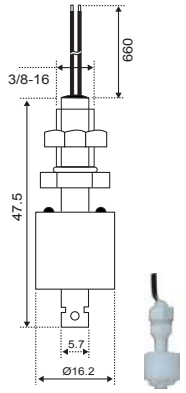
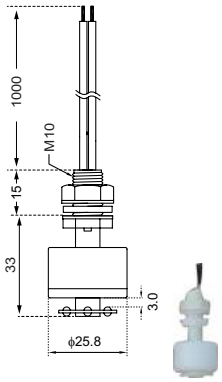
Vertical Level Sensor One Ball One Point Plastic Body

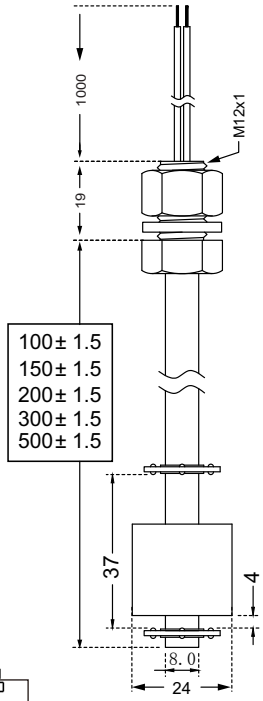
LIQUID SENSING

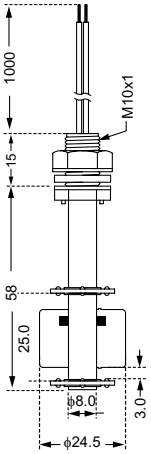


PSA-28-1/1-660



PSA 34-1/1-P





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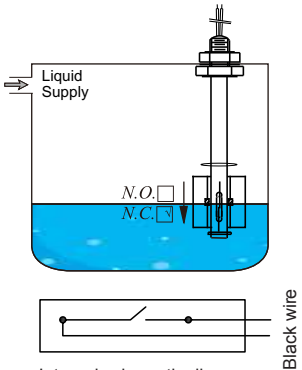
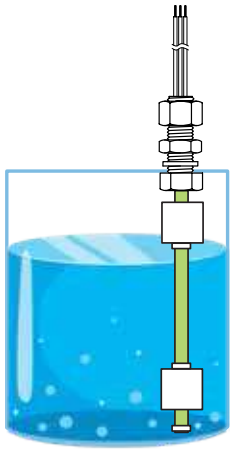
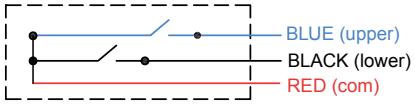


Internal schematic diagram

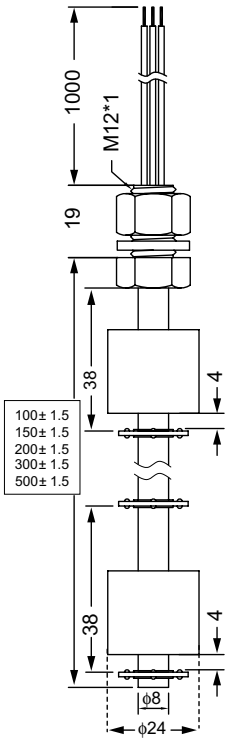
PSA-100-1/1-P PSA-150-1/1-P PSA-200-1/1-P PSA-300-1/1-P PSA-500-1/1-P

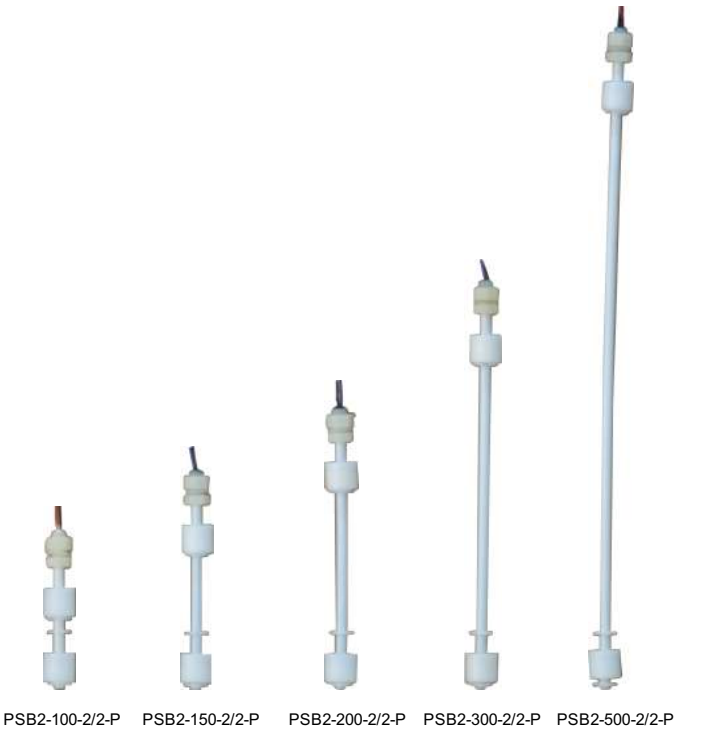
Vertical Level Sensor Two Ball Two Point Plastic Body





Internal schematic diagram





PSB2-100-2/2-P PSB2-150-2/2-P PSB2-200-2/2-P PSB2-300-2/2-P PSB2-500-2/2-P

The specifications are subject to change without prior notice
All dimensions are in mm

Vertical Level Sensor Plastic Body

Material Properties

Min. shock resistance	30G
Suitable temperature	-20°C ~ 80°C (Non freezing)
Min. vibration	30G (10~50Hz)
Humidity	95% RH (80°C)
Medium	Water

Material Description

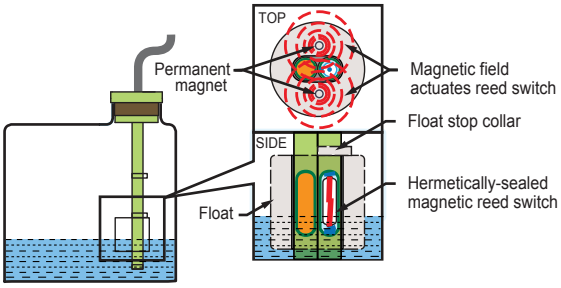
Reed	10W
Magnet	Ferrite
Resin	Black resin

1. Blank	White PP material
2. Float ball	White PP material
3. Float body	White PP material
4. Seal washer	Transparent silicone pad
5. Nuts	Beige nylon material
6. Wire	UL1007 22AWG, black line

Switching Characteristics

Operation life	$1*10^6$ (DC: 5V, 10mA)
Insulation resistance	≥ 100MΩ
Contact resistance	≤ 0.4Ω
Max. limiting current	1.0A
Max. switching current	0.5A
Max. switching voltage	100V
Max. contact power	10W
Switch type (factory set)	Normally open (NO)
Switch operation	Selectable NO or NC by inverting float on unit stem

Working Principle



Maintenance

Maintenance should consist of inspection to see that the float is free to move and not coated with any substance, which would change its weight or volume significantly. If this occurs, the float should be cleaned. This is easily accomplished without disturbing the installation. In addition, the stem may be wiped down to remove any build-up. The only repair possible in the field is replacement of float. Dents or nicks on the float are usually of no consequence to operation.

Cautions

1. The pressure, temperature and electrical limitations shown for the specified level switches must not be exceeded.
2. The pressures and temperatures must take into consideration possible surges in the temperature and pressure of the system.
3. The liquids used must be compatible with the materials of construction. Specifications of materials will be given upon request.
4. Life expectancy of the sensor varies with applications.
5. Level switches have been designed to be shock and vibration resistant. For maximum life, both shock and vibration should be minimized.
6. Physical damage to product may render product unserviceable.
7. Do not directly connect the solenoid valve, motor or magnetic switch.

REED SWITCH PROTECTION

INDUCTIVE LOADS

When using reed sensor for inductive loads such as motors, relay coil, solenoids, etc., the contact point will sometimes be subjected to high voltages. Such high induced voltages may damage the reed switch inside or significantly reduce its life.

Therefore, circuit protectors such as: *RC snubbers, varistors or clamping diodes are recommended. (see fig. 4a, fig. 4b, fig.4c)

$$C = \frac{I^2}{10}\ (uF)$$

$$R = \frac{E}{10I\left(1+\frac{E}{50}\right)}$$

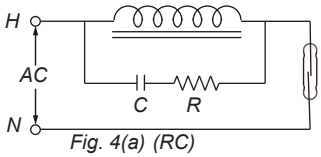


Fig. 4(a) (RC)

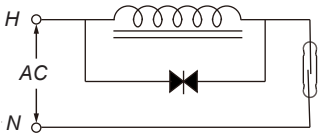


Fig. 4(b) (Varistor)

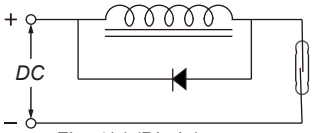


Fig. 4(c) (Diode)

CAPACITIVE LOADS

When using reed sensor for capacitive loads such as capacitors, incandescent lamps or long cables, the contact points will be subjected to electrical, surges. Therefore, protective circuits such as: surge suppressors or current limiting resistors are recommended. (fig.5a, fig.5b)

Therefore, circuit protections such as: *RC snubbers, varistors or clamping diodes are recommended (fig5a. fig5b)

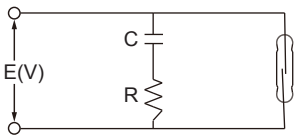


Fig. 5(a)

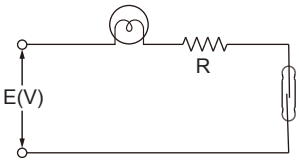


Fig. 5(b)

*RC snubbers, varistors or clamping diodes (**not included in the box**)