

Industrial Pressure Transmitter PSP



- ♦ Excellent price-to-quality ratio
- ♦ Compact design
- ♦ Positive and negative gauge and absolute pressure
- ♦ Up to 0.25% accuracy
- ♦ Ranges from -1 to 1000 bar
- ♦ Up to 125 °C process temperature

The PSP industrial pressure transmitter contains a thin-film sensor element and an electronic circuit. Calibration takes place electronically and thus the transmitter displays a comparably small total error and is stable in the long term. The hermetically welded measuring cell ensures a high degree of long-term resistance to leakage and stability. The special steel membrane is completely vacuum-tight, extremely burst-proof, and can be used with all standard media in hydraulics, pneumatics, environmental technology, process technology, and automotive engineering as far as such are compatible with special steel. This thereby covers use in standard applications in mobile hydraulics and in other areas of application. The great exactness and the robust, compact structure guarantee a broad range of possible uses in industry. On the basis of the combinability of different mechanical and electronic connections, a variety of different pressure transmitter versions is offered.



Technical specifications

Variant	'R'		'A'		
Specifications					
	Pressure	positive and/or negative gauge	gauge w/ sealed reference	absolute	
	Ranges to EN [bar]	-1...0/ 1 0...1/ 1.6/ 2/ 2.5/ 4/ 6/ 10/ 16/ 20/ 25/ 40	0...60/ 100/ 160/ 200/ 250/ 400/ 600/ 1000	0...1/ 1.6/ 2/ 2.5/ 4/ 6/ 10/ 16/ 20/ 25/ 40	0...60/ 100
	Accuracy	0.5%, 0.25% (option)			
	Repeatability error	≤ 0.1%			
Stability	0.1% per year				
Non-linearity	≤ 0.15%				
Temperature drift	≤ 0.03%/°C within -20...85 °C				
Pressure sensor type	thin-film resistances				
Overload pressure	min. 1.5x	min. 1.2x	min. 1.5x	min. 1.2x	
Bursting pressure	min. 3x	min. 1.5x	min. 3x	min. 1.5x	
Wetted parts	stainless steel				
Housing	stainless steel (IP65)				
Process connection	G1/4", 1/4" NPT, G1/2", 1/2" NPT, M20x1.5, 7/16"-20 UNF, 3/8"-24 UNF				
Electrical connection	vented cable or connector	standard cable or connector	standard (unvented) cable or connector		
Output	2-wire 4...20 mA, 3-wire 0...20 mA, 0...5 V, 1...5 V, 0...10 V, or 0.5...4.5 V (ratiometric)				
Power supply	9...32 VDC (12...32 VDC for voltage output)				
Ambient temperature	-40...105 °C				
Medium temperature	-40...125 °C				
Weight	80...120 g (depending on model design)				

Ordering code PSP★ - G3.G8.G9.G11.G15 - #1 ⁽¹⁾

Code	Feature or option	Code values
★	Variant	R - standard gauge, A - standard absolute
G3	Input range ⁽²⁾	RANGE (see table above)
G8	Cable length [m] and type ^(1,2)	1PV...10PV - standard PVC, 1PVV...10PVV - vented PVC, 1PU...10PU - standard PUR, 1PUV...10PUV - vented PUR
G9	Process connection ⁽³⁾	Q2 - M20x1.5, Q4 - G1/2", Q10 - 1/2" NPT, Q23 - G1/4", Q24 - 1/4" NPT, Q35 - 7/16"-20 UNF, Q36 - 3/8"-24 UNF, Z - other (specify!)
G11	Output	E - 0...20 mA, F - 4...20 mA, I - 0...5 V, J - 1...5 V, K - 0...10 V, N - 0.5...4.5 V, Z - other (specify!)
G15	Wiring connector ⁽¹⁾	C1 - 4(5)-pin connector M12, C7 - DIN 43650 detachable 4-pin connector, C7C - DIN 43650 C detachable 4-pin mini connector, Z - other (specify!)
#1	High accuracy	X - none (0.5% accuracy), HA - 0.25% accuracy

⁽¹⁾ Code EITHER G8 or G15!

⁽²⁾ Applicable for the selected variant

⁽³⁾ Mounting adapter type YD, ordered separately (see 'Accessories'), can also be used.