



VF-61

VF-62

VEL-MAX

DVF SERIES

DV SERIES

CLEAN Diesel™ Vessels & Housings

VF-61, VF-62, Vel-Max®, DV, DVF

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



ENGINEERING YOUR SUCCESS.

VF-61, VF-62

Small Housings for Diesel Fuel Filtration

Description

The VF-61, and VF-62 are versatile filter housings designed for use with several different high performance **Aquacon**® filter cartridges, as well as a variety of paper filters and coalescer/separator cartridges.

Use the VF-61E with band clamp closure for areas with limited space.

Over Pressure Protection

When exposed to a high concentration of water, the differential pressure across an absorbent cartridge (**Aquacon AD Series**) will immediately increase. Pressure bypasses or other means to limit the inlet pressure to 75 psi (5 bar) should be installed to prevent cartridge from collapsing.

Recommended Spares:

- 1 each G-0986 Buna-N O-Ring
- If Viton O-Rings are desired, 2 each G-0986A
- 6 each Cartridges

Ordering Information

- Unit is supplied with G-0986 Buna-N O-Ring and 1/8" valve and 1/2" drain plug installed. 1/2" petcock drain valve is shipped loose.
- Cartridges are not supplied and must be ordered separately.
- Viton O-Rings (P/N G-0986A) are available but must be ordered separately.



VF-61

VF-62

Caution

To protect the fuel system, including the filter housing & other components, be sure to install pressure relief valve(s).

Dimensions shown are for estimating purposes only. For exact dimensional detail, obtain certified copy of vessel drawing.

Product Specifications

- Max. Operating Pressure: 150 psi
- Inlet/Outlet connection: 1-1/2" NPT
- Closure Seal: Buna-N O-ring (P/N G-0986)
- 1/8" brass petcock vent valve and 1/2" drain valve
- Material: Die cast aluminum head and closure clamp assembly; carbon steel shell with epoxy coated exterior and interior
- Weight:
 - VF-61: 4.54 kg (10 lbs), Shipping weight: 5.44 kg (12 lbs)
 - VF-62: 7.26 kg (16 lbs), Shipping weight: 8.17 kg (18 lbs)

Optional Features

- Part Number 554Y020 is a Carbon Steel 1/2" NPT Ball Valve, with Mounting Nipple
- Part Number CK-1488 quick release hand bolts (set of 4) to replace closure bolts (as shown on page 2) VF-61 and VF-62 only.
- Part Number 10678 Differential Pressure Gauge Assembly (See Form #1959)



Color Indicates Pressure Drop

Green:
Clean
0 - 15 psi

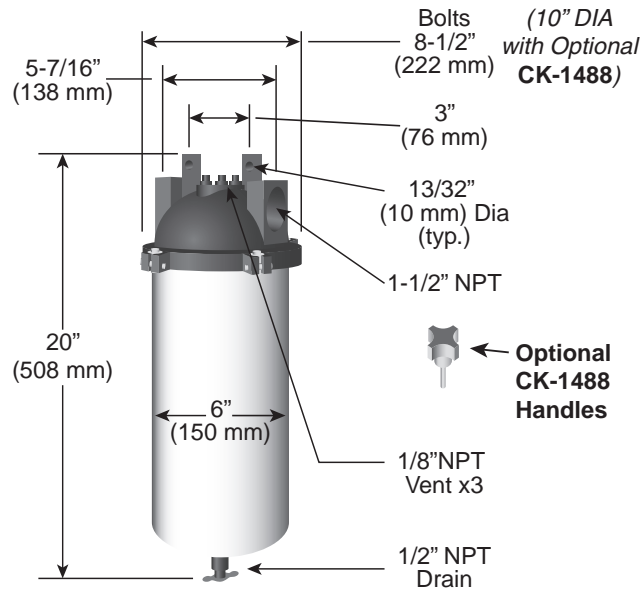
Red:
Change
16 - 25 psi

Dimensional Drawings

Drawings are not to scale. Dimensions are shown for estimating purposes only. Allow 6 inches (15.2 cm) below the vessel to safely remove the vessel to gain access to the cartridge.

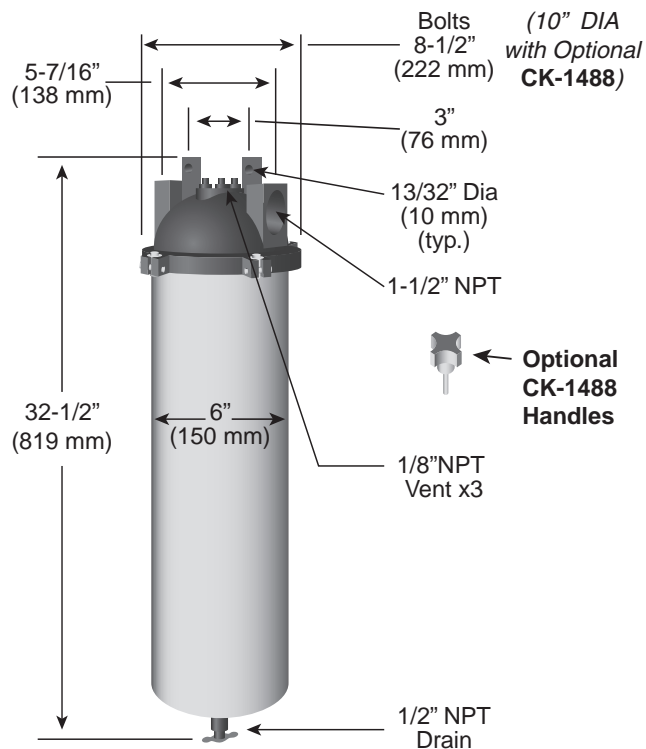
VF-61

(FOR USE WITH AD-5 AND DFO-5 CARTRIDGES)



VF-62

(FOR USE WITH AD-5 AND DFO-5 CARTRIDGES)



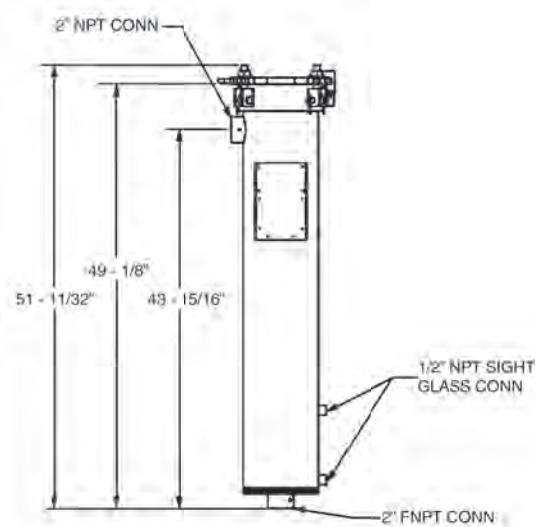
VF-62 has a longer body for areas and applications that require higher flow rate.

Vel-Max[®] Housings

Housings for Diesel Fuel Filtration
For use with AD-6 and DFO-6 Cartridges

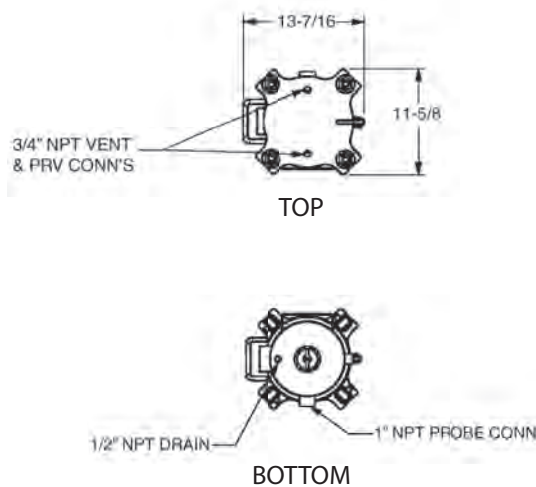
STANDARD FEATURES

- Carbon steel construction
- 250 psi design pressure
- Epoxy powder coated interior and exterior
- 2" NPT female inlet/outlet
- 1/2" NPT drain connection
- 3/4" NPT vent and relief connection
- 1/2" NPT sight glass connections
- 1" NPT water probe connection
- 1/8" NPT differential pressure gauge connections
- Lid gasket: G-2052 (Buna N)



OPTIONAL FEATURES

- Air eliminator
- Drain valve
- Pressure relief valve
- Water probe
- Sight gauge
- Leg assembly with adjustable height
- ASME Code Stamp
- CE Mark
- Differential pressure gauge assembly
- Lid Gasket: G-2052V (Viton[®])

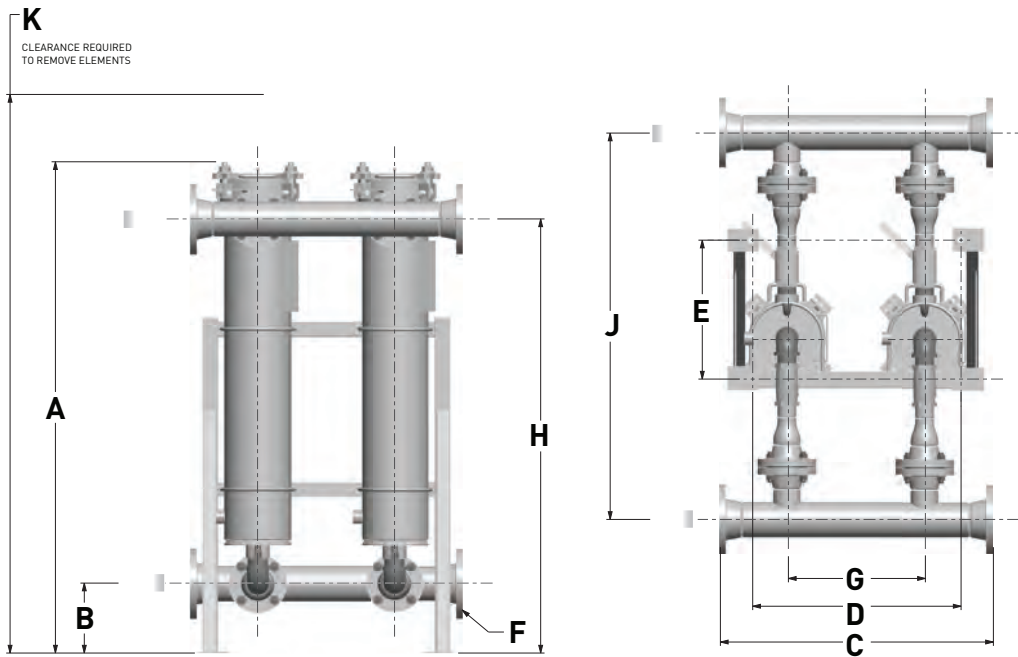
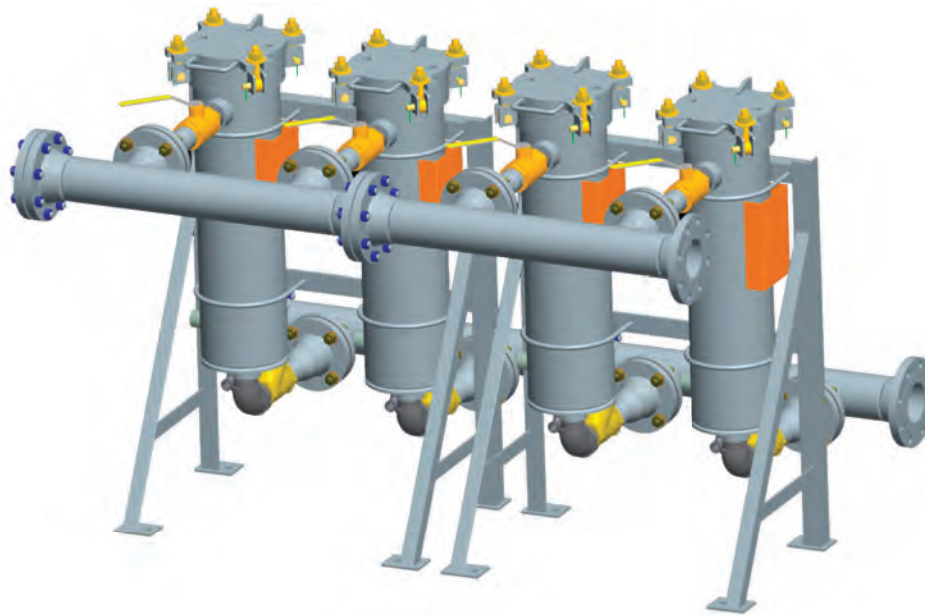


Vel-Max
(VX-2 shown with optional leg assembly)

| Model | Height | | Cover Width | | Cover Length | | Dry Weight | |
|-------|--------|------|-------------|-----|--------------|-----|------------|-----|
| | in. | mm | in. | mm | in. | mm | lbs. | kgs |
| VX-1 | 36 | 914 | 13 7/16 | 341 | 11 5/8 | 295 | 110 | 50 |
| VX-2 | 51 | 1295 | 13 7/16 | 341 | 11 5/8 | 295 | 125 | 57 |
| VX-3 | 66 | 1676 | 13 7/16 | 341 | 11 5/8 | 295 | 150 | 68 |

Dimensions shown are for estimating purposes only. For exact dimensional detail, obtain certified copy of vessel drawing.

Duplex Option



| Model | A | | B | | C | | D | | E | | F | | G | | H | | J | | K | |
|----------|----------|------|--------|-----|--------|-----|-----|-----|-----|-----|-----|-----|--------|-----|--------|------|---------|------|-----|------|
| | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
| VX-1 DPL | 45 5/8 | 1235 | 9 1/16 | 230 | 35 3/8 | 898 | 27 | 685 | 19 | 482 | 4 | 101 | 17 3/4 | 450 | 41 1/4 | 1047 | 50 1/16 | 1271 | 65 | 1651 |
| VX-2 DPL | 63 11/16 | 1617 | 9 1/16 | 230 | 11 5/8 | 295 | 125 | 57 | 18 | 457 | 4 | 101 | 17 3/4 | 450 | 56 1/4 | 1428 | 50 1/16 | 1271 | 93 | 2362 |
| VX-3 DPL | 78 11/16 | 1998 | 9 1/16 | 230 | 11 5/8 | 295 | 150 | 68 | 20 | 508 | 4 | 101 | 17 3/4 | 450 | 71 1/4 | 1809 | 50 1/16 | 1271 | 121 | 3073 |

Dimensions shown are for estimating purposes only. For exact dimensional detail, obtain certified copy of vessel drawing.

DVF Series

Vertical Filter Housings For Use with DFO-6 & AD-6 Cartridges

RECOMMENDED OPTIONAL ACCESSORIES

- Automatic Air Eliminator
- Pressure Relief Valve
- Differential Pressure Gauge
- Drain Valve(s)
- Sampling Probes
- ASME Code Stamp

DVF1644 and larger vessels, such as the DVF2044 shown on the right, are provided with swing bolt closure, RF flange connections and fittings for pressure gauge, air eliminator, pressure relief valve and drain valve.

Note: In applications where increased dirt contamination is present, it may be desirable to oversize filtration equipment. Contact Velcon for oversizing recommendations

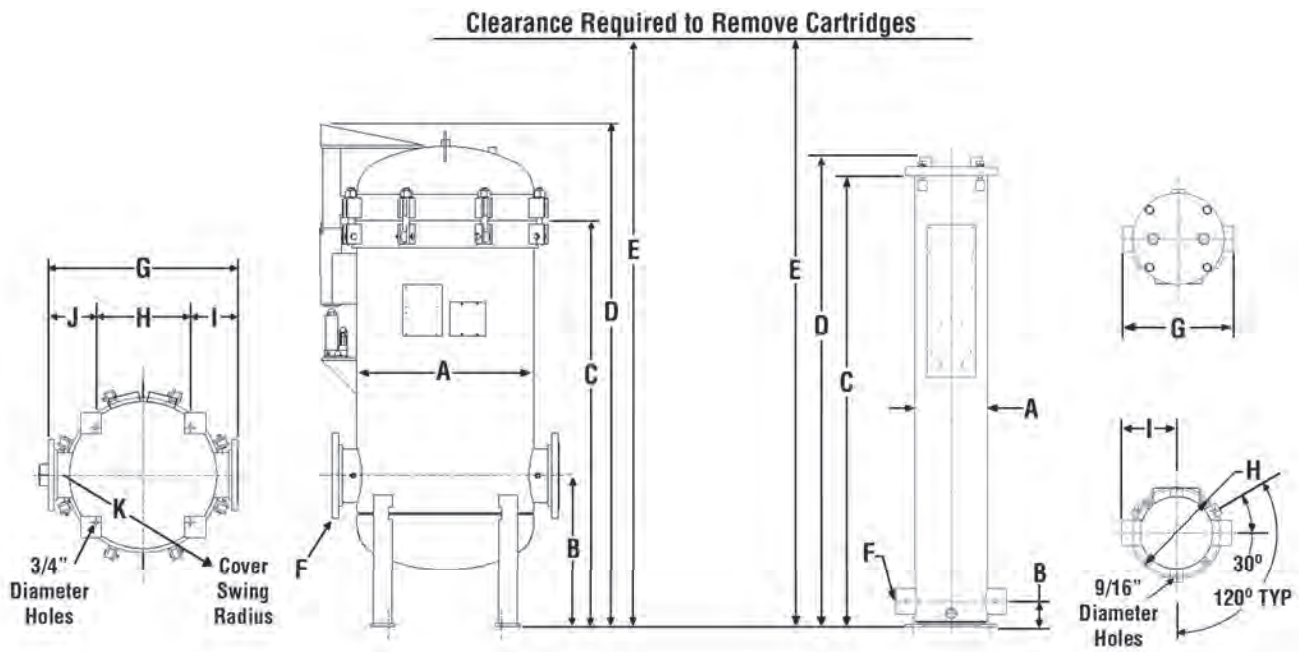


Figure 1

Figure 2

Vertical Filter Housings Selection Table

| Vessel Model | Flow Rate Range lpm (gpm) | | Length mm (in.) | Qty. | Fig. No. | Dimensions mm (in.) | | | | | | | | | | | Wt. w/Skid kgs(lbs) | Vol. Ltr. (U.S. gal) |
|--------------|------------------------------|------------------|--------------------|------|----------|---------------------|-----------------|--------------------|--------------------|----------------|-------------|------------------|------------------|-----------------|-----------------|------------------|---------------------------|-------------------------------|
| | Min | Max | | | | A | B | C | D | E | F | G | H | I | J | K | | |
| | DVF829 | 110 (29) | | | | 496 (131) | 737 (29) | 1 | 2 | 219 (8 5/8) | 76 (3) | 991 (57 1/16) | 1045 (41 1/8) | 1727 (68) | 51 (2) | 330 (13) | | |
| DVF844 | 167 (44) | 750 (198) | 1118 (44) | 1 | 2 | 219 (8 5/8) | 76 (3) | 1449 (57 1/16) | 1510 (59 7/16) | 2565 (101) | 51 (2) | 330 (13) | 264 (10 3/8) | 165 (6 1/2) | | | 138 (305) | 42 (11) |
| DVF1629 | 439 (116) | 1976 (522) | 737 (29) | 4 | 2 | 406 (16) | 381 (15) | 1341 (52 13/16) | 1418 (55 13/16) | 2083 (82) | 102 (4) | 616 (24 1/4) | 229 (9) | 194 (7 5/8) | 194 (7 5/8) | 468 (18 7/16) | 254 (560) | 132 (35) |
| DVF1644 | 666 (176) | 2998 (792) | 1118 (44) | 4 | 2 | 406 (16) | 381 (15) | 1695 (66 3/4) | 1772 (69 3/4) | 2794 (110) | 102 (4) | 616 (24 1/4) | 229 (9) | 194 (7 5/8) | 194 (7 5/8) | 468 (18 7/16) | 281 (620) | 189 (50) |
| DVF2044 | 999 (264) | 4497 (1188) | 1118 (44) | 6 | 2 | 508 (20) | 495 (19 1/2) | 1895 (74 5/8) | 2043 (80 7/16) | 2997 (118) | 152 (6) | 711 (28) | 330 (13) | 191 (7 1/2) | 191 (7 1/2) | 660 (26) | 499 (1100) | 341 (90) |
| DVF2444 | 1332 (352) | 5996 (1584) | 1118 (44) | 8 | 1 | 610 (24) | 533 (21) | 1651 (65) | 1829 (72) | 2845 (112) | 152 (6) | 813 (32) | 381 (15) | 203 (8) | 203 (8) | 813 (32) | 590 (1300) | 454 (120) |
| DVF2456 | 1696 (448) | 7631 (2016) | 1422 (56) | 8 | 1 | 610 (24) | 533 (21) | 1956 (77) | 2134 (84) | 3099 (122) | 152 (6) | 813 (32) | 381 (15) | 203 (8) | 203 (8) | 813 (32) | 612 (1350) | 568 (150) |
| DVF2844 | 1999 (528) | 9005 (2379) | 1118 (44) | 12 | 1 | 711 (28) | 610 (24) | 1635 (64 3/8) | 2026 (79 3/4) | 2743 (108) | 203 (8) | 914 (36) | 457 (18) | 229 (9) | 229 (9) | 889 (35) | 726 (1600) | 625 (165) |
| DVF2856 | 2544 (672) | 11447 (3024) | 1422 (56) | 12 | 1 | 711 (28) | 610 (24) | 1940 (76 3/8) | 2330 (91 3/4) | 3048 (120) | 203 (8) | 914 (36) | 457 (18) | 229 (9) | 229 (9) | 889 (35) | 794 (1750) | 757 (200) |
| DVF2644 | 2998 (792) | 13491 (3564) | 1118 (44) | 18 | 1 | 930 (36 5/8) | 660 (26) | 1635 (64 3/8) | 2134 (84) | 2769 (109) | 254 (10) | 1219 (48) | 584 (23) | 318 (12 1/2) | 318 (12 1/2) | 1118 (44) | 1021 (2250) | 1098 (290) |
| DVF3656 | 3816 (1008) | 17171 (4536) | 1422 (56) | 18 | 1 | 930 (36 5/8) | 660 (26) | 1940 (76 3/8) | 2438 (96) | 3073 (121) | 254 (10) | 1219 (48) | 584 (23) | 318 (12 1/2) | 318 (12 1/2) | 1118 (44) | 1089 (2400) | 1325 (350) |
| DVF4244 | 4497 (1188) | 20237 (5346) | 1118 (44) | 27 | 1 | 1086 (42 3/4) | 711 (28) | 1676 (66) | 2219 (87 3/8) | 2794 (110) | 305 (12) | 1372 (54) | 711 (28) | 330 (13) | 330 (13) | 1327 (52 1/4) | 1724 (3800) | 1514 (400) |
| DVF4256 | 5724 (1512) | 25756 (6804) | 1422 (56) | 27 | 1 | 1086 (42 3/4) | 711 (28) | 1981 (78) | 2499 (98 3/8) | 3099 (122) | 305 (12) | 1372 (54) | 711 (28) | 330 (13) | 330 (13) | 1327 (52 1/4) | 1814 (4000) | 1798 (475) |
| DVF4856 | 6995 (1848) | 31479 (8316) | 1422 (56) | 33 | 1 | 1219 (48) | 737 (29) | 2032 (80) | 2743 (108) | 4191 (165) | 356 (14) | 1676 (66) | 927 (36 1/2) | 375 (14 3/4) | 375 (14 3/4) | 1651 (65) | 1996 (4400) | 2385 (630) |
| DVF5456 | 8903 (2352) | 40065 (10584) | 1422 (56) | 42 | 1 | 1397 (55) | 787 (31) | 2083 (82) | 2870 (113) | 4216 (166) | 406 (16) | 1829 (72) | 1041 (41) | 394 (15 1/2) | 394 (15 1/2) | 1829 (72) | 2268 (5000) | 3975 (1050) |
| DVF6056 | 10599 (2800) | 47696 (12600) | 1422 (56) | 50 | 1 | 1549 (61) | 914 (36) | 2235 (88) | 3023 (119) | 4445 (175) | 457 (18) | 1981 (78) | 1156 (45 1/2) | 413 (16 1/4) | 413 (16 1/4) | 1905 (75) | 3084 (6800) | 4845 (1280) |

1. For higher viscosity fluids or operating in highly variable temperature conditions, consult your Velcon Representative.
2. VF Series are designed to accommodate our standard 6 in. O.D., 3 1/2 in. I.D. cartridges including Velcon's DFO, DI, DSO, and Aquacon AD.
3. Threaded base filter cartridges are available, which allow for easier cartridge change out and removal of particulate matter from the deckplates. The threaded base cartridges mount on the optional 6000T adapters.
4. VF16 and VF20 Series vessels have flat covers. VF16 Series vessels do not have hydraulic lift jacks.

DV Series

Vertical Filter-Coalescer/Separator For Use with DI/DSO Cartridges

STANDARD DESIGN FEATURES

- Pleated paper separator cartridges
- 150 psi ASME Code construction
- RF flanged connections
- Swing bolt closure with O-ring seal
- Epoxy-coated interior, primed exterior
- Threaded base coalescer
- Carbon Steel Construct

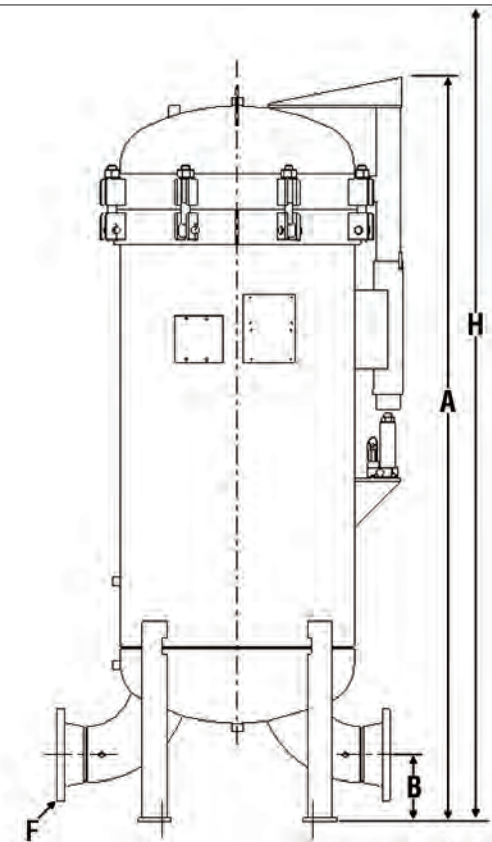
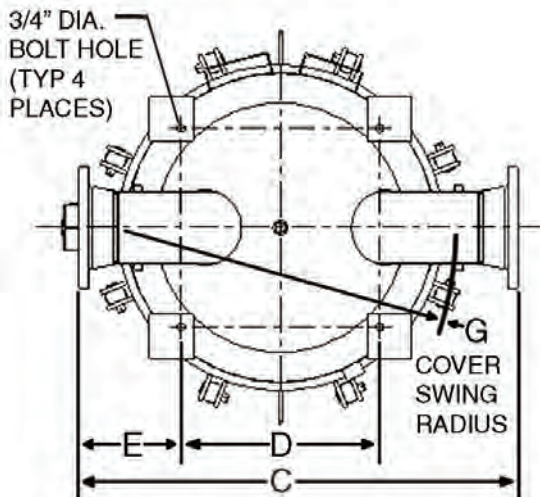
OPTIONAL ACCESSORIES

- Automatic air vent (R)
- Water slug valve (R)
- Sump heater
- Pressure relief valve (R)
- Water interface control (R)
- Sump sight glass
- Differential pressure gauge (R)
- Sampling probes (R)
- Manual drain valve (R)

The accessory items marked with an (R) are recommended for safe, effective operation of all installations.



Clearance Required to Remove Cartridges



| Vessel Model | Flow Rate Range lpm (gpm) | | DI/DSO | | Dimensions mm (in.) | | | | | | | | Wt. w/ Skid kgs (lbs) | Vol. Ltr. (U.S. gal) |
|--------------|------------------------------|----------------|--------------------|---------------|---------------------|------------|-------------------|-----------------|-----------------|------------|--------------|---------------|-----------------------------|----------------------------|
| | | | Length mm (in.) | Qty. (C/S) | A | B | C | D | E | F | G | H | | |
| | Min - Max | Target | | | | | | | | | | | | |
| DV2222 | 335 - 835 (90 - 220) | 500 (130) | 559 (22) | 4/3 | 1575 (62) | 203 (8) | 689 (27 1/8) | 394 (15 1/2) | 159 (6 1/4) | 102 (4) | 762 (30) | 2184 (86) | 503 (1110) | 242 (64) |
| DV2233 | 500 - 1250 (135 - 330) | 750 (200) | 838 (33) | 4/3 | 1753 (69) | 203 (8) | 689 (27 1/8) | 394 (15 1/2) | 159 (6 1/4) | 102 (4) | 762 (30) | 2591 (102) | 513 (1130) | 273 (72) |
| DV2833 | 750 - 1875 (200 - 495) | 1125 (300) | 838 (33) | 6/5 | 2108 (83) | 203 (8) | 1016 (40) | 457 (18) | 321 (12 5/8) | 152 (6) | 889 (35) | 2997 (118) | 748 (1650) | 644 (170) |
| DV2844 | 1000 - 2500 (265 - 660) | 1500 (400) | 1118 (44) | 6/5 | 2261 (89) | 203 (8) | 1016 (40) | 457 (18) | 321 (12 5/8) | 152 (6) | 889 (35) | 3378 (133) | 767 (1690) | 700 (185) |
| DV3638 | 1585 - 3955 (420 - 1045) | 2380 (630) | 965 (38) | 11/9 | 2326 (91 3/16) | 203 (8) | 1607 (63 1/4) | 584 (23) | 511 (20 1/8) | 152 (6) | 1118 (44) | 3277 (129) | 943 (2080) | 1060 (280) |
| DV3644 | 1835 - 4580 (485 - 1210) | 2750 (730) | 1118 (44) | 11/9 | 2448 (96 3/8) | 229 (9) | 1324 (52 1/8) | 584 (23) | 371 (14 5/8) | 203 (8) | 1118 (44) | 3556 (140) | 975 (2150) | 1155 (305) |
| DV3656 | 2335 - 5830 (620 - 1540) | 3500 (930) | 1422 (56) | 11/9 | 2786 (109 1/16) | 229 (9) | 1324 (52 1/8) | 584 (23) | 371 (14 5/8) | 203 (8) | 1118 (44) | 4064 (160) | 1043 (2300) | 1344 (355) |
| DV4244 | 2500 - 6245 (660 - 1650) | 3750 (995) | 1118 (44) | 15/12 | 2626 (103 3/8) | 229 (9) | 1405 (55 5/16) | 711 (28) | 381 (15) | 203 (8) | 1270 (50) | 3810 (150) | 1520 (3350) | 1703 (450) |
| DV4256 | 3180 - 7950 (840 - 2100) | 4770 (1260) | 1422 (56) | 15/12 | 2931 (115 3/8) | 229 (9) | 1405 (55 5/16) | 711 (28) | 381 (15) | 203 (8) | 1270 (50) | 4191 (165) | 1588 (3500) | 1968 (520) |

Dimensions shown are for estimating purposes only. For exact dimensional detail, obtain certified copy of vessel drawing.
 *Flow rates provided are for illustrative purposes. Actual flow rates may vary based on field conditions.

System Sizing



Velcon's extensive bulk fuel handling experience and our state-of-the-art fuel testing laboratory have quantitatively proven that increased system/housing will allow

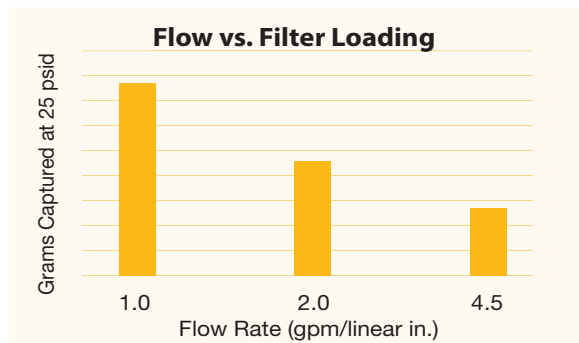
for lower flow rates per filter while dramatically extending the service life of the elements. Systems "sized for life" commonly see a full repayment of the additional system cost through operating savings. Using Velcon's proprietary calculator in **SizeRight**, for system sizing, we can help you select the right housing and elements for your application based on your ISO 4406 cleanliness requirements

and specified change-out interval. This invaluable tool can also help us in estimating your annual operating cost in maintaining your filtration system.

For additional information on this powerful tool, please contact Velcon or our local representative to have your filtration system **SizeRight** for your specific needs.

| ISO Code vs Mass | |
|------------------|----------------|
| ISO Code | lbs/yr (kg/yr) |
| 24/22/20 | 1609 (730) |
| 22/20/18 | 564 (256) |
| 17/15/13 | 20 (9.1) |
| 12/9/7 | 4 (1.8) |

Notes:
 Values are based on usage of +3.5M Liter of fuel per year. Field results may vary.



Worldwide Filtration Manufacturing Locations

North America

Compressed Air Treatment Filtration & Separation/Balston

Haverhill, MA
978 858 0505
www.parker.com/balston

Finite Airtex Filtration Airtex/domnick hunter/Zander

Lancaster, NY
716 686 6400
www.parker.com/faf

Finite Airtex Filtration/Finite

Oxford, MI
248 628 6400
www.parker.com/finitefilter

Engine Filtration & Water Purification Racor

Modesto, CA
209 521 7860
www.parker.com/racor

Holly Springs, MS
662 252 2656
www.parker.com/racor

Beaufort, SC
843 846 3200
www.parker.com/racor

Racor – Village Marine Tec.

Gardena, CA
310 516 9911
desalination.parker.com

Parker Sea Recovery

Carson, CA
310 637 3400
www.searecovery.com

Hydraulic Filtration Hydraulic Filter

Metamora, OH
419 644 4311
www.parker.com/hydraulicfilter

Laval, QC Canada
450 629 9594
www.parkerfarr.com

Process Filtration domnick hunter Process Filtration

Oxnard, CA
805 604 3400
www.parker.com/processfiltration

Madison, WI
608 824 0500
www.scilog.com

Phoenixville, PA
610 933 1600
www.parker.com/processfiltration

Aerospace Filtration

Velcon Filtration
Colorado Springs, CO
719 531 5855
www.velcon.com

Europe

Compressed Air Treatment domnick hunter Filtration & Separation

Gateshead, England
+44 (0) 191 402 9000
www.parker.com/dhfn

Parker Gas Separations

Etten-Leur, Netherlands
+31 76 508 5300
www.parker.com/dhfn

Hiross Zander

Padova Business Unit
Padova, Italy
+39 049 9712 111
www.parker.com/hzd

Hiross Zander

Essen Business Unit
Essen, Germany
+49 2054 9340
www.parker.com/hzd

Engine Filtration & Water Purification Racor

Dewsbury, England
+44 (0) 1924 487 000
www.parker.com/rfde

Racor Research & Development

Stuttgart, Germany
+49 (0)711 7071 290-10
www.parker.com/rfde

Hydraulic Filtration Hydraulic Filter

Arnhem, Holland
+31 26 3760376
www.parker.com/hfde

Ujala Operation

Ujala, Finland
+358 20 753 2500
www.parker.com/hfde

Condition Monitoring Centre

Norfolk, England
+44 (0) 1842 763 299
www.parker.com/hfde

Parker Kittiwake

West Sussex, England
+44 (0) 1903 731 470
www.kittiwake.com

Parker Procal

Peterborough, England
+44 (0) 1733 232 495
www.kittiwake.com

Process Filtration domnick hunter Process Filtration

Birtley, England
+44 (0) 191 410 5121
www.parker.com/processfiltration

Parker Twin Filter BV

Zaandam, Netherlands
+31(0)75 655 50 00
www.twinfilter.com

Asia Pacific

Australia

Castle Hill, Australia
+61 2 9634 7777
www.parker.com/australia

China

Shanghai, China
+86 21 5031 2525
www.parker.com/china

India

Navi Mumbai, India
+91 22 651 370 8185
www.parker.com/india

Parker Fowler

Bangalore, India
+91 80 2783 6794
www.johnfowlerindia.com

Japan

Tokyo, Japan
+81 45 870 1522
www.parker.com/japan

Parker Techno

Osaka, Japan
+81 66 340 1600
www.techno.taiyo-ltd.co.jp

Korea

Hwaseon-City
+82 31 359 0852
www.parker.com/korea

Singapore

Jurong Town, Singapore
+65 6887 6300
www.parker.com/singapore

Thailand

Bangkok, Thailand
+66 2186 7000
www.parker.com/thailand

Latin America

Parker Comercio Ltda. Filtration Division

Sao Paulo, Brazil
+55 12 4009 3500
www.parker.com/br

Pan American Division

Miami, FL
305 470 8800
www.parker.com/panam

Africa

Aeroporto Kempton Park, South Africa
+27 11 9610700
www.parker.com/africa

