



FS4003/08 series

Gas flow sensor

Gas Flow Sensors

产品简介

The **FS4003/08 Series Gas Mass Flow Sensor** is specifically engineered for general gas flow measurement. This sensor enables direct detection of gas mass flow without requiring bypass configurations, featuring minimal pressure loss. It serves dual applications: monitoring air or nitrogen flow in purification systems, and supporting environmental monitoring devices (e.g., atmospheric samplers) as well as analytical instruments such as chromatographs.

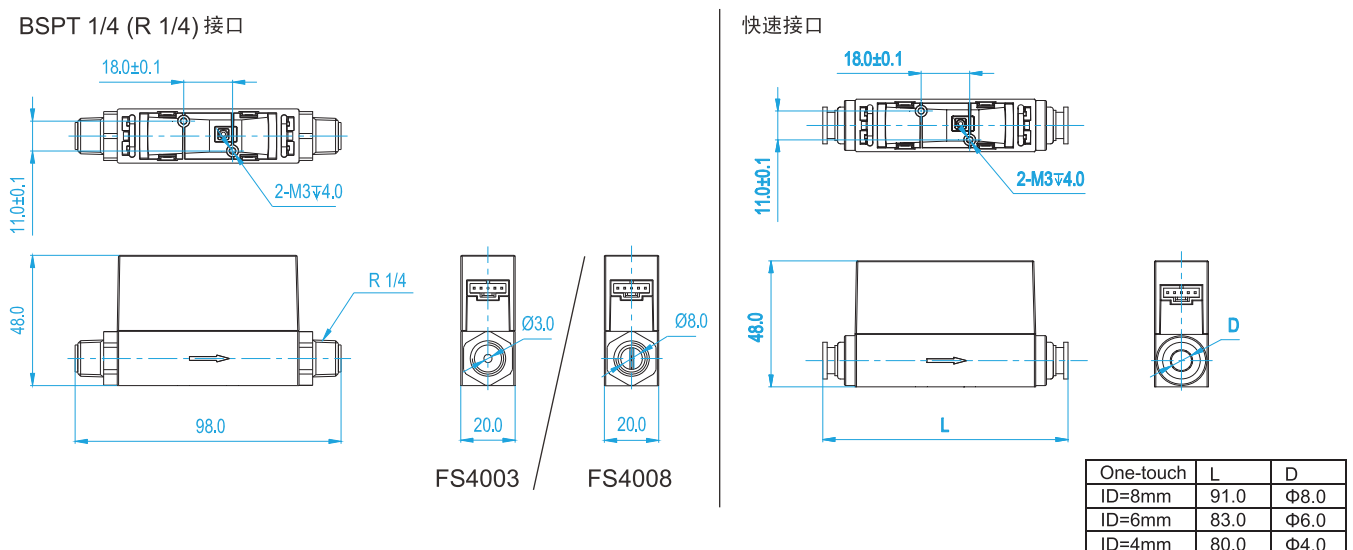
FS4003, the inner diameter of the pipe is 3mm, the maximum measurement range is 5SLPM; suitable for particle counter and all kinds of analytical instruments.

FS4008, the inner diameter of the pipe is 8 mm, the maximum measurement range is 50 SLPM; can be used for gas measurement and control equipment, anesthesia machine, environmental detector, atmospheric sampler and all kinds of analytical instruments.

产品特点

- ✍ Designed for low pressure gas flow measurement in 3mm and 8mm airways
- ✍ Support multiple connection methods, easy to install and use
- ✍ The sensor chip adopts thermal mass flow measurement, without temperature and pressure compensation, to ensure the high precision measurement of the sensor
- ✍ Multiple sensors are integrated on a single chip, giving it a range ratio of 100:1 or more
- ✍ The output method is flexible, which can not only actively upload data through the communication interface or query the output data by the host computer, but also output linear analog voltage through the analog interface with high zero stability
- ✍ Full range of high stability, high accuracy and excellent repeatability
- ✍ Low power consumption, low voltage loss
- ✍ Fast response

机械尺寸



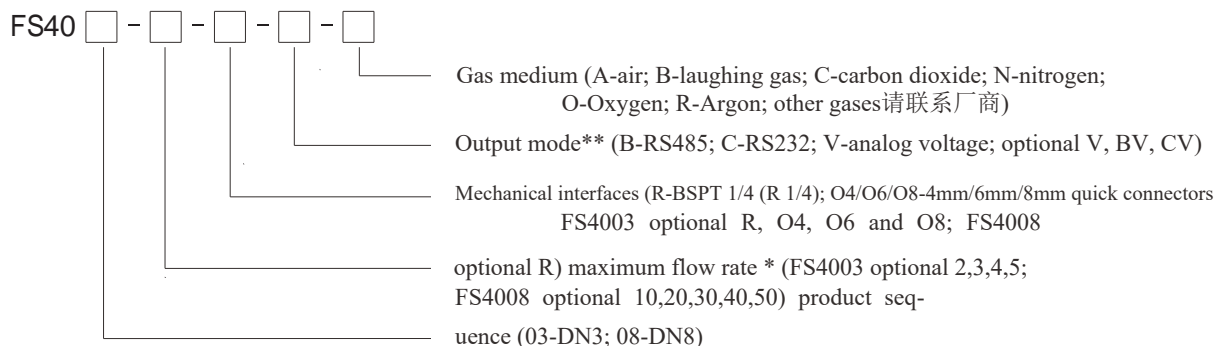
Technical Parameter

parameter	FS4003	FS4008	unit
latus rectum	3	8	mm
maximumflow	2,3,4,5	10,20,30,40,50	SLPM
Ratio of ranges	100: 1		
accuracy	Officers (1.5 + 0.2 FS)		%
repetitiveness	0.25		%
Zero point output drift	±30		mV
Output drift	±0.12		%/°C
Response time	10 (By default, you can set 20,50,100,200,500,1000)		ms
Operating power supply	8~24VDC , 50mA		
Output mode 1	Linear: RS232/RS485/ analog voltage 0.5-4.5 VDC		
Maximum flow pressure loss	100	600 0.5	Pa
maximum working pressure			MPa
working temperature	-10~+55		°C
storage temperature	-20 ~ + 65 <95%RH(no icing, no condensation)		°C
Humidity at work			
mechanical interface	BS PT1/4 (R1/4),4mm, 6mm, 8mm quick connectors BS PT1/4 (R1/4)		
Calibration method	Air(20°C , 101.325kPa)		
weight	50 (带BSPT 1/4(R1/4),69 接头) 4mm, 8mm quick connectors), 6 (with 6mm quick connector)		g
Maximum permitted traffic	30	200	SLPM
Maximum allowable traffic change	4	30	SLPM sec

Note: 1. The analog output is the standard output of the sensor, and users can choose RS232 or RS485 output according to different requirements;

2. The above parameters are measured at 20, 101 325kPa .

product types choosing



* The unit of maximum flow is SLPM, for example, 5 represents a maximum flow of 5SLPM;

For carbon dioxide and laughing gas, FS4003 maximum flow can be selected 2,3,4, not optional 5; FS4008 maximum flow can be selected 10,20,30,40, not optional 50;

** The standard output of the sensor is an analog voltage, RS232 and RS485 are optional.