

Liquid Level Switches

MLS Series

MLS Series Liquid Level Switches are float activated to operate an electrical SPDT reed switch for annunciation/controller or PLC. The MLS connects directly into the gas scrubber wall and can be used with an FW Murphy weld collar or FW Murphy external float chamber. The MLS Series is available in both 1 1/2 and 2 in. NPT models and with or without the test button.

The test button tests for float function; the complete mechanism including the magnetic activation of the reed switch; and the wiring from the switch to the control panel.

Features of the MLS Series include:

- Clean magnet design virtually eliminates iron filing accumulation on the magnet
- Seal-free construction
- ANSI/ISA 12.27.01 compliant (Single Seal)
- Optional push button to test functions
- Operates in 0.50 specific gravity or heavier fluids
- Designed for harsh gas compressor scrubber applications
- 304 cast equivalent SS body and 304 SS float
- Rated for 2000 psi (13.8 MPa) [138 bar] working pressure
- Trip on rising and falling without need to rotate body
- Electric model only available
- All models screw directly into the scrubber or can be mounted via an FW Murphy External Float Chamber
- CSA C/US Class I, Div. 1, Grp. B, C & D locations
- Canadian registered (TF models, registration pending at time of print)

Specifications

Process Connection: 2" NPT (MLS-020); 1-1/2" NPT (MLS-015)

Fluid Density (SG):

0.50 MIN (no extension)

0.65 MIN (1 inch extension)

Pressure Rating: 2000 psig (13.8 MPa) [138 bar]

Body: ASTM A351 CF8 (304 SS)

Cover: ASTM A351 CF8 (304 SS)

Other Wetted Parts: 303, 304 and 316 SS

Process Temperature: -20° to 300° F (-29° to 149° C)

Electrical: 30VAC/VDC 75mA Form C SPDT

Conductor cross section AWG/kcmil min.: 26

Conductor cross section AWG/kcmil max.: 16

Canadian Registration Number: OF12013.2 C (all provinces and territories) (TF models, registration pending at time of print)

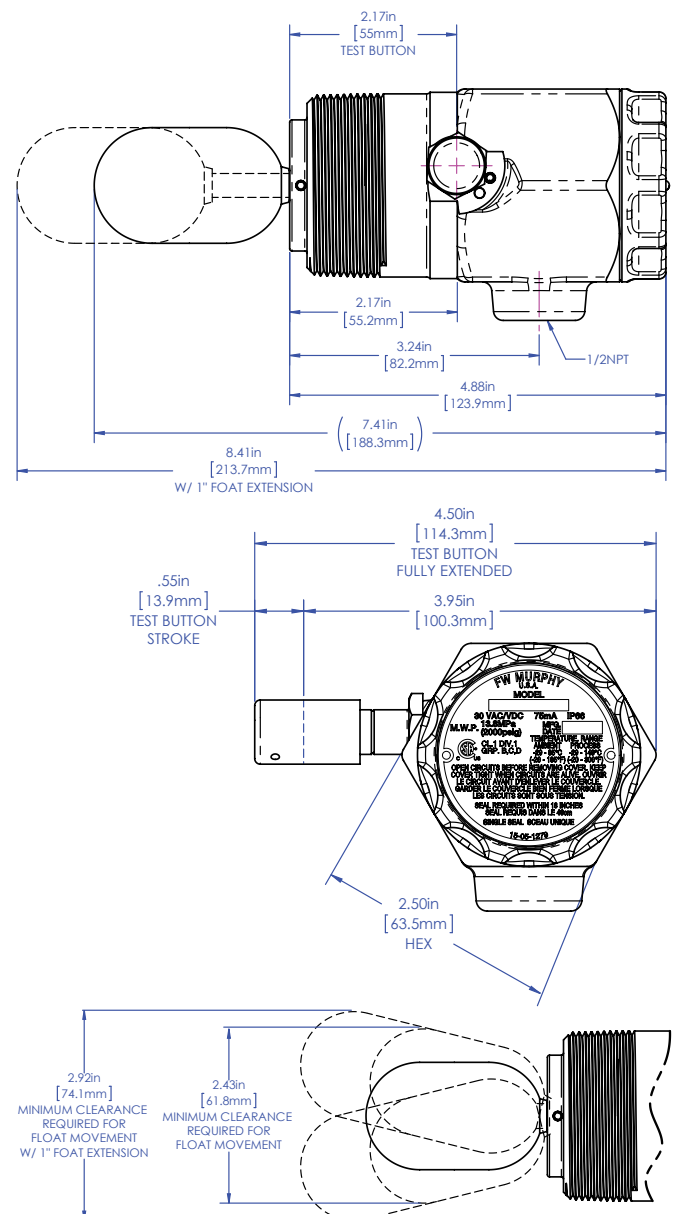


TF Model shown
with Test Button



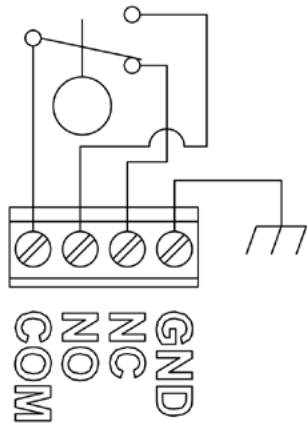
* CSA is model specific at time of print.

Dimensions

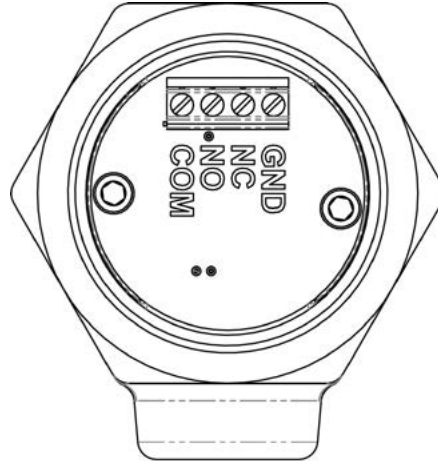


Electrical Wiring

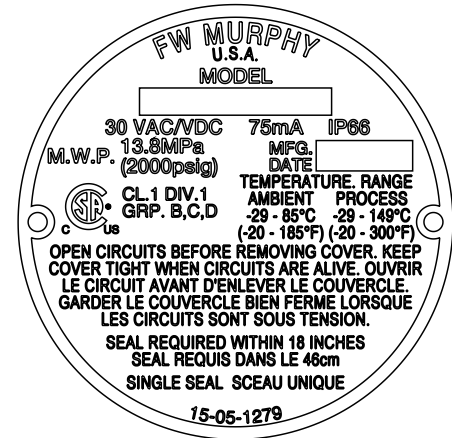
STD Wiring Diagram



Inside Back Cover



Back Cover



How to Order

Part Number	Description	Notes
15700840	MLS-015	1-1/2 in. NPT
15700905	MLS-015-TF	1-1/2 in. NPT with Test Function
15700839	MLS-020	2 in. NPT
15700904	MLS-020-TF	2 in. NPT with Test Function
15700799	External Float Chamber	Operating Pressure: 2000 psi (13.8 MPa) [138 bar]
15050375	Weld Collar	Operating Temperature: 400° F (204° C)
15000892	1-inch Float Extension Kit	

Approximate Shipping Weight:

MLS-015 models: 5 lbs. (2.27 kg)

MLS-020 models: 5.5 lbs. (2.49 kg)

External Float Chamber: 18 lbs. (8.2 kg)

Weld Collar: 6 lbs. (2.7 kg)

Approximate Shipping Dimensions:

All Models: 14 x 5 x 3.5 in. (356 x 127 x 89 mm)

Refer to MLS installation and operation manuals for additional information.