



Model 8112 Series Self-Contained Mass Flowmeter



Shown with optional 1/4" tube connections

Description

The Model 8112 Series Mass Flowmeters are offered as a more accurate alternative to Matheson's Standard Tube Cube® flowmeters. This series bridges the gap between standard flowmeters and higher priced mass flowmeters.

Applications

The Model 8112 Series is designed to measure flow rates of non-corrosive gases. The 8112 Series is available in eight convenient ranges calibrated for nitrogen and can be used in most applications where a standard flowmeter was utilized previously. Typical applications include:

- Flow measurement of purge gases
- General laboratory or instrument flow monitoring
- Flow measurement of calibration standards used in environmental monitoring

Design Features

- Self-contained direct reading of the flow rate
- Optional 9-pin connector for output data transmission
- Adjustable zero

Specifications

Maximum Operating Pressure:	150 psig (1035 kPa)
Optimum Operating Pressure:	20 psig (138 kPa)
Temperature Range:	0° to 50°C (32° to 122°F)
Temperature Coefficient:	0.15% full Scale/1°C
Standard Calibration	
Temperature:	0°C (32°F)
Response Time:	2 seconds to 98% of final flow (25-100% full scale)
Accuracy:	+/-1.5% full scale
Repeatability:	+/-0.5% full scale
Flow Capacity	20 sccm-20 slpm: 1 sccm to 20 slpm Nitrogen
Voltage Input:	12 VDC (12-15 VDC nominal); 100 mA max
Voltage Output:	0-5 VDC; 4-20 mA (optional)
End Connections:	1/4" NPT Female
Shipping Weight:	2 lbs

Each unit is shipped calibrated for Nitrogen at 0°C. Each unit is also supplied with the power pack to supply voltage to the unit

Materials in the Flowpath

Body and Sensor:	10% glass-filled Nylon 6/6 316 stainless steel Viton O-rings
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Ordering Information

Model Number	Range in Nitrogen	End Fittings
8112-0421	20 sccm	1/4" FNPT
8112-0412	100 sccm	1/4" FNPT
8112-0422	200 sccm	1/4" FNPT
8112-0452	500 sccm	1/4" FNPT
8112-0423	2 slpm	1/4" FNPT
8112-0453	5 slpm	1/4" FNPT
8112-0414	10 slpm	1/4" FNPT
8112-0424	20 slpm	1/4" FNPT

Options

Model Number	Description
8113-XXXX*	4-20 mA Output
CON-0070-SA	1/4" Tube Connection (2 required)
PWR-0009-XX	110 VAC Replacement Power Pack

**use last 4 digits from 8112 series for required flow*