

# Pressure Sensor

## FX9P202

Part Number

weFlux<sup>2</sup> InoxSens



- Analog output: 4 ... 20 mA
- Compact, laser-welded V4A stainless steel housing
- Outstanding measuring accuracy:  $\pm 0.5\%$
- Very short response time:  $< 1$  ms

### Technical Data

#### Sensor-specific data

|                                           |                     |
|-------------------------------------------|---------------------|
| Measuring Range                           | 0...250 bar         |
| Measurement Type                          | relative            |
| Maximum overload pressure                 | 500 bar             |
| Bursting pressure                         | 750 bar             |
| Medium                                    | Liquids, gases      |
| Pressure Response Time (t <sub>90</sub> ) | $< 1$ ms            |
| Measuring error (total)                   | $< 1$ %             |
| Temperature Coefficient Zero-Point        | $< \pm 0,15\%$ /10K |
| Temperature Coefficient Range             | $< \pm 0,2\%$ /10K  |

#### Environmental conditions

|                                            |                     |
|--------------------------------------------|---------------------|
| Temperature of medium                      | -25...125 °C**      |
| Ambient temperature                        | -25...80 °C         |
| Atmospheric humidity                       | 100 % r.H.          |
| Storage temperature                        | -25...80 °C         |
| EMC                                        | DIN EN 61326-2-3    |
| Shock resistance per DIN IEC 68-2-27       | 50 g / 11 ms        |
| Vibration resistance per DIN IEC 60068-2-6 | 10 g (10...2000 Hz) |

#### Electrical Data

|                                             |                 |
|---------------------------------------------|-----------------|
| Supply Voltage                              | 9...28 V DC     |
| Current Consumption (U <sub>b</sub> = 24 V) | $< 21$ mA       |
| Analog Outputs                              | 1               |
| Analog Output                               | 4...20 mA Press |
| Current Output Load Resistance              | $< 500$ Ohm     |
| Short Circuit Protection                    | yes             |
| Reverse Polarity Protection                 | yes             |
| Protection Class                            | III             |

#### Mechanical Data

|                                |                           |
|--------------------------------|---------------------------|
| Sensor element                 | Stainless steel diaphragm |
| Housing Material               | 1.4404                    |
| Material in contact with media | 1.4404; 1.4548; FKM       |
| Degree of Protection           | IP68/IP69K *              |
| Connection                     | M12 $\times$ 1; 4-pin     |
| Process Connection             | G 1/2"                    |
| {Dichtungsmaterial}            | FKM                       |

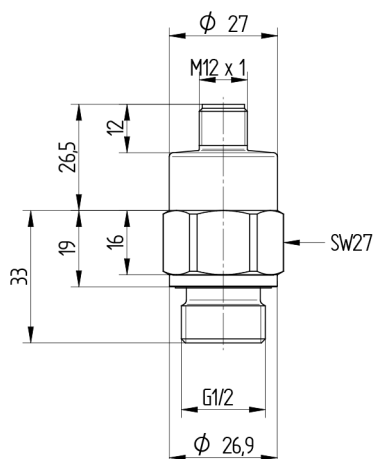
#### Safety-relevant Data

|                                   |           |
|-----------------------------------|-----------|
| MTTFd (EN ISO 13849-1)            | 3283,16 a |
| Analog Output                     | ●         |
| Connection Diagram No.            | 142       |
| Suitable Connection Equipment No. | 2         |
| Suitable Mounting Technology No.  | 903       |

\* Not UL certified

\*\* Sensors suitable up to 125 °C media temperature. During installation, please ensure that the sensor housing is adequately cooled by the surroundings.

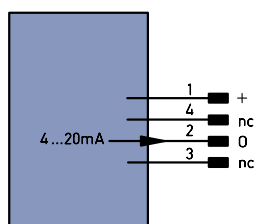




All dimensions in mm (1 mm = 0.03937 Inch)



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#### Legend

|          |                                            |       |                                |                                    |                     |
|----------|--------------------------------------------|-------|--------------------------------|------------------------------------|---------------------|
| +        | Supply Voltage +                           | PT    | Platinum measuring resistor    | ENAR5422                           | Encoder A/Ä (TTL)   |
| -        | Supply Voltage 0 V                         | nc    | not connected                  | ENB5422                            | Encoder B/B̄ (TTL)  |
| ~        | Supply Voltage (AC Voltage)                | U     | Test Input                     | ENa                                | Encoder A           |
| A        | Switching Output (NO)                      | Ū     | Test Input inverted            | ENb                                | Encoder B           |
| Ä        | Switching Output (NC)                      | W     | Trigger Input                  | AMIN                               | Digital output MIN  |
| V        | Contamination/Error Output (NO)            | W-    | Ground for the Trigger Input   | AMAX                               | Digital output MAX  |
| Ū        | Contamination/Error Output (NC)            | O     | Analog Output                  | AOK                                | Digital output OK   |
| E        | Input (analog or digital)                  | O-    | Ground for the Analog Output   | SY In                              | Synchronization In  |
| T        | Teach Input                                | BZ    | Block Discharge                | SY OUT                             | Synchronization OUT |
| Z        | Time Delay (activation)                    | AWV   | Valve Output                   | OLt                                | Brightness output   |
| S        | Shielding                                  | a     | Valve Control Output +         | M                                  | Maintenance         |
| RxD      | Interface Receive Path                     | b     | Valve Control Output 0 V       | rsv                                | reserved            |
| TxD      | Interface Send Path                        | SY    | Synchronization                | Wire Colors according to IEC 60757 |                     |
| RDY      | Ready                                      | SY-   | Ground for the Synchronization | BK                                 | Black               |
| GND      | Ground                                     | E+    | Receiver-Line                  | BN                                 | Brown               |
| CL       | Clock                                      | S+    | Emitter-Line                   | RD                                 | Red                 |
| E/A      | Output/Input programmable                  | ±     | Grounding                      | OG                                 | Orange              |
| IO-Link  | IO-Link                                    | SnR   | Switching Distance Reduction   | YE                                 | Yellow              |
| PoE      | Power over Ethernet                        | Rx+/- | Ethernet Receive Path          | GN                                 | Green               |
| IN       | Safety Input                               | Tx+/- | Ethernet Send Path             | BU                                 | Blue                |
| OSSD     | Safety Output                              | Bus   | Interfaces-Bus A(+)/B(-)       | VT                                 | Violet              |
| Signal   | Signal Output                              | La    | Emitted Light disengageable    | GY                                 | Grey                |
| BL-D+/-  | Ethernet Gigabit bidirect. data line (A-D) | Mag   | Magnet activation              | WH                                 | White               |
| EN0.5422 | Encoder 0-pulse 0-0̄ (TTL)                 | RES   | Input confirmation             | PK                                 | Pink                |
|          |                                            | EDM   | Contacting Monitoring          | GNYE                               | Green/Yellow        |