BCS-4S Series Float Liquid Level Switch

Overview

The BCS - 4S Float Liquid Level Switch are mainly used for water level control. Float ball switch built - in micro switch, and a weight is provided to ensure precise triggering at the target liquid level. This switch is maintenance - free, non - toxic, and environmentally friendly. It has excellent resistance to sewage and is widely applied in various containers such as civil and industrial - mining water tanks, oil tanks, acid - alkali tanks, barrels, cans, and sinks.

Features

- High protection level
- Wide application range
- Simple operation and easy installation

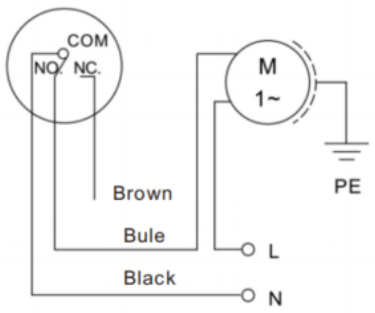
Specifications

Medium Type	Sewage, wastewater, liquid containing solid impurities, etc.
Medium Temp.	0℃~60℃
Medium Density	700~1200kg/m³
Switch Triggering Angle	45°
Contact Capacity	220VAC, 16A, 50/60Hz
Cable Length	4m
Certifications	CE、RoHS
Protection Class	IP68
Weight	NW:563g, GW:801g
Material	PP

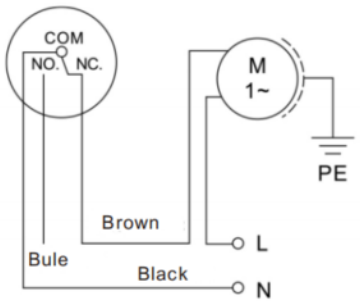
Ordering Information

Model No.	Cable Length
BCS-4S10-4	4m

Wiring Diagram



Auto-fill-water Mode

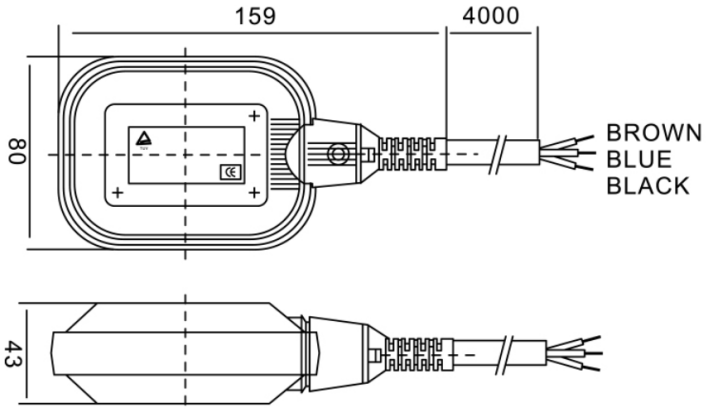


Auto-drainage and lack-water protection Mode

Auto-fill-water Mode: Wiring is black/blue. When the float ball is at the lower liquid level, the switch turns on and activates the water injection equipment.
Auto-drainage and lack-water protection Mode: Wiring is black/brown. When the float ball is at the upper liquid level, the switch turns on and activates the drainage equipment.

Notes:
The cable should be routed directly to the control box, and intermediate connectors should be avoided as much as possible. If connectors must be used, waterproof sealed connectors shall be adopted to ensure the connectors are completely isolated from liquid and prevent short-circuit faults.
Unused cables must undergo absolute insulation treatment (e.g., wrapping with insulating tape or covering with insulating sleeves) to avoid circuit short circuits caused by contact between exposed wires.

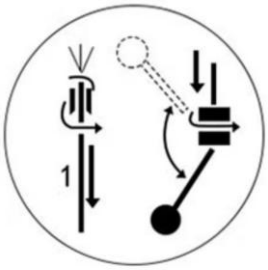
Appearance Dimensions



Dimension in: mm

Installation

Weight Installation



Weight Working Principle Diagram

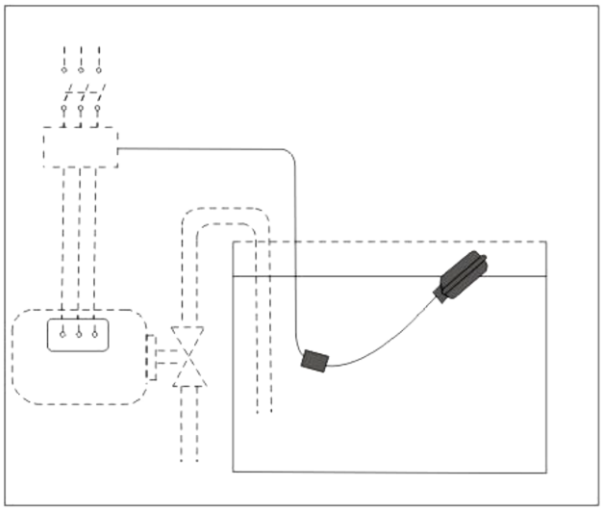
The weight is used to fix the "liquid level set point (or fixation point as below picture)" of the float ball, ensuring the switch triggers accurately at the target liquid level. The installation steps are as follows:

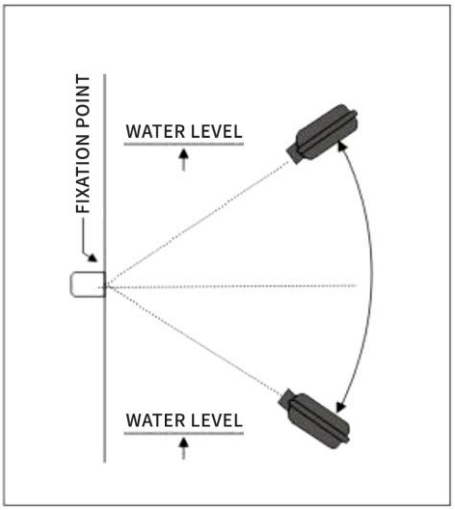
1. Thread clamping the weight: Pass the cable of the float switch through the downward convex circular hole in the center of the weight, gently push the weight to the preset "liquid level setting point" and clamp it.

2. Fix the weight position: It is highly recommended to additionally use a copper wire (or other insulating fasteners) to clamp both ends of the weight on the cable, or fix it on the inner wall of the container during use, especially for flowing or fluctuating liquid surface. So as to prevent the weight from sliding due to liquid level fluctuation and causing liquid level control deviation.

Liquid Level Installation

Simply lengthen or shorten the fixation point (or set point) of the free section of the cable to obtain the desired "ON (connect)" or "OFF (disconnect)" action differential; move the cable fixation point (or set point) up or down to adjust the "ON" and "OFF" switch actions to the target liquid level.





1. Adjust cable length via “set point/ fixation point”
2. Fix the weight position to the “fixation point/ set point”