# Temperature Sensor

## FXDD005
Part Number

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

### Technical Data

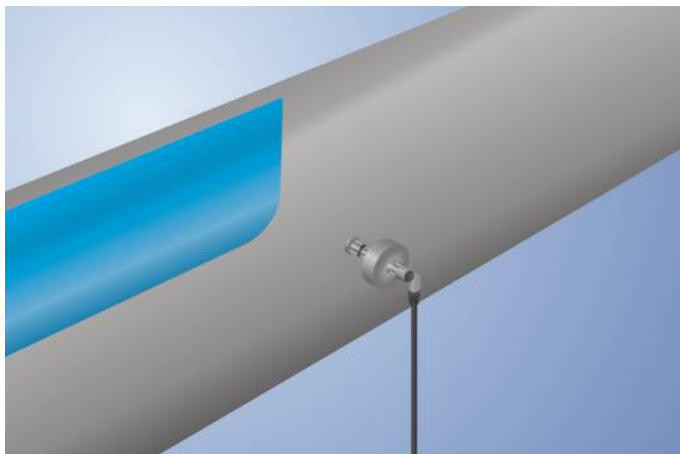| Sensor-specific data | |
|---|---|
| Sensor element | PT100, Class B |
| Temperature Measurement Range | -50...200 °C |
| Medium | Liquids, gases |
| Response Time | < 2 s |
| **Environmental conditions** | |
| Temperature of medium | -50...200 °C |
| Ambient temperature | -25...80 °C |
| Storage temperature | -25...80 °C |
| 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 | G 1/4" |
| Process Connection Length (PCL) | 45 mm |
| Probe Length (PL) | 9,5 mm |
| PT100 | ● |
| Connection Diagram No. | 140 |
| Suitable Connection Technology No. | 21 |
| Suitable Mounting Technology No. | 901 |

* 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

| | |
|---|---|
| Seal G1/4" ZH5G001 | |

All dimensions in mm (1 mm = 0.03937 Inch)

| 140 | |
|---|---|
| 1 | PT-1 |
| 2 | PT-1 |
| 3 | PT-2 |
| 4 | PT-2 |

## 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 |
| BI_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 |
| 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 |
| 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 |

### 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 |