

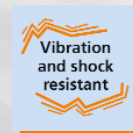


A breath of fresh air in pneumatics – now also available as NPN switching.



Compact pressure sensor for applications in robotics and handling.

- Slanted display for good readability and handling.
- Two-colour display for indication of the switching status.
- Easy installation using integrated mounting holes and accessories.
- Two programmable switching outputs or one switching and diagnostic output.
- Pressure range -1...1 bar or -1...10 bar.



PQ pressure sensor – for pneumatic applications

The new pressure sensors of the PQ series are based on a piezoresistive measuring element and are distinguished by an extremely compact housing and a wide range of possible applications. The units precisely measure the pressure in the negative pressure and overpressure range in pneumatic applications. The silicon measuring cell is insensitive to liquids (e.g. condensed water) and deposits that might occur in the system.

Technical details

The silicon measuring cell used guarantees a high overload resistance as well as an accuracy of $\pm 0.5\%$. The sensor can be programmed using two pushbuttons. The two-colour, four-digit display makes the system pressure visible from a distance in normal operation.







fluid sensors and diagnostic systems

position sensors and object recognition

bus, identification and control systems

**Process connection G 1/8
NPN switching**





| Measuring range Relative pressure [bar] | P _{overload} max. [bar] | P _{burst} min. [bar] | Set point SP1 / SP2 [bar] | Reset point rP1 / rP2 [bar] | Step increment [bar] | Order no. |
|---|--|-------------------------------------|---------------------------------|-----------------------------------|----------------------------|---------------|
| M8 connector · output function 2 x  /  programmable or 1 x  /  + diagnosis | | | | | | |
| -1...1 | 20 | 30 | -0.97...1 | -0.98...0.99 | 0.005 | PQ0809 |
| -1...10 | 20 | 30 | -0.90...10 | -0.95...9.95 | 0.05 | PQ0834 |

Mounting options

The sensor can be fixed to flat surfaces and profiles using the two M4 drill holes on the front. It can be fixed to a DIN rail using the robust DIN rail clip, which is secured against inadvertent movement. The sensor is screwed to the clip.

Installation with an optional double nipple with 1/8" thread is even easier. Using this nipple, the sensor can be fixed to the pipe or air-ducting plate and aligned at the same time – quickly and easily.



Accessories

| Type | Description | Order no. |
|---|--|---------------|
|  | DIN rail clip with socket head screws M4, stainless steel (1.4310/301) | E37340 |
|  | Adapter R1/8 - R 1/8, rotatable, nickel-plated brass | E37350 |
|  | T pipe mounting set G1/2 with reducer, nickel-plated brass | E37360 |
|  | Connector for standard tube, Ø 6 mm, 4 pcs. | E30076 |
| | Connector for standard tube, Ø 8 mm, 4 pcs. | E30077 |

Common technical data

| Type of pressure: relative pressure compressed air | | |
|--|--------|---|
| Operating voltage | [V DC] | 18...32 |
| Current rating | [mA] | 100 |
| Short-circuit protection, pulsed | | • |
| Reverse polarity protection | | • |
| Overvoltage protection | | up to 40 V |
| Current consumption | [mA] | < 50 |
| Accuracy / deviation (in % of the span) | | |
| Switch point accuracy | | < ± 0.5 |
| Deviation of the characteristics | | < ± 0.25 (BFSL) < ± 0.5 (LS) |
| Hysteresis | | < ± 0.25 |
| Repeatability | | < ± 0.1 |
| Long-term stability | | < ± 0.05 |
| Temperature coefficients (TEMPCO) in the temperature range 0...60 °C (in % of the span per 10K) | | |
| Greatest TEMPCO of zero | | 0.2 |
| Greatest TEMPCO of the span | | 0.2 |
| Switching frequency | [Hz] | ≤ 170 |
| Medium temperature | [°C] | 0...60 |
| Protection | | IP 65, III |
| Shock resistance | | 50 g |
| Vibration resistance | | 20 g |
| Housing materials | | PBT (Pocan), FPM (Viton), polyester |
| Materials (wetted parts) | | brass, FPM (Viton), silicon (plated), PBT (Pocan) |

Connectors and splitter boxes

| Type | Description | Order no. |
|---|-----------------------------------|---------------|
|  | Socket , M8, 2 m black, PUR cable | E11196 |
| | Socket , M8, 5 m black, PUR cable | E11197 |
|  | Socket , M8, 2 m black, PUR cable | E11199 |
| | Socket , M8, 5 m black, PUR cable | E11200 |

ifm article no. 7511457 · Printed in Germany on non-chlorine paper. · We reserve the right to make technical alterations without prior notice. · 04.2011

Fluid sensors and diagnostic systems