EN

mini CORI-FLOW

XM13

Ex-Proof Coriolis Mass Flow Meter / Controller

Bronkhorst®

Technical specifications

Measurement & control

Type of media	liquids and gases
Flow range	liquid: 0…2000 g/h (nominal flow rate: 1000 g/h) gas: 0...26.6 l_n/min (N_2) full scale (FS) value is user-configurable (50...2000 g/h)
Accuracy	±0.2 % Rd (liquids) ±0.5 % Rd (gases) ±5 kg/m3 (density)
Repeatability	±0.05 % Rd ± ½ (ZS x 100/actual flow)%
Turndown ratio	up to 1:100
Settling time (in control, typical)	1 sec. (typical)
Zero point stability (ZS)	< ±0.2 g/h
Response time (sensor)	≤ 200 msec
Operating temperature	0…70 °C
Fluid temperature	0…70 °C
Temperature sensitivity	on zero: < 0.02 g/h/°C; on span: < 0.001% Rd/°C; self heating (at zero flow): < 15 °C
Leak integrity, outboard	< 2 x 10^{-9} mbar l/s He
Max. Kv-value	2.3 x 10^{-3} for XM13+C2X-XC or C2X-XB (connection through the Ex-barrier) t.b.d. RC200 valve with Ex d TEIP11 I/P converter
Mounting	any position
Warm-up time	30 minutes
Storage/transport conditions	0...50 °C, max. 95 % RH (non-condensing)

Approvals

Marking	CE, UKCA
Ex-Protection	ATEX Zone 2

Mechanical specs

Pressure rating (PN)	138
Ingress protection	IP66
Material wetted parts	stainless steel 316L
Housing material	aluminium AL Si7Mg03 and stainless steel 1.4301 (304) / 1.4404 (316L)
Sealing material	metal only (in fluid path)
Sensor inner diameter	single tube, DN 0.5
Process connections	1/8" OD compression type (welded); other on request
Weight	12.5 kg

Electrical properties

Power supply	15…24 Vdc ±10%
Power consumption	meter: 2.5 W typical at 24 V controller: 7 W typical at 24 V for fieldbus: add 0.9 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)

Electrical interfaces

Actuator output	4-pin M8 (female)
Power (main connector)	Screw terminals
Function (main connector)	Analog, RS232
PROFIBUS DP	Screw terminals
CANopen / DeviceNet	Screw terminals
Modbus RTU/ASCII/FLOW-BUS	Screw terminals

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