

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.

Application

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

Features

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



OPERATING DATA

Temperature Range

-20...+85°C

Ambient Temperature

-30...+85°C

Measuring Sensitivity

0.05 m/s

Accuracy

±1,5 % of reading + ±0.3 % of full scale
±1,0 % of span for pressure
±2°C of temperature

Measuring Error

±5% of the range or ±0.5 m/s

Response Time

<0,5 sec

Sampling

150 msec

Stem Diameter

14 mm

Enclosure

IP65/ IP67,IP68 on request

Sliding Fittings

G 1/2", G 1" on request

MEASURING RANGES

Pipe Diameter

DN25-900 mm for insertion type (bigger pipe on request)
DN15-300 mm for in-line type

Flow Velocity Range

0,6-60 Nm/s
1,0-100 Nm/s
1,2-120 Nm/s
1,5-150 Nm/s

MATERIALS

Housing

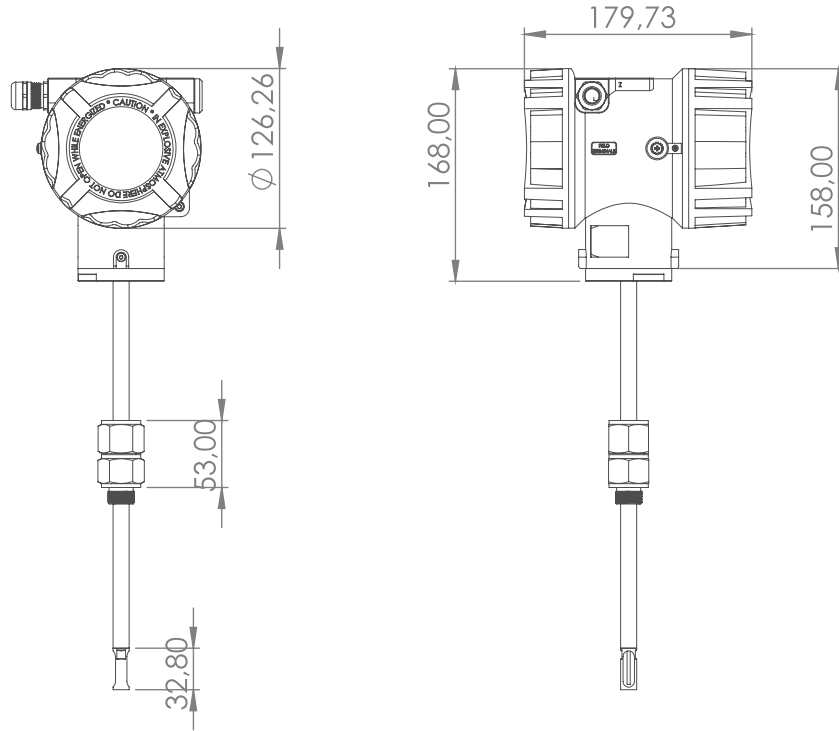
ABS or aluminum

Stem

SS304 / SS316 on request



TECHNICAL DRAWING AND DIMENSIONS



ELECTRICAL DATA

Signal Output

Pulse and 4...20 mA, 0...10 V DC on request

Power Supply

24 VDC

Display (Optional)

Panel type TFT LCD Display rate and total flow

Communication

RS485 Modbus, ethernet or HART on request

Datalogger

24 hours storage (on request)



OPTIONS

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

Model	
FATS	Thermal Mass Flowmeter

Design	
IT	Insertion Threaded
IF	Insertion Flanged
IN	Inline

Pipe Size	
XXXX	Please specify as unit is mm

Output	
A	4-20 mA, pulse
B	0-10 VDC, pulse

Communication	
R	RS-485 MODBUS
E	Ethernet
X	Others

Media	
A	Air
N	Nitrogen
O	Oxygen
C	Carbondioxide
D	Natural gas
X	On request

Range Type	
L	Low flow range (0,6-60 Nm/s)
S	Standard flow range (1,0-100 Nm/s)
H	High flow range (1,2-120 Nm/s)
U	Ultra high flow range (1,5-150 Nm/s)

Enclosure	
65	IP65
67	IP67
68	IP68

Pressure Management	
N	None
Y	Yes

Datalogger	
N	None
Y	24 hours stroage

Bi-directional Measurement	
N	None
Y	Yes

