



# MEMS mass flow sensors with fast response time

FS8000 series

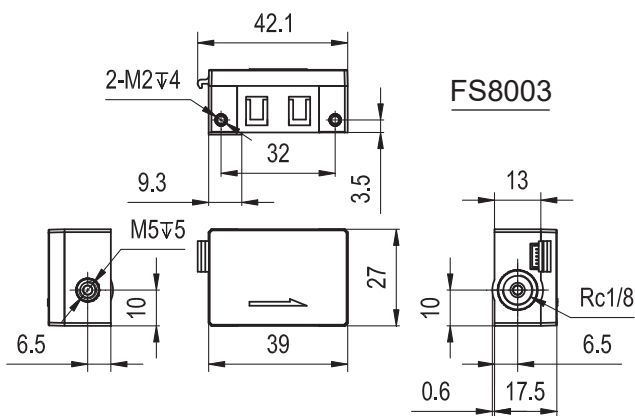
This series of mass flow sensors are designed with fast response time for gas mass flow measurement utilizing the Company's proprietary MEMS sensing and control electronic technology. Semiconductor equipment and automation are two targeted applications.

## Features

- ⦿ Designed for control automation
- ⦿ Fast response time to 1 msec
- ⦿ Fast flow switch capable
- ⦿ Both analog and digital interface
- ⦿ Large turn-down ration over 100:1
- ⦿ Compact footprint

## Applications

- \* Equipment automation
- \* Robotic actions
- \* Leakage detection
- \* Instrumentation
- \* Process monitor with dry gases
- \* Flow switching



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## Specifications

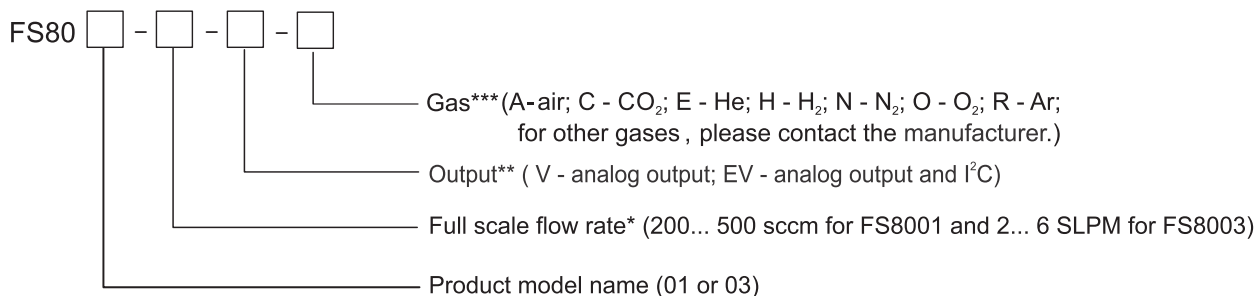
Model	FS8001	FS8003	Unit
Flow range	0 ~ 100... 500	0 ~ 2000... 6000	sccm
Accuracy	±(2.0+0.5FS)		%
Turn-down ratio	> 100:1		
Power consumption	≤ 50.0		mW
Response time	5 msec typical; up to 1 customizable		msec
Maximum pressure rating	0.5		MPa
Maximum pressure loss	900 (typical)		Pa
Temperature	- 10 ~ 55		°C
Power supply	8 ~ 24		Vdc
Null shift	± 30.0		mV
Temperature coefficient	± 0.12		%/°C
Output	Linear, I <sup>2</sup> C; Analog 0.5 ~ 4.5 Vdc		
Mechanical connection	M5 (FS8001) / Rc 1/8 inlet & M5 outlet (FS8003)		
Weight	12 (FS8001) / 21(FS8003)		g

**Notes:** \* The above parameters are applicable at 20°C and 101.325kPa, air calibration.

\*\* Digital interface can be customized.

## Order information

The sensor part number is composed of the model number and suffixes indicating the full scale flow rate, output format as well as the calibration gas. Refer to the followings for details.



\* Numerical maximum flow rate only. The default unit for FS8001 is sccm, and for FS8003 is SLPM.

\*\* The sensor standard electrical output is analog, and the digital output is optional.

\*\*\* For CO<sub>2</sub>, the full scale flow rate is 80% of the specified one for air: 400 sccm for FS8001 and 5 SLPM for FS8003.

- Please find your local sales contact at [www.Siargo.com](http://www.Siargo.com).
- For detailed product information or user manual please contact manufacturer.