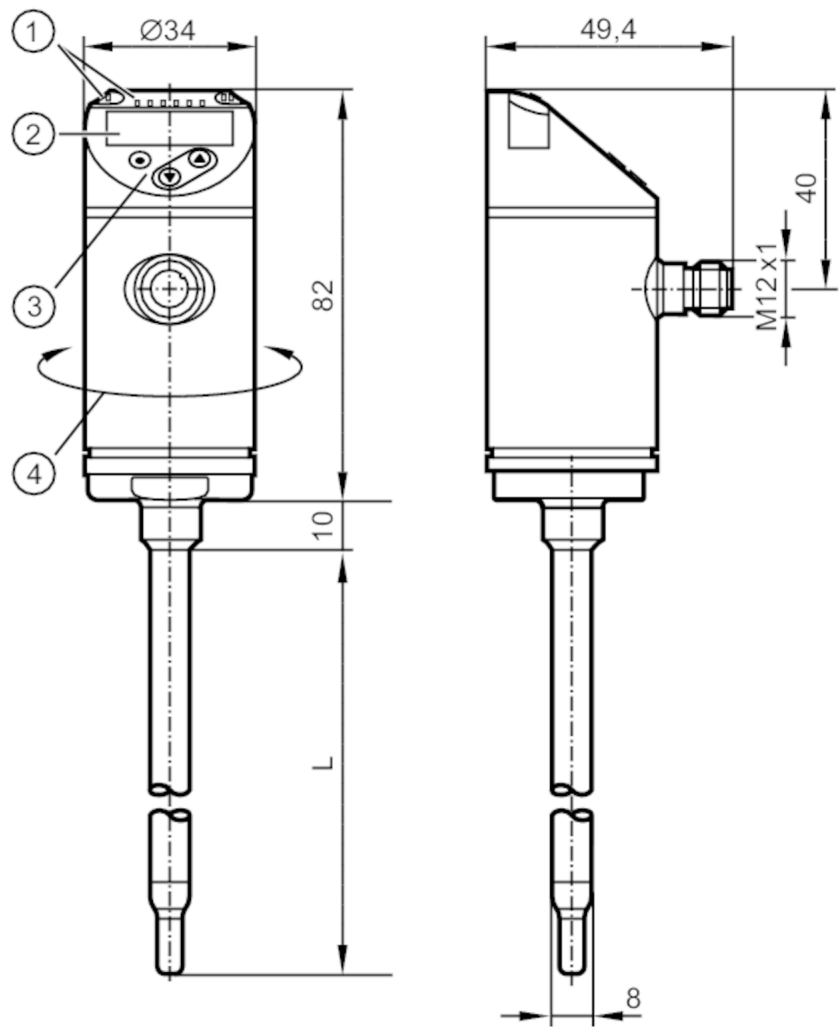


SA4304



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  CRN  US EC 1935/2004 FCM  KTW/W270 Reg31 

Product characteristics

Number of inputs and outputs	Number of analog outputs: 2
Process connection	Clamp fitting Ø 8 mm

Application

System	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	50 bar 5 MPa
MAWP (for applications according to CRN) [bar]	50

SA4304



Flow sensor

SAEXXXB50KG/US-100

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
Measuring principle		calorimetric
Inputs / outputs		
Number of inputs and outputs		Number of analog outputs: 2
Outputs		
Total number of outputs		2
Output signal		analog signal
Number of analog outputs		2
Analog current output	[mA]	4...20; (scalable)
Max. load	[Ω]	350
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Measuring/setting range		
Probe length L	[mm]	200
Operating mode		relative; absolutely liquid; absolutely gaseous; (absolute: reference measurement recommended; Factory setting: relative)
Temperature monitoring		
Measuring range	[°C]	-20...100
Resolution	[°C]	0.2
Analog start point	[°C]	-20...76
Analog end point	[°C]	4...100
In steps of	[°C]	0.2
Liquid media - absolute operating mode		
Setting range	[m/s]	0.04...3
Greatest sensitivity	[m/s]	0.04...3
Liquid media - relative operating mode		
Setting range	[m/s]	0.04...6
Greatest sensitivity	[m/s]	0.04...3
Gases - operating mode "absolute"		
Setting range	[m/s]	0...100
Greatest sensitivity	[m/s]	30...100
Gases - operating mode "relative"		
Setting range	[m/s]	0...200
Greatest sensitivity	[m/s]	30...100
Accuracy / deviations		
Temperature drift	[cm/s x 1/K]	0,003 m/s x 1/K (< 20 °C; > 70 °C)

SA4304



Flow sensor

SAEXXXB50KG/US-100

Max. temperature gradient of [K/min] medium		100	
Absolute operating mode			
Repeatability		0,05 m/s; (water; Flow velocity: 0,05...3 m/s)	
Relative operating mode			
Accuracy		± (7 % MW + 2 % MEW); (for relative mode in the range of maximum sensitivity under the following conditions:; 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)	
Reaction times			
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 color	
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 number I018 File number UL E174189	
Mechanical data			
Weight [g]		312.5	
Housing		tubular	
Dimensions [mm]		Ø 8 / L = 292	
Material		stainless steel (1.4404 / 316L); PBT-GF20; PBT-GF30	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		Clamp fitting 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.	

SA4304



Flow sensor

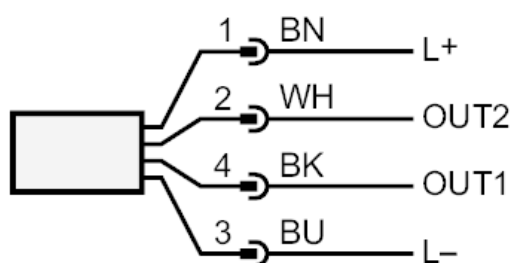
SAEXXXB50KG/US-100

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1: analog output Temperature monitoring
OUT2: analog output Volumetric flow quantity monitoring
Core colors :
BK = black
BN = brown
BU = blue
WH = white