

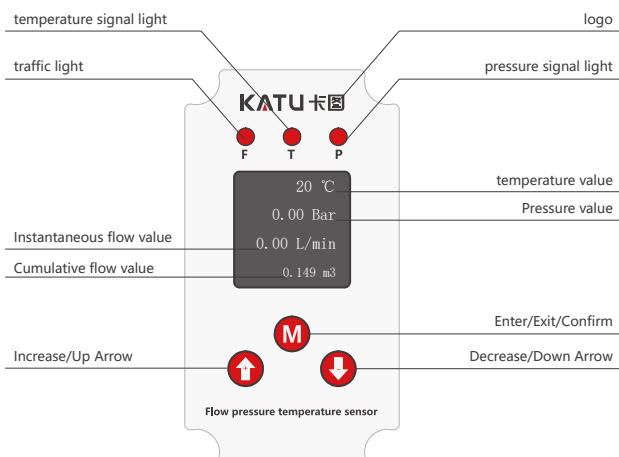
卡图电子



high temperature

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Panel Schematic



Principle features

- Liquid crystal display on-site instantaneous flow, cumulative flow and temperature, pressure information
- 3 groups of 4-20mA analog signal output; 3 groups of alarm points for flow, temperature and pressure
- Support digital output, RS485
- Can monitor gas, liquid
- Not affected by pipeline static pressure
- Simple structure, no moving parts
- Easy installation, no on-site calibration and debugging, maintenance-free

Applications

- Cooling water, circulating water, labyrinth seal, critical water flow monitoring
- Cooling, lubrication, hydraulic oil circuit system flow monitoring
- Flow monitoring of organic and inorganic solutions
- Steam flow monitoring, high and low temperature measurement, can be customized
- Gas (oxygen, nitrogen, ammonia, natural gas, etc.) flow monitoring
- Antifreeze protection, sprinkler system, sewage protection, etc.
- Built-in fuel consumption compensation function, accurate monitoring

technical parameter

◊Flow range: Liquid: 0.4-25,000 L/min, depending on the pipe size.

Please refer to the flow range table for specific standard flow rates.

Gas: Calculated according to specific application

◊Pressure range: 0-1.0Mpa

◊Temperature range: -20...80°C

◊Accuracy: $\pm 2\%$F.S (flow), $\pm 0.5\%$F.S (pressure), $\pm 1\text{ }^\circ\text{C}$ (temperature)

◊Repeatability: <math>< 2\%</math>, actual flow

◊Wetted material: Alumina/SUS304 (stainless steel)

◊Pressure level: 1.0Mpa (high pressure customized 1.6Mpa or 2.5Mpa)

◊Ambient temperature: -10...65°C

◊Medium temperature: -20...80°C (high temperature customization -40...350°C)

◊Process connection:

Thread type: G1/2-G2

Flange connection: DN15-DN250 (GB9119-2000)

◊ Power supply: 18-30VDC

◊Digital display: OLED LCD screen (1-1/2')

◊Linearization: 5-point flow linear curve

◊Alarm contacts: 3 independent alarm switches, which can be set by the user

within the full range. Switching capacity, 24VDC/400mA

◊Signal output:

Three-wire system 4-20mA, linear relationship with flow/pressure/temperature, can be set arbitrarily within the user range,

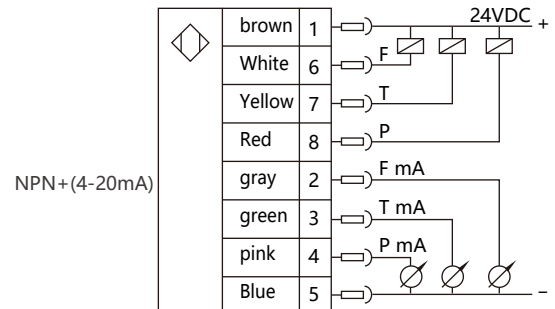
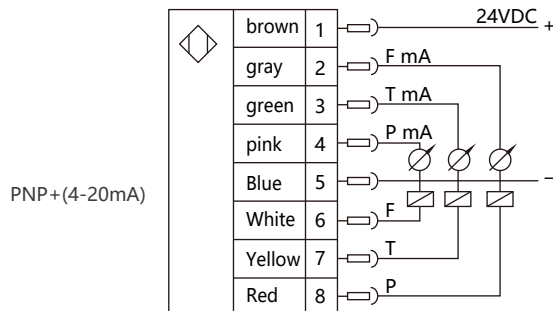
Maximum 500Ω, pulse frequency can be customized, maximum 1 kHz, user can set,

For example 1 pulse/liter or 1 liter/pulse can be customized RS485

Wiring diagram

1	brown	Power positive VDD
2	gray	Flow analog
3	green	temperature analog
4	pink	pressure analog

5	blue	Power supply negative GND
6	white	traffic switch/alarm
7	yellow	temperature switch/alarm
8	red	pressure switch/alarm



Selection table

FTS400-	015	-	G K	L	S	-	detail
FTS400							FTS400-Flow temperature and pressure integrated sensor
	015						DN15 caliber (025 represent DN25)
		-					Range code
			GK				Internal thread G tooth (caliber≤DN50)
			RK				Internal thread R tooth (caliber≤DN50)
			GM				External thread G tooth (caliber≤DN50)
			RM				External thread R teeth (caliber≤DN50)
			F				Gb flange (Chemical Industry standard PN16: pressure 1.6MPa)
				L			liquid
				G			1: oxygen (O ₂)
							2: nitrogen (N ₂)
							3: Ammonia (NH ₃)
							4: natural gas
					L		Body Material: Aluminum
					S		Body material: 304 stainless steel
					P		Body material: PPS
						-	Standard type (medium temperature: -20...80℃)
						G	High temperature type (medium temperature: -40...300℃)
						G3	High temperature type (medium temperature: -40...350℃)
						G2	High temperature type (medium temperature: -30...200℃)

Remarks: High temperature type select material, use 304 stainless steel

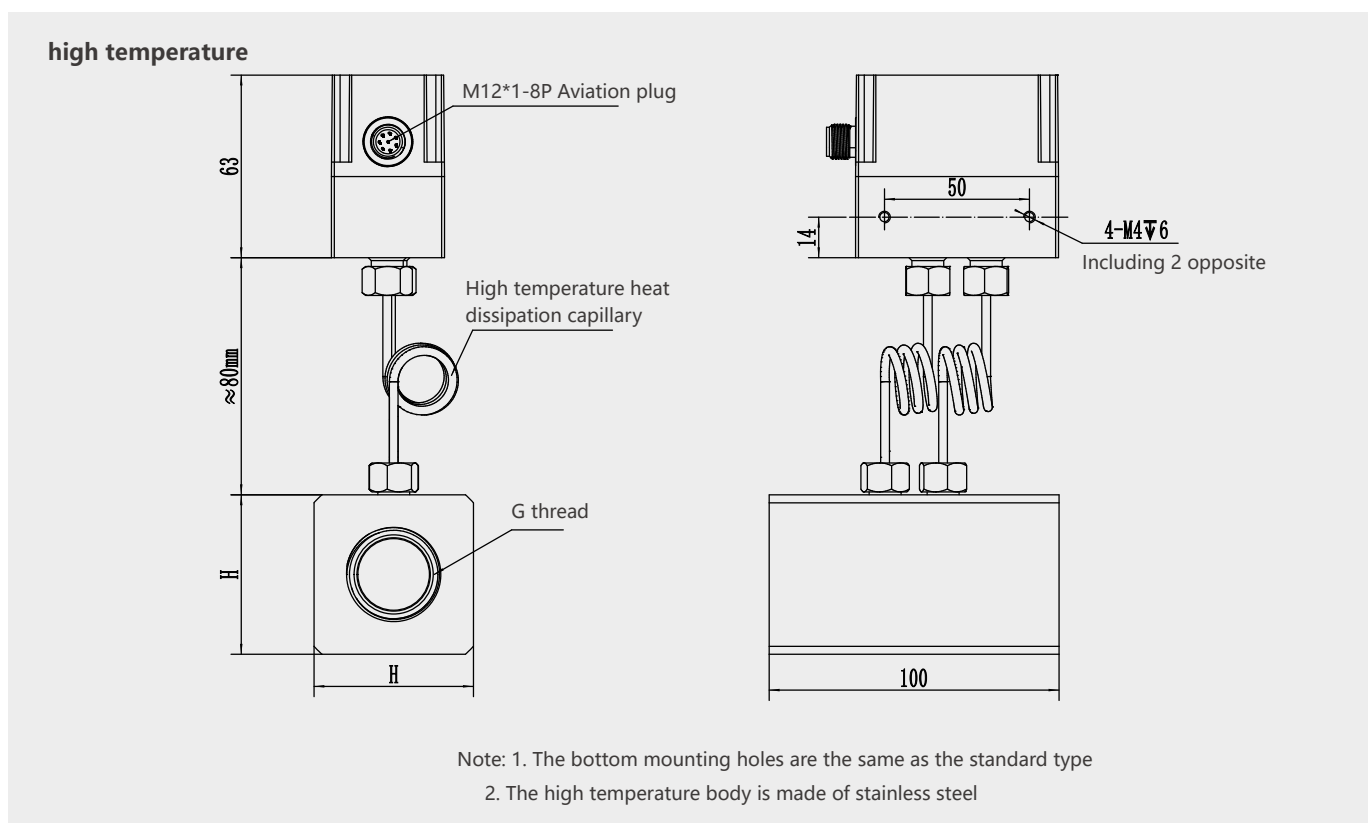
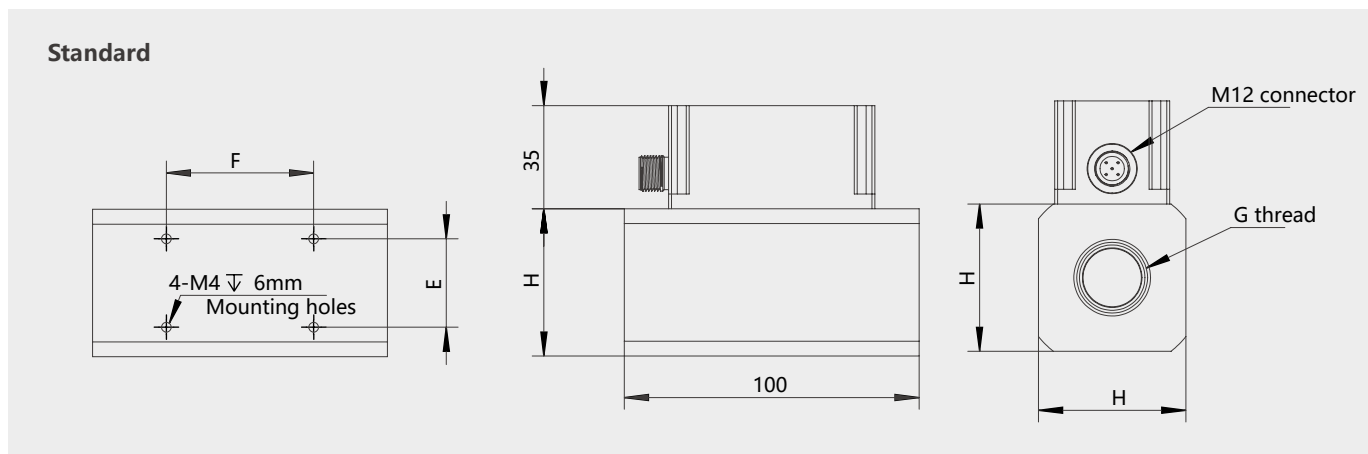
Range table

Pipe diameter	Process connection	range(L/min)	code
DN15 1/2"	Threaded flange	0.4~2	04
		1~5	1
		2~15	2
		4~30	4
		8~40	8
		10~50	10
DN20 3/4"	Threaded flange	2~15	2
		4~30	4
		8~40	8
		10~50	10
		16~120	16
DN25 1"	Threaded flange	2~15	2
		8~40	8
		4~30	4
		10~50	10
		12~60	12
		15~100	15
		20~120	20
		30~150	30
DN32 1 1/4"	flange	8~40	8
		15~100	15
		20~120	20
		30~150	30
		40~200	40
		50~250	50
DN40 1 1/2"	Threaded flange	8~40	8
		15~100	15
		20~120	20
		30~150	30
		40~200	40
		50~250	50
DN50 2"	flange	70~350	70
		20~120	20
		40~200	40
		100~500	100

Pipe diameter	Process connection	range(L/min)	code
DN65 2 1/2"	flange	20~120	20
		40~200	40
		50~250	50
		100~500	100
		160~800	160
DN80 3"	flange	20~120	20
		40~200	40
		80~400	80
		100~500	100
		150~750	150
DN100 4"	flange	250~1250	250
		40~200	40
		80~400	80
		150~750	150
		160~800	160
		200~1000	200
		250~1250	250
		280~1400	280
DN125 5"	flange	400~2000	400
		100~500	100
		200~1000	200
		400~2000	400
DN150 6"	flange	600~3000	600
		200~1000	200
		400~2000	400
		900~4500	900
DN200 8"	flange	1000~5000	1000
		400~2000	400
		600~3000	600
		1000~5000	1000
DN250 10"	flange	1500~7500	1500
		600~3000	600
		1000~5000	1000
		1500~7500	1500
		1600~8000	1600
		2000~10000	2000
		2400~12000	2400
		2500~12500	2500

- The flow value can be set to cubic meters per hour
- The above flow ranges are all calibrated with water as the medium, Other liquid media also need to provide density and kinematic viscosity.
- Please contact us if you need a larger pipe diameter range.
- This table is limited to the liquid flow measurement range. Gas and steam flow measurements are calculated separately.

Dimensions (mm)

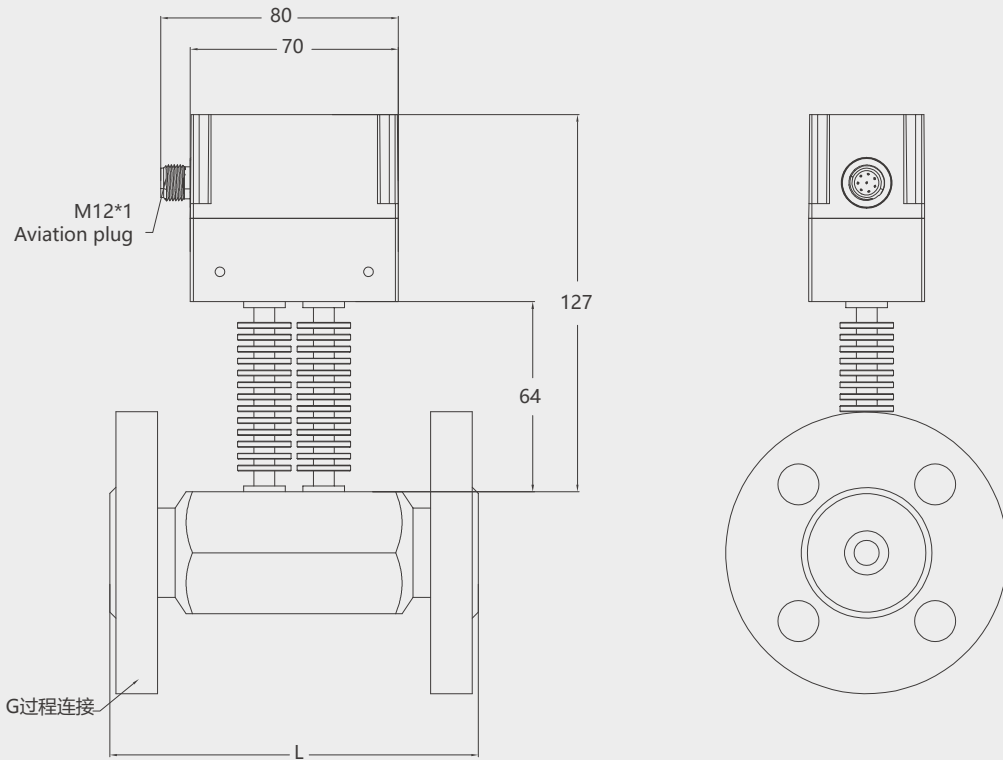


Measuring diameter (DN)	Process connection (G)	Body height (H)	Fixed method (E X F)
DN 15	1/2 "	45	35X50
DN20	3/4 "	50	40X50
DN25	1 "	55	45X50
DN32	1-1/4 "	65	55X50
DN40	1-1/2 "	70	60X50
DN50	2 "	80	70X50

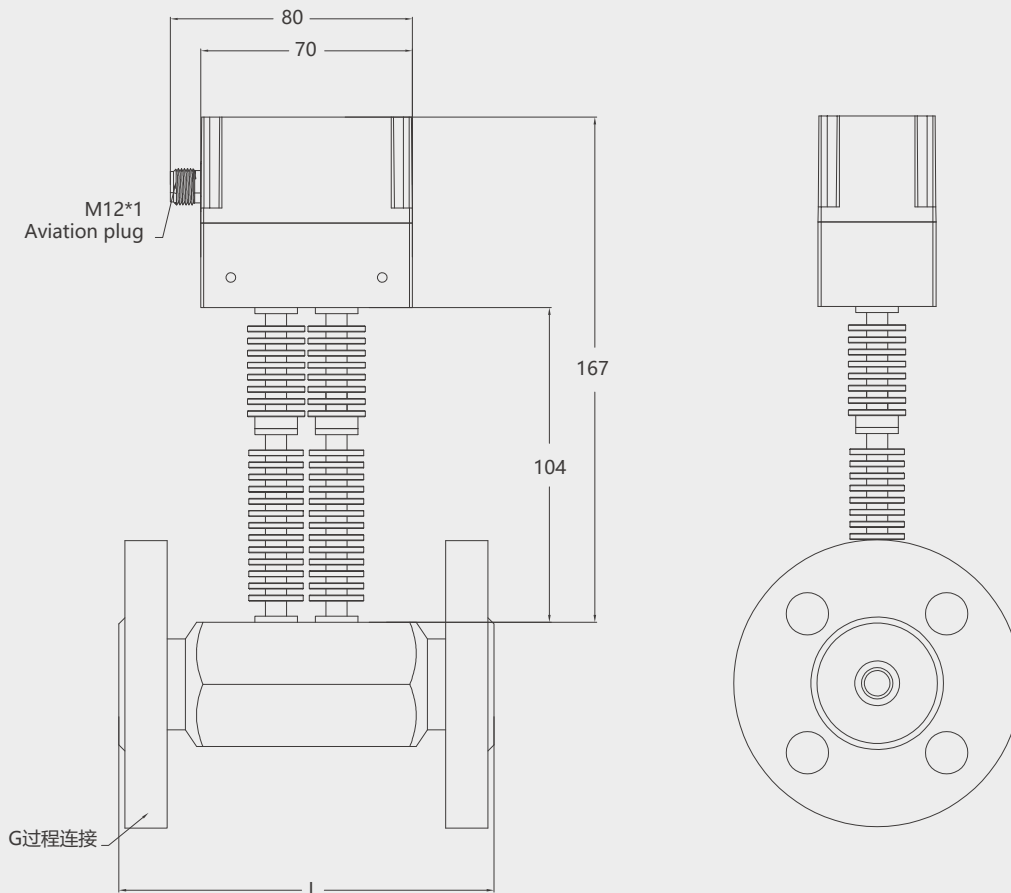
*Installation requirements: the length of the straight pipe section in the front is 5XDN, and the length of the straight pipe section in the rear is 10XDN.

*Measured pipe diameter \geq DN65 diameter, all use the national standard flange connection, the length of the front and rear straight pipe sections are both 200mm.

200°C High temperature type



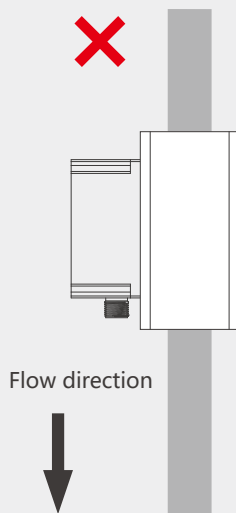
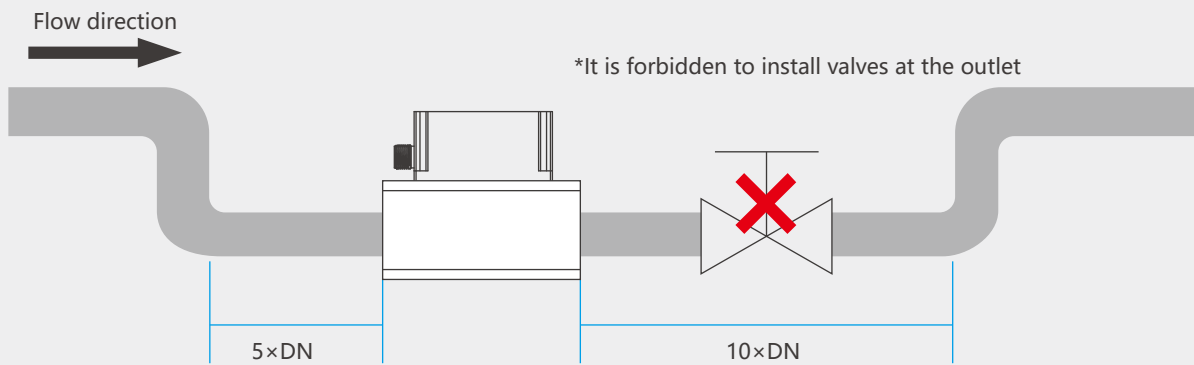
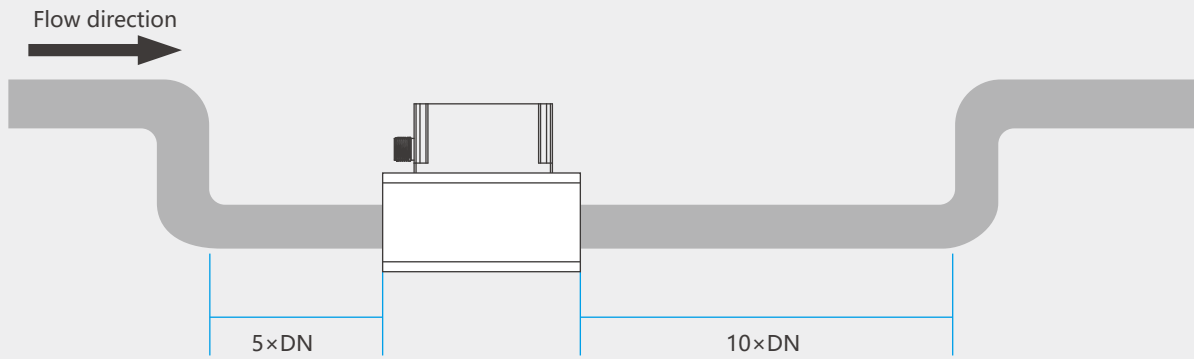
300°C High temperature type



Installation Precautions

*Horizontal installation is recommended ✓

Note: Please ensure the distance between the front and rear pipe sections of the sensor (DN represents the inner diameter of the pipe section)



*Vertical installation is not recommended

Vertical installation affects measurement accuracy

The factory standard of the product is horizontal calibration