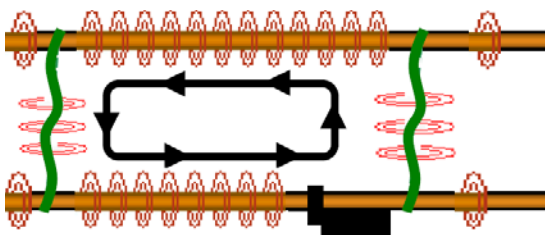
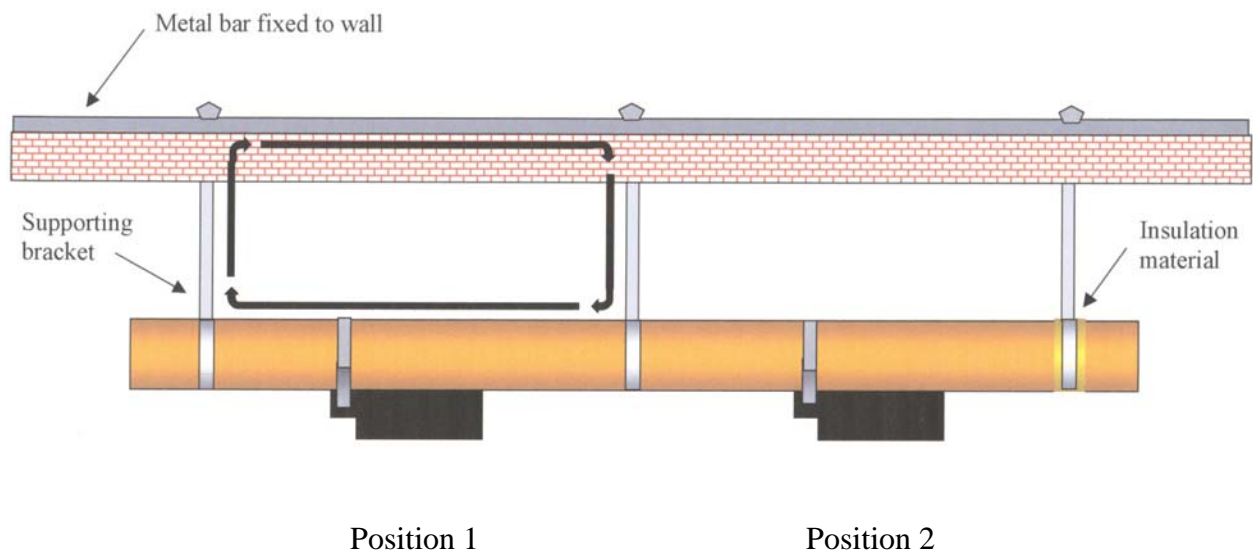
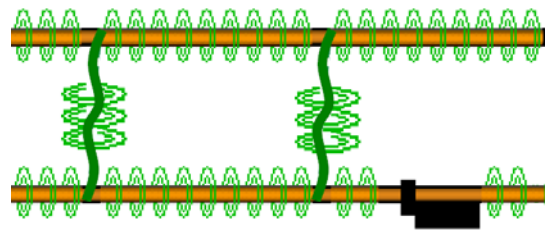


Explanation of an electrical loop

An electrical loop is created when there is a bonding on either side of the unit. The signal is shorted out and cannot propagate throughout the system.



By re-locating the unit outside the electrical loop the signal will propagate throughout the entire system.



It is possible with some installations to have the situation where a metal pipe is supported either by a bracket from a wall or suspended from the ceiling. In these cases it is important to ensure that the *HydroFLOW* unit is not located in an electrical loop as shown in Position 1. This causes a short circuit to the signal being transmitted into the water, in this situation it will not propagate over the complete system.

This can be overcome in a number of ways, either by moving the *HydroFLOW* unit to a different location on the pipe where there isn't a short circuit or alternatively the bracket holding the pipe can be insulated, as shown in position 2. It may however be necessary to insulate all the brackets to overcome the problem.