

MV-401

Mass Flow Regulator for gases with pressure compensation and integrated display



Technical specifications

Measurement & control

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|--------------------------|--|
| Type of media | Any clean and dry gas, filter recommended |
| Flow range | min. 10...50 ml _N /min max. 10...200 ml _N /min |
| Accuracy | ±2% Rd for flow > 50% of max. capacity; ±(1% Rd + 0.5% FS) on lower flows |
| Repeatability | <0.2% FS typical |
| Turndown ratio | up to 1 : 10 |
| Pre-installed gases | Air, N ₂ , CO, O ₂ |
| Response time (sensor) | 2 sec |
| Operating temperature | 0...50 °C (32...122 °F) |
| Temperature sensitivity | Zero: <0.1% FS/°C, Span: <0.2% Rd/°C |
| Leak integrity, outboard | tested < 2 x 10 ⁻⁹ mbar l/s He |
| Mounting | < 0.1% FS |

Approvals

| | |
|---------|-----------------------|
| Marking | CE, RoHS, WEEE, REACH |
|---------|-----------------------|

Mechanical specs

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|-----------------------|--|
| Pressure rating (PN) | 10 |
| Ingress protection | IP40 |
| Material wetted parts | Meter: Aluminium; Needle valve: SS316, Brass |
| Sealing material | Viton®, PTFE, Fluorosint®, Buna N; Controller membrane: fiber-reinforced nitrile |
| Process connections | G 1/4" BSPP female thread |
| Min. ΔP | 1 bar(d) |
| Max. ΔP | 7 bar(d) |
| Weight | 1,4 kg |

Electrical properties

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|-----------------------|---|
| Power supply | 15...24 Vdc (+/-10%) |
| Power consumption | 2 W (90 mA at 24 V) |
| Analog output | analog: 0...5 Vdc |
| Digital communication | digital: RS232 / RS485 (Modbus ASCII/RTU) |

Electrical interfaces