

Temperature Sensor

FXDD102

Part Number

weFlux² InoxSens



- FDA compliant
- Response time T90: < 2 seconds
- Robust stainless steel housing with IP69K
- Temperature measuring range: -50 ... +200° C

Technical Data

Sensor-specific data

| | |
|-------------------------------|-----------------|
| Sensor element | PT1000, Class B |
| Temperature Measurement Range | -50...200 °C |
| Medium | Liquids, gases |
| Response Time | < 2 s |

Environmental conditions

| | |
|-----------------------|--------------|
| Temperature of medium | -50...200 °C |
| Ambient temperature | -25...80 °C |
| Storage temperature | -25...80 °C |
| Mechanical Strength | 100 bar |
| Shock Resistance | IEC 60751 |
| Vibration resistance | IEC 60751 |

Mechanical Data

| | |
|---------------------------------|----------------------|
| Housing Material | 1.4404 |
| Material in contact with media | 1.4404 |
| Degree of Protection | IP68/IP69K * |
| Connection | M12 × 1; 4-pin |
| Process Connection | Cutting/locking ring |
| Process Connection Length (PCL) | 109 mm |
| Probe Length (PL) | 100 mm |

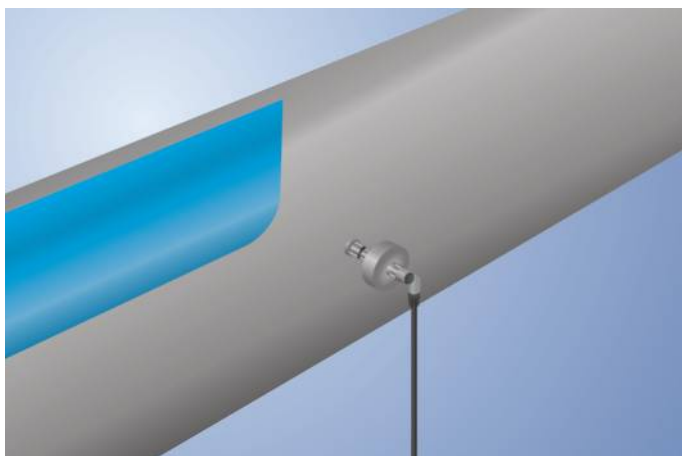
Safety-relevant Data

| | |
|------------------------|-----------|
| MTTFd (EN ISO 13849-1) | 31062,7 a |
|------------------------|-----------|

| | |
|------------------------------------|-----------|
| PT1000 | ● |
| Connection Diagram No. | 140 |
| Suitable Connection Technology No. | 21 |
| Suitable Mounting Technology No. | 907 908 |

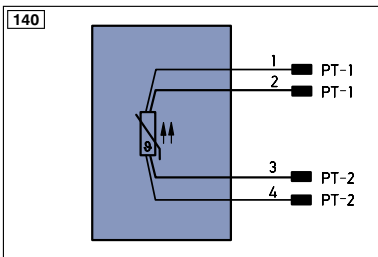
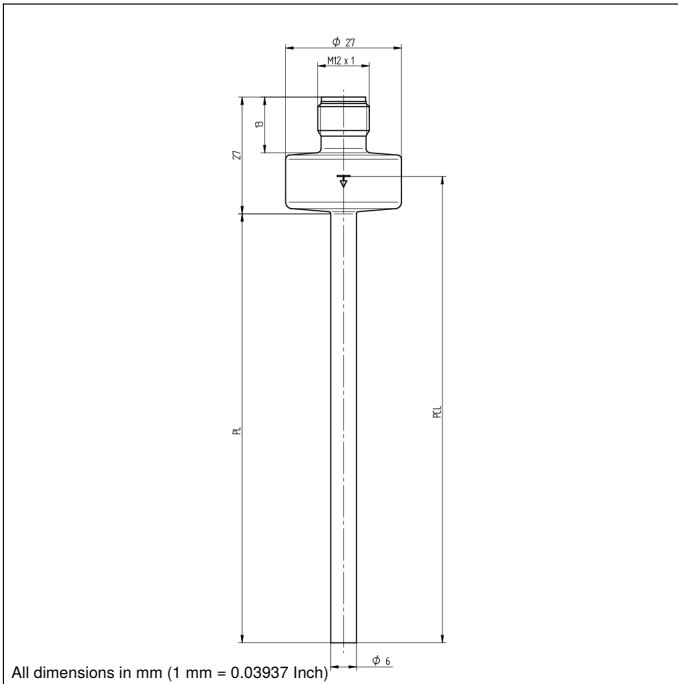
* Tested by wenglor


weFlux² Temperature Sensors ensure precise temperature measurement of liquids and gases in closed piping systems. It's easy to incorporate the standardized PT100/PT1000 resistance value into the controller. The compact housing with a diameter of just 27 mm is made of V4A stainless steel and features an easy-to-clean surface. Thanks to their rugged housing and functional design, the Temperature Sensors are FDA compliant.



Complementary Products

ZH6C00x adapter to G1/4"


Legend

| | | | | | |
|---|--|----------|------------------------------|--------|---------------------|
| + | Supply Voltage + | PT | Platinum measuring resistor | ENa | Encoder A |
| - | Supply Voltage 0 V | nc | not connected | ENb | Encoder B |
| ~ | Supply Voltage (AC Voltage) | U | Test Input | AMIN | Digital output MIN |
| A | Switching Output (NO) | U | Test Input inverted | AMAX | Digital output MAX |
| Ā | Switching Output (NC) | W | Trigger Input | AOK | Digital output OK |
| V | Contamination/Error Output (NO) | O | Analog Output | SY In | Synchronization In |
| ṽ | Contamination/Error Output (NC) | O- | Ground for the Analog Output | SY OUT | Synchronization OUT |
| E | Input (analog or digital) | BZ | Block Discharge | Out | Brightness output |
| T | Teach Input | AW | Valve Output | M | Maintenance |
| Z | Time Delay (activation) | a | Valve Control Output + | | |
| S | Shielding | b | Valve Control Output 0 V | | |
| RxD | Interface Receive Path | SY | Synchronization | | |
| TxD | Interface Send Path | E+ | Receiver-Line | | |
| RDY | Ready | S+ | Emitter-Line | | |
| GND | Ground | ± | Grounding | | |
| CL | Clock | SnR | Switching Distance Reduction | | |
| E/A | Output/Input programmable | Rx+/- | Ethernet Receive Path | | |
|  | IO-Link | Tx+/- | Ethernet Send Path | | |
| PoE | Power over Ethernet | Bus | Interfaces-Bus A(+)/B(-) | | |
| IN | Safety Input | La | Emitted Light disengageable | | |
| OSSD | Safety Output | Mag | Magnet activation | | |
| Signal | Signal Output | RES | Input confirmation | | |
| Bl..D +/- | Ethernet Gigabit bidirect. data line (A-D) | EDM | Contactorm Monitoring | | |
| EN0..RS422 | Encoder 0-pulse 0-0 (TTL) | ENAR5422 | Encoder A/Ā (TTL) | | |
| | | ENBR5422 | Encoder B/B̄ (TTL) | | |

Wire Colors according to DIN IEC 757

| | |
|------|--------------|
| 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 |

