

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

Type	Gauge or Absolute	(>0.5 to 2) bar (Typical)	<0.2 %FS
Burst Pressure	=>200 bar	(Maximum)	<4 mbar
Total Error Band (0.1 to 0.5) bar	(± % FS)*1	(>2 to 25) bar (Typical)	<0.1 %FS
(-5 to 50) °C	Typical/Maximum	(Maximum)	<0.2 %FS
(-5 to 80) °C	Typical/Maximum	2.0/2.5	
(>0.5 to 25) bar		Output	(4 to 20) mA two wire
(-5 to 50) °C	Typical/Maximum	Supply Voltage	(9 to 33) V DC
(-5 to 80) °C	Typical/Maximum	Atex Version	(9 to 30) V DC
Accuracy *2	Standard <= ± 0.25 % FS	Supply Voltage Influence	Typically <0.05 % FS
		Load Resistance	$RL = \frac{(V_{supply} - 9)}{0.02 A}$
		Load Resistance Influence	<0.05 %FS
		Material	Diaphragm & 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
Medium Temperature	(-5 to 80) °C		
Storage Temperature	(-10 to 80) °C		
Response Time	<1ms / (10 to 90) % FS		
Long Term Stability (0.1 to 0.5) bar			
(Typical)	<0.5 %FS		
(Maximum)	<4 mbar		

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

*2 Zero based non-conformity according to DIN16086, including hysteresis and repeatability by ambient temperature

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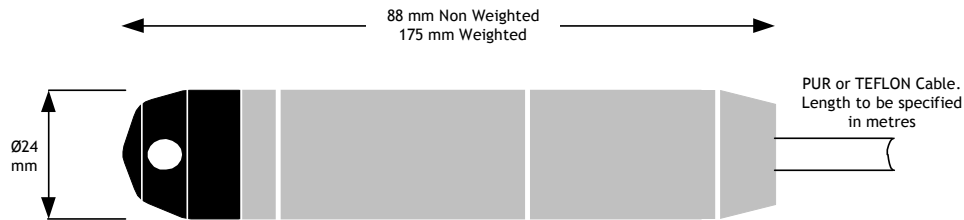
Ex-Approval gas / dust

II 1G Ex ia IIB / IIC T3...T6

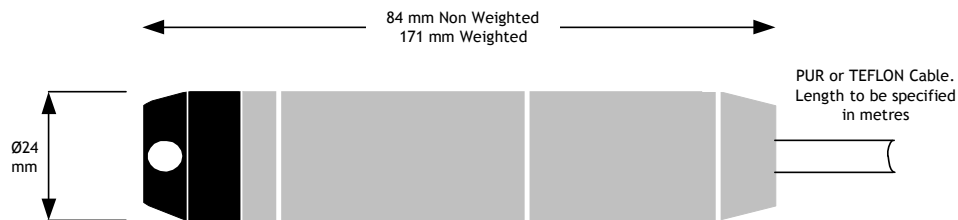
II 1D Ex iaD 20 IP6x T145...T70 °C

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