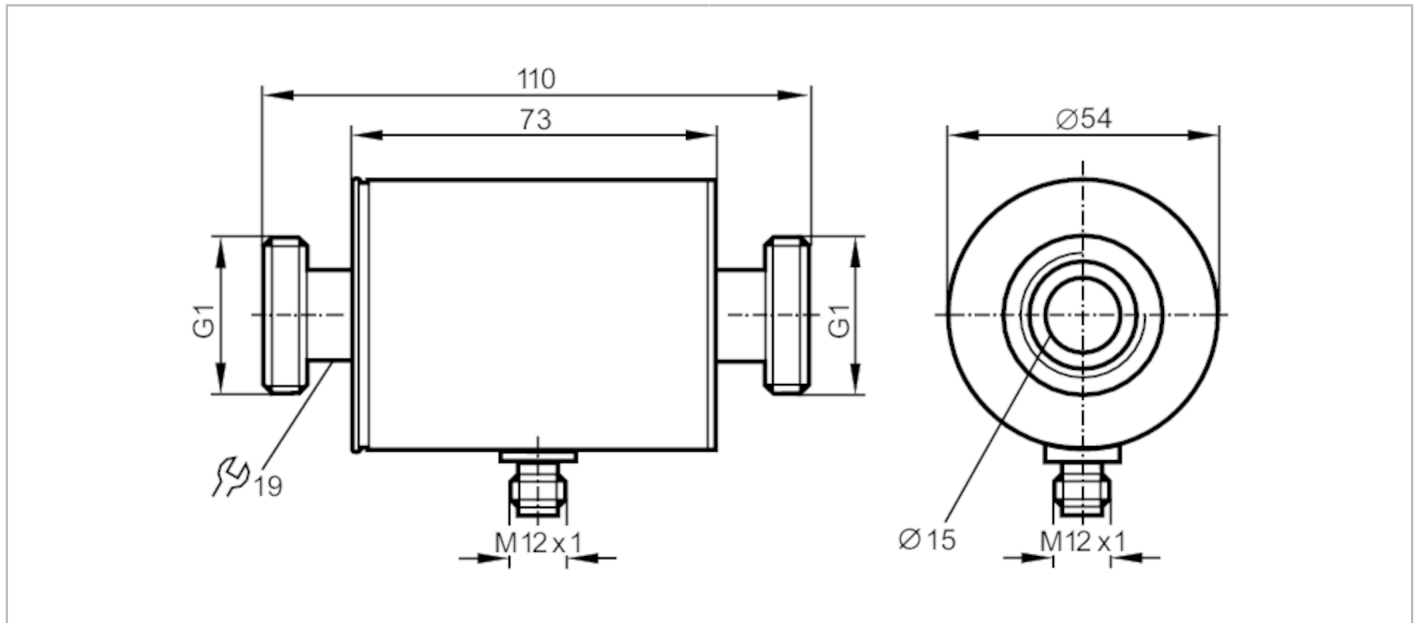


SM8050



Magnetic-inductive flow meter

SMR11GGX10KG/US



| Product characteristics | |
|--|---|
| Number of inputs and outputs | Number of analog outputs: 1 |
| Measuring range [l/min] | 0.2...100 |
| 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] | 18...30 DC; (to SELV/PELV) |
| Current consumption [mA] | 95; (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: 1 |
| Outputs | |
| Total number of outputs | 1 |

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| | | |
|--|--|--|
| Output signal | analog signal; IO-Link; (configurable) | |
| Permanent current rating of switching output DC [mA] | 250 | |
| Number of analog outputs | 1 | |
| Analog current output [mA] | 4...20 | |
| Max. load [Ω] | 500 | |
| Overload protection | yes | |

Measuring/setting range

| | |
|-------------------------|-----------|
| Measuring range [l/min] | 0.2...100 |
|-------------------------|-----------|

Accuracy / deviations

| | |
|-----------------------------------|--------------------------------|
| Flow monitoring | |
| Accuracy (in the measuring range) | $\pm (0,8 \% MW + 0,5 \% MEW)$ |
| Repeatability | $\pm 0,2\% MEW$ |

Reaction times

| | |
|-------------------|----------------------|
| Flow monitoring | |
| Response time [s] | 0.15; (dAP = 0, T19) |

Interfaces

| | | |
|------------------------------|--|-----------------|
| Communication interface | IO-Link | |
| Transmission type | COM2 (38,4 kBaud) | |
| IO-Link revision | 1.1 | |
| SDCI standard | IEC 61131-9 | |
| Profiles | Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis | |
| SIO mode | yes | |
| Required master port class | A | |
| Process data analog | 2 | |
| Min. process cycle time [ms] | 3 | |
| Supported DeviceIDs | Type of operation | DeviceID |
| | default | 577 |

Operating conditions

| | |
|--|----------|
| Ambient temperature [$^{\circ}\text{C}$] | -10...60 |
| Storage temperature [$^{\circ}\text{C}$] | -25...80 |
| Protection | IP 67 |

Tests / approvals

| | | |
|------------------------------|---|------------------------|
| EMC | DIN EN 60947-5-9 | |
| CPA approval | model number | 002MI |
| | accuracy class | - |
| | maximum allowable error | $\pm 1,5 \% FS$ |
| | 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] | 167 | |
| Pressure equipment directive | sound engineering practice; can be used for group 2 fluids; group 1 fluids on request | |

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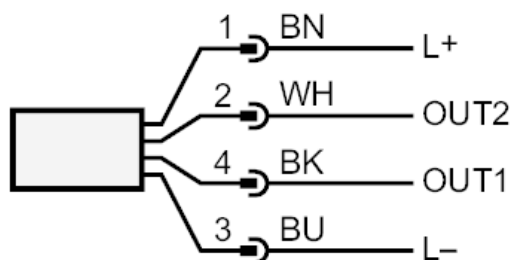
| Mechanical data | |
|--------------------------|---|
| Weight [g] | 575 |
| Material | stainless steel (1.4404 / 316L); PBT-GF20; FKM; TPE |
| Materials (wetted parts) | stainless steel (1.4404 / 316L); PEEK; FKM |
| Process connection | threaded connection G 1 DN25 flat seal |
| Remarks | |
| Remarks | 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



Connection



Colors to DIN EN 60947-5-2
OUT1: IO-Link
OUT2: analog output
Core colors :
BN = brown
WH = white
BK = black
BU = blue

SM8050

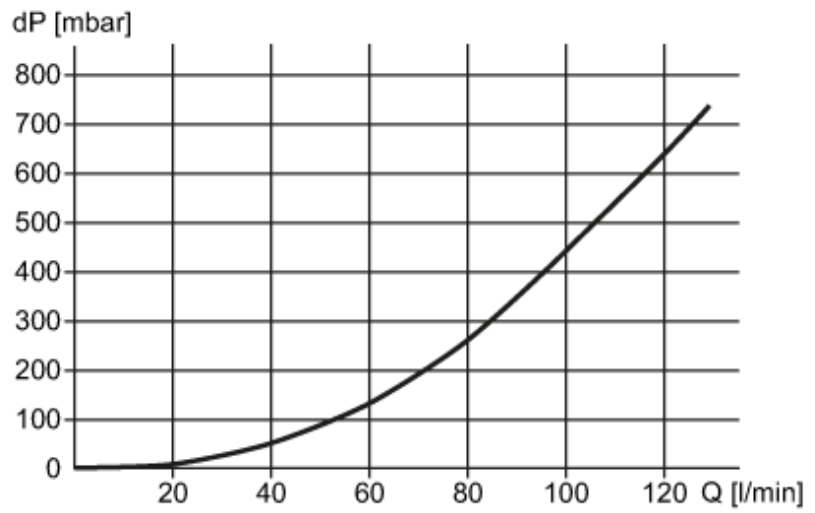


Magnetic-inductive flow meter

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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity