



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

Thermal mass flow meter

SUP-MF

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dTS.
INSTRUMENTS

Datasheet**Thermal mass flow meter
SUP-MF**

The thermal mass flow meter is designed based on the principle of thermal diffusion. The instrument uses the constant temperature difference method to accurately measure the gas. It has the advantages of small size, high degree of digitization, convenient installation and accurate measurement.

Reduce your energy costs and increase your sustainability. Monitor your consumption and analyze your leakage flows with just one measuring device.

Applications

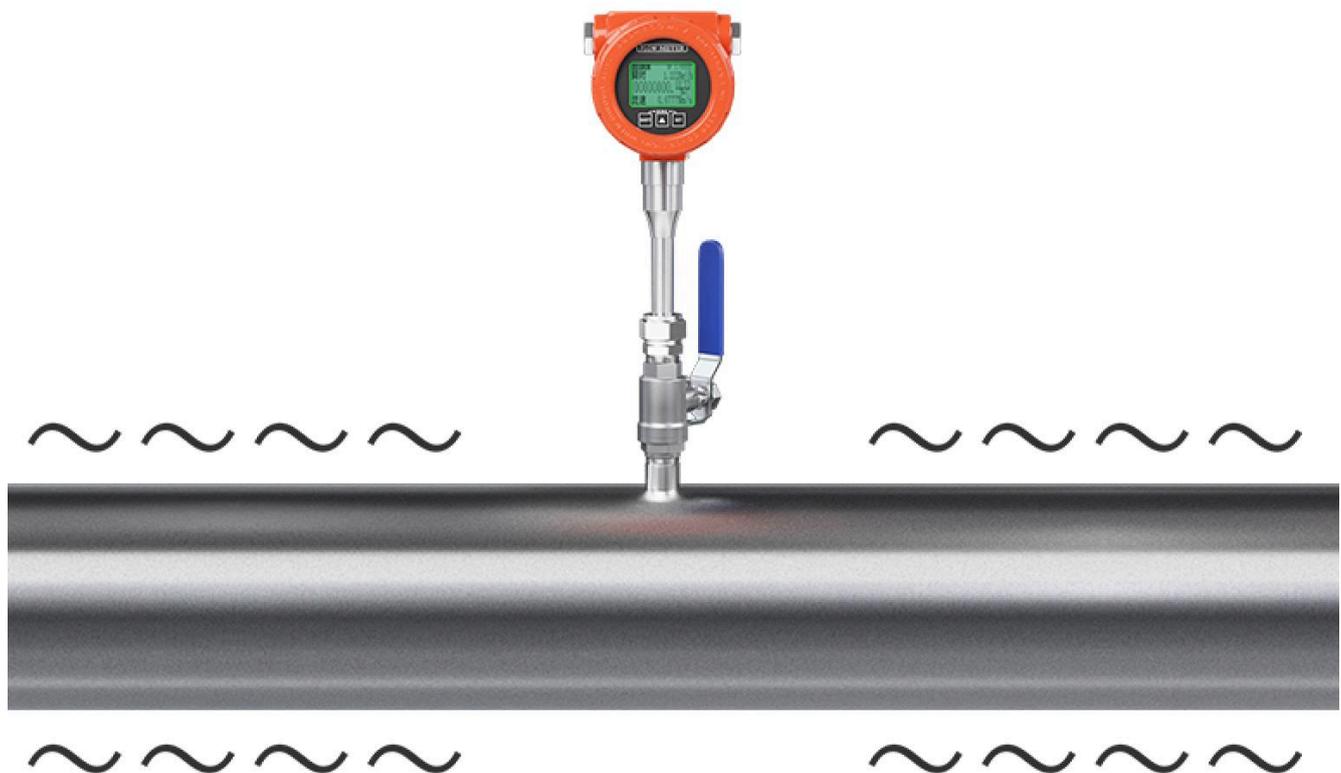
- Compressed air measurement.
- Sewage treatment aeration measurement
- Flue gas emission measurement
- Chimney flue exhaust monitoring

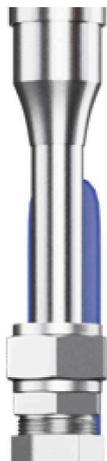
Features

- Without temperature and pressure compensation
- Wide range: 0.5Nm/s~100Nm/s
- Vibration resistance and long service life
- Easy installation and maintenance
- Digital circuit, accurate measurement
- With RS485 communication

**Thermal mass flow meter**

Parameters	
Type	Insertion
Medium	Steady-state gases (except unstable media as acetylene and boron trichloride etc)
Diameter	DN65~DN1000
Flow rate	0.1~100 Nm/s
Accuracy	±2.5%
Working temperature	Sensor: (-40~+300) °C Converter: (-20~+45) °C
Working pressure	≤2.5MPa
Power supply	220VAC 24VDC; 18W
Respond time	1s
Signal output	4~20 mA
Communication	RS485
Relay	1~2 relay optional
Local display	LED display
Ingress protection	IP65
Sensor material	Stainless steel





Shield Rod



Ball valve

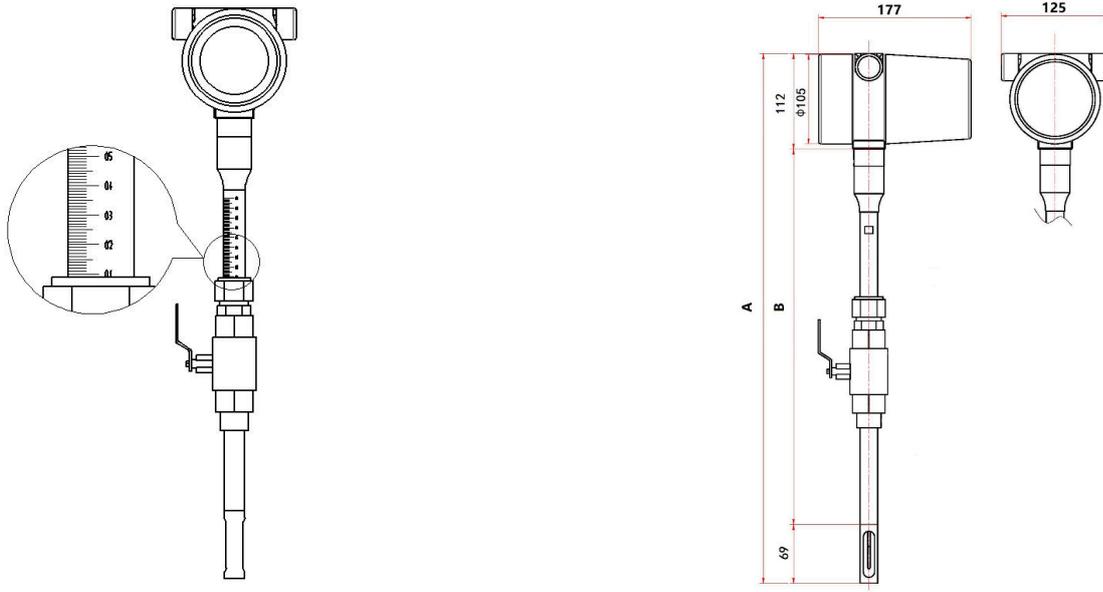


Sensor



Flow range				
Diameter	Air (Nm ³ /h)	Extended range (Nm ³ /h)	Oxygen (Nm ³ /h)	Combustible gas (Nm ³ /h)
10	0.5~28	0.03~30	0.5~14	0.5~5
15	0.5~65	0.07~65	0.5~32	0.5~10
20	0.5~100	0.12~110	0.5~55	0.5~20
25	0.5~175	0.18~180	0.5~89	0.5~28
32	0.5~290	0.3~290	0.5~144	0.5~45
40	0.5~450	0.5~450	0.5~226	0.5~70
50	1~600	0.5~700	0.7~352	0.7~110
65	1.5~1000	1~1200	1.2~600	1.2~185
80	2~1500	1.5~1800	2~900	2~280
100	3~2300	3~2800	3~1420	3~470
125	4.5~3500	4~4400	4.5~2210	4.5~700
150	6.5~5200	6~6300	6.5~3200	6.5~940
200	12~9000	12~11500	12~5650	12~1880
250	18~14500	18~17500	18~8830	18~2820
300	25~21000	25~25000	25~12720	25~4060
350	35~28000	35~34500	35~17000	35~5600
400	45~36500	45~45000	45~22600	45~7200
450	60~46500	60~57000	60~29000	60~9200
500	70~57000	70~70000	70~35300	70~11280
600	100~81000	100~101000	100~50600	100~16300
700	140~110000	140~138000	140~69000	140~22100
800	180~150000	180~180000	180~90000	180~29000
900	230~185000	230~230000	230~115000	230~36500
1000	290~230000	290~280000	290~140000	290~45500

Dimension



Ordering code

SUP-MF-DN65-M1-S1-MM1-J9-DT1-01-D2-I3-V1-DQ1-P1-T0-IP1													Description	
SUP-MF	-	-	-	-	-	-	-	-	-	-	-	-	-	DN65~DN1000
Pipe size	DNXX													Compact type
Meter type	M1													Insertion
Installation method	S1													Gas
Medium		MM1												2.5%
Accuracy			J9											Local display
Display type				DT1										4~20mA
Signal output					01									RS485
Communication						D2								Thread + ball valve
Installation type							I3							Flange+ ball valve
							I4							24VDC
Power supply								V1						220VAC
								V2						Stainless steel
Sensor material									DQ1					-0.1MPa~0MPa
Pressure range										P0				1.6MPa
										P1				-20~150°C
Temperature range											T0			150~220°C
											T1			220~300°C
											T2			IP65
Ingress protection												IP1		