

Technical Data for MCP Moderate Flow Mass Flow Controllers

0 to 50SLPM Full Scale through 0 to 250SLPM Full Scale

NOTICE: The following specifications are applicable to Alicat MCP Series Mass Flow Controllers only. Please note maximum pressure of 80 PSIG.

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
Turndown Ratio	200 : 1	
Typical Response Time	100	Milliseconds (Adjustable)
Standard Conditions (STP)	25°C & 14.696PSIA	Mass Reference Conditions
Operating Temperature	-10 to +50	°Celsius
Zero Shift	0.02%	Full Scale / °Celsius / Atm
Span Shift	0.02%	Full Scale / °Celsius / Atm
Humidity Range	0 to 100%	Non-Condensing
Controllable Flow Rate	102.4%	Full Scale
Maximum Pressure	80	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	None	
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 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 5.4"W x 1.6"D	1/4" NPT Female	6.0
100SLPM			14.0
250SLPM	5.0"H x 6.3"W x 1.6"D	1/4" NPT Female	58.1
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.			