

# Flow Sensor

## FFXF014

Part Number

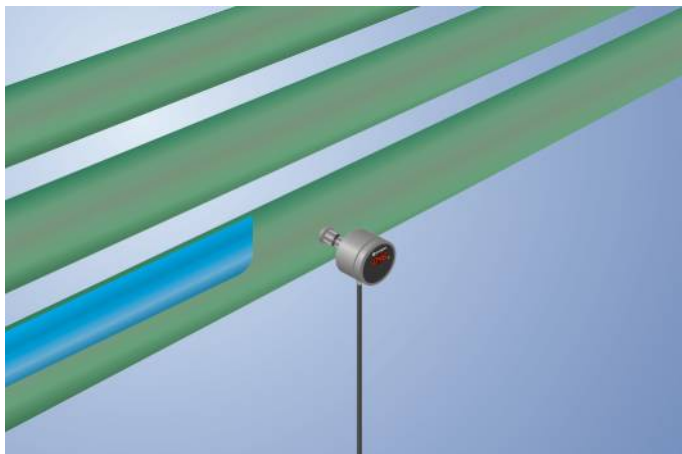
InoxSens UniFlow



- 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 ... 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	10...300 cm/s
Measuring range 1	10...150 cm/s
Setting range 1	15...150 cm/s
Measuring range 2	20...300 cm/s
Setting range 2	30...300 cm/s
Medium	Water
Measuring error (total)	2 %
MTTFd (EN ISO 13849-1)	766,91 a
Switching Hysteresis	5 %
Temperature gradient	30 K
Response time in case of temperature jump	10 s

#### Environmental conditions

Temperature of medium	0...100 °C
Temperature of the medium, short-term	140 °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 (U <sub>b</sub> = 24 V)	60 mA
Number of Switching Outputs	1
Analog Output	0...10 V
Signal source	Flow
Response Time	1...5 s
Relay Output/Switching Current (24 VDC)	< 1 A
Load Current Voltage Output	< 20 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

#### Mechanical Data

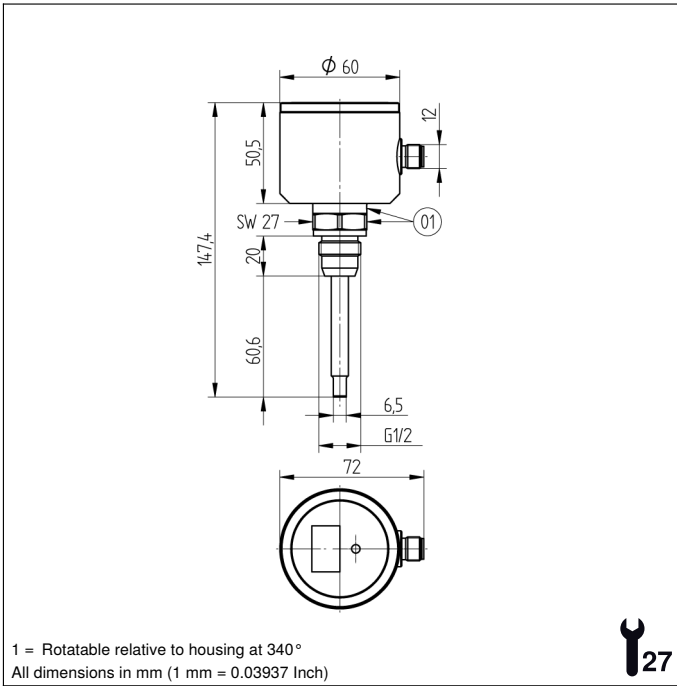
Setting Method	Menu
Housing Material	1.4404; PC; EPDM
Material Control Panel	Polyester
Material in contact with media	1.4435; 1.4404
Degree of Protection	IP67/IP69K *
Connection	M12 × 1; 4-pin
Process Connection	G 1/2" CIP-capable
Process Connection Length (PCL)	98 mm
Probe Length (PL)	60 mm

Analog output flow	●
PNP NO	●
Connection Diagram No.	1003
Control Panel No.	A12
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	906

\* Certified by wenglor

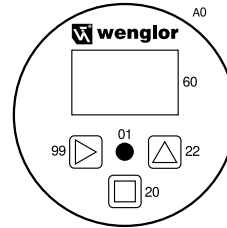
### Complementary Products

Software



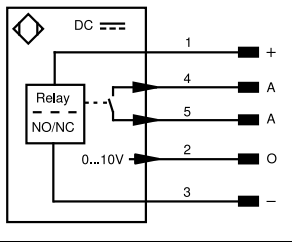
## Ctrl. Panel

A12



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

1003



### Legend

+	Supply Voltage +	nc	Not connected	EN <sub>BR5422</sub>	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	EN <sub>B</sub>	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	Power 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
EN <sub>o</sub> RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contacting Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	EN <sub>AR5422</sub>	Encoder A/Ā (TTL)		

