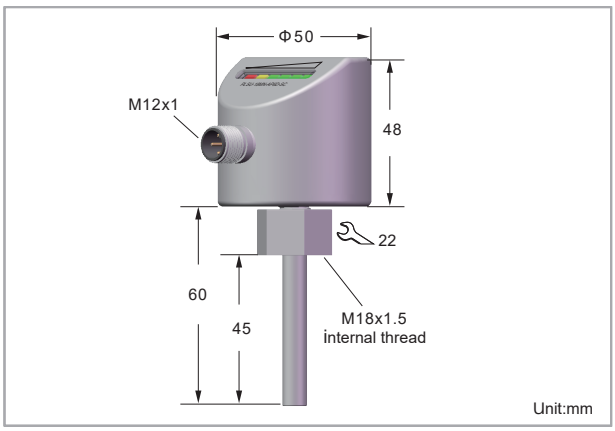
PLSU Series

General flow sensor

PLSU-18MN-AP6D-SC



- Based on the thermal conductivity principle
- All stainless steel shell
- The measuring medium is liquid
- M18x1.5 internal thread
- 3-wire PNP normally open output
- Switching point adjustable via potentiometer
- M12 Connector outlet

Technical Parameters

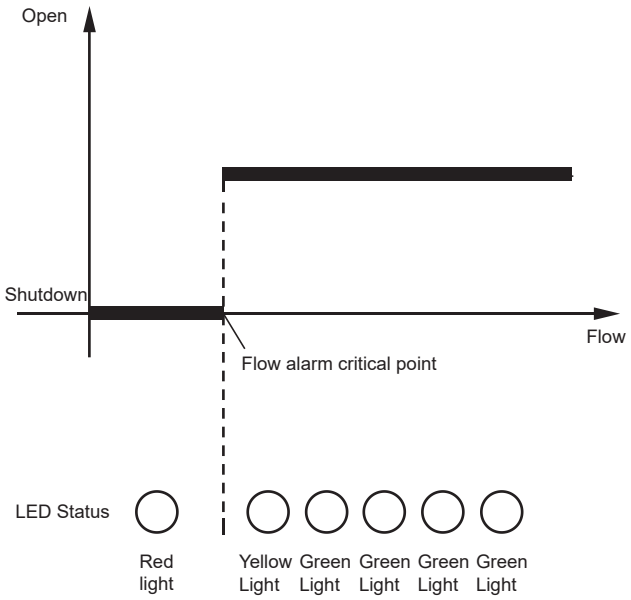
Electrical parameters

Installation method	Insertion
Medium	liquid
Operating range	Water 1. . . 150cm/s
	Oil 3...300cm/s
Operating voltage	24V± 20%
Rated switching current	≤ 200mA
No-load current	≤ 100mA
Output method	PNP Normally open
Switching characteristics	< 8s
On/off time	< 2s
Temperature change response time	Maximum 12s
Medium temperature	-20...+80℃
Reverse polarity protection	Built-in
Short-circuit protection	Built-in
Display	3-colour LED light strip
Protection class	IP67

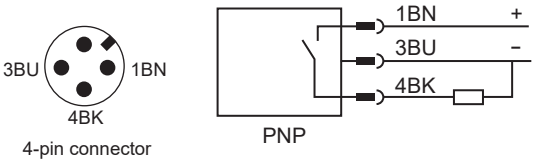
Mechanical parameters

Shell material	Stainless steel
Probe material	304 stainless steel
Threaded connection	M18 x 1,5 internal thread
Withstand voltage level	100bar
Maximum torque of shell nut	30Nm
Electrical connections	M12 connector

Switching signal state



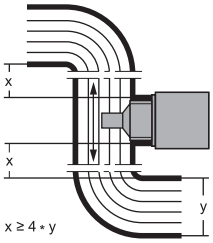
Wiring Diagram



Installation instructions:

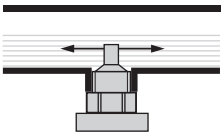
Installation needs to be used in conjunction with welded pipes or tees

(1)



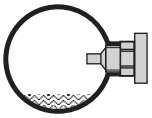
Special attention: The distance between the straight pipe and the elbow or intersection should not be less than 4 times the pipe diameter, that is, x ≥ 4y

(2)



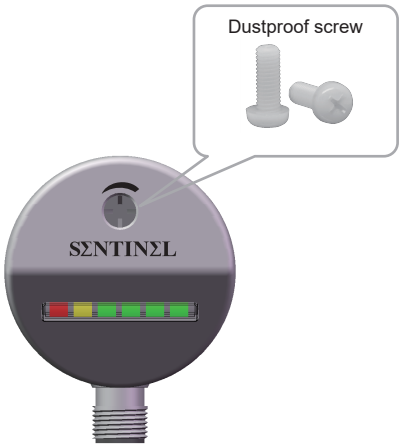
When the medium cannot completely fill the pipe, the sensor needs to be installed at the bottom of the pipe

(3)



If there is a possibility of sediment in the pipe, install the sensor sideways and horizontally. Make sure there are no air pockets near the probe.

Debugging method:



LED Meaning:

The flow sensor uses 6 LEDs to indicate the flow status.

Switch signal output:

4 green LEDs: set point exceeded (1, 2, 3 or 4 green LEDs lit)

1 yellow LED: set point reached / set point exceeded

1 red LED: below set point, alarm output

According to the ⌒ indication, the light of the rotary potentiometer will increase or decrease in sequence.

Adjustment settings

The setting of flow sensor should follow the following steps

(1)The sensor must be installed on the pipe and the required flow rate (set point) must be selected. Adjustments can only be made 8 seconds after the device is powered on.

(2)Before adjustment, you need to open the plastic dustproof screw at the front of the sensor. The dustproof screw is used to protect the adjustment potentiometer from dust.

(3) a.Establish the minimum flow rate (set point).
b.Adjust the potentiometer so that the red LED lights up.
c.Restore the flow rate to normal so that at least the yellow light and one green light are on.