# Temperature Sensor

## FXDD018

Part Number

weFlux² InoxSens

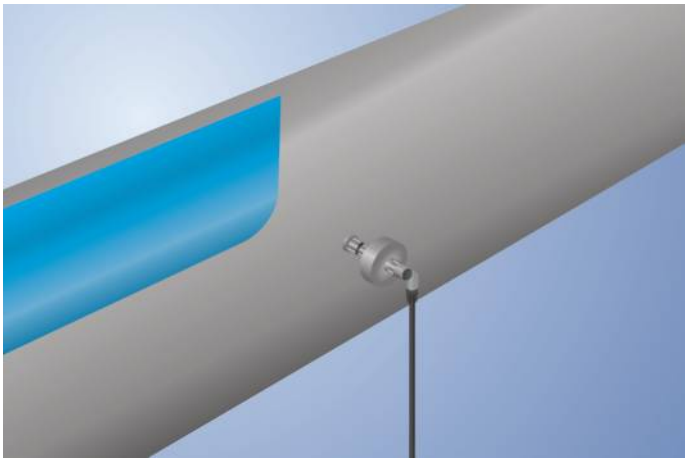
- **FDA compliant**
- **Response time T90: < 2 seconds**
- **Robust stainless steel housing with IP69K**
- **Temperature measuring range: -50 ... +200° C**

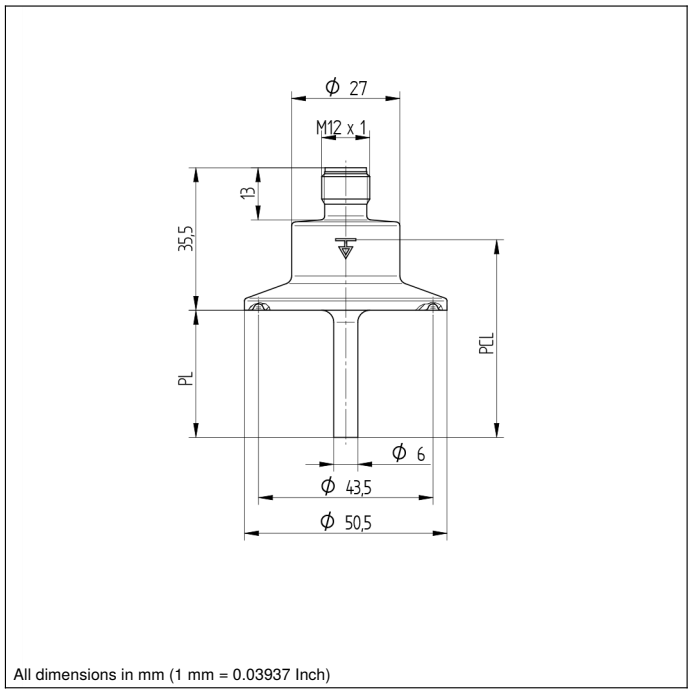
### Technical Data

| | |
|---|---|
| **Sensor-specific data** | |
| Sensor element | PT100, 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 |
| Pressure Resistance | 25 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 | Clamp diameter: 50,5 mm |
| Process Connection Length (PCL) | 214 mm |
| Probe Length (PL) | 200 mm |
| PT100 | ● |
| Connection Diagram No. | 140 |
| Suitable Connection Equipment No. | 2 |

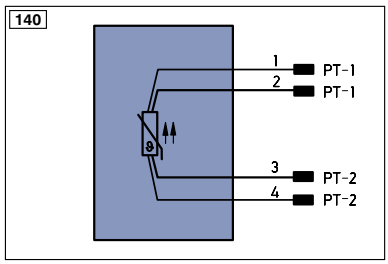
* Tested by wenglor

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.






All dimensions in mm (1 mm = 0.03937 Inch)




Legend

| | | | |
|---|---|---|---|
| + | Supply Voltage + | | |
| – | Supply Voltage 0 V | | |
| ~ | Supply Voltage (AC Voltage) | | |
| A | Switching Output | (NO) | |
| Ā | Switching Output | (NC) | |
| V | Contamination/Error Output | (NO) | |
| V̄ | Contamination/Error Output | (NC) | |
| E | Input (analog or digital) | | |
| T | Teach Input | | |
| Z | Time Delay (activation) | | |
| S | Shielding | | |
| RxD | Interface Receive Path | | |
| TxD | Interface Send Path | | |
| RDY | Ready | | |
| GND | Ground | | |
| CL | Clock | | |
| E/A | Output/Input programmable | | |
| | IO-Link | | |
| PoE | Power over Ethernet | | |
| IN | Safety Input | | |
| OSSD | Safety Output | | |
| Signal | Signal Output | | |
| Bl_D+/- | Ethernet Gigabit bidirect. data line (A-D) | | |
| EN0 RS422 | Encoder 0-pulse 0-0̄ (TTL) | | |

| | |
|---|---|
| PT | Platinum measuring resistor |
| nc | not connected |
| U | Test Input |
| Ū | Test Input inverted |
| W | Trigger Input |
| W– | Ground for the Trigger Input |
| O | Analog Output |
| O– | Ground for the Analog Output |
| BZ | Block Discharge |
| AMV | Valve Output |
| a | Valve Control Output + |
| b | Valve Control Output 0 V |
| SY | Synchronization |
| SY– | Ground for the Synchronization |
| E+ | Receiver-Line |
| S+ | Emitter-Line |
| ⏚ | Grounding |
| SnR | Switching Distance Reduction |
| Rx+/– | Ethernet Receive Path |
| Tx+/– | Ethernet Send Path |
| Bus | Interfaces-Bus A(+)/B(–) |
| La | Emitted Light disengageable |
| Mag | Magnet activation |
| RES | Input confirmation |
| EDM | Contactor Monitoring |

| | |
|---|---|
| ENA RS422 | Encoder A/Ā (TTL) |
| ENB 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 |