

# Installation and Maintenance



## Tilt Float Liquid Level Switches, M4546 and M4649 Series

ECN # 11537, Effective Date 12/6/2019, MF-068, Rev D

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### Installation Instructions:

1. There are no specific installation concerns. However, the lead cable should be supported in an enclosed tank. Additionally, in an open tank, sump, or pond, it is advantageous to clip the lead cable to the side; especially if excessive turbulence is experienced (a nylon cable-tie is included).
2. The standard cable lengths are as follows:
  - 2 meters +/- 5% of the length for the M4546 series
  - 15 meters +/- 5% of the length for the M4649 series
3. The lead colors are defined as follows for the standard cable lengths:
  - Black is Common
  - Blue is Normally Closed
  - Brown is Normally Open
  - The lead colors are defined as follows for cable lengths greater than 15 meters:
    - Black is Common
    - Green is Normally Closed
    - White is Normally Open
  - These operations are achieved with the float down and the wire coming out of the TOP of the unit.
4. A stabilizing weight and plastic c-clip are included with the Tilt Float Switches. This may be installed at any point on the lead cable. The weight has a conical inner diameter, to allow it to slide onto the c-clip.
  - Remove the c-clip from the weight and snap onto cable at desired location.
  - Insert the cable through the weight. Make sure the cable is inserted in the larger inner diameter FIRST.
  - Slide weight down length of cable until it contacts the c-clip.
  - Force the weight onto the c-clip by rotating it and using slight pressure.

### General Information:

- To alleviate the effects of rapid switching conditions if such turbulence is expected, it is recommended that a maintaining circuit be used to both safeguard the micro-switch and cut out any chatter from the starters of associated equipment, such as pumps.
- Optional cable lengths are available upon request.

### Warnings:

- DO NOT exceed the Maximum Pressure, 1 bar, and Maximum Temperature, 70° C.
- DO NOT exceed the Contact Ratings, 16A 250 VAC 60Hz General Purpose, 1/2HP 250 VAC 60Hz.
- Life expectancy varies with the application.
- Physical damage to switch assembly may render product unserviceable.