

PRESSURE TRANSMITTER

PTX19 SERIES

- Measuring Range (0.1 to 1000) bar
- Atex Gas & Dust Approved Version
- 2 wire (4 to 20) mA output
- High Temperature Stability
- Choice of Process Connection
- Compact and Robust
- Reverse Polarity and Short Circuit Protection



INTRODUCTION

The PTX19 is a high quality 2 wire pressure transmitter providing a 2 wire (4 to 20) mA output over a wide pressure range. The piezoresistive element provides excellent accuracy and stability in an all welded stainless steel housing. The body of the product is oil filled and coupled with high accuracy electronics, this enables the product to maintain a very high level of accuracy and temperature stability when used with high temperature processes. There are a number of process connections to choose from, and measurement ranges of any value between 100 mbar to 1000 bar can be ordered making the PTX19 a very versatile product suitable for many applications.

SPECIFICATION @ 20 °C

Type	Gauge or Absolute		
Pressure Range	(0 to 1000) bar		
Overpressure			
(0.1 to 0.5) bar	3 bar		
(>0.5 to 2) bar	3 x FS (min. 3 bar)		
(>2 to 600) bar	3 x FS (Max. 850 bar)		
(>600 to 1000) bar	1500 bar		
Burst Pressure			
(0.1 to 2) bar	=>200 bar		
(>2 to 600) bar	=>850 bar		
(>600 to 1000) bar	=>1500		
Total Error Band	(± % FS)*1		
(0.1 to 0.5) bar			
(0 to 70) °C	Typical/Maximum	1.0/1.5	
(-25 to 100) °C	Typical/Maximum	2.0/2.5	
(>0.5 to 1000) bar			
(0 to 70) °C	Typical/Maximum	0.7/1.0	
(-25 to 100) °C	Typical/Maximum	1.0/1.5	
Accuracy *2	Standard	<= ± 0.25 % FS	
	Optional	<= ± 0.1 % FS	
			*2 Zero based non-conformity according to DIN16086, including hysteresis and repeatability by ambient temperature
			Medium Temperature (-40 to 150) °C
			Ambient Temperature (-40 to 125) °C
			Storage Temperature (-40 to 125) °C
			Response Time <1ms / (10 to 90) % FS
			Long Term Stability
			(0.1 to 0.5) bar
			(Typical) <0.5 %FS
			(Maximum) <4 mbar
			(>0.5 to 2) bar
			(Typical) <0.2 %FS
			(Maximum) <4 mbar
			(>2 to 1000) bar
			(Typical) <0.1 %FS
			(Maximum) <0.2 %FS
			Output (4 to 20) mA two wire
			Supply Voltage (9 to 33) V DC
			Atex Version (9 to 30) V DC
			Supply Voltage Influence Typically <0.05 % FS
			Load Resistance $RI = \frac{(V_{supply} - 9)}{0.02 A}$
			Load Resistance Influence <0.05 %FS

*1 Total Error Band indicated accuracy, temperature influences, temperature error zero and span, hysteresis and repeatability by maximum signal span (16 mA)

PRESSURE TRANSMITTER

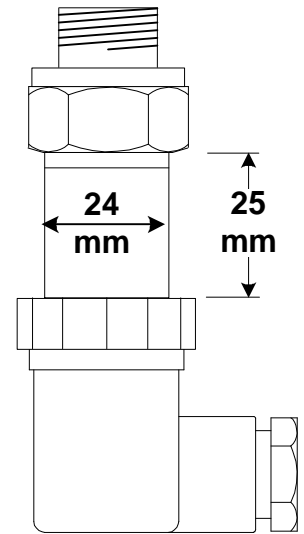
Material Diaphragm, Process Connection & Housing
Stainless Steel 1.4435

Approvals

Vibration EN 60068-2-6
Shock EN 60068-2-27
Emission, Class B EN55022
Generic Immunity EN 61000-4-2
Electrostatic discharge EN 61000-4-3
Fast Transients (burst) EN 61000-4-4
Surge EN 61000-4-5
Conducted radio-Frequency EN 61000-4-6

Ex-Approval gas / dust
II 1G Ex ia IIB / IIC T3...T6
II 1D Ex iad 20 IP6x T145...T70 °C

Temperature class	T6	T4	T3
Ambient Temperature Ta	(-40 to 50)°C	(-40 to 85)°C	(-40 to 125)°C
Process Temperature	(-40 to 50)°C	(-40 to 110)°C	(-40 to 150)°C



ORDER CODE

PTX19 / / / /

Intrinsic safety X

Pressure Type: Gauge G
 Absolute (vacuum) A

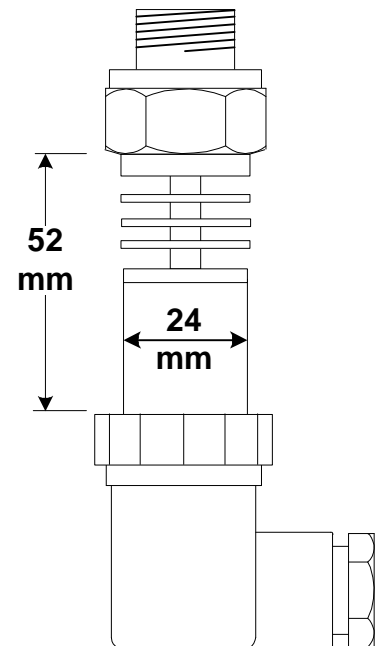
Pressure Connection:

1/4" BSP FEMALE Pressure fitting	1
1/2" BSP MALE Flush Diaphragm	2
1/4" BSP MALE Pressure fitting	5
1/2" BSP MALE Pressure fitting	7
1/2" NPT Male Pressure Fitting	8
1/4" NPT Male Pressure Fitting	9

Pressure Range:
Low / High

OPTIONS

Extended Temperature Range (-25 to 100) °C compensated (allowed medium temperature (-40 to 125) °C	1a
Cooling Extension (-25 to 100) °C compensated (allowed medium temperature (-40 to 150) °C	1b
Ranges over 600 Bar	1c



EXAMPLE: PTX19/G/5/100/500/1a
Pressure Transmitter/Non IS/Gauge/1/4" BSP MALE Pressure fitting/
Extended Temperature Range (-25 to 100) °C