

VLS Series

INTEGRATED LIQUID SEPARATOR/INLET FILTER

The VLS Integrated liquid separator packs a lot in a little space. It is primarily used in air process systems where liquids such as water or solvents need to be removed before the air reaches the vacuum pump. Pump contamination can lead to corrosion, oil degradation, premature pump failures, and environmental problems.

The high efficiency of the separator is accomplished by a baffle along with directional air flow changes. The final stage has a cleanable or replaceable 5 micron polyester filter element to remove any solids that enter the separator. As a final safety for the pump, an integrated ball float shut-off is included. Should any liquid fill the separator housing, the ball floats to the top of the discharge port, isolating the pump from the process and preventing pump damage. An additional safety screen is located in the discharge line.

Features include: ΔP ports to enable monitoring of the filter element; a sight glass port for monitoring of the contents; ports for liquid level switches to facilitate automated draining; a drain port, and split housing for easy cleaning. The standard material is painted carbon steel; epoxy coated carbon steel, or 304 stainless steel is available as an option. Special PVC versions, and reverse flow, coalescing inlet separators are also available (contact the factory).



Stainless steel VLS separator installed in a prison facility on a vacuum toilet system.

FEATURES

- Liquid and solid separation
- 99% liquid removal efficiency
- Ample capacity
- Low pressure differential
- ΔP ports*
- Liquid drain port
- Ball float valve shut-off
- Cleanable and replaceable element
- Liquid level switch ports*
- Liquid coalescing version available
- Rated for operation to 1×10^{-3} torr

* (N/A Mini-VLS)



10 Models
28 to 830 CFM



Mini-VLS, with standard and optional (inset) KF/NF fittings

TECHNICAL DATA

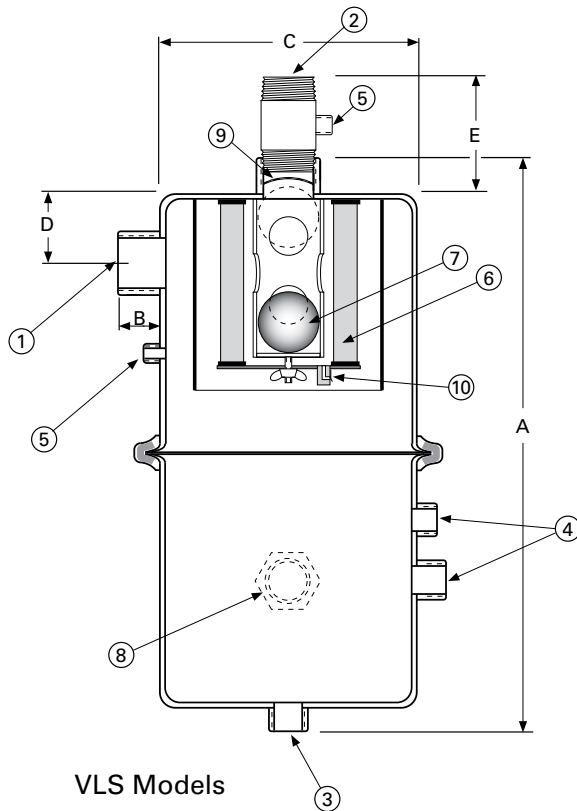
	Mini-VLS	VLS-60-075	VLS-85-100	VLS-85-125	VLS-100-150	VLS-135-200	VLS-195-250	VLS-300-300	VLS-520-4F	VLS-830-6F
Nominal SCFM Rating	28	60	85	85	100	135	195	300	520	830
Inlet/Outlet Size (NPT)	3/4"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4" flg.	6" flg.
Holding Capacity (gal's.)	0.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5	4.5	4.5
Dimensional Data	(Inches)									
A	13.27	17.74	17.92	17.92	17.96	22.19	22.72	24.32	23.38	30.56
B	---	0.56	0.75	0.75	0.78	0.75	1.28	2.88	3.48	4.0
C Dia.	5.03	7.68	7.68	7.68	7.68	12.0	12.0	12.0	16.0	16.0
D	2.42	3.0	3.0	3.0	3.0	6.22	6.22	6.22	5.0	5.0
E	---	3.0	3.0	3.0	3.0	2.9	4.2	2.53	3.5	4.0

Manufacturer reserves right to alter data without notice.

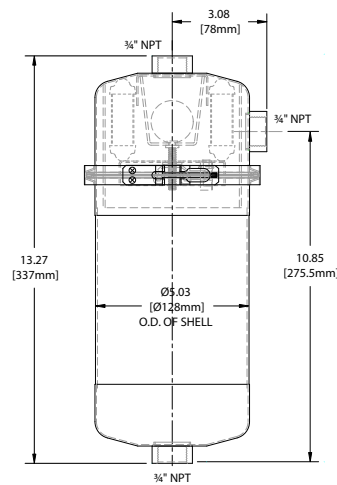
Recommended filter element change-out: 15-17" WC. Element may be washed in warm soapy water and gently but thoroughly blown dry.

Note: Accessories or fittings NOT included with separator. Separator is shipped with thread protectors installed in ports.

Suggested accessories (by others): Sight glass, level switches; differential pressure gauges or switches, drain valves.

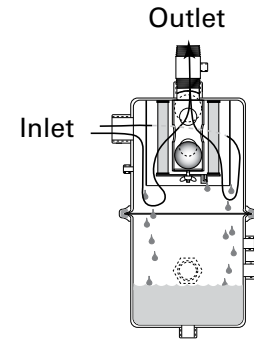


VLS Models



Mini-VLS

- 1 - Inlet (process) port
- 2 - Outlet (pump) port
- 3 - Drain port - 1/2" NPT
- 4 - Liquid level switch ports
- 5 - DP gauge ports
- 6 - Inlet filter, 5 micron, polyester
- 7 - Stainless steel ball float
- 8 - Sight glass port
- 9 - Safety screen
- 10 - Liquid drain-back valve



VLS FLOW Diagram