



Technical specifications

Measurement & control

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|-------------------------------------|--|
| Type of media | almost all gases and gas-mixes, compatible with chosen materials |
| Flow range | min. 10...200 ml/min max. 0.1...2 l/min |
| Accuracy | ±1.0% Rd plus ±0.5% FS |
| Repeatability | < ±0.2% FS |
| Turndown ratio | 1:20 |
| Multi fluid capability | up to 8 calibration curves |
| Settling time (in control, typical) | < 2 sec. |
| Control stability | < 0.2% FS typical |
| Response time (sensor) | approx. 0.3 sec. |
| Operating temperature | 0...+50°C |
| Temperature sensitivity | ±0.1% Rd/°C (Air) |
| Leak integrity, outboard | < 2 x 10 ⁻⁸ mbar l/s He |
| Pressure sensitivity | ±0.3% Rd / bar typical (Air) |
| Max. Kv-value | 6,6 x 10 ⁻² |
| Mounting | at 90° deviation from horizontal max. error 0.2% at 1 bar typical N2 |
| Warm-up time | 30 minutes |
| Storage/transport conditions | 0...+50°C, max. 95% RH (non-condensing) |

Approvals

Mechanical specs

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|-----------------------|---|
| Pressure rating (PN) | 20 |
| Ingress protection | IP65 |
| Material wetted parts | Aluminum EN AW-6082-T6 or stainless steel SS316, elastomer seals |
| Sealing material | standard: FKM/Viton® options: EPDM, FFKM/Kalrez®, FDA and USP Class VI approved compounds |
| Plunger material | standard: FFKM with PI foil; options: EPDM with PI foil, FDA and USP Class VI approved EPDM |
| Process connections | 1/4" BSPP female tread (ISO1179-1); compression type or face seal (VCR/VCO) couplings |
| Weight | Aluminum: 1.1 kg; Stainless steel: 1.6 kg |

Electrical properties

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|-----------------------|---|
| Power supply | +15...24 Vdc \pm 10 % |
| Power consumption | 3.5 W typical at 24 V for fieldbus: add + 0.9 W for display: add + 0.5 W |
| Analog output | 0...5 (10) Vdc or 0 (4)...20 mA (sourcing) |
| Analog setpoint | 0...5 (10) Vdc or 0 (4)...20 mA (sinking) |
| Digital communication | standard: RS232 options: CANopen®, DeviceNet™, EtherCAT®, PROFIBUS DP, PROFINET, Modbus (RTU, ASCII or TCP/IP), EtherNet/IP, POWERLINK or FLOW-BUS |

Electrical interfaces

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|---|------------------------|
| Power (main connector) | 8-pin DIN (male) |
| Function (main connector) | Analog, RS232, RS485 |
| PROFIBUS DP | 8-pin M12B (female) |
| CANopen / DeviceNet | 5-pin M12A (male) |
| Modbus RTU/ASCII/FLOW-BUS | 5-pin M12A (male) |
| Modbus TCP / EtherNet/IP / EtherCAT®/ PROFINET / POWERLINK | 2x 4 pin M12D (female) |