Multi Level Switch Kits





Model Number	ML4444
Materials	Stem & Float: Brass & Buna-N
Minimum Media SG	0.56
Mounting	2" NPT
Max. Pressure	150 psi
Max. Temperature	221°F / 105°C
Electrical Ratings	240V AC, 0.40A; 120V AC, 0.50A;
	120V DC, 0.20A; 24V DC, 0.50A
Switch Ratings	60 watt, SPST

Assembly Instructions

- Lay out the supplied components in the configuration that your application requires. A typical configuration is shown in the drawing on side 2. Determine the lengths of the connecting tubes required for your application. NOTE: The tube end extends into the union fitting and endcap .90"
- Cut the connecting (empty) tube(s) to the lengths that your application requires. NOTE: DO NOT CUT THE SWITCH CAPSULES (the short tubes with wires. We suggest the use of a tubing cutter to get clean, square cuts.
- 3. De-burr the inside and outside of the cut ends of the tubes with a fine file, sandpaper, etc. NOTE: Be sure to remove ALL sharp edges from the inside of the tubes to prevent damage to the insulation on the switch wires.
- 4. Trial assemble all of the tubes, floats and switch capsules using the supplied union fittings and end cap. The upper switch capsule is the one with the red wires and an inner tube. The wires from the lower switch capsule must pass through the inner tube. Be sure that the switch capsules and connecting tubes bottom out in the union fittings and end cap. NOTE: ONLY TIGHTEN THE UNIONS HAND TIGHT. Using a continuity indicator (light, buzzer, ohm meter, etc.), verify that the switch actuation levels (L1 and L2) are at the required levels and the switch action (normally open or normally closed) is correct for your application.

BE CERTAIN THAT YOU HAVE THE SWITCH SETUP THE WAY YOU REQUIRE BEFORE TIGHTENING ANY FITTINGS

Setting Switch Operation

Stainless Steel Floats

NC- (dry position- switch will open on rising fluid level) round witness mark on end of the float AWAY from the large pipe fitting. NO- (dry position- switch will close on rising fluid level) round witness mark on end of the float TOWARD the large pipe fitting.

Buna-N Floats

NC- (dry position- switch will open on rising fluid level) the 3 gray dots on the end of the float TOWARD from the large pipe fitting. NO- (dry position- switch will close on rising fluid level) the 3 gray dots on the end of the float AWAY the large pipe fitting.

Polypropylene Floats

NC- (dry position- switch will open on rising fluid level) the 3 white dots on the end of the float TOWARD from the large pipe fitting. NO- (dry position- switch will close on rising fluid level) the 3 white dots on the end of the float AWAY the large pipe fitting.

- 5. Re-test the electrical operation of both switches using a continuity indicator.
- 6. When the switch is completely set-up as you require, tighten the union fittings and endcap, using 13/16" and 7/8" wrenches. Use the 13/16" to hold the body of the fitting and the 7/8" to tighten the nut. Tighten the nuts 1-1/4 turns past finger tight- no more!
- 8. Be sure to apply a suitable thread sealant to the pipe threads on the top fitting before installing the switch into your tank

WARNINGS

DO NOT cut or modify the switch capsules (the short tubes with the wires) in any way, except to cut the wires to the required length at installation.

DO NOT exceed the maximum pressure and temperature ratings listed.

DO NOT exceed current and voltage ratings listed. NOTE: These ratings are for resistive loads only. For inductive loads, maximum life will be obtained with the use of appropriate transient suppression. Maximum voltage rating is 240V AC.

Be sure that all fittings are assembled and tightened correctly.





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Not responsible for any typographic errors. Specifications are subject to change without notice. MAC_144_B 012023