

Flow Sensor

2 × Analog Output

FXFF902

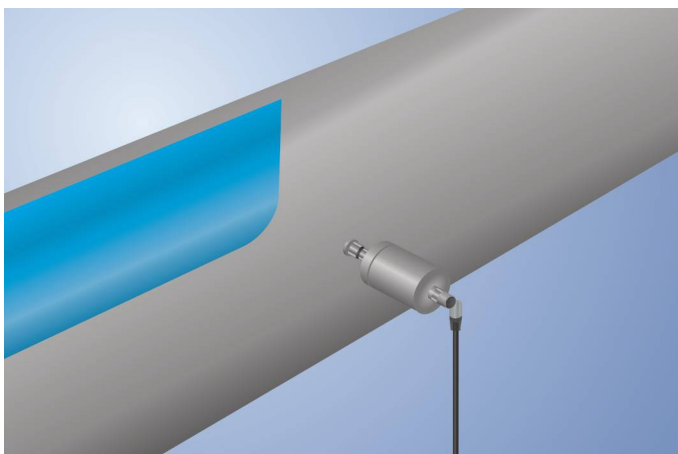
Part Number

weFlux² InoxSens



- 2 analog outputs: 4 ... 20 mA
- A single sensor for flow and temperature
- FDA compliant
- Measurement independent of flow direction and installation position

weFlux² Flow Sensors with two analog outputs simultaneously measure flow velocity and the temperature of aqueous liquids regardless of position and direction of flow. Advantage: The number of measuring points and the diversity of sensor variants are cut in half, and greatest possible flexibility is assured for installation in closed piping systems. The analysis module is integrated into the compact housing.



Technical Data

Sensor-specific data

Measuring Range	10...400 cm/s
Temperature of the medium, flow measurement	0...125 °C**
Temperature of the medium, temperature measurement	-25...150 °C
Setting Range	10...400 cm/s
Medium	Water
Measuring error (total)	≤ 2 %
Temperature measurement error	± 1 °C
MTTFd (EN ISO 13849-1)	1210,41 a
Response time in case of temperature jump	10 s
Step response time T90	< 5 s

Environmental conditions

Ambient temperature	-25...80 °C
Storage temperature	-25...80 °C
Pressure Resistance	100 bar
EMC	DIN EN 61326-1
Shock resistance per DIN IEC 68-2-27	30 g / 11 ms
Vibration resistance per DIN IEC 60068-2-6	5 g (10...2000 Hz)

Electrical Data

Supply Voltage	12...32 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Number of analog outputs	2
Analog Output	4...20 mA
Signal source	Flow
Signal source	Temperature
Response Time	1...5 s
Operating delay time	< 10 s
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

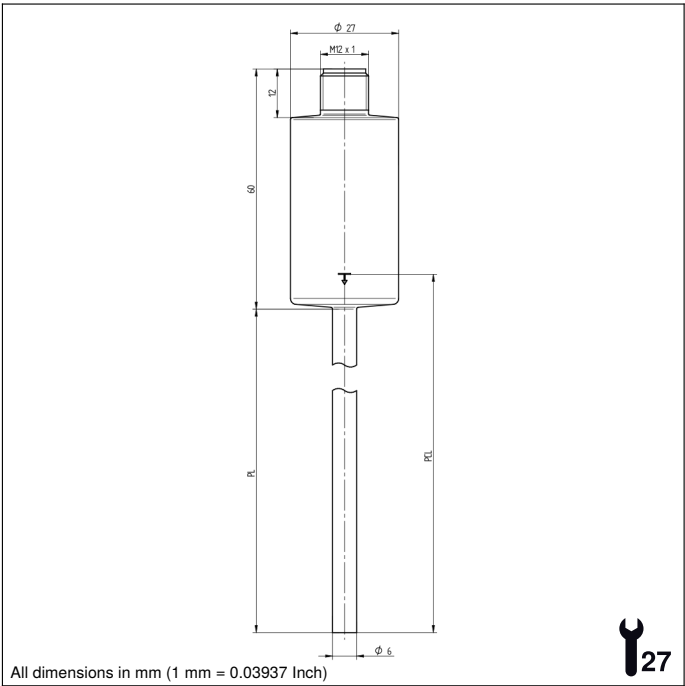
Mechanical Data

Housing Material	Stainless steel, V4A (1.4404/316L)
Material in contact with media	Stainless steel, V4A (1.4404/316L)
Degree of Protection	IP68 *
Degree of Protection	IP69K *
Connection	M12 × 1; 4-pin
Process Connection	Cutting/locking ring
Process Connection Length (PCL)	109 mm
Probe Length (PL)	100 mm
Rod diameter	6 mm
Scope of delivery	1 × initial start-up instructions 1 × sensor

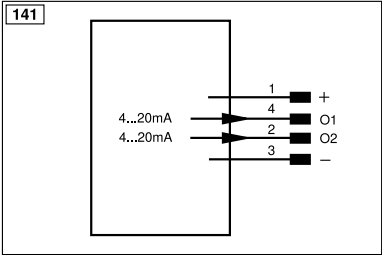
Analog output flow	●
Analog output temperature	●
Connection Diagram No.	141
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	907 908

* Certified by wenglor

** The sensors were calibrated and specified for the medium water. Technically, the sensors are suitable for a medium temperature of up to -25 °C. To achieve a temperature below 0 °C, a different medium must be added to the water. This leads to a different measurement result, which is why an application below 0 °C must be tested individually for the mixture used.



All dimensions in mm (1 mm = 0.03937 Inch)



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)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ū	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
R	Reset input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	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	S+	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(-)
QSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/1 (TTL)	EDM	Contact Monitoring
		ENARs422	Encoder A/Ā (TTL)
		ENBRs422	Encoder B/B̄ (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 DIN 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