

Flow Sensor

FFAF047

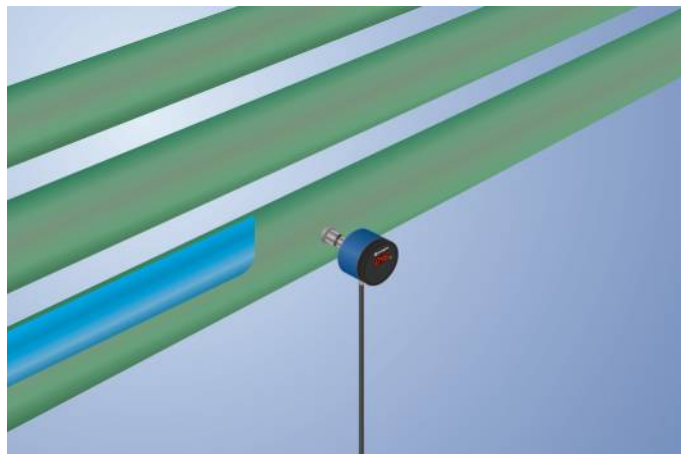
Part Number

UniFlow



- Display can be switched between flow and medium temperature
- Highest precision of its class
- Installation in any position
- Measurement independent of flow direction
- Simple operation via the display
- 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 integrated display. The highly visible switching status display enables the rapid localization of affected sensors for maintenance processes.



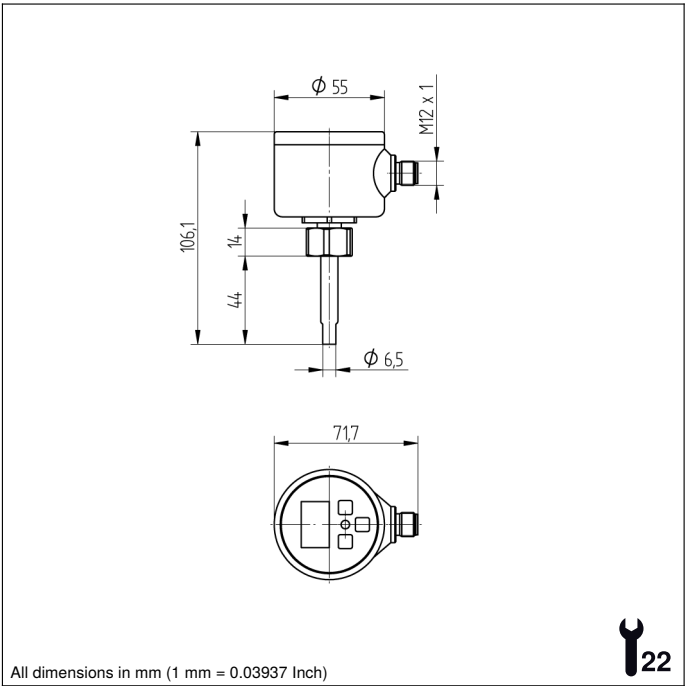
Technical Data

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 _b = 24 V)	60 mA
Number of Switching Outputs	1
Analog Output	4...20 mA
Signal source	Temperature
Response Time	1...5 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	III
Mechanical Data	
Setting Method	Menu
Housing Material	PBT; PC; FKM
Material Control Panel	Polyester
Material in contact with media	1.4435; 1.4404; FKM
Degree of Protection	IP67 *
Connection	M12 × 1; 5-pin
Process Connection	Sealing cone M18 × 1,5
Process Connection Length (PCL)	64 mm
Probe Length (PL)	44 mm
Analog output temperature	●
PNP NO	●
Connection Diagram No.	1002
Control Panel No.	A03
Suitable Connection Equipment No.	35
Suitable Mounting Technology No.	900 901

* Certified by wenglor

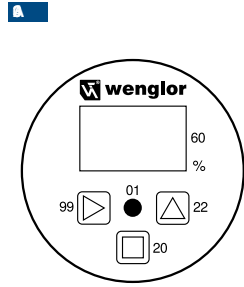
Complementary Products

Software

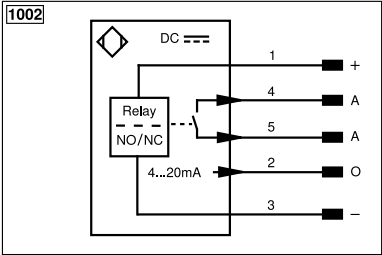


All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



01 = Switching Status Indicator
20 = Enter key
22 = Up key
60 = display
99 = Right button



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ä	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Ÿ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach 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	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	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/Ü (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARIS422	Encoder A/Ä (TTL)
ENBRIS422	Encoder B/B (TTL)	ENA	Encoder A
ENB	Encoder B	AMIN	Digital output MIN
AMAX	Digital output MAX	Ack	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