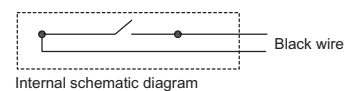
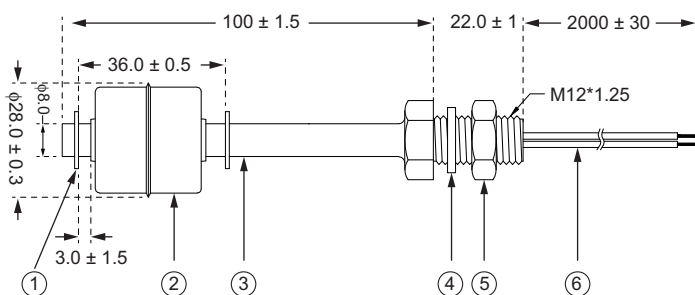
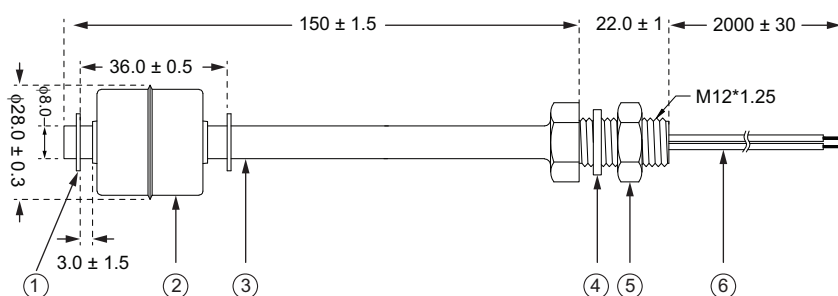


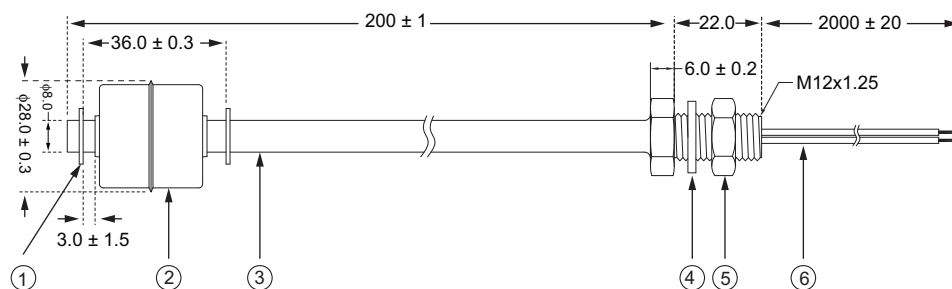
PSA-100-1/1-S



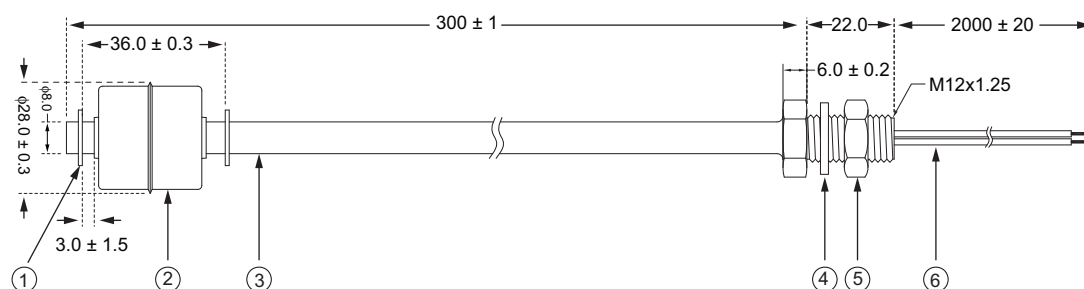
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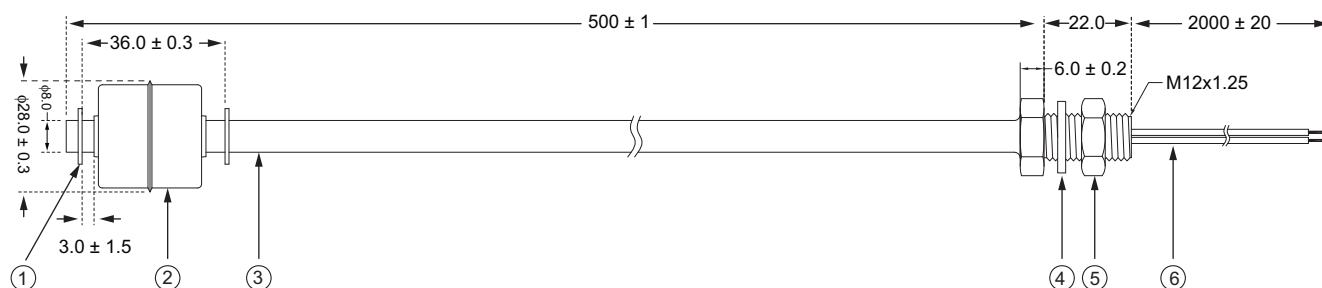
PSA-200-1/1-S



PSA-300-1/1-S



PSA-500-1/1-S



Material Properties

Suitable temperature	-20°C ~ 150°C (Non freezing)
Min. shock resistance	30G
Min. vibration	30G (10~50Hz)
Medium	Liquid

Material Description

Reed	10W
Magnet	Ferrite
Resin	Black high temp. resin
Inside PCB	Single side glass fiber material

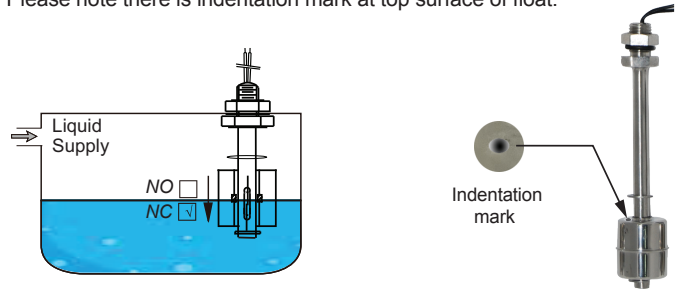
Switching Characteristics

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)

1. Locking ring	SS316
2. Float ball	SS316 (Float ball 2828)
3. Float stem	SS304
4. O Ring	Transparent silicone material
5. Nuts	M12 SS304
6. Wire	UL3122 24AWG, Silicone insulated for high temperature

Switch Operation

Units are shipped NO unless otherwise specified.
Selectable NO or NC by inverting float on unit stem.
To change from NO to NC pull out locking ring and invert the float.
Please note there is indentation mark at top surface of float.



REED SWITCH PROTECTION

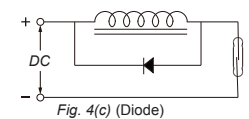
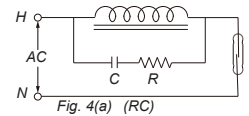
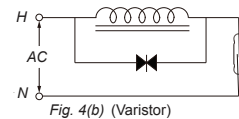
INDUCTIVE LOADS

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)

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

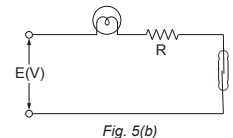
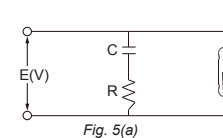
$$R = \frac{E}{10I \left(1 + \frac{E}{50}\right)}$$



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)



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

Usage

Automotive & Marine

- Water storage system
- Braking system
- Fuelling system

Scientific/Medical

- Water purification
- Liquid inventory, waste and media management
- Cryogenic liquid storage and dispensing systems
- Liquid gas storage
- Solvent and chemical control

Food/Beverage

- Storage vessels – pumps and valves
- Food processing monitoring systems, alarms and alerts
- Water purification
- Cryogenic fast freeze technologies
- Food test laboratories
- Liquid gas storage
- Transport
- Liquid dispensing
- Solvent and chemical control

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. Ambient temperature changes can affect switch set points, since specific gravities of liquids vary with temperature.
6. Level switches have been designed to be shock and vibration resistant. For maximum life, both shock and vibration should be minimized.
7. Excessive contaminants in fluid may inhibit float operation, and occasional wipe down may be necessary.
8. Level switches must not be field repaired.
9. Physical damage to product may render product unserviceable.
10. Installation in a vessel made from magnetic materials may affect operation.
11. Do not directly connect the solenoid valve, motor or magnetic switch.