MASS FLOW CONTROLLER QUANTIM, CORIOLIS

QUANTIM
Coriolis Mass Flow Controller QUANTIM

- For all gases and liquids
- Metal sealed
- Optical sensing technique enables accuracy at extreme low flows

PRODUCT DESCRIPTION

Achieve superior accuracy and unmatched zero stability in ultra-low-flow gas and liquid measurement and control with the Quantim® Coriolis mass flow controllers and meters from Brooks Instrument. With the Quantim® series, Brooks has taken the lead in driving improvements in Coriolis flow technology: Our patented Quantim® Coriolis sensor design measures low flows independent of fluid type or process variables. The result: unsurpassed performance - the most accurate, stable, repeatable and reproducible mass flow measurement and control, even under changing conditions.

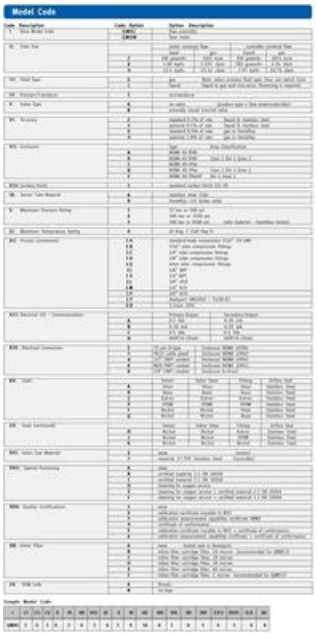
Features:

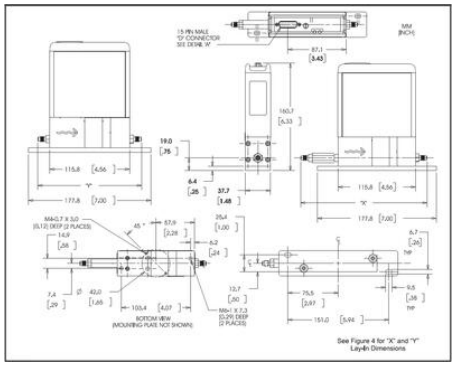
- True mass flow measurement
- Accurate density measurement
- 100% of fluid flows through low-mass sensor tube (no bypass)
- The Quantim® Coriolis series' proprietary optical sensing technique enables accuracy at extreme low flows
- Measures both liquids and gases over a wide flow range
- Coplanar valve delivers super-fast response times
- The Quantim® Coriolis series' offers the smallest, lowest-flow Coriolis meter and controller available on the market
- Measures and outputs two of four parameters: mass flow, volumetric flow, temperature, density
- Independent diagnostic/service port and user display
- Variety of material options, enclosure types and area classifications available

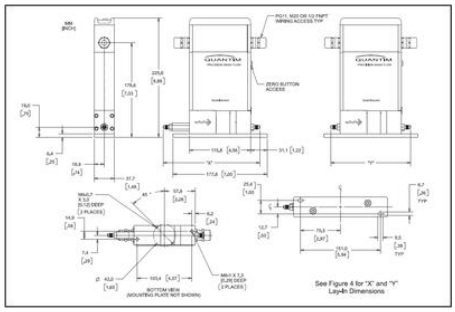
SPECIFICATIONS

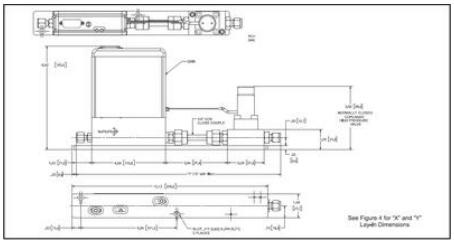
Approvals	EMC Directive 89/336EEC per EN 50081-2 and EN 61326-1, II 2 G EEx d IIB T6 and II 2 D T 85OC per EN 50014, EN 50018 and EN 50281-1-1, II 3 G EEx nA II T4 and II 3D T 135 C per EN 60079-15: 2003 and EN 50281-1-1: 1998 + A1, KEMA 04ATEX1241 X II3G EEx nA II T4 per EN 60070-15: 2003, Pressure Equipment Directive
Control range	1-100 %
Density Range Max	2 g/cm³
Density Range Min	0.2 g/cm³
IP Class	IP40, IP66, IP66XP
Lowest flow	10-27000 gr/h

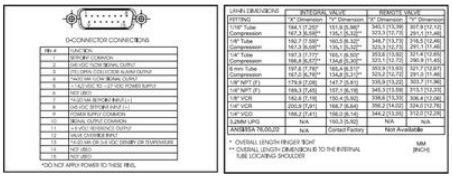
Material of seals	EPDM, Buna, Kalrez, Neoprene, Viton
Materials Wetted Parts	Hastelloy, Stainless steel 17-7 PH, Stainless steel 316
Pressure Range Max	300 bar
Response time	<0.5s - <2 s
Temperature range from	5 °C
Temperature range of media to	65 °C
Temperature range to	65 °C
Valve type	NC

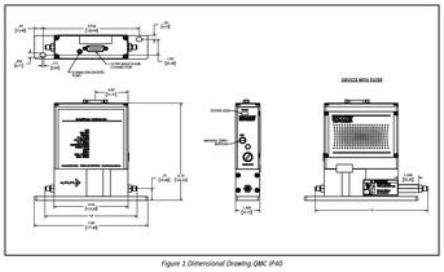


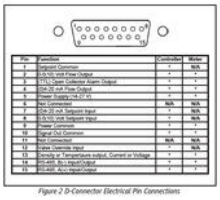


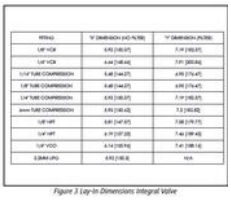












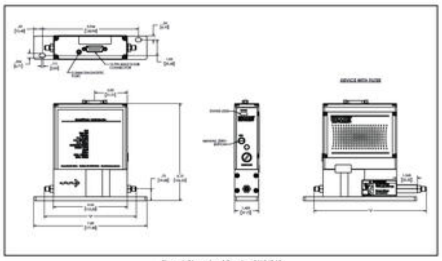
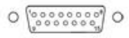


Figure 1 Dimensional Drawing QMC IP40



Pin	Function	Controller	Meter
1	Setpoint Common	*	N/A
2	0-5/10 Volt Flow Output	*	*
3	(TTL) Open Collector Alarm Output	*	*
4	(0)4-20 mA Flow Output	*	*
5	Power Supply (14-27 V)	*	*
6	Not Connected	N/A	N/A
7	(0)4-20 mA Setpoint Input	*	N/A
8	0-5/10 Volt Setpoint Input	*	N/A
9	Power Common	*	*
10	Signal Out Common	*	*
11	Not Connected	N/A	N/A
12	Valve Override Input	*	N/A
13	Density or Temperature output, Current or Voltage	*	*
14	RS-485, B(-) Input/Output	*	*
15	RS-485, A(+) Input/Output	*	*

Figure 2 D-Connector Electrical Pin Connections

FITTING	"X" DIMENSION (NO FILTER)	"Y" DIMENSION (FILTER)
1/8" VCR	5.93 [150.57]	7.19 [182.57]
1/4" VCR	6.44 [163.64]	7.91 [200.84]
1/16" TUBE COMPRESSION	5.68 [144.27]	6.95 [176.47]
1/8" TUBE COMPRESSION	5.68 [144.27]	6.95 [176.47]
1/4" TUBE COMPRESSION	5.93 [150.57]	7.19 [182.57]
6mm TUBE COMPRESSION	5.93 [150.42]	7.2 [182.82]
1/8" NPT	5.81 [147.57]	7.08 [179.77]
1/4" NPT	6.19 [157.23]	7.46 [189.48]
1/4" VCO	6.14 [155.96]	7.41 [188.14]
5.5MM UPG	5.93 [150.6]	N/A

Figure 3 Lay-In Dimensions Integral Valve