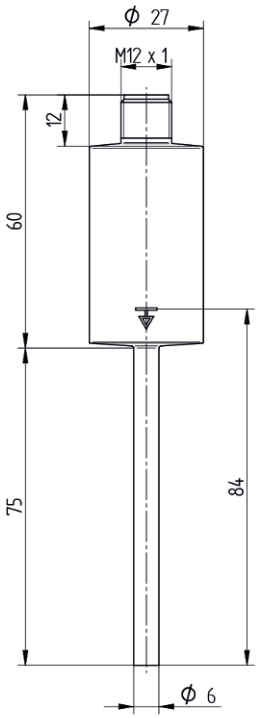
wenglor
the innovative family

Technical Data

FXFF318
Flow Sensor

with IO-Link





EN

Dimensions in mm
Subject to change without notice
Version 0
www.wenglor.com

Technical data

Sensor-specific data	
Measuring Range	10...400 cm/s
Temperature of the medium, flow measurement	0...90 °C**
Temperature of the medium, temperature measurement	0...90 °C
Setting Range	≤ 400 cm/s
Medium	PG25
Temperature measurement error	± 1 °C
MTTFd (EN ISO 13849-1)	1210.41 a
Response time in case of temperature jump	10 s
Step response time T90	< 5 s

Environmental conditions	
Ambient temperature	-25...80 °C
Storage temperature	-25...80 °C
Pressure Resistance	100 bar
EMC	DIN EN 61326-1
Shock resistance per DIN IEC 68-2-27	30 g / 11 ms
Vibration resistance per DIN IEC 60068-2-6	5 g (10...2000 Hz)

Electrical Data	
Supply Voltage	12...32 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
Number of Switching Outputs	2
Number of analog outputs	1
Analog Output	4...20 mA
Signal source	Flow
Response Time	1...5 s
Switching Output/Switching Current	± 100 mA
Switching Output Voltage Drop	< 2 V
Residual Current Switching Output	< 250 µA
Load Current Voltage Output	≤ 20 mA
Operating delay time	< 10 s
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Interface	IO-Link V1.1

Mechanical Data	
Setting Method	IO-Link
Housing Material	Stainless steel, V4A (1.4404/316L)
Material in contact with media	Stainless steel, V4A (1.4404/316L)
Degree of Protection	IP69K * IP68 *
Connection Type	Plug variant

Mechanical Data	
Connection	M12 × 1; 4-pin
Process Connection	Cutting/locking ring
Process Connection Length (PCL)	84 mm
Probe Length (PL)	75 mm
Rod diameter	6 mm

General Data	
Scope of delivery	1 × initial start-up instructions 1 × sensor
Approvals	FDA compliant

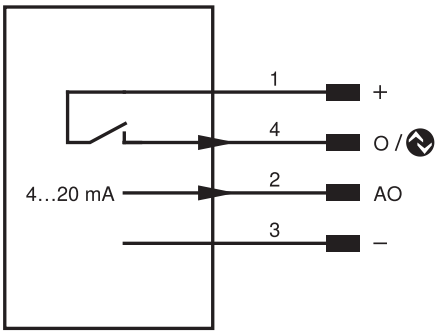
Adjustable parameters	
Output	Analog Output Push-pull NPN PNP
Analog output	0...10 V 4...20 mA
Signal source	Flow Temperature
Circuit	NC NC/NO NO
Other parameters	2 switching points Selectable measurement range

All other parameters can be found in the product documentation.

* Certified by wenglor
** The sensors were factory-calibrated for the PG25 medium and specified for this application. Technically, the sensors are suitable for a temperature of medium down to -25°C. To achieve a temperature below 0°C, the concentration must be increased. This results in a deviating measurement result, which is why use below 0°C must be tested individually for the specific mixture being used.

BMECat data	
eCl@ss 5.1.4	27-27-31-90 Flow control device
eCl@ss 6.x	27-27-31-90 Flow control device
eCl@ss 7.0	27-27-31-90 Flow control device
eCl@ss 7.1	27-27-31-90 Flow control device
eCl@ss 8.x	27-27-31-90 Flow control device
eCl@ss 10.0.1	27-27-31-90 Flow control device

Technical illustrations



Pin	Pin function	Polarity	Circuit	Signal type
1	Supply Voltage +			
2	Analog output			4...20 mA
3	Supply voltage 0 V			
4	Switching output IO-Link	PNP	NO	

