### **DV Series**

## Vertical Filter-Coalescer/Separator Housings for use with DI-6 and DSO-6 Elements

Dry fuel is more important than ever with HPCR (High Pressure Common Rail) systems becoming the standard in diesel engines. Water can displace fuel in the injectors and high pressure fuel pumps causing a lack of lubricity, thus resulting in premature wear. This wear can cause a loss of fuel economy, a less efficient engine, down time, component failure, catastrophic engine failure and potentially the rejection of a warranty claim from engine manufacture. Engine manufactures are requiring standard diesel, D975, to be less than 100 parts per million water. Current requirements for water per D975 is less than 500 parts per million water. All bulk fuel could potentially not meet OEM requirements while still meeting D975 specifications. The DV series can coalesce water from diesel fuel in flows from 330 gallons per minute to 2,100 gallons per minute in a standard single vessel. The DV series from Parker can easily achieve OEM requirements for water in parts per million.



#### **Typical Applications**

The DV series offer many options which makes the product perfect for many markets and applications. In the Natural Resources market, the DV can be utilized in mining equipment, fuel transfer, fuel polishing and fuel delivery for coalescing water. Opportunities exist for small and large fuel terminals. The Power Generation market offers several potential applications. Fuel transfers from terminals and polishing of bulk storage tanks, the DV can provide superior dry fuel. The Transportation market also provides many different opportunities. Larger commercial marine vessels can coalesce water as it is offloaded from land or sea suppliers. Railroad terminals can coalesce water from fuel as it is transferred to maintain superior fuel quality. The DV series can be used to meet the water specifications in parts per million as required by the engine manufactures. Clean Dry fuel allows the engines to operate at maximum efficiencies and maintain emission requirements.



### **DV** Series

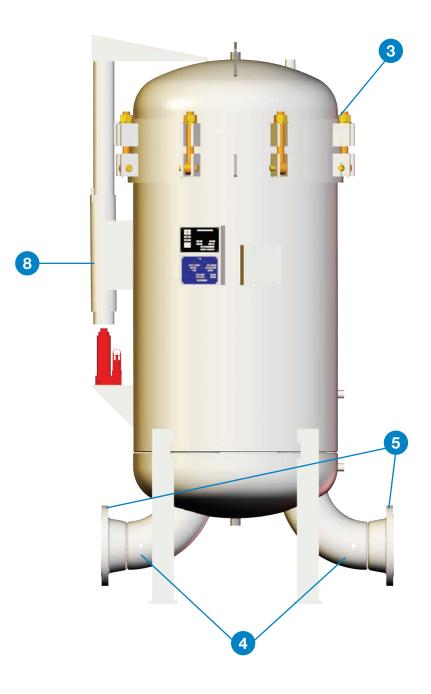
### **Features**

#### **Standard Design Features**

- 1 150 psi welded steel ASME Code construction (stamp on request)
- 2 Epoxy-coated interior, primed exterior
- 3 Swing bolt closure with O-ring seal
- 4 Inlet/Outlet sample ports
- 5 RF flanged connections
- 6 Threaded base coalescer
- 7 Carbon steel construct
- 8 Hydraulic lifting davit

#### **Options**

- 9 Automatic air vent
- 10 Pressure relief valve
- 11 Differential pressure gauge
- 12 Water interface control
- 13 Water sight glass
- 14 Sampling probes
- 15 Manual drain valve
- 16 Water slug valve
- 17 Sump heater
- 18 Choice of micron rating from 5 to 25 microns
- 19 Choice of pleated or depth type media



# **DV Series**Specifications

Clearance Required to Remove Elements

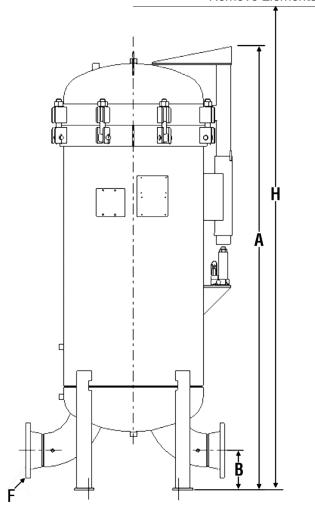


Figure 1

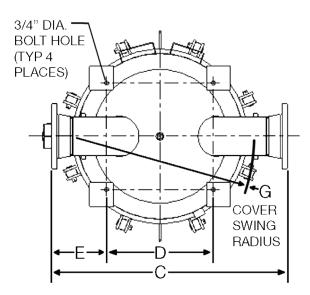


Figure 2

### **DV Series**

### **Specifications**

	Flow Rate Rar	nge gpm (lpm)	Elem	nents	Di	mensions in (mr	n)
Model Number	Max	Target	DI DSO	Qty of Elements	Α	В	С
DV2222	220 (835)	130 (500)	DI-622 DSO-622	4 3	62 (131)	8 (203)	27.13 (203)
DV2233	330 (1250)	200 (750)	DI-633 DSO-629	4 3	69 (198)	8 (203)	27.13 (203)
DV2833	495 (1875)	300 (1125)	DI-633 DSO-629	6 5	83 (522)	8 (203)	40 (203)
DV2844	660 (2500)	400 (1500)	DI-644 DSO-633	6 5	89 (792)	8 (203)	40 (203)
DV3638	1045 (3955)	630 (2380)	DI-638 DSO-629	11 9	91.56 (1188)	8 (203)	63.25 (203)
DV3644	1210 (4580)	730 (2750)	DI-644 DSO-633	11 9	96.38 (1584)	9 (229)	52.13 (229)
DV3656	1540 (5830)	930 (3500)	DI-656 DSO-644	11 9	109.69 (2016)	9 (229)	52.13 (229)
DV4244	1650 (6245)	995 (3750)	DI-644 DSO-633	15 12	103.38 (2379)	9 (229)	55.31 (229)
DV4256	2100 (7950)	1260 (4770)	DI-656 DSO-644	15 12	119.13 (2379)	9 (229)	55.31 (229)

Model		Dimensions in (mm)			Wt.	Volume	
Number	D	E	F	G	н	w/ Skid lbs (kgs)	US gal (L)
DV2222	15.5 (394)	6.25 (159)	4 (102)	30 (762)	86 (2184)	1110 (503)	64 (242)
DV2233	15.5 (394)	6.25 (159)	4 (102)	30 (762)	102 (2591)	1130 (513)	72 (273)
DV2833	18 (457)	12.63 (321)	6 (152)	35 (889)	118 (2997)	1650 (748)	170 (644)
DV2844	18 (457)	12.63 (321)	6 (152)	35 (889)	133 (3378)	1690 (767)	185 (700)
DV3638	23 (584)	20.13 (511)	6 (152)	44 (1118)	129 (3277)	2080 (943)	280 (1060)
DV3644	23 (584)	14.63 (371)	8 (203)	44 (1118)	140 (3556)	2150 (975)	305 (1155)
DV3656	23 (584)	14.63 (371)	8 (203)	44 (1118)	160 (4064)	2300 (1043)	355 (1344)
DV4244	28 (711)	15 (381)	8 (203)	50 (1270)	150 (3810)	3350 (1520)	450 (1703)
DV4256	28 (711)	15 (381)	8 (203)	50 (1270)	165 (4191)	3500 (1588)	520 (1968)

### **Element Coalescing Performance**

>99% efficient at rated flows

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.

### **DV22 Series**

# Vertical Filter-Coalescer/Separator Housings for use with DI-6 and DSO-6 Elements

for Flows up to 330 gpm (1250 lpm)

#### How to Order

Select the desired symbol (in the correct position) to construct a model code. Example:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8
DV22	22	CS	X	В	DP	A4	1

BOX 1: Filter Series						
Symbol	Description					
DV22	Diesel Vertical Filter Coalescer/Separator up to 330 gpm/1250 lpm					
BOX 2: E	Element Length					
Symbol	Description					
22	22 in (559 mm)					
33	33 in (838 mm)					
BOX 3: F	BOX 3: Filtration Type					
Symbol	Description					
cs	Coalescer/Separator					
BOX 4: N	Media Code					
Symbol	Description					

No Element Installed<sup>1,2</sup>

BOX 5: Seals			
Symbol	Description		
В	Nitrile		
V	Fluorocarbon		
v Fluorocarbon			

BOX 6: Indicator			
Symbol	Description		
Р	Port Plugged		
DP	Differential Pressure		
DP	Differential Pressure		

BOX 7: Ports			
Symbol	Description		
A2	2" 150# RF ANSI		
A3	3" 150# RF ANSI		
<b>A</b> 4	4" 150# RF ANSI		

BOX 8: Options <sup>3</sup>			
Symbol	Description		
1	None		
AE	Air Eliminator		
CL	Custom Leg Height <sup>4</sup>		
DV	Drain Valve		
PR	Pressure Relief Valve 150#		
SG	Sight Glass		

### Please note the bolded options reflect standard options with reduced lead-time.

#### Notes

- Use the code chosen from Box 2 along with the desired filtration rating and separator material to select the correct element from the table below. Example: For model DV2222CSXBPA41 with 10 micron coalescer and cellulose separator, DI-622D10TB and element DSO-622PLF3 would be required.
- 2. Element qty required: (4) Coalescer, (3) Separator
- 3. Select one or more options, as desired.
- Customer must supply the length for Dimension B referenced in Figure 1 on page 94.

#### Replacement Elements

Type / Media					
Coalescer	Separator	22 in (559 mm)	22 in (559 mm)	33 in (838 mm)	29 in (737 mm)
5 micron	0 11 1 (01)	DI-622D5TB	D00 000D1 50	DI-633D5TB	D00 000DL 50
10 micron	Cellulose (PL) Screen (C)	DI-622D10TB	DSO-622PLF3	DI-633D10TB	DSO-629PLF3
25 micron	23.23.1 (0)	DI-622D25TB		DI-633D25TB	111 0200

Part Number	Description
101-G	Air Eliminator
115-C	Drain Valve
130-BT	Pressure Relief Valve 150#

Part Number	Description
120-Q	Differential Pressure Gauge
138-P	Sight Glass
G-2042	Cover Gasket

### **DV28 Series**

### **Vertical Filter-Coalescer/Separator Housings** for use with DI-6 and DSO-6 Elements

for Flows up to 660 gpm (2500 lpm)

#### How to Order

Select the desired symbol (in the correct position) to construct a model code. Example:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8
DV28	33	CS	X	В	DP	A6	1

BOX 1: Filter Series		
Symbol	Description	
DV28	Diesel Vertical Filter Coalescer/Separator up to 660 gpm/2500 lpm	
BOX 2: Element Length		
Symbol	Description	
33	33 in (838 mm)	
44	44 in (1118 mm)	
BOX 3: Filtration Type		
Symbol	Description	
CS	Coalescer/Separator	

BOX 2: Element Length		
Symbol	Description	
33	33 in (838 mm)	
44	44 in (1118 mm)	
BOX 3: Filtration Type		
Symbol	Description	
cs	Coalescer/Separator	
BOX 4: Media Code		
Symbol	Description	
Х	No Element Installed <sup>1,2</sup>	

BOX 5: Seals	
Description	
Nitrile	
Fluorocarbon	

BOX 6: Indicator			
Symbol	Description		
Р	Port Plugged		
DP	Differential Pressure		

BOX 7: Ports		
Symbol	Description	
A3	3" 150# RF ANSI	
A4	4" 150# RF ANSI	
A6	6" 150# RF ANSI	

BOX 8: Options <sup>3</sup>		
Description		
None		
Air Eliminator		
Custom Leg Height <sup>4</sup>		
Drain Valve		
Pressure Relief Valve 150#		
Sight Glass		

#### Please note the bolded options reflect standard options with reduced lead-time.

- 1. Use the code chosen from Box 2 along with the desired filtration rating and separator material to select the correct element from the table below. Example: For model DV2833CSXBPA61 with 10 micron coalescer and cellulose separator, DI-633D10TB and element DSO-629PLF3 would be required.
- 2. Element qty required: (6) Coalescer, (5) Sparator
- 3. Select one or more options, as desired.
- 4. Customer must supply the length for Dimension B referenced in Figure 1 on page 94.

#### Replacement Elements

Type / Media					
Coalescer	Separator	33 in (838 mm)	29 in (737 mm)	44 in (1118 mm)	33 in (838 mm)
5 micron	0 11 1 (01)	DI-633D5TB	D00 000DI 50	DI-644D5TB	D00 000D1 50
10 micron	Cellulose (PL) Screen (C)	DI-633D10TB	DSO-629PLF3	DI-644D10TB	DSO-633PLF3
25 micron	33.3311(0)	DI-633D25TB	233 0200	DI-644D25TB	200 0000

Part Number		Description
	101-G	Air Eliminator
	115-C	Drain Valve
	130-BT	Pressure Relief Valve 150#

Part Number	Description
120-Q	Differential Pressure Gauge
138-P	Sight Glass
G-0769	Cover Gasket

### **DV36 Series**

# Vertical Filter-Coalescer/Separator Housings for use with DI-6 and DSO-6 Elements

for Flows up to 1540 gpm (5830 lpm)

#### How to Order

Select the desired symbol (in the correct position) to construct a model code. Example:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8
DV36	38	CS	Χ	В	DP	A8	1

BOX 1: Filter Series				
Symbol	Description			
DV36	Diesel Vertical Filter Coalescer/Separator up to 1540 gpm/5830 lpm			
BOX 2: Flement I ength				

BOX 2: Element Length		
Symbol	Description	
38	38 in (965 mm)	
44	44 in (1118 mm)	
56	56 in (1422 mm)	

BOX 3: Filtration Type			
Symbol Description			
CS	Coalescer/Separator		

ВО	BOX 4: Media Code			
Syn	Symbol Description			
X No Element Installed <sup>1,2</sup>				

BOX 5: Seals		
Symbol	Description	
В	Nitrile	
V	Fluorocarbon	

BOX 6: Indicator			
Symbol	Description		
Р	Port Plugged		
DP	Differential Pressure		

BOX 7: Ports		
Symbol	Description	
A4	4" 150# RF ANSI	
A6	6" 150# RF ANSI	
<b>A</b> 8	8" 150# RF ANSI	

BOX 8: Options <sup>3</sup>		
Symbol	Description	
1	None	
AE	Air Eliminator	
CL	Custom Leg Height <sup>4</sup>	
DV	Drain Valve	
PR	Pressure Relief Valve 150#	
SG	Sight Glass	

### Please note the bolded options reflect standard options with reduced lead-time.

#### Notes

- Use the code chosen from Box 2 along with the desired filtration rating and separator material to select the correct element from the table below. Example: For model DV3644CSXBPA81 with 10 micron coalescer and cellulose separator, DI-644D10TB and element DSO-633PLF3 would be required.
- 2. Element qty required: (11) Coalescer, (9) Separator
- 3. Select one or more options, as desired.
- Customer must supply the length for Dimension B referenced in Figure 1 on page 94.

#### Replacement Elements

Type / Media							
Coalescer	Separator	38in (965 mm)	29 in (737 mm)	44 in (1118 mm)	33 in (838 mm)	56 in (1422 mm)	44 in (1118 mm)
5 micron	0 11 1 (01)	DI-638D5TB	D00 000DI F0	DI-644D5TB	D00 000DI 50	DI-656D5TB	500 044545
10 micron	Cellulose (PL) Screen (C)	DI-638D10TB	DSO-629PLF3	DI-644D10TB	DSO-633PLF3	DI-656D10TB	DSO-644PLF3
25 micron	33.3311(0)	DI-638D25TB	255 0200	DI-644D25TB	200 0000	DI-656D25TB	200 0110

Part Number	Description
101-G	Air Eliminator
115-C	Drain Valve
130-BT	Pressure Relief Valve 150#

Part Number		Description
	120-Q	Differential Pressure Gauge
	138-P	Sight Glass
	G-0511A	Cover Gasket

### **DV42 Series**

# Vertical Filter-Coalescer/Separator Housings for use with DI-6 and DSO-6 Elements

for Flows up to 2100 gpm (7950 lpm)

#### How to Order

Select the desired symbol (in the correct position) to construct a model code. Example:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8
DV42	44	CS	X	В	DP	A8	1

BOX 1: Filter Series			
Symbol	Description		
DV42	Diesel Vertical Filter Coalescer/Separator up to 2100 gpm/7950 lpm		
BOY 0. F	Thomas I awaib		
DUX 2: E	Element Length		
Symbol	Description		
44	44 in (1118 mm)		
56	56 in (1422 mm)		
BOX 3: F	Filtration Type		
Symbol	Description		
cs	Coalescer/Separator		
BOX 4: N	Media Code		
Symbol	Description		

No Element Installed<sup>1,2</sup>

BOX 5: Seals			
Symbol	Description		
В	Nitrile		
V	Fluorocarbon		

BOX 6: Indicator		
Symbol	Description	
P	Port Plugged	
DP	Differential Pressure	

BOX 7: F	BOX 7: Ports		
Symbol	Description		
A6	6" 150# RF ANSI		
<b>A</b> 8	8" 150# RF ANSI		
A10	10" 150# RF ANSI		

BOX 8: 0	BOX 8: Options <sup>3</sup>		
Symbol	Description		
1	None		
AE	Air Eliminator		
CL	Custom Leg Height <sup>4</sup>		
DV	Drain Valve		
PR	Pressure Relief Valve 150#		
SG	Sight Glass		

### Please note the bolded options reflect standard options with reduced lead-time.

#### Notes

- Use the code chosen from Box 2 along with the desired filtration rating and separator material to select the correct element from the table below. Example: For model DV4244CSXBPA81 with 10 micron coalescer and cellulose separator, DI-644D10TB and element DSO-633PLF3 would be required.
- 3. Element qty required: (15) Coalescer, (12) Separator
- 4. Select one or more options, as desired.
- Customer must supply the length for Dimension B referenced in Figure 1 on page 94.

#### Replacement Elements

Type / Media						
Coalesc	er	Separator	44 in (1118 mm)	33 in (838 mm)	56 in (1422 mm)	44 in (1118 mm)
5 micro	on		DI-644D5TB	D00 000D1 50	DI-656D5TB	500 0445450
10 micro	on	Cellulose (PL) Screen (C)	DI-644D10TB	DSO-633PLF3 DSO-633C	DI-656D10TB	DSO-644PLF3 DSO-644C
25 micro	on	23.7311 (0)	DI-644D25TB		DI-656D25TB	

Part Number	Description
101-G	Air Eliminator
115-C	Drain Valve
130-BT	Pressure Relief Valve 150#

Part Number	Description
120-Q	Differential Pressure Gauge
138-P	Sight Glass
G-0050E	Cover Gasket