#### **FIL-TREK CORPORATION**

55 Stafford Court Cambridge, ON N1T 1B3 **P** (519) 623-7448

**F** (519) 623-8807

# 77V SERIES

## **Reverse Flow Gas Coalescer**

- Single Stage Coalescing Filter
- Vertical Orientation
- ASME Design ("U"/"UM")

Ideal for the removal of solid contaminants and aerosol mists from gas streams 0.3 micron and larger

#### **SUITABLE USES**





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
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STD DESIGN TEMP	-20°F to 350°F (-28.8°C to 176.6°C	)
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<b>AVAILABLE FINISHES</b> Carbon or Stainless Steel 304 or 316. Also available
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in LDX2101, C276, AL6XN, 2205, 2507 & Monel 400

ADDITIONAL FEATURES

Single stage coaleser and separator work by moving gas upward through the element from the inside out. Clean gas exits the housing while the coalesced fluid drains via the vessel drain.

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	1" - 2" NPT
Clean Drain	1" - 2" NPT
Vent	½" NPT on all sizes
Gauges	½" NPT on all sizes
Closure	Swing bolt closure *Limited to pressure class
Headlift	Mechanical Davit on 77V12 and larger Hydraulic Davit on 77V40 and larger
Legs	Skirt
Standard Pressure	150 PSIG *Other pressures available, see table
Standard Temperature	400°F (204°C) *Other temperatures available, see table
Certifications	ASME Section VIII, Div. I U, UM, CE, NB, CRN
Sour Service	Available, please contact
Corrosion Allowance	Available, please contact

#### PRESSURE & TEMPERATURE DESIGNATION

DESIGNATION	МОС	PSI	TEMP (°F)	ANSI RATING	
DT4	CS	285	100	ANCI 150	
PT1	SS304/SS316	270	100	ANSI 150	
PT2	CS	200	400	ANSI 150	
FIZ	SS304/SS316	190	400	ANSI 150	
PT3	CS	740	100	ANSI 300	
PIS	SS304/SS316	720	100	טטכ וכווא	
PT4	CS	635	400	ANSI 300	
P14	SS304/SS316	495	400	ANSISOO	
DTE	CS	1480	100	ANSI 600	
PT5	SS304/SS316	1440	100	AIVJI 000	

#### **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)

## **PRODUCT NOMENCLATURE**







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#### **HOUSING OPTIONS**

\*Indicates standard configuration

Configuration (-) A - Side In/Side Out\* D - Same Side In/Out **Options** 

(at right)

**Finish** (-) External paint "National Blue" (CS)\* (-) Bead Blast (SS304 and SS316)\* **Options** 

(-) Swing Bolt (O-Ring Seal)\* Cover Options\*\* ANSI Bolted Cover (Gasket Seal)

Yoke Cover (O-Ring Seal)

Quick Opening Threaded Cover (O-Ring Seal) Quick Opening C-Clamp Cover (O-Ring Seal)

Grooved

\*Based on standard of construction \*\*See page 5-6 for closure options

O-Ring/ O-Ring Options (-) Buna-N\* Gasket **EPDM Options** 

Viton Silicone

Teflon encapsulated Viton

Teflon

Filter Support (-) SS304 support post (Std)\*

**Options** SS316 support post

**Filter** Double Open End (std)\*

Configuration

(-) Skirt (Std)\* **Leg Options** 

Leg tabs

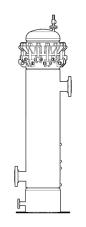
Angle Iron Legs

Accessories Direct Reading Gauge

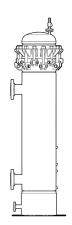
DP Gauge

Safety Relief Valves

Vent Valves Drain Valves Side in/side out\*



Side in/Side Out, Same Side



#### **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**

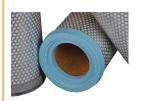
99.98% absolute, 0.3 micron pleated gas filter, available in microglass or polyester media

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.





#### FIBERLOC P SERIES FILTERS

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





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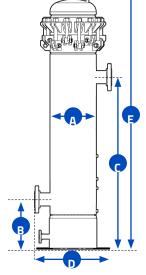


## **MODEL DIMENSIONAL DETAILS**

		A	В	С	D	E
77V06-001-336-2F	1	65/8"	28"	74"	24"	90"
77V10-002-336-4F	2	10¾"	30"	98"	27"	130"
77V12-002-336-4F	2	123/,"	30"	98"	29"	130"
77V12-003-336-6F	3	12¾"	30"	100"	29"	130"
77V14-003-336-6F	3	14"	30"	100"	30"	130"
77V14-004-336-6F	4	14"	30"	100"	30"	130"
77V16-005-336-8F	5	16"	30"	100"	32"	132"
77V18-007-336-8F	7	18"	30"	100"	34"	132"
77V20-008-336-8F	8	20"	30"	100"	36"	132"
77V22-011-336-8F*	11	22"	30"	100"	40"	132"
77V24-013-336-10F	13	24	30"	112"	44"	134"
77V26-016-336-12F	16	26"	30"	114"	46"	148"
77V28-019-336-12F	19	28"	30"	114"	48"	148"
77V30-021-336-14F	21	30"	34"	120"	50"	156"
77V32-023-336-14F	23	32"	34"	120"	52"	156"
77V34-028-336-16F	28	34"	34"	120"	54"	156"
77V36-031-336-16F	31	36"	34"	120"	56"	156"

\*Only available in swing bolt closure up to llimited pressure, please contact.. Specifications above do not include corrosion allowance and are for 336 elements and are reference only. Available in additional sizes up to 72' diameter. For sizing information for other element sizes please contact Fil-Trek. All quotes are complete with certified drawing which indicate accurate dimensions and weight.





#### **CHART LEGEND**

- **OUTSIDE DIAMETER**
- FLOOR TO INLET
- FLOOR TO OUTLET
- FACE TO FACE
- **OVERALL HEIGHT**



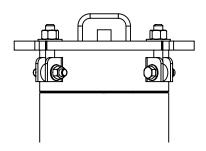
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## **CLOSURE AND QUICK OPENING COVER OPTIONS**

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**

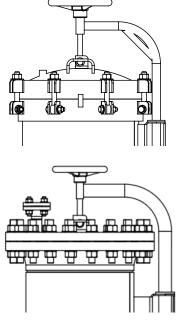


The most economical quick opening closure offered for fabricated strainers with nominal pressure applications. The swing bolt hinged cover uses an O-ring to seal. Easy to open by quickly and easily by loosening the swing bolts until they clear the holding lugs and swinging the head open on its hinge.

## **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.



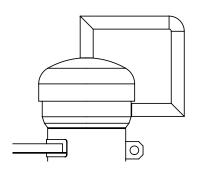


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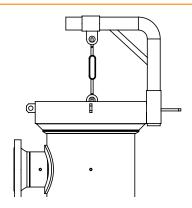
## **THREADED HINGED COVER**



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	Х	X	-	-
NOMINAL PRESSURE APPLICATIONS	Х	X	Х	Χ
HIGH PRESSURE APPLICATIONS	-	X	Х	Х



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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 SS316	Other (Please specify)			
Other Details				

