

# Pressure Sensor

## FX6P203

Part Number

weFlux<sup>2</sup> InoxSens



- Analog output: 4...20 mA
- Compact, laser-welded stainless steel 316L housing
- Very fast response time of < 1 s

### Technical Data

#### Sensor-specific data

|                              |                |
|------------------------------|----------------|
| Measuring Range              | -1...25 bar    |
| Measurement Type             | relative       |
| Maximum overload pressure    | 50 bar         |
| Bursting pressure            | 75 bar         |
| Medium                       | Liquids, gases |
| Pressure response time (t90) | < 1 ms         |
| Measuring error (total)      | ≤ ± 1 %        |

#### 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 membrane |
| Housing Material               | 1.4404                   |
| Material in contact with media | 1.4404; 1.4548; FKM      |
| Degree of Protection           | IP68/IP69K *             |
| Connection                     | M12 × 1; 4-pin           |
| Process Connection             | G 1/4"                   |
| Seal material                  | FKM                      |

#### Safety-relevant Data

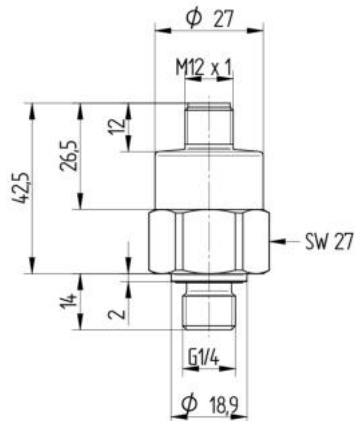
|                        |           |
|------------------------|-----------|
| MTTFd (EN ISO 13849-1) | 3283,16 a |
|------------------------|-----------|

|                                   |     |
|-----------------------------------|-----|
| Analog Output                     | ●   |
| Connection Diagram No.            | 142 |
| Suitable Connection Equipment No. | 2   |
| Suitable Mounting Technology No.  | 919 |

\* Not UL certified

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

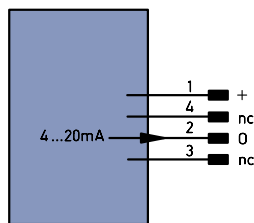




All dimensions in mm (1 mm = 0.03937 Inch)



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#### Legend

|           |                                            |       |                                |
|-----------|--------------------------------------------|-------|--------------------------------|
| +         | Supply Voltage +                           | PT    | Platinum measuring resistor    |
| -         | Supply Voltage 0 V                         | nc    | not connected                  |
| ~         | Supply Voltage (AC Voltage)                | U     | Test Input                     |
| A         | Switching Output (NO)                      | U     | Test Input inverted            |
| Ā         | Switching Output (NC)                      | W     | Trigger Input                  |
| V         | Contamination/Error Output (NO)            | W-    | Ground for the Trigger Input   |
| V̄        | Contamination/Error Output (NC)            | O     | Analog Output                  |
| E         | Input (analog or digital)                  | O-    | Ground for the Analog Output   |
| T         | Teach Input                                | BZ    | Block Discharge                |
| Z         | Time Delay (activation)                    | AWV   | Valve Output                   |
| S         | Shielding                                  | a     | Valve Control Output +         |
| RxD       | Interface Receive Path                     | b     | Valve Control Output 0 V       |
| TxD       | Interface Send Path                        | SY    | Synchronization                |
| RDY       | Ready                                      | SY-   | Ground for the Synchronization |
| GND       | Ground                                     | E+    | Receiver-Line                  |
| CL        | Clock                                      | S+    | Emitter-Line                   |
| E/A       | Output/Input programmable                  | ±     | Grounding                      |
| IO-Link   | IO-Link                                    | SnR   | Switching Distance Reduction   |
| PoE       | Power over Ethernet                        | Rx+/- | Ethernet Receive Path          |
| IN        | Safety Input                               | Tx+/- | Ethernet Send Path             |
| OSSD      | Safety Output                              | Bus   | Interfaces-Bus A(+)/B(-)       |
| Signal    | Signal Output                              | La    | Emitted Light disengageable    |
| BI-D+/-   | Ethernet Gigabit bidirect. data line (A-D) | Mag   | Magnet activation              |
| EN0 RS422 | Encoder 0-pulse 0-0 (TTL)                  | RES   | Input confirmation             |
|           |                                            | EDM   | Contact Monitoring             |

|           |                     |
|-----------|---------------------|
| ENAR5422  | Encoder A/Ā (TTL)   |
| EN0 RS422 | Encoder B/B̄ (TTL)  |
| ENa       | Encoder A           |
| ENb       | Encoder B           |
| AMIN      | Digital output MIN  |
| AMAX      | Digital output MAX  |
| AOK       | Digital output OK   |
| SY In     | Synchronization In  |
| SY OUT    | Synchronization OUT |
| OLt       | Brightness output   |
| M         | Maintenance         |
| rsv       | reserved            |

Wire Colors according to IEC 60757

|      |              |
|------|--------------|
| BK   | Black        |
| BN   | Brown        |
| RD   | Red          |
| OG   | Orange       |
| YE   | Yellow       |
| GN   | Green        |
| BU   | Blue         |
| VT   | Violet       |
| GY   | Grey         |
| WH   | White        |
| PK   | Pink         |
| GNYE | Green/Yellow |

