Pressure Transmitter with Display PSQA

CE

- 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. 2.5...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	4-pin detachable connector DIN 43650 C
Dimensions	approx. 125x70x32 mm
Weight	approx. 90 g
Protection, sensor/display	IP65 / IP44
EM compatibility	EN50081-1, EN50081-2, EN50082-2
Electrical insulation	≥ 10 MΩ at 50 VAC

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

Code	Feature or option	Code values
G3	Input range	**RANGE** (see table above)
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]

COMECO reserves the right of changing specifications without prior notice!