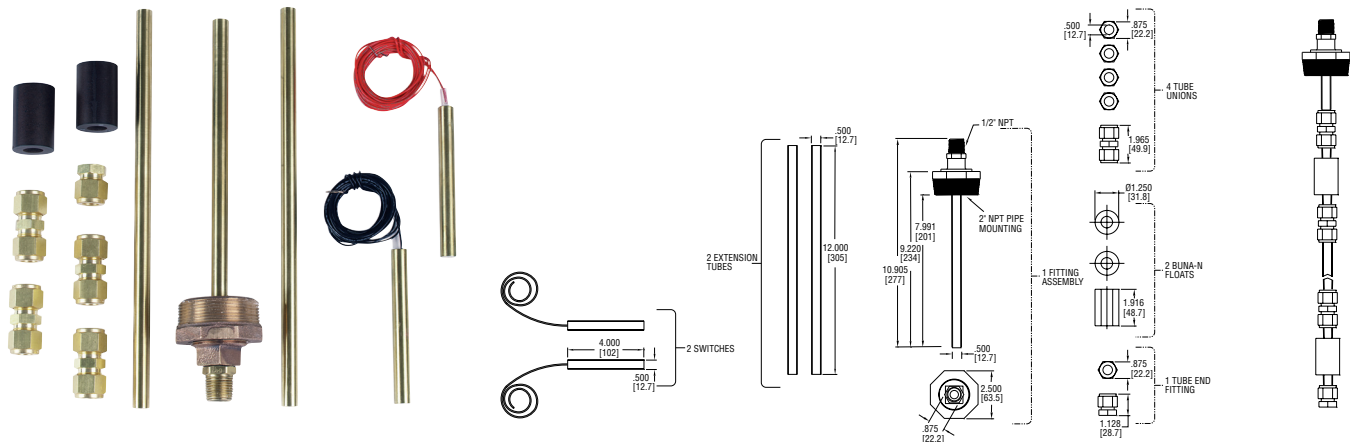




Model F7-MLK Multi-Level Switch Kit



Specifications - Installation and Operating Instructions



GENERAL

The F7-MLK Multi-Level Switch Kit contains all the components necessary for the design and fabrication of a 1 or 2 station level switch for pipe plug mounting. User can customize stem length (max 36"), actuation point, distance between floats, and lead wire lengths. The switch kit is ideal for general purpose, low specific gravity, and gas and oil applications. Model F7-MLK includes two level stations with Buna-N floats (switch, tube, and float), two brass extension tubes 12" length, four brass tube unions, one end fitting, and one mounting plug.

ASSEMBLY

1. Lay out the components required for the desired configuration of one or two level stations. A typical configuration is shown in figure 1.
2. Cut the tubes to the desired length. DO NOT CUT THE SWITCH CAPSULES (short tubes with wires).
3. Clean and smooth all sharp edges on the ends of the cut tubes to avoid damaging the wires.
4. Make a trial assembly of the switch, including the floats, to determine that the assembly is correct for the application. Be sure the tube and switch capsules are inserted fully into the shoulder of the fittings. Pass the lower switch capsule wire through the upper capsule feedthrough tube. DO NOT TIGHTEN THE UNIONS AND THE END CAP UNTIL YOU ARE SURE THE SWITCH IS CORRECT!
5. To set switch operation for Buna-N floats:
 - NC-(dry position - open on fluid rise) three magnet holes on float should face pipe plug.
 - NO-reverse float
- To set operation for stainless steel floats:
 - NC-(dry position - open on fluid rise) round witness mark in float should be away from pipe plug.
 - NO-reverse float

PHYSICAL DATA

- Electrical Rating:** 60 Watts: 0.4A @ 220VAC, 0.5A @ 110VAC, 0.2A @ 120VDC, 0.5A @ 24VDC.
- Maximum Temperature:** 221°F (105°C).
- Maximum Pressure:** 150 psig (10 bar).
- Material (Float/Stem):** Buna-N/Brass.
- Minimum Specific Gravity:** 0.45.
- Tube/Fitting Size:** 1/2" O.D.
- Stem Length:** 36" (91cm) maximum.
- Mounting Connection:** 2" NPT(M) pipe plug.
- Mounting:** Up to 30° angle from vertical.
- Wire Leads:** 22 AWG × 72" (183 cm).
- Weight:** 3.5 lbs (1.6 kg).

6. Test electrical operation with a continuity meter..
7. When the switch is completely set up as desired, tighten all fittings 1-3/4 turns beyond finger tight using two wrenches.
8. Use proper thread sealant on the pipe threads when installing the switch in the tank.

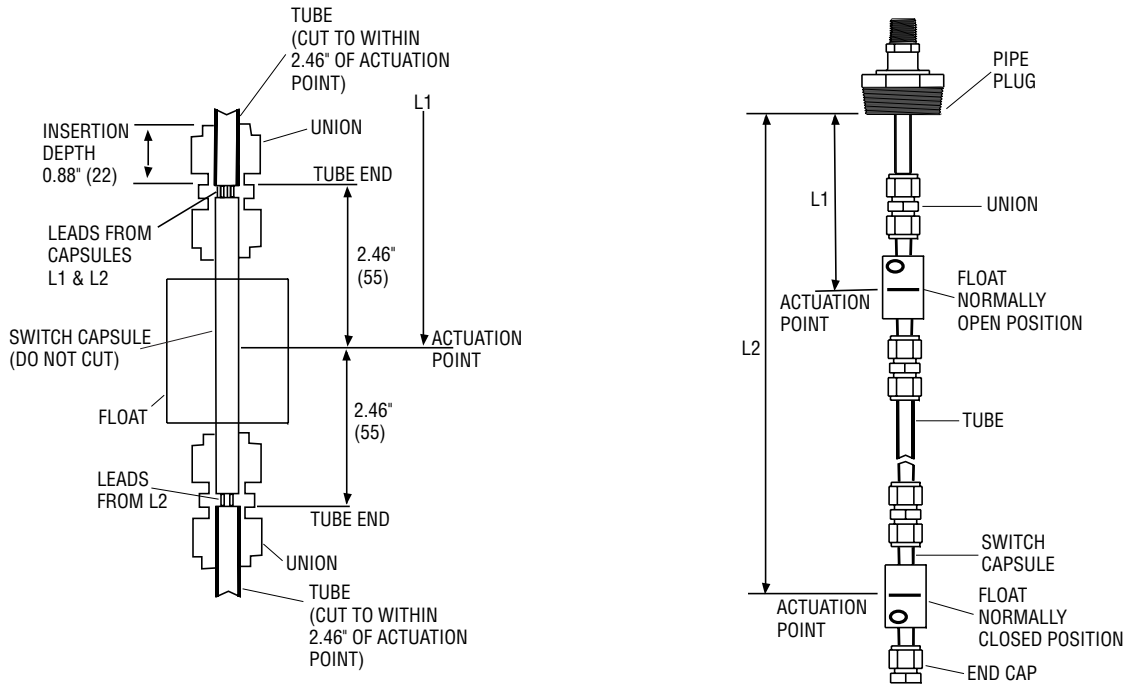
WARNINGS

DO NOT CUT OR MODIFY THE SWITCH CAPSULES (SHORT TUBE WITH WIRES) IN ANY WAY, EXCEPT TO CUT THE WIRES TO LENGTH AFTER ASSEMBLY IS COMPLETE.

DO NOT EXCEED PRESSURE AND TEMPERATURE RATINGS.

DO NOT EXCEED CURRENT AND VOLTAGE READINGS.

BE SURE ALL FITTINGS ARE ASSEMBLED AND TIGHTENED CORRECTLY



Typical Switch Configuration

Current and Voltage Ratings: These ratings are for resistive loads only. For inductive loads, maximum life will be achieved if appropriate arc suppression is used.

Maximum Voltage ratings: SPST Switches-220VAC.

Watts	Voltage	Current Amps. (Resistive)
60	220AC	0.4
	110AC	0.5
	120DC	0.2
	24DC	0.5