



# Vertical Filter Vessels

## VF Series

### STANDARD DESIGN FEATURES

- 150 psi welded steel ASME Code construction.
- Choice of micron rating from 0.5 to 75 microns.
- Choice of pleated or depth type media.
- Epoxy coated interior, primed exterior.
- Buna-N O-ring cover seals.

### RECOMMENDED OPTIONAL ACCESSORIES

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

### TYPICAL APPLICATIONS

Jet Fuels   Diesel Fuels   Gasoline

Consult our cartridge data sheets to select the micron rating and type of cartridge that is right for your application – PLF Series (pleated surface type filtration), FG Series (fiberglass depth type filtration), or **Aquacon**® Series (dehydration and filtration).

Filter vessels VF814 through VF844, such as the VF814150 shown at right, have through-bolt covers, NPT connections, and include fittings for drain, pressure gauge and air vent.

VF1614 and larger vessels, such as the VF2044150 shown at top 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. For API/EI applications, please consult Velcon



VF2044150



VF814150

## Clearance Required to Remove Cartridges

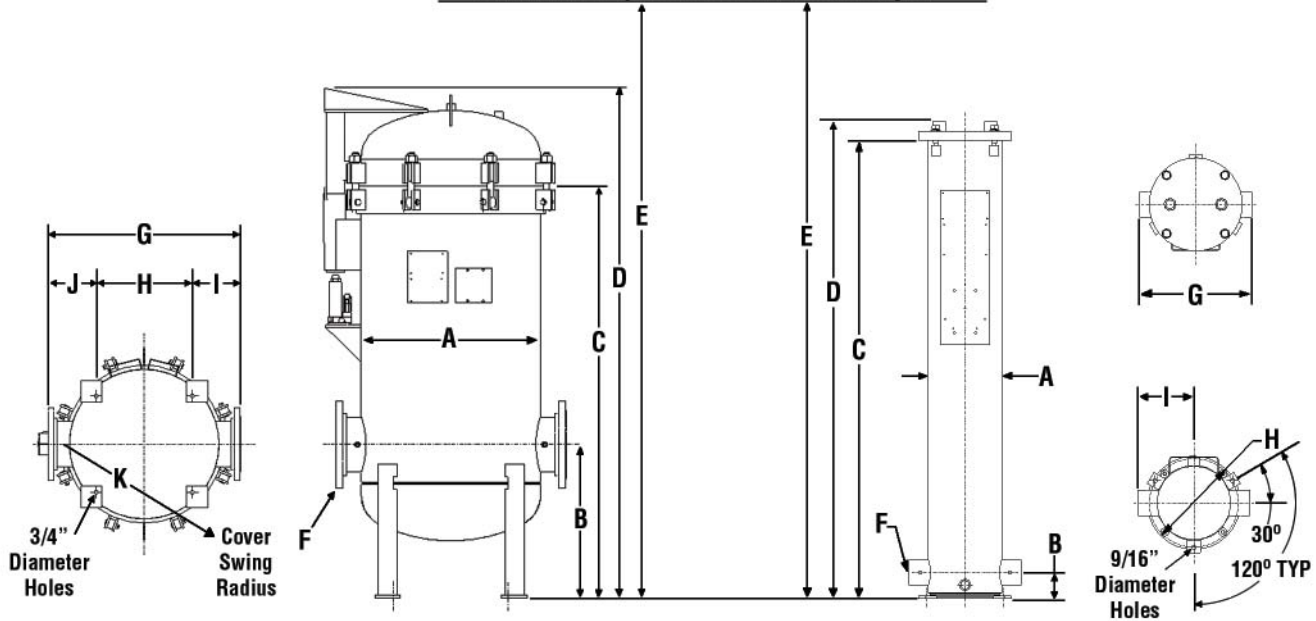


Figure 1

Figure 2

Vessel Model Number	Maximum Flow USGPM			FO Series Cartridges		Fig. No.	Dimensions in Inches											Weight with Skid, lbs.	Volume U.S. Gallons
	Jet Fuel	Gasoline	Diesel	Length	Qty.		A	B	C	D	E	F	G	H	I	J	K		
VF814	67	68	65	14	1	2	8 <sup>5</sup> / <sub>8</sub>	3	24 <sup>3</sup> / <sub>4</sub>	26 <sup>3</sup> / <sub>4</sub>	39	2	13	10 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	-	-	225	5
VF829	133	136	130	29	1	2	8 <sup>5</sup> / <sub>8</sub>	3	39	41 <sup>1</sup> / <sub>8</sub>	68	2	13	10 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	-	-	265	8
VF844	200	204	195	44	1	2	8 <sup>5</sup> / <sub>8</sub>	3	57 <sup>1</sup> / <sub>16</sub>	59 <sup>7</sup> / <sub>16</sub>	101	2	13	10 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	-	-	305	11
VF1614	267	272	260	14	4	1	16	15	37 <sup>13</sup> / <sub>16</sub>	40 <sup>13</sup> / <sub>16</sub>	52	4	24 <sup>1</sup> / <sub>4</sub>	9	7 <sup>5</sup> / <sub>8</sub>	7 <sup>5</sup> / <sub>8</sub>	18 <sup>7</sup> / <sub>16</sub>	500	22
VF1629	533	544	520	29	4	1	16	15	52 <sup>13</sup> / <sub>16</sub>	55 <sup>13</sup> / <sub>16</sub>	82	4	24 <sup>1</sup> / <sub>4</sub>	9	7 <sup>5</sup> / <sub>8</sub>	7 <sup>5</sup> / <sub>8</sub>	18 <sup>7</sup> / <sub>16</sub>	560	35
VF1644	800	816	780	44	4	1	16	15	66 <sup>3</sup> / <sub>4</sub>	69 <sup>3</sup> / <sub>4</sub>	110	4	24 <sup>1</sup> / <sub>4</sub>	9	7 <sup>5</sup> / <sub>8</sub>	7 <sup>5</sup> / <sub>8</sub>	18 <sup>7</sup> / <sub>16</sub>	620	48
VF2029	800	816	780	29	6	1	20	19 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>8</sub>	65 <sup>5</sup> / <sub>8</sub>	89	6	28	13	7 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	26	1000	67
VF2044	1200	1224	1170	44	6	1	20	19 <sup>1</sup> / <sub>2</sub>	74 <sup>5</sup> / <sub>8</sub>	80 <sup>7</sup> / <sub>16</sub>	118	6	28	13	7 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	26	1100	88
VF2829	1600	1632	1560	29	12	1	28	24	48 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>4</sub>	77	8	36	18	9	9	35	1500	125
VF2844	2400	2448	2340	44	12	1	28	24	64 <sup>3</sup> / <sub>8</sub>	79 <sup>3</sup> / <sub>4</sub>	108	8	36	18	9	9	35	1600	165
VF3644	3600	3672	3510	44	18	1	36 <sup>5</sup> / <sub>8</sub>	26	63 <sup>3</sup> / <sub>8</sub>	84	109	10	48	23	12 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	44	2250	288
VF4244	5400	5508	5265	44	27	1	42 <sup>3</sup> / <sub>4</sub>	28	66	87 <sup>3</sup> / <sub>8</sub>	110	12	54	28	13	13	52 <sup>1</sup> / <sub>4</sub>	3800	400

- Flow rates are for FO-614PLF series pleated paper cartridges. For higher viscosity fluids, consult your Velcon Representative.
- VF Series Filters are designed to accommodate our standard 6 in. O.D., 3<sup>1</sup>/<sub>2</sub> in. I.D., 14<sup>1</sup>/<sub>2</sub> in. long cartridges that are stacked one, two, or three high. Many cartridges are available in longer lengths that eliminate stacking. For example, a 44 inch long FO-644PLF1M could be used in place of three 14<sup>1</sup>/<sub>2</sub> inch long cartridges. This makes for easier and less expensive changeouts.
- A number of threaded base filter cartridges (e.g. FO-644PLF5TB) are available, which allow for easier cartridge changeout and removal of particulate matter from the deckplates. See data sheet #1549. The threaded base cartridges mount on the 6000T Adapters.
- Dimensions shown are for estimating purposes only. For exact dimensions, obtain certified drawing.
- VF16 and VF20 Series vessels have flat covers. VF16 Series vessels do not have hydraulic lift jacks.
- Available **Aquacon**® Cartridges are AC-6xx05 and AD-6xx25 where xx represents cartridge lengths of 14, 29, and 44 inches.

Velcon products are sold and serviced by a world-wide representative network. To order, contact Headquarters or your LOCAL REPRESENTATIVE:

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