

Pressure Transmitter with Display PSQA

- ♦ For low-cost applications
- ♦ For gauge pressure
- ♦ Ranges from 0 to 500 bar
- ♦ 2-wire 4...20 mA output
- ♦ 5-digit loop-powered programmable LCD display
- ♦ Alarm relay output
- ♦ Optional serial interface
- ♦ Up to 1.0% accuracy
- ♦ Compact design

The PSQA pressure transmitter is a combination of a thin-film pressure sensor type PSQ and a programmable loop-powered indicator. A 5-digit LCD display allows visualization of the measured pressure from -9999 to 9999 units with user programmable display scale limits very useful when different pressure engineering units are used. PSQA is also equipped with programmable pressure alarms driving a low-power electronic relay output, which can also be used to activate various electric actuators for ON/OFF pressure control. The display limits, decimal point position, measurement offset value as well as other parameters are fully programmable via a front panel keyboard. Thanks to its excellent price-to-performance ratio as well as its compact design and optional serial interface, PSQA is a widely applicable device in low-budget pressure measuring and control applications.



Technical specifications

Input	
Input type	thin-film resistance bridge
Measurement range	0 to min. 1...max. 500 bar
Overload	1.5 x full span
Outputs (up to 2 outputs)	
Analog (main) output	4...20 mA, 2-wire
Solid state relay	0.12A/240V, optically isolated
MOS gate	0.1A/60V, optically isolated
Control algorithm	ON/OFF
Alarm limits	programmable
Serial interface ⁽¹⁾ (option)	RS232, requiring special cable ⁽²⁾
Accuracy	
Measurement error	± 1% from span
Temperature drift	0.02% from span for 1 °C
Response time	≤ 10 ms (0...99% of span)
Local indicator	
Digital display	5 LCD indicators, 8 mm
Display error	± 0.1% from span
Temperature drift	0.01% from span for 1 °C
Keyboard	3 membrane keys

⁽¹⁾ Instead of the relay output! Ask for availability!

⁽²⁾ Ordered separately

Power supply

Loop supply voltage	16...32 VDC
Device voltage drop	≤ 6 V

Operating conditions

Process temperature	-30...85 °C
Ambient temperature	-20...70 °C
Ambient humidity	0...85 %RH

Design and materials

Wetted parts	stainless steel 1Cr18Ni9Ti
Sensor sheath	stainless steel
Enclosure material	plastic
Process connection	G1/4", M12x1.25, 3/8"-24UNF, or 7/16"-20UNF
Wiring	I/S (Industrial Standard) Form C 4-pin detachable mini connector set
Dimensions	approx. 125x70x32 mm
Weight	approx. 90 g
Protection, sensor/display	IP65 / IP44
Electrical insulation	≥ 10 MΩ at 50 VAC

Ordering code PSQA - G3.G5.G9 - #1

Code	Feature or option	Code values
G3	Input ranges to EN [bar]	0...1/2.5/ 4/ 6/ 10/ 16/ 25/ 40/ 60/ 100/ 250/ 400/ 600 or other on request (0...max. 500 bar)
G5	Relay output	X - none, D - SSR, M - isolated MOS gate
G9	Process connection	Q23 - G1/4", Q32 - M12x1.25, Q35 - 7/16"-20 UNF, Q36 - 3/8"-24 UNF, Z - other (specify!)
#1	Serial interface	X - none, A - RS232 ⁽¹⁾