



HM 2211

MEMS Integrated Sensors

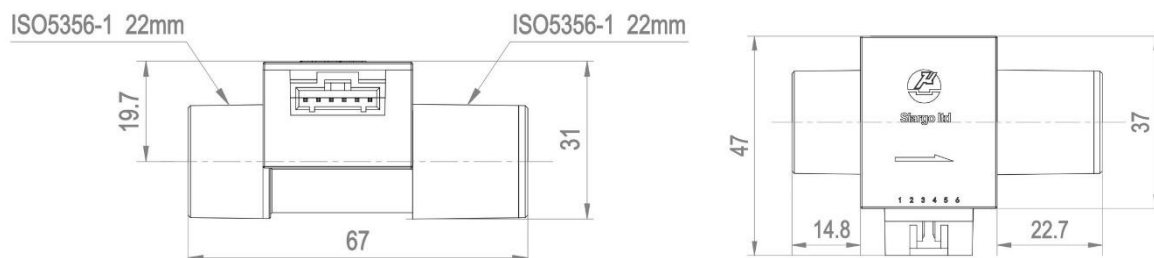
Multi-parameter sensing for ventilators

FS6122 Series

FS6122 series mass flow sensors offer a unique solution for multi-parameter flow measurement with mass flow, gauge pressure, temperature, and humidity. It is designed for medical respiratory equipment and can also be applied for general purpose flow metering and control applications. The sensors were designed with a super-low pressure loss. The current models can be readily applied to medical applications such as a ventilator, respiratory analyzer, CPAP, and other applications such as environmental monitor; and many process control applications.

FS6122 can measure a uni- or bi-directional flow up to 250 SLPM, and ± 100 cmH₂O gauge pressure, as well as temperature and relative humidity. The connectors can be fully customized.

Dimensions



Specifications

Flow	Range	$\pm 250.0 / 0 \sim 100 \dots 250$	SLPM
	Accuracy	$\pm (2.5 + 0.5FS)$	%
Pressure	Range	$\pm 100 / -5 \sim 100 / -5 \sim 40$ (gauge)	cmH ₂ O
	Accuracy	± 1.0	%
Temperature	Range	$-10 \sim 60$	Vdc
	Accuracy	± 0.5	%
Humidity*	Range	0~100 (no condensation)	%RH
	Accuracy	± 2.0 (20~80%RH); ± 5.0 , others	%
	Humidity response	5.0 (25~75%RH)	sec
	Other response time	1.8	msec
	Power supply	5.0 ($\pm 5\%$)	Vdc
	Compensation range	$-5 \sim 60$	°C
	Output	I ² C / 0.5~4.5 Vdc linear flow or pressure	
	Mechanical	ISO22mm or adapters	
	Pin-out	6 pins, AMPMODU MTE, or compatible	
	Calibration	Air @ 20°C, 101.325 kPa (flow, pressure)	
	Storage temperature	$-20 \sim 70$	°C

Note: Parameters specified at the calibration conditions. For detailed specifications, refer to the manual. Humidity sensing may require long sensing stable time, not recommended for nonessential applications.

Product selection

FS6122 - ☐ F ☐ - ☐ P ☐ -TH ☐ - ☐

- Connector: I – ISO22mm; N – NPT; X – customized.
- Temperature/humidity sensor: 0 or 1 (0 for null)
- Gas pressure: 0, 40, 100 (0 for null)
- Vacuum pressure: 0, 5, 100 (0 for null)
- Full scale flow rate: 100... 250
- Reverse full scale flow rate: 0, 50... 250

Note: Connector selection can be left blank for ISO22mm.