

# Temperature Sensor with IO-Link

## FXTT003

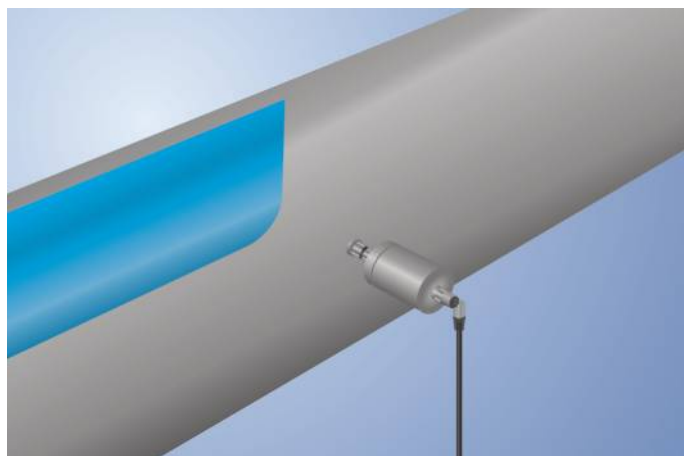
Part Number

weFlux<sup>2</sup> InoxSens



- FDA compliant
- Ready for Industry 4.0 with IO-Link 1.1
- Response time T90: < 2 seconds
- Temperature measuring range: -50 ... +150° C

weFlux<sup>2</sup> Temperature Sensors ensure precise temperature measurement of liquids and gases in closed piping systems. Either 2 switching outputs, 1 switching output and 1 analog output or one 2-wire analog output is available depending on settings and connection configuration. The outputs can be configured as desired via IO-Link in order to flexibly adapt the sensors to the respective application.



### Technical Data

#### Sensor-specific data

Temperature Measurement Range	-50...150 °C
Adjustable Range	-50...150 °C
Medium	Liquids, gases
Measuring error	± 0,5 °C
Resolution	0,01 °C
Response Time	< 2 s

#### Environmental conditions

Temperature of medium	-50...150 °C
Ambient temperature	-25...80 °C
Storage temperature	-25...80 °C
Mechanical Strength	100 bar
EMC	DIN EN 61326-1
Shock Resistance	IEC 60751
Vibration resistance	IEC 60751

#### Electrical Data

2-wire supply power	12...32 V DC
3-wire supply power	12...32 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 15 mA
Switching Outputs	2
Switching Output/Switching Current	± 100 mA
Switching Output Voltage Drop	< 1,5 V DC
Analog Output	0...10 V/4...20 mA
Current Output Load Resistance	(U <sub>b</sub> -U <sub>bmin</sub> )/0,02A
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Interface	IO-Link V1.1

#### Mechanical Data

Setting Method	IO-Link
Housing Material	1.4404
Material in contact with media	1.4404
Degree of Protection	IP68/IP69K *
Connection	M12 × 1; 4-pin
Process Connection	Sealing cone M18 × 1,5
Process Connection Length (PCL)	132 mm
Probe Length (PL)	100 mm

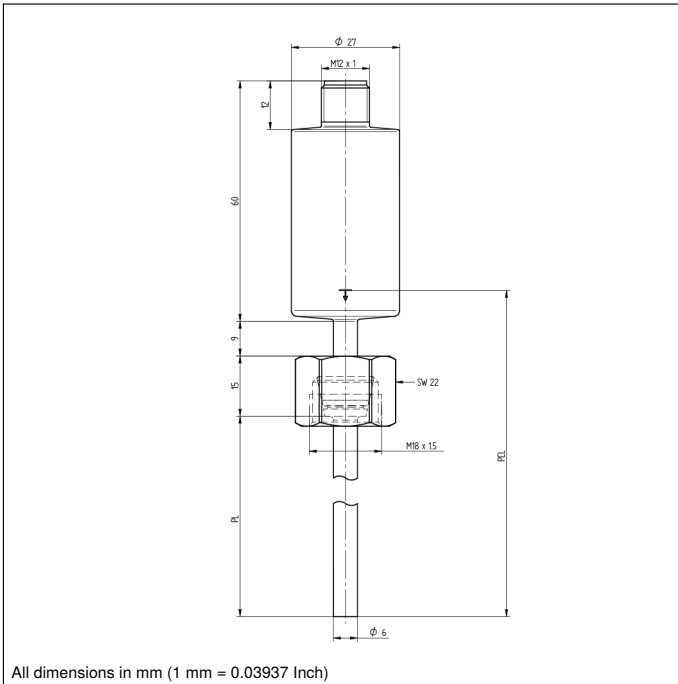
#### Safety-relevant Data

MTTFd (EN ISO 13849-1)	1198,4 a
Analog Output	●
Configurable as PNP/NPN/Push-Pull	●
Switchable to NC/NO	●
IO-Link	●
Connection Diagram No.	139
Suitable Connection Technology No.	21
Suitable Mounting Technology No.	900   901

\* Tested by wenglor

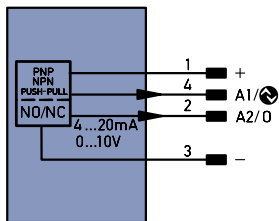
### Complementary Products

IO-Link Master
wTeach2 software DNNF005

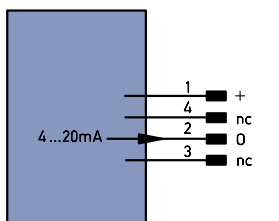


All dimensions in mm (1 mm = 0.03937 Inch)

139



142



**Legend**

<b>+</b> Supply Voltage +	<b>nc</b> not connected	<b>ENa</b> Encoder A
<b>-</b> Supply Voltage 0 V	<b>U</b> Test Input	<b>ENb</b> Encoder B
<b>~</b> Supply Voltage (AC Voltage)	<b>U</b> Test Input inverted	<b>AMIN</b> Digital output MIN
<b>A</b> Switching Output (NO)	<b>W</b> Trigger Input	<b>AMAX</b> Digital output MAX
<b>Ā</b> Switching Output (NC)	<b>O</b> Analog Output	<b>AOck</b> Digital output OK
<b>V</b> Contamination/Error Output (NO)	<b>O-</b> Ground for the Analog Output	<b>SY In</b> Synchronization In
<b>V̄</b> Contamination/Error Output (NC)	<b>BZ</b> Block Discharge	<b>SY OUT</b> Synchronization OUT
<b>E</b> Input (analog or digital)	<b>AWV</b> Valve Output	<b>Out</b> Brightness output
<b>T</b> Teach Input	<b>a</b> Valve Control Output +	<b>M</b> Maintenance
<b>Z</b> Time Delay (activation)	<b>b</b> Valve Control Output 0 V	
<b>S</b> Shielding	<b>SY</b> Synchronization	
<b>RxD</b> Interface Receive Path	<b>E+</b> Receiver-Line	
<b>TxD</b> Interface Send Path	<b>S+</b> Emitter-Line	
<b>RDY</b> Ready	<b>±</b> Grounding	
<b>GND</b> Ground	<b>SnR</b> Switching Distance Reduction	
<b>CL</b> Clock	<b>Rx+/-</b> Ethernet Receive Path	
<b>E/A</b> Output/Input programmable	<b>Tx+/-</b> Ethernet Send Path	
<b>IO-Link</b>	<b>Bus</b> Interfaces-Bus A(+)/B(-)	
<b>PoE</b> Power over Ethernet	<b>La</b> Emitted Light disengageable	
<b>IN</b> Safety Input	<b>Mag</b> Magnet activation	
<b>OSSD</b> Safety Output	<b>RES</b> Input confirmation	
<b>Signal</b> Signal Output	<b>EDM</b> Contactor Monitoring	
<b>Bl..D +/-</b> Ethernet Gigabit bidirect. data line (A-D)	<b>ENAR5422</b> Encoder A/Ā (TTL)	
<b>EN0 R5422</b> Encoder 0-pulse 0-0̄ (TTL)	<b>ENBR5422</b> Encoder B/B̄ (TTL)	

**Wire Colors according to DIN IEC 757**

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

