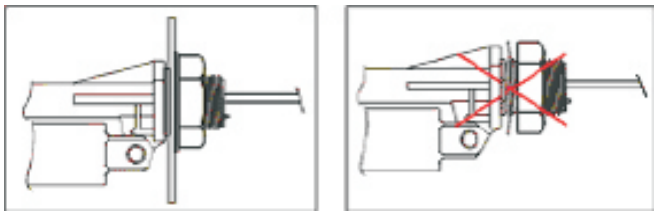
Float Switches - Installation Notes

Thread Mounted Types

The tank wall should be flat, as concave, convex or uneven walls can cause ineffective sealing of the float switch in the tank wall.



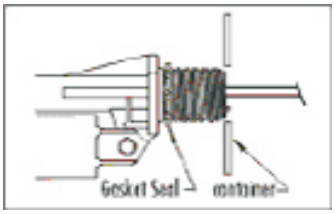
Drill the correct size hole in the tank wall, observing the appropriate safety requirements.

Remove any swarf and ensure that both faces of the hole are smooth, to avoid damage to the sealing washer/gasket.

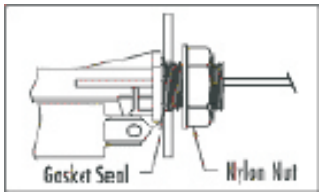
Internal fitting types, RSF10, RSF20, RSF30, RSF40, RSF50, RSF60, SSF211, SSF213, SSF22, SSF24, SSF26, SSF28 SSF29 series.

Fit the sealing washer/gasket on the float switch thread.

Feed the connecting lead/s and the threaded portion of the float switch through the hole in the container , from the inside. Take care to ensure that the sealing washer/gasket is not damaged and that it is correctly positioned against the face of the tank wall and the collar of the float switch.



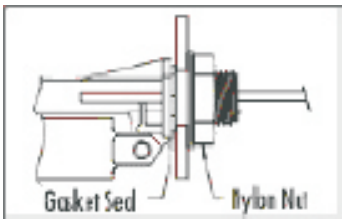
Feed the fixing nut over the connecting lead/s and position on the float switch thread, ready for tightening.



Hold the float switch firmly, ensuring that the orientation of the float is correct and that the sealing washer/gasket is not impaired, and tighten the nut, until finger tight.

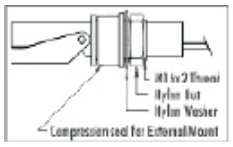
Carefully tighten the nut to the appropriate torque of 3 lbft (4.0Nm) maximum.

Check the seal and orientation, before connecting the float switch to the required electrical circuit.



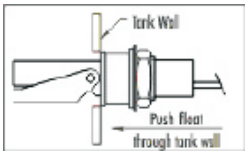
External fitting RSF70 series.

Feed the compression seal/grommet, friction relief washer and fixing nuts over the connecting lead/s and position on the float switch thread, ready for tightening.



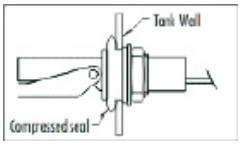
Turn the fixing nut only until the compression seal/grommet starts to deform.

Hold the float switch assembly by the cable entry and insert the assembly into the hole in the tank wall, until compression seal/grommet meets the face of the tank wall. Ensure orientation of the float is correct, by reference to the indicator on the cable entry.



Hold the float assembly by the cable entry end, using the flats provided, and carefully tighten the fixing nut to a maximum torque of 2.0 lb ft (2.67Nm).

Check the seal and orientation, before connecting the float switch to the required electrical circuit.

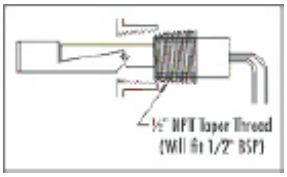


Float Switches - Installation Notes

External fitting 1/2"NPT. RSF80, SSF212 series.

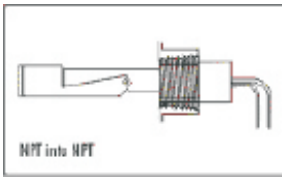
These have a ½"NPT taper thread, which can be screwed directly into a ½"NPT female thread or a ½"BSP female thread, to give a "jam" fit. The tank wall, or tank wall and threaded boss, should have a minimum thread length of 7mm and a maximum length of 17mm, from the outer thread to the inner face of the tank wall.

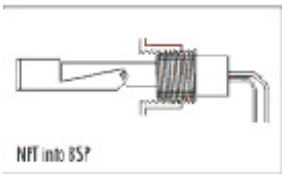
Drill a hole in the tank wall of the correct size for cutting the required thread form and cut the thread, or drill a hole and fit a threaded boss on or in the tank wall.



Apply a compatible thread sealing compound, or tape, to the thread and engage the assembly in the threaded tank wall. Rotate the assembly until it is finger tight in the thread.

Tighten the assembly into the thread, using a spanner on the flats provided, until a good seal is made and the orientation of the assembly is correct, by reference to the indicator on the cable entry, also ensuring that the torque is limited to less than 5.0 lb ft (6.75 Nm).





Cable Suspended types

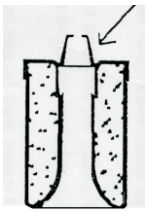
SLP series

This type is designed to be suspended by its cable, so the cable should be secured in a suitable clamp or gland with the switch hanging below this. It may be more practical, in some applications, to mount the switch body in a clamp at the desired level.

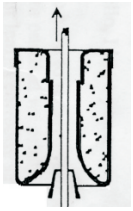
Free Floating Switches. FFS, FFSMC, LM, MS series.

These are cable end switches, where the switch actuation is dependant on the angle of inclination of the switch relative to the horizontal. This requires the switch to pivot on a length of cable about an anchored point.
The switches are all supplied with counterweights, which can be fitted to the cable and positioned at a suitable point to provide the correct pivoting action and levels.

Remove locking cone from counterweight moulding.



Fit the locking cone on the cable, feed the cable through the counterweight and insert it into the base of the counterweight to lock the counterweight in the required position.



The switches can, alternatively, be positioned by use of a cable gland in the wall of the tank or by securing the cable to some feature within the tank.