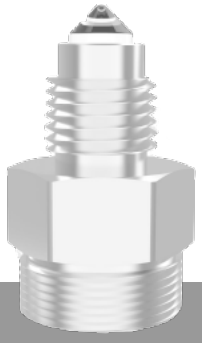
BIG BEAR INSTRUMENTS



BBOLS-1/4 Industrial Photoelectric Liquid Level Sensor

Application

- Water dispenser
- Water heater
- Humidifier
- Medical devices or equipment
- Off Highway Vehicles
- Electrical equipment and devices which need to detect liquid

Product Features

- No mechanical moving components and with high reliability
- Strong corrosion resistance
- High precision of liquid level control
- Waterproofing standard IP68
- Fast Response time, installation method is flexible, easy to clean to avoid bacterial accumulation

Electrical Specification (Ta=25°C)

	Parameter	Condition	Min	Typ	Ma	Units
Direct-Current	Working Voltage		>5	24	<25	V
	Current	VDD=24V /in Water	>9		<15	mA
		VDD=24V /in Air	>9		<15	mA
	Output Current	VDD=24V Ta=25℃	-	<500	-	mA
	Response Time	VDD=24V Ta=25℃	-	<1	-	S
Limit Value	Operating Temperature	VDD=24V	-40	-	110	℃
	Storage Temperature	-	-40	-	110	℃
	Working Time	VDD=24V Totg=25℃	-	50000	-	h
	Pressure Range	-	-	-	5	MPa

Ordering Information

NO		Output Voltage in W	Output Voltage in Air	Application circuit type
1	**BBOLS-1/4-NC-A**	<0.3V	>22V	A
2	**BBOLS-1/4-NO-A**	>22V	<0.3V	A
3	**BBOLS-1/4-NC-B**	>22V	<0.3V	B
4	**BBOLS-1/4-NO-B**	<0.3V	>22V	B

This specification is the standard for the operation of the corresponding products. It will be used as the basis for production and supply after confirmation by the customer. If you have special requirements, please contact our sales and issue an acknowledgment.

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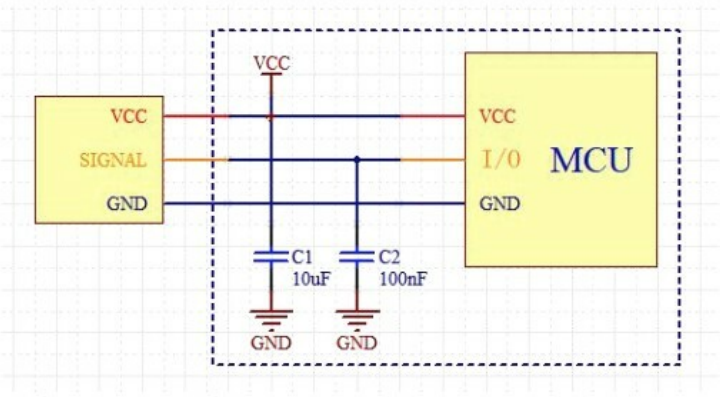
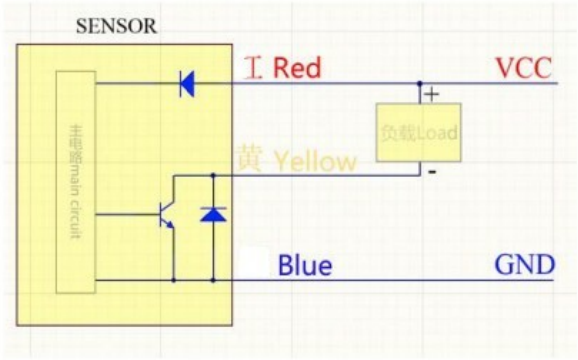
Recommended Application Circuit



A



B

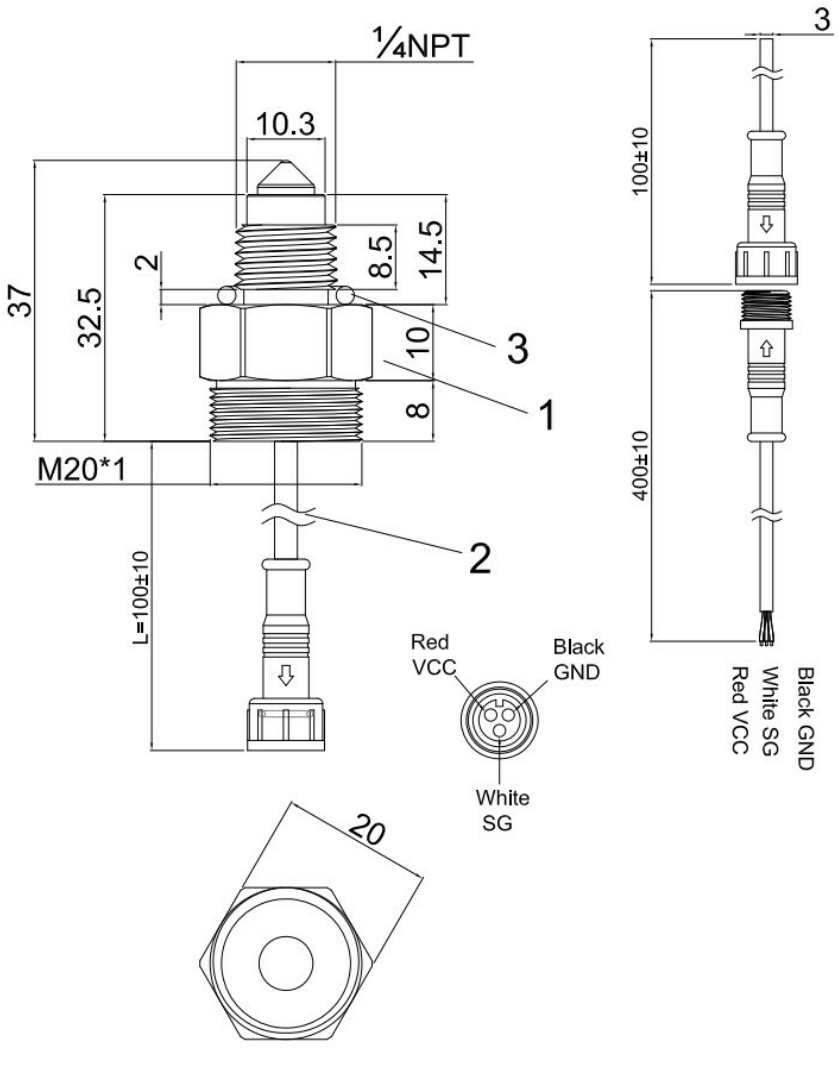
Application & Detection

Install the level sensor according to one of the following modes（Recommended Installation）and connect it according to the circuit above（Recommended Application Circuit).The signal end will output a voltage signal consistent with the water level. This voltage signal is used as the height control signal of the liquid level sensor to be accessed to the A/D(analog-to-digital conversion) port of the MCU (microcontroller). When the liquid level is over the critical level and the sensor body is submerged, output voltage signal is low voltage; When the liquid level is below the critical level and the sensor body is exposed, output voltage signal is high voltage. Specific parameters please refer to above table(Electrical Specification).

Notice:

1. During long-term use, the surface of the sensor can become dirty due to liquid impurities. Slight impurities will not affect the performance of the sensor.
2. The sensor will be affected when exposed to direct sunlight. Please install it away from direct sunlight.

Outline Drawing and Recommended Installation



Temperature resistance	*	Withstand voltage	300V
Tin plating	1.5+/-0.5	Length	100+/-10
Line number	*	Numbering	*
Color	White	Model	*
Wire specification			

Foot distance	*	Number of holes	*
Color	*	Model	*
Terminal specification			

4		1	
3	Viton Seal	1	18*2.5
2	Cable	1	
1	Sensor body	1	
NO.	Name	Qty	P.S.

Designer	Chen	Material	316L	Unit	mm	BIG BEAR INSTRUMENTS			
Checked	Chen	Finish		Scale	*				
Approved	Wei	Quantity	*	Size	A4	Product Name	BBOLS-1/4	Date	21-05-25
Tolerances	0-35	+/-0.10	0.8	Remarks	*	Part name		Rev	A
	35-70	+/-0.20							
	70-150	+/-0.30		View		DWG NO.	*	Page No.	1/1

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