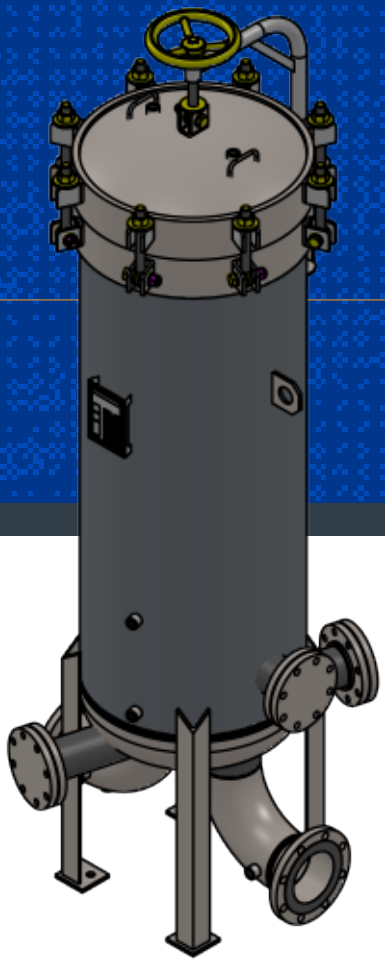
FIL-TREK CORPORATION
55 Stafford Court
Cambridge, ON N1T 1B3
P (519) 623-7448
F (519) 623-8807

VV SERIES

Liquid Filter Separator

- Two Stage Liquid Filter Separator
- Vertical Orientation
- ASME Design ("U")

Combines water coalescing and separator cartridges to filter hydrocarbon fuels based on flow and product.



SUITABLE USES

Air & Gas

Oil & Gas

MEDIA	Accepts single or multiple 336 elements. **Other size elements available*
COMPATIBLE FILTERS	DynaDep Series, DynaPleat Series, FiberLoc Series, FiberLoc P Series and FiberLoc HT Series
DESIGN PRESSURE	150 PSIG
STD DESIGN TEMP	-340°F to 150°F (-129°C to 66°C)
AVAILABLE FINISHES	Carbon or Stainless Steel 304 or 316. Also available in C276, AL6XN, 2205, 2507 & Monel 400
TYPICAL APPLICATIONS	Water coalescent filtration removes water contaminants from hydrocarbon fuels like jet fuel, kerosene, diesel, and gasoline by combining small water droplets into larger ones that can be filtered out.

Custom sizes, configurations, materials of construction and other options may be available. Please contact Fil-Trek

For more information, e-mail: info@fil-trek.com or visit Fil-Trek.com

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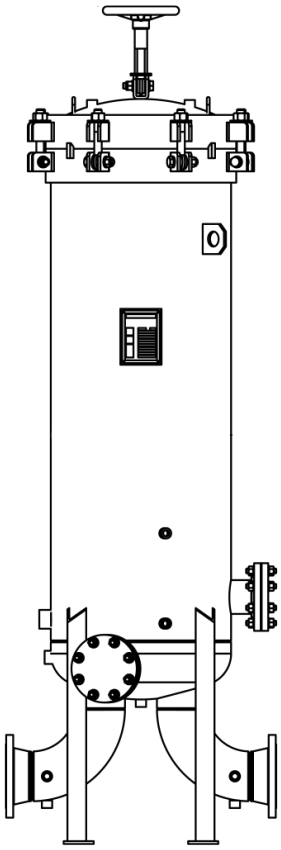
HOUSING SPECIFICATIONS

Inlet/Outlet	Flange
Dirty Drain	6" - 9" 3000lb NPT
Clean Drain	1" - 2" 3,000 lb NPT
Vent	¾" 3,000 lb NPT
Gauges	½" 3,000 lb NPT
Closure	Swing bolt closure, **Limited to pressure class*
Headlift	Mechanical Davit
Legs	Angle Iron Legs
Standard Pressure	150 PSIG **Other pressures available, see table*
Standard Temperature	150°F (66°C) **Other temperatures available, see table*
Certifications	ASME Section VIII, Div. I & II "U"

Bottom In/Bottom Out



MATERIAL OF CONSTRUCTION

MATERIAL OF CONSTRUCTION	MAX. OPERATING PRESSURE	MAX. DESIGN TEMP
Carbon Steel	150 psi (10.3bar)	400°F (204°C)
304 Stainless Steel	150 psi (10.3bar)	400°F (204°C)
316 Stainless Steel	150 psi (10.3bar)	400°F (204°C)

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HOUSING OPTIONS

*Indicates standard configuration

Configuration Options *(at right)*	**(-) Bottom in/Bottom Out***
Finish Options	**(-) External paint "National Blue" (CS)*** **(-) Bead Blast (SS304 and SS316)*** Internal epoxy coating
O-Ring/ Gasket Options	**(-) Buna-N*** Viton
Filter Support Options	**(-) SS304 support post (Std)*** SS316 support post
Filter Configuration	**Double Open End (std)***
Leg Options	**(-) Angle Iron Legs***
Accessories	Air Eliminators Direct Reading Gauge DP Gauge Safety Relief Valves Vent Valves Drain Valves

COMPATIBLE FILTERS

DYNADEP SERIES FILTERS

99.98% absolute, 0.3 micron depth gas filter, available in polyester or polypropylene.

Click to view DynaDep Series

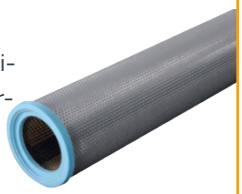
DYNAPLEAT SERIES FILTERS

99.98% absolute, 0.3 micron pleated gas filter, available in microglass or polyester media

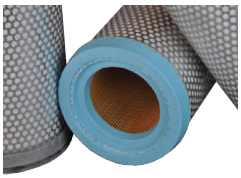
Click to view DynaPleat Series

FIBERLOC/FIBERLOC HT SERIES FILTERS

98.5% absolute, 0.3 micron depth gas filter, microglass media. Also available for high temperature applications.



Click to view FiberLoc Series



FIBERLOC P SERIES FILTERS

98.5% absolute, 0.3 micron depth gas filter. Microglass media with internal cellulose pleated pre-filter.

Click to view FiberLoc P Series

PRODUCT NOMENCLATURE

S6	VV	20	6F	150	-
MOC	**MODEL**	**HOUSING DIAMETER**	**CONNECTION TYPE**	**DESIGN PRESSURE**	**OPTIONS**
(-) CS S4 SS304 S6 SS316	**VV -** Vertical Liquid Seperator	See Table	See Table	150	See Housing Options

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MODEL DIMENSIONAL DETAILS

FIG.	MODEL	# COALESCER ELEMENTS	COALESCER LENGTH (IN)	# SEPARATOR ELEMENTS	SEPERATOR LENGTH (IN)	A	B	C	D	E
1	VV12	1	22"	1	18"	12.76"	5.98"	35.24"	17.13"	39.25"
1	VV16	2	22"	1	23"	15.98"	5.98"	42.01"	22.99"	45.98"
1	VV16	2	33"	1	29"	15.98"	5.98"	52.52"	22.99"	56.50"
1	VV16	3	33"	1	36"	15.98"	5.98"	57.99"	28.27"	62.01"
1	VV18	3	33"	1	33"	17.99"	5.98"	59.49"	29.37"	63.50"
1	VV18	3	38"	1	40"	17.99"	5.98"	64.49"	29.37"	68.50"
1	VV20	3	44"	1	44"	20.00"	5.98"	71.61"	29.61"	75.51"
1	VV24	5	28"	2	30"	24.02"	5.98"	63.50"	31.26"	67.52"
1	VV24	5	33"	2	30"	24.02"	7.99"	63.50"	35.83"	67.52"
1	VV24	5	38"	2	36"	24.02"	7.99"	69.49"	35.83"	73.50"
1	VV24	5	44"	2	40"	24.02"	7.99"	74.02"	35.83"	77.99"
2	VV28	7	33"	3	30"	27.99"	7.99"	69.49"	37.13"	81.50"
2	VV28	7	38"	3	30"	27.99"	7.99"	69.49"	37.13"	81.50"
2	VV28	7	44"	3	40"	27.99"	7.99"	75.51"	37.13"	87.52"
2	VV28	7	56"	3	44"	27.99"	7.99"	87.99"	37.13"	100.00"
2	VV36	11	33"	5	36"	35.98"	9.02"	82.01"	52.99"	95.98"
2	VV36	11	44"	5	36"	35.98"	9.02"	82.99"	52.99"	97.01"
2	VV36	12	56"	6	44"	35.98"	9.02"	95.00"	52.99"	97.20"
2	VV48	20	56"	10	44"	47.99"	9.02"	95.98"	56.50"	112.99"

CHART LEGEND

- **A** OUTSIDE DIAMETER
- **B** FLOOR TO INLET
- **C** FLOOR TO LID
- **D** FACE TO FACE
- **E** FLOOR TO LID

Figure 1

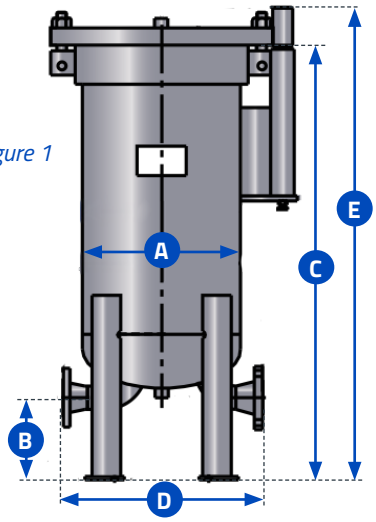
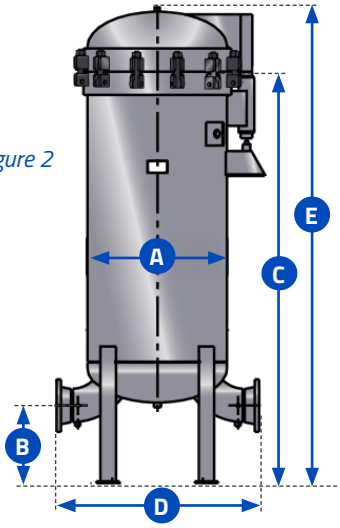


Figure 2



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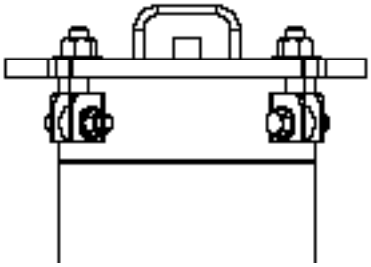
CLOSURE AND QUICK OPENING COVER OPTIONS

Fil-Trek designs and fabricates a variety of closure and quick opening cover options to accomodate strict applications and requirements. All materials of construction are in accordance with ASME specifications and manufacturing complies with the applicable rules of the ASME Code for Pressure Piping and with the ASME Boiler and Pressure Vessel Code.

HINGED COVER

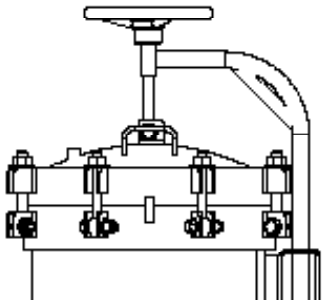


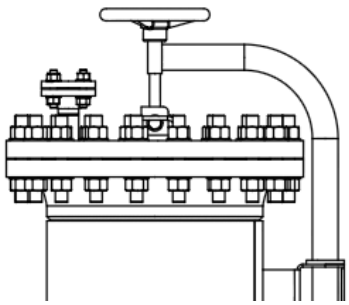
The most economical quick opening closure offered for fabricated strainers with nominal pressure applications. The swing bolt hinged cover uses an O-ring to seal. Easy to open by quickly and easily by loosening the swing bolts until they clear the holding lugs and swinging the head open on its hinge.

MECHANICAL DAVIT ASSEMBLY

Our mechanical davit assembly makes it easy for the operator to open and swing the cover away to facilitate basket or screen removal for cleaning. It is used primarily for larger strainers where cover removal is difficult and heavy. This is the most inexpensive alternative to quick release covers, especially when operating conditions require a bolted cover. Available for swing bolt and ANSI closures.

**Hydraulic davit head lift also available.





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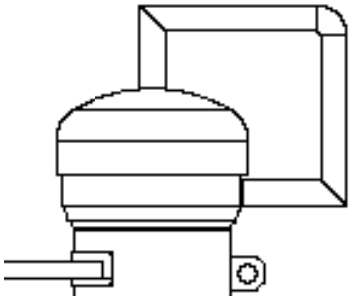
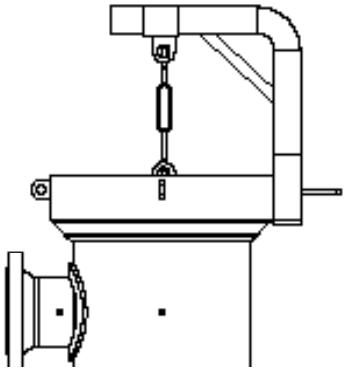
THREADED HINGED COVER



The quick open threaded hinged closure uses a cap fastened to a hub and is welded to the strainer body. The female cap is threaded onto the male hub using O-rings to seal. The O-ring prevents corrosion of the closure threads and provides a long, trouble free service. The threaded cover can be used for both nominal and high pressure applications. Available in both vertical and horizontal configurations.

YOKE CLOSURE

The Yoke hinged cover is a true ANSI rated closure and uses an O-ring seal. Used primarily on high pressure applications, it is available for 150#, 300#, 600#, 900# and 1500# ANSI ratings with a wide range of operating aids, ranging from a single lever chain and sprocket drive to completely automated.



CLOSURE COMPARISON

	COVER TYPE			
	HINGED COVER	MECHANICAL DAVIT	THREADED COVER	YOKE CLOSURE
COST	Low	Moderate	High	High
QUICK OPENING ABILITY	Good	Fair	Best	Best
LOW PRESSURE APPLICATIONS	X	X	-	-
NOMINAL PRESSURE APPLICATIONS	X	X	X	X
HIGH PRESSURE APPLICATIONS	-	X	X	X

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GAS HOUSING SIZING WORKSHEET

Please use the following worksheet to enter as much detail as possible about the gas application you are sizing for. The minimum requirement we need to help size will be the areas marked with an '*'.

Operating Conditions

Name of Gas* _____ **Name of Liquid Present** _____

Max. Operating Flow Rate* _____ **@** _____ *Pressure (PSIG)*

Gas Specific Gravity (Air = 1)* _____ **OR Mole Weight/Composition** _____

Type of System or Location in Process* _____ **Dry?** ☐ **Wet?** ☐

Min. Operating Pressure (PSIG)* _____ **Max. Operating Pressure (PSIG)** _____

Min. Operating Temperature (F) _____ **Max. Operating Temperature (F)*** _____

Amount of Liquids Present (GPD) _____ **Specific Gravity (Water = 1)** _____

Amount of Particulate Present (Parts per 100 scf) _____ **Name of Particulate** _____

Max. Allowable Clean Pressure Drop _____ *(Standard = 2 PSID Flange to Flange)*

Mechanical Data

Design Pressure Min.* _____ **Max.*** _____ **Design Temperature Min.*** _____ **Max.*** _____

ASME Code Required?* _____ **Sour Service?** ☐ **Acid Service?** ☐

If YES, Pressure (PSI) _____ **Temp (F)** _____ **Corrosion Allowance (in)** _____

Fire Safe Service _____ *(ie All Connections/Closures Flanged?)* _____

Inlet/Outlet Type *Flanged* ☐ *Threaded* ☐ *Other (Please specify)* _____

Type/ANSI Rating of Flanges (#) _____ **Face** *RF* ☐ *RTJ* ☐ **Type** *SO* ☐ *WN* ☐ *LWN* ☐

Vessel MOC *CS* ☐ *SS304* ☐ *SS316* ☐ *Other (Please specify)* _____

Internals MOC *CS* ☐ *SS304* ☐ *SS316* ☐ *Other (Please specify)* _____

Other Details

_____

_____

_____

_____