

mini CORI-FLOW

ML120V00

(Ultra) Low Flow Coriolis Mass Flow Meter



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/min (N2) full scale (FS) value is user-configurable
Accuracy	±0.2% Rd (liquids) ±0.5% Rd (gases)
Repeatability	±0.05% Rd ± 1/2 (ZS x 100/actual flow)%
Turndown ratio	up to 1:4,000
Zero point stability (ZS)	< ±10 mg/h
Response time (sensor)	≤ 200 msec
Operating temperature	0...70 °C
Fluid temperature	0...70 °C
Temperature sensitivity	on zero: < 3 mg/h/°C; on span: < 0.005% Rd/°C; self heating (at zero flow): < 10 °C
Leak integrity, outboard	< 2 × 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	IP40
Surface roughness wetted parts	3.2 µm (Ra max)
Material wetted parts	stainless steel 316L
Housing material	galvanized and powder coated steel (1.0330)
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
Weight	0.8 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)
Frequency/Pulse output	max 50 kHz

Electrical interfaces

Actuator output	4-pin M8 (female)
Power (main connector)	9-pin D-sub (male)
Function (main connector)	Analog, RS232, RS485
PROFIBUS DP	9-pin D-sub (female)
CANopen / DeviceNet	5-pin M12A (male)
Modbus RTU/ASCII/FLOW-BUS	RJ45
Modbus TCP / EtherNet/IP / EtherCAT®/ PROFINET / POWERLINK	2x RJ45