Flow Sensor

FFXF017

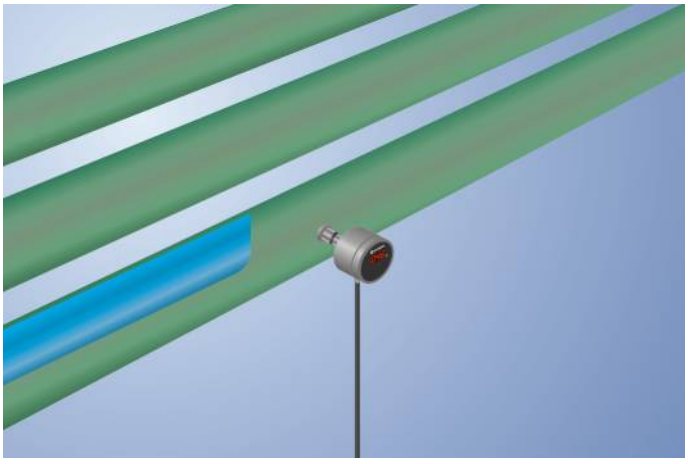
Part Number

InoxSens UniFlow



- **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 ... 60° 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.



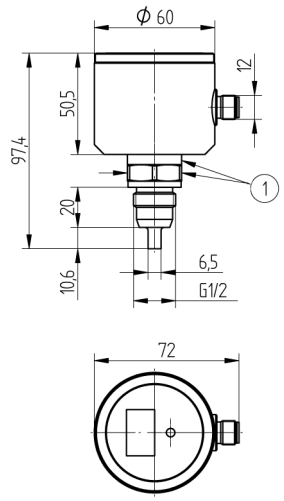
Technical Data

Sensor-specific data	
Measuring Range	15...100 cm/s
Setting Range	20...100 cm/s
Medium	Oil
Measuring error (total)	2 %
MTTFd (EN ISO 13849-1)	1194,55 a
Switching Hysteresis	5 %
Temperature gradient	30 K
Response time in case of temperature jump	10 s
Environmental conditions	
Temperature of medium	0...60 °C
Ambient temperature	-20...70 °C
Pressure Resistance	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 (10...2000 Hz)
Electrical Data	
Supply Voltage	16...32 V DC
Current Consumption (Ub = 24 V)	60 mA
Number of Switching Outputs	1
Analog Output	4...20 mA
Signal source	Flow
Response Time	4...15 s
Switching Output/Switching Current	< 250 mA
Switching Output Voltage Drop	< 2 V
Current Output Load Resistance	< 500 Ohm
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
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)	48 mm
Probe Length (PL)	10 mm
Analog output flow	●
PNP NO	●
Connection Diagram No.	533
Control Panel No.	A12
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	906

* Certified by wenglor

Complementary Products

Software

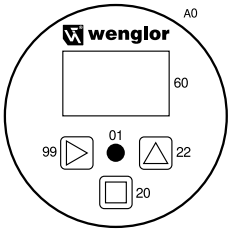


1 = Rotatable relative to housing at 340°
All dimensions in mm (1 mm = 0.03937 Inch)

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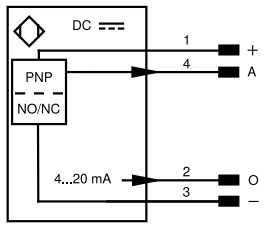
Ctrl. Panel

A12



01 = Switching Status Indicator
0A = Detachable lid
20 = Enter key
22 = Up key
60 = display
99 = Right button

533



Legend					
+	Supply Voltage +	nc	Not connected	ENRS422	Encoder B/B̄ (TTL)
–	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENB	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W–	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
V̄	Contamination/Error Output (NC)	O–	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	AMV	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY–	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	⏚	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
	IO-Link	Rx+/–	Ethernet Receive Path	GN	Green
PoE	ower over Ethernet	Tx+/–	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(–)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
BI_D+/–	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		

Specifications are subject to change without notice V0-31.03.2023