

Model FS6122B

Medical Respiratory Sensor

VA.0



Medical Respiratory Sensor

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1. Features

- Measures mass flow rate and gauge pressure
- Fast response time
- Highly sensitive in small flow rate
- Low power consumption
- Specially designed for medical equipment



2. Sensor Performance

All data unless otherwise noted apply for calibration conditions: air, 20 °C, 101.325 kPa absolute pressure, horizontal mounting.

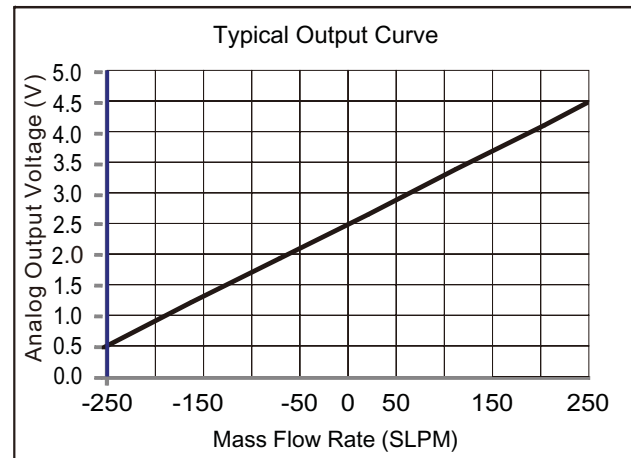
Spec	Value	Unit
Flow Sensor		
Flow Range	-250 ~ +250	SLPM
Accuracy (Total Error Band)	$\pm (2.5+0.5FS)$	%
Output *	Linear, Analog/I ² C	
Analog Output Offset	0.5	Vdc
Analog Output Span	4	Vdc
Response Time	5	ms
Pressure Sensor		
Pressure Type	Gauge	
Pressure Range	-5 ~ +40	cmH2O
Linearity	0.8 \pm 0.5%FS	
Output *	Linear, Analog/I ² C	ms
Analog Output Offset	0.5	Vdc
Analog Output Span	4	Vdc
Response Time	5	ms
Other Specifications		
Gas Type	Air	
Supply voltage	5.0 \pm 1%	Vdc
Output pin shape	Pin header	
Accuracy compensated Temp.	-5 ~ +65	°C
Storage Temp.	-40 ~ +85	°C
Maximum pressure	0.1	MPa
Humidity	(0~100)%RH (No icing or condensation)	
Warming up time	<50	ms

* 14 bit for I²C.

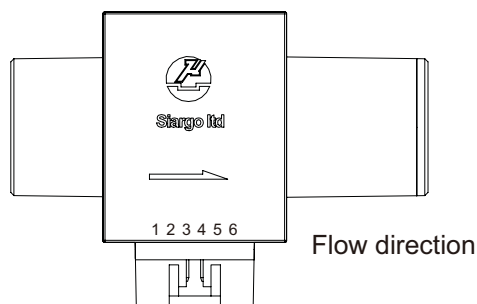
MEMS Mass Flow Sensors

3. Flow Characteristics

Flow Rate (SLPM)	Typical Voltage (Vdc)
-250	0.500
-200	0.900
-150	1.300
-100	1.700
-50	2.100
0	2.500
+50	2.900
+100	3.300
+150	3.700
+200	4.100
+250	4.500

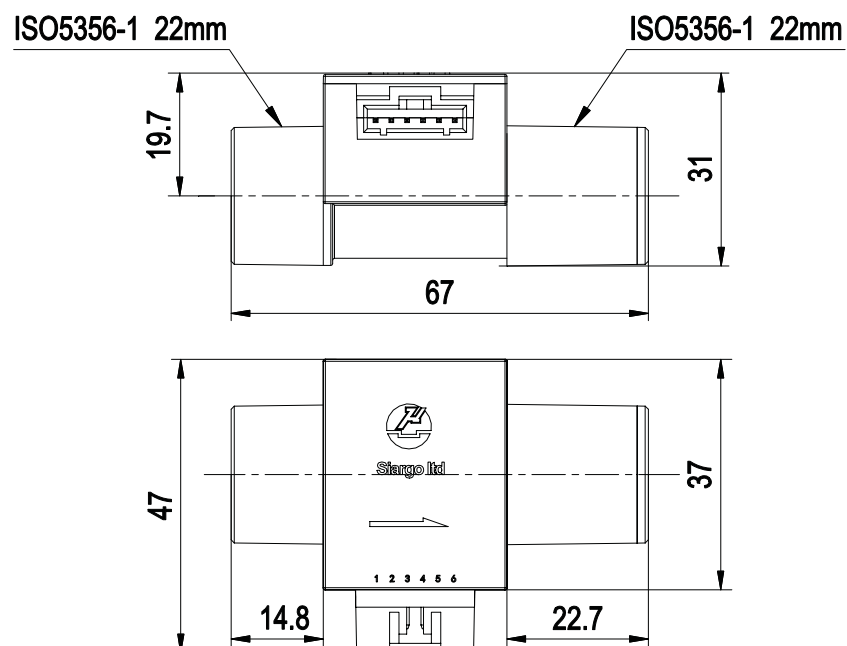


4. Electrical Interface



Pin #	Definition
1	Pressure sensor analog output
2	Flow sensor analog output
3	GND, Ground
4	VCC, Power supply
5	SLK (I ² C)
6	SDA (I ² C)

5. Mechanical Dimensions



MEMS Mass Flow Sensors

Safety and Maintenance

Safety Precautions

The sensors cannot be used for gas metrology of fluoride or fluoride containing gases. For updates of the product certification information, please contact manufacturer or visit www.Siargo.com. Use for other gases such as extreme corrosive and toxic may cause the product malfunctioning or even severe damages. The product sealing is ensured to work under working pressure of 0.2 MPa and is leakage proof before the shipment. But cautions and further leakage test are important at installation as well since any leakage could cause severe safety issue. The power supply for this product is a lithium battery, all precautions and measures for electrical voltage handling must apply.

Attention: any alternation and/or improper use of the product without the permission of the manufacturer can cause unpredicted damages and even injuries or other severe situations. Siargo or any of its employees, subsidiaries shall not be hold and indemnified against such consequences due to such circumstances via improper use of the product.

Maintenance

Attention: without prior permission of the manufacturer, please do not attempt to alter any parts of the product as it may cause unrecoverable damages. If there are questions or doubts, please contact manufacturer immediately before further actions.

All maintenance of the sensor should be performed by trained and certified personnel by Siargo.