EN

mini CORI-FLOW

M12

Low Flow Coriolis Mass Flow Meter for Gases & Liquids

Bronkhorst®

Technical specifications

Measurement & control

Type of media	liquids and gases
Flow range	liquid: 0…200 g/h (nominal flow rate: 100 g/h) gas: 0…2.66 l_n/min (N_2) full scale (FS) value is user-configurable
Accuracy	±0.2% Rd (liquids) ±0.5% Rd (gases)
Repeatability	±0.05% Rd ± ½ (ZS x 100/actual flow)%
Turndown ratio	up to 1:2,000
Zero point stability (ZS)	< ±0.02 g/h
Response time (sensor)	≤ 200 msec
Operating temperature	0…70 °C
Fluid temperature	0…70 °C; for ATEX Cat.3, Zone 2 max. 50 °C
Temperature sensitivity	on zero: < 0.01 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
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)	200
Ingress protection	IP65
Surface roughness wetted parts	3.2 µm (Ra max)
Material wetted parts	stainless steel 316L or Hastelloy C22
Housing material	stainless steel 430F
Sealing material	metal only (in fluid path)
Sensor inner diameter	single tube, DN 0.25
Process connections	compression type or face seal (VCR/VCO) couplings, or Tri-Clamp flanges (welded)
Weight	1.1 kg

Electrical properties

Power supply	15…24 Vdc ±10%
Power consumption	2.5 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)	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)

Last modified 22-05-2025.