EX-FLOW F-126BX

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

- ATEX approval Cat.2, Zone 1
- Also IECEx, TIIS and KCs certified
- High accuracy, excellent repeatability
- Virtually pressure and temperature independent
- Pressure rating 200 bar



Intrinsically Safe Gas Mass Flow Meters for high flow rates

Bronkhorst[®] EX-FLOW Mass Flow Meters (MFMs) are suited for precise gas flow measurement in ATEX Zone 1 hazardous areas. The MFM should be connected to a power supply with galvanic isolation / preamplifier / readout system (located in the safe zone). See Bronkhorst[®] E-8000 Series.

EX-FLOW model F-126BX covers flow ranges from 1...50 m_n^3/h up to 7,5...375 m_n^3/h (N₂-equivalent) at operating pressures up to 200 bar.

The intrinsically safe measuring head of the flow meter is tested according to ATEX 114 Directive 2014/34/EU and approved under EC-Type Examination Number: KEMA 01ATEX1172, protection II 2 G Ex ib IIC T4 Gb.

Other certifications: IECEx (IECEx DEK14.0060) and TIIS (検·第TC21584号).

Technical specifications

Measurement / control system

| Flow range (intermediate ranges available) | min. 150 m_n^3/h max. 7,5375 m_n^3/h (based on N ₂) |
|---|---|
| Accuracy (incl. linearity) (based on actual calibration) | ± 1 % FS |
| Repeatability | < 0,2 % RD |
| Turndown ratio | 1:50 (2100%) |
| Time constant | 5 sec. |
| Operating temperature | -10 +70 °C |
| Temperature sensitivity | zero: < 0,05% FS/°C; span: < 0,05% Rd/°C |
| Leak integrity, outboard | tested < 2 x 10 ⁻⁹ mbar l/s He |
| Attitude sensitivity | max. error at 90° off horizontal 0,2% FS at 1 bar, typical N_2 |
| Warm-up time | 30 min. for optimum accuracy 2 min. for accuracy ± 2% FS |

Mechanical parts

| Material (wetted parts) | Stainless steel 316L or comparable |
|-------------------------|--|
| Pressure rating (PN) | 200 bar abs |
| Process connections | compression type or face seal (VCR/VCO) couplings |
| Seals | standard: Viton®; options: EPDM, Kalrez® (FFKM) |
| Ingress protection | IP65 |

Electrical properties

| Signal circuit | type of explosion protection: intrinsic safety Ex ib IIC, only for connection to a certified intrinsically safe circuit with the following maximum values: Ui = 28 V, Ii = 98 mA, Pi = 686 mW The effective internal capacitance between: Terminals 1 and 3: Ci = 1 nF; Effective internal inductance: Li = 0,3 mH |
|---|---|
| Output signal | 15 20 mA (linear) |
| I/O signals via PS/Readout (located in safe area) | analog: 05 Vdc, 010 Vdc, 020 mA, 420 mA; digital: RS232, PROFIBUS DP, DeviceNet™, Modbus RTU or ASCII, PROFINET, EtherCAT®, FLOW- BUS |

Electrical connection

Ex-proof measuring head Terminal connection, cable gland M16x1,5

Technical specifications subject to change without notice.

For dimensional drawings and hook-up diagrams please visit the product page on our website

Recommended accessories



E-8000 SERIES

Digital Readout / Control Systems

Bright, wide angle, 1.8" display (TFT technology) User friendly operation, menu driven with 4 push buttons

Related products



EX-FLOW F-126AX

Flow ranges from 0,4...20 m3n/h up to 4...200 m3n/h Pressure rating 200 bar ATEX approval Cat.2, Zone 1 Rugged IP65 construction



BRONKHORST (UK) LTD

1 Kings Court Willie Snaith Road Newmarket Suffolk CB8 7TG Tel. <u>+44 1223 833222</u> <u>sales@bronkhorst.co.uk</u>

