

# SUBMERSIBLE PRESSURE TRANSMITTER

## PTX20 SERIES

- Measuring Range (0 to 1) mH2O to (0 to 250) mH2O
- High Temperature Stability
- Atex Gas & Dust Approved Version
- 2 wire (4 to 20) mA output
- Reverse Polarity and Short Circuit Protection



## INTRODUCTION

The PTX20 is a high quality level 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. A titanium housing is available on request for more aggressive process media. 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 open and closed versions to choose from, and also a ballast weight can be specified too. Measurement ranges of any value between 1mH2O to 250mH2O can be ordered making the PTX20 a very versatile product suitable for many applications.

## SPECIFICATION @ 20 °C

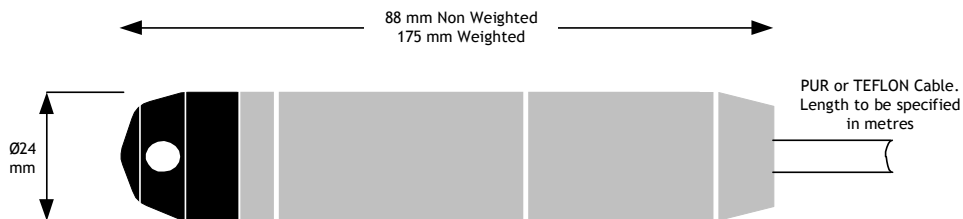
<b>Type</b>	Gauge or Absolute	(>0.5 to 2) bar (Typical)	<0.2 %FS
<b>Burst Pressure</b>	=>200 bar	(Maximum)	<4 mbar
<b>Total Error Band (0.1 to 0.5) bar</b>	(± % FS) <sup>*1</sup>	(>2 to 25) bar (Typical)	<0.1 %FS
(-5 to 50) °C	Typical/Maximum	(Maximum)	<0.2 %FS
(-5 to 80) °C	Typical/Maximum		
<b>(&gt;0.5 to 25) bar</b>		<b>Output</b>	(4 to 20) mA two wire
(-5 to 50) °C	Typical/Maximum	<b>Supply Voltage</b>	(9 to 33) V DC
(-5 to 80) °C	Typical/Maximum	Atex Version	(9 to 30) V DC
<b>Accuracy <sup>*2</sup></b>	Standard <= ± 0.25 % FS	<b>Supply Voltage Influence</b>	Typically <0.05 % FS
		<b>Load Resistance</b>	$RL = \frac{(V_{supply} - 9)}{0.02 A}$
<sup>*1</sup> Total Error Band including - accuracy, temperature influences, temperature error zero and span, hysteresis and repeatability by maximum signal span (16 mA)		<b>Load Resistance Influence</b>	<0.05 %FS
<sup>*2</sup> Zero based non-conformity according to DIN16086, including hysteresis and repeatability by ambient temperature		<b>Material</b>	Diaphragm & Housing Stainless Steel 1.4435
<b>Medium Temperature</b>	(-5 to 80) °C	<b>Option</b>	Titanium
<b>Storage Temperature</b>	(-10 to 80) °C	<b>Approvals</b>	
<b>Response Time</b>	<1ms / (10 to 90) % FS	Vibration	EN 60068-2-6
<b>Long Term Stability</b> (0.1 to 0.5) bar		Shock	EN 60068-2-27
(Typical)	<0.5 %FS	Emission, Class B	EN55022
(Maximum)	<4 mbar	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

# SUBMERSIBLE PRESSURE TRANSMITTER

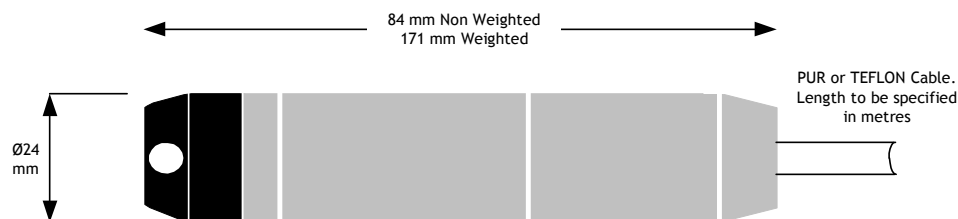
Ex-Approval gas / dust  
 II 1G Ex ia IIB / IIC T3...T6  
 II 1D Ex iaD 20 IP6x T145...T70 °C

Temperature class	T6	T4	T3
Ambient Temperature Ta	(-5 to 50) °C	(-5 to 80) °C	(-5 to 80) °C
Process Temperature	(-5 to 50) °C	(-5 to 80) °C	(-5 to 80) °C

## Closed Version



## Open Version



## ORDER CODE

PTX20	/	/	/	/	/	/	/	/
Intrinsic safety	X							
Pressure Type:	Gauge	G						
	Absolute (vacuum)	A						
Open End			0					
Closed End			3					
Pressure Range:								
Low / High								
OPTIONS								
	Extended Temperature Range (-5 to 80) °C compensated							1c
	(allowed medium temperature (-5 to 80) °C							
CABLE								
	Teflon cable per metre							Tx
	PUR cable per metre - Max Temp 50 °C							Px
Weighted Option								W

EXAMPLE: PTX20/G/3/0.1/20/1c/P5  
 Pressure Transmitter/Non IS/Gauge/Closed End/100 mbar to 20 bar/ Extended  
 Temperature Range (-5 to 80) °C compensated (allowed medium temperature (-5 to  
 80) °C / 5 meters of PUR Cable / Non Weighted