Flow Sensor

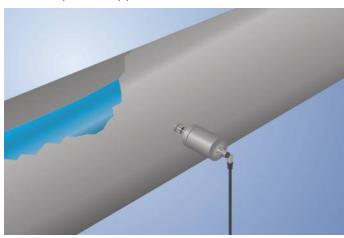
FXFF003

Part Number



- A single sensor for flow and temperature
- FDA compliant
- Measurement independent of flow direction and instillation position
- Ready for Industry 4.0 with IO-Link 1.1

weFlux² Flow Sensors 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. Either 2 switching outputs or 1 switching output and 1 analog output are available depending on application requirements. The outputs can be configured as desired via IO-Link in order to flexibly adapt the sensors to the respective application.



weFlux2 InoxSens

Technical Data

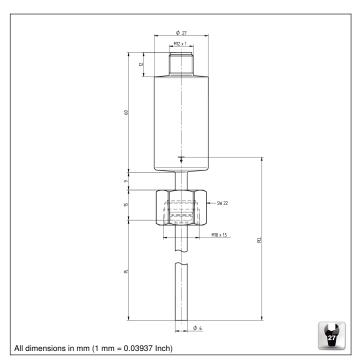
i echnicai Data			
Sensor-specific data			
Measuring Range	10400 cm/s		
Temperature Measurement Range	-25150 °C		
Adjustable Range	10400 cm/s		
Medium	Water		
Measuring error	2 % 30 K 10 s		
Temperature gradient			
Response time in case of temperature jump			
Environmental conditions			
Temperature of medium	-25150 °C		
Ambient temperature	-2580 °C		
Storage temperature	-2580 °C		
Mechanical Strength	100 bar		
EMC	DIN EN 60947-5-9		
Shock resistance per DIN IEC 68-2-27	50 g / 11 ms		
Vibration resistance per DIN IEC 60068-2-6	20 g (102000 Hz)		
Electrical Data	_0 g (.c000 ; iz)		
Supply Voltage	1232 V DC		
Current Consumption (Ub = 24 V)	< 40 mA		
Switching Outputs	2		
Analog Outputs	1		
Analog Output	010 V/420 mA		
Response Time	15 s + 100 mA		
Switching Output/Switching Current			
Switching Output Voltage Drop	< 2 V		
Current Output Load Resistance	(Ub-Ubmin)/0,02A ≤ 20 mA		
Current Load Voltage Output			
Short Circuit Protection			
Reverse Polarity Protection	yes		
Protection Class	III		
Interface	IO-Link		
IO-Link Version	1.1		
Mechanical Data	1.1		
Setting Method	IO-Link		
Housing Material			
Material in contact with media	1.4404		
	1.4404		
Degree of Protection Connection	IP68/IP69K *		
Process Connection	M12 × 1; 4-pin M18×1.5		
	- 7-		
Process Connection Length	82 mm		
Probe Length	50 mm		
Analog output switchable to flow or temperature			
Switching output switchable to flow or temperature			
Switchable to NC/NO			
Configurable as PNP/NPN/Push-Pull			
Connection Diagram No.	139		
Suitable Connection Technology No.	21		
Suitable Mounting Technology No.	900 901 902		

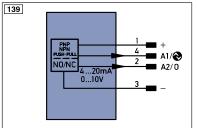
^{*} Tested by wenglor

Complementary Products

Flow calculator software DNNF008
IO-Link Master
wTeach2 software DNNF005







eger	nd		PT	Platinum measuring resistor	ENA	Encoder A	
+	Supply Voltage +		nc	not connected	ENB	Encoder B	
-	Supply Voltage 0 V		U	Test Input	Amin	Digital output MIN	
~	Supply Voltage (AC Voltage)		Ū	Test Input inverted	Амах	Digital output MAX	
A	Switching Output	(NO)	W	Trigger Input	Аок	Digital output OK	
Ā	Switching Output	(NC)	0	Analog Output	SY In	Synchronization In	
V	Contamination/Error Output	(NO)	0-	Ground for the Analog Output	SY OUT	Synchronization OUT	
V	Contamination/Error Output	(NC)	BZ	Block Discharge	OLT	Brightness output	
E	Input (analog or digital)		AMV	Valve Output	М	Maintenance	
Т	Teach Input		а	Valve Control Output +			
Z	Time Delay (activation)		b	Valve Control Output 0 V			
S	Shielding		SY	Synchronization		ire Colors according to	
RxD	Interface Receive Path		E+	Receiver-Line	DIN IE	DIN IEC 757	
TxD	Interface Send Path		S+	Emitter-Line	BK	Black	
RDY	Ready		±	Grounding	BN	Brown	
GND	Ground		SnR	Switching Distance Reduction	RD	Red	
CL	Clock		Rx+/-	Ethernet Receive Path	OG	Orange	
E/A	Output/Input programmable		Tx+/-	Ethernet Send Path	YE	Yellow	
•	IO-Link		Bus	Interfaces-Bus A(+)/B(-)	GN	Green	
PoE	Power over Ethernet		La	Emitted Light disengageable	BU	Blue	
IN	Safety Input		Mag	Magnet activation	VT	Violet	
OSSD	Safety Output		RES	Input confirmation	GY	Grey	
	Signal Output		EDM	Contactor Monitoring	WH	White	
	- Ethernet Gigabit bidirect. data	a line (A-D)	ENARS422	Encoder A/Ā (TTL)	PK	Pink	
	Encoder 0-pulse 0-0 (TTL)			Encoder B/B (TTL)	GNYE	Green/Yellow	









