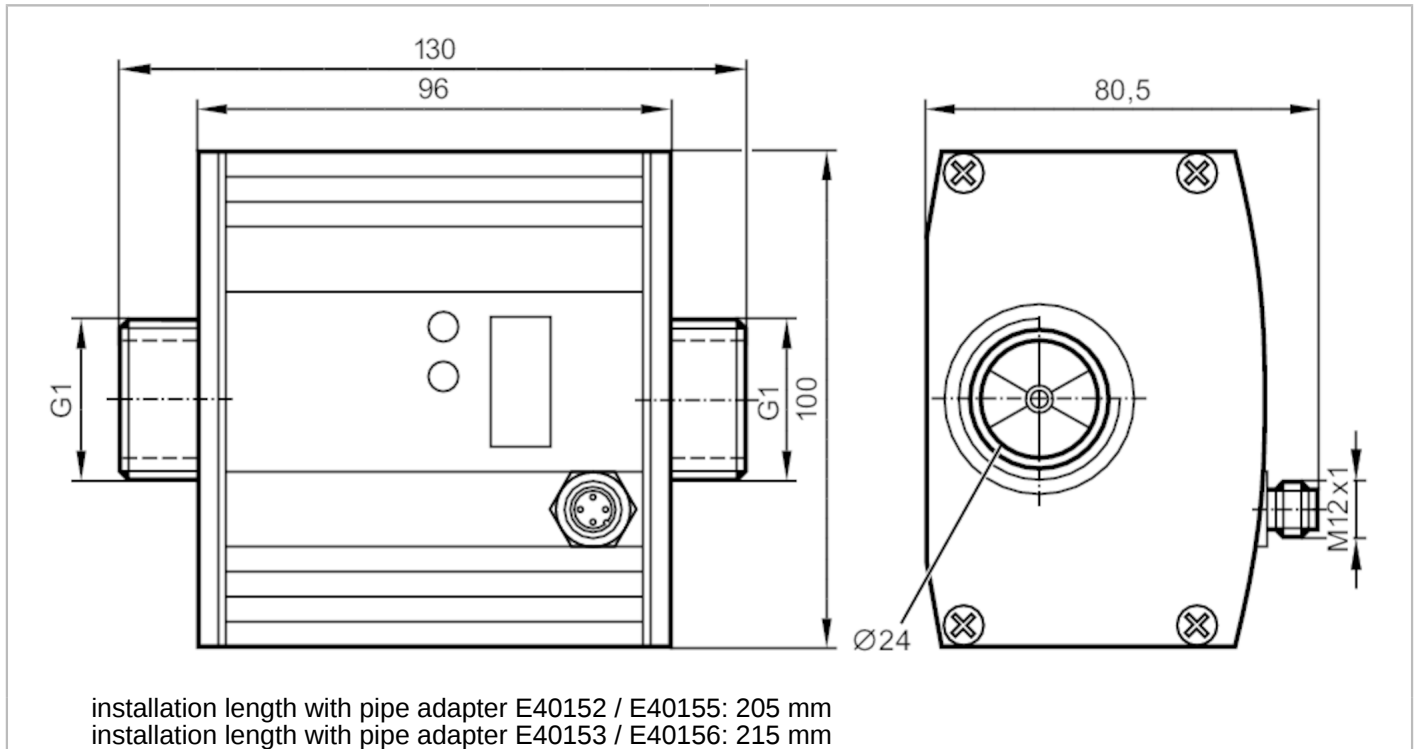


SU8200



Ultrasonic flow meter

SUR11HGBFPKG/W/US-100-IPF



| Product characteristics | |
|---------------------------------|--|
| Number of inputs and outputs | Number of digital outputs: 2 |
| Measuring range | 0...100 l/min 0...26.42 gpm |
| Process connection | threaded connection G 1 flat seal |
| Application | |
| Special feature | Gold-plated contacts |
| Application | for industrial applications |
| Installation | connection to pipe by means of an adapter |
| Media | water; glycol solutions; coolants; oil |
| Note on media | low-viscosity oils with viscosity: 7...40 mm ² /s (40 °C) high-viscosity oils with viscosity: 30...68 mm ² /s (40 °C) |
| Medium temperature [°C] | -10...80 |
| Pressure rating [bar] | 16 |
| Electrical data | |
| Operating voltage [V] | 19...30 DC; (according to EN 50178 SELV/PELV) |
| Current consumption [mA] | 100 |
| Min. insulation resistance [MΩ] | 100; (500 V DC) |
| Protection class | III |
| Reverse polarity protection | yes |
| Power-on delay time [s] | 10 |
| Inputs / outputs | |
| Number of inputs and outputs | Number of digital outputs: 2 |



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| Outputs | | |
|--|---|------------------|
| Total number of outputs | 2 | |
| Output signal | switching signal | |
| Electrical design | PNP | |
| Number of digital outputs | 2 | |
| Output function | normally open / normally closed; (parameterisable) | |
| Max. voltage drop switching output DC [V] | 2 | |
| Permanent current rating of switching output DC [mA] | 250; (per output) | |
| Short-circuit protection | yes | |
| Type of short-circuit protection | pulsed | |
| Overload protection | yes | |
| Measuring/setting range | | |
| Measuring range | 0...100 l/min | 0...26.42 gpm |
| Display range | 0...120 l/min | 0...31.7 gpm |
| Resolution | 0.1 l/min | 0.02 gpm |
| Set point SP | 0.2...100 l/min | 0.06...26.42 gpm |
| Reset point rP | 0...99.8 l/min | 0...26.38 gpm |
| Max. flow rate [l/min] | 110 | |
| In steps of | 0.1 l/min | 0.02 gpm |
| Temperature monitoring | | |
| Measuring range [°C] | -10...80 | |
| Resolution [°C] | 0.2 | |
| Set point SP [°C] | -9.8...80 | |
| Reset point rP [°C] | -10...79.8 | |
| In steps of [°C] | 0.2 | |
| Accuracy / deviations | | |
| Flow monitoring | | |
| Accuracy (in the measuring range) | $< \pm (3 \% MW + 0,2 \% MEW) / < \pm (5 \% MW + 0,5 \% MEW);$ (water; glycol: 35%; oil: viscosity 68 mm ² /s at 40 °C) | |
| Repeatability | 0,2 l/min (0,05 gpm) | |
| Temperature monitoring | | |
| Accuracy [K] | 0,2 | |
| Response times | | |
| Flow monitoring | | |
| Response time [s] | 0.25; (dAP = 0) | |
| Delay time programmable dS, dr [s] | 0...50 | |
| Damping for the switching output dAP [s] | 0...1 | |
| Temperature monitoring | | |
| Dynamic response T05 / T09 [s] | T09 = 70 (Q > 5 l/min); (water) | |

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| Software / programming | | |
|---|---|---|
| Parameter setting options | Flow monitoring; Temperature monitoring | |
| Operating conditions | | |
| Ambient temperature [°C] | -10...60 | |
| Storage temperature [°C] | -25...80 | |
| Protection | IP 67 | |
| Tests / approvals | | |
| 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] | 246 | |
| Pressure Equipment Directive | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request | |
| Mechanical data | | |
| Weight [g] | 1694 | |
| Materials | housing: AlMgSi0,5 anodised; Sealing: FKM; connector housing: brass Optalloy-plated; PA 6.6; cover film: PA | |
| Materials (wetted parts) | stainless steel (1.4404 / 316L); FKM; PES; Centellen 200 | |
| Process connection | threaded connection G 1 flat seal | |
| Displays / operating elements | | |
| Display | Display unit | 4 x LED, green (l/min, m ³ /h, gal/min, gal/h) |
| | Display unit | 2 x LED, yellow (°C / °F) |
| | switching status | 2 x LED, yellow |
| | measured values | alphanumeric display, 4-digit |
| | programming | alphanumeric display, 4-digit |
| Display unit | l/min; m ³ /h; gpm; gph; °C; °F | |
| Accessories | | |
| Accessories (supplied) | sealings: 2, Centellen | |
| Accessories (optional) | adapter for pipe: 1 x R1/2, stainless steel, E40179 | |
| | adapter for pipe: 1 x R3/4, stainless steel, E40180 | |
| | adapter for pipe: 1 x 1/2 NPT, stainless steel, E40192 | |
| | adapter for pipe: 1 x 3/4 NPT, stainless steel, E40193 | |
| | adapter for pipe: 1 x R1/2, brass, E40152 | |
| | adapter for pipe: 1 x R3/4, brass, E40153 | |
| | adapter for pipe: 1 x 1/2 NPT, brass, E40155 | |
| adapter for pipe: 1 x 3/4 NPT, brass, E40156 | | |
| Remarks | | |
| Remarks | MW = measured value | |
| | MEW = Final value of the measuring range | |
| | sealing: only with supplied Centellen seals | |
| Pack quantity | 1 pcs. | |
| Electrical connection | | |
| Connector: 1 x M12; Moulded body: brass, Optalloy-plated; Contacts: gold-plated | | |

SU8200

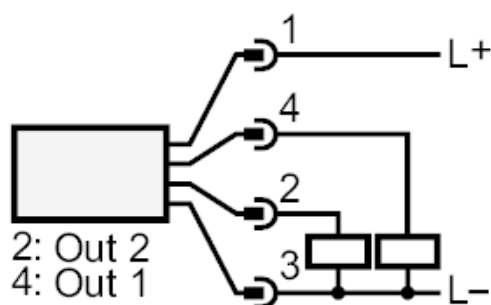


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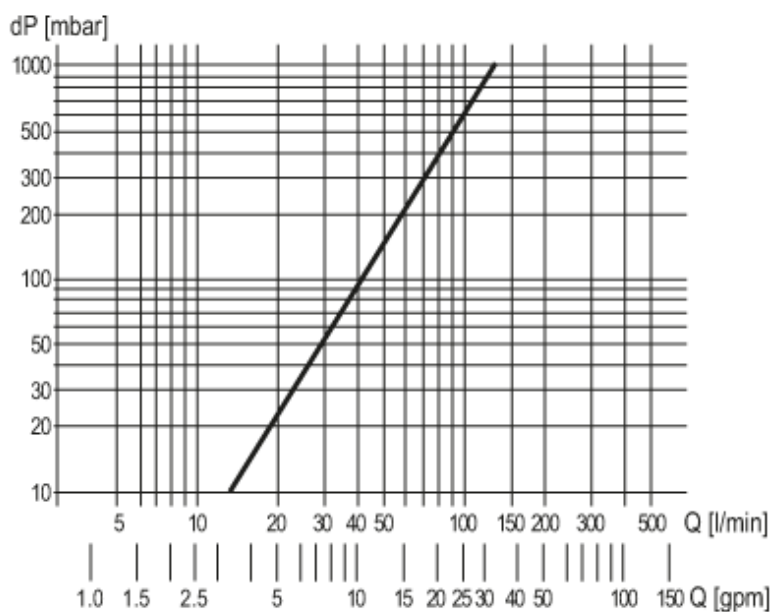


Connection



Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity