

# T/LL12/13/01 INSTALLATION INSTRUCTIONS

Fozmula Limited produces a wide range of float switches for many applications. This leaflet is intended as a general guide for the installation of the float switch with which you have been supplied. If any aspect of the installation is unclear, or if you have any other questions, please call or fax our Sales Department. The float switch works on the proven magnet and reed switch principle. The construction of the float switch is rugged but you should still exercise care in handling.

In particular:

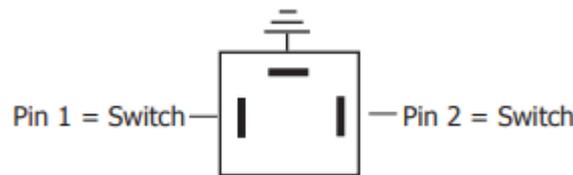
1. Do not bend the vertical tube or the free movement of the floats will be impaired.
2. Do not move the circlips or spring rods that locate the floats in some models.
3. Do not overtighten the mounting threads or flanges during installation.
4. Do not allow the tube or floats to foul the sides, base or internal baffles of the tank during installation.

### Electrical information:

Every Fozmula float switch is manufactured to customer specification and rated, within wide tolerances, to the voltage and current you have requested. Do not overdrive the float switch by applying a current or voltage greater than that you have specified. To do so will affect any potential claim under warranty.

### Wiring diagram:

This model has a mini DIN style connector which is wired as shown below. Please ensure that the mating connector is wired as shown below:

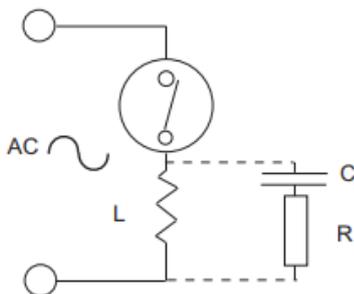


### Inductive load:

If you are using an inductive load you should fit a suppression circuit unless the inductive load is very small. A number of recommended circuits are shown overleaf.

Suppression circuits

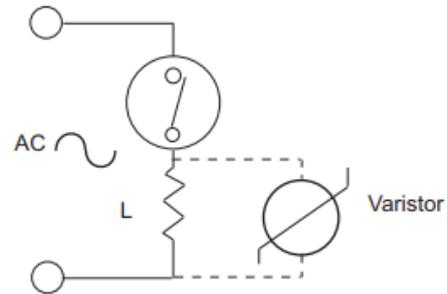
#### 1. Low switching currents



$$C = \frac{L}{R_L^2}$$

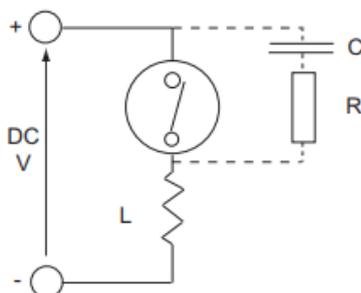
$$R = \frac{L}{R_L C}$$

#### 2. Higher switching currents



$$\text{Varistor } V = \text{RMS voltage} + 10\%$$

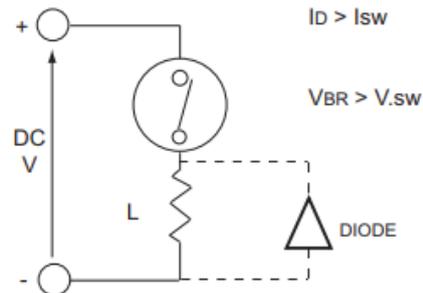
#### 3.



$$C = \frac{I^2}{IO}$$

$$R > = \frac{V}{I_{sw} - \frac{V}{R_L}}$$

#### 4.



$$I_D > I_{sw}$$

$$V_{BR} > V_{sw}$$