

Thermal Mass Flowmeter

FATS



LIQUID



OVERVIEW

Operation

The FATS Thermal Mass Flowmeter is designed for contact measurement of the speed of gaseous substances, in which there are no major changes in temperature and humidity during measurement. When the sensor in combination with the central holder is used, it is possible to use the sensor for measurements of flow in air conditioning ducts or piping. The temperature resistance of the sensor head is -30 to 80 °C and it must not be exceeded even for a short time.

Features

- Durable and light weight design
- High sensitivity
- Easy to install
- High accuracy
- Exclusive interior design
- Adjustable pulse output
- Long term stability

Application

- Pharmaceutical industry
- Weather station
- Mechanical engineering
- Measuring in hospital
- Textile industry
- Clean room

OPERATING DATA

Temperature of Measu.	-20...+85°C
Ambient Temperature	-30...+80°C
Measuring Sensitivity	0.05 m/s
Overpressure	16 Bar max.
Accuracy	±1.0%
Measuring Error	±5% of the range or ±0.5 m/s
Response Time	< 2 s
Recom. Wire Cross-sect.	0.35...1.5 mm ²
Type of grommet	M12 x 1.5
Measu. Stem Diameter	10 mm
Stem Standard Lengths	100-200 mm(others on request)
Enclosure	IP65/ IP67,IP68 on request

MEASURING RANGES

Velocity Range	0-5 m/s
	0-10 m/s
	0-20 m/s
	0-60 m/s
	0-100 m/s

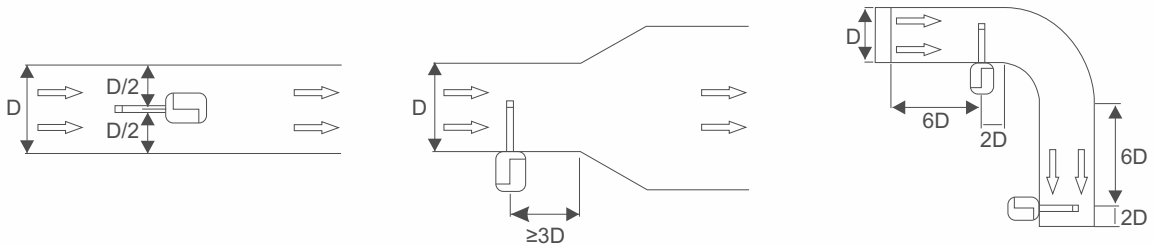
MATERIALS

Head	ABS
Stem	SS304 / SS316 on request

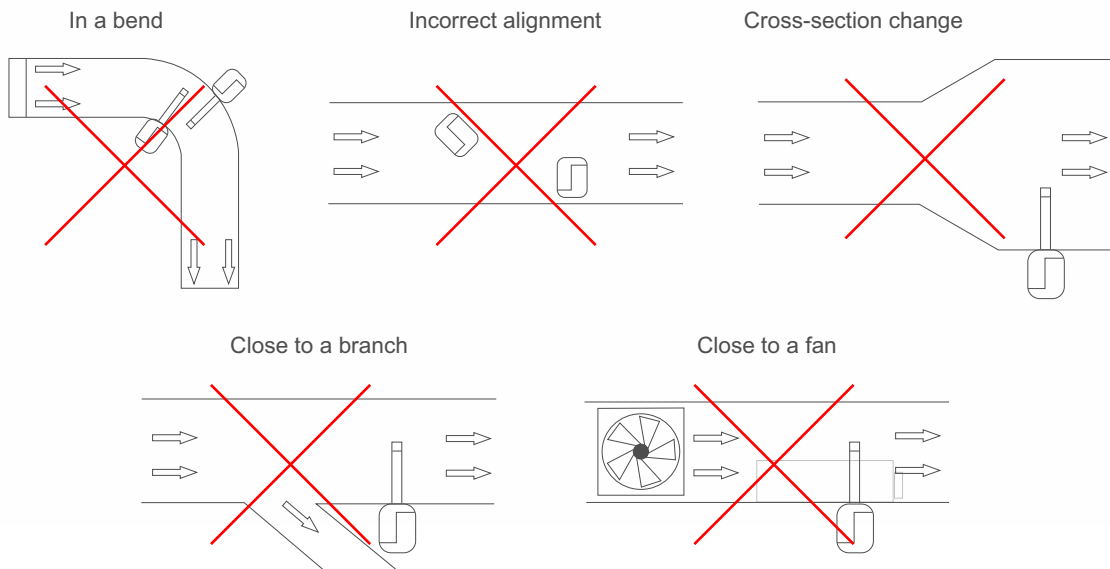
INSTALLATION

Correct:

The axis of the cable grommet must be horizontal with the direction of the flow.



Incorrect



ELECTRICAL DATA

Signal Output	Pulse, 4...20 mA or 0...10 V DC on request
Power Supply	15-30 VDC (recommended 24 VDC)
Display (optional)	Panel type TFT LCD Display rate and total flow
Communication	RS485 on request

OPTIONS, ELECTRONIC

BAB212

Selectable Inputs	4-20 mA,0-10VDC,0-5VDC,Pulse (PNP,NPN)
Operating Media	Liquids
Selectable Outputs	4-20 mA , 0-10VDC and Pulse
Communication	RS485-MODBUS (HART on request)
Analog Input Resolution	10 bit
Digital Input Speed	10 KHz, max
Digital Output Speed	50 Hz max
Display	TFT, 4.3" 480x272 pixel resistive touchscreen
Humidity	%10...85 non-condensate
Power Supply	24 VDC, \pm %10
Power Consumption	3 W
Dimensions	144 x 144 mm (front) ,134 x 134 mm (rear), depth 100 mm
Enclosure	IP65 (front) , IP66 , IP67 on request



ORDERING

FATS			Thermal Mass Flowmeter
Function	TA		Pulse, 4...20 mA output, No display
	TV		Pulse, 0...10 VDC output, No display
	GK		4...20 mA, pulse, RS485 MODBUS output with rate and total display
Size		S	DN25-DN200
		M	DN250-DN500
		L	DN600-DN1000
Measuring Range		05	0...5 m/sec
		10	0...10 m/sec
		20	0...20 m/sec
		60	0...60 m/sec
		100	0...100 m/sec