Temperature Sensor

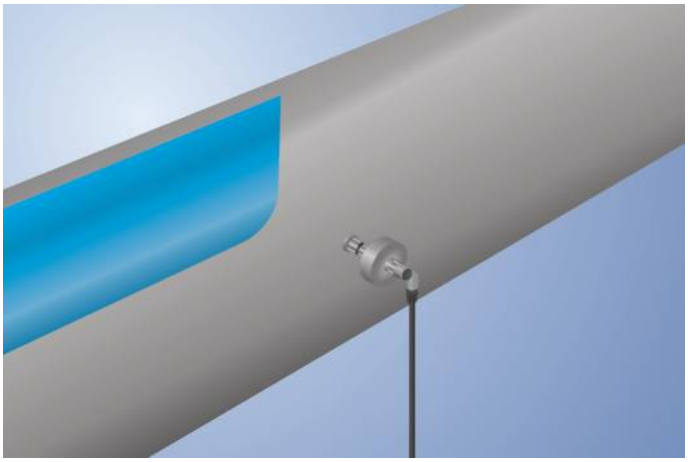
FXDD002

Part Number

weFlux² InoxSens

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

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.



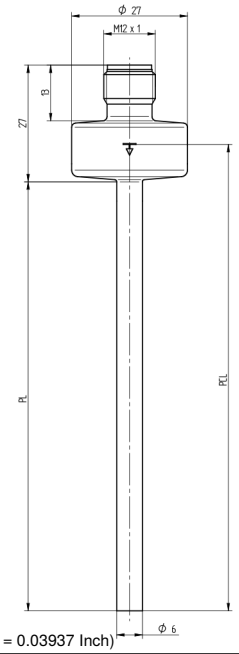
Technical Data

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	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
PT100	●
Connection Diagram No.	140
Suitable Connection Technology No.	21
Suitable Mounting Technology No.	907 908

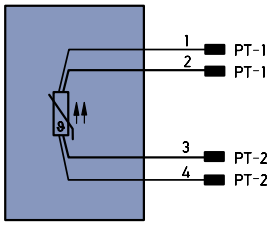
* Tested by wenglor

Complementary Products

ZH6C00x adapter to G1/4"



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
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