# Temperature Sensor

FXDD003

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
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 × 1; 4-pin
Process Connection	Cutting/locking ring
Process Connection Length (PCL)	209 mm
Probe Length (PL)	200 mm
PT100	●
Connection Diagram No.	140
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	907 908

* 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.
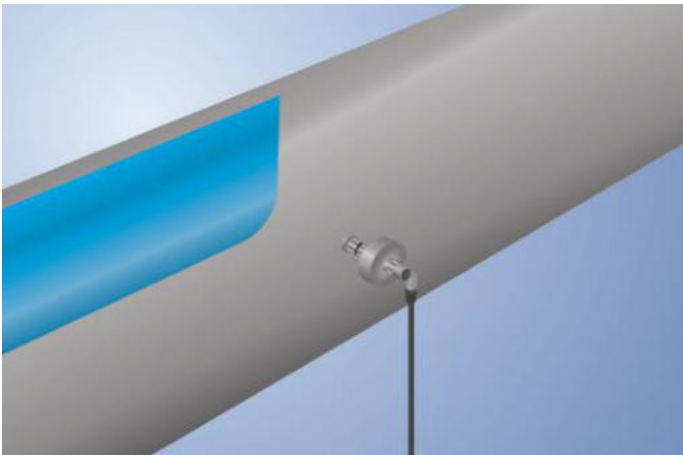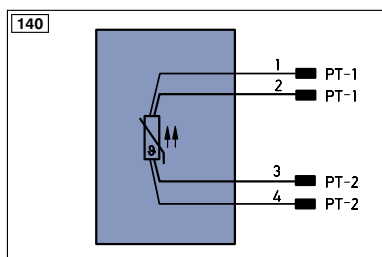

Complementary Products

ZH6C00x Adapter to G1/4"	
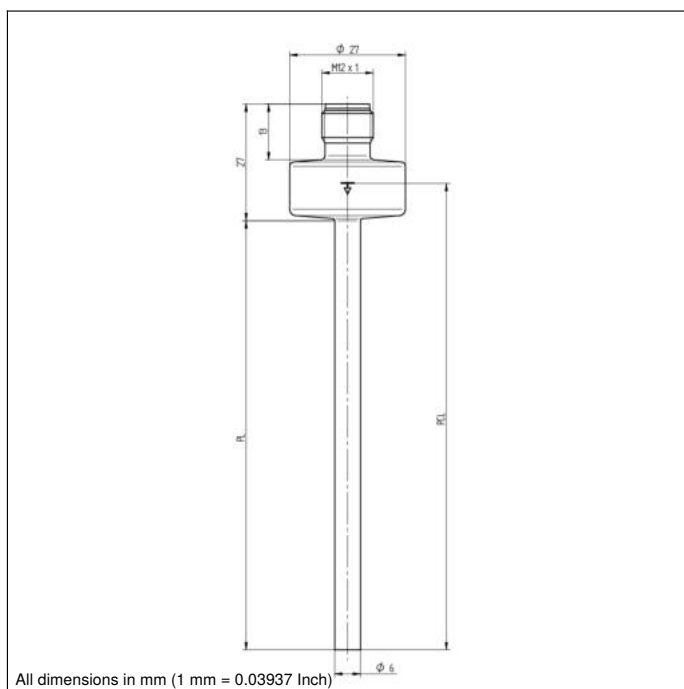
All dimensions in mm (1 mm = 0.03937 Inch)

140

1 — PT-1
2 — PT-1
3 — PT-2
4 — PT-2

Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN ARS422	Encoder A/Ā (TTL)		
–	Supply Voltage 0 V	nc	not connected	EN BRS422	Encoder B/B̄ (TTL)		
~	Supply Voltage (AC Voltage)	U	Test Input	EN A	Encoder A		
A	Switching Output (NO)	Ū	Test Input inverted	EN B	Encoder B		
Ā	Switching Output (NC)	W	Trigger Input	A MIN	Digital output MIN		
V	Contamination/Error Output (NO)	W–	Ground for the Trigger Input	A MAX	Digital output MAX		
V̄	Contamination/Error Output (NC)	O	Analog Output	A OK	Digital output OK		
E	Input (analog or digital)	O–	Ground for the Analog Output	SY In	Synchronization In		
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT		
Z	Time Delay (activation)	A MW	Valve Output	O LT	Brightness output		
S	Shielding	a	Valve Control Output +	M	Maintenance		
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved		
TxD	Interface Send Path	SY	Synchronization		Wire Colors according to IEC 60757		
RDY	Ready	SY–	Ground for the Synchronization	BK	Black		
GND	Ground	E+	Receiver-Line	BN	Brown		
CL	Clock	S+	Emitter-Line	RD	Red		
E/A	Output/Input programmable	⏚	Grounding	OG	Orange		
⌾	IO-Link	SnR	Switching Distance Reduction	YE	Yellow		
PoE	Power over Ethernet	Rx+/–	Ethernet Receive Path	GN	Green		
IN	Safety Input	Tx+/–	Ethernet Send Path	BU	Blue		
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(–)	VT	Violet		
Signal	Signal Output	La	Emitted Light disengageable	GY	Grey		
BI_D+/–	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White		
EN 0RS422	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink		
		EDM	Contactor Monitoring	GNYE	Green/Yellow		