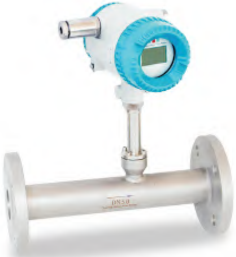
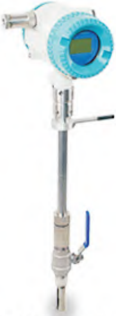
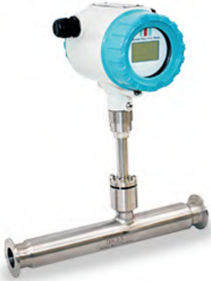
Thermal Gas Mass Flow Meter



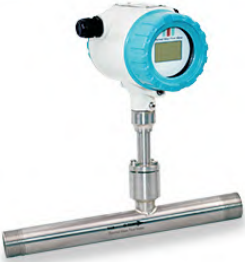
Flange type connection



Insertion type connection

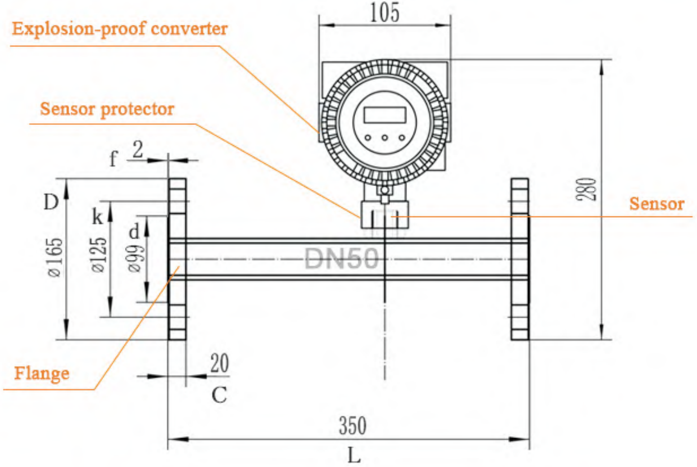


Tri-clamp type connection



Thread type connection

Thermal Gas Mass Flow Meter Dimension



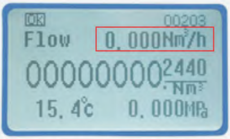
Why choose us

NO.1

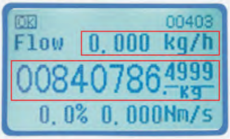
LCD HD Display

Multi-flow unit switching

DN50
Thermal Mass Flow Meter



Nominal standard volume flow



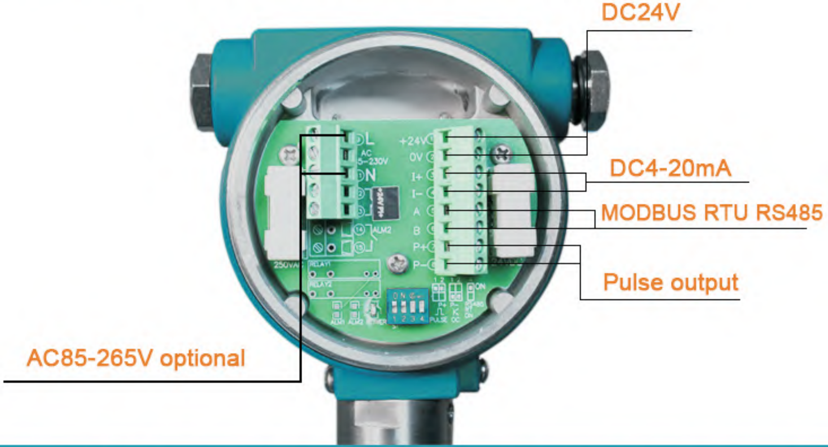
Mass flow and accumulated flow

Ensure the accurate of measuring,stable performance,multi-flow unit switching,multi-function setting

NO.2

Dual Power Supply

More options in the wiring process



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

Rod be made of stainless steel 304,which is more corrosion-resistant

Standard rod dia. :φ18

Optional rod dia. :φ12

NO.4

Anti-Shedding Design

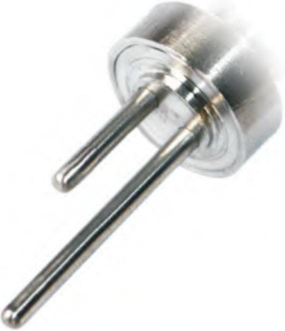
Standard:
Copper material

Option:PTFE

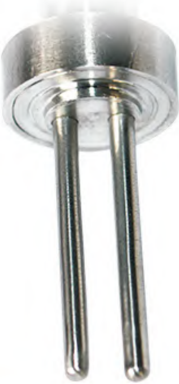
NO.5

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

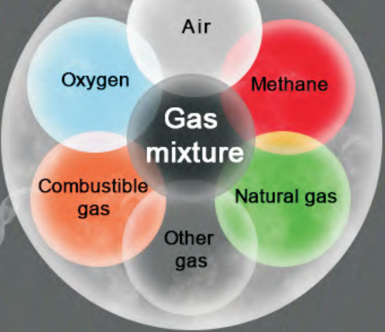


Standard sensor

NO.6

Could Measure Multiphase Mixed Gas

(Except acetylene and humid gas)



Need to tell us the composition of the gas

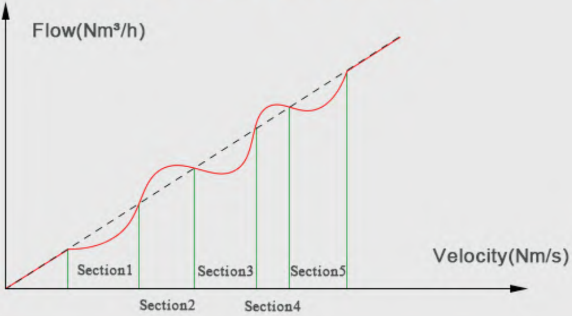
NO.7 Wide Flow Range,High Sensitivity

The minimum flow velocity is 0.1Nm/s

0.1 Nm/s ~ **100 Nm/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 of Gas (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 ≤1.6Mpa Flanged Sensor:medium pressure ≤1.6Mpa Special pressure please double check
Power Supply	Compact type: 24VDC or 220VAC, Power consumption ≤18W Remote type:220VAC,Power consumption ≤19W
Response Time	1s
Output	4-20mA(optoelectronic isolation,maximum load 500Ω),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℃ and Pressure 101.325Kpa.

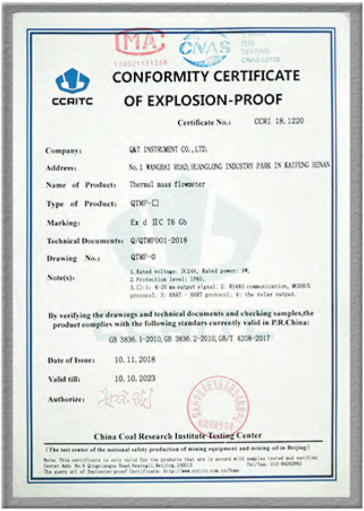
Thermal gas flowmeter selection table

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

Strict Flow Calibration

Adopt the gas venturi sonic nozzle calibration device and submit the equipment for inspection and verification regularly, which could guarantee the accuracy more stable and reliable!

Certificates



CMA 170021131268

CNAS TESTING CNAS L0738

CCRITC

CONFORMITY CERTIFICATE OF EXPLOSION-PROOF

Certificate No.: CCRI 18.1220

Company: Q&T INSTRUMENT CO.,LTD.

Address: No.1 WANGBAI ROAD,HUANGLONG INDUSTRY PARK IN KAIFENG HENAN

Name of Product: Thermal mass flowmeter

Type of Product: QTMF-□

Marking: Ex d ⅡC T6 Gb

Technical Documents: Q/QTMF001-2018

Drawing No.: QTMF-0

Note(s):
1.Rated voltage: DC24V, Rated power: 9W,
2.Protection level: IP65;
3.□:1: 4-20 mA output signal; 2: RS485 communication, MODBUS protocol; 3: HART - HART protocol; 4: the relay output.

By verifying the drawings and technical documents and checking samples,the product complies with the following standars currently valid in P.R.China:

GB 3836.1-2010,GB 3836.2-2010,GB/T 4208-2017

Date of Issue: 10.11.2018

Valid till: 10.10.2023

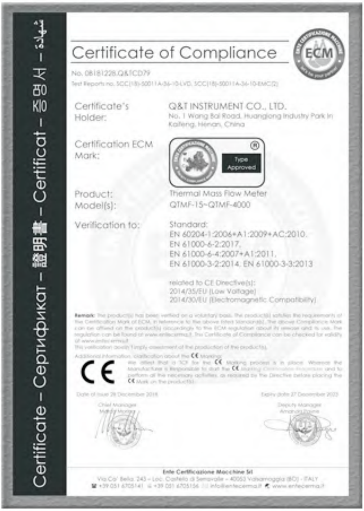
Authorize:

China Coal Research Institute Testing Center

(The test center of the national safety production of mining equipment and mining oil in Beijing)

Note: This certificate is only valid for the products that are in accord with samples tested and verified.
Center Add: No.5 Qingniangou Road,Hepingli,Beijing,100013 Tel/Fax: 010-84262991
The query url of Explosion-proof Certificate: http://www.ccritc.com.cn/Home

Thermal gas mass flow meter EX-proof



Certificate – Сертификат – 證明書 – Certificat – 증명서 – شهادة

Certificate of Compliance

No. 08181228.Q&TCD79
Test Reports no. SCC(18)-50011A-36-10-LVD, SCC(18)-50011A-36-10-EMC(2)

Certificate's Holder:	Q&T INSTRUMENT CO., LTD. No. 1 Wang Bai Road, Huanglong Industry Park In Kaifeng, Henan, China
Certification ECM Mark:	Type Approved
Product:	Thermal Mass Flow Meter
Model(s):	QTMF-15~QTMF-4000
Verification to:	Standard: EN 60204-1:2006+A1:2009+AC:2010, EN 61000-6-2:2017, EN 61000-6-4:2007+A1:2011, EN 61000-3-2:2014, EN 61000-3-3:2013 related to CE Directive(s): 2014/35/EU (Low Voltage) 2014/30/EU (Electromagnetic Compatibility)

Remark: The product(s) has been verified on a voluntary basis. The product(s) satisfies the requirements of the Certification Mark of ECM, in reference to the above listed Standard(s). The above Compliance Mark can be affixed on the product(s) accordingly to the ECM regulation about its release and its use. The regulation can be found at www.entecerma.it. The Certificate of Compliance can be checked for validity at www.entecerma.it
This verification doesn't imply assessment of the production of the product(s).

Additional information, clarification about the CE Marking:

CE

We attest that a TCF for the CE Marking process is in place. Whereas the Manufacturer is Responsible to draft the CE Marking Certification Procedure and to perform all the necessary activities, as required by the Directive before placing the CE Mark on the product(s).

Date of issue 28 December 2018 Expiry date 27 December 2023

Chief Manager Deputy Manager

Ente Certificazione Macchine Srl
Via Ca' Bella, 243 - Loc. Castello di Serravalle - 40053 Valsamoggia (BO) - ITALY
+39 051 6705141 +39 051 6705156 info@entecerma.it www.entecerma.it

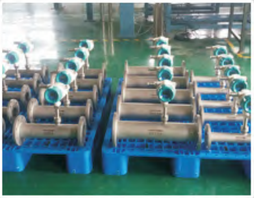
Thermal gas mass flow meter CE

德意志联邦共和国
商标注册证书
企业法人营业执照

Enterprise certificates

More than 100 patents

Packing Of Products



Product ready for packing

ECO packing

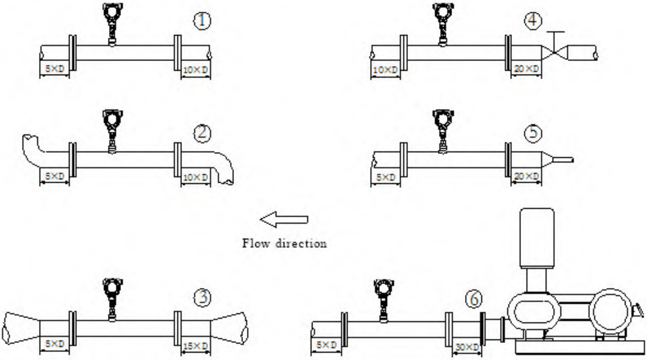
Enter the finished product warehouse and wait for transportation

Products are multi-packaging, shockproof and anti-fall,ensuring be delivered to customers'hands safely .

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.

Pipe installation-size

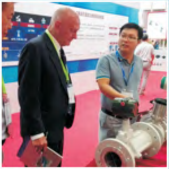
Nominal Diameter	Flange outer diameter	Center hole	Bolt hole	Screw Threads	Sealing face		Flange thickness	Installation length
DN	D	k	n x L		d	f	C	L
15	95	65	4x14	M12	46	2	14	280
20	105	75	4x14	M12	56	2	16	280
25	115	85	4x14	M12	65	2	16	280
32	140	100	4x18	M16	76	2	18	350
40	150	110	4x18	M16	84	2	18	350
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

Note： More than 100mm customized

Trade Show

Rich experiences in exhibition

Q&T INSTRUMENT CO., LTD

Kaifeng Qingtianweiye Flow Instrument Co.,Ltd
CHIN
Q&T