



2-wire pressure sensor with display, parameter setting via IO-Link.

Fluid sensors and diagnostic systems



Flush design for hygienic applications.

- Process connection G1 Aseptoflex Vario or G1 conical.
- Programmable analogue output in 2-wire operation.
- Additional switching output in 3/4-wire operation.
- High overall accuracy (0.2 %) and electronic temperature compensation.
- High temperature resistance, therefore suitable for SIP and CIP processes.

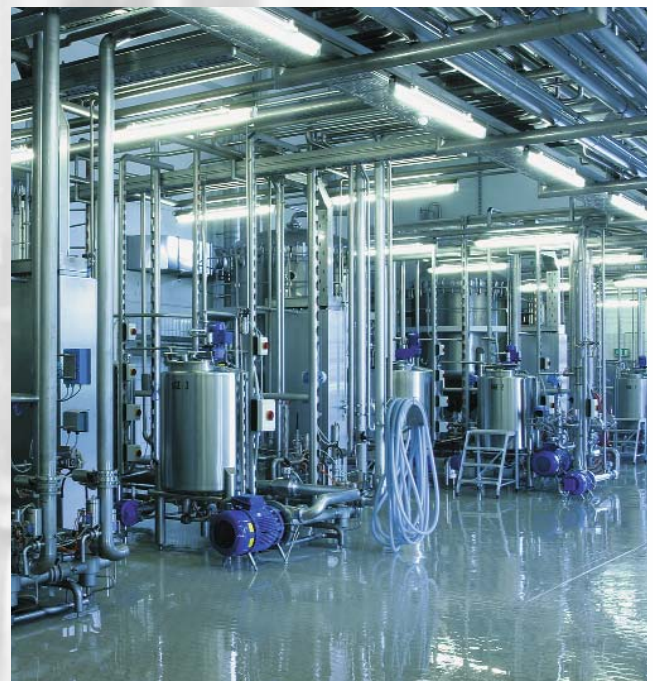


Flexible: 2, 3 or 4 wires

The pressure sensors of the PI27/PI28 series with clearly visible LED display can not only be connected as 3- or 4-wire units but also as 2-wire units in a current loop. This reduces the wiring complexity in new installations and facilitates exchange in existing 2-wire connections.

Flush and hygienic

The full-metal version of the PI pressure sensor is now also available with conical G1 process connection in addition to the Aseptoflex Vario connection available so far. It is also possible to use it for flush installation when using an adapter. It can also be used for hygienic applications. This makes it easier to exchange units in existing installations.



Pressure monitoring in hygienic areas.

fluid sensors
and diagnostic
systems

position
sensors
and object
recognition

bus,
identification
and control systems



Flush pressure sensors with Aseptoflex Vario G1 process connection.

| Measuring range Relative pressure [bar] | P _{overload} max. [bar] | Analogue start point [bar] | Analogue end point [bar] | Set point SP1 [bar] | Reset point rP1 [bar] | Step increment [bar] | Order no. |
|---|--|----------------------------------|--------------------------------|---------------------------|-----------------------------|----------------------------|---------------|
| Output function switching output PNP/NPN programmable + analogue output programmable | | | | | | | |
| -1...25 | 100 | -1.00...18.74 | 5.24...25.00 | -0.96...25.00 | -1.00...24.96 | 0.02 | PI2793 |
| -1...10 | 50 | -1.0...7.5 | 1.5...10.00 | -0.98...10.00 | -1.00...9.98 | 0.01 | PI2794 |
| -1...4 | 30 | -1.00...3.00 | 0.00...4.00 | -0.990...4.000 | -1.000...3.990 | 0.005 | PI2795 |
| -0.124...2.5 | 20 | -0.124...1.880 | 0.500...2.500 | -0.120...2.500 | -0.124...2.496 | 0.002 | PI2796 |
| -0.05...1 | 10 | -0.05...0.75 | 0.2...1.00 | -0.048...1.00 | -0.05...0.998 | 0.001 | PI2797 |
| -0.0124...0.25 | 10 | -0.0124...0.1874 | 0.05...0.25 | -0.012...0.25 | -0.0124...0.2496 | 0.0002 | PI2798 |
| -1...1 | 10 | -1...0.5 | -0.5...1 | -0.998...1 | -1...0.998 | 0.001 | PI2799 |
| -0.005...0.1 | 4 | -0.005...0.075 | 0.02...0.1 | -0.0048...0.1 | -0.005...0.098 | 0.0001 | PI2789 |

Front flush pressure sensors with G1 process connection

| Measuring range Relative pressure [bar] | P _{overload} max. [bar] | Analogue start point [bar] | Analogue end point [bar] | Set point SP1 [bar] | Reset point rP1 [bar] | Step increment [bar] | Order no. |
|---|--|----------------------------------|--------------------------------|---------------------------|-----------------------------|----------------------------|---------------|
| Output function switching output PNP/NPN programmable + analogue output programmable | | | | | | | |
| -1...25 | 100 | -1.00...18.74 | 5.24...25.00 | -0.96...25.00 | -1.00...24.96 | 0.02 | PI2893 |
| -1...10 | 50 | -1.0...7.5 | 1.5...10.00 | -0.98...10.00 | -1.00...9.98 | 0.01 | PI2894 |
| -1...4 | 30 | -1.00...3.00 | 0.00...4.00 | -0.990...4.000 | -1.000...3.990 | 0.005 | PI2895 |
| -0.124...2.5 | 20 | -0.124...1.880 | 0.500...2.500 | -0.120...2.500 | -0.124...2.496 | 0.002 | PI2896 |
| -0.05...1 | 10 | -0.05...0.75 | 0.2...1.00 | -0.048...1.00 | -0.05...0.998 | 0.001 | PI2897 |
| -0.0124...0.25 | 10 | -0.0124...0.1874 | 0.05...0.25 | -0.012...0.25 | -0.0124...0.2496 | 0.0002 | PI2898 |
| -1...1 | 10 | -1...0.5 | -0.5...1 | -0.998...1 | -1...0.998 | 0.001 | PI2899 |
| -0.005...0.1 | 4 | -0.005...0.075 | 0.02...0.1 | -0.0048...0.1 | -0.005...0.098 | 0.0001 | PI2889 |

Accessories

| Type | Description | Order no. |
|------|---|---------------|
| | G1 adapter for Clamp 1-1.5" | E33601 |
| | G1 adapter for DIN11851 DN40 (1.5") | E33612 |
| | Aseptoflex Vario adapter Clamp 1-1.5" for PEEK / O-ring | E33201 |
| | Aseptoflex Vario adapter Clamp 1-1.5" Metal-to-metal seal | E33701 |
| | Aseptoflex Vario adapter Clamp 2" for PEEK / O-ring | E33202 |
| | Aseptoflex Vario adapter Clamp 2" Metal-to-metal seal | E33702 |
| | FKM (Viton) sealing ring for Aseptoflex Vario adapter | E30123 |
| | PEEK sealing ring for Aseptoflex Vario adapter | E30124 |

Connectors and splitter boxes

| | | |
|--|---|---------------|
| | Socket, M12, 4-pole 5 m orange, PVC cable | EVT004 |
| | Socket, M12, 4-pole 10 m orange, PVC cable | EVT005 |

Common technical data

| Type of pressure: relative pressure Liquids and gases | | |
|---|--------|--|
| Operating voltage | [V DC] | 20...32 (2W), 18...32 (3W) |
| Current rating | [mA] | 250 |
| Current consumption | [mA] | 3.6...21 (2W) / < 45 (3W) |
| IO-Link Device type of transmission | | COM2 (38.4 kbaud) |
| Accuracy / deviation (in % of the span) turn down 1:1 | | PI2x9x PI2x89 |
| Deviation of the switch point | | < ± 0.2 < ± 0.5 |
| Deviation of the characteristics | | < ± 0.2 < ± 0.5 |
| Linearity | | < ± 0.15 < ± 0.25 |
| Hysteresis | | < ± 0.15 < ± 0.2 |
| Repeatability | | < ± 0.1 < ± 0.1 |
| Long-term stability | | < ± 0.1 < ± 0.1 |
| Temperature coefficients (TEMPCO) in the temperature range 0...70 °C (in % of the span per 10 K) | | |
| Greatest TEMPCO of zero | | < ± 0.05 < ± 0.1 |
| Greatest TEMPCO of the span | | < ± 0.15 < ± 0.2 |
| Power-on delay time | [s] | 1 (2W) / 0.5 (3W) |
| Response time switching output | [ms] | 3 |
| Medium temperature | [°C] | -25...125 (145 max. 1 h) |
| Protection | | IP 67 / IP 68 / IP 69K |
| Materials (wetted parts) | | high-grade stainless steel 316L (1.4435); ceramics (99.9 % Al ₂ O ₃); PTFE |

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