

FSVP Photoelectric Level Switch

1. Product Features

- Sensor for liquid level detection
- Built-in amplifier, infrared transmitter, receiver
- Output: transistor electronic switch PNP, NPN, NO or NC
- Good chemical resistance to most acids and alkalis.
- There is no electrical or thermal connection between the liquid and the circuit.
- Power supply: DC type: 10V~40VDC.



2. Product Description

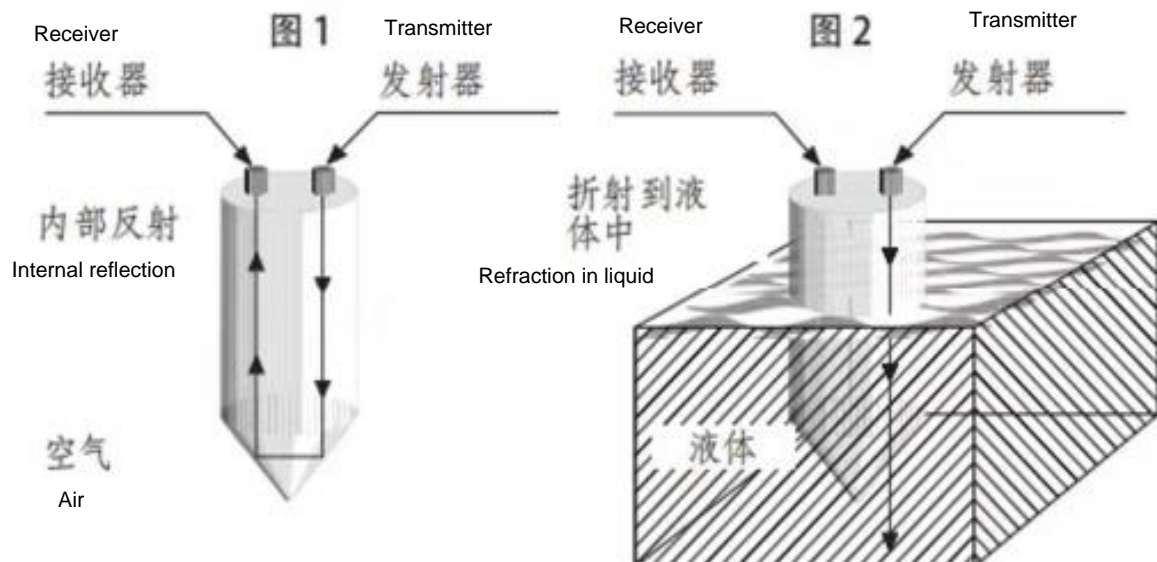
Optical liquid level sensor, equipped with unmodulated infrared light, for detecting liquids. With built-in amplifier. Transmitter and receiver, with solid polysulfone plastic housing, can be installed in the container wall.

3. Operation Mode

The sensor contains an IR transmitter, receiver and amplifier with transistor or SCR output. The light source is an IR emitting tube that emits infrared light.

The cone tip of the sensor forms a 90° angle. This angle makes the cone tip a prism, that is, the light beam emitted from the GaAlAs diode on one side of the sensor head is reflected from the inside to the phototransistor on the other side of the sensor head, provided that the sensor tip is in free air. If the sensor tip is immersed in liquid, always make sure that the refractive index is different from that in air, the light beam will not be refracted by the prism, and the phototransistor will not receive any signal.

These types of sensors can operate in oil, wastewater, aqueous solutions (such as beer, wine, alcohol, etc.) without any accessories.



4. Product Selection

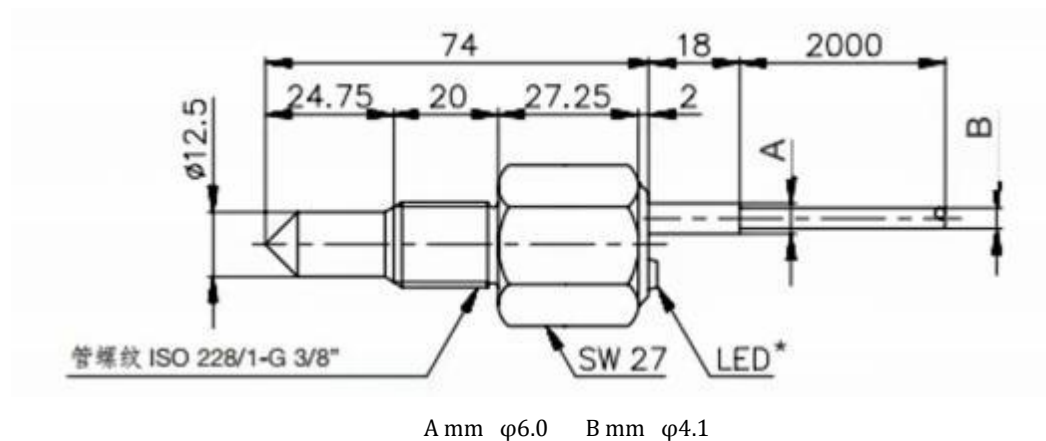
Product Model	FSVP	
Shell	0 (Polysulfone)	
Output method	1 Normally open	2 Normally closed
Output Type	P (PNP Type)	N (PNP Type)

Example: Commonly used PNP type normally open, specification: FSVP-01P

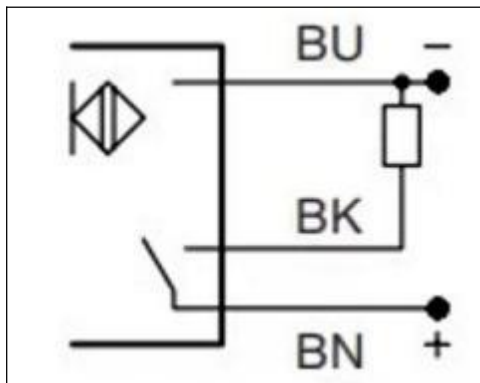
5. Specifications

Rated operating voltage	10-40VDC
Rated operating current	200mA
Voltage drop	≤1.0VDC
No-load current	≤12mA
Sensing accuracy Liquid level difference	Horizontal installation: ±5mm Vertical installation: ±2.5mm
Ambient light	0-100 lux
Duty cycle frequency (f)	30Hz
Protection level	IP67
Operating temperature	+20°~70°C
Storage temperature	-40°~+100-C
Output status indication	LED yellow
Case and cover material	Polysulfone+Nylon 12
Weight	90g
Connection	Cable: 2m
Pressure	10bar at +60°C
Pipe thread	3/8" pipe thread

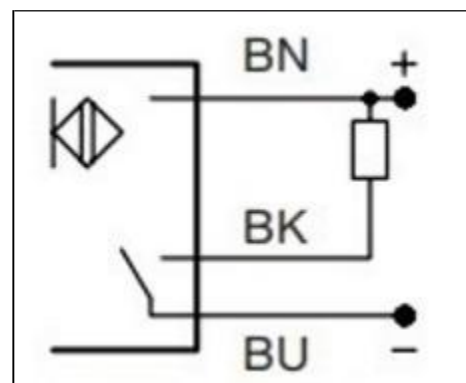
6. Dimensions



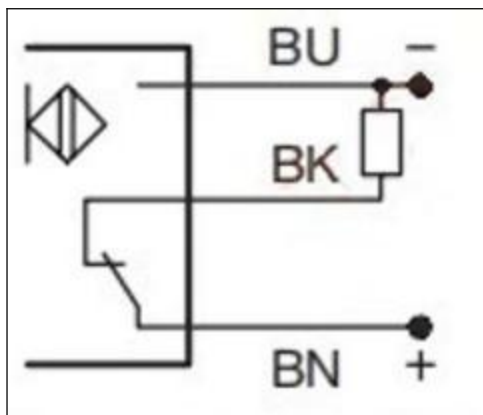
7. Wiring method



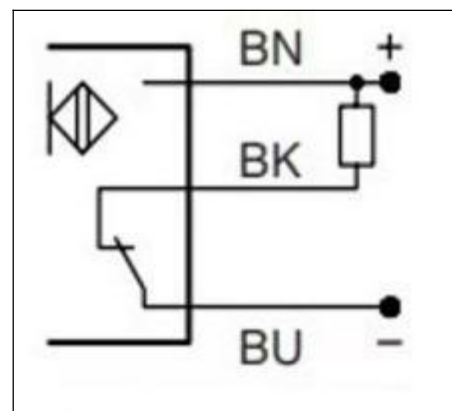
FSVP01P



FSVP01N



FSVP02P



FSVP02N

8. Installation and precautions

