100°C
Ambient Temperature	-20...80°C
Environ. Protection	IP65
Vibration Protection	Internal electronics potted in silicon oil
Vibration Resistance	15g (15...2000 Hz)
Shock Resistance	1000g, 1 ms
Weight	0.2 kg (0.4 lb)

*Special Ranges

Range	Over Range	Burst Pressure
0...10 in.H2O	100 in.H2O	100 in.H2O
0...15 in.H2O	100 in.H2O	100 in.H2O
0...25 in.H2O	100 in.H2O	100 in.H2O
30...0 in.Hg (vac.)	70 psi	70 psi
30"...0...30 psig	250 psi	250 psi
30"...0...60 psig	500 psi	500 psi
30"...0...100 psig	500 psi	500 psi
30"...0...160 psig	500 psi	500 psi
30"...0...200 psig	1100 psi	1100 psi
0...50 in.H2O	30 psi	30 psi
0...100 in.H2O	30 psi	30 psi
0...5 psig	30 psi	30 psi
0...10 psig	60 psi	60 psi
0...15 psia	70 psi	70 psi
0...15 psig	70 psi	70 psi
0...25 psia	145 psi	145 psi
0...25 psig	145 psi	145 psi
0...30 psig	145 psi	145 psi
0...50 psia	250 psi	250 psi
0...50 psig	250 psi	250 psi
0...60 psig	250 psi	250 psi
0...100 psia	500 psi	500 psi
0...100 psig	500 psi	500 psi
0...160 psig	500 psi	500 psi
0...200 psig	500 psi	500 psi
0...250 psia	1100 psi	1100 psi
0...250 psig	1100 psi	1100 psi
0...300 psig	1100 psi	1100 psi
0...400 psig	725 psi	3600 psi
0...500 psia	1100 psi	5800 psi
0...500 psig	1100 psi	5800 psi
0...600 psig	1100 psi	5800 psi
0...750 psig	1100 psi	5800 psi
0...1000 psig	1750 psi	8000 psi
0...1500 psig	2900 psi	11,500 psi
0...2000 psig	4600 psi	14,500 psi
0...3000 psig	4600 psi	14,500 psi
0...5000 psig	11,500 psi	25,000 psi
0...8000 psig	17,500 psi	35,000 psi
0...10,000 psig	17,500 psi	35,000 psi
0...15,000 psig	22,000 psi	45,000 psi
0...25,000 psig	30,000 psi	60,000 psi
0...35,000 psig	43,500 psi	70,000 psi
0...40,000 psig	45,000 psi	75,000 psi
0...58,000 psig	64,000 psi	100,000 psi

1 bar = 14.5 psi
1 bar = 100 kPa
1 bar = 401.5" H2O
1 bar = 29.53" Hg
1 kPa = 4.0" H2O

ORDER CODES

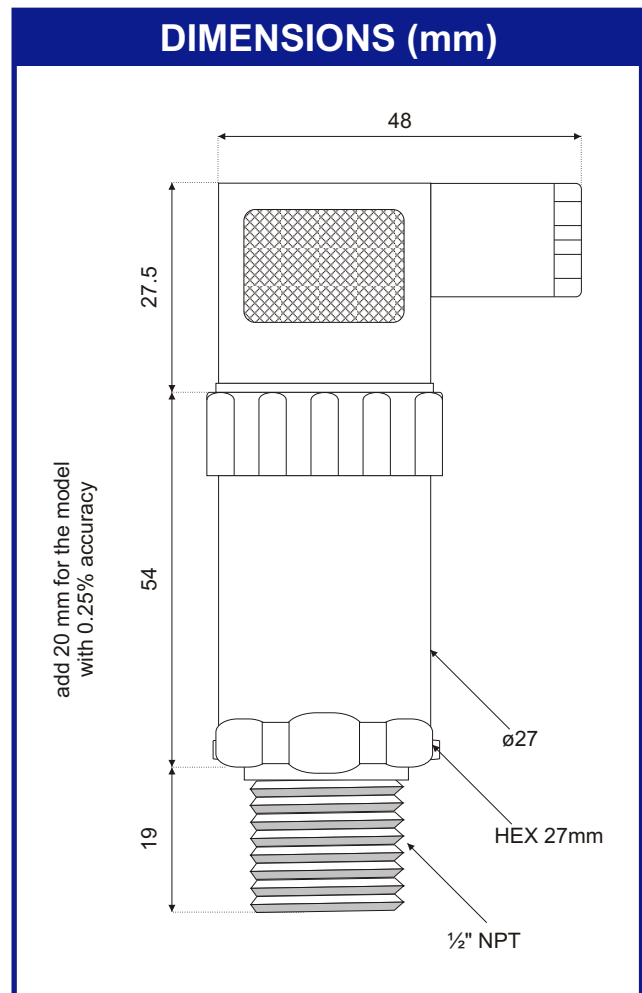
Model PTF110 -

ACCURACY
0.5% (standard)
0.25% (option)

PROCESS CONNECTION
½" NPT (standard)
½" BSP

OUTPUT SIGNAL
4 - 20 mA (standard)
0 - 5 VDC
0 - 10 VDC
1 - 6 VDC
0 - 20 mA

(Local indicator must be ordered separately)



Indumart reserves the right to change the specifications without prior notice.