

## Technical Data for Moderate Flow M Mass Flow Meters

0 to 50 SLPM Full Scale through 0 to 250 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 conditions after tare                                 |
| 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 Flow, Volumetric Flow, Pressure & Temperature  | RS-232 Serial or RS-485 Serial or PROFIBUS or DeviceNet <sup>1</sup> |
| Output Signal Analog                    | Mass Flow   | 0-5Vdc   |
| Optional Output Signal Secondary Analog | Mass Flow, Volumetric Pressure or Temperature   | 0-5 Vdc or 0-10Vdc or 4-20mA   |
| Electrical Connections                  | 8 Pin   | Mini-DIN   |
| Supply Voltage                          | 7 to 30 Vdc (15-30Vdc for 4-20mA outputs)   |  |
| Supply Current                          | 0.040 Amp (+ output current on 4-20mA)  |  |
| Mounting Attitude Sensitivity           | 0%  | Tare after installation  |
| Warm-up Time                            | < 1   | Second   |
| Wetted Materials <sup>2</sup>           | 303 & 302 Stainless Steel, Viton®, Silicone RTV (Rubber), Glass Reinforced Nylon, Aluminum. |  |

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 Application Assistance for available options.

### Mechanical Specifications

| Full Scale Flow Mass Meter | Mechanical Dimensions | Process Connections <sup>1</sup> | Pressure Drop <sup>2</sup> (PSID) |
|----------------------------|-----------------------|----------------------------------|-----------------------------------|
| 50SLPM                     | 4.4"H x 4.0"W x 1.6"D | 1/4" NPT Female                  | 2.0                               |
| 100SLPM                    |                       |                                  | 2.5                               |
| 250SLPM                    | 5.0"H x 4.0"W x 1.6"D | 1/2" NPT Female                  | 4.0                               |

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

50SLPM approximate shipping weight: 2.2 lb.  
100SLPM approximate shipping weight: 2.4 lb.  
250SLPM approximate shipping weight: 3.2 lb.