

PRESSURE TRANSMITTER

PTX21 SERIES

- > GAUGE OR ABSOLUTE
- > HIGH ACCURACY
- > IS VERSION
- > 150 °C MEDIUM TEMPERATURE
- > FLUSH DIAPHRAGM
- > LIGHTNING PROTECTION OPTION
- > 2 YEARS WARRANTY



INTRODUCTION

The PTX21 pressure transmitters are high accuracy, robust, 2 wire current output pressure sensing devices. Sensing is by a piezoresistive element, oil filled, and enclosed in an all welded stainless steel (316L) housing. Silicon filling and Viton seals are available as standard, with other options to order.

Span and Zero potentiometers are provided for fine adjustment or periodic re-calibration.

Gauge, absolute or sealed gauge types are available and all models are reverse polarity protected.

Ranges are to Din standard (in ratios of 1, 1.6, 2.5, 4, 6,) e.g. 100, 160, 250, 400, 600 mbar and 1, 1.6 bars etc. with custom calibrations available in all pressure measurement units. High medium temperatures, up to 150 °C (illustrated). Lightning (surge) protection to EN 61000-4-5 and Intrinsic Safety options are all provided.

SPECIFICATIONS @ 20 °C

INPUT

Type	Gauge or absolute
Pressure Range	Standard DIN pressure ranges from (0 to 100) mbar to (0 to 600) bar Full Scale. Higher pressure on application. Over Pressure Rated pressures can be exceeded to the following limits without degrading performance. 3 x FS 0 mbar to 2 bar (minimum 3 bar) 3 x FS > (2 to 25) bar 3 x FS > (25 to 600) bar (850 bar maximum)
Burst Pressure	> 200 bar for ranges to 25 bar > 850 bar maximum 25 to 600 bar
Supply Voltage	
PTX21	(9 to 33) VDC
PTX21X	(10 to 30) VDC voltage influence < 0.1 % FS
Output	(4 to 20) mA, two wire
Accuracy	Standard $\leq \pm 0.5\%$ FS (0 to 600) bar Optional $\leq \pm 0.25\%$ FS (0 to 600) bar $\leq \pm 0.1\%$ FS (0.1 to 600) bar

Operating Temperature Range (electronics)

Standard	(0 to 70) °C
Optional	(-25 to 85) °C

Electrical Connection	PTX21 DIN 43650 Electrical connection supplied
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NOTE: Combined Non-linearity, Hysteresis and Repeatability will not deviate from the straight line connecting Zero and FS output by more than the accuracy stated.

APPROVALS

EMC

Emissions	EN 61000-6-3
Immunity	EN 61000-6-2
Optional	EN61000-4-5 Surge (lightning strikes)

HAZARDOUS AREA

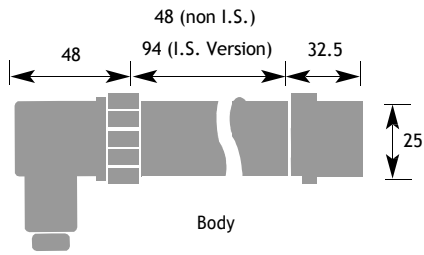
ATEX I/II MI/IG EEx IIC T3...T6	Ex for gas & mines
II 10 T90 °C IP68	Ex for dust

Max. value for supply/output circuit 30 V, 100 mA, 1 W

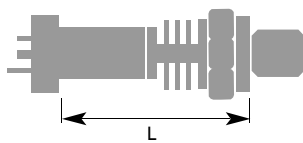
PRESSURE TRANSMITTER

MECHANICAL DETAILS

(All dimensions in mm)



Pressure connector 1 ¼" BSP internal thread



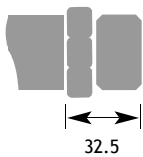
High Temperature Option

L= 67 mm for connector DIN 43650

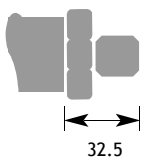
L= 72 mm for all other versions

L= 121 mm for versions with surge (lightning protection)

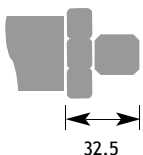
PRESSURE CONNECTORS



Pressure connector
2 ½" BSP external thread
with Flush Diaphragm



Pressure connector 5 ¼"
BSP male



Pressure connector 7 ½"
BSP male cell at rear

ORDER CODE

PTX21		/			/	/	/	
Intrinsic safety	X							
Gauge	G							
Absolute	A							
¼" BSP FEMALE Pressure fitting	1							
½" BSP MALE Flush Diaphragm	2							
¼" BSP MALE Pressure Fitting	5							
½" BSP MALE Pressure Fitting	7							
Pressure Range								
Low/High								
OPTIONS								
Extended Temperature Range (-25 to 85) °C	-1							
Accuracy 0.25 %	-3							
Negative range/Offset	-5							
0.1 % Accuracy < 600 Bar	-6							
Range below 100 mbar	-7							
Cooling extension to 150 °C process	-8							

EXAMPLE PTX21/G/1/0/2/1

Pressure transmitter - non IS - Gauge ¼" BSP - (0 to 2) Bar - extended temperature range (-25 to 85) °C