Technical Data for Low Flow Mass Flow Meters

0 to 100 SCCM Full Scale through 0 to 20 SLPM Full Scale

The following specifications are for the standard configuration of the Alicat product as shipped from the factory. There are many low-cost customization options available.

Specification	Mass Meter	Description	
Accuracy	± (0.8% of Reading + 0.2% of Full Scale) At calibration condition		
High Accuracy Option	± (0.4% of Reading + 0.2% of Full Scale)	At calibration conditions after tare	
Accuracy: Bi-directional Meters Only	± (0.8% of reading + 0.2% of total span positive full scale to negative full scale)	At calibration conditions after tare	
Repeatability	± 0.2% Full Scale		
Operating Range	1% to 100% Full Scale	Measure	
Typical Response Time	10	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	
Measurable Flow Rate	128%	Full Scale	
Maximum Pressure	145	PSIG	
Output Signal Digital	Mass, Volume, Pressure & Temperature	RS-232 Serial or PROFIBUS ¹	
Output Signal Analog	Mass Flow	0-5Vdc	
Optional Output Signal Secondary Analog	Mass, Volumetric Pressure or Temperature	0-5 Vdc or 0-10Vdc or 4-20mA	
Electrical Connections	8 Pin Mini-DIN or DB-15		
Supply Voltage	7 to 30 Vdc (15-30Vdc for 4-20mA outputs)		
Supply Current	0.035Amp (+ output current on 4-20mA)	0mA)	
Mounting Attitude Sensitivity	0% Tare after installation		
Warm-up Time	< 1 Second		
Wetted Materials ²	303 & 302 Stainless Steel, Viton®, Silicone RTV (Rubber), Glass Reinforced Nylon, Aluminum.		

^{1.} If selecting PROFIBUS no analog signal is available. PROFIBUS units do not have the display. See PROFIBUS specifications for PROFIBUS supply voltages and currents.

Mechanical Specifications

Full Scale Flow Mass Meter	Mechanical Dimensions	Process Connections ¹	Pressure Drop ² (PSID)
100SCCM to 10SLPM	4.1"H x 2.4"W x 1.1"D	1/8" NPT Female	1.0
20SLPM	4.1"H x 2.4"W x 1.1"D	1/8" NPT Female	1.0

^{1.} Compatible with Beswick®, Swagelok® tube, Parker®, face seal, push connect and compression adapter fittings.

^{2.} If your application demands a different material, please contact Application Assistance for available options.

^{2.} Venting to atmosphere. Lower Pressure Drops Available, please contact Application Assistance.

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