

# MLS Series - Liquid Level Switches

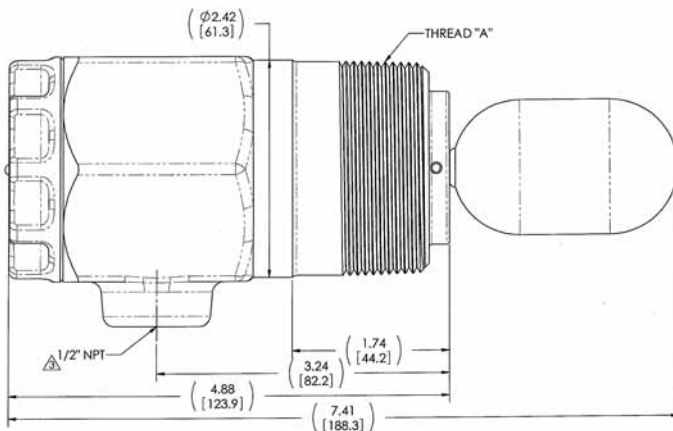


## Features

- **Clean Magnet Design** virtually eliminates iron filing accumulation onto the magnet
- **Seal-Free Construction**
- ANSI/ISA 12.27.01 compliant (Single Seal)
- 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 a Murphy external float chamber
- CSA C/US Class I, Div. 1, Grp. B, C & D locations
- NACE MR0175 compliant
- Canadian Registration Number 0F01476.2

MLS Series Liquid Level Switches are float activated to operate an electrical SPDT reed switch for annunciation/pilot signal for indication of high level to an annunciator, controller or PLC. The MLS connects directly into the gas scrubber wall and can be used with a Murphy weld collar or Murphy external float chamber. The MLS Series is available in both 2" NPT and 1-1/2" NPT models.

## Product Dimensions



## Specifications

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

**Fluid Density (Sg):** 0.50 MIN

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

### Materials:

Body: ASTM A351 CF8 (304 SS)

Cover: ASTM A351 CF8 (304 SS)

**Other Wetted Parts:** 304 or 316 SS

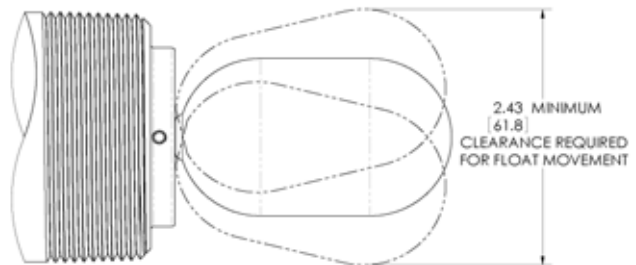
Meets NACE MR0175 for direct exposure to H<sub>2</sub>S

**Process Temperature:** -20 to 300°F (-24 to 149°C).

**Electrical:** 30VAC/VDC 75mA Form C SPDT

Conductor cross section AWG/kcmil min.: 26

Conductor cross section AWG/kcmil max.: 16



## Accessories

Refer to MLS Installation and Operations manual for additional information.

### External Float Chamber 15700799

**Operating Pressure:** 2000psi (13.8MPa)[138 bar]

**Operating Temperature:** 400°F (204°F)

**Shipping Weight:** 18lbs (8.2kg)

### Weld Collar 15050375

**Operating Pressure:** 2000psi (13.8MPa)[138 bar]

**Operating Temperature:** 400°F (204°F)

**Shipping Weight:** 6lbs (2.7kg)

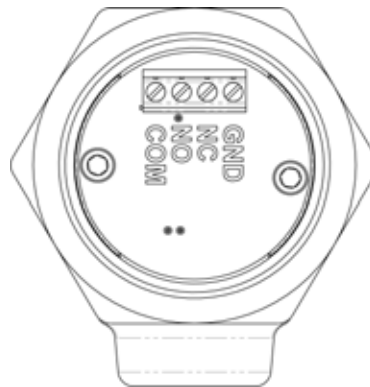
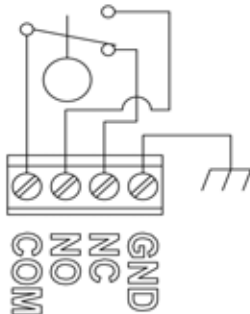
## Approximate Shipping Weights and Dimensions (all models)

**Weight:** 5.5 lbs (2.49kg)

**Dimensions:** 14 x 5 x 3.5 in (356 x 127 x 89 mm)

## Electrical Wiring Diagram

STD WIRING DIAGRAM



## How to Order

To order the MLS Series Level Switch please specify one of the products listed below:

MLS-020 (2" NPT)

MLS-015 (1-1/2" NPT)

### FW MURPHY

P.O. Box 470248  
Tulsa, Oklahoma 74147 USA  
Phone: +1 918 317 4100 Fax: +1 918 317 4266  
E-mail: sales@fwmurphy.com

### INDUSTRIAL PANEL DIVISION

Fax: +1 918 317 4124  
E-mail: ipdsales@fwmurphy.com

### MURPHY POWER IGNITION

Web site: www.murphy-pi.com

### CONTROL SYSTEMS & SERVICES DIVISION

P.O. Box 1819  
Rosenberg, Texas 77471 USA  
Phone: +1 281 633 4500 Fax: +1 281 633 4588  
E-mail: css-solutions@fwmurphy.com

### FRANK W. MURPHY LTD.

Church Road, Laverstock  
Salisbury, SP1 1QZ, UK  
Phone: +44 1722 410055 Fax: +44 1722 410068  
E-mail: sales@fwmurphy.co.uk  
Web site: www.fwmurphy.co.uk

### COMPUTRONIC CONTROLS

41 - 46 Railway Terrace  
Natchells, Birmingham, B7 5NG, UK  
E-mail: sales@computroniccontrols.com  
Web site: www.computroniccontrols.com

[www.fwmurphy.com](http://www.fwmurphy.com)

### FW MURPHY INSTRUMENTS (HANGZHOU) CO., LTD.

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E-mail: apsales@fwmurphy.com



USA-ISO 9001:2008 FM 20221  
UK-ISO 9001:2008 FM 29422  
CHINA-ISO 9001:2008 FM 20201

ISO 9001  
REGISTERED

Registered Facilities

Printed in U. S. A.

02/11/2011

**Warranty** - A limited warranty on materials and workmanship is given with this FW Murphy product.  
A copy of the warranty may be viewed or printed by going to <http://www.fwmurphy.com/warranty>