

Thermal Gas Mass Flow Meters



Features

Thermal gas mass flow meter is a flow meter that uses the principle of heat conduction to directly measure gas mass flow. No temperature compensation or pressure compensation is required.

- Wide range ratio, can measure gas with flow rate as high as 120Nm/s and as low as 0.1Nm/s. Can be used for gas leak detection.
- Good seismic resistance and long service life. The sensor has no moving parts and pressure sensing parts, and is not affected by vibration on measurement accuracy.
- Easy to install and maintain. If site conditions permit, non-stop installation and maintenance can be achieved. (Special customization required)
- Digital design. Overall digital circuit measurement, accurate

measurement and easy maintenance.

- The thermal gas mass flow meter adopts RS-485 communication or HART communication. It can realize factory automation and integration.
- The power supply is optional AC220V, DC24V or AC220V, DC24V dual power supply.

Specifications

Measuring medium	Single-component and multi-component gases (except acetylene gas)
Pipe diameter range	Round tube DN10~4000mm or square tube
Flow rate range	0.0~120Nm/s
Accuracy	Relative error $\pm 1.5\%$
Operating temperature	Normal temperature type: $-40\sim 100^{\circ}\text{C}$ High temperature type $-40\sim 220^{\circ}\text{C}$
work pressure	Medium pressure $\leq 1.6\text{MPa}$ (2.5Mpa , 4Mpa other pressures can be customized)
Power supply	DC24V or AC220V
responding speed	1S
output signal	4-20mA (photoelectric isolation, maximum 500 Ω load), RS-485 (MODBUS) (photoelectric isolation), pulse, HART, etc. optional
Pipe material	Materials suitable for measuring pipes: carbon steel,

	stainless steel, plastic, etc.
display	Four-line LCD display
Display content	Standard voltage, instantaneous flow, cumulative total, standard flow rate, etc.
Protection level	IP65
Explosion-proof level	ExdIICT4
Sensor material	316L or Hastelloy
Alarm Output	1~2 way relay open contact 10A/220V/AC 5A/30V/DC
Installation interface form	Pipe flange type, threaded type, clamp type, plug-in type, plug-in type with ball valve, flange plug-in type

Flow range

Diameter DN mm	Flow Range (Nm ³ /h)
DN10	0.3-30
DN15	0.6-60
DN20	1.1-110
DN25	1.8-180

DN32	2.9-290
DN40	4.5-450
DN50	7-700
DN65	12-1200
DN80	18-1800
DN100	28-2800
DN125	44-4400
DN150	64-6400
DN200	130-13000
DN250	170-17000
DN300	254-25400