

Temperature Sensor

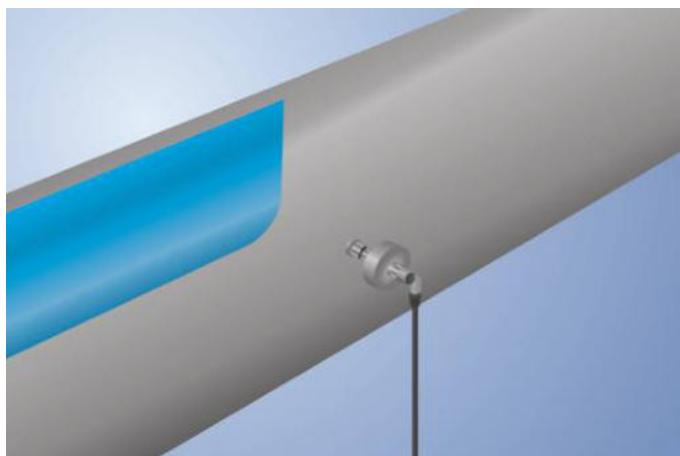
FXDD002

Part Number



- **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
Pressure Resistance	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 x 1; 4-pin
Process Connection	Cutting/locking ring
Process Connection Length (PCL)	109 mm
Probe Length (PL)	100 mm

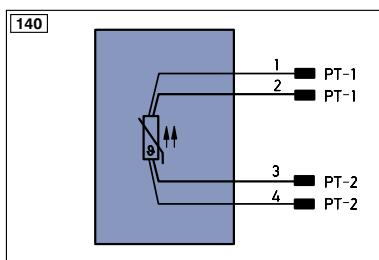
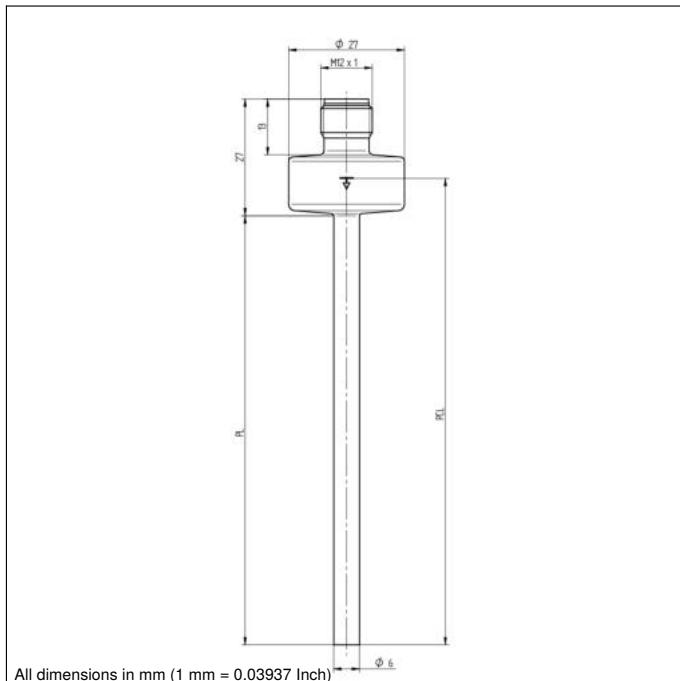
Safety-relevant Data

MTTFd (EN ISO 13849-1)	31062,7 a
PT100	●
Connection Diagram No.	140
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	907 908

* Tested by wenglor

Complementary Products

ZH6C00x Adapter to G1/4"


Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	Ü	Test Input inverted
Ä	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ü	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	Awv	Valve Output
S	Shielding	a	Valve Control Output +
		b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	E-	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
SSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BLD	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
EN0542	Encoder 0-pulse 0-0 (TTL)	EDM	Contactor Monitoring

EN0542 Encoder A/Ä (TTL)

EN0542 Encoder B/B (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

