Technical Data for MCP Moderate Flow Mass Flow Controllers

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

The following specifications are for the standard configuration of the Alicat product. There are many low-cost customization 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% to 100% Full Scale	Measure and Control
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	40	PSIG
Input /Output Signal Digital	Mass, Volumetric, Pressure & Temperature	RS-232 Serial
Input / Output Signal Analog	Mass Flow	0-5Vdc
Optional Input / Output Signal Secondary Analog	Mass, Volumetric, Pressure or Temperature	0-5 Vdc or 0-10Vdc or 4-20mA
Electrical Connections	8 Pin	Mini-DIN
Supply Voltage	12 to 30 Vdc	
Supply Current	0.250Amp	
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, Brass, 410 &416 Stainless Steel.	

1. If your application demands a different material, please contact Application Assistance for available options.

Mechanical Specifications

Full Scale Flow Mass Controller	Mechanical Dimensions	Process Connections[1]	Pressure Drop[2] (PSID)
50SLPM	4.4”H x 5.4”W x 1.6”D	1/4” NPT Female	6.0
100SLPM			

1. Compatible with Beswick®, Swagelok® tube, Parker®, face seal, push connect and compression adapter fittings.
2. Lower Pressure Drops Available, Please contact Application Assistance.

MCP Series:
50SLPM
100SLPM