XM14

Ex-Proof Coriolis Mass Flow Meter / Controller





Technical specifications

Measurement & control

Type of media	liquids and gases
Flow range	liquid: 030 kg/h (nominal flow rate: 10 kg/h)
	gas: 0400 l _n /min (N ₂)
	full scale (FS) value is user-configurable (130
	kg/h)
Accuracy	±0.2 % Rd (liquids)
	±0.5 % Rd (gases)
	±5 kg/m3 (density)
Repeatability	$\pm 0.05\%$ Rd $\pm\%$ (ZS x 100/actual flow)%
Turndown ratio	up to 1:100
Settling time (in control, typical)	1 sec. (typical)
Zero point stability (ZS)	< ±6.0 g/h
Response time (sensor)	≤200 msec
Operating temperature	070 °C
Fluid temperature	070 °C
Temperature sensitivity	on zero: < 0.5 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 XM14+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
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Warm-up time	30 minutes
Storage/transport conditions	050 °C, max. 95 % RH (non-condensing)

Approvals

Marking	CE, UKCA
Ex-Protection	ATEX Zone 2

Mechanical specs

Pressure rating (PN)	107
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 1.3
Process connections	1/8" OD compression type (welded); other on request
Weight	12.5 kg

Electrical properties

Power supply	1524 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	05 (10) Vdc or 0 (4)20 mA (sourcing)
Analog setpoint	05 (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