

# Scrubber Level Control System (SLS)

## Automatic Level Control for Gas Scrubber Applications

The FW Murphy Gas Compressor Scrubber Level System

The system provides for liquid control in gas scrubber applications by dumping liquids to drain and protect compressors with high liquid level switch. Wetted metal parts are made to survive constant use in corrosive environments.

### Filter Regulator and Gage

Instrument-quality  
Air/Gas supply

### Pneumatic Level Control

Float-actuated level snap-acting switch controls pneumatic pressure to open and close Dump Valve.  
LS200NDVOR: Dump Valve Operator, pressure regulator and pressure indicating gage.

### High Level Shutdown Switch

Float-actuated level switches to alarm and/or shutdown the equipment. LS200 and MLS-020 models available. Class 1, Division 1.

MLS / Electric models wired to control panel

### Pneumatic Dump Valves

Two piece union design with manual valve operator allows soft plug and hard seat to be replaced without disassembling outlet piping or scrubber pipe connection. Diaphragm-actuated valves operate on 30-70 psi (207-483 kPa: 2-5 bar).



You Save Money By Purchasing The SLS System Which Includes the Following:

- **LS200, MLS-020\*** High Level Shutdown Switch
  - **DVU\*\*** Pneumatic Dump Valve
  - **LS200NDVOR** Pneumatic Level Control with:
  - **Filter Regulator with Gage**
- For detailed information on Level Switches and Dump Valves visit [www.fwmurphy.com](http://www.fwmurphy.com).*

\* Choose model using the How To Order matrix.

\*\*Specify Dump Valve model when ordering.

### Service Tip

The Gage and Filter/Regulator on the LS200NDVOR help keep the control medium clean and dry. It also allows operator to adjust pressure to recommended level of 30-70 psig. The Gage and Filter/Regulator are recommended to help increase system life and trouble-free operation.

### Level Switches

- Designed for Harsh Gas Compressor Scrubber Applications.  
NOTE: Not recommended for hydrogen gas applications.
- Stainless Steel Float: Specific gravity varies by model and configuration, see Specific Gravity.
- For Separators/Scrubbers rated for up to 2000 psi (13.8 MPa) [138 bar] Working Pressure.
- Electric and Pneumatic Models Available.

### Dump Valve Operator/ Dump Valve

- Hex Union Allows Plug and Seat Replacement Without Piping Removal.
- Operates on 30-70 psi (207-483 kPa) [2.07-4.83 bar] Control Pressure.
- Manual Valve Operator.

## Specific Gravity

Minimum Allowable Specific Gravity			
Model	Float Extension Length (inch)	Pressure (psi)	Specific Gravity
LS200	0	2000	0.55
	1		0.7
LS200NDVO	0	2000	0.63
	1		0.73
MLS-020	0	2000	0.5
	1		0.65

**NOTE:** DO NOT OVERPRESSURE. The stainless-steel float may be deformed if exposed to pressure beyond rated (2000 psi). This can affect specific gravity and overall operation.

## How To Order

Approximate Shipping of SLS2120 Kit

Weight: 25 lb. 6 oz. (8.7 kg)

Dimensions: (w x h x d) 15 x 15 x 12 in. (381 x 381 x 305 mm)

## SLS

The SLS Kits Include LS200, LS200NDVO(R) and a DVU Valve.

<b>SLS150</b>		-	<b>LR</b>		
Options					
Blank = Include Filter/ Regulator					
LR = Less Regulator					
Model	Dump Valve	Inlet	Outlet	Trim Size	Maximum Working Pressure
SLS150	DVU150	1" NPT	1/2" NPT	0.359 IN. (9 MM)	1800 psi
SLS175*	DVU175	1" NPT	3/4" NPT	0.359 IN. (9 MM)	1800 psi
SLS2120	DVU2120	2" NPT	1" NPT	0.436 IN. (11 MM)	2000 psi

\*Filter/regulator option not available.

LR: Less regulator option is available with all models.

## MSLS

The MSLS Kits Include MLS-020, LS200NDVO(R) and a DVU Valve.

<b>MSLS150</b>		-	<b>LR</b>	<b>TF</b>	
Options					
Blank = Include Filter/ Regulator					
LR = Less Regulator					
Options					
Blank = Without Test Function					
TF = Test Function					
Model	Dump Valve	Inlet	Outlet	Trim Size	Maximum Working Pressure
MSLS150	DVU150	1" NPT	1/2" NPT	0.359 IN. (9 MM)	1800 psi
MSLS175*	DVU175	1" NPT	3/4" NPT	0.359 IN. (9 MM)	1800 psi
MSLS2115	DVU2115	2" NPT	1" NPT	0.571 IN. (14.5 MM)	1500 psi
MSLS2120	DVU2120	2" NPT	1" NPT	0.436 IN. (11 MM)	2000 psi

\*Filter/regulator option not available.

LR: Less regulator option is available with all models.

TF: Test function option available with less regulator (except MSLS2115).

**FW MURPHY PRODUCTION CONTROLS**  
SALES, SERVICES & ACCOUNTING  
4646 S. HARVARD AVE.  
TULSA, OK 74135

**MANUFACTURING**  
2151 RANDON DYER ROAD  
ROSENBERG, TX 77471  
5757 FARINON DRIVE  
SAN ANTONIO, TX 78249

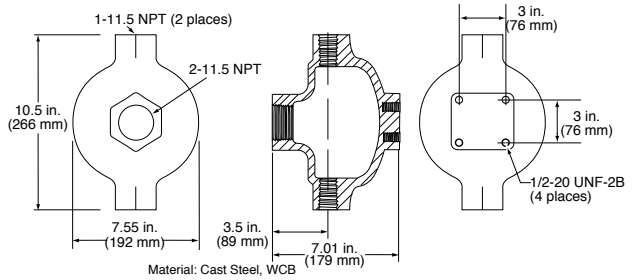
### DOMESTIC SALES & SUPPORT

**FW MURPHY PRODUCTS**  
PHONE: 918 957 1000  
EMAIL: INFO@FWMURPHY.COM  
WWW.FWMURPHY.COM

**FW MURPHY CONTROL SYSTEMS & SERVICES**  
PHONE: 281 633 4500  
EMAIL: CSS-SOLUTIONS@FWMURPHY.COM

## Accessories

### Float Chamber 15051098

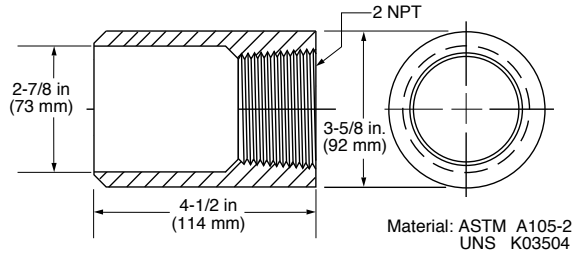


Operating Pressure: 2000 psi (13.8 MPa) [138 bar]

Operating Temperature: 400° F (204° C)

Shipping Weight: 32 lb. (14.5 kg)

### Weld Collar 15050375

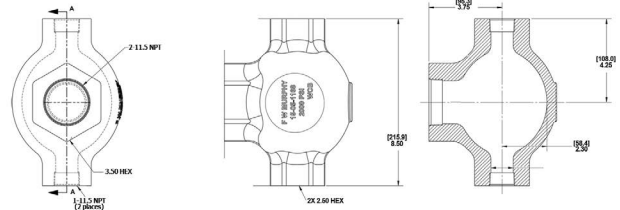


Operating Pressure: 2000 psi (13.8 MPa) [138 bar]

Operating Temperature: 400° F (204° C)

Shipping Weight: 6 lb. (2.7 kg)

### Series 100 Float Chamber 15700799

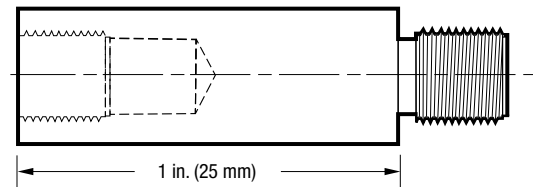


Operating Pressure: 2000 psi (13.8 MPa) [138 bar]

Operating Temperature: 400° F (204° C)

Shipping Weight: 18 lb. (8.16 kg)

### 1-Inch Float Shaft Extensions



Float Shaft Extension **15000478** (LS200) 12-24 UNC threads

Float Shaft Extension **15000892** (MLS) 10-32 UNF threads

### INTERNATIONAL SALES & SUPPORT

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