



# Horizontal Filter/Separators

## HV Series

### Compact Horizontal Filter/Separator Vessels for Fixed Installations Offers Significant Operating Advantages Over Vertical Designs

#### EASIER CARTRIDGE CHANGE

The horizontal filter/separator design provides more convenient access to the cartridges than the vertical design.

#### EFFLUENT CLEANLINESS

A horizontal filter/separator must be drained to change the elements. This prevents the possibility of getting dirt in the effluent that can occur if the operator does not fully drain a vertical vessel when changing elements. The separator mounting holes on a horizontal vessel are in a vertical plane at the top of the vessel so it is nearly impossible to get dirt in the effluent when cartridges are being changed.

#### LOWER COST

A horizontal filter/separator will often cost less than a vertical filter/separator of the same rated flow, for the same specifications.

#### INDUSTRY QUALIFIED

Velcon HV Series Horizontal Filter/Separators are fully qualified to API Publication 1581, Third Edition, Group II, Class B (fixed installations). These units incorporate one piece threaded base coalescer elements for easy, reliable installation and reusable one piece Teflon<sup>®</sup> coated screen separators.

#### SPECIFICATIONS

- 150 psi ASME Code Construction
- RF Flanged Connections
- Swing Bolted Closure
- Buna-N O-ring Cover Seal
- MIL-PRF-4556 Epoxy Coated Interior, Primed Exterior



#### RECOMMENDED ACCESSORIES

The following accessories are recommended for safe effective operation at all installations:

- Automatic Air Vent
- Pressure Relief Valve
- Differential Pressure Gauge
- Sampling Probes
- Interface Control (ballast type float recommended)
- Water Slug Control Valve
- Manual Drain Valve
- ASME Code Stamp
- API Nameplate

#### OTHER ACCESSORIES AVAILABLE

- Sump Heater
- Sight Glass

<sup>®</sup> Teflon is a registered trademark of E.I. du Pont de Nemours & Co., Inc.

# Compact Horizontal Filter/Separator Vessels for Fixed Installations

## CARTRIDGE SELECTION

Vessel Model No.	Flow Rates - USGPM <sup>(1)</sup>		Coalescer Elements			Separator Elements	
	Kerosene API Group II Class B	Gasoline	Qty	83 Series Options <sup>(2)</sup>	85 Series Options <sup>(3)</sup>	Qty	Model Number
HV-1422	100	150	2	I-62283TB	I-62285TB	1	SO-323C
HV-1622	150	230	3	I-62283TB	I-62285TB	1	SO-424C
HV-1633	240	350	3	I-63383TB	I-63385TB	1	SO-436C
HV-2233	320	475	4	I-63383TB	I-63385TB	2	SO-430C
HV-2244	435	650	4	I-64483TB	I-64485TB	2	SO-436C
HV-2838	655	950	7	I-63883TB	I-63885TB	2	SO-636CM
HV-2844	765	1100	7	I-64483TB	I-64485TB	2	SO-640CM
HV-2856	990	1400	7	I-65683TB	I-65685TB	2	SO-648CM
HV-3456	1400	1900	10	I-65683TB	I-65685TB	3	SO-648CM

- Notes:** 1. Based on fuel with minimum interfacial tension of 36 dynes per centimeter over water.  
 2. For gasoline and API 1581, Group I Class B.  
 3. For API 1581 Third Edition, Group II Class B. (Also qualified with 87 Series Coalescers.)

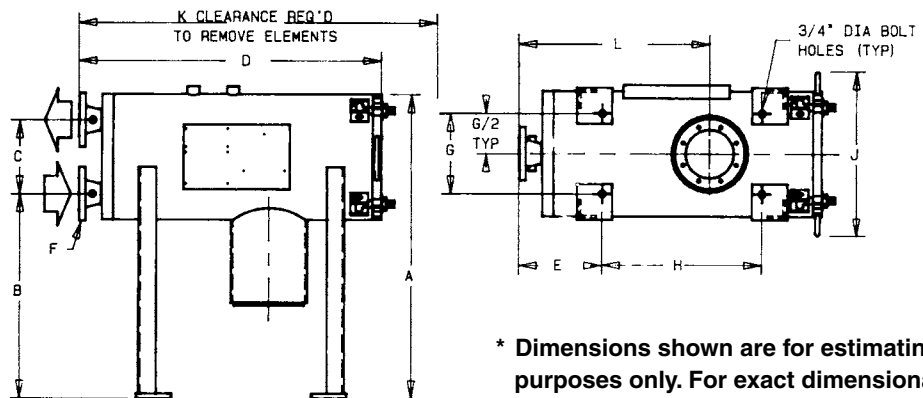
## DIMENSIONAL DATA

Vessel Model No.	Dimensions (inches)*										
	A	B	C	D	E	F	G	H	J	K	L
HV-1422	35 <sup>3</sup> / <sub>4</sub>	25 <sup>1</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>8</sub>	35 <sup>11</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>8</sub>	2	9	18	18 <sup>1</sup> / <sub>2</sub>	56	21 <sup>1</sup> / <sub>2</sub>
HV-1622	36 <sup>3</sup> / <sub>8</sub>	23 <sup>3</sup> / <sub>8</sub>	10	35 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>8</sub>	4	13	16	20 <sup>5</sup> / <sub>8</sub>	58	17 <sup>1</sup> / <sub>2</sub>
HV-1633	36 <sup>3</sup> / <sub>8</sub>	23 <sup>3</sup> / <sub>8</sub>	10	45 <sup>9</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>8</sub>	4	13	27	20 <sup>5</sup> / <sub>8</sub>	80	28 <sup>5</sup> / <sub>8</sub>
HV-2233	53	38 <sup>1</sup> / <sub>2</sub>	10	50 <sup>3</sup> / <sub>4</sub>	14 <sup>7</sup> / <sub>16</sub>	4	16	23 <sup>1</sup> / <sub>2</sub>	27 <sup>1</sup> / <sub>16</sub>	83	29
HV-2244	53	38 <sup>1</sup> / <sub>2</sub>	10	62 <sup>1</sup> / <sub>4</sub>	14 <sup>7</sup> / <sub>16</sub>	4	16	29 <sup>1</sup> / <sub>2</sub>	27 <sup>1</sup> / <sub>16</sub>	105	29 <sup>5</sup> / <sub>16</sub>
HV-2838	55 <sup>3</sup> / <sub>4</sub>	34 <sup>1</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	57	15	6	22	22	34 <sup>1</sup> / <sub>2</sub>	83	27
HV-2844	55 <sup>3</sup> / <sub>4</sub>	34 <sup>1</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	61	16	6	22	22 <sup>1</sup> / <sub>2</sub>	34 <sup>1</sup> / <sub>2</sub>	93	33
HV-2856	55 <sup>3</sup> / <sub>4</sub>	34 <sup>1</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	67 <sup>3</sup> / <sub>4</sub>	15	6	22	42	34 <sup>1</sup> / <sub>2</sub>	122	45
HV-3456	65 <sup>3</sup> / <sub>8</sub>	38 <sup>3</sup> / <sub>8</sub>	20	82 <sup>1</sup> / <sub>2</sub>	18 <sup>7</sup> / <sub>16</sub>	6**	28	38 <sup>1</sup> / <sub>4</sub>	39 <sup>3</sup> / <sub>4</sub>	124	37 <sup>1</sup> / <sub>2</sub>

- Notes:** HV-14, -16 and -22 series filter/separators have flat covers while the HV-28, and -34 series have domed covers.  
 \*\* If 8" Flanges are desired, specify P/N 180-CC.

## WEIGHTS AND VOLUMES

Vessel Model No.	Weight With Skid (lbs)	Volume (US gal)
HV-1422	390	20
HV-1622	435	28
HV-1633	475	37
HV-2233	800	73
HV-2244	860	90
HV-2838	1050	130
HV-2844	1100	145
HV-2856	1200	176
HV-3456	1800	290



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



FISCHER-ROBERTSON, INC.  
 Filtration & Separation  
 3890 Symmes Rd.  
 Hamilton, OH 45015  
 Phone: 513-860-3445  
 Fax: 513-860-4744  
 e-mail: sales@fischer-robertson.com  
 www.fischer-robertson.com

OVERSEAS AFFILIATES:  
 Frankfurt/M., Germany & Singapore

**Liquid Filtration  
 and Separation  
 Specialists**