

## V & VR DUAL DISC HORIZONTAL PLATE FILTERS

Standard model specs. Number of filter plates can be custom. V Filters are wire mesh or bag filters only, no filter paper. Contact us for more information.

U.S.	
FILTER AREA FT?	CAKE CAPACITY FT3
4.71	0.073
9.42	0.147
38.16	0.596
57.24	0.894
76.32	1.192
104.94	1.638
109.9	2.575
153.86	3.605
208.81	4.893
252.77	5.923
307.72	7.21
351.68	8.24
	4.71 9.42 38.16 57.24 76.32 104.94 109.9 153.86 208.81 252.77 307.72

	Metric /	S.I.
CARTRIDE	FILTER AREA NO	CAKE CAPACITY ME
V-12-3	0.44	0.0021
V-12-6	0.88	0.0042
V-17-12	3.55	0.0169
V-17-18	5.32	0.0253
V-17-24	7.09	0.0338
V-17-33	9.75	0.0464
V-32-10	10.21	0.0729
V-32-14	14.29	0.1021
V-32-19	19.40	0.1386
V-32-23	23.48	0.1677
V-32-28	28.59	0.2042
V-32-32	32.67	0.2333

	τ	S.		
VR	CARTRING	FILTER AREA C	CAKE CAPACITY FT3	
	VR-12-3	4.71	0.073	
	VR-12-6	9.42	0.147	
	VR-17-12	38.16	0.596	
	VR-17-18	57.24	0.894	
	VR-17-24	76.32	1.192	
	VR-17-33	104.94	1.638	
	VR-32-10	109.9	2.575	
	VR-32-14	153.86	3.605	
	VR-32-19	208.81	4.893	
	VR-32-23	252.77	5.923	

307.72

351.68

7.21

8.24

VR-32-28

VR-32-32

	Metric S.I.					
CARTRIDGE	FILTER AREA M2	CAKE CAPACITY M3				
VR-12-3	0.44	0.0021				
VR-12-6	0.88	0.0042				
VR-17-12	3.55	0.0169				
VR-17-18	5.32	0.0253				
VR-17-24	7.09	0.0338				
VR-17-33	9.75	0.0464				
VR-32-10	10.21	0.0729				
VR-32-14	14.29	0.1021				
VR-32-19	19.40	0.1386				
VR-32-23	23.48	0.1677				
VR-32-28	28.59	0.2042				
VR-32-32	32.67	0.2333				

## **Horizontal Plate Filter**

Request for quote- definitions and additional information.

## Filter Type-

<u>Standard Horizontal Plate Filter</u>- One of the most universally accepted industrial liquid filtration solutions in the world. Uniform flow, compact, no moving parts and simple design.

<u>Reverse Flow Filter</u>- The Sparkler Reverse Flow Filter combines the proven ability of the Standard Horizontal Plate Filter with the benefit of easy maintenance due to its reverse flow design.

<u>VR Dual Disc Filter</u>- The Sparkler VR Dual Disc Filter is designed for processes which require the removal of all traces of solids. Generally used in applications where solids are under .1%.

<u>V Dual Disc Filter</u>- The Sparkler V Dual Disc Filter is similar in design to the VR type but generally designed for cloth and wire media using a pre-coat. All plates are V shaped, allowing direct pathway to the filter media.

<u>Wash-Off Filter</u>- Sparkler Wash-Off Filters offer cake stability, plus low consumable-cost, less labor, fast cleaning, and savings in materials for real filtration economy with no sacrifice in quality. About 1/3 of the cleaning time of traditional filters and generally designed for cloth or wire filter media.

**Cartridge Description-** \*some aspects may vary based on precise model

XS (Extra Shallow): .325-.55" solids loading space between filter plates. Cartridges consist of filter plates, bottom ring or Scavenger Plate and top ring.\*

S (Shallow): ¾-1" solids loading space between filter plates. Cartridges consist of filter plates, bottom ring or Scavenger Plate and top ring.\*

D (Deep): 1 ½-2" solids loading space between filter plates. Cartridges consist of filter plates, bottom ring or Scavenger Plate, one shallow plate next to the Scavenger and top ring.\*

**Wetted Material-** Portion of the filter that comes into contact with the liquid being filtered. Example: inside of filter tank, filter cartridge.

**Non-Wetted Material-** Portion of the filter that is not intended to come into contact with the liquid being filtered. Example: outside of filter tank.

**Scavenger Plate**- A Scavenger Plate minimizes unfiltered product in applications where it is essential to recover as much filtrate as possible. Unnecessary on Reverse Flow Filters.

Jacket- Jacket will extend over the tank section only. Jackets are primarily used to regulate temperature.

**Cover Mechanism**- Standard cover mechanism varies depending on the size of the filter. Alternative designs can be furnished if requested. Example: Handles are standard on 14" and 18" filters while a hand wheel and davit arm are standard on 33" and 44" filters.

**Differential Pressure**- Pressure drop across filter plates. Standard drop is 50 PSIG. Higher pressure drops can be furnished on request.

**Filter Mounting-** Standard mounting includes three pipe legs with floor flanges. Alternative designs can be furnished if requested.

**Required Micron Retention-** What micron retention does your application require? This will help us determine what type of filter media would be best for your particular application.

**Spare Cartridge-** In some applications, the time that it takes to clean the cartridge causes lost production. Many customers prefer a second cartridge for their filter. Having a spare cartridge allows you to quickly replace the cartridge and reduce downtime.

Spare Bottom Equipment- Reduces cleaning time, particularly for the D (Deep) cartridge type.

**Sight Glass Port-** A sight glass port can be used to view the inside of the filter while in operation. Often times, two sight glass ports are requested; one as a light source and the other to use as a view port to monitor operation.

## Standard Ports and Sizes

PORT ID	8"	14"	18"	18" Rubber Lined	33" Standard	33" Reverse Flow	33" Rubber Lined	44"	44" Rubber Lined
Inlet	3/8" MNPT Common to Drain	3/4" MNPT	1 1/2" MNPT	1 1/2" 150# Flg'd	2" MNTP	2 1/2" 150# Flg'd	2 1/2" 150# Flg'd	6" 150# Flg'd	6" 150# Flg'd
Outlet	1/2" MNPT	1 1/2" FNPT	1 1/2" FNPT	1 1/2" 150# Flg'd	2 1/2" FNTP	2 1/2" 150# Flg'd Common to Drain	2 1/2" 150# Flg'd	6" 150# Flg'd	6" 150# Flg'd
Drain	3/8" MNPT Common to Inlet	3/4" MNPT	3/4" MNPT *	1" 150# Flg'd	2" MNTP	2 1/2" 150# Flg'd Common to Outlet	2 1/2" 150# Flg'd	6" 150# Flg'd	6" 150# Flg'd
Air Vent	1/4" MNPT	1/2" MNPT	1/2" MNPT	1" 150# Flg'd Common to Gauge Connection	1/2" MNTP	1/2" MNTP	1 1/2" Flg'd Common to Gauge Connection	2" 150# Flg'd Common to Gauge Connection	2" 150# Flg'd Common to Gauge Connection
Scavenger	3/8" MNPT	1/2" MNPT	1/2" MNPT	N/A	3/4" MNPT	N/A	3/4" MNPT	N/A	N/A
Jacket Inlet	3/4" FNPT	3/4" FNMT	3/4" FNPT	3/4" FNPT	1" FNPT	1" FNPT	1" FNPT	1 1/2" FNPT	1 1/2" FNPT
Jacket Outlet	1/2" FNPT	3/4" FNPT	3/4" FNPT	3/4" FNPT	1" FNPT	1" FNPT	1" FNPT	1 1/2" FNPT	1 1/2" FNPT
Gauge Connection	1/4" FNPT	1/4" FNPT	1/4" FNPT	1" 150# Flg'd Common to Air Vent	1/4"FNPT	1/4" FNPT	1 1/2" Flg'd Common to Air Vent	2" 150# Flg'd Common to Air Vent	2" 150# Flg'd Common to Air Vent

MNPT- Male National Pipe Thread

\*Drain 1 1/2" MNPT on 18" Wash-Off and 18" Non-Scavenger

FNPT- Female National Pipe Thread

Common to- This port serves dual functions

