Rod Float Level Switch
User Manual

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Application Fields:
Mainly suitable for liquid level control in industries such as wastewater/purified water treatment, shipbuilding, generator equipment, petrochemicals, food, electronics, dyeing and finishing, chemicals, rubber and plastics, hydraulic machinery, and pharmaceutical manufacturing.

1. Overview

One or more reed switches are fixed inside a sealed non-magnetic guide tube. When a hollow float with a permanent ring magnet inside rises or falls with the liquid level, it approaches the reed switch. Under the influence of the magnetic field, the reed switch changes its original contact state: normally open contacts will close (ON), and normally closed contacts will open (OFF). This generates one or more ON/OFF signals that can be used for alarm indication or remote control.

2. Product Features

- All reed switches are produced in Russian factories, with a contact life of up to 10 million cycles.
- Simple principle, stable and reliable performance, and long service life.
- Suitable for circuits of 220VAC or 24VDC.
- Reed switch and wiring are completely isolated from the measured medium, ensuring reliable operation even under high temperature and high pressure.
- Compact and lightweight design, convenient for multi-point or remote control applications.
- Available in various materials such as SUS304, SUS316, PP, with multiple process connection options to meet different environmental requirements.

3. Application Fields

Mainly applied in wastewater/purified water treatment, shipbuilding, generator equipment, petrochemical, food, electronics, dyeing and finishing, chemical, rubber and plastics, hydraulic machinery, and pharmaceutical industries.

4. Technical Specifications

- **Maximum Pressure:** 20 bar
- **Medium Temperature:** Up to 250°C
- **Medium Density:** ≥0.75 g/cm³
- **Output:** Switch output, optional contact rating: 24VDC, 0.5A SPDT or 220VAC, 0.5A SPDT
- **Protection Rating:** IP65

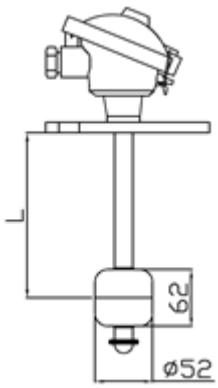
- **Body Material:** SUS304, SUS316, or PP (multiple options available)
- **Process Connection:** Threaded or flange connection (optional)

5. Instrument Selection Guide

Selection	Description
Junction Box Type	X – Compact Type B – Standard Type F – Explosion-proof Type N – No Junction Box
Number of Switching Points	1 – One Point 2 – Two Points 3 – Three Points 4 – Four Points *** – Customer-specified
Process Connection	F – Flange G – Threaded (Compact type uses M10 threaded connection by default)
Total Length L	-XXXX – Total insertion depth, expressed as four digits in mm

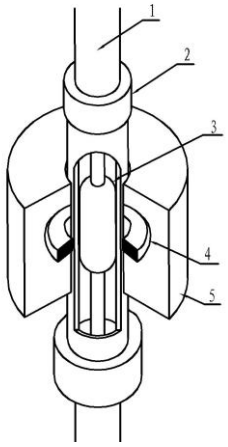
- **Note:** Please specify the exact process connection type, dimensions, and switching point positions.

6. Dimensional Drawing



Note: The flange size is specified by the customer.

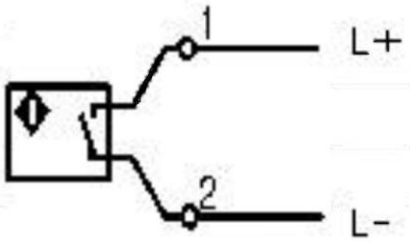
The diagram below shows the structure of this series of switches, where:



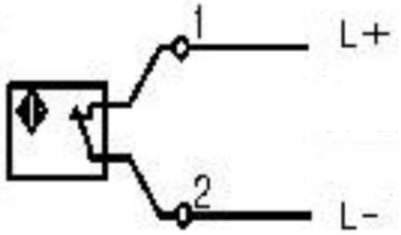
1. Non-magnetic guide tube
2. Clamp
3. Reed switch
4. Ring magnet
5. Float

7. Instrument Wiring

The diagram below shows the wiring for the two types of contacts:



Normally Open (NO) Contact



Normally Closed (NC) Contact