



Features & Benefits

- Reliable
- Easy to install
- Easy to adjust
- Simple wiring

Technical Overview

The LS-AFS is designed for simple reliable water level control. The float switch can be used to control a pump for either tank filling or tank emptying (a high or low level cut-out). It is easily achieved by positioning the float stops on the cord.

The electrical connections are easily made inside the housing, via the terminal strip. Two M20 cable glands are provided for use with suitable conduit.


Product Codes

LS-AFS Automatic float switch

Specification

Max. switching voltage	250Vac
Current rating:	
Resistive	20A
Inductive	8A
Float operating range:	
Maximum	700mm
Minimum	50mm
Dimensions:	
Float	125mm x 63mm dia.
Housing	59 x 56 x 132mm
Cord length	920mm
Material:	
Housing & Float	Polypropylene
Weights	Brass
Cord	Nylon
Ambient temp. range	0 to +50°C
Media temperature	4 to 50°C
Protection	IP22
Country of origin	UK

WEEE Directive:

 At the end of the products useful life please dispose as per the local regulations. Do not dispose of with normal household waste. Do not burn.



The products referred to in this data sheet meet the requirements of EU Directive 2014/35/EU

Operational

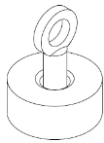
The contact is made using a micro switch, activated by the tipping motion of the arm with the rise and fall of the float. All parts are manufactured from UV protected polypropylene, and the weights are brass. Movement of the float is transmitted easily by adjusting the stops on the cord to ensure a positive make or break action.

Operational

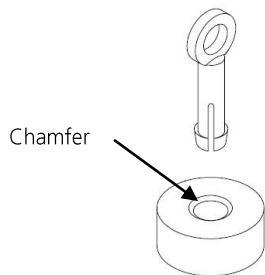
The switch assembly includes three weights, the position of which relative to the switch assembly is important for correct functionality of the switch.

Counterbalance weight

This is the heaviest of the three (approx 112g) and is pre-fitted at the factory as shown.

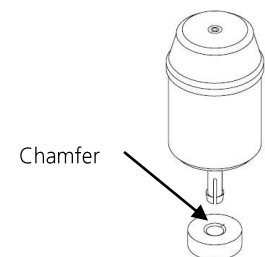


If ever there is a need to remove or replace this weight, it must be re-fitted with the chamfer upwards as shown.

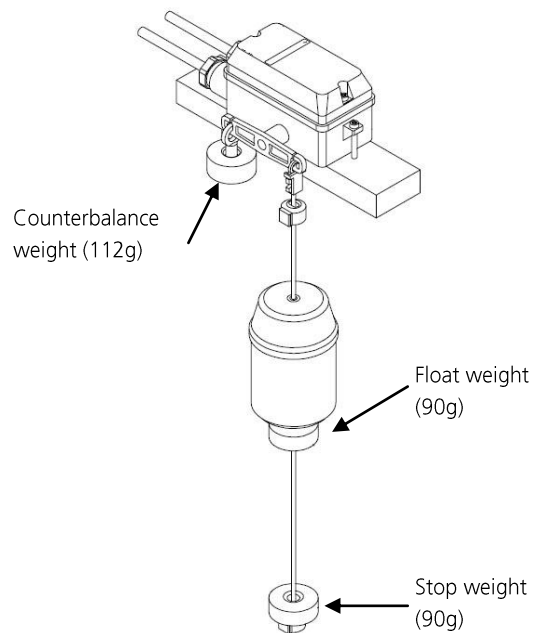
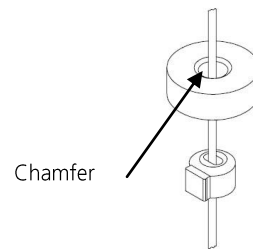


Float weight and stop weight

These two weights are the same size (approx 90g), are supplied loose and are interchangeable. The float weight must be assembled to the float with the chamfer upwards as shown.



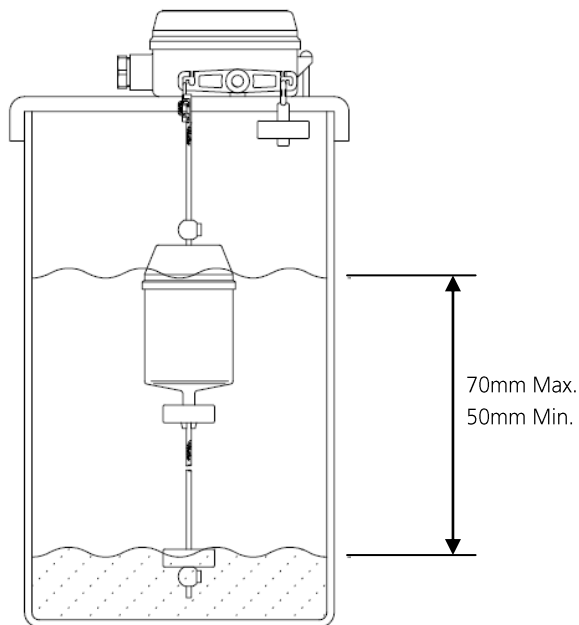
The stop weight must also be assembled with the chamfer upwards as shown.



Installation

- When used on a sump, make sure that it is kept clean. Aggressive mediums such as concrete dust and cinders may cause damage.
- When installing the main float switch casing ensure the mounting holes (to suit M4 screws) are used. Do not drill the switch casing as water ingress may subsequently occur which will damage the switch.
- Do not allow plastic parts to come into contact with oil or cellulose based paints, paint thinners or strippers, acid based descalents or aggressive cleaning agents.

The switch housing must be securely fixed in a horizontal position and should be protected from being sprayed with water. To permit free action of the switch, a sump should not be less than 20 cm diameter and at least 45 cm deep. This will permit a reasonable distance to be obtained between adjustment stops, which in turn will prevent constant stop / start conditions which could cause damage to motor. See sketch below for float operating range.



Install unit so that the cord, float and the counterbalance weight cannot foul or rub against anything. The top of the float is marked 'TOP'. It is important to fit it the right way up. The float must slide easily up and down the cord. Control the movement of the float by adjusting the upper and lower level stops. Ensure that when in the lower position the float and stop weight are clear of the bottom of the sump or tank. The counterbalance operates the switch when the float lifts up the weighted cord. When the tank is emptied, the weighted cord plus float must overcome the counterbalance and operate the switch in the reverse direction.

Operating conditions

The following points should be noted particularly when using the device:

- The maximum permissible pressure p_{max} of the transmitter may not be exceeded.
- The temperature of the medium in contact with the transmitter may not exceed 80°C.
- Avoid formation of ice on the process input of the transmitter because this could damage the diaphragm.
- Prevent soiling of the transmitter input.

Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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