

# VV Two Stage Vertical Liquid Filter Separator

The 3L Filters™ VV Series liquid filter separators provide water coalescing and filtration of hydrocarbon fuels. The VV's vertical two stage design combines coalescer and separator cartridges based on flow and product.

## Applications

Water coalescing and filtration of hydrocarbon fuels, such as jet fuel, kerosene, diesel, gasoline and similar liquids.

## Standard Features

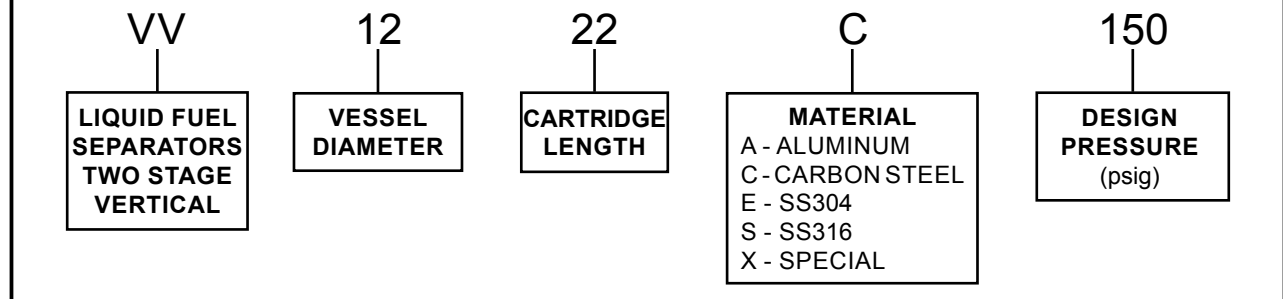
- designed to ASME Section VIII Div.1 & 2 and API Bulletin 1581
- 150 psig standard design pressure
- -340°F to 150°F (-129°C to 66°C) standard design temperature
- 150 lb ANSI RF flanged inlet/outlet
- 3000 lb NPT couplings for vent, drain and pressure gauge connections
- carbon steel housing material
- housing dimensions up to 8" to 18" (203 mm to 457 mm) utilize 3L Pogo (spring-assisted) headlift; hydraulic Jack headlift on housing dimensions larger than 18" (457 mm)
- quick access for replacement of cartridges
- standard Swing Bolt closure with O-ring seal
- external primer finish for carbon steel housing
- internal epoxy coating
- angle legs

## Options & Accessories

- custom design pressures to 3000 psig
- custom flange rating
- custom housing materials
- optional closure: Thru-Bolt
- O-ring closure seal in Buna or Viton®
- electropolishing of stainless steel housings
- passivation of stainless steel housings
- paint or coating to customer specification
- sump heater
- additional nozzles as needed
- air eliminators
- valves
- safety relief valves
- automatic water dump valve
- water slug shut-off device
- pressure gauges
- liquid level gauges
- working platform



## Model Coding



VV

## Liquid Filter Separators (Two Stage Vertical)

Fig.	Model No.	Coalescer Elements		Separator Elements		A Vessel OD in (mm)	B Inlet/ Outlet in (mm)	C in (mm)	D in (mm)	E in (mm)	G in (mm)	H in (mm)	L in (mm)	Inlet/ Outlet (RF)	Vent Safety Drains (NPT)	Press. Gauge (NPT)	GPM (US) Kerosene API Group II	GPM (US) Gasoline	Weight lbs (kg)
		Qty	Lg in (mm)	Qty	Lg in (mm)														
1	V1222C150	1	22 (559)	1	18 (457)	12.75 (324)	6 (152)	35.25 (895)	39.25 (997)	57.25 (1454)	17.125 (435)	8.0 (203)	6.5 (165)	1 1/2"	3/4"	1/2"	50	70	360 (163)
1	V1622C150	2	22 (559)	1	23 (584)	16.00 (406)	6 (152)	42.00 (1067)	46.00 (1168)	65.00 (1651)	23.000 (584)	9.0 (229)	7.0 (178)	2 1/2"	3/4"	1/2"	100	140	500 (227)
1	V1633C150	2	33 (838)	1	29 (737)	16.00 (406)	6 (152)	52.50 (1334)	56.50 (1435)	85.50 (2172)	23.00 (584)	9.0 (229)	7.5 (191)	2 1/2"	3/4"	1/2"	155	215	600 (272)
1	VV1633C150	3	33 (838)	1	36 (914)	16.00 (406)	6 (152)	58.00 (1473)	62.00 (1575)	91.00 (2311)	28.250 (718)	9.0 (229)	7.5 (191)	4"	3/4"	1/2"	200	260	620 (281)
1	VV1833C150	3	33 (838)	1	33 (838)	18.00 (457)	6 (152)	59.50 (1511)	63.50 (1613)	92.50 (2350)	29.375 (746)	10.5 (267)	8.0 (203)	4"	3/4"	1/2"	220	305	700 (318)
1	VV1838C150	3	38 (965)	1	40 (1016)	18.00 (457)	6 (152)	64.50 (1638)	68.50 (1740)	102.50 (2604)	29.375 (746)	10.5 (267)	8.0 (203)	4"	3/4"	1/2"	270	380	950 (431)
1	VV2044C150	3	44 (1118)	1	44 (1118)	20.00 (508)	6 (152)	71.50 (1816)	75.50 (1918)	115.50 (2934)	29.625 (752)	13.0 (330)	8.0 (203)	4"	3/4"	1/2"	300	445	1075 (488)
1	VV2328C150	5	28 (711)	2	30 (762)	24.00 (610)	6 (152)	63.50 (1613)	67.50 (1715)	91.50 (2324)	31.250 (794)	15.5 (394)	8.0 (203)	4"	3/4"	1/2"	335	450	1175 (533)
1	VV2333C150	5	33 (838)	2	30 (762)	24.00 (610)	8 (203)	63.50 (1613)	67.50 (1715)	96.50 (2451)	35.813 (910)	15.5 (394)	11.0 (279)	6"	3/4"	1/2"	400	540	1175 (533)
1	VV2338C150	5	38 (965)	2	36 (914)	24.00 (610)	8 (203)	69.50 (1765)	73.50 (1867)	107.50 (2731)	35.813 (910)	15.5 (394)	11.0 (279)	6"	3/4"	1/2"	465	630	1200 (544)
1	VV2344C150	5	44 (1118)	2	40 (1016)	24.00 (610)	8 (203)	74.00 (1880)	78.00 (1981)	118.00 (2997)	35.813 (910)	15.5 (394)	11.0 (279)	6"	3/4"	1/2"	540	740	1225 (556)
2	VV2833C150	7	33 (838)	3	30 (762)	28.00 (711)	8 (203)	69.50 (1765)	81.50 (2070)	102.50 (2604)	37.125 (943)	18.0 (457)	11.0 (279)	6"	3/4"	1/2"	560	760	1600 (726)
2	VV2838C150	7	38 (965)	3	30 (762)	28.00 (711)	8 (203)	69.50 (1765)	81.50 (2070)	107.50 (2731)	37.125 (943)	18.0 (457)	11.0 (279)	6"	3/4"	1/2"	605	880	1600 (726)
2	VV2844C150	7	44 (1118)	3	40 (1016)	28.00 (711)	8 (203)	75.50 (1918)	87.50 (2223)	119.50 (3035)	37.125 (943)	18.0 (457)	11.0 (279)	6"	3/4"	1/2"	765	1035	1650 (748)
2	VV2856C150	7	56 (1422)	3	44 (1118)	28.00 (711)	8 (203)	88.00 (2235)	100.00 (2540)	144.00 (3658)	37.125 (943)	18.0 (457)	11.0 (279)	6"	3/4"	1/2"	900	1340	1750 (794)
2	VV3638C150	11	38 (838)	5	36 (914)	36.00 (914)	9 (229)	82.00 (2083)	96.00 (2438)	120.00 (3048)	53.000 (1346)	24.0 (610)	13.0 (330)	8"	3/4"	1/2"	1030	1390	2125 (964)
2	VV3644C150	11	44 (1118)	5	36 (914)	36.00 (914)	9 (229)	83.00 (2108)	97.00 (2464)	127.00 (3226)	53.000 (1346)	24.0 (610)	13.0 (330)	8"	3/4"	1/2"	1205	1630	2150 (975)
2	VV3656C150	12	56 (1422)	6	44 (1118)	36.00 (914)	9 (229)	95.00 (2413)	109.00 (2769)	151.00 (3835)	53.000 (1346)	24.0 (610)	13.0 (330)	8"	3/4"	1/2"	1800	2340	2300 (1043)
2	VV4856C150	20	56 (1422)	10	44 (1118)	48.00 (1219)	9 (229)	96.00 (2438)	113.00 (2870)	152.00 (3861)	56.500 (1435)	32.0 (813)	14.0 (356)	10"	3/4"	1/2"	3000	3900	3600 (1633)

**Note:**

Dimension 'E' is the minimum clearance required for cartridge removal.  
 Drawings for reference only. Certified drawings will be supplied after receipt of order.  
 Flow rates based on kerosene.

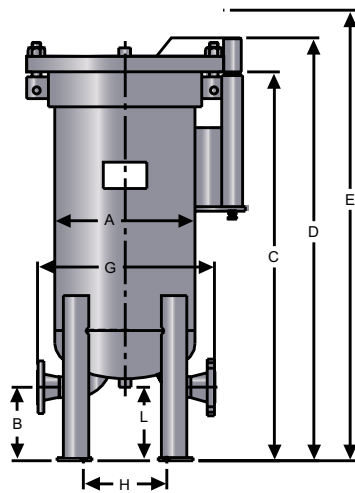


Figure 1

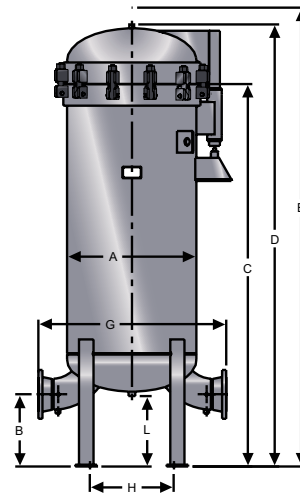


Figure 2