XM12

Ex-Proof Coriolis Mass Flow Meter / Controller





Technical specifications

Measurement & control

Type of media	liquids and gases
Flow range	liquid: 0200 g/h (nominal flow rate: 100 g/h) gas: 02.66 l _n /min (N ₂)
	full scale (FS) value is user-configurable
Accuracy	±0.2% Rd (liquids)
	±0.5% Rd (gases)
Repeatability	$\pm 0.05\%$ Rd $\pm \frac{1}{2}$ (ZS x 100/actual flow)%
Turndown ratio	up to 1:100
Settling time (in control, typical)	1 sec. (typical)
Zero point stability (ZS)	< ±0.02 g/h
Response time (sensor)	≤200 msec
Operating temperature	070 °C
Fluid temperature	070 °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
Max. Kv-value	2.3 x 10 ⁻³ for XM12+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	050 °C, max. 95% RH (non-condensing)

Approvals

N	1arkir	ng					CE,	UKC	A					
E	x-Pro	tecti	ion				ATE	X Zor	ne 2					

Mechanical specs

Pressure rating (PN)	138
Ingress protection	IP66
Surface roughness wetted parts	3.2 µm (Ra max)
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 0.25
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, RS485
PROFIBUS DP	Screw terminals
CANopen / DeviceNet	Screw terminals
Modbus RTU/ASCII/FLOW-BUS	Screw terminals