Technical Data for Moderate Flow MC Mass Flow Controllers

0 to 50SLPM Full Scale through 0 to 100SLPM Full Scale

The following specifications are for the standard configuration of the product. There are many options available.

Specification	Mass Controller	Description
Accuracy	± (0.8% of Reading + 0.2% of Full Scale)	At calibration conditions after tare
High Accuracy Option	± (0.4% of Reading + 0.2% of Full Scale)	At calibration conditions after tare
Repeatability	± 0.2%	Full Scale
Operating Range	1/2% to 100%	Full Scale
Turndown Ratio	200 : 1	
Typical Response Time	100	Milliseconds (Adjustable)
Standard Conditions (STP)	25ºC & 14.696PSIA	Mass Reference Conditions
Operating Temperature	−10 to +50	ºCelsius
Zero Shift	0.02%	Full Scale / ºCelsius / Atm
Span Shift	0.02%	Full Scale / ºCelsius / Atm
Humidity Range	0 to 100%	Non–Condensing
Controllable Flow Rate	102.4%	Full Scale
Maximum Pressure	145	PSIG
Input /Output Signal Digital	Mass Flow, Volumetric Flow, Pressure & Temperature	RS-232 Serial or RS-485 Serial or PROFIBUS or DeviceNet[2]
Input / Output Signal Analog	Mass Flow	0-5Vdc
Optional Input / Output Signal Secondary Analog	Mass Flow, Volumetric Flow, Pressure or Temperature	0-5 Vdc or 0-10Vdc or 4-20mA
Electrical Connections	8 Pin Mini-DIN or DB-15	
Supply Voltage	24 to 30 Vdc	
Supply Current	0.750Amp	
Mounting Attitude Sensitivity	Control response somewhat sensitive to inverted operation.	
Warm-up Time	< 1	Second
Wetted Materials[2]	303 & 302 Stainless Steel, Viton®, Silicone RTV (Rubber), Glass Reinforced Nylon, Aluminum, 416 Stainless Steel, Nickel, Silicon, Glass.	

1. If selecting PROFIBUS or DeviceNet no analog signal is available. PROFIBUS / DeviceNet units do not have the display. See PROFIBUS or DeviceNet specifications for PROFIBUS or DeviceNet supply voltages and currents.
2. If your application demands a different material, please contact info@alicatscientific.com or 888-290-6060 for available options.

Mechanical Specifications

Full Scale Flow Mass Controller	Mechanical Dimensions	Process Connections[1]	Pressure Drop[2] (PSID)
50SLPM	4.4”H x 6.4”W x 2.3”D	1/4” NPT Female	9.0
100SLPM			11.7

1. Compatible with Beswick®, Swagelok® tube, Parker®, face seal, push connect and compression adapter fittings.
2. Lower Pressure Drops Available, Please contact info@alicatscientific.com or 888-290-6060.

50SLPM to 100SLPM approximate weight: 6.4 lb.