



THERMAL GAS MASS FLOW METER

Model: F07.0404



Flange type connection



Insertion type connection

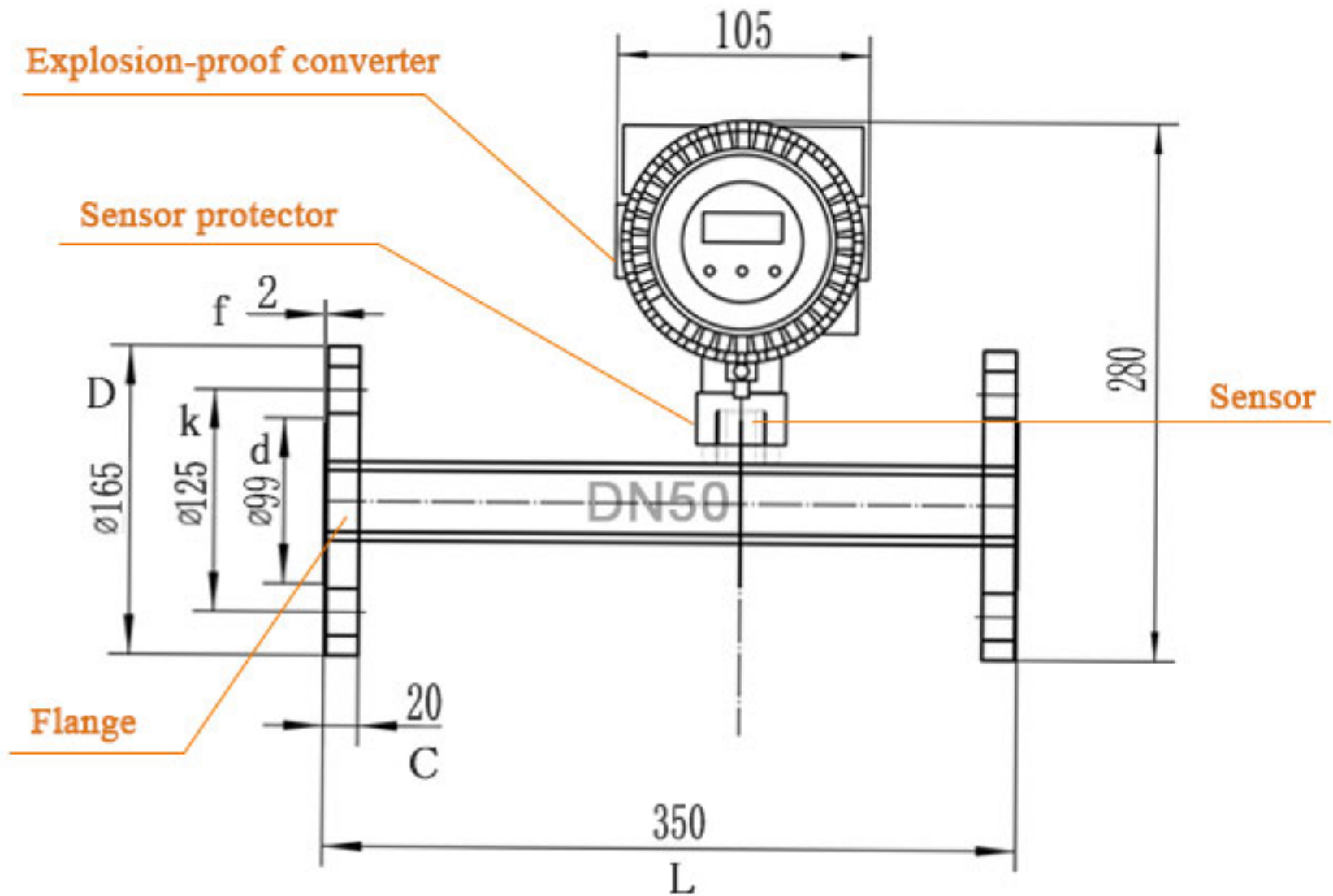


Tri-clamp type connection



Thread type connection

Thermal Gas Mass Flow Meter Dimension



Thermal Gas Mass Flow Meter Installation Parameters

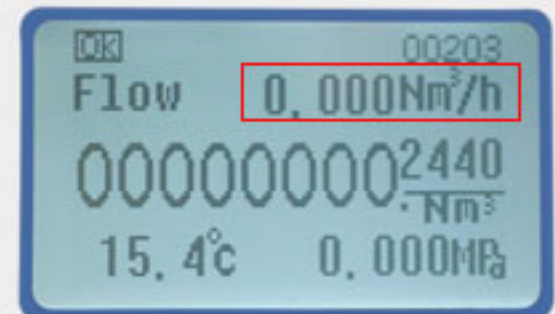
Nominal Diameter	Flange outer diameter	Center hole	Bolt hole	Screw Threads	Sealing face		Flange thickness	Installation length
					d	f		
DN	D	k	n x L		d	f	C	L
15	95	65	4x14	M12	46	2	14	280
20	105	75	4x14	M12	56	2	16	280
25	115	85	4x14	M12	65	2	16	280
32	140	100	4x18	M16	76	2	18	350
40	150	110	4x18	M16	84	2	18	350
50	165	125	4x18	M16	99	2	20	350
65	185	145	4x18	M16	118	2	20	400
80	200	160	8x18	M16	132	2	20	400
100	220	180	8x18	M16	156	2	22	500

Why choose us

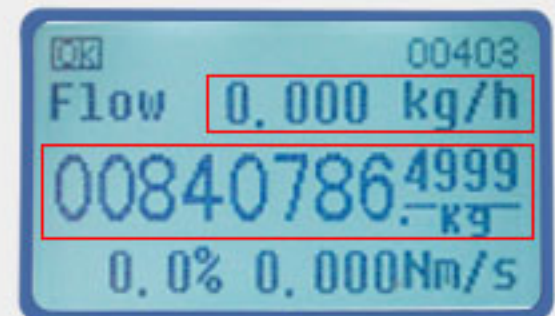
NO.1

LCD HD Display

Multiple flow units



Nominal standard
volume flow



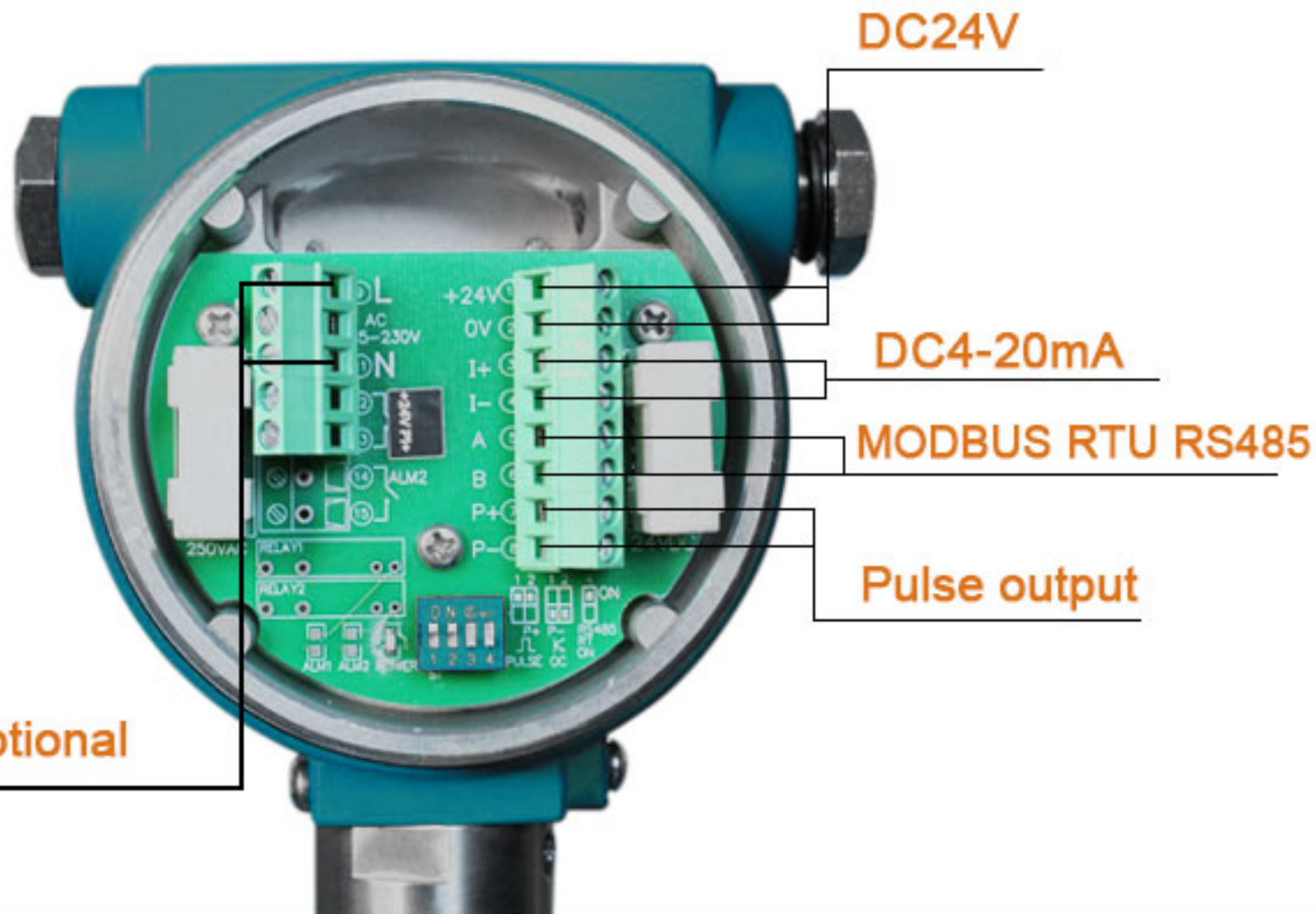
Mass flow
and accumulated flow

High accuracy, Stable performance, Multiple flow units seamless switching and multi-function setting

NO.2

Dual Power Supply

More options in the wiring process



AC85-265V optional

DC24V

DC4-20mA

MODBUS RTU RS485

Pulse output

With DC4-20mA four-wire output, which is more convenient for remote reception. Support MODBUS RTU RS485 protocol, coordinating the receiving system to collect more data and modify system

NO.3

Refined Shielded Rod

Stainless Steel 304 Rod, Corrosion Resistant



Standard rod dia. : $\phi 18$

Optional rod dia. : $\phi 12$

NO.4

Anti-Shedding Design

Standard:
Copper material



Option:PTFE



NO.5

High Precision Reinforced Sensor

The sensor is adopted reinforcing design and the root is partially reinforced to make the probe stronger and more suitable for a variety of media



Optional sensor

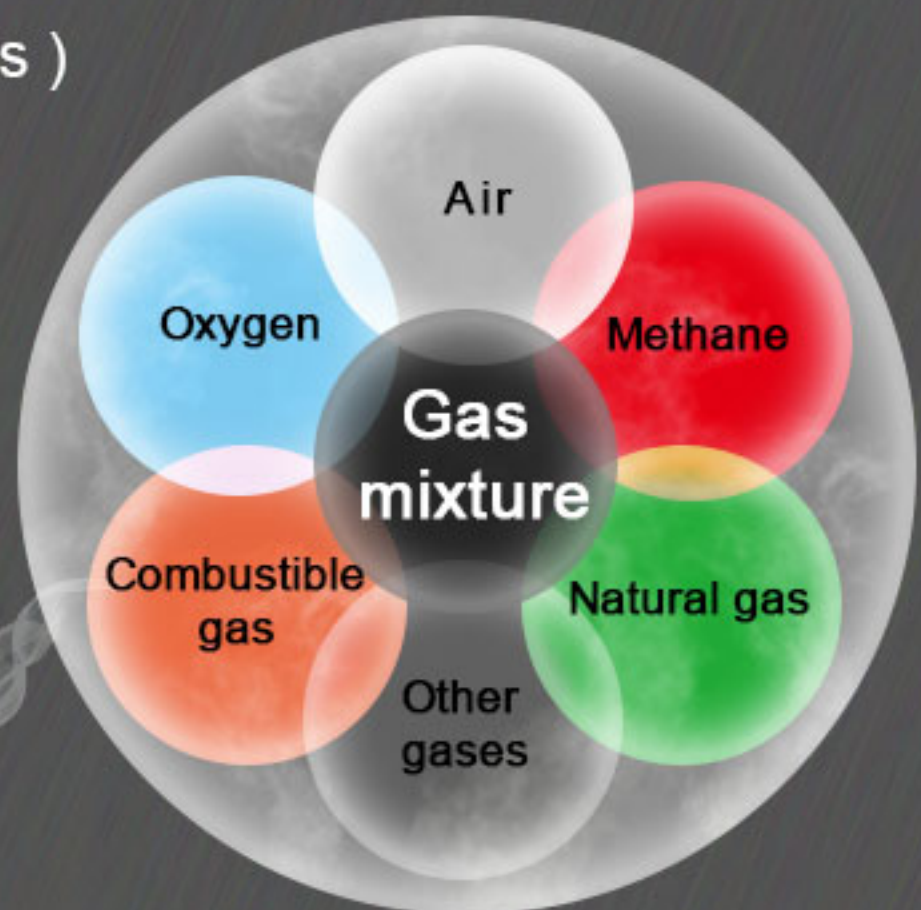
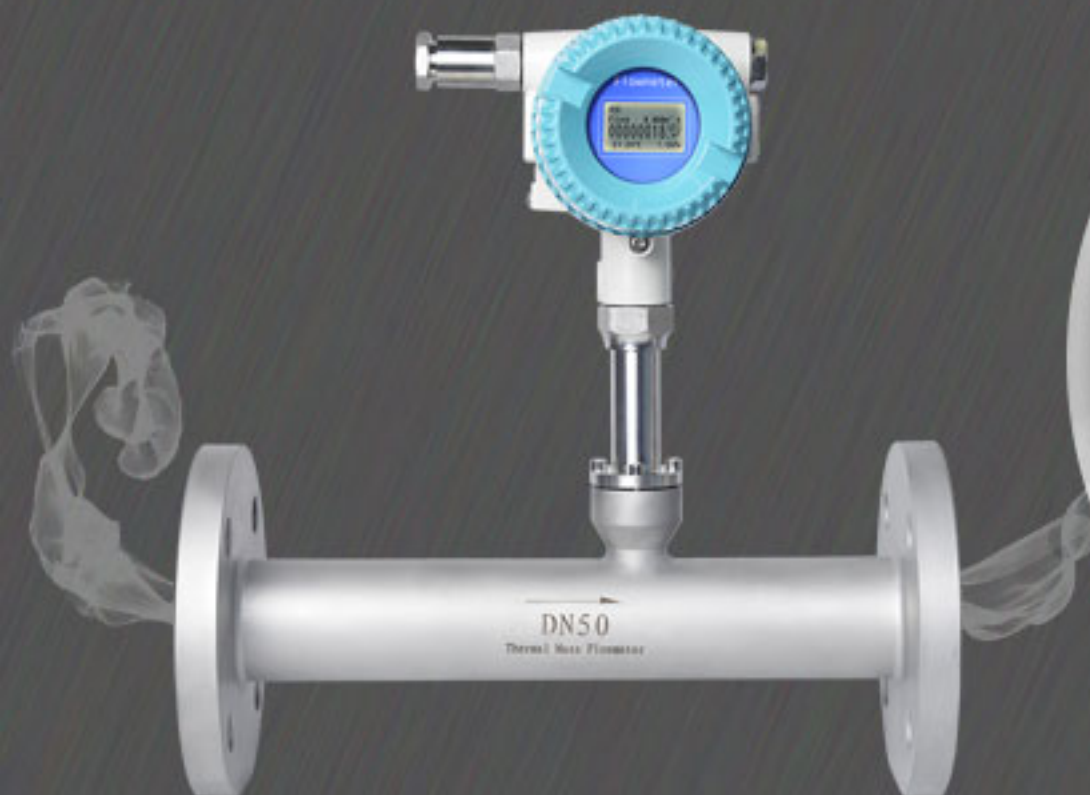


Standard sensor

NO.6

Could Measure Mixed Gas

(Except acetylene and humid gas)



Detailed Gas Composition is Needed for Model Selection

NO.7

Wide Flow Range, High Sensitivity

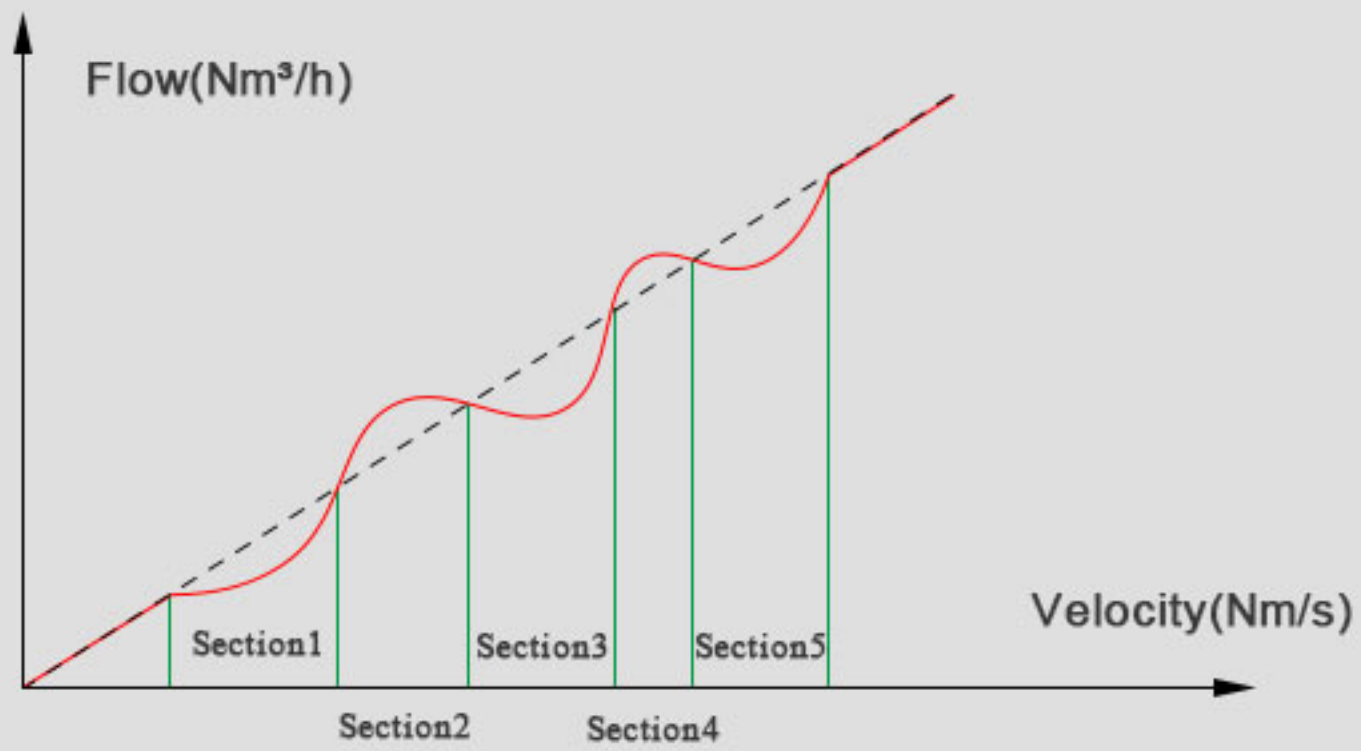
The minimum flow velocity is 0.1Nm/s



The thermal gas flowmeter is mainly used for measuring gas with low flow and the range could reach 1:1000, which is better than gas flowmeter on market and low flow could be measured.

NO.8

Thermal Gas Mass Flowmeter Segment Correction



Can be divided into five sections for correction, this operation will make measuring more accurate

NO.9

Easy To Install And Maintain

Could be installed and maintained without stopping production



Online installation

Only need to reserve 20mm mounting hole

Insertion type thermal gas mass flow meter need to reserve 20mm mounting hole, which could be used to weld and fix the base. (Option: Inline type thermal gas mass flow meter could be made Min.size 10mm)

Thermal Gas Flowmeter Parameter

Description	Specifications
Measuring Medium	Various Gases(Except acetylene)
Pipe Size	DN10-DN4000mm
Velocity	0.1-100Nm/s
Accuracy	+/-1~2.5%
Working Temperature	Sensor:-40~+220 degC Transmitter:-20~+45 degC
Working Pressure	Insertion Sensor:medium pressure ≤ 1.6 Mpa Flanged Sensor:medium pressure ≤ 1.6 Mpa Special pressure please double check
Power Supply	Compact type: 24VDC or 220VAC, Power consumption ≤ 18 W Remote type:220VAC,Power consumption ≤ 19 W
Response Time	1s
Output	4-20mA(optoelectronic isolation,maximum load 500 Ω),Pulse RS485(optoelectronic isolation) and HART
Alarm Output	1-2 line Relay, Normally Open state, 10A/220V/AC or 5A/30V/DC
Sensor Type	Standard Insertion, Hot-tapped Insertion and Flanged
Construction	Compact and Remote
Pipe Material	Carbon Steel, Stainless Steel,Plastic etc.
Display	4 lines LCD Mass flow, Volume flow in standard condition, Flow totalizer, Date and Time, Working time, and Velocity, etc.
Protection	IP65

Thermal gas flowmeter Flow-rate range table

Caliber (Nm ³ /h)	Range of air (Nm ³ /h)	Range of oxygen (Nm ³ /h)	Range of combustible gas (Nm ³ /h)
10	0.5-28	0.5-14	0.5-5
15	0.5-65	0.5-32	0.5-10
20	0.5-100	0.5-55	0.5-20
25	0.5-175	0.5-89	0.5-28
32	0.5-290	0.5-144	0.5-45
40	0.5-450	0.5-226	0.5-70
50	1-600	0.7-352	0.7-110
65	1.5-1000	1.2-600	1.2-185
80	2-1500	2-900	2-280
100	3-2300	3-1420	3-470
125	4.5-3500	4.5-2210	4.5-700
150	6.5-5200	6.5-3200	6.5-940
200	12-9000	12-5650	12-1880
250	18-14500	18-8830	18-2820
300	25-21000	25-12720	25-4060
350	35-28000	35-17000	35-5600
400	45-36500	45-22600	45-7200
450	60-46500	60-29000	60-9200
500	70-57000	70-35300	70-11280
600	100-81000	100-50600	100-16300
700	140-110000	140-69000	140-22100
800	180-150000	180-90000	180-29000
900	230-185000	230-115000	230-36500
1000	290-230000	290-140000	290-45000
2000	1150-900000	1150-560000	1150-18500

Nominal Condition Flow is the flow rate at Temperature 20°C and Pressure 101.325Kpa.

Thermal gas flowmeter selection table

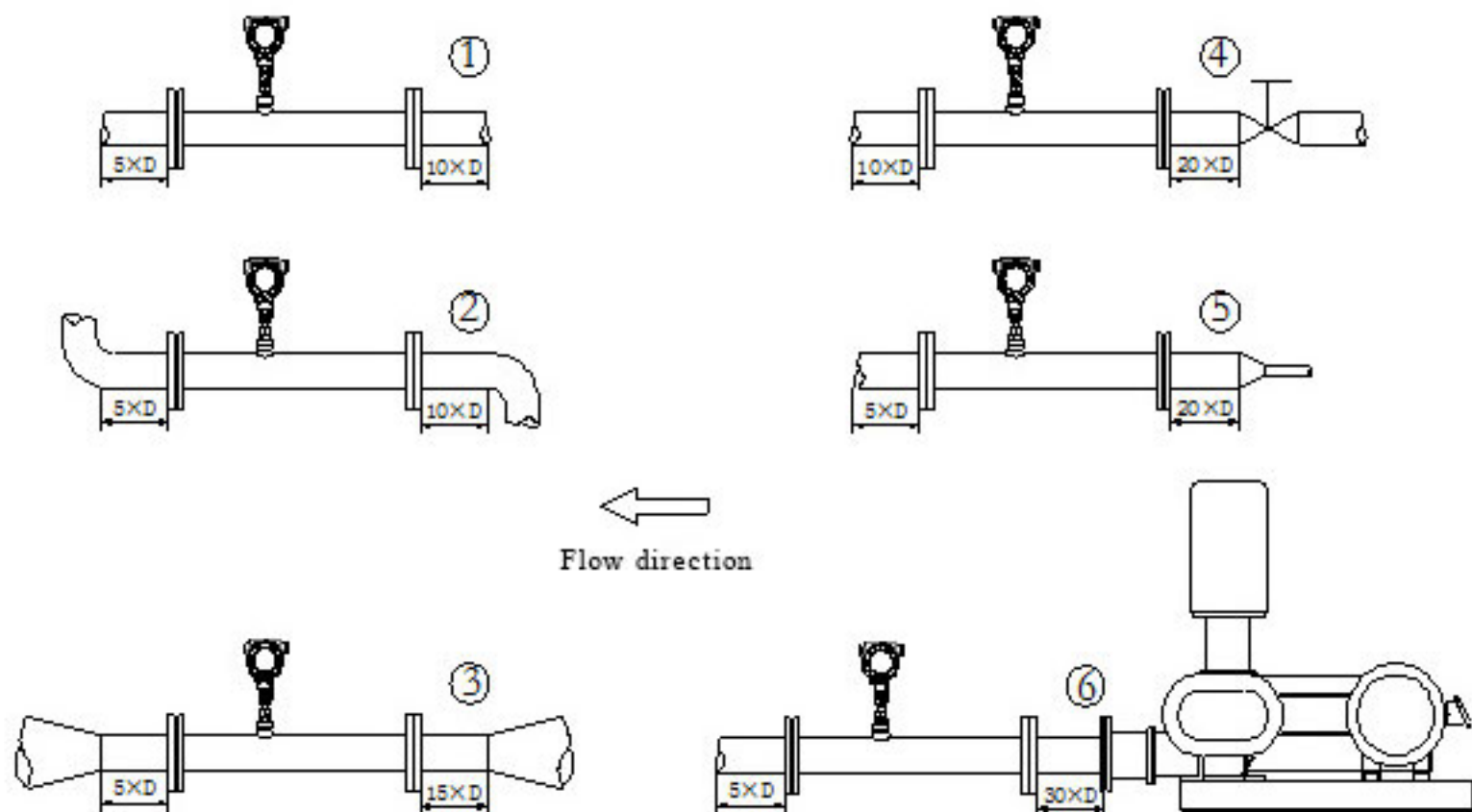
Structural style	F					Split type
	I					Integrated
	PI					Insert-Type
	PL					Piping Type
Connection type	C					Flange card installed
	ST					Threaded connection
	F					Flange connections
	B					Plug-in connection
Nominal diameter	15					15mm
	020					20mm

	A10					1000mm
Temperature	T0					-20°C ~ 60°C
	T1					60°C ~ 100°C
	T2					100°C ~ 150°C
	T3					150°C ~ 200°C
	T4					200°C ~ 300°C
Pressure	P0					<0
	P1					0 ~ 1.0Mpa
	P2					0 ~ 1.6Mpa
	P3					0 ~ 2.0Mpa
	P4					0 ~ 3.0Mpa

Thermal mass flow meter installation

Installation location and straight pipe requirements

1. When installing the thermal mass flowmeter, keep away from elbows, obstacles, reducers and valves to ensure a stable flow field. It is required to have a long upper straight pipe. The front straight pipe length is greater than $10D$, and the rear straight pipe length is greater than $5D$.



Installation upstream and downstream straight pipe

2. When the site cannot meet the requirements of the straight pipe section, the gas rectifier can be connected in series to greatly reduce the requirements for the straight pipe section.