

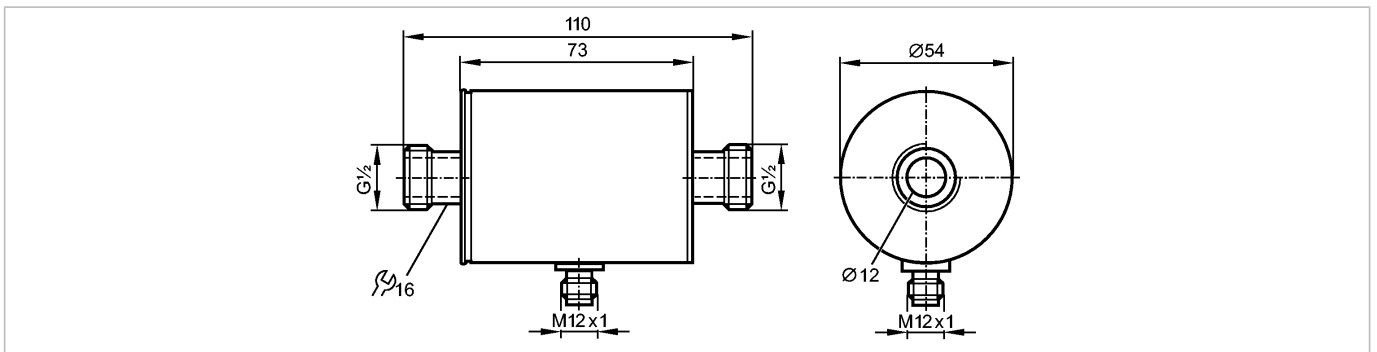


SM6050

SMR12GGX10KG/US-100



Flow sensors



Product characteristics

Magnetic-inductive flow meter

Quick disconnect

Process connection: G $\frac{1}{2}$ flat seal

connection to pipe by means of an adapter

Analog output 4...20 mA

Measuring range

0...25 l/perc

Application

| | |
|-------------------------|---|
| Application | Conductive liquids (conductivity: $\geq 20 \mu\text{S/cm}$ / viscosity: $< 70 \text{ cSt}$ at $104 \text{ }^\circ\text{F}$) |
| Pressure rating [bar] | 16 |
| Medium temperature [°C] | -10...70 |

Electrical data

| | |
|-------------------------------------|--------------------------|
| Electrical design | DC |
| Operating voltage [V] | 19...30 DC ¹⁾ |
| Current consumption [mA] | 90 |
| Insulation resistance [M Ω] | > 100 (500 V DC) |
| Protection class | III |
| Reverse polarity protection | yes |

Outputs

| | |
|------------------------|------------------|
| Output function | 4...20 mA analog |
| Overload protection | yes |
| Analog output | 4...20 mA |
| Max. load [Ω] | 500 |

Measuring / setting range

| | |
|-------------------------|--------|
| Flow monitoring | |
| Measuring range [l/min] | 0...25 |

Accuracy / deviations

| | |
|-----------------|--|
| Flow monitoring | |
| Accuracy | $\pm (2\% \text{ MW} + 0.5\% \text{ MEW})$ |
| Repeatability | $\pm 0.2\% \text{ MEW}$ |



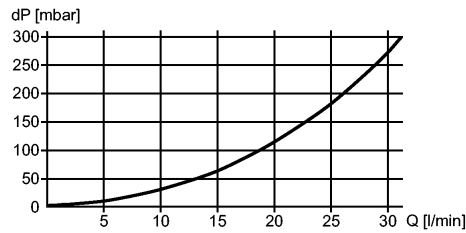
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Flow sensors

Pressure loss (dP) / flow rate (Q)



Reaction times

| | | |
|------------------------|-----|------------------------|
| Power-on delay time | [s] | 5 |
| Flow monitoring | | |
| Response time | [s] | < 0.150 |
| Temperature monitoring | | |
| Response time | [s] | T09 = 20 (Q > 1 l/min) |

Environment

| | | |
|---------------------|------|----------|
| Ambient temperature | [°C] | -10...60 |
| Storage temperature | [°C] | -25...80 |
| Protection | | IP 67 |

Tests / approvals

| | | |
|------------------------------|---|--------------------|
| Pressure equipment directive | article 3, section 3 - sound engineering practice | |
| EMC | EN 61000-4-2 ESD: | 4 kV CD / 8 kV AD |
| | EN 61000-4-3 HF radiated: | 10 V/m |
| | EN 61000-4-4 Burst: | 2 kV |
| | EN 61000-4-5 Surge: | 0.5 kV |
| | EN 61000-4-6 HF conducted: | 10 V |
| 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] | 182 |

Mechanical data

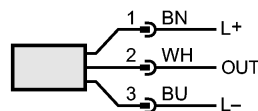
| | | |
|--------------------------|---|-------|
| Process connection | G½ flat seal | |
| Materials (wetted parts) | stainless steel 316L / 1.4404; PEEK (polyether ether ketone); FKM | |
| Housing materials | stainless steel 316L / 1.4404; PBT-GF 20; FKM; TPE | |
| Weight | [kg] | 0.491 |

Electrical connection

| | | |
|------------|-------------------------------------|--|
| Connection | M12 connector; gold-plated contacts | |
|------------|-------------------------------------|--|

Wiring

Core colors
 BN brown
 BU blue
 WH white



Colours to DIN EN 60947-5-2

OUT: Analog output

Remarks

| | |
|---------|---|
| Remarks | ¹⁾ to EN50178, SELV, PELV MW = measured value |
|---------|---|



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Flow sensors

MEW = final value of the measuring range

Pack quantity

[piece]

1

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