



**SOLBERG**  
Filtration & Separation

# Multistage Liquid/Particulate Separator

*SLS Series*



protecting your equipment • protecting your environment

Solberg's SLS series is a multistage liquid and particulate separator. It is an off the shelf solution for a majority of liquid removal applications.

### Benefits

- Maximum pump protection with multi-stage filtration & separation
- Reduce costs with a singular modular design
- Housings may be used in a variety of conditions with multiple media pack options available
- Minimize frequent and costly maintenance checks with large liquid/slurry holding chamber

**Solberg innovates solutions that meet the needs of our clients.**

- Protect pumps from harmful liquids that destroy lubricating/seal oil
- Ease of maintenance
- Prevents emulsification in oil lubricated systems
- Sustain vacuum levels

## Standard Features

### Filtration Process



### Ports

- 2 - 1" sight glass ports with sight glasses (low/high level)
- 1" upper chamber drain port
- ¼" plugged differential ports on inlet and outlet
- ½" plugged equalization port for use with pneumatic drain system

### Legs

- 6 position adjustable legs
- Pre drilled to accept pneumatic drain system option
- Predrilled floor anchor holes
- Legs ship in lowest position

### Other

- Nameplate
- 2" drain with brass ball valve included
- Lifting lugs on the tank body



# Selection Guide

The SLS series is designed to cover most liquid removal applications found in the marketplace. Use self selection guidelines and the chart below to find preferred SLS models based on your target flow rate. Please contact factory to discuss the proper product selection when there are large volumes of liquid, harsh process chemicals or extreme operating conditions.

## Operating Guidelines for Self Selection

<b>Vacuum Level (Absolute)</b>	100 mbar	200 mbar	300 mbar	400-1000 mbar
<b>High Temp Level</b>	40°C (86°F)	50°C (104°F)	60°C (113°F)	65°C (150°F)

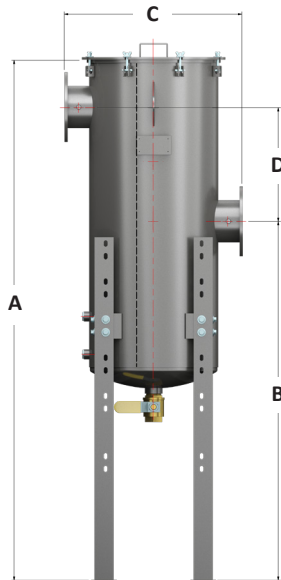
- Service range: Up to 1000 mbar absolute
- Fluids: water and non-corrosive oils
- No foaming substances

**Note:** Vacuum, temperature, and materials being separated can significantly affect performance. For any conditions outside of those listed, please contact factory to discuss your application specifics.

		Assembly Part Number		Pump Max Flow Rating (m <sup>3</sup> /h)									
		5 micron 99+% particulate protection	1 micron 99+% particulate protection	300	510	670	885	1170	1870	3060	4930		
DN80	Demister	SLS-M300D5-DN80	SLS-M300D1-DN80	■	■	■	■	■	■	■	■	■	■
	Wire mesh	SLS-M510W5-DN80	SLS-M510W1-DN80	■	■	■	■	■	■	■	■	■	■
DN100	Demister	SLS-M670D5-DN100	SLS-M670D1-DN100	■	■	■	■	■	■	■	■	■	■
	Wire mesh	SLS-M885W5-DN100	SLS-M885W1-DN100	■	■	■	■	■	■	■	■	■	■
DN150	Demister	SLS-M1175D5-DN150	SLS-M1175D1-DN150	■	■	■	■	■	■	■	■	■	■
	Wire mesh	SLS-M1870W5-DN150	SLS-M1870W1-DN150	■	■	■	■	■	■	■	■	■	■
DN200	Demister	SLS-M1835D5-DN200	SLS-M1835D1-DN200	■	■	■	■	■	■	■	■	■	■
	Wire mesh	SLS-M3060W5-DN200	SLS-M3060W1-DN200	■	■	■	■	■	■	■	■	■	■
DN250	Demister	SLS-M3085D5-DN250	SLS-M3085D1-DN250	■	■	■	■	■	■	■	■	■	■
	Wire mesh	SLS-M4930W5-DN250	SLS-M4930W1-DN250	■	■	■	■	■	■	■	■	■	■

- Suitable for use in this flow range
- Contact Solberg for review of application
- Not recommended for use at listed flowrate

## Dimensions (listed for reference only)

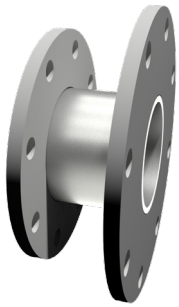


	SLSDN80	SLSDN100	SLSDN150	SLSDN200	SLSDN250
A*	1995 mm	1995 mm	2095 mm	2095 mm	2375 mm
B*	1340 mm	1340 mm	1441 mm	1441 mm	1619 mm
C	508 mm	597 mm	737 mm	879 mm	1016 mm
D	457 mm	457 mm	419 mm	419 mm	432 mm
PN10 FLANGE CONNECTION	DN80	DN100	DN150	DN200	DN250
LIQUID CAPACITY	19 Liters	34 Liters	57 Liters	91 Liters	151 Liters
UPPER ELEMENT SERVICE HEIGHT	250 mm	250 mm	375 mm	375 mm	375 mm
LOWER ELEMENT SERVICE HEIGHT	660 mm	711 mm	838 mm	838 mm	1016 mm
UPPER ELEMENT	235 / 235Z	245 / 245Z	375 / 375Z	377 / 377Z	385 / 385Z
LOWER ELEMENT	230S / DM8	234S / DM12	274S / DM16	276S / DM20	384S / DM26

\*Height can be adjusted up or down in 152 mm increments to a maximum of 304 mm in either direction.

# Optional Equipment

## Flange Adapters



FLANGE TO FLANGE	ADAPTER PART NUMBER	FACE TO FACE DIMENSION
DN80 to DN100	AD-DN100/DN80	90 mm
DN100 to DN150	AD-DN150/DN100	115 mm
DN150 to DN200	AD-DN200/DN150	140 mm
DN200 to DN250	AD-DN250/DN200	165 mm

## STS Series

### Benefits

- Prohibit liquid and debris from damaging vacuum valves & pumps
- Easy visual inspection with see-through housing
- Minimize piping costs with “T” style configuration
- Compact design for space restricted work areas
- Shuts off flow to prevent liquid bypass

### Filtration Process (standard)



Integrated  
Baffle



Emergency  
Shut Off



## Pneumatic Drain System



The Pneumatic Drain System allows Solberg Liquid Separator units to be drained without stopping the process and breaking the vacuum. The liquid removed by the liquid separator flows under gravity into the drain pot. When the high level sensor detects the liquid, the drain pot is isolated from the liquid separator by the upper pneumatic ball valve. The bleed in valve then opens along with the bottom drain valve allowing the liquid to drain to atmosphere either by gravity (DSG) or forced by compressed air (DSP). When the lower level sensor triggers, the bleed in valve closes along with the bottom drain valve and the upper pneumatic ball valve opens to allow the process to repeat.



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