Temperature Sensor

FXDD019
Part Number

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

Technical Data

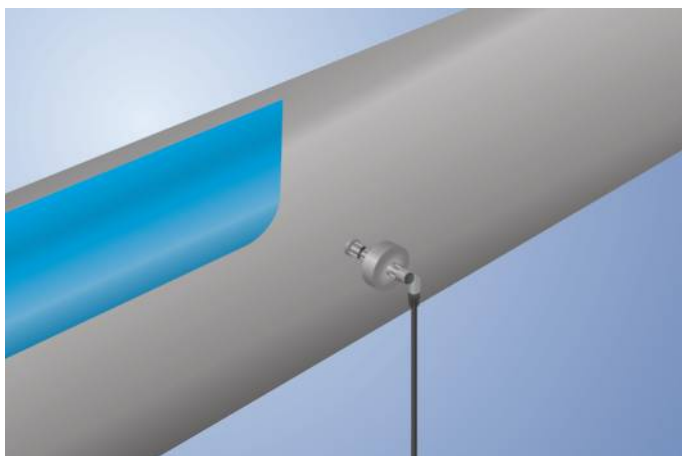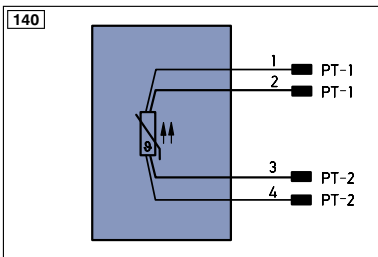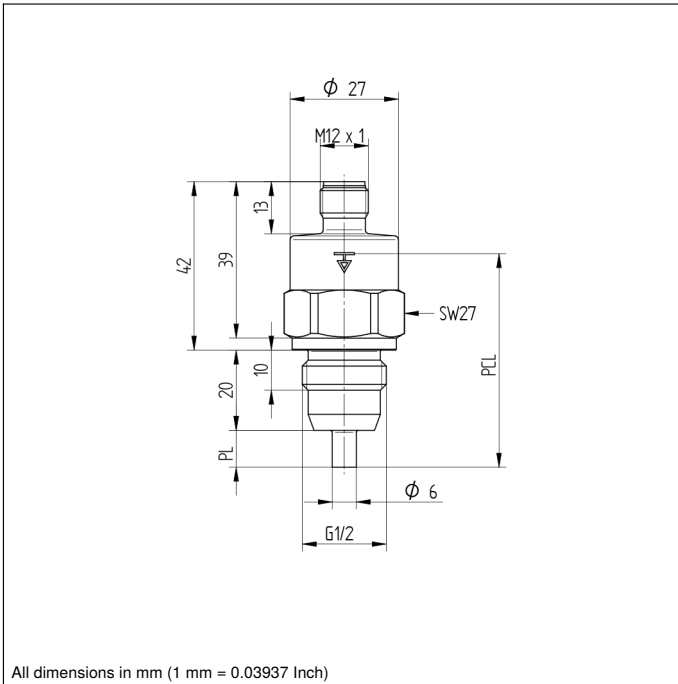| Sensor-specific data	
Sensor element	PT100, Class B
Temperature Measurement Range	-50...200 °C
Medium	Liquids, gases
Response Time	< 2 s
Environmental conditions	
Temperature of medium	-50...200 °C
Ambient temperature	-25...80 °C
Storage temperature	-25...80 °C
Pressure Resistance	100 bar
Shock Resistance	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	G 1/2" CIP-capable
Process Connection Length (PCL)	243,5 mm
Probe Length (PL)	200 mm
PT100	●
Connection Diagram No.	140
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	906

* 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.

Fluid Sensors

All dimensions in mm (1 mm = 0.03937 Inch)

Dimensions: Ø 27, M12 x 1, 13, 39, 42, SW27, PCL, 10, 20, PL, G1/2, Ø 6

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