

# Safety Pressure Switch M011 Installation Instructions

## Theory of Operation

The Safety Pressure Switch M011 is designed to activate the attached 120v pigtail only in the presence of pressure. It is commonly used in swimming pool chemical injection applications to allow chemical injection pumps or chemical controllers to activate only when there is water pressure at the point of chemical injection. It is designed to deactivate power when there is no flow in the return line. SAFETY PRESSURE SWITCH MUST BE CALIBRATED CORRECTLY. SAFETY PRESSURE SWITCH DOES NOT REPLACE OWNER RESPONSIBILITY; ALWAYS VERIFY PROPER OPERATION. NEVER BACKWASH FILTERS WHILE POOL IN USE.

## Tools for Installation

|                 |  |
|-----------------|--|
| Drill           | Pliers                                   |
| 7/16" Drill Bit | Screws and Anchors                       |
| ¼ NPT Pipe Tap  | Screwdriver                              |
| Teflon Tape     | Drill bit for Mounting Screws or Anchors |

## Included Parts

Safety Pressure Switch (Normally Open)  
20' ¼" OD Black HDPE pressure tubing  
¼" Tube x ¼ NPT pressure switch fitting



## Ratings

120VAC/12a

Pressure Input - 1-6 PSIG (In below grade applications if static pressure over 6 PSIG exists when circulation system off or in backwash mode, please order Part#M011-HP (2-22 PSI) for a higher pressure actuation point).

## Installation Instructions

**Warning: Do not exceed pressure, voltage, and/or current ratings.**

- 1) Position and mount the Safety Pressure Switch (using anchors and screws) on a vertical surface like a wall or fence so that the 120V pigtail is hanging down. 120v cable on load to be switched must be able to reach pigtail.
- 2) With pressure isolated (pump off, valves shut, etc.) drill a 7/16" hole and tap with ¼ NPT pipe tap just before the chemical injection point(s) in the return line. Only screw tap 1/2 of the tap thread length into the pipe.
- 3) Wrap threads of pressure switch fitting with teflon tape and thread until tight in threaded hole in pipe.
- 4) Install ¼" OD pressure tubing between pressure switch fitting and pressure inlet fitting on Safety Pressure Switch.
- 5) Turn system back on and inspect for leaks.
- 6) Plug load to be switched into Safety Pressure Switch pigtail.
- 7) Test Switch performance several times by doing the following:
  - a) Turn Circulation pump off. Safety Pressure Switch should turn off load.
  - b) If system is a pressure filtration system, put filter in backwash mode. Safety Pressure Switch should turn off load.
- 8) If Safety Pressure Switch does not turn off load during the above testing, follow the Calibration Instructions.

### Calibration Instructions

- 1) Remove Safety Pressure Switch Cover plate and gasket by removing four screws in cover.
- 2) To raise actuation pressure turn knurled knob clockwise (down) until desired actuation pressure is attained.
- 3) To lower actuation pressure turn knurled knob counter-clockwise (up) until desired actuation pressure is attained.
- 4) Replace gasket and cover.
- 5) Perform step 7 of Installation Instructions to insure Safety Pressure Switch is operating correctly.

