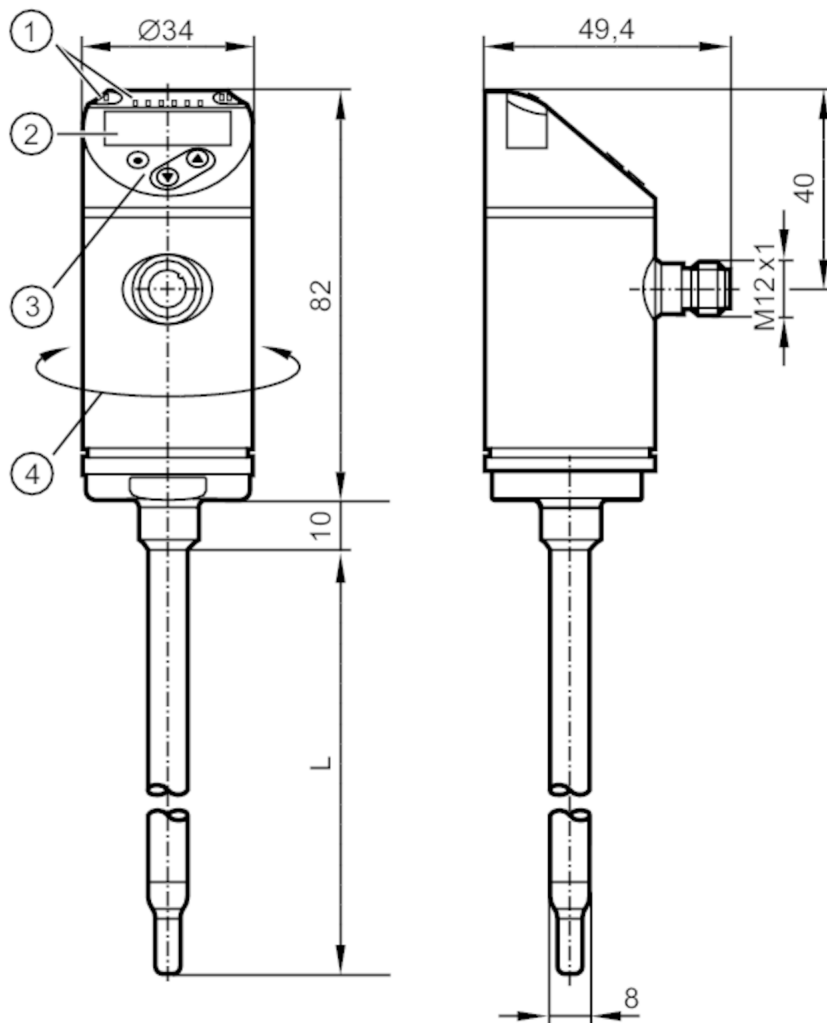


SA4304



Flow sensor

SAEXXXB50KG/US-100



- L 200 mm
- 1 LEDs Display unit
- I, II not used
- 2 alphanumeric display 4-digit red/green
- 3 programming buttons
- 4 upper part of the housing can be rotated 345°

ACS CE CRN c UL LISTED US EAC EC 1935/2004 FCM FDA KTW/W270 Reg31

Product characteristics

Number of inputs and outputs	Number of analogue outputs: 2	
Process connection	diameter \varnothing 8 mm	
Liquids		
Measuring range	[m/s]	0.04...3
Gases		
Measuring range	[m/s]	2...100

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Application	
Special feature	Gold-plated contacts
Media	water; glycol solutions; air; oils
Note on media	low-viscosity oils with viscosity: $\leq 40 \text{ mm}^2/\text{s}$ (40 °C) high-viscosity oils with viscosity: $> 40 \text{ mm}^2/\text{s}$ (40 °C)
Medium temperature [°C]	-20...100
Pressure rating [bar]	50
MAWP (for applications according to CRN) [bar]	50
Electrical data	
Operating voltage [V]	18...30 DC
Current consumption [mA]	< 100
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	10
Inputs / outputs	
Number of inputs and outputs	Number of analogue outputs: 2
Outputs	
Total number of outputs	2
Output signal	analogue signal
Number of analogue outputs	2
Analogue current output [mA]	4...20; (scalable)
Max. load [Ω]	350
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes
Measuring/setting range	
Probe length L [mm]	200
Operating mode	relative; absolutely liquid; absolutely gaseous
Note on setting range	Operating mode: relative
Liquids	
Measuring range [m/s]	0.04...3
Setting range [m/s]	0...6
Gases	
Measuring range [m/s]	2...100
Setting range [m/s]	0...200
Temperature monitoring	
Measuring range [°C]	-20...100
Resolution [°C]	0.2
Analogue start point [°C]	-20...76
Analogue end point [°C]	4...100
In steps of [°C]	0.2

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Accuracy / deviations			
Flow monitoring			
Temperature drift	[cm/s x 1/K]	0,003 m/s x 1/K (< 20 °C; > 70 °C)	
Temperature gradient	[K/min]	100	
Accuracy		± (7 % MW + 2 % MEW); (Für Relativmodus im Bereich der größten Empfindlichkeit mit; water: 20...70 °C; inlet length: 1.5 m; DN25 (DIN 2448); mounting position according to instructions; Accuracy can differ for other media and mounting positions.)	
Repeatability		0,05 m/s; (water; flow velocity: 0,05...3 m/s)	
Temperature monitoring			
Temperature drift		± 0,005 K/°C	
Accuracy	[K]	± 0,3 / ± 1; (water; flow velocity: 0,3...3 m/s / air; flow velocity: > 10 m/s)	
Response times			
Flow monitoring			
Response time	[s]	0.5; (T09; water; glycol: 0,8 s; air: 7 s; oil: 1,8 s; each T09)	
Temperature monitoring			
Dynamic response T05 / T09	[s]	1,5 (T09); (water; flow velocity: 0,3...3 m/s)	
Software / programming			
Parameter setting options		medium selection; Damping; Teach function; display can be rotated and switched off; standard unit of measurement; process value colour	
Operating conditions			
Ambient temperature	[°C]	-40...80	
Storage temperature	[°C]	-40...100	
Protection		IP 65; IP 67	
Tests / approvals			
EMC		DIN EN 60947-5-9	
Shock resistance		DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance		DIN EN 60068-2-6	2 g (10...2000 Hz)
MTTF	[years]		180
UL approval		UL Approval no.	I018
		File number UL	E174189
Mechanical data			
Weight	[g]		311.5
Materials			stainless steel (1.4404 / 316L); PBT-GF20; PBT-GF30
Materials (wetted parts)			stainless steel (1.4404 / 316L)
Process connection			diameter Ø 8 mm
Displays / operating elements			
Display	Display unit	6 x LED, green (% , m/s, l/min, m³/h, °C, 10³)	
	measured values	alphanumeric display, red/green 4-digit	
Remarks			
Remarks		MW = measured value	
		MEW = Final value of the measuring range	
Pack quantity		1 pcs.	
Electrical connection			

Connector: 1 x M12; Contacts: gold-plated

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Connection



colours to DIN EN 60947-5-2

OUT1: analogue output Temperature monitoring

OUT2: analogue output volumetric flow quantity monitoring

Core colours :

BK = black

BN = brown

BU = blue

WH = white