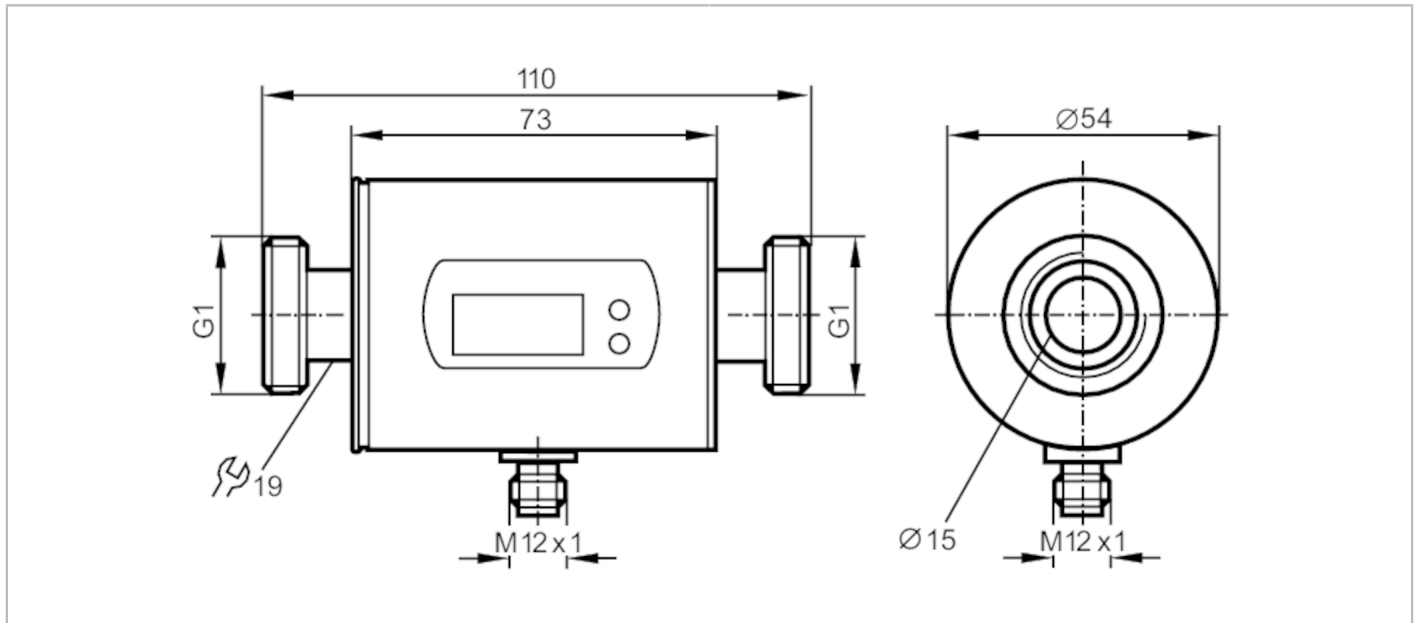


SM8004



Magnetic-inductive flow meter

SMR11GGX50KG/US100



Product characteristics

| | | |
|------------------------------|--|----------------|
| Number of inputs and outputs | Number of analog outputs: 2 | |
| Measuring range | 0.2...100 l/min | 0.1...26.4 gpm |
| Process connection | threaded connection G 1 DN25 flat seal | |

Application

| | | |
|--|---|--|
| System | gold-plated contacts | |
| Application | for industrial applications | |
| Installation | connection to pipe by means of an adapter | |
| Media | Conductive liquids; water; water-based media | |
| Note on media | conductivity: $\geq 20 \mu\text{S/cm}$ viscosity: $< 70 \text{ mm}^2/\text{s}$ (40 °C) | |
| Medium temperature [°C] | -10...70 | |
| Pressure rating [bar] | 16 | |
| Pressure rating [Mpa] | 1.6 | |
| MAWP (for applications according to CRN) [bar] | 11.2 | |

Electrical data

| | | |
|-----------------------------|----------------------------|--|
| Operating voltage [V] | 20...30 DC; (to SELV/PELV) | |
| Current consumption [mA] | 120; (24 V) | |
| Protection class | III | |
| Reverse polarity protection | yes | |
| Power-on delay time [s] | 5 | |

Inputs / outputs

| | | |
|------------------------------|-----------------------------|--|
| Number of inputs and outputs | Number of analog outputs: 2 | |
|------------------------------|-----------------------------|--|

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| 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] | 500 |
| Overload protection | | yes |
| Measuring/setting range | | |
| Measuring range | 0.2...100 l/min | 0.1...26.4 gpm |
| Display range | -120...120 l/min | -31.7...31.7 gpm |
| Resolution | 0.1 l/min | 0.05 gpm |
| Analog start point ASP | 0...80 l/min | 0...21.1 gpm |
| Analog end point AEP | 20...100 l/min | 5.3...26.4 gpm |
| In steps of | 0.1 l/min | 0.05 gpm |
| Temperature monitoring | | |
| Measuring range | [°C] | -20...80 |
| Resolution | [°C] | 0.2 |
| Analog start point | [°C] | -20...60 |
| Analog end point | [°C] | 0...80 |
| In steps of | [°C] | 0.2 |
| Accuracy / deviations | | |
| Flow monitoring | | |
| Accuracy (in the measuring range) | | ± (2 % MW + 0,5 % MEW) |
| Repeatability | | ± 0,2% MEW |
| Temperature monitoring | | |
| Accuracy | [K] | ± 2,5 (Q > 1 l/min) |
| Reaction times | | |
| Flow monitoring | | |
| Response time | [s] | 0.15; (dAP = 0, T19) |
| Damping process value dAP | [s] | 0...3 |
| Temperature monitoring | | |
| Dynamic response T05 / T09 | [s] | T09 = 20 (Q > 1 l/min) |
| Operating conditions | | |
| Ambient temperature | [°C] | -10...60 |
| Storage temperature | [°C] | -25...80 |
| Protection | | IP 67 |

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| Tests / approvals | | |
|------------------------------|---|--------------------------------|
| EMC | DIN EN 60947-5-9 | 500 V withstand voltage (V DC) |
| | model number | 009MI |
| CPA approval | accuracy class | - |
| | maximum allowable error | ± 2,5 % FS |
| | Q (min) | 0,01 m ³ /h |
| | Q (t) | - |
| | Q (max) | 6 m ³ /h |
| Shock resistance | DIN IEC 68-2-27 | 20 g (11 ms) |
| Vibration resistance | DIN IEC 68-2-6 | 5 g (10...2000 Hz) |
| MTTF [years] | 175 | |
| Pressure equipment directive | sound engineering practice; can be used for group 2 fluids; group 1 fluids on request | |

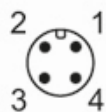
| Mechanical data | | |
|--------------------------|---|--|
| Weight [g] | 576.9 | |
| Material | stainless steel (1.4404 / 316L); PBT-GF20; PC; FKM; TPE | |
| Materials (wetted parts) | stainless steel (1.4404 / 316L); PEEK; FKM | |
| Process connection | threaded connection G 1 DN25 flat seal | |

| Displays / operating elements | | |
|-------------------------------|--|---|
| Display | Display unit | 6 x LED, green (l/min, m ³ /h, gpm, gph, °C, °F) |
| | Measured values | alphanumeric display, 4-digit |
| | Programming | alphanumeric display, 4-digit |
| Display unit | l/min; m ³ /h; gpm; gph; °C; °F | |

| Remarks | | |
|---------------|---|--|
| Remarks | MW = Measured value MEW = Final value of the measuring range | |
| Pack quantity | 1 pcs. | |

Electrical connection

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



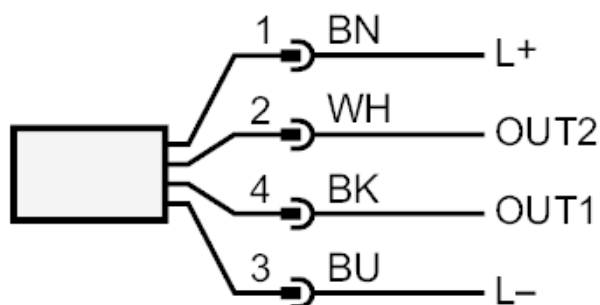
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Connection



Colors to DIN EN 60947-5-2

OUT1: analog output Temperature monitoring

OUT2: analog output Volumetric flow quantity monitoring

Core colors :

BK = black

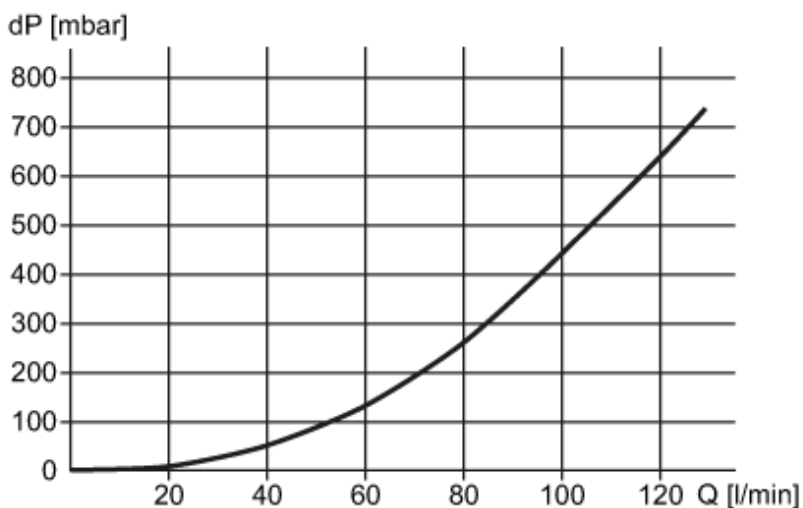
BN = brown

BU = blue

WH = white

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity