

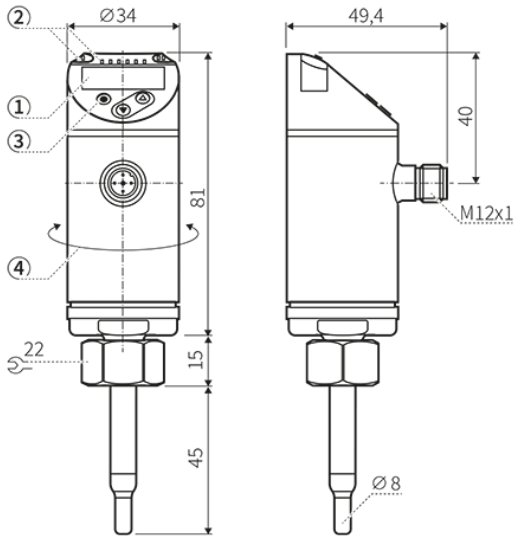
AS005 Flow sensor Programmable M18x1 , 5l



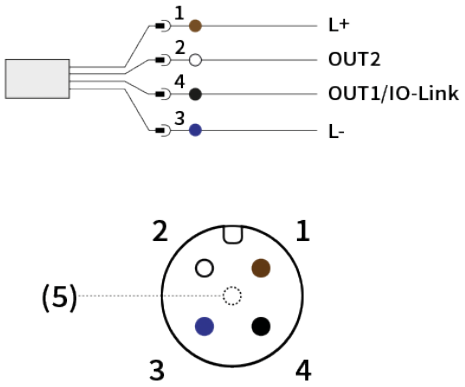
- **For water, air, oils, glycol solutions, low-viscosity oils; different sensitivity curves can be programmed depending on the medium**
- **Colour display signals at first glance whether the process is running within the target range**
- **IO-Link, 4-20mA & digital output**
- **extremely robust and more resistant to malfunctioning**
- **Protection rating IP65/ IP67**

In daily use - proven millions of times over.
We offer 5 years warranty - with money-back guarantee!

Dimensional drawing



Connection & pin assignment



Dimensional drawing legend

1: LEDs (display unit / switching status)

2: 4-digit alphanumeric display

3: Programming button

4: Upper part of the housing can be rotated by 345°

General information

Range of application	Water; glycol solutions; air; oils low-viscosity oils with viscosity: = 40 mm²/s (40 °C) high-viscosity oils with viscosity: > 40 mm²/s (40 °C)
Flow measurement speed of gaseous media	2 ... 100 m/s
Flow measurement speed of liquid media	0.04 ... 3 m/s
Parametrisation options	Hysteresis / window
	Normally open / Normally closed
	Switching logic
	Current /frequency output
	Media selection
	Damping
	Teach function
	Display rotates / can be switched off
	Standard unit of measure
	Colour of process value
Temperature measuring range min.	-20°C
Temperature measuring range max.	90°C
Adjustment range	0 ... 6 m/s (liquid) | 0 ... 200 m/s (gaseous)

Outputs / inputs

Switching output	2 x normally closed / normally open programmable
Analogue output	4 ... 20 mA
	Programmable
	Scalable
Comment on analogue output	When used with an analog output use exclusively sensor cables without LED
IO-Link	Yes

Electrical data

Operating voltage	18 ... 30 V DC
Voltage type	Direct voltage (DC)
Electrical design	PNP
	NPN*
	*Programming buttons
	*IO-Link parameterisation
Current carrying capacity max.	250mA
Voltage drop max.	2.5V
Current consumption max.	100mA
Protection class	III
Short-circuit protection	Yes
Overload-proof	Yes
Reverse polarity protection	Yes

Mechanical data

Materials in contact with the medium	V4A (1.4404)
	FKM
Union nut tightening torque	25 Nm
Material of housing	V4A (1.4404)
	V2A (1.4310)
	PBT-GF 20
	PBT-GF 30
Electrical connection	M12
	4-pin
	Contacts gold-plated
Pressure resistance	100 bar
Process connection	For adapter
	Internal thread
	M18 x 1.5

Accuracy

Resolution	0.02 m/s * | 0.2 °C
Reproducibility	0.05 m/s *
Response dynamics of T05 / T09	1,5 s * (for temperature monitoring)
Comment	* applies to water
	** MV = measured value, MREV = measurement range end value
Accuracy	± (7 % MV+ 2 % MREV) ** | ± 0.3 °C / ± 1 °C
Response time	Water: 0.5 s; glycol: 0.8 s; air: 7 s; oil: 1.8 s (T09 for flow monitoring in each case)

Ambient conditions

Ambient temperature min.	-40°C
Ambient temperature max.	80°C
Protection rating	IP65
	IP67

Additional information

MTTF	212 years
Function display	LED
	Yellow
	Green
	Programming keys
	4-digit display
	Red / green display
Accessories included with delivery	No accessories included
EMC test	DIN EN 60947-5-9
Shock resistance test	DIN EN 60068-2-27
Vibration resistance test	DIN EN 60068-2-6
Approval	CE
	cULus