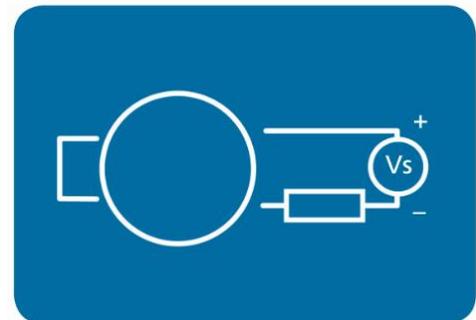


PTX19 PRESSURE TRANSMITTER

- MEASURING RANGE (0.1 to 1000) bar
- HIGH TEMPERATURE STABILITY
- ATEX GAS & DUST APPROVED VERSION
- 2 WIRE (4 to 20) mA OUTPUT
- COMPACT AND ROBUST

➤ 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 several 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.



➤ FEATURE HIGHLIGHTS

TANK LINEARISATION (SEM1600VI)

When used with products like the Status Instruments SEM1600VI conditioning block (the SEM1600VI can also provide power for the PTX19), a user non-linear curve can be applied to the (4 to 20) mA signal to allow for volume measurement in non-linear shaped tanks.

FLEXIBLE

Any range between (0 to 0.1) bar and (0 to 1000) bar can be selected with 100 mbar the smallest span available. Absolute and gauge options are both available.

WIDE TEMPERATURE RANGE

Options for use with high temperature mediums up to 150 °C are possible. The lowest temperature medium can be as low as -40 °C.

ALARM RELAYS (SEM1636)

When the PTX19 is used with products like the Status Instruments SEM1636 (4 to 20) mA loop powered alarm, two independent alarm trips can be used. The SEM1636 can also be linearised for non-standard tanks.

PTX19 PRESSURE TRANSMITTER

ELECTRICAL INPUT		SPECIFICATIONS @20°C
Type/Range	Notes	Error/stability
Over pressure	(0 to 0.1) to (0 to 0.5) bar	3 bar
	(0 to 0.5) to (0 to 2) bar	3 x FS (minimum 3 bar)
	(0 to 2) to (0 to 600) bar	3 x FS (maximum 850 bar)
	(0 to 600) to (0 to 1000) bar	1500 bar
Burst pressure	(0 to 0.1) to (0 to 2) bar	= > 200 bar
	(0 to 2) to (0 to 600) bar	= > 850 bar
	(0 to 600) to (0 to 1000) bar	= > 1500 bar
Within (0 to 0.1) to (0 to 0.5) bar (0 to 70) °C (-25 to 100) °C (-40 to 100) °C	Total error band (± % FS) *1	
	(Typical/Maximum)	≤ ± (1.0/1.5) % FS
		≤ ± (1.5/2.0) % FS
Within (0 to 0.5) to (0 to 1000) bar (0 to 70) °C (-25 to 100) °C (-40 to 100) °C	Total error band (± % FS) *1	
	(Typical/Maximum)	≤ ± (0.7/1.0) % FS
		≤ ± (1.0/1.5) % FS
Long term stability, 1 year typical	(0 to 0.1) to (0 to 2) bar	Typical/maximum <0.5 %FS/4 mbar
	(0 to 2) to (0 to 600) bar	Typical/maximum <0.2 %FS/4 mbar
	(0 to 600) to (0 to 1000) bar	Typical/maximum <0.1 %FS/<0.2 %FS
Response time	<1 ms	(10 to 90) % FS
FS = Full scale input range		
*1 Total error including accuracy and temperature influences at maximum signal span (16 mA)		

OUTPUT		SPECIFICATIONS @20°C
Type/options	Range	Accuracy/stability/notes
(4 to 20) mA two wire		Accuracy included in input values
Supply voltage, normal	(9 to 33) Vdc	SELV
Supply voltage, ATEX	(9 to 28) Vdc	
Supply influence		<0.05 % FS
Load resistance		Load = $\frac{V_{\text{supply}} - 9}{0.02 \text{ A}}$
Load resistance influence		<0.05 % FS
Reverse polarity protection		Yes

AMBIENT	
Operating temperature	(-40 to 125) °C
Process temperature	(-40 to 150) °C
Storage temperature	(-40 to 125) °C

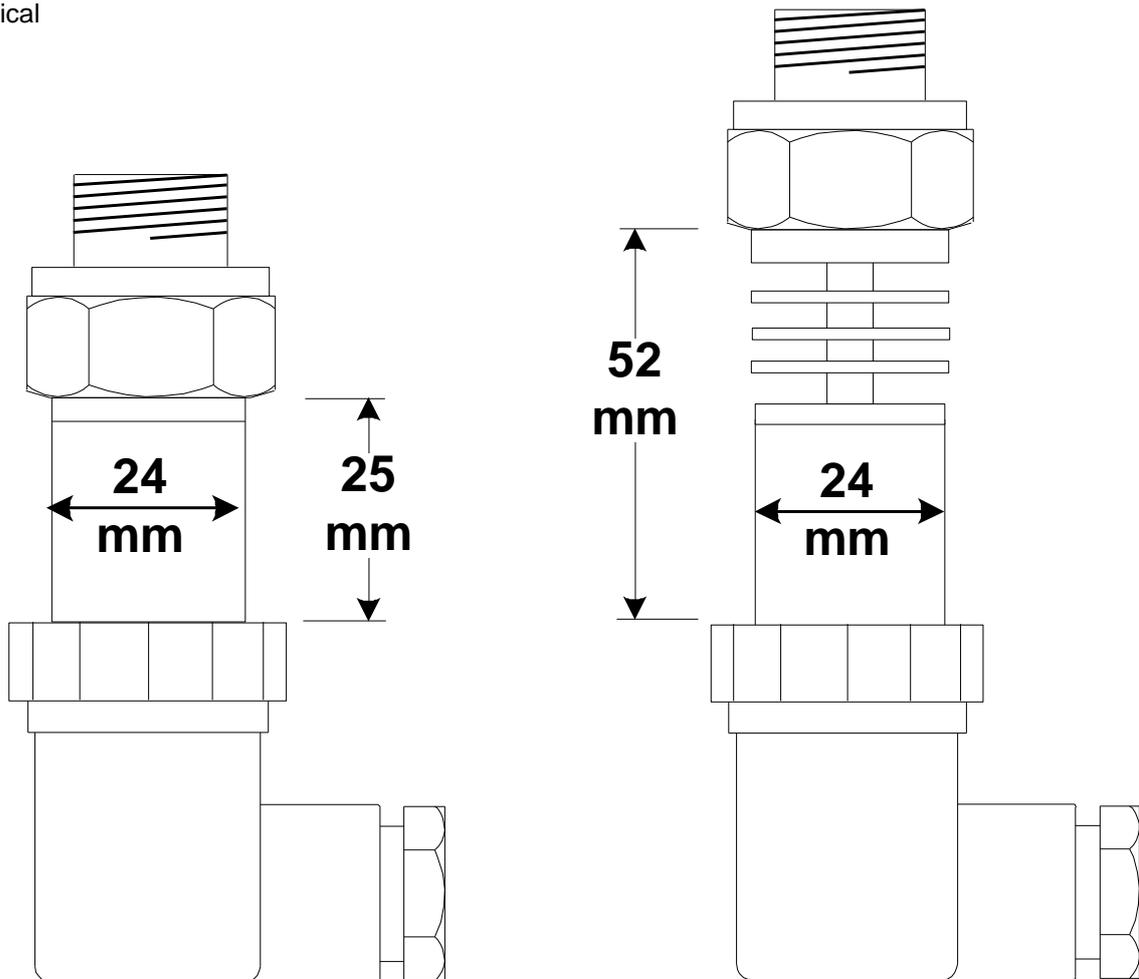
MECHANICAL	
Diaphragm, process connection and housing	Stainless Steel 316L
Connector	DIN 43650 IP65
Seals	Viton
Weight and weighted option	210 g and 470 g
Cable	PUR, FEP (Teflon)

PTX19 PRESSURE TRANSMITTER

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

ATEX VERSION			
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	(-5 to 50) °C	(-40 to 110) °C	(-40 to 150) °C

Mechanical



PTX19 PRESSURE TRANSMITTER

ORDER CODE PTX19						
	PTX19					
0 = non ATEX X = ATEX						
A = Absolute G = Gauge						
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 to high) bar				(xx to xx) bar		
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		
Negative Ranges				= 1d		
Example: Non ATEX, Gauge, 1/2" BSP Male flush diaphragm, no options Note: Pressure ranges can be quoted in other units than bar if preferred						
	PTX19	0	G	2	(0 to 5) bar	0

To maintain full accuracy annual calibration is required: Contact sales@status.co.uk for details
The data in this document is subject to change. Status Instruments assumes no responsibility for errors

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