# **IWF - INTERNALLY WEIGHTED FLOAT SWITCH**

Float Switches are inexpensive and efficient liquid level detectors. They are simple to install, and designed for trouble free operation over a long life. The IWF is a plastic float switch using a three-core rubber H-05RNFcable. Opening and closing circuit operations are via a silver contact micro-switch arrangement.

#### Construction

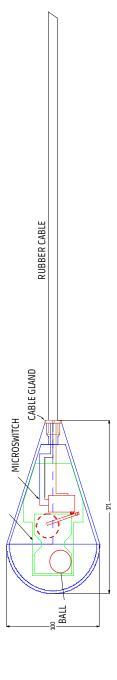
The unit comprises three major components:

- 1. The float chamber houses the micro-switch arrangement, totally sealed within a polypropylene casing, with a single pole double throw action.
- 2. The three-cored cable, connected to the micro-switch assembly inside the float chamber, is sheathed in H-05RNF rubber. This cable is supplied in three standard lengths, 10 metres, 20 metres and 30 metres ±5% of the length quoted.
- 3. The counter weight is located inside the polypropylene chamber, hence giving the float a self tilting action.

## Mounting

Whilst no hard and fast rules apply to the mounting of these units, the lead should be supported in an enclosed vessel, and in an open vessel it is advantageous to clip the lead to the side, especially if excessive turbulence is experienced.

To obviate the effects of rapid switching conditions that would result if such turbulence is experienced, it is advantageous to use a maintaining circuit which both safeguards the micro-switch and cuts out any chatter in the starters of associated pumps etc.

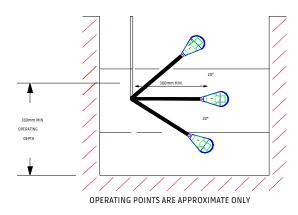




### **Method of Operation**

The micro-switch assembly inside the float, axially mounted in line with the weight, changes contacts according to the float's position, as in the diagram below. Therefore as the liquid level drops or rises slowly, a pump or flow control suitably connected, can be switched in or out to maintain an average level of the liquid. By connecting only one side of the switch, the unit can be also used to fill or empty the tank as required.

Dimensions, in mm, do not take into consideration any lateral swing of the cable.



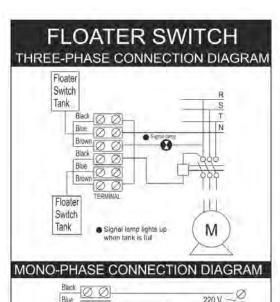
Contact rating: Nominal Voltage 250V

Rated Current 6A

**NOTE**: Local regulations may limit the voltage.

Max. Temperature - 85°C

Max. submerged depth - 20 metres



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#### Chemical Resistance

Against	Rating
Lubricants	Fair
Diesel oil & petrol	Poor
Vegetable & animal fats	Good
Water Absorption	Good
Oxidation	Good
Ozone	Good
Sunlight	Good
Dilute Acids	Good
Alkalis	Good
Alcohols	Good
Salt water	Good

Cable Colors	For Emptying	For Filling	Alarm High Level	Alarm Low Leve
Black	•			
Blue / Grey				
Brown				



Floater

Switch Tank