

Stainless steel float level switch

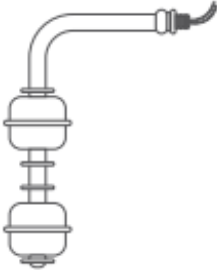
User manual | Complete English translation

1. Product overview

This float switch is a simple, convenient liquid-level sensing device. A magnetic float moves up and down with the liquid and actuates the reed switch inside the stainless steel stem, providing level indication or control.

2. Features

- Simple construction:** The float, connecting stem and reed switch are easy to install and maintain.
- Reliability:** Stainless steel provides resistance to corrosion, wear and heat. Refer to the specifications of the exact product for its limits.
- Level sensing:** The switch detects changes in liquid level for control applications.
- Applications:** Level indication or control in water, wastewater, oil and other compatible liquids. Keep the float free to move.

Vertical single float	Side-mounted single float	Vertical double float	Side-mounted double float
			

Selected product configurations are illustrated. Custom configurations are available.

3. General manual specifications

Parameter	1A1	2A1
Operating voltage	≤100VDC	≤250VDC / ≤260VAC
Operating current	≤0.5ADC	≤1.5ADC / ≤1.1AAC
Stem length	0.045-2m; customizable	0.045-2m; customizable
Operating temperature	-20°C to 120°C	-20°C to 120°C
Protection options	IP65 ordinary / IP68 waterproof version	IP65 ordinary / IP68 waterproof version

The protection rating depends on the ordered construction. These are the general manual values; a specific product's lower electrical limits remain controlling. The miniature product-page ratings are separately listed on page 3.

Installation, operation and maintenance

4. Installation

1. Before installation, verify that the model, specifications, operating voltage and load current meet the application requirements.
2. Install the switch correctly and ensure that the float moves freely.
3. Connect the signal wires correctly and avoid short circuits.
4. Commission and test the installation to confirm normal switching.

5. Contact action

Configuration	Liquid level rises	Liquid level falls
Below-closed: default	The float moves away from the reed switch's set position and the contact opens.	The float returns to the reed switch's set position and the contact closes.
Above-closed	The float returns to the reed switch's set position and the contact closes.	The float moves away from the reed switch's set position and the contact opens.

The terms “below-closed” and “above-closed” describe the contact's closed position. Check the actual contact state with the float in both positions before connecting the receiving controller.

6. Precautions

1. Avoid impact and compression during installation and use; these can damage internal components.
2. Install away from external magnetic fields that could affect operation.
3. Inspect switching regularly. Repair or replace the switch promptly if abnormal operation is found.
4. Disconnect the power before cleaning or maintaining the equipment.

7. Manufacturer and original imprint

Trademark owner and manufacturer: Yueqing ELECALL Electric Co., Ltd.

Address: No. 246 Weishi Road, Yueqing Economic Development Zone, Wenzhou, Zhejiang, China.

Telephone: 4006-111-323.

Original slogan: “ELECALL, making high-quality products.” / “DO BETTER FOR EVER.”

This English edition translates both pages of the Chinese stainless steel float switch user manual, including all features, ratings, operating states, installation instructions, precautions, configuration captions and the manufacturer imprint. No numerical measurement-accuracy value is specified.

Miniature stainless steel configuration

Additional specifications from the Chinese miniature product page

8. Product-specific contact ratings

Parameter	1A1	2A1
Maximum contact rating	10VA	50VA
Maximum switching voltage	100VAC/DC	220VAC/DC
Maximum switching current	0.5A	1.5A
Breakdown-voltage reference	110VAC/DC	300VAC/DC
Maximum contact resistance	100mΩ	100mΩ
Operating temperature	−30°C to 120°C	−30°C to 120°C
Float / body material	304 stainless steel	304 stainless steel

Respect voltage, current and power limits simultaneously. Breakdown voltage is not the permitted switching voltage. The miniature page's 220V limit for 2A1 is lower than the general manual's 250VDC / 260VAC; do not substitute the higher general limit. Its −30°C lower temperature is product-specific, while the general manual gives −20°C.

9. Switching points and custom lengths

A single float has a stated control travel of 10mm; this is not a ± 10 mm accuracy specification. Configurations with 1–4 floats are offered, with more floats and custom stem lengths available on request. Use multiple fixed switching points or a combination of separate switches when a larger control-level difference is required.

The reed switches are fixed inside the stem. Moving the retaining clips does not relocate the reed switches or their operating levels; the clips only limit float travel. Reversing the float changes the closed-state orientation. The Chinese webpage uses an ambiguous “down-open” term for its default, whereas the manual explicitly defines below-closed operation. Verify continuity in both float positions.

10. Receiving circuits and suitable liquids

Use a small receiving relay for a solenoid valve or alarm. For a pump, use a small receiving relay and an AC contactor matched to the pump. Do not connect these loads directly to the reed contact. The receiving relay's input must remain within the selected contact's voltage, current and power limits.

The miniature configuration is intended for clean, compatible liquids without impurities or floating debris. Its compact form suits small tanks, water-treatment equipment, appliances and industrial auxiliary reservoirs. Keep the float free of deposits and obstructions.

The website's three control illustrations show two vertical single-float switches, one vertical double-float switch, and two side-mounted single-float switches connected to a receiving control module. They illustrate separate high and low levels, with floats marked below-closed and their dimpled ends upward. They do not identify universal receiving-module terminal numbers.