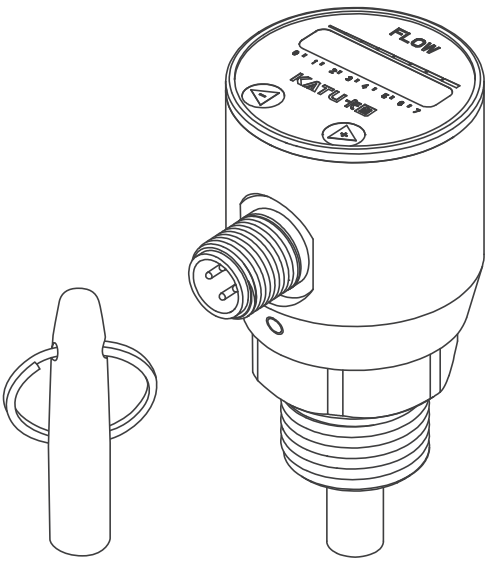
Sensors and controllers

■Flow ■pressure ■Temperature ■level ■position

KATU 卡图

Operating instruction
Electronic flow switch
FS210 series



safety instructions

-Before installing this equipment, please read this document to ensure that the product is suitable for your application and is not subject to any restrictions;

-Failure to follow the operating instructions or technical data may result in personal injury or property damage;

-In all applications, check whether the product material is compatible with the tested medium; the equipment is only used as the tested medium, and it must only be ensured that the equipment is used correctly to be able to operate stably for a long time, and ensure that the tested medium will not cause damage to the testing part of the product damage;

! The responsibility for determining whether the measuring sensor is suitable for the corresponding application lies with the operator, and the manufacturer does not assume any responsibility for the consequences of improper use by the operator. Improper installation and use of the sensor will invalidate the claim during the warranty period.

The flow sensor monitors the medium flow of the fluid

Note: Beware of personal injury, danger of overpressure!

Product Introduction

FS210 series thermal flow switch adopts the principle of thermal diffusion. There are two temperature sensors in the probe. One is used as a reference sensor to measure the temperature of the medium, and the other is used as a measuring sensor after being heated. The temperature difference between the two sensors is used as the basis for measuring the flow rate. When the medium flow rate increases, the temperature difference decreases. Smaller, on the contrary increase. The temperature difference value is processed and converted into a standard electrical signal for output and display.

FS210 series adopt all-metal shell design, 8-digit LED display flow trend and switch status, one product is suitable for multiple pipe diameters. It can be set by sensor button or computer. There are no moving parts, maintenance-free, and can be used in a variety of media.

Function Description

-Wide range-Set the switch point or define the range by pressing the button

You can also set more parameters through a handheld setter or computer

-8 LEDs display flow trend and switch status

-PNP/NPN/relay electrical output optional

-Inductive button setting, very easy to operate

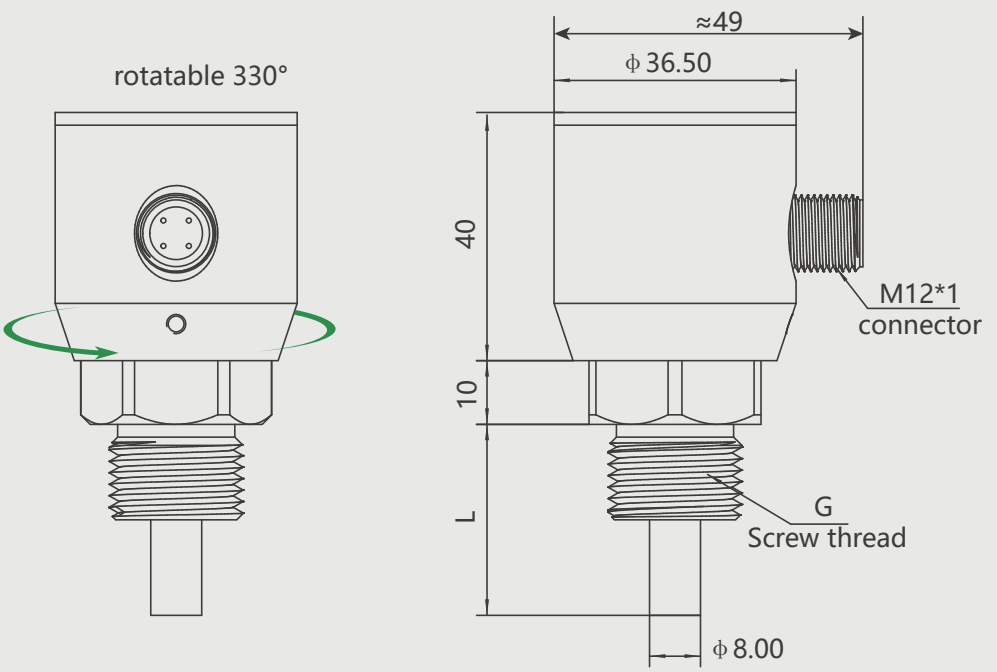
-Protection grade IP67

-Small structure with 36mm diameter

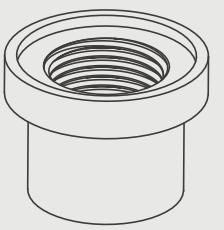
-The outlet direction can be rotated by 330°

Dimensions (mm)

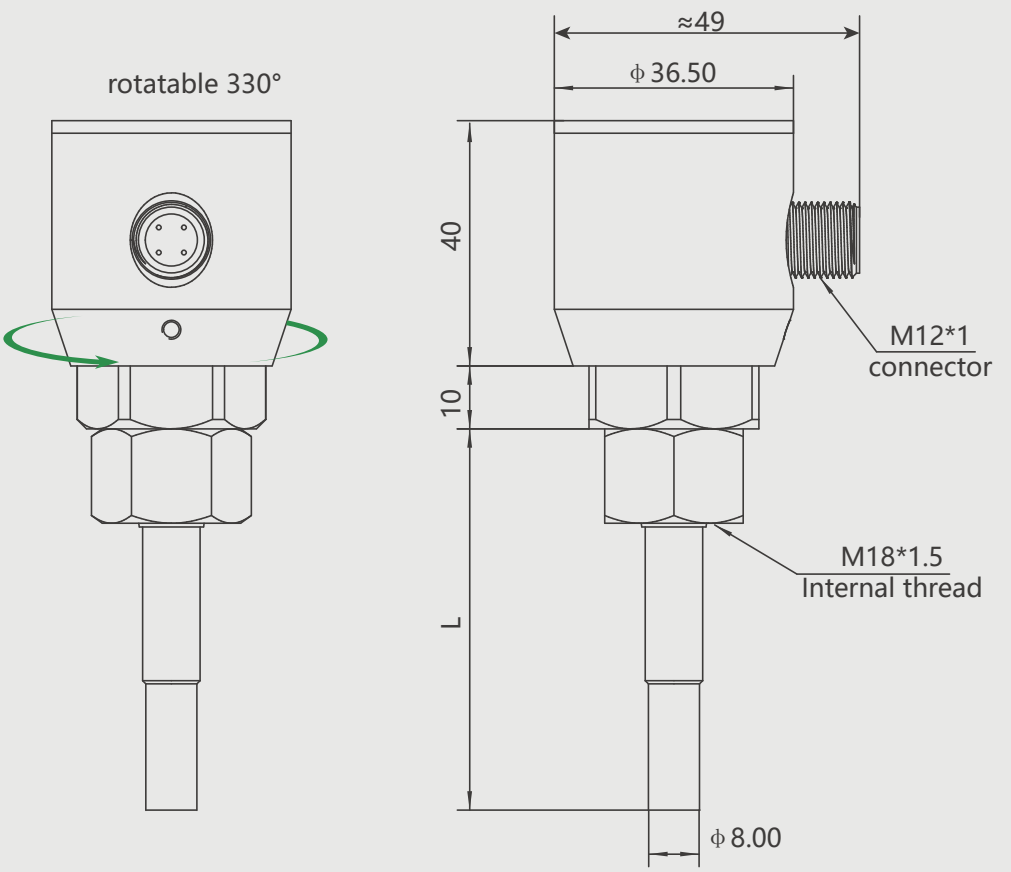
External thread connection



Optional installation accessories:
welding base



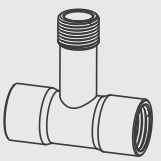
M18*1.5 internal thread connection



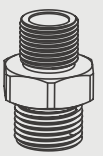
Installing accessories is mandatory

Welded base

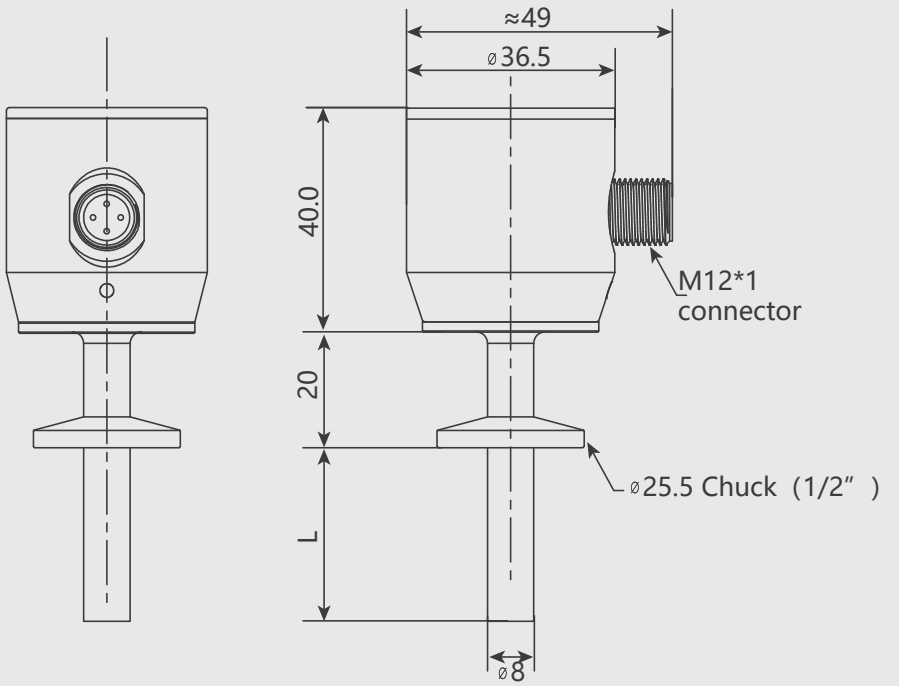
Tee



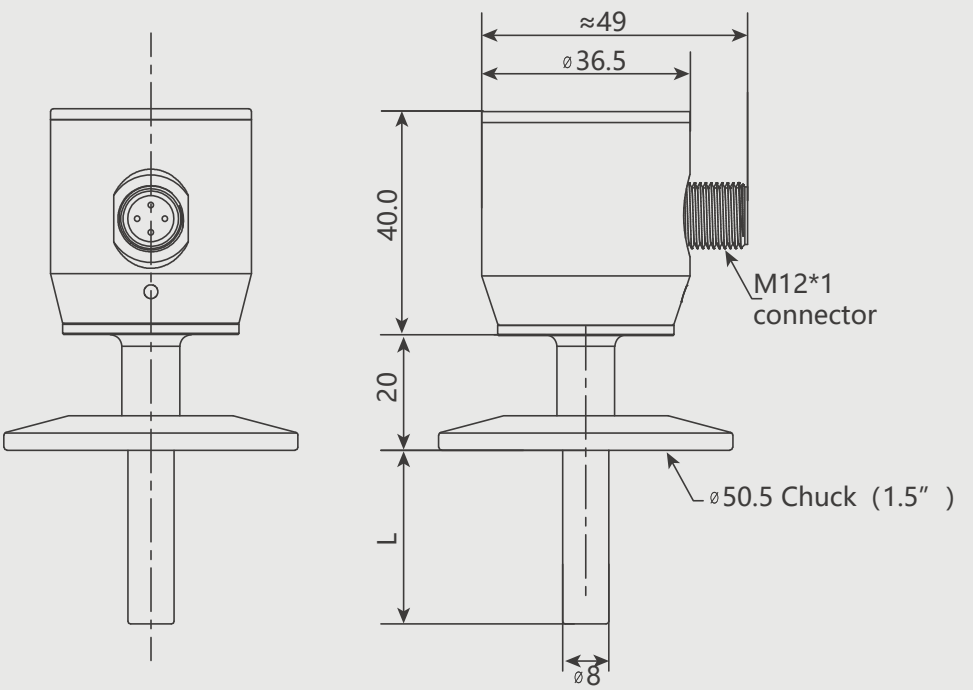
adapter



Chuck connection: ½ inch



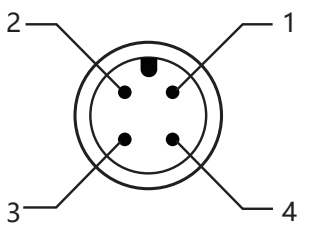
Chuck connection: 1.5 inch



Electrical connections

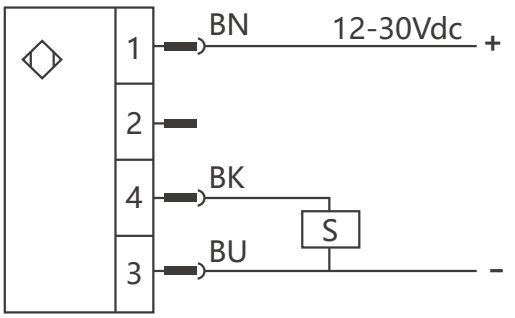
! The product must be wired by a qualified electrician,
and the electrical equipment must be observed
Install relevant domestic and international regulations.
The power supply voltage should comply with EN 50178,
SELV, PELV standards

- cut the power
- Connect the product according to the wiring method as shown in the figure below

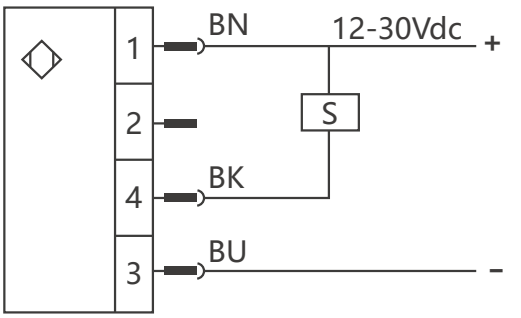


signal	stitch	Line color
power supply(+)	1	BN
power supply(-)	3	BU
Switching output	4	BK
Switching output	2	WH

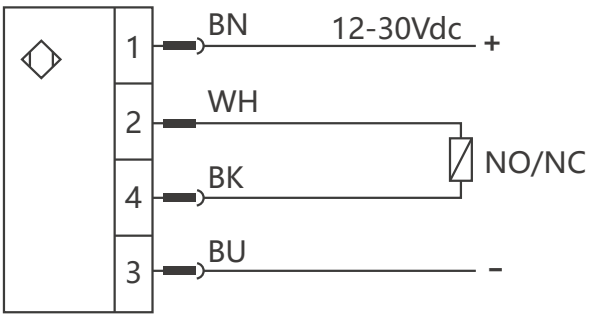
PNP



NPN

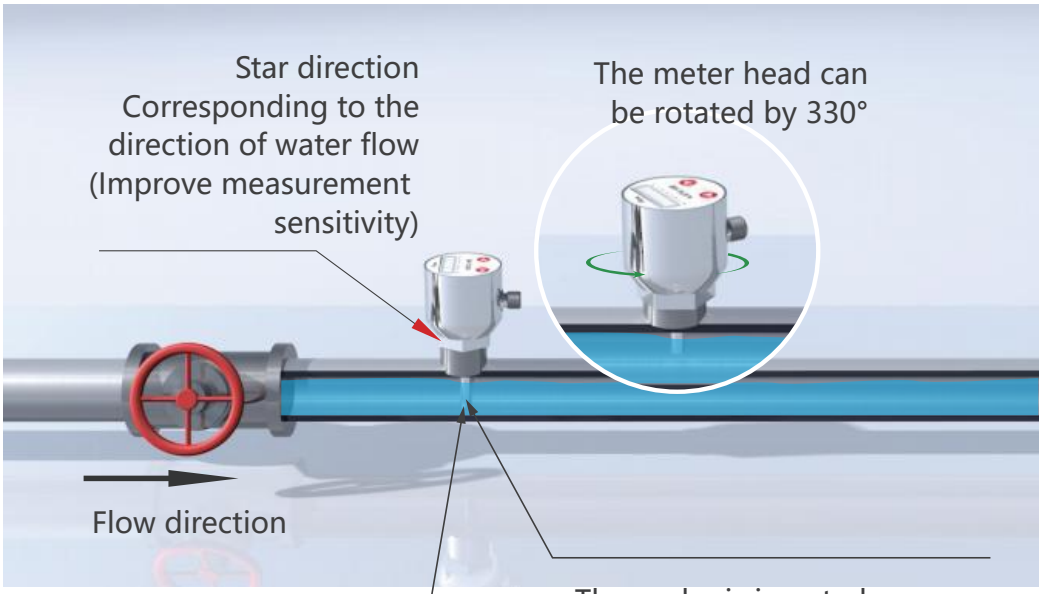


Relay output



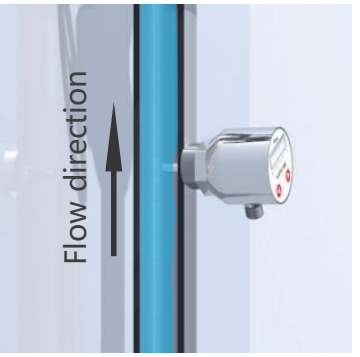
Installation Notes

When installed horizontally, the probe should avoid air and precipitation.



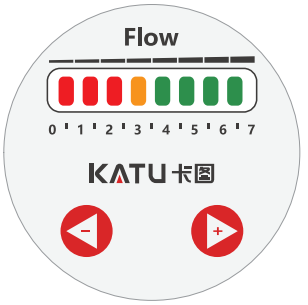
Do not touch the
probe with the pipe wall

The probe is inserted
into the pipe and
Full contact with flowing
medium > 5mm



When installed vertically,
it should be installed
under the On the supremely
flowing pipe section

LED function and setting



Red light on indicates that the current flow rate is lower than the set flow rate of the switch point, and the switch has not acted

Yellow light indicates that the current flow rate is equal to the set flow rate of the switch point, and the switch is activated

When the green light is on, it means that the current flow rate is higher than the set value of the switch point, and the switch keeps the output action. The more green light is on, the greater the flow rate

Annotation
Support arbitrary setting of switch value on site

Instructions for use

initialization

Power supply

Initialization time is about 3s

Flow pattern

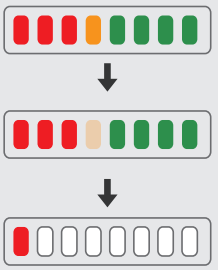
One-key calibration

Ensure that the pipe is full of medium, use the magnetic handheld setting device to press the " " key for about 3 seconds

The red light flashes, and the zero calibration is successful.

Parameter adjustment

1. Normally open/normally closed switch

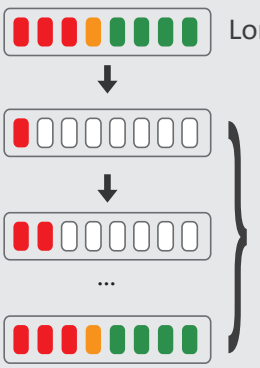


Long press the " + " button to enter the full light flashing

Single press the " - " button to enter the yellow light flashes quickly

Normally open/normally closed switch, set successfully and save

2. Sensitivity setting



Long press the " + " button to enter the full light flashing

Single press " + " key to increase/decrease sensitivity

Can be added cyclically

Liquid level mode (check if there is any medium)

1. Separate the sensor probe from the medium
2. One-key calibration

Long press the " - " key for about 3s

The red light flashes, the calibration is successful

3. When the filling medium is in contact with the probe,
   the red light gradually lights up
4. The medium is separated from the probe,
   the green light is off and the red light is on
5. The calibration is successful

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