



MLS

Mechanical Float Level Sensors

- Direct pump control (small HP motors)
- Adjustable ON/OFF switching levels
- Unaffected by magnetic fields
- Simple installation
- 10 A SPDT miniature switch
- Field adjustable probe length

The model MLS is a simple float switch designed for top mounting in open tanks or vessels. The MLS can be installed by bulkhead, screw in or flange mounting. Control ranges up to 59 in. (1500 mm) can be accommodated. This switch is designed for use as a reliable component in hydraulic units, boilers, magnetic cooling equipment, irrigation systems, etc. The model MLS is an economical solution for emptying and filling control.



File No. 156365 (LR90200-27)

■ Specifications

Material

Float, Rod, Stop and Flange: 304SS

Protective Bellows: Neoprene (option for silicone)

Housing and Cover: Polycarbonate

Enclosure Protection: IP42/NEMA 1

Output Contact Rating: 1 SPDT miniature switch; 250 V 10 A AC; 250 V 0.4 A DC (resistive)

Minimum SG: 0.85

Operating Temperature: 32 to 176°F (0 to 80°C)

Maximum Humidity: 85% RH

Maximum Allowable Impact: 10 g

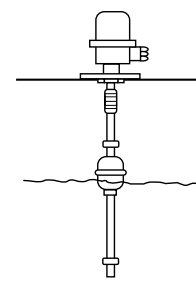
Float Dimensions: 3.3 in. dia. x 4.3 in. (84 mm x 110 mm)



liquid level sensing

■ Applications

The MLS switch can be used in any open tank or vessel with all liquids compatible with stainless steel.



In many cases one MLS switch can replace two inconvenient mechanical switches and the related latching relay components for improved reliability.



For the Latest Information

Try Our Fax Back System at **1/916/431-6544**

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liquid level sensing

Operational Description

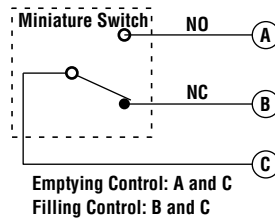
The model MLS consists of a miniature switch operated by a vertical rod and float mechanism. The float moves freely up and down the rod between two adjustable stops. As the liquid level rises, the float will rise until it reaches the upper stop. Increasing liquid level will then cause the float to apply upward pressure on the rod causing the miniature switch to activate. A spring mechanism attached to the rod is designed to provide mechanical hysteresis. Once the switch has activated, it requires a greater reduction in pressure before it returns to its original state. As a result of this design, when the liquid level falls and is no longer pressing on the upper stop, the miniature switch remains in the activated state. The miniature switch will not be deactivated until the liquid level falls below the lower stop. At that point the combined weight of the rod and float, acting against the spring, reduces the pressure on the miniature switch so that it deactivates.

The stops on the rod can be adjusted to obtain desired switching levels, and the 10A rated, single pole, double throw (SPDT) switch makes the model MLS suitable for either empty or fill operations.

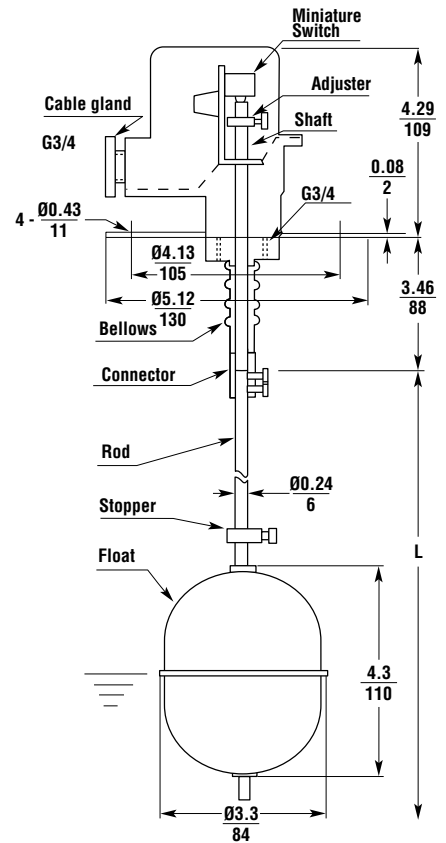
Intrinsic Safety

Any of the STI float switch level controls may be used with STI Intrinsic Safety Barriers (IS) to meet hazardous location requirements for level control device. For more information see www.automationsensors.com/7150. For hazardous location requirements see the website at www.stiapg.com/0825.

Wiring



Dimensions — in./mm



Ordering Information

MLS-2S -

Protective Bellows	(null) Neoprene	S Silicone
Rod Length	(null) 1000mm	250-1500 Specify rod length (in mm) from 9.8 in. to 59 in. (250 mm to 1500 mm)

Rod Length	Operating Differential	Mounting Attitude from Vertical
9.8 in. to 19.7 in. (250 mm to 500 mm)	2.4 in. to 13.8 in. (60 mm to 350 mm)	Up to 10°
19.7 in. to 39.4 in. (501 mm to 1000 mm)	2.4 in. to 33.5 in. (60 mm to 850 mm)	Up to 5°
39.4 in. to 59 in. (1001 mm to 1500 mm)	2.4 in. to 53.1 in. (60 mm to 1350 mm)	Up to 2°