# PRODUCT INTRODUCTION

## DESCRIPTION

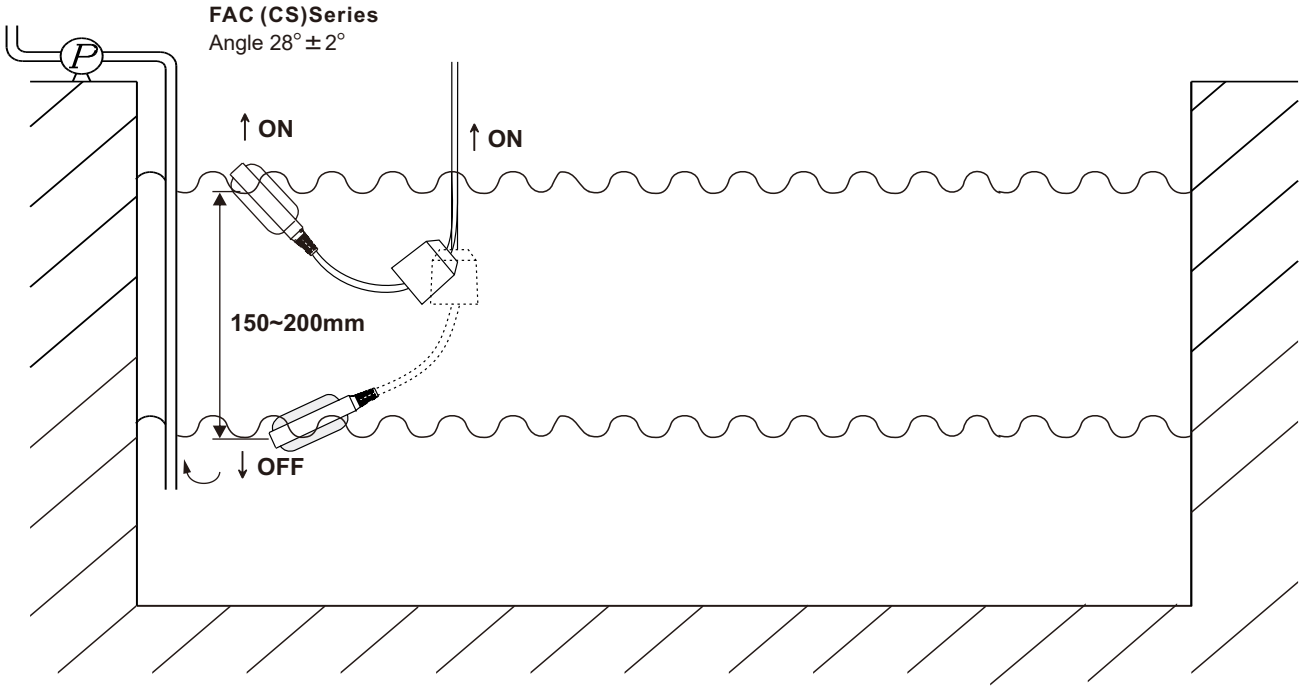
The Float Level Switch is made from chemical resistant polypropylene. It is durable, low-cost,and specially designed to assist with long range and multiple point level detection in liquids. It is also suitable for tanks containing pumps and granular solutions.

## APPLICATION

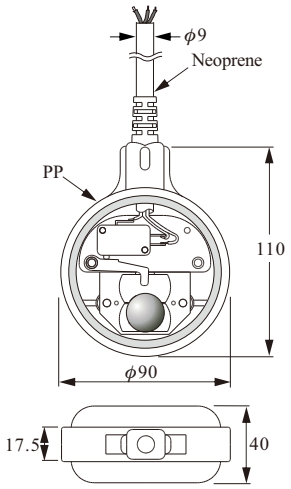
FAC: Suitable for pump controlled systems
FAR/ P / D/ E: Suitable for pump controlled waste water with a low Specific Gravity (SG level).
FAS: High temperature solutions
FAL/ J: Cleaner water, and installation with smaller process connections.
It is suggested to apply Reed Switch contact models in PLC or DCS control.

## WORKING PRINCIPLE

The Cable Float Level Switch is a structured by using either micro switches proximity switches or reed switches to control the contact. It's user-friendly design is ideal for level measurement.
The switches will transmit an ON or OFF contact signal output when the float rises and turns upwards. The switch contains a metal ball that can slide as the float position changes.
For different water or solution temperatures, different float materials are available for selection. Plastic and stainless steel switches are the most common.
The cable float level switch can not only can be used in clear liquids but also can be used in granular liquids. Long distance detection points and multi-point contacts are also available.
Cable float level switches can be applied in all water management, petrochemical, chemical industries. Other uses include: air-conditioner systems, drainage systems, most tanks or containers with level switch requirements.

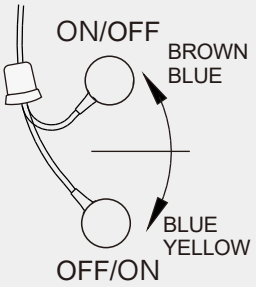


# SPECIFICATIONS

| | | | |
|---|---|---|---|
| **Dimensions (Unit:mm)** |  | | |
| **Model** | **FAC C Round type** | | |
| **Switch** | Micro switch | | |
| **Float material** | P.P. | | |
| **Cable spec** | Neoprene Cable<br>1mm$^2$x3C or 2C | | |
| **Contact rating** | 10A/ 250Vac (std.) or 15A/ 250Vac | | |
| **Contact form** | N.O or N.C or SPDT | | |
| **Operating temp.** | -10°C~80°C | | |
| **Specific gravity** | 0.6 | | |
| **Weight approx.** | 770g/5M | | |
| **Pressure** | 2 kg/cm$^2$ | | |
| **Wire voltage** | 600 Vac | | |
| **Isolation resistance** | Min 100 MΩ | | |
| **Contact resistance** | Max. 100mΩ+(70mΩ/m) | | |
| **Actuation angle** | 28° ± 2° | | |
| **Protection** | IP68 | | |

## SPDT (1C)

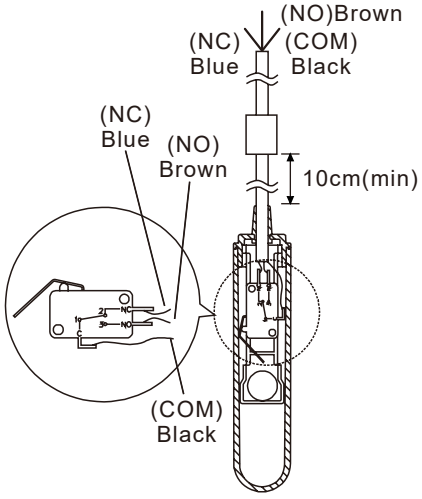
**FACC**



# WIRING

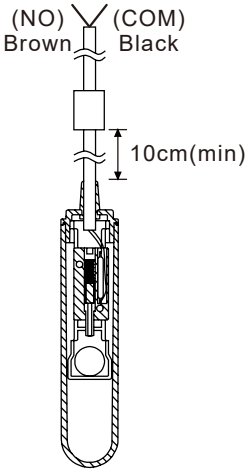
## Micro Switch

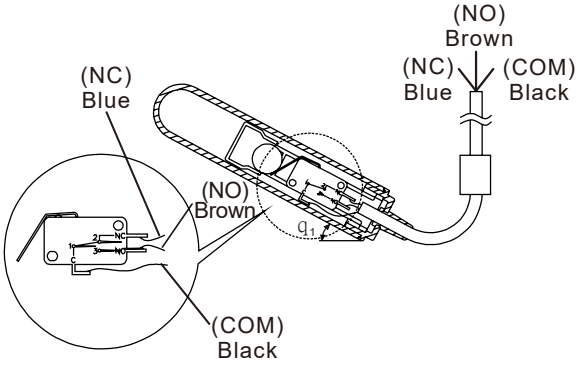
When the float hasn't contacted the liquid, the blue and black wires are in an open state and the contact mode will be NC. When the liquid level rises and lifts the float until it reaches the actuation angle, the brown and black wires will be in an open state and the contact mode will be NO.

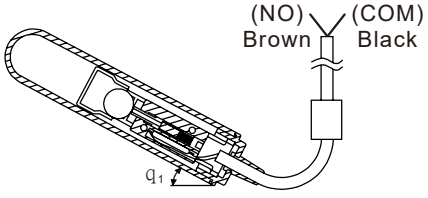



## Reed Switch

When the liquid level is low, the metal ball remains away from the sensing range and the brown and black wires are in an open state (NC mode). When the liquid level rises and lifts the float until it reaches the actuation angle, the brown and black wires will be in an open state (NO mode).



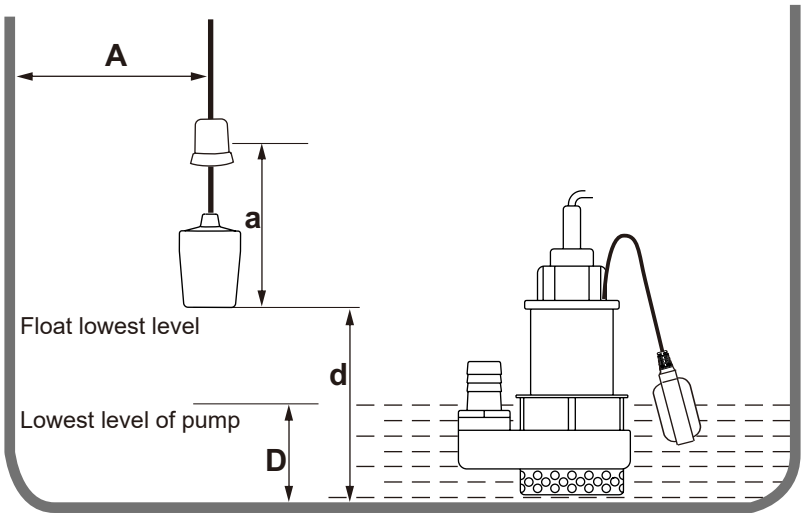



# INSTALLATION GUIDE

## DIMENSIONS

The float's action length (a) must be shorter than the distance between the wall and the cable (A) ; if not,it will not function accurately.

The lowest float level (d) must be higher than the lowest water level of the pump (D).




## PRECAUTIONS

Keep a proper distance between the installation position and the water pump inlet to prevent the float switch from being sucked in towards the pump.

There should be a proper distance between the installation position and water inlet to prevent any direct water impact. If it can't be avoided, please install a pipe-shield or plate that lowers the turbulence.