

EX-FLOW

# F-120MX

High-Pressure Mass Flow Meter for Gases, Ex-Protected Style



## Technical specifications

### Measurement & control

|                              |                                                                               |
|------------------------------|-------------------------------------------------------------------------------|
| Type of media                | Gases                                                                         |
| Flow range                   | min. 0.15... 7.5 ml <sub>N</sub> /min<br>max. 0.18...9.5 ml <sub>N</sub> /min |
| Accuracy                     | ±1% FS (incl. linearity, based on actual calibration)                         |
| Repeatability                | < ±0.2% Rd                                                                    |
| Turndown ratio               | 1:50 (2...100%)                                                               |
| Operating temperature        | EX-FLOW sensor: -10...+70°C; XB-coil: -40...+65°C XC-coil: -40...+ 65°C       |
| Temperature sensitivity      | zero: < ±0.05% FS/°C; span: < ±0.05% Rd/°C                                    |
| Leak integrity, outboard     | tested < 2 x 10 <sup>-9</sup> mbar l/s He                                     |
| Mounting                     | max. error at 90° off horizontal 0,2% at 1 bar, typical N2                    |
| Warm-up time                 | 30 minutes                                                                    |
| Storage/transport conditions | 0...+50°C, max. 95% RH (non-condensing)                                       |

### Approvals

|               |                                                                       |
|---------------|-----------------------------------------------------------------------|
| Marking       | CE, UKCA, RoHS, WEEE, REACH                                           |
| Ex-Protection | ATEX Zone 1, ATEX Zone 2, IECEx Zone 1, IECEx Zone 2, TIIS/JP Ex, KCS |

### Mechanical specs

|                                |                                                   |
|--------------------------------|---------------------------------------------------|
| Pressure rating (PN) - in barg | 200                                               |
| Ingress protection             | IP65                                              |
| Material wetted parts          | stainless steel 316L or comparable                |
| Housing material               | anodized aluminum                                 |
| Sealing material               | standard: FKM/Viton®; options: EPDM, FFKM/Kalrez® |
| Process connections            | compression type or face seal (VCR/VCO) couplings |

### Electrical properties

|                 |                                                                        |
|-----------------|------------------------------------------------------------------------|
| Analog output   | 15...20 mA (linear). Additional power supply and readout unit required |
| Analog setpoint | For MFC, additional power supply, readout and control unit required    |

### Electrical interfaces

|                                 |                                          |
|---------------------------------|------------------------------------------|
| Function (instrument connector) | Analog                                   |
| Measuring head                  | Terminal connection, cable gland M16x1,5 |