

Horizontal Filter/Separator Vessels

HV and HVS Series. Designed Specifically for Hydrant Carts and Refuelers. EI 1581 6th Edition Qualified. Cat C, Type S-LW and Cat M, Type S.

FEATURES

- Reduced Weight is vital in the manufacture of refuelers and hydrant carts. Parker Velcon Filter/Separators drastically reduce the weight of the vessel.
- Reduced Size is another important factor in designing refuelers and hydrant carts. Parker Velcon Filter/Separators reduce the size of the vessel by up to 50%.
- Easier Maintenance. One piece cartridge design provides faster changeout and fewer potential gasket leaks than stacked cartridges.
- Industry Qualified. Parker Velcon HV and HVS Series Horizontal Filters/Separators are fully qualified to EI 1581, 6th Edition. These units incorporate one piece threaded base coalescer elements for easy, reliable installation and reusable one piece PTFE coated screen separators.

SPECIFICATIONS

- 150 psi ASME Code & EI 1596 Construction
- Victaulic Connections (Flanges Optional)
- Swing Bolted Closure
- Buna-N O-ring Cover Seal
- Spider Assembly to stabilize cartridges
- EI 1541 Epoxy Coated Interior, Primed Exterior
- Fittings for Pressure Relief Valve, Air Vent, and Pressure Gauge
- Sump is covered with plywood when shipped. Bolted steel cover is available as an option



Model No. HV1633M
A fully-qualified 300 USGPM Filter/Separator.
End Opening unit is only 16 inches in diameter
and 47 inches long.



Model No. HVS2228M
A fully-qualified 510 USGPM Filter/Separator.
Side Opening unit is only 22 inches in diameter
and 65 inches long.

Model	Dimensions (in.)												Wt w/ Skid (lbs)	Vol (US Gal)
	A	B	C	D	E	F	G	H	J	K	L	M		
HV1414M	14	6 ¾	8 ½	17 ¾	4 ⅞	2	28 ¾	18 ¼	10 ¾	18 ⅞	13 ⅞	43	350	17
HV1416M	14	6 ¾	8 ½	17 ¾	4 ⅞	2	30 ¾	20 ¼	10 ¾	18 ⅞	15 ⅞	45	400	18
HV1422M	14	6 ¾	8 ½	17 ¾	4 ⅞	2	36 ½	26 ¼	10 ¾	18 ⅞	21 ¾	51	420	20
HV1622M	16	6	10	19	9 ¾	4	36 13/16	16	10 ¾	20 ¾	17 ¼	56	440	32
HV1633M	16	6	10	19	9 ⅞	4	46 ⅞	27	10 ¾	20 ¾	28 ¾	79	450	42
HV2233M	22	10 ½	10	30	11 ½	4	52 11/16	29	16	27 1/16	29	85	800	69
HV2238M	22	10 ½	10	30	11 ½	4	55	34	16	27 1/16	37 ¾	92	835	77
HV2244M	24	9	12 ½	30	15	6	63 13/16	31 ½	16	27 1/16	32 ⅞	107	870	87
HV2456M	24	12	11 ½	33	15 ⅞	6	72 11/16	38	18	33 1/2	36 ⅞	125	1255	124
HV2828M	28	10 ½	16 ¾	36	12	6	55 ¾	22 ½	21	34 ¾	23 ¼	69	1210	120
HV2833M	28	10 ½	16 ¾	36	12	6	61 1/16	28	21	34 ¾	23 ¼	83	1255	135
HV2838M	28	10 ½	16 ¾	36	12	6	59 15/16	28	21	34 ¾	23 ¼	85	1300	150
HV2844M	28	10 ½	16 ¾	36	12	6	64 ½	29	21	34 ¾	23 ¼	98	1350	166
HV2856M	28	10 ½	16 ¾	36	12	6	75 25/32	41	21	34 ¾	23 ¼	119	1460	198

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

END OPENING VESSELS CARTRIDGE SELECTION

Vessel Model	Category	Type	Flow Rate GPM(LPM)	Cover Style	Coalescer		Separator	
					Qty	Model	Qty	Model
HV1414M	C	S-LW	70 (265)	Flat	2	I-614C5TB	1	SO-417V5
	M	S	55 (208)			I-614MMTB		
HV1416M	C	S-LW	90 (341)		2	I-616C5TB	1	SO-318V5
	M	S	70 (265)			I-616MMTB		
HV1422M	C	S-LW	125 (473)		2	I-622C5TB	1	SO-324V5
	M	S	100 (379)			I-622MMTB		
HV1622M	C	S-LW	190 (719)		3	I-622C5TB	1	SO-424V5
	M	S	150 (568)			I-622MMTB		
HV1633M	C	S-LW	300 (1136)		3	I-633C5TB	1	SO-436V5
	M	S	240 (908)			I-633MMTB		
HV2233M	C	S-LW	425 (1609)		4	I-633C5TB	2	SO-424V
	M	S	305 (1155)			I-633MMTB		SO-424V5
HV2238M	C	S-LW	495 (1874)		4	I-638C5TB	2	SO-430V
	M	S	365 (1382)			I-638MMTB		SO-430V5
HV2244M	C	S-LW	580 (2196)		4	I-644C5TB	2	SO-436V
	M	S	425 (1609)			I-644MMTB		SO-436V5
HV2456M	C	S-LW	745 (2820)		4	I-656C5TB	2	SO-636V
	M	S	555 (2101)			I-656MMTB		SO-636V5
HV2828M	C	S-LW	615 (2328)		7	I-628C5TB	2	SO-624V
	M	S	405 (1533)			I-628MMTB		SO-624V5
HV2833M	C	S-LW	740 (2801)	7	I-633C5TB	2	SO-636V	
	M	S	550 (2082)		I-633MMTB		SO-636V5	
HV2838M	C	S-LW	865 (3274)	7	I-638C5TB	2	SO-636V	
	M	S	615 (2328)		I-638MMTB		SO-636V5	
HV2844M	C	S-LW	1015 (3842)	7	I-644C5TB	2	SO-640V	
	M	S	690 (2612)		I-644MMTB		SO-640V5	
HV2856M	C	S-LW	1310 (4959)	7	I-656C5TB	2	SO-648V	
	M	S	830 (3142)		I-656MMTB		SO-648V5	

Please contact Parker AFD for additional possible vessel configurations.

CARTRIDGE SELECTION

Model	Category	Type	Flow Rates GPM (LPM)	Qty	Coalescer Cartridges	Qty	Separator Cartridges
HV1422	C	S	100 (379)	2	I-622C5TB	1	SO-324V5
	M				I-622MMTB		
HV1622	C	S	150 (568)	3	I-622MMTB ⁽¹⁾	1	SO-424V5
	M				I-622MMTB		
HV1633	C	S	240 (908)	3	I-633MMTB ⁽¹⁾	1	SO-436V5
	M				I-633MMTB		
HV2233	C	S	365 (1382)	4	I-633C5TB	2	SO-430V
	M		315 (1192)		I-633MMTB		SO-430V5
HV2244	C	S	495 (1874)	4	I-644C5TB	2	SO-436V
	M		425 (1609)		I-644MMTB		SO-436V5
HV2838	C	S	745 (2820)	7	I-638C5TB	2	SO-636V
	M		615 (2328)		I-638MMTB		SO-636V5
HV2844	C	S	870 (3293)	7	I-644C5TB	2	SO-640V
	M		690 (2612)		I-644MMTB		SO-640V5
HV2856	C	S	1130 (4278)	7	I-656C5TB	2	SO-648V
	M		830 (3142)		I-656MMTB		SO-648V5
HV3456	C	S	1420 (5375)	10	I-656C5TB	5	SO-648V5
	M		1250 (4732)		I-656MMTB	3	

Notes: 1. Testing to Category "M" qualifies for both Category "M" and Category "C".

DIMENSIONAL DATA

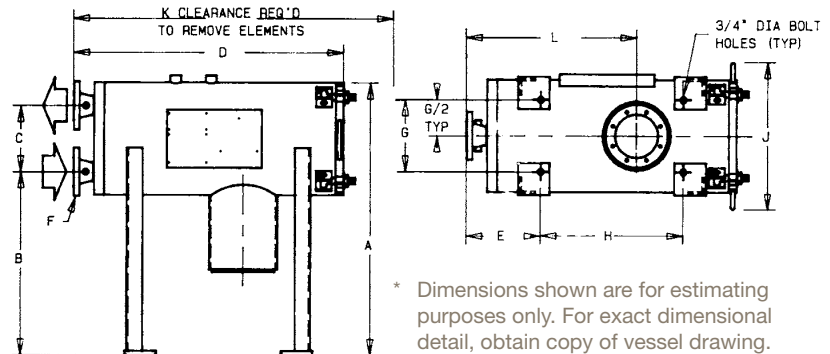
Model No.	Dimensions in.(mm)*										
	A	B	C	D	E	F	G	H	J	K	L
HV1422	35 $\frac{3}{4}$ (10897)	25 $\frac{1}{8}$ (7658)	8 $\frac{1}{8}$ (2477)	35 $\frac{1}{16}$ (906)	9 $\frac{3}{8}$ (238)	2 (51)	9 (229)	18 (457)	18 $\frac{1}{2}$ (470)	56 (1422)	21 $\frac{1}{2}$ (546)
HV1622	36 $\frac{3}{8}$ (11087)	23 $\frac{3}{8}$ (7125)	10 (3048)	35 $\frac{1}{16}$ (891)	9 $\frac{3}{8}$ (238)	4 (102)	13 (330)	16 (406)	20 $\frac{5}{8}$ (524)	58 (1473)	17 $\frac{1}{2}$ (445)
HV1633	36 $\frac{3}{8}$ (11087)	23 $\frac{3}{8}$ (7125)	10 (3048)	45 $\frac{5}{16}$ (1157)	9 $\frac{3}{8}$ (238)	4 (102)	13 (330)	27 (686)	20 $\frac{5}{8}$ (524)	80 (2032)	28 $\frac{5}{8}$ (727)
HV2233	53 (16154)	38 $\frac{1}{2}$ (11735)	10 (3048)	50 $\frac{3}{4}$ (1289)	14 $\frac{7}{16}$ (367)	4 (102)	16 (406)	23 $\frac{1}{2}$ (597)	27 $\frac{1}{16}$ (687)	85 (2159)	29 (737)
HV2244	53 (16154)	38 $\frac{1}{2}$ (11735)	10 (3048)	62 $\frac{1}{4}$ (1581)	14 $\frac{7}{16}$ (367)	4 (102)	16 (406)	29 $\frac{1}{2}$ (749)	27 $\frac{1}{16}$ (687)	105 (2667)	29 $\frac{9}{16}$ (745)
HV2838	55 $\frac{3}{4}$ (16993)	34 $\frac{1}{4}$ (10439)	16 $\frac{3}{4}$ (5105)	57 (1448)	15 (381)	6 (152)	22 (559)	22 (559)	34 $\frac{1}{2}$ (876)	83 (2108)	27 (686)
HV2844	55 $\frac{3}{4}$ (16993)	34 $\frac{1}{4}$ (10439)	16 $\frac{3}{4}$ (5105)	61 (1549)	16 (406)	6 (152)	22 (559)	22 $\frac{1}{2}$ (572)	34 $\frac{1}{2}$ (876)	93 (2362)	33 (838)
HV2856	55 $\frac{3}{4}$ (16993)	34 $\frac{1}{4}$ (10439)	16 $\frac{3}{4}$ (5105)	67 $\frac{3}{4}$ (1721)	15 (381)	6 (152)	22 (559)	42 (1067)	34 $\frac{1}{2}$ (876)	122 (3099)	45 (1143)
HV3456	65 $\frac{3}{8}$ (19926)	38 $\frac{3}{8}$ (11697)	20 (6096)	82 $\frac{1}{2}$ (2096)	18 $\frac{1}{16}$ (468)	6** (152)	28 (711)	38 $\frac{1}{4}$ (972)	39 $\frac{3}{4}$ (1010)	124 (3150)	37 $\frac{1}{2}$ (953)

Notes: HV-14, -16 and -22 series filter/separators have flat covers while the HV-28, and HV-34 series have domed covers.

** If 8 in. flanges are desired, specify P/N 180-CC.

WEIGHTS AND VOLUMES

Model	Weight With Skid lbs(kg)	Volume Gal.(Ltr.)
HV1422	390 (177)	20 (76)
HV1622	435 (197)	28 (106)
HV1633	475 (215)	37 (140)
HV2233	800 (363)	73 (276)
HV2244	860 (363)	90 (341)
HV2838	1050 (476)	130 (492)
HV2844	1100 (499)	145 (549)
HV2856	1200 (544)	176 (666)
HV3456	1800 (816)	290 (1098)



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

FLOW RATES AND CARTRIDGES

Model	Flow Rates ⁽¹⁾ gpm (lpm)	Coalescer Quantity	Cartridge Model	Separator Quantity	Cartridge Model	Weight with Skid lbs(kgs)	Volume gal(ltr)
HV2238225	300 (1136)	4	I-638MMTB	2	SO-430V5	1000 (454)	85 (322)
HV2838225	600 (2271)	7	I-638MMTB	2	SO-636V5	1175 (533)	140 (530)
HV3456225	1200 (4542)	10	I-656MMTB	3	SO-648V5	2100 (953)	335 (1268)

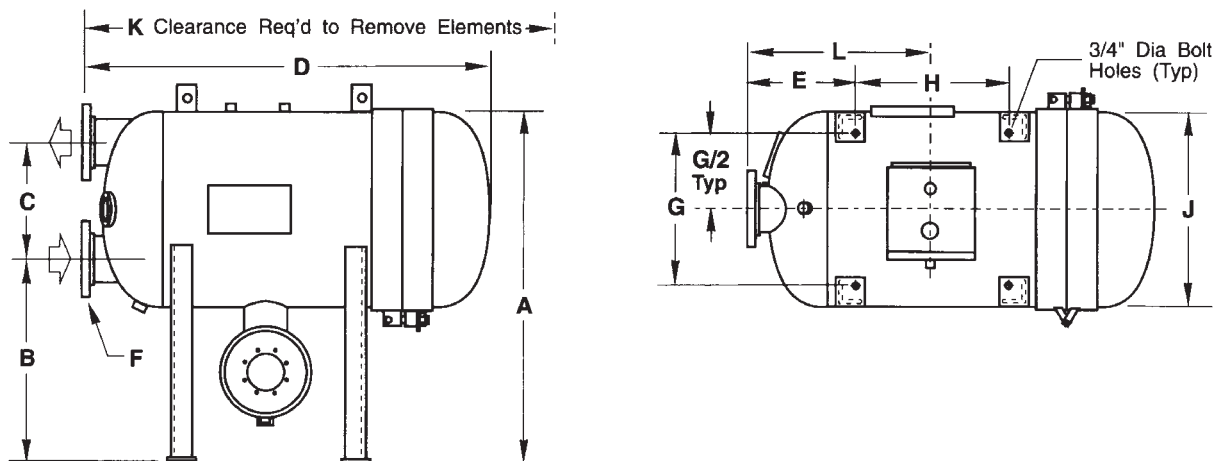
Note: (1) For Jet A, Jet A-1, Jet B, JP-4, JP-5, JP-8

DIMENSIONAL DATA

Model ⁽²⁾	Dimensions in (mm)*										
	A	B	C	D	E	F ⁽³⁾	G	H	J	K	L
HV2238225	53 (1346)	38½ (978)	10 (254)	59⅛ (1502)	14½ (370)	4 (102)	16 (406)	30 (762)	22 (559)	93½ (2375)	29 (737)
HV2838225	55¾ (1416)	34¼ (870)	16¾ (425)	62½ (1588)	15 (381)	6 (152)	22 (559)	22 (559)	28 (711)	85 (2159)	27 (686)
HV3456225	65⅝ (1661)	37⅞ (949)	22 (559)	83½ (2121)	19⅞ (494)	8 (203)	28 (711)	38¼ (972)	34 (864)	94½ (2400)	38½ (978)

Notes (2) HV2238225 has a flat cover, while the HV2838225 and HV3456225 have domed covers.

(3) Flanges are raised face flanges complying with ANSI B16-5, Class 150.



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