



APOLLO

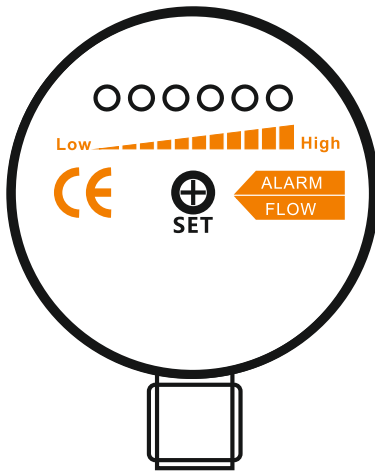
INDUSTRIAL
FLOW SWITCH

FLOW SWITCH

① 6 LED indicators (1 red 1 yellow 4 green) :



red yellow green green green green



1 red LED: indicates that the velocity of the medium is lower than the set point

1 yellow LED: indicates that the velocity of the medium is equal to or higher than the set point

4 green LEDs: indicates the extent to which the medium velocity exceeds the set point

②



Dust-proof sealing screw (located in the center above the plate), protect the potentiometer inside, and screw out counterclockwise during debugging.

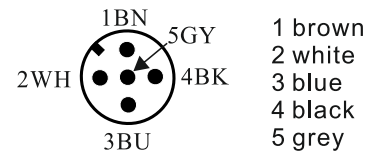
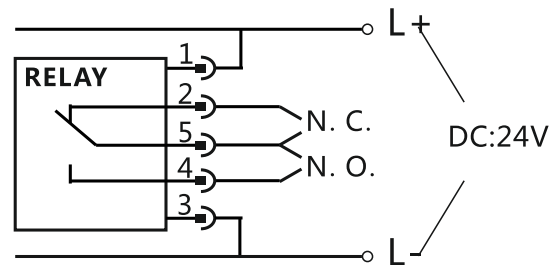
③



Internal potentiometer knob, screw out the dust-proof sealing screw to see, adjust the medium flow rate set point, rotate clockwise, the more the green LED will light up, the less the counterclockwise green LED will light or only Light up the yellow/red LED.

LED indication status	meaning	output	
	The velocity is below the set point	Relay N.C. contact (2 and 5)	close
		Relay N.O. contact (4 and 5)	open
	The velocity is equal to or higher than the set point	Relay N.C. contact (2 and 5)	open
		Relay N.O. contact (4 and 5)	close
① ② ③ ④	The velocity is greater than the set point, and the number of green LED lights indicates the degree that the velocity is greater than the set point	Relay N.C. contact (2 and 5)	open
		Relay N.O. contact (4 and 5)	close

Wiring diagram



Before turn on power, please make sure the power is correct if not will cause that damage.

Attention:

Please empty the output line when you first use the adjustment, so that you can be more familiar with the equipment and prevent the control equipment from bad operation.

FLOW SWITCH

Debugging steps:

- 1、 After the flow switch is installed, according to the requirements of the field output signal, connect the power supply and output wiring according to the above figure;
- 2、 Confirm that the pressure and temperature in the pipeline are in normal operation.
- 3、 At this point, open the valve on the pipe where the flow switch is located to fully open or flow at normal operation flow, **then wait for 3 minutes to 5 minutes.**
- 4、 Adjust the potentiometer knob with a small screwdriver (turn the potentiometer clockwise to increase the LED lighting. Turn the potentiometer counterclockwise and the number of lights will decrease gradually until all the leds turn on (turn the potentiometer counterclockwise and the 6th green LED will turn off).
- 5、 Set the alarm (action) point, **the flow switch will have an action output when the yellow LED and the red LED are switched.** First, identify the action points required during use. There are 6 indicator lights in the flow switch, among which there is 1 interval between each 2 indicator lights, there are 5 intervals in total, and each interval represents 20% of the benchmark full pipe flow. After a lot of field verification the standard full pipe flow with a fixed point of 60% or 40% is the most suitable setting value.

Corresponding relation between indicator light and percentage flow:

- 100% corresponds to 4 green lights and 1 yellow light is on
- 80% corresponds to 3 green lights and 1 yellow light is on
- 60% corresponds to 2 green lights and 1 yellow light is on
- 40% corresponds to 1 green light and 1 yellow light is on
- 20% only corresponds to 1 yellow light

After adjusting the full pipe reference flow, the alarm point can be set. proceed as follows:

- A. Adjust the valve on the pipe where the flow switch is located (usually adjust to the direction of closing), and observe the status of the indicator on the flow switch.
According to the corresponding relationship between the indicator and the percentage flow, until the display of the indicator corresponds to the percentage required for actual use. When the flow rate (usually 40% or 60%), stop adjusting the valve;
- B. **Wait 1 minute to 3 minutes** to make the flow switch internal circuit memory current pipeline flow;
- C. At this point, the potentiometer knob is adjusted, which is divided into two cases:
 - (1) If the alarm is just set, adjust the potentiometer knob until a red LED lights up
 - (2) If the alarm is lower than the set point, adjust the potentiometer knob until a yellow LED lights up.
- D. At this point, the setting is completed, the valve can be adjusted to fully open or the flow in the pipeline to normal flow operation.



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