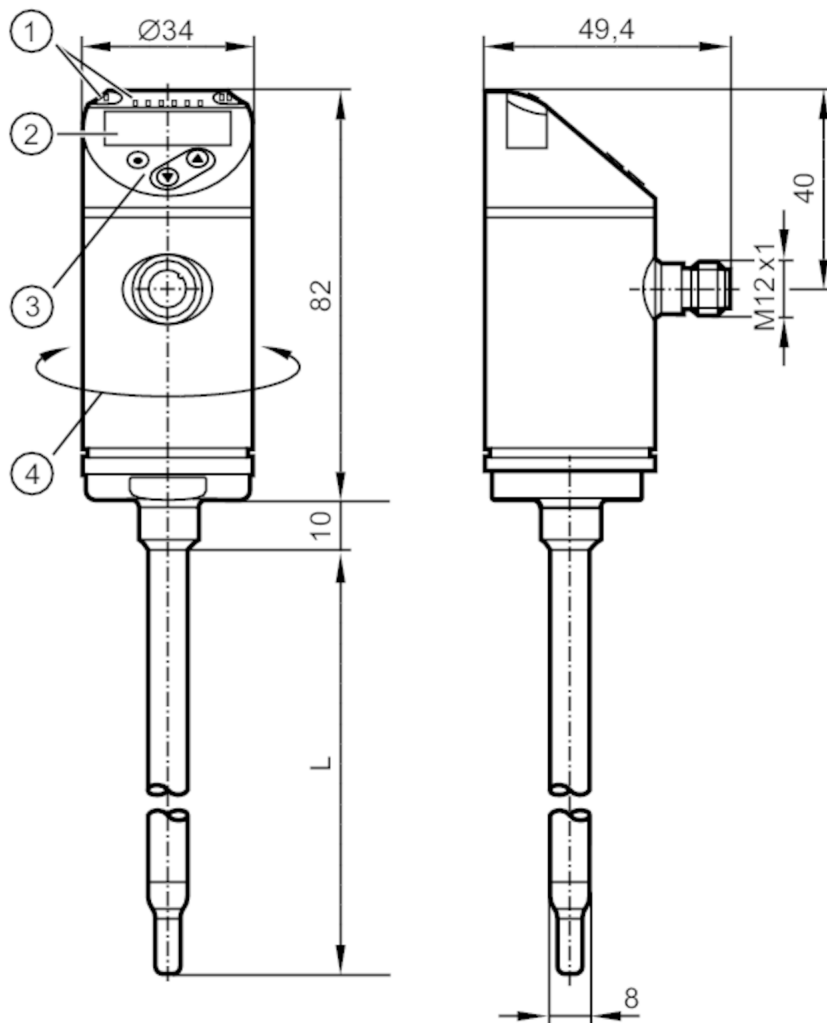


SA4104



Flow sensor

SAEXXXB50KG/US-100



- L 100 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 cUL_{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] | 100 |
| 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 | 5 g (10...2000 Hz) |
| MTTF | [years] | | 180 |
| UL approval | | UL Approval no. | I018 |
| | | File number UL | E174189 |
| Mechanical data | | | |
| Weight | [g] | | 260.5 |
| 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