

Temperature Sensor with IO-Link

FXTT020

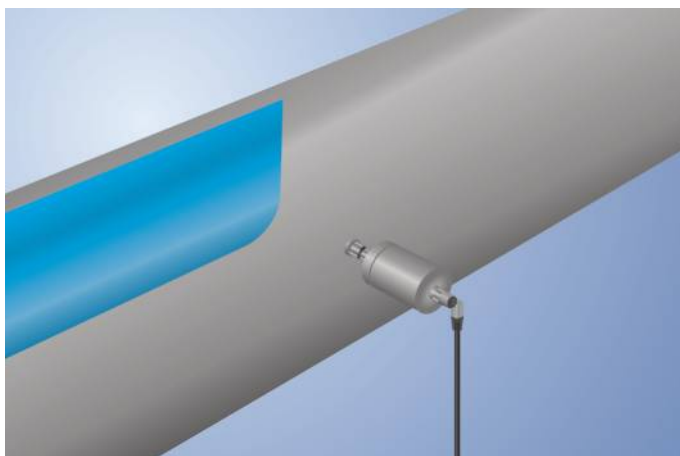
Part Number

weFlux² InoxSens



- FDA compliant
- Ready for Industry 4.0 with IO-Link 1.1
- Response time T90: < 2 seconds
- Temperature measuring range: -50 ... +150° C

weFlux² Temperature Sensors ensure precise temperature measurement of liquids and gases in closed piping systems. Either 2 switching outputs, 1 switching output and 1 analog output or one 2-wire analog output is available depending on settings and connection configuration. The outputs can be configured as desired via IO-Link in order to flexibly adapt the sensors to the respective application.



Technical Data

Sensor-specific data

Temperature Measurement Range	-50...150 °C
Adjustable Range	-50...150 °C
Medium	Liquids, gases
Measuring error	± 0,5 °C
Resolution	0,01 °C
Response Time	< 2 s

Environmental conditions

Temperature of medium	-50...150 °C
Ambient temperature	-25...80 °C
Storage temperature	-25...80 °C
Mechanical Strength	100 bar
EMC	DIN EN 61326-1
Shock Resistance	IEC 60751
Vibration resistance	IEC 60751

Electrical Data

2-wire supply power	12...32 V DC
3-wire supply power	12...32 V DC
Current Consumption (U _b = 24 V)	< 15 mA
Switching Outputs	2
Switching Output/Switching Current	± 100 mA
Switching Output Voltage Drop	< 1,5 V DC
Analog Output	0...10 V/4...20 mA
Current Output Load Resistance	(U _b -U _{bmin})/0,02A
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Interface	IO-Link V1.1

Mechanical Data

Setting Method	IO-Link
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"
Process Connection Length (PCL)	115,5 mm
Probe Length (PL)	75 mm

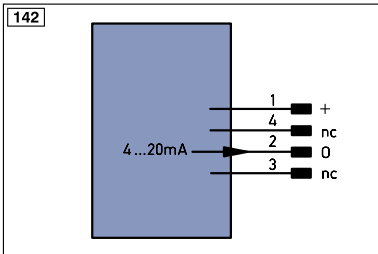
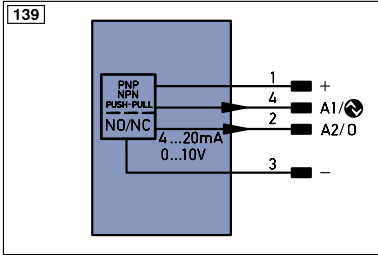
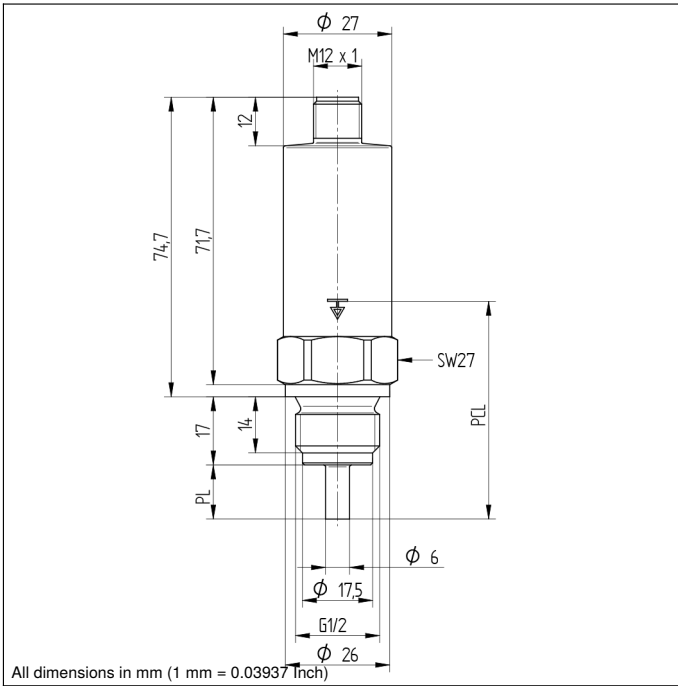
Analog Output	●
Configurable as PNP/NPN/Push-Pull	●
Switchable to NC/NO	●
IO-Link	●

Connection Diagram No.	139
Suitable Connection Equipment No.	21
Suitable Mounting Technology No.	903

* Tested by wenglor

Complementary Products

IO-Link Master Software	
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Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN _{A/RS422}	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN _{B/RS422}	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
Ṽ	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 _{WV}	Valve Output	OL _T	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 DIN IEC 757	
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	S _{nR}	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	L _a	Emitted Light disengageable	GY	Grey
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN _{0/RS422}	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNYE	Green/Yellow

