Temperature Sensor

FXDD102

Part Number

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

Technical Data

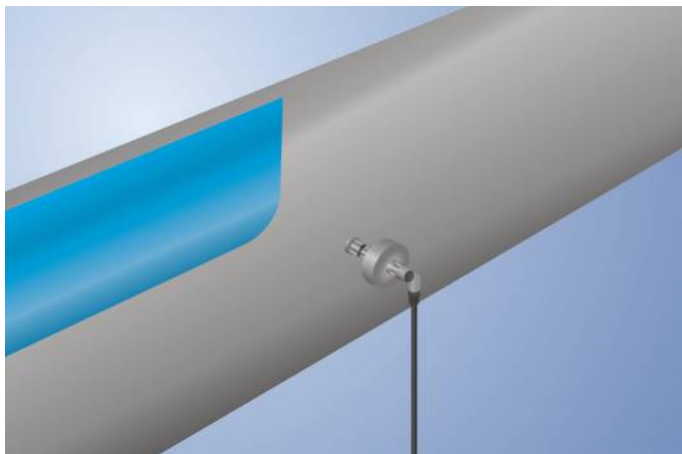| Sensor-specific data	
Sensor element	PT1000, Class B
Temperature Measurement Range	-50...200 °C
Medium	Liquids, gases
Response Time	< 2 s
Environmental conditions	
Temperature of medium	-50...200 °C
Ambient temperature	-25...80 °C
Storage temperature	-25...80 °C
Pressure Resistance	100 bar
Shock Resistance	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)	109 mm
Probe Length (PL)	100 mm
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	31062,7 a
PT1000	●
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"

Fluid Sensors

All dimensions in mm (1 mm = 0.03937 Inch)

φ 27
M12 x 1

140

1	PT-1
2	PT-1
3	PT-2
4	PT-2
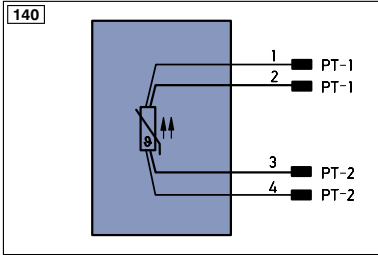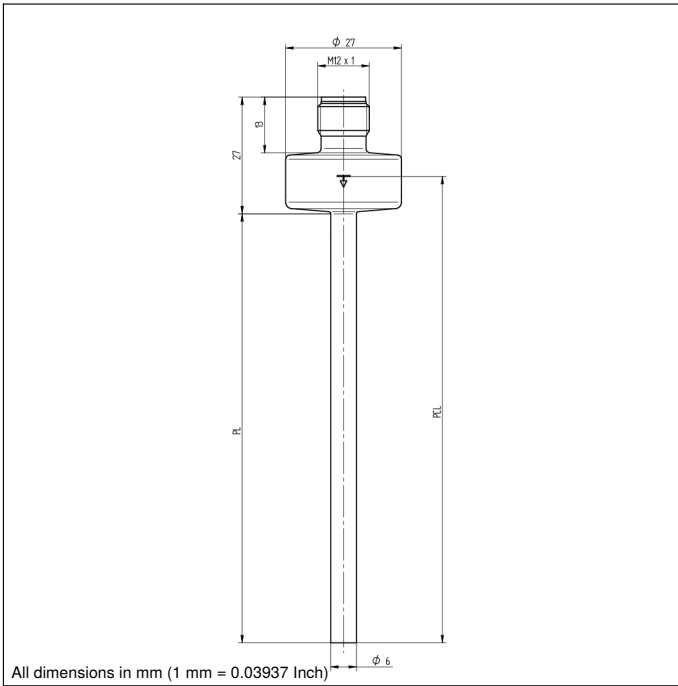
Legend

+	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