## **Flow Sensor**

## InoxSens UniFlow

FFXF012 Part Number

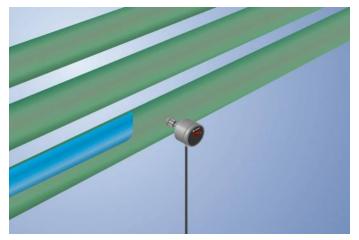


- CIP-capable
- FDA compliant
- Highest precision of its class
- Hygienic design makes it easy to clean
- Measurement independent of flow direction
- Temperature of the medium: 0 ... 100° C (140° C for 24 hours without current measurement)

wenglor UniFlow flow sensors measure the flow rate of aqueous and oily media in closed piping systems.

UniFlow flow sensors are very easy to operate thanks to the removable cover on the integrated display. The highly visible switching status display enables the rapid localization of affected sensors for maintenance processes.

Thanks to the metallic sealing edge on the process connection, no further seals are required.



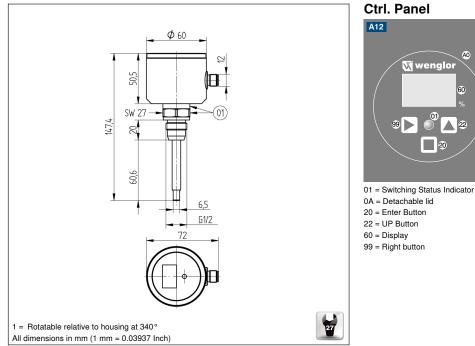
## **Technical Data**

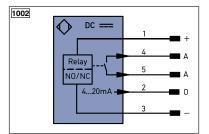
Sensor-specific data			
Selectable measuring range	10300 cm/s		
Measuring range 1	10150 cm/s		
Adjustable range 1	15150 cm/s		
Measuring range 2	20300 cm/s		
Adjustable range 2	30300 cm/s		
Medium	Water		
Measuring error	2 %		
Switching Hysteresis	5 %		
Temperature gradient	30 K		
Response time in case of temperature jump	10 s		
Environmental conditions			
Temperature of medium	0100 °C		
Temperature of the medium, short-term	140 °C		
Ambient temperature	-2070 °C		
Mechanical Strength	60 bar		
EMC	DIN EN 60947-5-9		
Shock resistance per DIN IEC 68-2-27	30 g / 11 ms		
Vibration resistance per DIN IEC 60068-2-6	20 g (102000 Hz)		
Electrical Data			
Supply Voltage	1632 V DC		
Current Consumption (Ub = 24 V)	60 mA		
Switching Outputs	1		
Analog Output	420 mA Temp		
Response Time	15 s		
Relay Output/Switching Current (24 VDC)	< 1 A		
Current Output Load Resistance	< 500 Ohm		
Short Circuit Protection	yes		
Reverse Polarity Protection	yes		
Protection Class			
Mechanical Data			
Setting Method	Menu		
Housing Material	1.4404; PC; EPDM		
Material Control Panel	Polyester		
Material in contact with media	1.4435; 1.4404		
Degree of Protection	IP67/IP69K *		
Connection	M12 × 1; 4-pin		
Process Connection	G 1/2" CIP-capable		
Process Connection Length (PCL)	98 mm		
Probe Length (PL)	60 mm		
Safety-relevant Data			
MTTFd (EN ISO 13849-1)	766,91 a		
Diagnostic Coverage (DC)	0 %		
Service Life TM (EN ISO 13849-1)	20 a		
Analog output temperature			
Relay NO/NC switchable			
Connection Diagram No.	1002		
Control Panel No.	A12		
Suitable Connection Technology No.	35		
Suitable Mounting Technology No.	906		

\* Tested by wenglor

Complementary Products Software







Leger	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	
А	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	
Е	Input (analog or digital)	Awv	Valve Output	м	Maintenance	
т	Teach Input	а	Valve Control Output +	rsv	reserved	
Z	Time Delay (activation)	b	Valve Control Output 0 V			
S	Shielding	SY	Synchronization	Wire Colors according to		
RxD	Interface Receive Path	E+	Receiver-Line	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		Orange	
E/A	Output/Input programmable	Tx+/-	Ethernet Send Path		Yellow	
0	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	Signal Output	EDM	Contactor Monitoring	WH	White	
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	ENARS42	Encoder A/Ā (TTL)	PK	Pink	
ENersez Encoder 0-pulse 0-0 (TTL) ENersez Encoder B/B (TTL) GNYE Green/Yellow						

