



SERFILCO[®], LTD.

Pumps | Filters | Systems | Purification Media | Accessories

www.serfilco.com 800-323-5431

VOL
28

Your Guide to Liquid Processing and Purification for ...

50 years



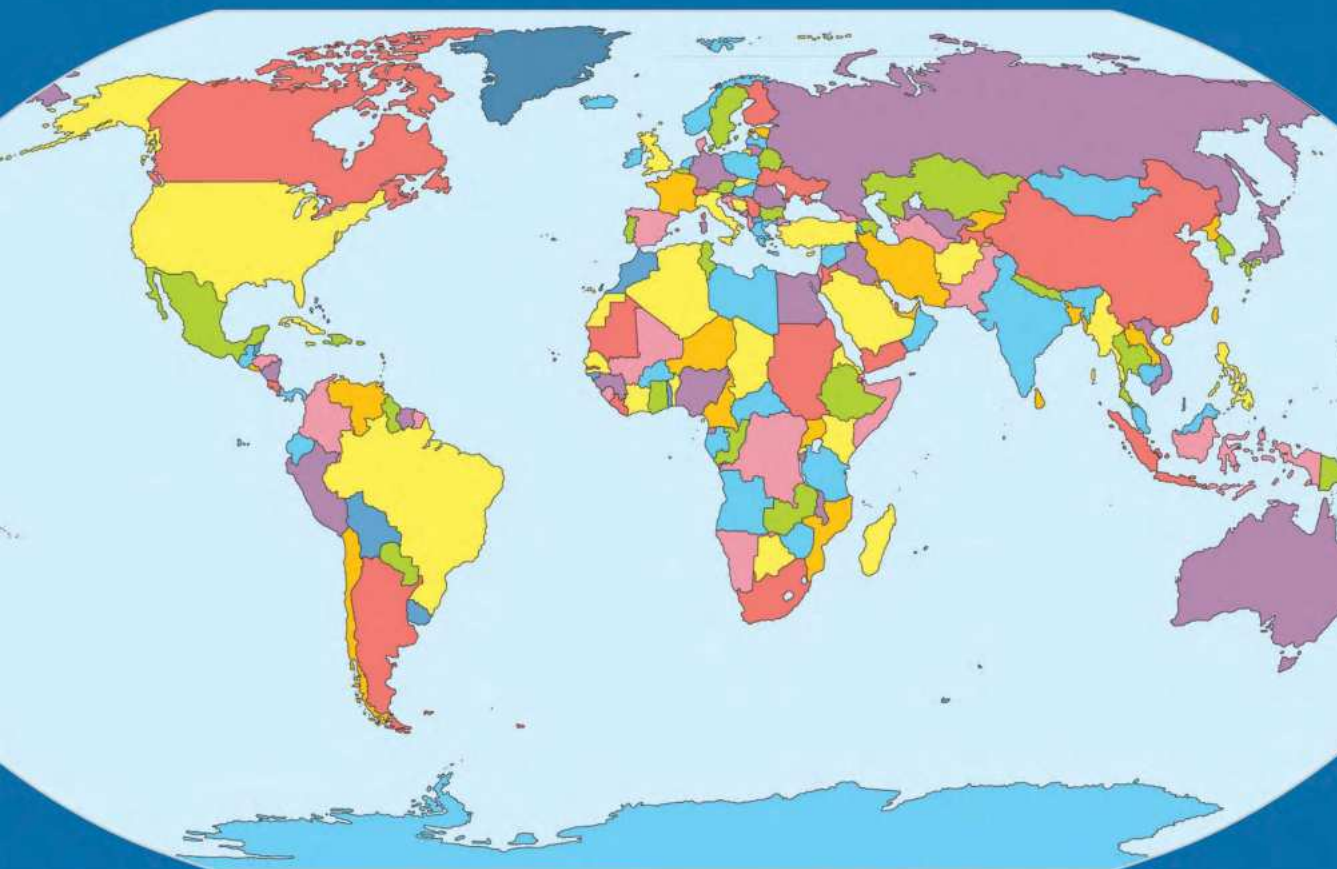


SERFILCO®

SERVING INDUSTRY WORLDWIDE

"SIR FILCO"
Protector of Industry &
Environment

for over 50 years



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AIR DIAPHRAGM PUMPS	134-141	
Air operated double diaphragm pumps with a choice of metallic or all plastic solution contact to handle any product that pours.		
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FILTER CHAMBERS	146-192	
In-line housings constructed of plastic, rubber lined steel, stainless steel or carbon steel. Operating pressures to 300 PSI. ASME code design and custom models available. Designed for depth wound, high solids loading cartridges with capacities from 1 to 2600 cartridges or for use with discs, sleeves or bags. Chambers can be arranged in parallel to achieve higher capacities or in series for		
STEP DOWN FILTRATION. An application may require coarse screening followed by multi-media (sand) filtration, followed by a cartridge filter and finally ultra filtration or reverse osmosis. Using this approach flow rates from laboratory pilot requirements to thousands of gallons per minute can be achieved.		



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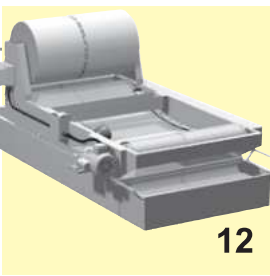
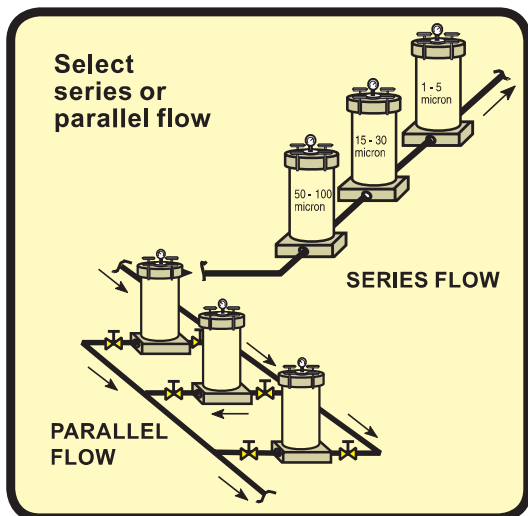
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Consist of a filter chamber or chambers with a horizontal pump mounted on a common base. Systems can be all plastic for non-metallic solution contact or all metallic and range in size from a single cartridge system to multi cartridge systems with flow rates to 21,000 GPH. Systems are available for use with cartridges, discs, sleeves or bags.		 9
FILTRATION SYSTEMS (In - Tank)	242-254	
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AUTOMATIC PERMANENT MEDIA FILTRATION SYSTEMS	255-258	
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FILTER PRESS AND GRAVITY FILTER	259-269	
Automatic indexing of filter media permits uninterrupted flow of solution from process to filter thus providing efficient solids-liquid separation. Recommended for machine tool oils and coolants, waste water, cooling towers, fume scrubbers and other industrial process applications. 1.5 to 113 sq. ft. filter area. FILTER PRESSES – For dewatering wastes and municipal sludge, reclamation of solids, clarification and recovery of chemicals and costly solutions. Recessed polypropylene plates with hydraulic closure. Standard models to 50 cu. ft. with larger sizes available upon request.		 12



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Designed to remove contaminants from hydraulic, lubricating, turbine and screw machine oils. They can also be used for maintaining high clarity in hydraulic oils used for injection molding and die cast machines. Stationary and portable models available. Optional coalescing chambers are available for separation and removal of water.		
PURIFICATION SYSTEMS & CHAMBERS	273-287	
CARBON PURIFICATION – All plastic systems and chambers for organics removal from rinse waters, cleaners, plating solutions and waste streams.		
ION EXCHANGE – Resin systems and chambers for water purification, precious metal recovery, and heavy metal removal.		
LIQUID/LIQUID SEPARATION – Coalescing systems for removal of oils from aqueous solutions or removal of water from hydraulic and other oil base fluids.		
FILTRATION MEDIA	288-315	
REPLACEMENT MEDIA – We stock depth wound filter cartridges in 4" to 40" lengths and from sub-micron to 200 micron retention. We offer melt blown, pleated, membrane and stainless steel cartridges for most filter vessels; we offer both bulk granular carbon and a variety of carbon filter cartridges. Additionally we have bags, discs, industrial cartridges and a wide variety of roll-media.		
AGITATION AND MIXERS	316-323	
SER-DUCTOR AGITATION – provides solution MIXING and agitation with a centrifugal pump and a nozzle/sparger system. Agitation is five times the pump output. Improves plating and other process efficiencies without introducing foreign matter; reduces airborne emissions and saves money.		
MIXERS – Direct drive and gear drive mixers for process mixing and waste treatment applications.		



Suitable for:
SOLID / LIQUID SEPARATION,
CARBON ADSORPTION and
ION EXCHANGE RESIN

- **Low, medium and high flow rates**
- **Recirculation or in-line**
Parallel or series flow
- **Uninterrupted flow with low pressure drop**
- **Choice of media**
Depth or pleated cartridges,
cleanable sleeves,
bags or discs,
carbon or resin

SERFILCO recognizes the fact that not every liquid clarification requirement can be met with a pre-packaged filtration system. That is why we offer a range of standard, off-the-shelf filter chambers and a broad selection of filter media, such as bags, discs, depth and pleated cartridges, cleanable sleeves and carbon or resin purification to give you the flexibility you need to meet your clarification / purification requirements. By using different combinations of chambers and media, configured for recirculatory or in-line filtration, you can achieve the level of clarification / purification desired.

The selection of the most effective combination of elements for particle / liquid separation or purification depends upon a number of factors, including the size and nature of the particles to be removed. Determination of particle size is necessary to properly select the micron retention level of the filter media to be used. Through pilot testing or experimentation, this level can be determined. Often, the filtration efficiency of existing equipment can be improved by adding a filter chamber with coarse media upstream of the existing chamber to remove a large portion of the contaminants and thereby extend the life of the denser, more costly media in the downstream filter chamber.

The nature of the particles is also a key consideration. Are the particles "slimy", blinding off the media at the surface or will they remain porous and sand-like and develop a thick cake which, in turn, enhances the filtration / separation efficiency by removing finer and finer particles as the cake develops? The answers to these questions will lead to the choice of filter media.

The common perception is that bag filters continue to retain contaminant until they are filled to capacity and puffed up like a vacuum cleaner bag. This is generally not the reality of bag filtration. Instead, once the pores on the surface of the bag plug with fines, the bag needs to be cleaned for re-use. As a result, such a filtration system becomes very maintenance intensive.

On the other hand, systems which use depth type filter media require very little maintenance because depth type filters provide a high flow rate over more than 80% of their life before the flow rate is reduced to a level where cartridge maintenance is necessary.

The following pages identify some of the filter chambers and filter media available from SERFILCO. We have included a number of schematics to help you understand the variety of approaches that can be used to meet your clarification / purification needs.



FILTER CHAMBER SIZING & ITS RELATIONSHIP TO SOLUTION CLARITY

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TP-119_A

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IN ADDITION TO THE QUESTION OF IN-LINE OR RECIRCULATORY INSTALLATION OF A FILTER FOR YOUR SOLUTION, CHAMBER SIZING CAN MAKE A SIGNIFICANT CONTRIBUTION TO THE ECONOMICS OF THE FILTRATION PROCESS.

Chamber Sizing / Oversizing

Select a filter chamber for its solids holding capacity. The size and amount of dirt in the solution will determine the number of cartridges or surface area necessary, with one 10" (25 cm) cartridge (3.5 square feet), or 2/3 sq. ft. of surface for each 50 gallons (200 liters) of solution used as a rule of thumb. The flow rate should be 2 - 30 or more tank turnovers per hour on recirculatory filter systems, depending on the application and the clarity desired. Coarse media and high flows are desirable for high dirt load applications. Increasing the number of cartridges reduces solution flow per cartridge, improves efficiency and reduces cartridge consumption. Filter cartridge solids holding capacity is increased if flow rate (velocity) through each cartridge is decreased. Therefore, reduced flow rate or

velocity through the cartridge reduces the number of filter cartridges consumed by a given dirt load. Thus, when 2 cartridges per 50 gallons (200 L) are employed, cartridge consumption is reduced by 29% and when 4 cartridges are employed, cartridge consumption is reduced by 50 %.

Oversizing by a factor of 4 doubles the solids holding capacity per cartridge. Since the chamber holds 4 times the number of cartridges, the filter is opened only 1/8 as often, reducing the labor by 87-1/2% for cartridge changing. Increasing the size of your filter chamber is particularly worthwhile since most filter chambers are offered in larger sizes at only a slight increase in cost. Oversizing also results in a savings in downtime and prevents solution loss.

ECONOMICS OF FILTER CHAMBER OVERSIZING

Oversizing Factor	Number of Cartridges in Chamber*	Dirt Holding Factors per Cartridge	Time Between Cartridge Change	Cartridge Consumption/ Cost Reduced by:	Labor Cost Downtime/ Solution Loss Reduced by:
1	C	D	T	0	0
2	2xC	1.4D	3T	29%	67%
3	3xC	1.7D	5T	42%	80%
4	4xC	2D	8T	50%	87½%



For example...

using a	instead of a	reduces cartridge consumption by
12 cartridge filter	9 cartridge filter	13%
9 "	6 "	18%
6 "	3 "	29%
9 "	3 "	42%
12 "	3 "	50%
15 "	3 "	55%

* Based on average sizing
[i.e. 1 - 10" (25cm)
cartridge per 50 gallons (200 L)]



IN-LINE PLASTIC FILTER CHAMBERS

C-101_L

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

FOR FILTRATION & PURIFICATION OF WATER OR CHEMICALS

- Choice of construction
Polypropylene, Nylon, Clear S.A.N.
Buna N "O"-ring standard
- Operating Pressure to 125 psi (8.5 bar)
- For Temperatures to 165°F (71°C)
- Accepts wide range of cartridge media:
Pleated, String-wound, Carbon, Melt-Blown

These sturdy and quality built two piece filter housings are designed to meet the need for reliable, long lasting and convenient use. Pipeline mounted cap, and body nested Buna N "O"-ring provide ease of installation and quick-change cartridge replacement. Housings pass Water Conditioning Federation's recommended standards for hydrostatic leak and burst pressures. For complete specifications, refer to table below.

All chambers accept most standard filter cartridges: wound, pleated, melt blown, carbon. Order cartridges separately.*

- GPO** - Models constructed of glass-reinforced polypropylene.
- GNO** - Models constructed of glass-reinforced nylon and are for high-temperature service.
- GSO** - Models constructed of glass-reinforced polypropylene cover with a clear styrene acryl nitrile (S.A.N.) shell
- 10-3/4** - models accept 9-3/4" to 10" wound cartridge or 9-3/4" pleated, melt-blown, or carbon cartridge.
- 10-1** - models accept 9-3/4" to 10" cartridge up to 4-5/18" diameter.
- 20-3/4** - models accept 19-3/4" to 20" wound or 19-3/4" pleated, melt-blown, or carbon cartridge.
- 20-1-1/2** - models accept all 20" cartridges up to 4" diameter.

MODEL	CONN.	MAX PRESSURE		MAX TEMP		VENT BUTTON	DRAIN PLUG	DIMENSIONS				WEIGHT		PRICE CODE NO.
	NPT	PSI	BAR	°F	°C			WIDTH		LENGTH		Lbs.	kg.	
								in.	mm	in.	mm			
GPO10-3/4	3/4"	125	8.5	125	52	INCL	INCL	5-1/4	133	12-1/8	307	3-1/4	1.47	78-0930 A
GPO20-3/4	3/4"	125	8.5	125	52	INCL	INCL	5-1/4	133	22-1/2	571	4-1/4	1.93	78-0931 A
GPO10-1	1"	100	6.5	100	38	INCL	INCL	7-1/4	184	13	330	4-1/2	2.04	78-1157 A
GNO10-3/4	3/4"	125	8.5	165	71	N.A.	N.A.	5-1/4	133	12-1/8	307	4-1/4	1.93	78-0932
GSO10-3/4	3/4"	125	8.5	125	52	INCL	INCL	5-1/4	133	12-3/4	323	2-1/2	1.13	78-0929 A
GSO20-1-1/2	1"or 1-1/2"	90	8.5	100	52	INCL	N.A.	7-1/2	191	22-1/2	570	7	3.18	78-0922

OPTIONAL	PRICE CODE NO.
Wall mounting bracket for 3/4" NPT models	77-0882
Wall mounting bracket for 1" NPT Models	77-0883
Viton "O"-ring at vent	22-0691
Viton "O"-ring at cover, 3/4" models only	22-0585

ECTFE vent plug with EPDM "O"-ring (to replace button in cover). For non-metal. solution contact	ADD TO PCN
	B
Valve-In-Cover-For GSO & GPO-3/4 models only. Plug valve built into cover isolates chamber from inlet and back flow when replacing cartridge.	C

*See bulletin M-109 for filter media.

Specifications subject to change without

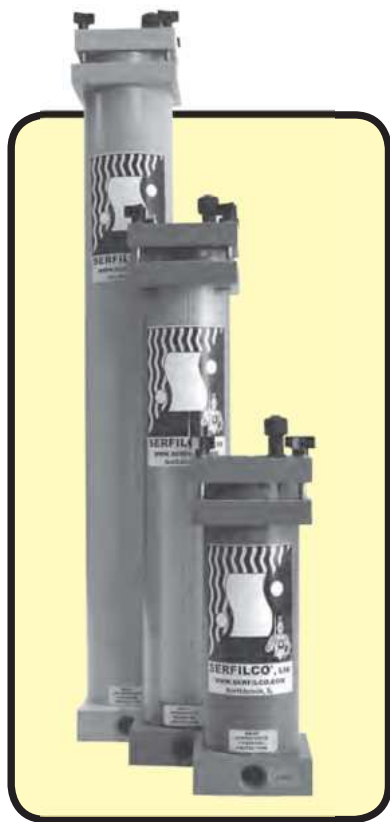


SERIES 'L' PLASTIC FILTER CHAMBERS

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C-105_U

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FOR FILTRATION & PURIFICATION OF PROCESS SOLUTIONS:

**ELECTROPLATING / CARBON PURIFICATION
WATER TREATMENT / CLEANING
PHOTOGRAPHIC / PHARMACEUTICAL
CHEMICAL / PETROCHEMICAL / BEVERAGE**

FEATURES:

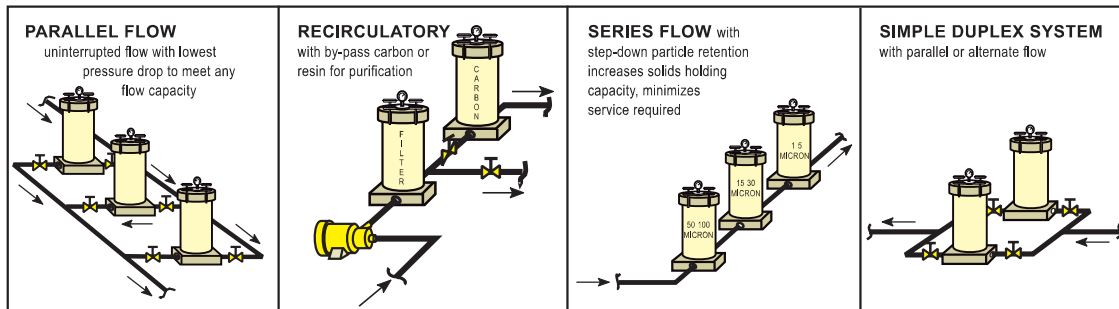
- **Non-metallic solution contact**
CPVC, polypropylene, PVC and pure PVDF construction
(See a chemical resistance chart)
- **Heavy duty construction**
 - Pressure ratings to 160 PSI (1103 KPa)
(See Pressure/temperature table on page 3)
 - Clamp ring closure or optional external tie rod
- **Variety of sizes**
From 4", 6" and 1 to 4 - 10" cartridge capacity
(or equivalent 20", 30", or 40" lengths.)
- **Port size ¾" NPT**
Metric and flange available
- **"O"-ring seal at cover & vent valve**
EPDM (standard), Viton® (optional)
- **Easy servicing, no tools required**

For use with a variety of filter media (order separately)

- Depth wound, pleated, carbon or membrane cartridges
- Positive cartridge seal for -
Standard - DOE . . . Double Open End
Optional - SOE . . . Single Open End for 222 "O"-ring

FLOW RATE

Flow rates up to 34 GPM depending upon style and length of filter cartridge, solids content, viscosity, pressure drop, and degree of clarity desired. Pressure ratings of filter chambers depend upon the temperature of solutions being filtered. See Pressure/temperature table.



**SPECIFICATIONS AND DIMENSIONS****Series 'L' Plastic Filter Chambers include:**

- Pressure ratings to 160 PSI
- Non - metallic solution contact
- EPDM "O" - ring standard, Viton® optional
- Clamp ring cover closure standard, tie rods optional
- Integral shell-base assembly
- Vent valve or vent plug

PL CPVC Base & Cover, translucent PVC Shell

PVC shell sealed to base, EPDM "O" - ring at cover, polypropylene vent valve. Cross post or CPVC tube guide**. For DOE Cartridges.

CL CPVC Base & Cover, CPVC Shell

CPVC shell sealed to base, EPDM "O" - ring at cover, polypropylene vent valve. Cross post or CPVC tube guide**. For DOE Cartridges.

PPL Polypropylene Base, Cover and Shell

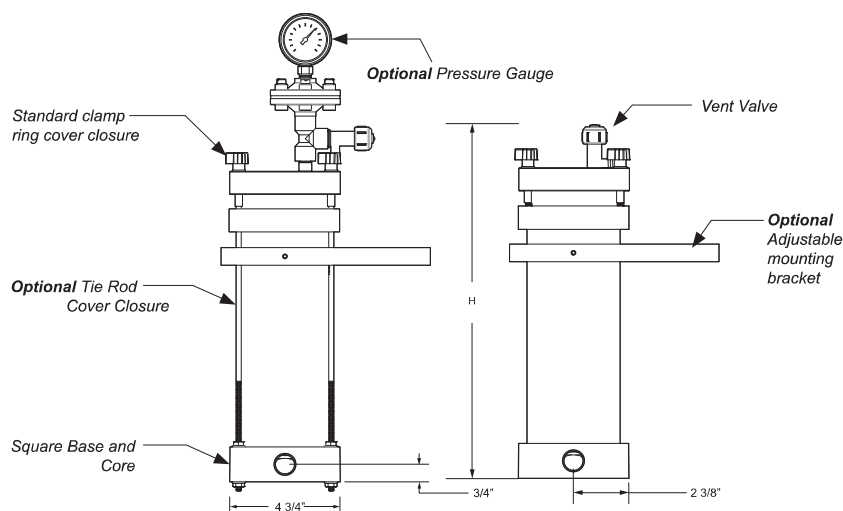
Polypropylene* shell sealed to base, EPDM "O" - ring at cover, polypropylene vent valve. Polypropylene cross post or tube guide**. For DOE Cartridges.

*glass reinforced polypropylene

KL PVDF Base, Cover and Shell

PVDF shell sealed to base, EPDM "O" - ring at cover and at PVDF vent plug. PVDF cross post or PVDF tube guide**. For DOE Cartridges.

** Tube guide on size 10" and smaller chambers; cross post on size 20" and larger chambers.



DIMENSIONS										
CHAMBER			CARTRIDGES - Max dia. 3"							
SIZE	HEIGHT in.	SHIPPING WT. lbs.	SIZE & NUMBER						SOLIDS AREA	
			4"	6"	10"	20"	30"	40"		
4	7	3	1	-	-	-	-	-	1.4	
6	9	4	-	1	-	-	-	-	2.1	
10	13	5	-	-	1	-	-	-	3.5	
20	23	7	-	-	2	1	-	-	7.0	
30	33	9	-	-	3	-	1	-	10.5	
40	43	11	-	-	4	2	-	1	14.0	



SERIES 'L' PLASTIC FILTER CHAMBERS

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PRESSURE/TEMPERATURE

FLOW RATE vs. PRESS. DIFF. ¹		
CONN.	@ 5 PSI	@ 15 PSI
3/4"	12 GPM 45 LPM	24 GPM 91 LPM

¹ With 15 micron depth wound cartridges.

MAX. PSI PRESSURE AT OPERATING TEMP. WITH TIE ROD COVER CLOSURE ²			
TEMP	CL	KL	PPL & PCL
70°F	160	130	100
100°F	130	105	85
120°F	105	90	75
140°F	80	75	65
170°F	50	60	25
200°F	30	45	—

² With clamp ring cover closure 40 PSI max.

TO ORDER, use Price Code Number

SERIES 'L' CHAMBERS			
DESCRIPTION		MODEL NUMBER w/3/4" NPT CONN.	PRICE CODE NO.
PCL	CPVC base and cover, translucent PVC shell with shell sealed to base	CPCL4 3/4	78-1266AC
		CPCL6 3/4	78-1267AC
		CPCL10 3/4	78-1268AC
		CPCL20 3/4	78-1269AC
		CPCL30 3/4	78-1270AC
		CPCL40 3/4	78-1271AC
CL	CPVC base, cover, and shell with shell sealed to base	CCL4 3/4	78-0238AC
		CCL6 3/4	78-0239AC
		CCL10 3/4	78-0240AC
		CCL20 3/4	78-0241AC
		CCL30 3/4	78-0242AC
		CCL40 3/4	78-0243AC
PPL	Polypropylene base, cover, and shell with shell sealed to base	CPPL4 3/4	78-0285AC
		CPPL6 3/4	78-0286AC
		CPPL10 3/4	78-0287AC
		CPPL20 3/4	78-0288AC
		CPPL30 3/4	78-0289AC
		CPPL40 3/4	78-0290AC
KL	PVDF base, cover, and shell with shell sealed to base	CKL4 3/4	78-0465AC
		CKL6 3/4	78-0466AC
		CKL10 3/4	78-0467AC
		CKL20 3/4	78-0468AC
		CKL30 3/4	78-0469AC



OPTIONAL EQUIPMENT

TO ORDER	DESCRIPTION	ADD to MODEL NO.	ADD to PRICE CODE NO.
Viton elastomers	Change L to V in Model Number.		-V
Mounting bracket	Adjustable: 9" x 5" PVC		44-3200-1
Cover plate	Standard on models with tie rod cover closure. (Recommended above 120°F at 75% of max. pressure)		99-1099-1
222 °O-ring cartridge seat	For SOE (single open and flat top) cartridge. Cross post not furnished.	-2	-2
Pressure gauge 0-60 PSI	Mounted in cover with EPDM diaphragm & vent valve. Polypropylene	-G4A	99-1399
	CPVC	-G4A	99-0733
	Mounted in cover with Viton diaphragm & vent plug PVDF	-G4	99-1222
Tie rod cover closure	Drop first C from Model Number and C from Price Code Number		



SERIES 'S' PLASTIC CARTRIDGE FILTER CHAMBERS

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C-106_U

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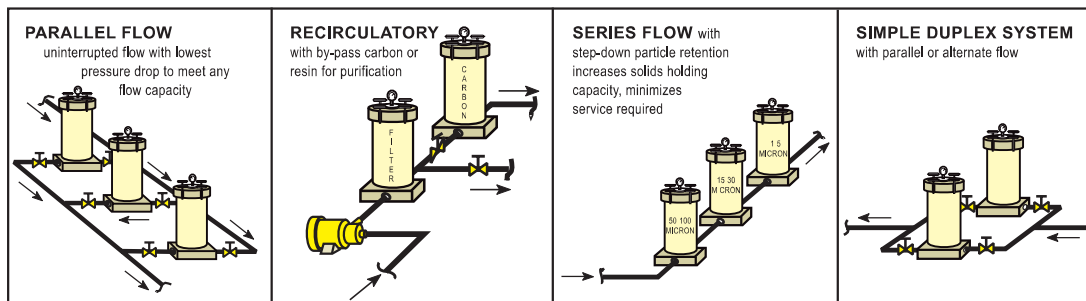
- **Non-metallic solution contact**
CPVC, polypropylene, PVC and pure PVDF construction
(See a chemical resistance chart)
- **Heavy duty construction**
 - Pressure ratings to 135 PSI (931 KPa)
(See Pressure/temperature table on next page)
 - Swing bolt cover closure with tee handle
- **Variety of sizes**
From 3 to 12 - 10" cartridge capacity
(or equivalent 20", 30", or 40" lengths.)
- **Port size 1" NPT**
Metric and flange available
- **"O"-ring seal at cover & vent valve**
EPDM (standard), Viton® (optional)
- **Easy servicing, no tools required**

For use with a variety of filter media (order separately)

- Depth wound, pleated, carbon or membrane cartridges
- Positive cartridge seal for -
Standard - DOE . . . Double Open End
Optional - SOE . . . Single Open End for 222 "O"-ring

FLOW RATE

Flow rates up to 68 GPM depending upon style and length of filter cartridge, solids content, viscosity, pressure drop, and degree of clarity desired. Pressure ratings of filter chambers depend upon the temperature of solutions being filtered. See Pressure/temperature table on next page.



**SPECIFICATIONS****Series 'S' Plastic Filter Chambers include:**

- Pressure ratings to 135 PSI
- Non-metallic solution contact
- EPDM "O" - ring standard, Viton® Optional
- Swing bolt cover closure w/ SS swing bolts & bracket
- Integral shell-base assembly
- Inlet to outlet at 90° or 180° aspect
- 0 - 60 PSI pressure with gauge guard and vent valve

PL CPVC Base & Cover, PVC Shell

PVC shell sealed to base, EPDM "O" - ring at cover. Polypropylene vent valve, cross posts and springs. For DOE Cartridges.

CL CPVC Base, Cover, and Shell

CPVC shell sealed to base, EPDM "O" - ring at cover. Polypropylene vent valve, cross posts and springs. For DOE Cartridges.

PPL Polypropylene Base, Cover and Shell

Polypropylene* shell sealed to base, EPDM "O" - ring at cover. Polypropylene vent valve, cross posts and springs. For DOE Cartridges.

*glass reinforced polypropylene

KL PVDF Base, Cover and Shell

PVDF shell sealed to base, EPDM "O" - ring at cover. PVDF vent valve, cartridge posts and internals. For DOE Cartridges.

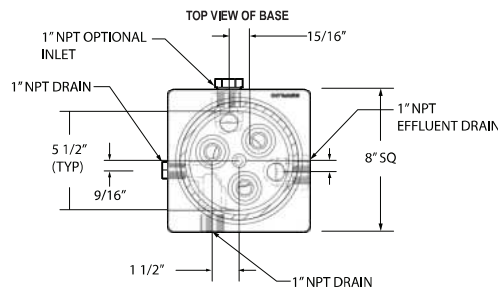
PRESSURE/TEMPERATURE

FLOW RATE vs. PRESS. DIFF. ¹		
CONN.	@ 5 PSI	@ 15 PSI
1"	30 GPM 114 LPM	58 GPM 220 LPM

¹ With 15 micron depth wound cartridges.

MAX. PSI PRESSURE AT OPERATING TEMP.					
TEMP.	PL		CL		KL PPL
	*with cover plate	without cover plate	*with cover plate	without cover plate	
70°F	135	100	135	100	120 50
100°F	100	85	110	85	95 45
120°F	65	55	90	65	80 40
140°F	35	30	70	50	70 35
170°F	—	—	45	30	55 15
200°F	—	—	25	20	45 —

* See Optional for cover reinforcing plate.

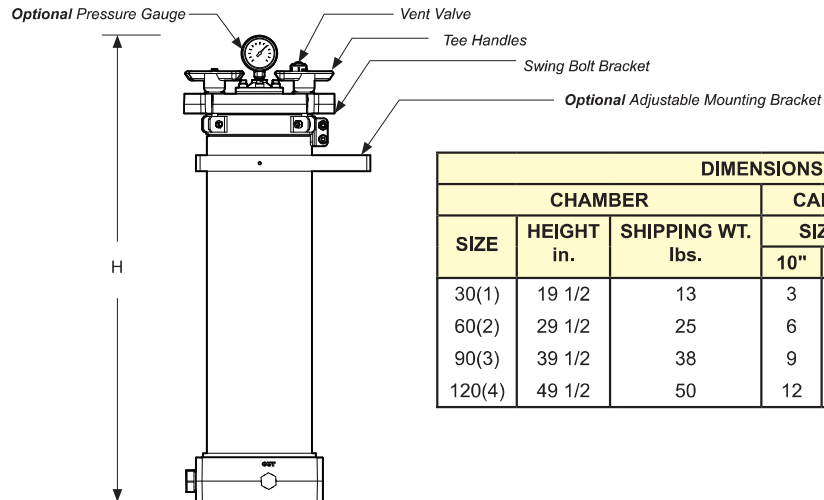
**DIMENSIONS**



SERIES 'S' PLASTIC CARTRIDGE FILTER CHAMBERS

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DIMENSIONS							
CHAMBER			CARTRIDGES - Max dia. 2.7"				
SIZE	HEIGHT in.	SHIPPING WT. lbs.	SIZE & NUMBER				SOLIDS AREA
			10"	20"	30"	40"	
30(1)	19 1/2	13	3	-	-	-	10.5
60(2)	29 1/2	25	6	3	-	-	21.0
90(3)	39 1/2	38	9	-	3	-	31.5
120(4)	49 1/2	50	12	6	-	3	42.0

TO ORDER, use Price Code Number

DESCRIPTION		MODEL NUMBER w/ 3/4 NPT CONN.	PRICE CODE NO.
PL	CPVC base and cover, PVC shell sealed to base	PL30(1)S-1-G3	78-1132
		PL60(2)S-1-G3	78-1133
		PL90(3)S-1-G3	78-1134
		PL120(4)S-1-G3	78-1135
CL	CPVC base, cover, and shell with shell sealed to base	CL30(1)S-1-G3	78-0250
		CL60(2)S-1-G3	78-0251
		CL90(3)S-1-G3	78-0252
		CL120(4)S-1-G3	78-0253
KL	PVDF base, cover, and shell with shell sealed to base	KL30(1)S-1-G3	78-0450 A
		KL60(2)S-1-G3	78-0451 A
		KL90(3)S-1-G3	78-0452 A
		KL120(4)S-1-G3	78-0453 A
PPL	Polypropylene base, cover, and shell with shell sealed to base	PPL30(1)S-1-G3	78-1040 A
		PPL60(2)S-1-G3	78-1041 A
		PPL90(3)S-1-G3	78-1042 A
		PPL120(4)S-1-G3	78-1043 A

OPTIONAL EQUIPMENT

TO ORDER	DESCRIPTION	ADD to MODEL NO.	ADD to PRICE CODE NO.
Viton elastomers	Viton gaskets gauge diaphragm	Change L to V in Model Number.	-V
Mounting bracket	PVC 11" x 8" x 1" (279 x 203 x 25mm)	Use prefix S	88-0556-1
Reinforcing plate	For PL, CL models.	-	88-0597-1
222 "O"-ring cartridge seat	For SOE (single open end flat top) cartridges. (2.7" max dia.) Top seats, springs, cross posts not furnished.	-2	-2
PVDF flange connections for KL models	1" (25mm) (Specify 90° or 180° orientation)	-F	-F



SERIES 'G' PLASTIC CARTRIDGE FILTER CHAMBERS

155

C-107_W

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



FLOW RATE

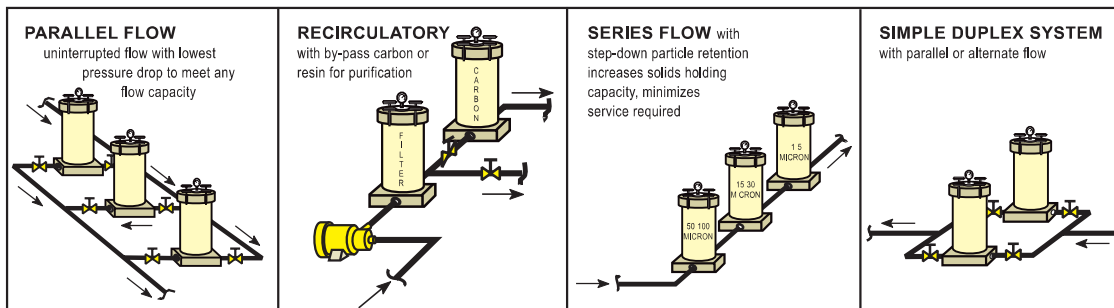
Flow rates to 125 GPM depending upon size of chamber, style of filter cartridge, solids content, viscosity, pressure drop and degree of clarity desired. Pressure ratings of filter chambers depend upon the temperature of solutions being filtered. See table.

**FOR : WATER TREATMENT / FOOD PROCESSING
CLEANING / PHOTOGRAPHIC
ELECTROPLATING / PHARMACEUTICAL
CHEMICAL / PETROCHEMICAL / BEVERAGE**

These filter chambers are designed for filtering process solutions where clarification will extend operating life and improve quality.

FEATURES:

- **Non-metallic solution contact**
CPVC, PVC or polypropylene construction
(See a chemical resistance chart)
EPDM elastomers standard, Viton® optional
- **Heavy duty construction**
 - Pressure ratings to 80 PSI (552 KPa)
 - Positive "O"-ring seal at base and cover
 - Cartridge guides with screw-on caps for positive cartridge seal
 - Stainless steel external hardware
 - 0-60 PSI pressure gauge with gauge guard and vent valve
- **Cartridge capacity**
From 12 to 60 - 10" cartridge capacity
(or equivalent 20", 30", or 40" lengths)
- **Easy service**
Swing bolt cover closure with tee handles – no tools required
- **Port size 1½" NPT**
BSP optional



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All chambers have cover swing bolts with tee handles, stainless steel swing bolt and hold down brackets; FRP top and bottom reinforcing plate, cartridge guides with screw-on cap, 0-60 PSI pressure

gauge with gauge guard, EPDM gaskets and drain plugs. All fasteners are stainless steel. For DOE cartridges.

TO ORDER, USE PRICE CODE NUMER

DESCRIPTION		CONN.	MODEL NUMBER	PRICE CODE NUMBER	NUMBER of 10" CARTS	SOLIDS*	SHIPPING WEIGHT lbs.
PL	CPVC base and cover, PVC shell, CPVC vent valve and internals.	1½" NPT	PL120SIO 1½-G3A	78-1901P	12	42	82
			PL240SIO 1½-G3A	78-1902P	24	84	89
			PL360SIO 1½-G3A	78-1903P	36	126	97
			PL480SIO 1½-G3A	78-1904P	48	168	104
			PL600SIO 1½-G3A	78-1905P	60	210	112
CL	CPVC base, cover, shell, vent valve and internals.	1½" NPT	CL120SIO 1½-G3A	78-1901C	12	42	82
			CL240SIO 1½-G3A	78-1902C	24	84	89
			CL360SIO 1½-G3A	78-1903C	36	126	97
			CL480SIO 1½-G3A	78-1904C	48	168	104
			CL600SIO 1½-G3A	78-1905C	60	210	112
PPL	Polypropylene base, cover and shell, CPVC vent valve and internals.	1½" NPT	PPL120SIO 1½-G3A	78-1901PP	12	42	82
			PPL240SIO 1½-G3A	78-1902PP	24	84	89
			PPL360SIO 1½-G3A	78-1903PP	36	126	97
			PPL480SIO 1½-G3A	78-1904PP	48	168	104
			PPL600SIO 1½-G3A	78-1905PP	60	210	112

* For each 10" length, the solids holding capacity is 3" sq ft of surface media of the same porosity

For use with a variety of filter media (order separately)

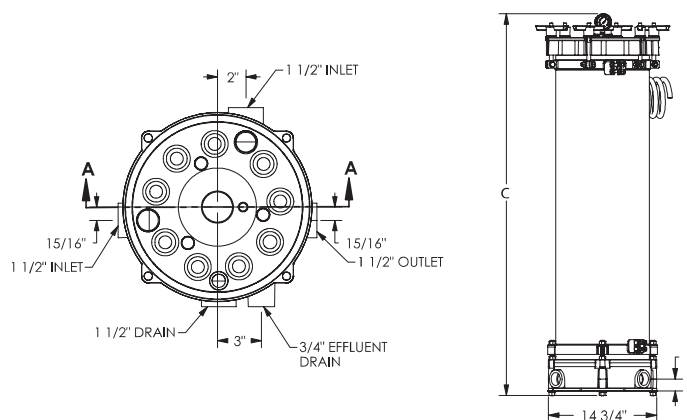
- Depth wound, pleated, carbon or membrane cartridges
- Positive cartridge seal for Double Open End (DOE)
Standard - DOE ... Double Open End
Optional - SOE ... Single Open End for 222 "O"-ring

OPTIONAL

TO ORDER	ADD TO MODEL NO.	ADD TO PRICE CODE NO.
Viton elastomers	change L to V	- V
1½" BSP connections**	- B	- B

** For flange or socket connection consult factory

TO ORDER	ADD TO MODEL NO.	ADD TO PRICE CODE NO.
222 "O"-ring seat for SOE (Single open end flat top) cartridge. Top seats, springs and cross posts not furnished.	-2	- 2

**DIMENSIONS**

CHAMBER MODEL	C HEIGHT in.	CARTRIDGES (Max. dia. 2-5/8") SIZE & NUMBER			
		10"	20"	30"	40"
120S-1½	21¼	12	—	—	—
240S-1½	31¼	24 or 12	—	—	—
360S-1½	41¼	36	— or 12	—	—
480S-1½	51¼	48 or 24	— or 12	—	—
600S-1½	61¼	60 or 12	+ 12	—	—

PRESSURE / TEMPERATURE

MAXIMUM PRESSURE AT OPERATING TEMPERATURE WITH TOP & BOTTOM REINFORCING PLATES			
TEMPERATURE	PSI ¹		
	PL	PPL	CL
70°F	80	75	80
100°F	75	60	75
120°F	40	50	70
140°F	25	40	55
170°F	—	15	35
200°F	—	—	30

FLOW RATE vs. PRESSURE DIFFERENTIAL ²		
MODEL	@ 5 PSI	@ 15 PSI
1½" 'G'	60 GPM 227 LPM	110 GPM 416 LPM

¹ Maximum differential pressure from inlet to outlet (across separator plate) is 40 PSI at 68° F.

² With 15 micron depth wound cartridges.





SERIES 'GC' PLASTIC CARTRIDGE FILTER CHAMBERS

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C-113_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

For: ACID / AQUEOUS / CHEMICAL / ELECTROPLATING / WASTE TREATMENT

These filter chambers are designed for filtering process solutions where clarification will extend operating life and improve quality.

FEATURES:

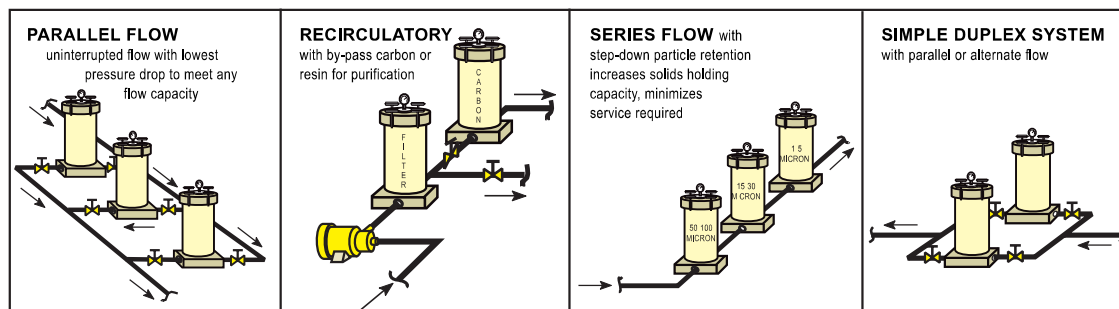
- **Non-metallic solution contact**
PVC or CPVC with Viton® or EPDM elastomers
(See a chemical resistance chart)
- **Heavy duty construction** – shell cemented to base – no leaks
- **High flow rate, low pressure drop**
2" connections
- **High capacity** –
12 - 20", 30", 40" or 50" filter cartridges
- **Easy to operate** – swing bolts with 'T'-handles, 60 psi gauge with guard assembly, air vent valve and drain port

BENEFITS:

- **Will not leak at base.** Shell and base cemented together
- **Long service life** – will not rust or corrode
- **Easy to install and operate**
- **Improve finished goods quality**
Eliminate scrap and rework

Series 'GC' chambers feature a precision CNC machined base and molded cover. The innovative base design has 2" inlet and outlet ports providing low pressure differential. The base includes $\frac{3}{4}$ " plugged drain ports for ease of maintenance. The shell is cemented to the machined base to eliminate leakage and warping. The cover includes a vent valve, 0-60 psi pressure gauge with guard assembly, and an FRP cover plate. The cover is secured with swing bolts and 'T'-handles (no tools are required to change

cartridges). The shell is 12" diameter and will hold 12 - 20", 30", 40" or 50"* D.O.E. (double open end) style cartridges. Internals included are CPVC cross posts and polypropylene cap springs to ensure proper cartridge location and eliminate solution by-pass. The base, shell and cover are PVC or CPVC for totally non-metallic solution contact. Elastomers are EPDM or Viton and all external hardware is stainless steel.



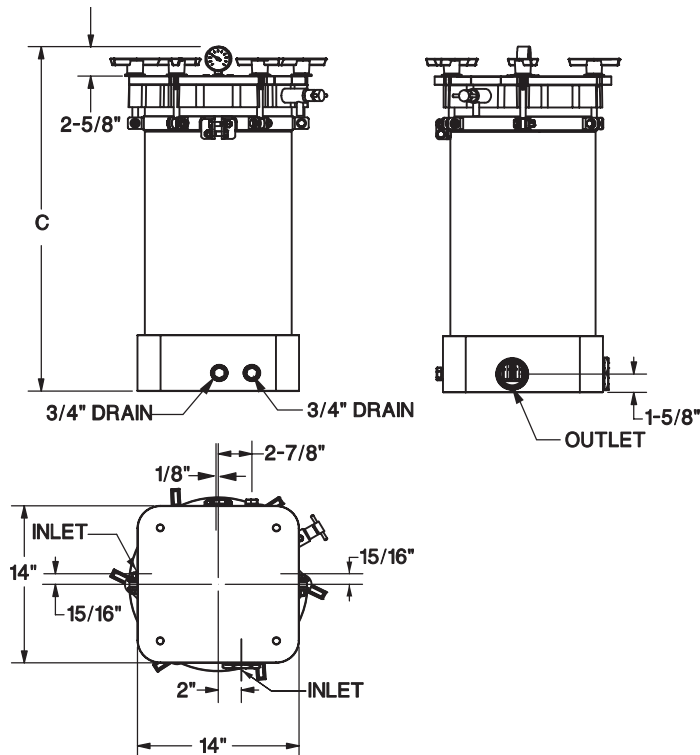


SERIES 'GC' FILTER CHAMBERS

Specifications, Dimensions and Ordering Information

159

C-113_A

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FLOW RATE	vs.	PRESSURE DIFFERENTIAL
115 GPM @ 5 PSI		
145 GPM @ 15 PSI		

MAXIMUM PSI		@ OPERATING TEMP.
PVC	CPVC	
80	80	70°F
75	75	100°F
40	70	120°F
25	55	140°F
—	35	170°F
—	30	200°F

TO ORDER, use Price Code Number						
MATERIALS	PORT SIZE NPT	NO. CARTS.	MODEL NUMBER	DIM. 'C'	PRICE CODE NUMBER	SHIP. WT. (lbs.)
PVC/EPDM	2"	12 - 20"	PL240(2)SC 2 G3A	30-11/16"	78-1671 P	115
		12 - 30"	PL360(3)SC 2 G3A	40-11/16"	78-1672 P	125
		12 - 40"	PL480(4)SC 2 G3A	50-11/16"	78-1673 P	135
		12 - 50"	PL600(5)SC 2 G3A	60-11/16"	78-1674 P	145
CPVC/EPDM	2"	12 - 20"	CL240(2)SC 2 G3A	30-11/16"	78-1671 C	115
		12 - 30"	CL360(3)SC 2 G3A	40-11/16"	78-1672 C	125
		12 - 40"	CL480(4)SC 2 G3A	50-11/16"	78-1673 C	135
		12 - 50"	CL600(5)SC 2 G3A	60-11/16"	78-1674 C	145

SLEEVE SET (12) CPVC & POLYPROPYLENE		
LENGTH	SOLIDS AREA sq. ft.	Add PRICE CODE NO.
20	14.4	78-0201
30	21.6	78-0202
40	28.8	78-0203
50	36.0	78-0204

For Viton elastomers:
add -V to Price Code Number and change L to V in Model Number

OPTIONAL	ADD TO MODEL NO.	ADD TO PRICE CODE NO.
222 "O"-ring seat for SOE (Single open end flat top) cartridge. Top seats, springs and cross posts not furnished.	- 2	- 2





SERIES 'GH-HP' PLASTIC FILTER CHAMBERS

160

C-114_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



**WATER TREATMENT / FOOD PROCESSING
CLEANING / PHOTOGRAPHIC
ELECTROPLATING / PHARMACEUTICAL
CHEMICAL / PETROCHEMICAL / BEVERAGE**

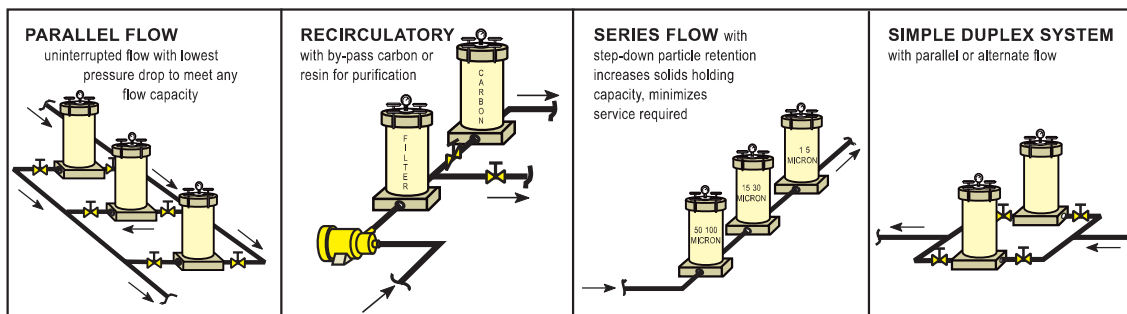
These filter chambers are designed for filtering process solutions where clarification will extend operating life and improve quality.

FEATURES:

- **Non-metallic solution contact**
CPVC, PVC, polypropylene or pure PVDF construction
(See Chemical Resistance Chart)
- **Heavy duty construction**
 - High Pressure to 140 PSI (965 K Pa)
(See Pressure/temperature table)
 - SS tie rod cover closure with tee handles
 - Pressure gauge with gauge guard and vent valve or plug
 - Cartridge guides with screw-on caps for positive cartridge seal
- **Variety of sizes are available**
From 4 to 55 - 10" cartridge capacity
(or equivalent 20", 30", or 40" lengths)
- **Port sizes 1½", 2" & 3" NPT or flange depending on model**

The Series 'GH-HP' Filter Chambers feature heavy duty construction to meet difficult high pressure and/or temperature applications. They utilize machined bases and covers with tie rod cover closures for extra strength.

Series 'GH-HP' chambers are offered in a wide variety of sizes with flows to 275 GPM. Materials of construction offerings include PVC, CPVC, polypropylene, and PVDF.





SERIES 'GH-HP' CHAMBERS Specifications and Ordering information

C-114A

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Tie rod closure with tee handles, stainless steel shell hold-down bracket, top reinforcing plate, 0-60 PSI pressure gauge and guard, EPDM gaskets, drain plugs. All fasteners are stainless steel. For DOE cartridges.			MODEL NUMBER	PRICE CODE NUMBER	CARTRIDGE		SHIPPING WEIGHT lbs.
					NUMBER of 10" CARTS.	SOLIDS AREA sq. ft.	
PL	PVC base, cover and shell, CPVC vent valve and internals.	CONNS.	PL50 1½-G3A-HP	78-0520	5	17.5	45
		1½" NPT	PL100 1½-G3A-HP	78-0521	10	35.0	55
			PL150 1½-G3A-HP	78-0522	15	52.5	65
			PL200 1½-G3A-HP	78-0523	20	70.0	75
		2" NPT	PL220 2-G3A-HP	78-0321	22	77.0	94
			PL330 2-G3A-HP	78-0322	33	115.5	101
			PL440 2-G3A-HP	78-0323	44	154.0	109
			PL550 2-G3A-HP	78-0324	55	192.5	116
		3" NPT	PL330 3-G3A-HP	78-1328	33	115.5	101
			PL440 3-G3A-HP	78-1329	44	154.0	109
			PL550 3-G3A-HP	78-1330	55	192.5	116
PPL	Polypropylene base, cover, and shell. Polypropylene vent valve and internals.	2" Flange	PPL70 2F-G3-HP	78-1377	7	24.5	30
			PPL140 2F-G3-HP	78-1378	14	49.0	60
			PPL210 2F-G3-HP	78-1379	21	73.5	90
			PPL280 2F-G3-HP	78-1380	28	98.0	120
CL	CPVC base, cover and shell with CPVC vent valve and internals.	1½" NPT	CL50 1½-G3A-HP	78-1146A	5	17.5	45
			CL100 1½-G3A-HP	78-1147A	10	35.0	55
			CL150 1½-G3A-HP	78-1148A	15	52.5	65
			CL200 1½-G3A-HP	78-1149A	20	70.0	75
		2" NPT	CL220 2-G3A-HP	78-0111	22	77.0	94
			CL330 2-G3A-HP	78-0112	33	115.5	101
			CL440 2-G3A-HP	78-0113	44	154.0	109
			CL550 2-G3A-HP	78-0114	55	192.5	116
		3" NPT	CL330 3-G3A-HP	78-1331	33	115.5	101
			CL440 3-G3A-HP	78-1332	44	154.0	109
			CL550 3-G3A-HP	78-1333	55	192.5	116
KL	PVDF cover and base, PVDF shell sealed to base. PVDF vent plug, and internals.	1½" Flange	KL40(1) 1½F-G3-HP	78-0479	4	14.0	45
			KL80(2) 1½F-G3-HP	78-0480	8	28.0	55
			KL120(3) 1½F-G3-HP	78-0481	12	42.0	65
			KL160(4) 1½F-G3-HP	78-0482	16	56.0	75
		2" Flange	KL70 2F-G3-HP	78-0454	7	24.5	55
			KL140 2F-G3-HP	78-0455	14	49.0	115
			KL210 2F-G3-HP	78-0456	21	73.5	175
			KL280 2F-G3-HP	78-0457	28	98.0	230

PRESSURE/TEMPERATURE

MAXIMUM PSI PRESSURE AT OPERATING TEMPERATURE							
TEMP. °F	PL		PPL	CL		KL	
	1½"	2" & 3"	2"	1½"	2" & 3"	1½"	2"
70	140	110	100	140	110	135	120
100	95	75	64	120	100	110	95
120	60	50	52	100	80	90	80
140	35	25	40	75	60	80	70
170	—	—	31	50	30	60	55
200	—	—	—	30	25	50	45

FLOW RATE vs. PRESS. DIFFERENTIAL ¹

MODEL	@ 5 PSI	@ 15 PSI
1½" 'GH-HP'	70 GPM 265 LPM	125 GPM 473 LPM
2" 'GH-HP'	115 GPM 435 LPM	145 GPM 549 LPM
3" 'GH-HP'	170 GPM 643 LPM	275 GPM 1040 LPM

¹ With 15 micron depth wound cartridges.



OPTIONAL

TO ORDER ADD TO	MODEL NO.	
	PRICE CODE NO.	
Flange connections: CPVC	1½" 2" 3"	- F
Viton elastomers	change L to V	- V

TO ORDER	ADD TO	
	MODEL NO.	PRICE CODE NO.
222 "O"-ring seat for SOE (Single open end flat top) cartridge.	- 2	- 2

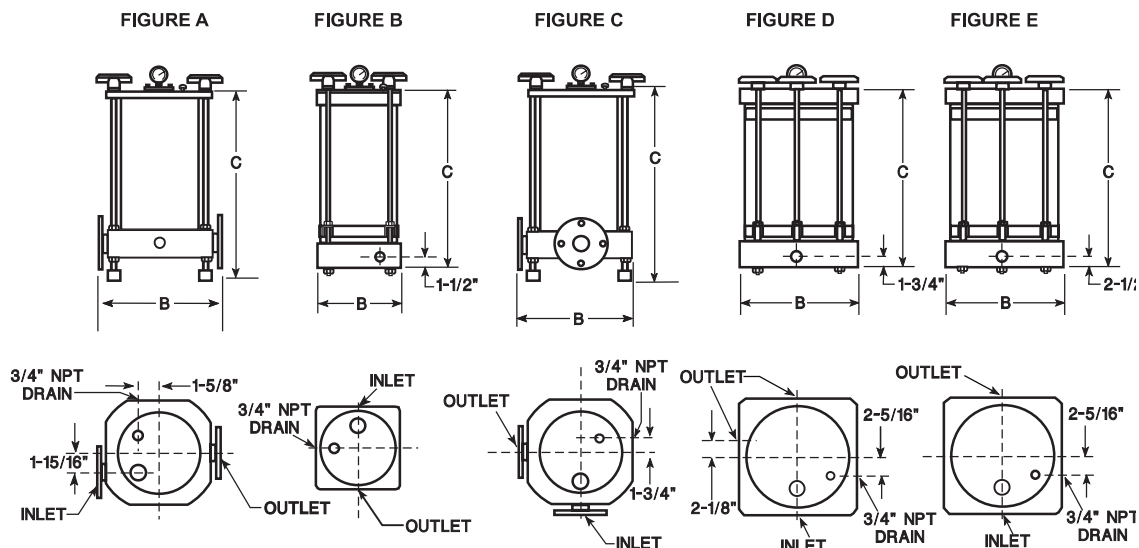
**DIMENSIONS****TOP VIEW of BASES**

FIGURE	CHAMBER MODEL	PORT SIZE	B WIDTH in.	C HEIGHT in.	CARTRIDGES*			
					10"	20"	30"	40"
A	KL40 1½F	1½" FLANGE	13½ INCLUDES FLANGES	21	4	-	-	-
	KL80 1½F			31	8 or	4	-	-
	KL120 1½F			41	12	- or	4	-
	KL160 1½F			51	16 or	8	- or	4
B	CL, PL50 1½	1½" NPT	10 SQUARE	20½	5	-	-	-
	CL, PL100 1½			30½	10 or	5	-	-
	CL, PL150 1½			40½	15	- or	5	-
	CL, PL200 1½			50½	20 or	10	- or	5
C	PPL, KL70 2F	2" FLANGE	14½ INCLUDES FLANGES	24	7	-	-	-
	PPL, KL140 2F			34	14 or	7	-	-
	PPL, KL210 2F			44	21	- or	7	-
	PPL, KL280 2F			54	28 or	14	- or	7
D	CL, PL 2	2" NPT	15½ SQUARE	31	22 or	11	-	-
	CL, PL 2			41	33	- or	11	-
	CL, PL 2			51	44 or	22	- or	11
	CL, PL 2			61	55 or	11 +	11	-
E	CL, PL 3	3" NPT	15½ SQUARE	42½	33	-	11	-
	CL, PL 3			52½	44 or	22	- or	11
	CL, PL 3			62½	55 or	11 +	11	-

* Maximum cartridge diameter: All PPL and PL & CL 50, 100, 150 & 200 - 2-5/8 inches. All others - 2-3/4 inches.



SERIES 'HD' PLASTIC CARTRIDGE FILTER CHAMBERS

163

C-111_B

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

***ELECTRONIC MANUFACTURING,
PHARMACEUTICALS, FOOD & BEVERAGE***



FEATURES

- High purity non-metallic solution contact — Precision CNC machined from premium grade PVDF or natural pure polypropylene
- Proven durability and ease of service
- Standard heavy duty flange connections for ease of installation and trouble-free operation
- Standard 0-60 PSI gauge, air vent valve and drain port
- For use with standard 10", 20", 30" or 40" single open end (SOE) 222 style filter cartridges
- Flow rates to 150 GPM

BENEFITS

- Economical — Easy installation, operation and maintenance
- Efficient — High flow rate, low pressure drop saves energy
- Improves quality of finished product — Saves money, reduces scrap and rework
- SERFILCO — worldwide leader in service, dependability and design for over 35 years

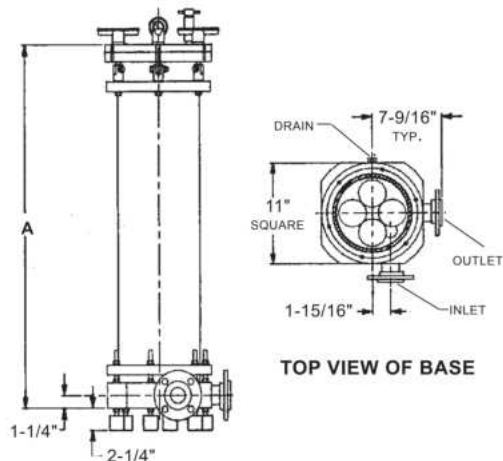
SPECIFICATIONS

SERIES 'HD' filter chambers are precision CNC machined from high purity PVDF or natural pure polypropylene. Chambers feature a swing bolt cover closure with 'T'-handles for ease of cartridge service — no tools are required. Precision machined covers feature FRP reinforcing plate to ensure positive liquid containment. Standard 0 - 60 PSI gauge guard, vent valve and drain port are designed to simplify operation and maintenance. Standard flange connections are 1½" with rugged 316 stainless steel back plates for ease of installation and to ensure leak-free operation. All external fasteners are 316 stainless steel; standard elastomers are EPDM. Chambers are designed for use with 4 - 10", 20", 30" or 40" SOE style filter cartridges.



**SERIES 'HD' CHAMBER Specifications**

C-111_B

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**DIMENSIONS****FLOW RATE vs. PSI**70 GPM = Δ 5 P
125 GPM = Δ 15 P**MAX. PSI PRESSURE
@OPERATING TEMPERATURE**

TEMPERATURE	PSI	
	Polypropylene	PVDF
80°F	58	90
100°F	51	76
120°F	45	65
140°F	39	55
160°F	30	47
180°F	Not recommended	40
200°F	Not recommended	34

SPECIFICATIONS and ORDERING INFORMATION

MODEL	MATERIAL	CONNECTIONS	NO. of SOE CARTRIDGES *	MAX. CART. LENGTH	HEIGHT A	SHIP. WT. Lbs.	TO ORDER, USE PRICE CODE NO.
PPL40(1) SH 1½F-2 PPL80(2) SH 1½F-2 PPL120(3) SH 1½F-2 PPL160(4) SH 1½F-2	Polypropylene	1½" flange	4 - 10" 4 - 20" 4 - 30" 4 - 40"	10 ^{1/8} " 20 ^{1/8} " 30 ^{1/8} " 40 ^{1/8} "	16½" 26½" 36½" 46½"	35 40 45 50	78-1650 L 78-1651 L 78-1652 L 78-1653 L
KL40(1) SH 1½F-2 KL80(2) SH 1½F-2 KL120(3) SH 1½F-2 KL160(4) SH 1½F-2	PVDF	1½" flange	4 - 10" 4 - 20" 4 - 30" 4 - 40"	10 ^{1/8} " 20 ^{1/8} " 30 ^{1/8} " 40 ^{1/8} "	16½" 26½" 36½" 46½"	55 65 75 85	78-1654 L 78-1655 L 78-1656 L 78-1657 L

NOTE: For Viton® elastomers, change **L** to **V** in Model and Price Code No.

* Cartridges ordered separately. Refer to Bulletin M-207-2.



SERIES 'HF' FILTER CHAMBERS

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C-112_C

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

HIGH FLOW FILTER CHAMBERS FOR:

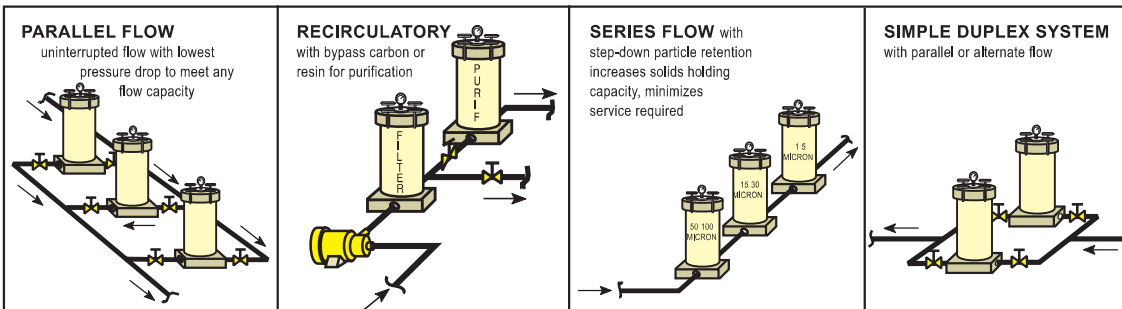
**CHEMICAL, ELECTROPLATING,
WASTE TREATMENT, WATER TREATMENT,
COOLING TOWER, AQUACULTURE**

FEATURES:

- Rugged construction, non-metallic solution contact
- PVC or CPVC construction
EPDM elastomer standard, Viton® optional
- Flows to 400 GPM
- High capacity — 26 - 20", 30", 40" or 50" filter cartridges
- Standard 0-60 psi gauge with guard, air vent valve and drain port
- Low pressure drop — 4 psi @ 200 GPM
- 'T'-handle cover closure — no tools required to change cartridges

BENEFITS:

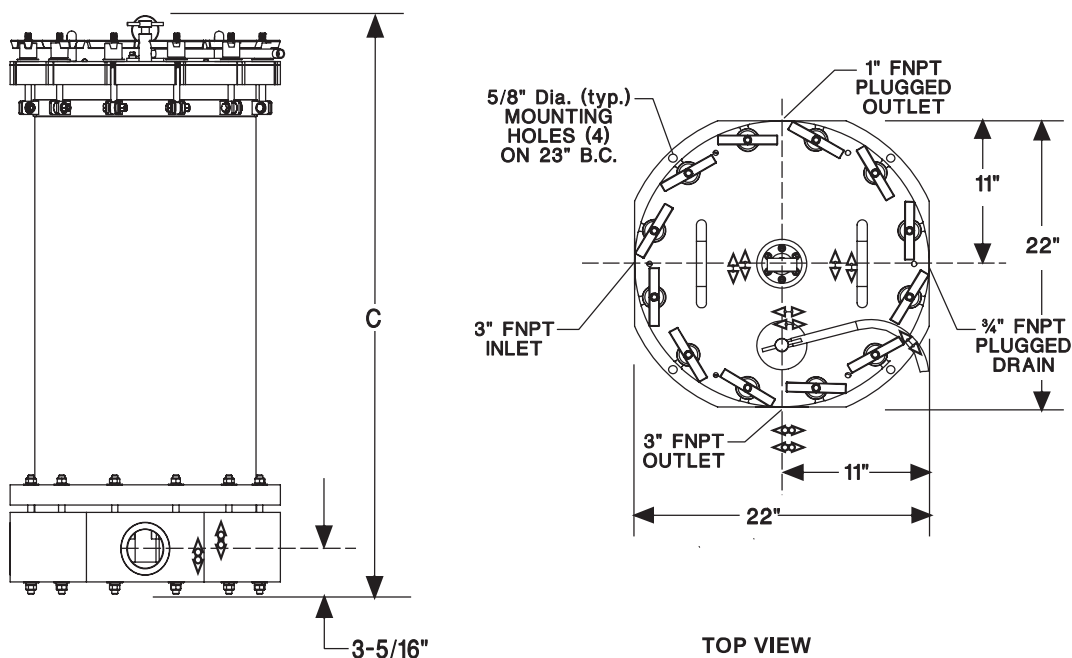
- Long service life — will not rust or corrode
- Continuous high flow particle removal improves your process and finished goods
- Long intervals between cartridge changes reduces maintenance cost.
- Easy to operate and install.
- Efficient to operate — low pressure differential



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SERIES 'HF' chambers feature precision CNC machined base and cover. The innovative base design has 3" inlet and outlet ports providing low pressure differential. Base includes a 1" plugged drain port for ease of maintenance. Cover includes vent valve, 0-60 psi pressure gauge with guard assembly, and stainless steel cover plate. Cover is secured with swing bolts and 'T'-handles (no tools are

required to change cartridges). Shell is 18" diameter and will hold 26 - 20", 30", 40" or 50" D.O.E. (double open end) style cartridges. CPVC cross posts with screw-on caps provide a positive cartridge seal ensuring no solution by-pass. Base, shell and cover are PVC or CPVC for totally non-metallic solution contact. Elastomers are EPDM and all external hardware is stainless steel.

DIMENSIONS

TOP VIEW

TO ORDER, use Price Code Number

MODEL NUMBER ¹	NO. CARTS.	SHIP. WT. (lbs.)	DIMENSION 'C'	PRICE CODE NUMBER
PL520(2)SH-3-G3A	26 - 20"	215	38" (965 mm)	78-1662
PL780(3)SH-3-G3A	26 - 30"	235	48" (1219 mm)	78-1663
PL1040(4)SH-3-G3A	26 - 40"	255	58" (1473 mm)	78-1664
PL1300(5)SH-3-G3A	26 - 50" ²	275	68" (1595 mm)	78-1665

MAXIMUM TEMPERATURE	MAXIMUM PSI
140°F PVC 180°F CPVC	50
FLOW RATE vs. PSI	
200 GPM = 4 ØP 310 GPM = 10 ØP	

¹ Listed model is PVC. For CPVC change **P** to **C** in model number and add **C** to price code number. For Viton® elastomers change **L** to **V** in model number and add **-V** to price code number

² 50" lengths are achieved by pairing a 20" cartridge with a 30" cartridge or a 10" cartridge with a 40" cartridge.



SERIES 'WT' PLASTIC CARTRIDGE FILTER CHAMBERS

167

C-103_T

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



Model
PL210S-2

WATER TREATMENT / D.I. WATER R.O. & U.F. PREFILTER BRACKISH WATER/SEA WATER WASTE TREATMENT / INDUSTRIAL LIQUIDS

FEATURES:

- **Non-metallic solution contact**
PVC construction
with EPDM "O"-ring (Viton® optional)
(See a chemical resistance chart)
- **Heavy Duty construction**
 - Rated 125 PSI at 70° F (8.5 BAR @ 21°C.)
 - Cartridge guides with screw-on caps for positive cartridge seal
- **Cartridge capacity**
From 7 to 28-10" cartridge capacity
(or equivalent 20", 30", or 40" lengths)
- **Quick opening for easy servicing**
- **2" NPT connections**
1/2" NPT drain and 1/4" NPT vent
Choice of outlet direction

The Series 'WT' Plastic Filter Chamber is designed for total corrosion resistance, versatility of use, high flow rates at low pressure drop and ease of cartridge replacement. Each model holds seven of 10", 20", 30" or 40" filter cartridges and offers a choice of depth wound, pleated or carbon media. Quick opening eye nut-swing bolt closure allows

ease of cartridge exchange without tools, spillage or chamber draining. Cartridges are securely sealed by means of cartridge guides with screw-on caps. Standard location of outlet is opposite inlet as illustrated above. Outlet may also be provided at 90° increments to offer the most convenient arrangement for piping.



TO ORDER, use Price Code Number

DESCRIPTION	MODEL NUMBER	PRICE CODE NUMBER
Floor standing unit constructed of high luster white PVC. Includes EPDM "O"-ring, stainless steel swing bolt cover closure with eye nuts and vinyl coated bracket. Inlet/outlet connections are 2" NPT with 1/2" NPT drain and 1/4" NPT vent plug.	PL70S-2	78-1290
	PL140S-2	78-1291
	PL210S-2	78-1292
	PL280S-2	78-1293

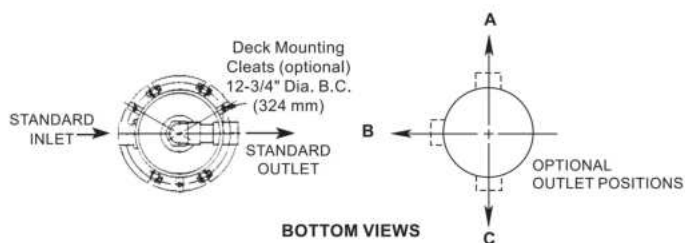
2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**OPTIONAL**

DESCRIPTION	ADD to MODEL NO.	ADD TO OR SEPARATE PRICE CODE NO.
Pressure gauge, 0-160 PSI, on polypropylene gauge guard with diaphragm and CPVC vent valve	-G7	78-0078
Optional outlet direction	-A B or C	-A, B or C
Viton "O"-ring, change L to V in Model Number		-V
Flange connections, 2" PVC	-F	78-1122
Deck anchor cleats (set of three)	-D	78-1124A

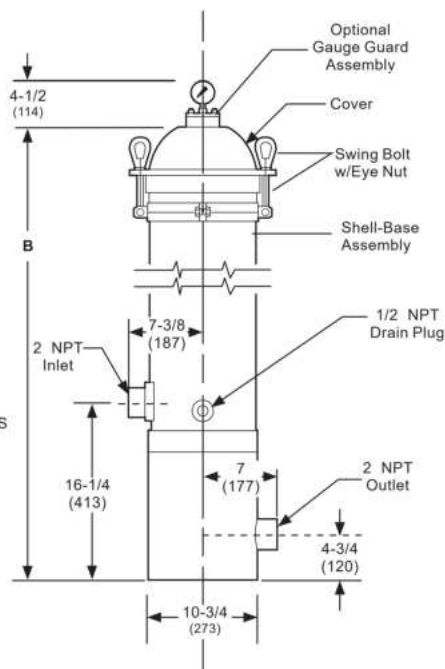
DIMENSIONS

FLOW RATE * @ PRESSURE DIFFERENTIAL			
GPM	LPM	PSI	Bar
35	132	1	.07
70	265	1	.07
105	397	2	.14
140	530	2	.14

* Using 10 micron polypropylene depth cartridges, 5 GPM/10" length.



The use of a standpipe or pulsation dampener is recommended when operating with high pressure pumps or quick closing valves, due to the possibility of damage by water hammer.

**SPECIFICATIONS**

MODEL NUMBER	HEIGHT B		SHIPPING WT.		CARTRIDGE CAPACITY		SOLIDS DEPTH AREA	MAXIMUM FLOW		MAXIMUM PSI AT OPERATING TEMP.		
	Inches	mm	Lbs.	Kg.	10 inch	Unit length		U.S. GPM	LPM	ALL MODELS	Temp.	Max. PSI
PL70S-2	29-3/8	746	55	25	7	7 of 10"	24.5	70	265		70°F	125
PL140S-2	39-3/8	1000	60	27	14	7 of 20"	49.0	100	378		100°F	77
PL210S-2	49-3/8	1254	65	29	21	7 of 30"	73.5	140	530		120°F	50
PL280S-2	59-3/8	1508	75	34	28	7 of 40"	98.0	140	530		140°F	28

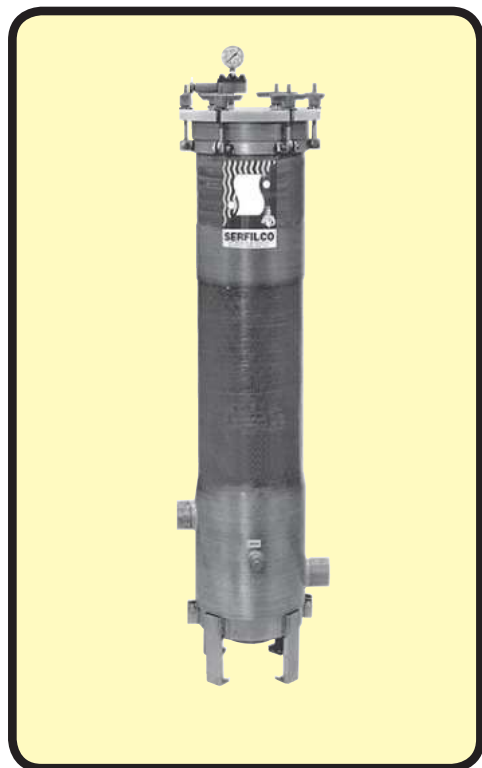


SERIES 'FRP' PLASTIC CARTRIDGE FILTER CHAMBERS

169

C-108_M

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



HIGH FLOW RATES AND HIGH OPERATING PRESSURES FOR: *WATER / DEIONIZED WATER SEA WATER / BRACKISH WATER INDUSTRIAL LIQUIDS / CHEMICALS OEM-REVERSE OSMOSIS & ULTRA-FINE PREFILTER*

- **Non-metallic solution contact**
Epoxy resin and CPVC
(See a chemical resistance chart)
- **Heavy duty construction**
Filament-wound fiberglass and epoxy vessel with
integral domed bottom
- **Rated to 125 PSI from 32°F to 200°F**
(862 kPa from 0°C to 93°C)
- **Chamber capacity**
8-40" or 32-10" cartridges
- **High flow rates to 320 U. S. GPM**
(1211 LPM) at low PSI differential
- **2" or 3" FNPT connections standard**
Optional ANSI 150 PSI flanges
- **Quick cartridge change**
Easy cartridge change, no tools required

For use with a variety of filter media¹:

- Depth wound, pleated, carbon and membrane cartridges
- Positive cartridge seal for -
DOE . . . Double Open End
SOE . . . Single Open End with 120 "O"-ring

Series 'FRP' Filter Chambers provide economical particulate removal and extend the useful life of solutions through clarification. They are constructed of thermoset plastic resin reinforced with continuous filament wound fiberglass to offer the strongest FRP composite obtainable. No pigments or fillers are used, making these chambers suitable for a wide range of liquids. Standard models have EPDM "O"-rings (Viton® optional) and CPVC internals for non-metallic solution contact.

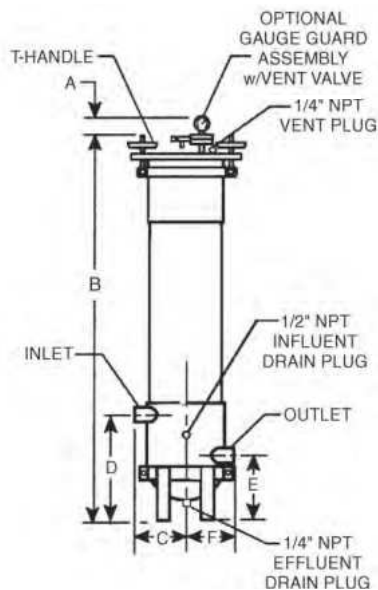
All 'FRP' models include CPVC tube guides which accept full 40" length cartridges. They also accept

carbon cartridges. An optional CPVC cross post set can be ordered for stacking 10" or 20" DOE cartridges.

'FRP' chambers use vinyl coated 316 stainless steel springs and CPVC cartridge seats to provide positive seating. Stainless steel swing bolts and polyester T-handles facilitate quick opening of cover closure. Chambers include 304 stainless steel mounting legs. Models have FNPT inlet and outlet connections. Optional flange connections available.

¹ Cartridges must be ordered separately.
Refer to Filter Media.



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DIMENSIONS - Inches (mm)							
MODEL	A	B	C	D	E	F	PORT
							SIZE FNPT
FRP320S	3 (76)	57-1/2 (1460)	7-1/4 (184)	15-1/8 (384)	9-1/8 (232)	7-3/4 (197)	2" or 3" IN & OUT

TO ORDER, use Price Code Number

DIMENSIONS - Inches (mm)							
MODEL	FNPT CONNS.	NUMBER OF CARTRIDGES (Ordered separately)	FLOW RATE* @PRESS. DIFF. U.S. GPM		MAXI- MUM FLOW RATE	SHIP. WT.	PRICE CODE NUMBER
			2 PSI	5 PSI	U.S. GPM	lbs.	
FRP320S-2	2"	8-40" or 32-10"	100	190	250	68	77-9969

* Using clean 10 micron Maxi-Depth wound filter cartridges.

OPTIONAL, use Price Code Number

DESCRIPTION	ADD TO MODEL NO.	ADD TO OR USE SEPARATE PRICE CODE NO.
Pressure gauge, 0-160 PSI, on polypropylene gauge guard with diaphragm and CPVC vent valve	-G4A	99-0740
Pressure gauge with Viton diaphragm	-G4AV	99-0740V
Viton "O"-ring	-V	-V
Flange connections, 150 PSI ANSI	-F	78-0459
2" CPVC for 180°F (82°C) maximum temperature		78-1122
2" PVC for 140°F (60°C) maximum temperature		78-1344
3" CPVC for 180°F (82°C) maximum temperature		78-1234
3" PVC for 140°F (60°C) maximum temperature		
Cross post set (to stack 10" or 20" cartridges, in place of standard tube guides,	—	77-9917
Modification to accept 120 "O"-ring (internal) SOE cartridges	-120	77-9934

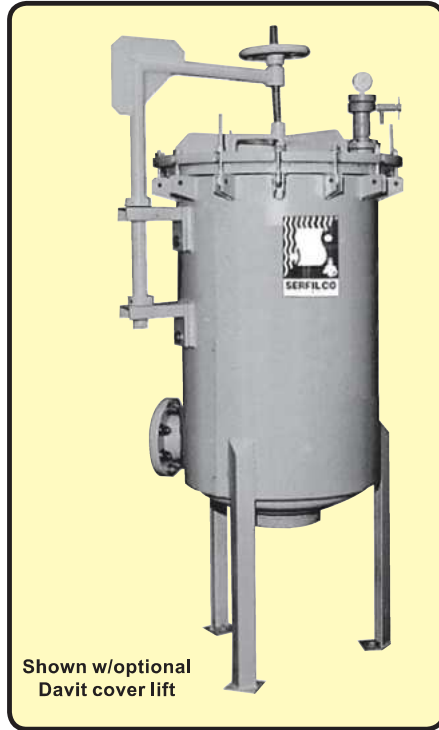


SERIES 'Y' RUBBER LINED STEEL CARTRIDGE FILTER CHAMBERS

171

C-203_J

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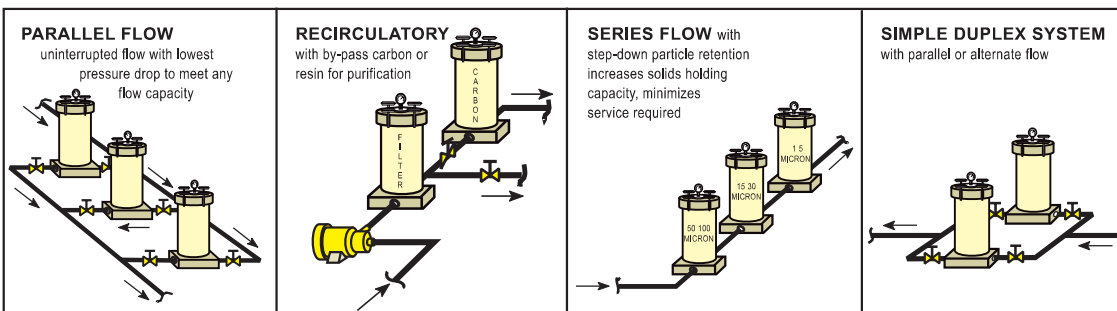
Shown w/optional
Davit cover lift

FOR FILTRATION & PURIFICATION OF PROCESS SOLUTIONS:

**CHEMICAL / ELECTROPLATING
R.O. PRE-FILTER / WATER TREATMENT
WASTE TREATMENT / COOLING TOWER**

- **Non-metallic solution**
Rubber or Hypalon lined steel construction
- **Heavy duty construction**
75 PSI ASME code design standard
150 PSI code design optional
- **Large cartridge capacity & wide range of sizes**
24-445 of 10" cartridges
to 1557 sq ft. dirt holding capacity
- **High flow rates to 2225 GPM**
- **Easy to service**
Removable cage assembly

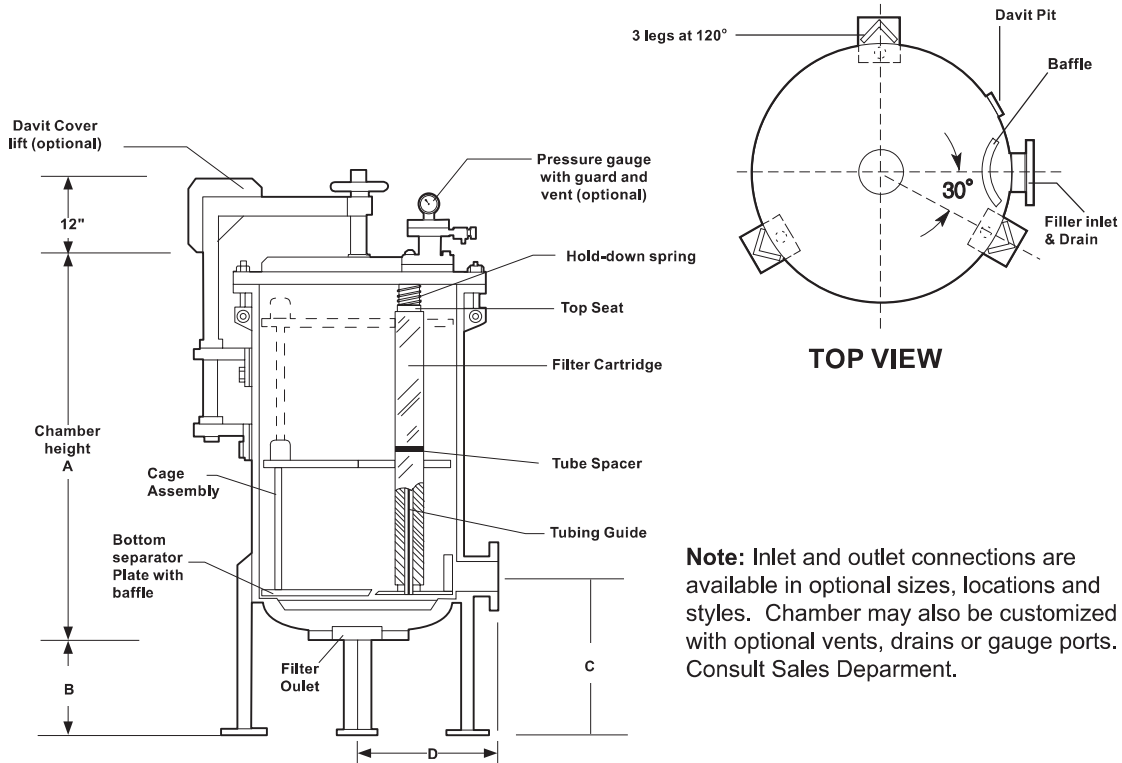
SERIES 'Y' Filter Chambers are made of carbon steel with vulcanized rubber or Hypalon® lining to provide non-metallic solution contact for use as a prefilter ahead of reverse osmosis membranes, for filtration of electroplating and other chemical solutions and for many other applications. Consult a chemical resistance chart, Bulletin TC-101, and Sales Department for chemical compatibility.





SERIES 'Y' RUBBER LINED STEEL FILTER CHAMBERS (Cont'd)

C-203_J

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

MODEL	A		B		C		D*		SHIP WT	
	in	mm	in	mm	in	mm	in	mm	lbs	kg
_240-2	32	813	14	356	22	559	12	305	350	159
_360-2	42	1067							375	170
_520-2	32	813	15	381	26	660	14.5	368	360	163
_780-2	42	1067							390	177
_B540-4	45	1143	15	381	26	660	14.5	368	600	272
_870-4									650	295
_B900-4	65	1651	20	508	32.6	829	18	457	800	363
_1050-4	45	1143							850	386
_1450-4	65	1651	20	508	35.9	889	20	508	9000	408
_1750-4									1000	454
B1800-6	65	1651	20	508	39	991	26	660	1200	544
_3000-6									1400	635
_B3000-8	65	1651	20	508	35.9	889	20	508	1500	680
_4450-8									1800	816
_B4450-8	65	1651	20	508	39	991	26	660	1950	885

* w/ rubber lining

**SERIES Y' RUBBER LINED STEEL FILTER CHAMBERS (Cont'd)**

C-203_J

2900 MacArthur Blvd. Northbrook, IL. USA 60062 **WWW.SERFILCO.COM** (800) 323 - 5431

'Y' Filter Chambers are constructed of rubber or Hypalon® lined carbon steel, providing non-metallic solution contact. A 75 PSI ASME code design, non-stamped, is standard with 150 PSI code design optional. ASME code stamp for either pressure rating is also optional.

The lining material serves as full cover, separator plate and flange gasket. Standard internals are PVC. External steel surfaces are painted with two part epoxy gray enamel and external fasteners are stainless steel.

The chamber is provided with a removable internal cage assembly for ease of cartridge service and chamber cleanout. Standard chambers are for double open end (DOE) cartridges with 222 'O-ring' SOE cartridge seats optional. Models with "B" designation provide maximum spacing between cartridges.

SPECIFICATIONS and ORDERING INFORMATION

MODEL	CHAMBER DIA (in)	FLANGE SIZE (in)	NO. OF 10"	NO. OF COLUMNS	SOLIDS CAPACITY (sq. ft)	MODEL PREFIX	
						YR RUBBER	YH HYPALON
						PRICE CODE	PRICE CODE
_240-2	18	2	24	12	84	78-0002	78-0036 A
_360-2			36	12	126	78-0003	78-0037 A
_520-2			52	26	182	78-0004	78-0038 A
_780-2			78		273	78-0005	78-0039 A
_B540-4	22	4	54	18	189	78-0006	78-0040 A
_870-4			87	29	305	78-0007	78-0041 A
_B900-4			90	18	315	78-0008	78-0042 A
_1050-4			105	35	368	78-0009	78-0043 A
_1450-4			145	29	508	78-0010	78-0044 A
_1750-4			175	35	613	78-0011	78-0045 A
_B1800-6	28	6	180	36	630	78-0012	78-0046 A
_3000-6			300	60	1050	78-0013	78-0047 A
_B3000-8	32	8	300	60	1050	78-0014	78-0048 A
_4450-8			445	89	1558	78-0015	78-0049 A
_B4450-8	44	8	445	89	1558	78-0016	78-0050 A

**OPTIONAL**

DESCRIPTION	ADD TO MODEL NO.	PRICE CODE NUMBER			
		18"	22" dia	28" dia.	32" dia.
Davit cover lift	-D	78-0066	78-0066	78-0067	78-0068
150 PSI ASME code design - non stamped	-150	78-0084			
ASME code stamp	-X	78-0073			
Pressure gauge/guard vent valve assembly CPVC	-GS				
222 "O"- Ring cartridge seats for SOE cartridges	-2	add - 2			



SERIES 'YW' METAL CARTRIDGE FILTER CHAMBERS

174

C-208_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



FOR HIGH FLOW RATE APPLICATIONS WATER, CHEMICAL, PETROLEUM

- **Flow rates to 13,000 GPM**
(49,200 LPM)
- **Choice of construction**
 - Carbon steel
 - Rubber lined carbon steel
 - Stainless steel
- **ASME code design**
- **Pressure to 300 psi**
- **Flanged drain and vent ports**
- **Davit cover lift standard**
- **2-part epoxy paint on carbon steel**

SERFILCO Series 'YW' Filter Chambers are designed to meet the unique requirements of the municipal and desalination markets. They provide high flow rates to 13,000 GPM for pre-filtration ahead of reverse osmosis membranes and are designed for use with either double open end or single open end filter cartridges.

Chambers for use with salt water are typically manufactured of rubber lined steel with non-metallic internal components, however all carbon steel or stainless steel chambers are also available depending on the application. All chambers are designed and manufactured to meet specification requirements including ASME code, with or without code stamp, and pressures from 75 psi to 300 psi as required.



CHAMBER CAPABILITIES

MODEL ¹	CHAMBER DIAMETER (in)	FLANGE SIZE (in)	NUMBER OF COLUMNS	TOTAL NUMBER OF 10" CARTRIDGES ²	MAXIMUM FLOW (GPM)	PRICE CODE NO.
YWR 4450-10	32	10	89	445	2225	78-0600
YWR 5300-10	36	10	106	530	2650	78-0601
YWR 7900-12	42	12	158	790	3950	78-0602
YWR 10950-14	48	14	219	1095	5475	78-0603
YWR 13500-16	54	16	270	1350	6750	78-0604
YWR 16800-18	60	18	336	1680	8400	78-0605
YWR 20800-20	66	20	416	2080	10400	78-0606
YWR 26000-24	72	24	520	2600	13000	78-0607

¹ Rubber lined steel chamber

² Using 50" length, 2 1/2" diameter cartridges

Specifications subject to change without notice



SERIES 410-430 BAG FILTER CHAMBERS

175

C-309

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

FOR FILTRATION & PURIFICATION OF PROCESS SOLUTIONS

FEATURES:

- **Non-metallic solution contact**
PVC, CPVC, polypropylene or PVDF construction
EPDM elastomers standard (Viton® optional)
- **Sizes to 2.25 square feet (0.23 sq/m)**
For flow rates to 20 GPM (75 LPM)
- **Top inlet – bottom outlet design**
- **Easy to service**
Clamp ring cover closure – No tools required
- **Port size**
3/4" hose quick-connect coupling x 3/4" FNPT
- **Polypropylene filter bags**
1, 5, 10, 25, 50 & 100 micron

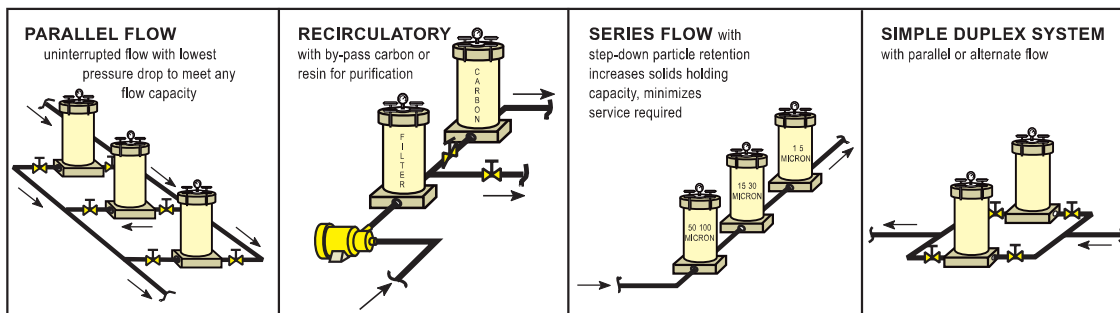


The Series 410 - 430 Bag Filter Chambers are designed for filtering various process solutions where clarification will extend operating life and improve quality. These chambers provide surface area of 0.75 to 2.25 sq. ft. and are designed for small tanks or small filtration applications.

is based on our proven 'L' chamber with molded base and cover and clamp closure. Depending on the application and the solution being filtered, these chambers are capable of handling 100 PSI pressure at ambient conditions and 200 F at lower pressures.

The 410-430 Bag Filter Chambers feature non-metallic solution contact and are offered in a choice of materials of construction to meet a wide variety of applications. The design

Because of their size, these chambers can provide a more economical solution for smaller filtration applications.



**SERIES 410-430 - Specifications and Ordering Information**

C-309

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

DESCRIPTION		MODEL NUMBER	PRICE CODE NUMBER
PCL	CPVC base and cover, translucent PVC shell sealed to base, EPDM 'O'-ring. Clamp ring cover closure.	CPCL10BFS-3/4	78-1280
		CPCL20BFS-3/4	78-1281
		CPCL30BFS-3/4	78-1282
CL	CPVC base and cover, CPVC shell sealed to base, EPDM 'O'-ring. Clamp ring cover closure.	CCL10BFS-3/4	78-1280C
		CCL20BFS-3/4	78-1281C
		CCL30BFS-3/4	78-1282C
PPL	Polypropylene base and cover, polypropylene shell sealed to base, EPDM 'O'-ring. Clamp ring cover closure.	CPPL10BFS-3/4	78-1280PP
		CPPL20BFS-3/4	78-1281PP
		CPPL30BFS-3/4	78-1282PP
KL	PVDF base and cover, PVDF shell sealed to base, EPDM 'O'-ring. Clamp ring cover closure.	CKL10BFS-3/4	78-1280K
		CKL20BFS-3/4	78-1281K
		CKL30BFS-3/4	78-1282K

For Viton elastomers change L to V in model Number and add -V to Price Code Number

SERIES NUMBER	SURFACE AREA		PORTS	MAXIMUM FLOW RATE		HEIGHT				SHIPPING WEIGHT	
						A		B			
	ft. ²	m ²				NPT	GPM	LPM	in	mm	in
410	0.75	0.10	3/4"	20	75	0	0	0	0	5	2
420	1.5	0.15	3/4"	20	75	0	0	0	0	7	3
430	2.25	0.20	3/4"	20	75	0	0	0	0	9	4



POLYPROPYLENE FILTER BAGS (EPDM seal rings)						
NOMINAL MICRON RATING	FOR 410 CHAMBERS		FOR 420 CHAMBERS		FOR 430 CHAMBERS	
	PRICE CODE NO	MODEL NUMBER	PRICE CODE NO	MODEL NUMBER	PRICE CODE NO	MODEL NUMBER
1	88-1730-1	FB-PP01 x .75	88-1731-1	FB-PP01 x 1.50	88-1732-1	FB-PP01 x 2.25
5	88-1730-5	FB-PP05 x .75	88-1731-5	FB-PP05 x 1.50	88-1732-5	FB-PP05 x 2.25
10	88-1730-10	FB-PP10 x .75	88-1731-10	FB-PP10 x 1.50	88-1732-10	FB-PP10 x 2.25
25	88-1730-25	FB-PP25 x .75	88-1731-25	FB-PP25 x 1.50	88-1732-25	FB-PP25 x 2.25
50	88-1730-50	FB-PP50 x .75	88-1731-50	FB-PP50 x 1.50	88-1732-50	FB-PP50 x 2.25
100	88-1730-100	FB-PP100 x .75	88-1731-100	FB-PP100 x 1.50	88-1732-100	FB-PP100 x 2.25



SERIES 630 & 640 BAG FILTER CHAMBERS

177

C-307_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



FOR FILTRATION & PURIFICATION OF PROCESS SOLUTIONS:

**WATER TREATMENT / FOOD PROCESSING
CLEANING / PHOTOGRAPHIC
ELECTROPLATING / PHARMACEUTICAL
CHEMICAL / PETROCHEMICAL / BEVERAGE**

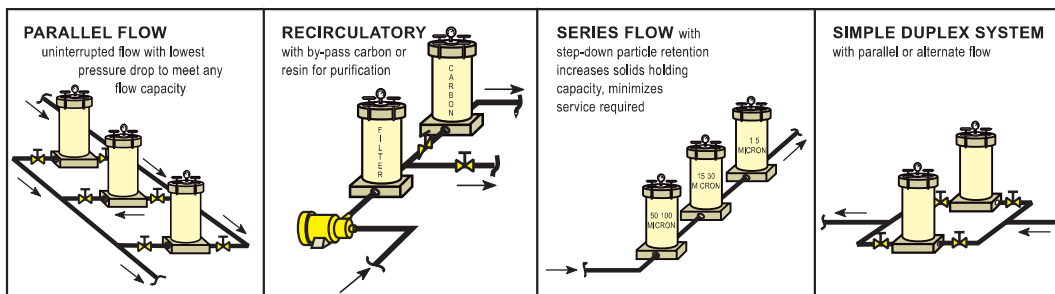
- **Non-metallic solution contact**
PVC, CPVC, polypropylene or PVDF construction
EPDM elastomers standard (Viton® optional)
- **Sizes to 5.0 square feet (0.5 sq/m)**
For flow rates to 40 GPM (151 LPM)
- **Bottom inlet – bottom outlet design**
Allows chamber to be hard piped
Change bags without disconnecting piping
- **Easy to service**
Swing bolt / tie rod cover closure with tee handles
- **Port sizes 1" FNPT**
- **Polypropylene filter bags**
1, 5, 10, 25, 50 & 100 micron

The Series 630 and 640 Bag Filter Chambers are designed for filtering various process solutions where clarification will extend operating life and improve quality.

These chambers are redesigned to make them easy to operate and convenient to service. The design features a bottom inlet and bottom outlet which allows these chambers to be hard piped and allows the user

to change bags without disconnecting any hoses or piping.

The Series 630 and 640 Bag Filter Chambers feature non-metallic solution contact and are offered in a choice of materials of construction to meet a wide variety of applications. The single bag design provides filter area to 5.0 sq. ft. and micron retention Ratings of 1 to 100.



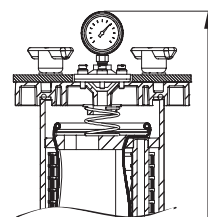
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EPDM elastomers and pressure gauge with gauge guard are standard.

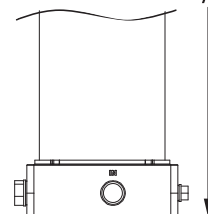
DESCRIPTION	TEE HANDLE	
	MODEL NUMBER	PRICE CODE NUMBER
PL PVC shell sealed to base, CPVC base and cover. SS swing bolts with tee handles. Polypropylene vent valve.	PL630BFS-1-G3	78-1773P
	PL640BFS-1-G3	78-1774P
CL CPVC shell sealed to base, CPVC base and cover. SS swing bolts with tee handles. Polypropylene vent valve.	CL630BFS-1-G3	78-1773C
	CL640BFS-1-G3	78-1774C
PPL Polypropylene shell sealed to base. Glass reinforced polypropylene base and cover. SS swing bolts with tee handles. Polypropylene vent valve.	PPL630BFS-1-G3	78-1773PP
	PPL640BFS-1-G3	78-1774PP
KL PVDF shell sealed to base. PVDF base and cover. SS swing bolts with tee handles. PVDF vent plug.	KL630BFS-1-G3	78-1773K
	KL640BFS-1-G3	78-1774K

For Viton elastomers change L to V in model Number and add -V to Price Code Number

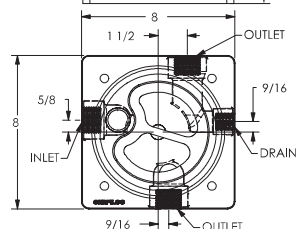
SERIES NUMBER	SURFACE AREA		PORTS	MAXIMUM FLOW RATE		HEIGHT		SHIPPING WEIGHT	
	ft. ²	m ²		GPM	LPM	A		lbs	kg
630	3.5	.3	1"	40	151	39.5	1003	38	17
640	5.0	.5	1"	40	151	49.5	1257	50	23



A



POLYPROPYLENE FILTER BAGS (EPDM seal rings)				
NOMINAL MICRON RATING	FOR 630 CHAMBERS		FOR 640 CHAMBERS	
	PRICE CODE NO	MODEL NUMBER	PRICE CODE NO	MODEL NUMBER
1	88-0832G	FB-PP01 x 3.5	88-1476F	FB-PP01x5
5	88-0832A	FB-PP05 x 3.5	88-1476A	FB-PP05x5
10	88-0832B	FB-PP10 x 3.5	88-1476B	FB-PP10x5
25	88-0832C	FB-PP25 x 3.5	88-1476C	FB-PP25x5
50	88-0832E	FB-PP50 x 3.5	88-1476E	FB-PP50x5
100	88-0832D	FB-PP100 x 3.5	88-1476D	FB-PP100x5





SERIES 1235 & 1255 BAG FILTER CHAMBERS

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C-308_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



FOR FILTRATION & PURIFICATION OF PROCESS SOLUTIONS:

**WATER TREATMENT / FOOD PROCESSING
CLEANING / PHOTOGRAPHIC
ELECTROPLATING / PHARMACEUTICAL
CHEMICAL / PETROCHEMICAL / BEVERAGE**

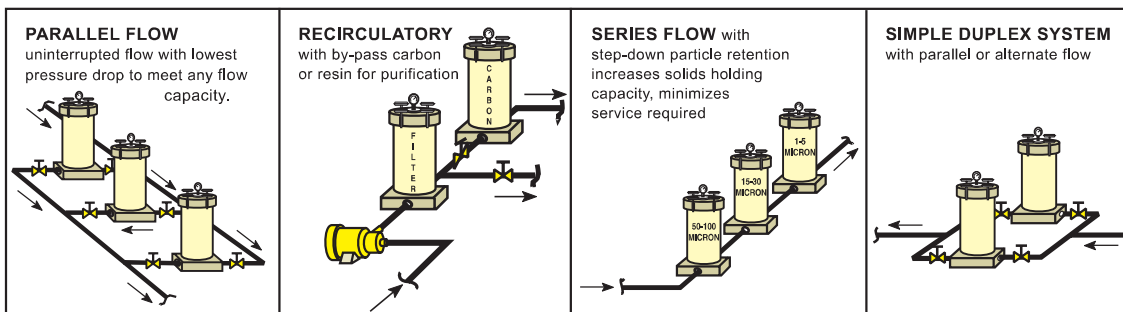
FEATURES:

- **Non-metallic solution contact**
PVC, CPVC, or polypropylene construction
EPDM elastomer standard, Viton® optional
- **Sizes to 19.5 square feet (1.8 sq/m)**
For flow rates to 100 GPM (378 LPM)
- **Bottom Inlet – bottom outlet design**
Allows chamber to be hard piped
Change bags without disconnecting piping
- **Easy to service**
Swing bolt cover closure with tee handles
- **Port size 1 1/2" NPT**
- **Polypropylene filter bags**
1, 5, 10, 25, 50 & 100 micron

The Series 1235 and 1255 Bag Filter Chambers are designed for filtering various process solutions where clarification will extend operating life and improve quality. These chambers have been redesigned to make them easier to operate and more convenient to service. The new design features a bottom inlet and bottom outlet, which allows these chambers to be hard, piped and allows the user to change bags without disconnecting any hoses or piping. Additionally the new design utilizes multiple 4" flanged bags

which provides greater surface area for the same size chamber.

As before the Series 1235 and 1255 Bag Filter Chambers feature non-metallic solution contact and are offered in a choice of materials of construction to meet a wide variety of applications. The new design provides filter area to 19.5 sq. ft. and micron retention ratings of 1 to 100.





SERIES 1235 & 1255 BAG FILTER CHAMBER

Specification and Ordering Information

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C-308_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

Chambers hold five individual 4" flanged bags. All chambers have cover swing bolts with tee handles, stainless steel swing bolt bracket; FRP top and bot-

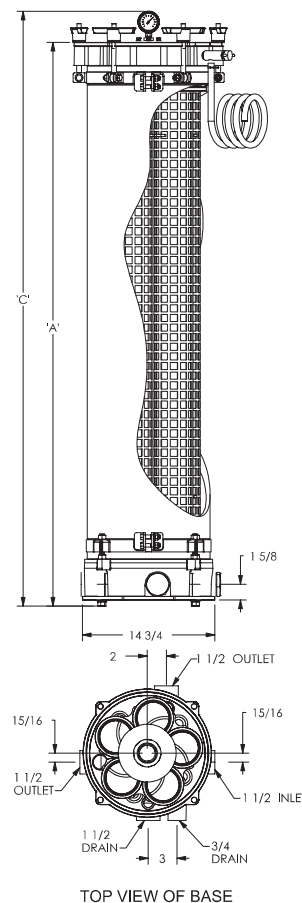
tom reinforcing plate, 0-60 PSI pressure gauge with gauge guard, EPDM gaskets and drain plugs. All fasteners are stainless steel.

DESCRIPTION		MODEL NUMBER	PRICE CODE NUMBER
PL	PVC shell. CPVC base and cover	PL1235BFS - 1 1/2 - G3A	78-1733 P
		PL1255BFS - 1 1/2 - G3A	78-1735 P
CL	CPVC shell, base and cover.	CL1235BFS - 1 1/2 - G3A	78-1733 C
		CL1255BFS - 1 1/2 - G3A	78-1735 C
PPL	Polypropylene shell. Glass reinforced polypropylene base and cover.	PPL1235BFS - 1 1/2 - G3A	78-1733 PP
		PPL1255BFS - 1 1/2 - G3A	78-1735 PP

For Viton elastomers change **L** to **V** model Number and add **-V** to Price Code Number

SERIES NUMBER	SUR- FACE AREA		PORTS	MAXIMUM FLOW RATE		HEIGHT				SHIPPING WEIGHT	
	ft. ²	m ²		NPT	GPM	LPM	A		C		
							in	mm	in	mm	lbs
1230	12,0	1.1	1 1/2"	80	303	38.4	975	41.9	1064	100	45
1250	19,5	1.8	1 1/2"	100	454	58.4	1483	61.9	1572	115	52

POLYPROPYLENE FILTER BAGS (4" Flanged)				
NOMINAL MICRON RATING	FOR 1235 CHAMBERS		FOR 1255 CHAMBERS	
	PRICE CODE NO	MODEL NUMBER	PRICE CODE NO	MODEL NUMBER
1	88-3613F	FB-PP01x2.4	88-3615F	FB-PP01x3.9
5	88-3613A	FB-PP05x2.4	88-3615A	FB-PP05x3.9
10	88-3613B	FB-PP10x2.4	88-3615B	FB-PP10x3.9
25	88-3613C	FB-PP25x2.4	88-3615C	FB-PP25x3.9
50	88-3613E	FB-PP50x2.4	88-3615E	FB-PP50x3.9
100	88-3613D	FB-PP100x2.4	88-3615D	FB-PP100x3.9





SERIES 'G' PLASTIC DISC FILTER CHAMBERS

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C-303_A

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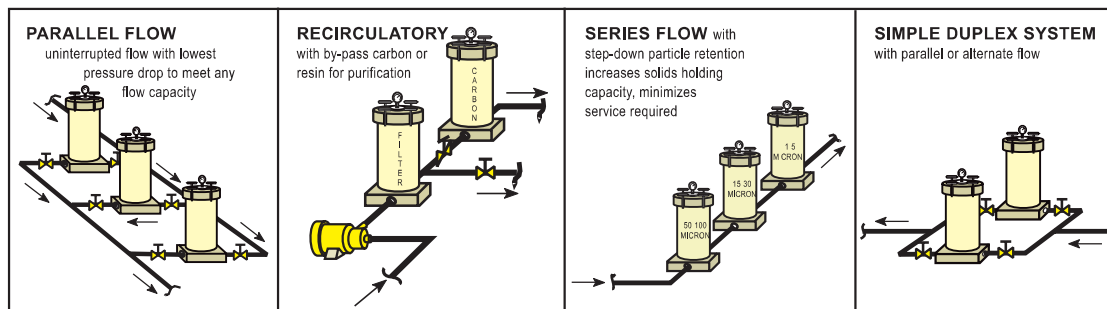
**FOR : WATER TREATMENT / FOOD PROCESSING
CLEANING / PHOTOGRAPHIC
ELECTROPLATING / PHARMACEUTICAL
CHEMICAL / PETROCHEMICAL / BEVERAGE**

- **Non-metallic solution contact**
PVC, CPVC or polypropylene construction
EPDM elastomers standard, Viton® optional
- **Heavy duty construction**
Pressure and temperature capabilities to meet wide variety of applications
- **High flow rates**
Up to 6000 GPH (22,700 l/h)
- **High capacity —**
15, 30, 45 ft² (1.4, 2.8, 4.2 m²) solids area
- **Ease of Service**
SS Swing bolt cover closure
Stack assembly for quick media change
- **Choice of filter media:**
 - Cellulose discs for 5, 10, 20 & 40 micron filtration**
Use alone or with filter aid and/or powdered carbon
 - Carbon discs for purification**
Interchangeable with filter discs

These disc filter chambers are designed for quality filtration of plating and other chemical solutions. The large surface area with I.D. and O.D. edge seals on all filter discs assures optimum performance and clarity of solution being filtered. Disc filters may be used with a precoat of filter aid alone or with a mixture of filter aid and powdered carbon. Carbon discs are also available and may be installed in total or in partial to accomplish the proper degree

of organic removal. Some applications may allow filtration without a media precoat. Chambers include a drip pan to catch run-off liquid when servicing discs.

Disc chambers are serviced by lifting the cover and disc stack assembly from the chamber, facilitating a cleaner change-out and less solution loss than with other designs. No messy "floating" of the disc is required when changing the disc media.





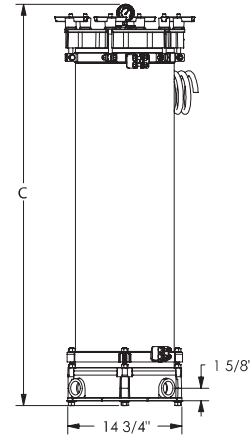
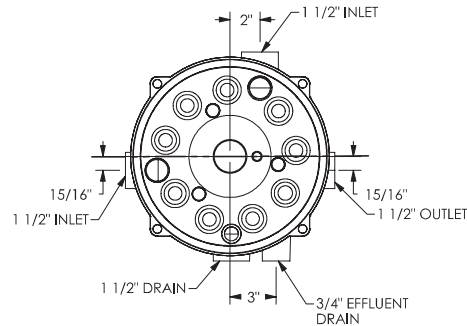
SERIES 'G' DISC FILTER CHAMBERS

C-303_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

SOLIDS AREA sq. ft.	NO. OF DISCS	DIM. 'C'
15	31	20-15/16
30	65	30-15/16
45	99	40-15/16

MAXIMUM PSI		@ OPERATING TEMP.
PVC	CPVC	
80	80	70°F
75	75	100°F
40	70	120°F
25	55	140°F
—	35	170°F
—	30	200°F



TO ORDER, use Price Code Number								
MATERIALS	NO. OF DISCS	AREA		MODEL NUMBER	MAX FLOW		PRICE CODE NUMBER	SHIP. WT. (lbs.)
		ft ²	m ²		GPH	LPH		
PVC/EPDM	31	15	1.4	PL15DFO-1½-G3A	3000	11,355	78-1721 P	77
	65	30	2.8	PL30DFO-1½-G3A	4500	17,033	78-1722 P	92
	99	45	4.1	PL45DFO-1½-G3A	6000	22,710	78-1723 P	107
CPVC/EPDM	31	15	1.4	CL15DFO-1½-G3A	3000	11,355	78-1721 C	77
	65	30	2.8	CL30DFO-1½-G3A	4500	17,033	78-1722 C	92
	99	45	4.1	CL45DFO-1½-G3A	6000	22,710	78-1723 C	107
Polypropylene EPDM	31	15	1.4	PPL15DFO-1½-G3A	3000	11,355	78-1721 PP	77
	65	30	2.8	PPL30DFO-1½-G3A	4500	17,033	78-1722 PP	92
	99	45	4.1	PPL45DFO-1½-G3A	6000	22,710	78-1723 PP	107

For Viton® elastomers change L to V in Model Number add -V to Price Code Number

FILTER DISCS FOR SERIES 'G' CHAMBERS (ordered separately)
packaged in quantities of 100

DISC MODEL NUMBER	MICRON RATING	PRICE CODE NUMBER
CE 5 x 10	5	78-1612
CE 10 x 10	10	78-1613
CE 20 x 10	20	78-1614
CE 40 x 10	40	78-1615
C x 10 CARBON	10	78-1616



SERIES 'M' STEEL AND STAINLESS STEEL CARTRIDGE FILTER CHAMBERS

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C-201_P

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

FOR FILTRATION AND PURIFICATION OF:

**WATER / PHOTOGRAPHIC / SOLVENTS / CHEMICALS
PHARMACEUTICAL / OILS / WASTE TREATMENT**

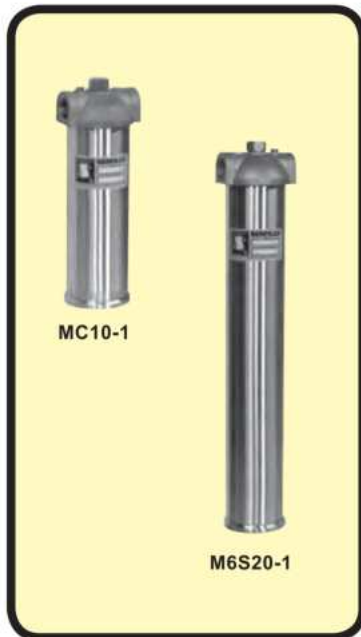
SINGLE CARTRIDGE CHAMBERS

STEEL - Painted two-part epoxy gray on exterior.

MODEL	MATERIAL	MAXIMUM PRESSURE	PORT SIZE	NO. FILTER CARTRIDGES	PRICE CODE NO.
MC10-½	Carbon steel and cast iron, 304 stainless steel centering spring Buna N shell gasket ¹	250 PSI	½" NPT	1	78-1500
MC10-¾			¾" NPT	1	78-1501
MC10-1			1" NPT	1	78-1502
MC20-¾			¾" NPT	2	78-1503
MC20-1			1" NPT	2	78-1504
MC30-¾			¾" NPT	3	78-1505
MC30-1			1" NPT	3	78-1506

STAINLESS STEEL

M4S10-¾	304 stainless steel, Buna N shell gasket ¹	250 PSI	¾" NPT	1	78-1507
M4S10-1			1" NPT	1	78-1508
M4S20-¾			¾" NPT	2	78-1509
M4S20-1			1" NPT	2	78-1510
M4S30-¾			¾" NPT	3	78-1511
M4S30-1			1" NPT	3	78-1512
M6S10-¾	316 stainless steel, Buna N shell gasket ¹	250 PSI	¾" NPT	1	78-1513
M6S10-1			1" NPT	1	78-1514
M6S20-¾			¾" NPT	2	78-1515
M6S20-1			1" NPT	2	78-1516
M6S30-¾			¾" NPT	3	78-1517
M6S30-1			1" NPT	3	78-1518

¹ Fiber gasket at vent, drain and center nut.Viton® elastomers: Add **-V** to Model and suffix **V** to Price Code No.

MODEL NO.	DIMENSIONS (In.)		SHIP WT. (lbs.)
	A	B	
M*10-½	12 ⁷ / ₈	4	6
M*10-¾	12 ⁷ / ₈	4	6
M*10-1	13 ¹ / ₈	4 ¹ / ₄	7
M*20-¾	23	4	8
M*20-1	23 ¹ / ₄	4 ¹ / ₄	9
M*30-¾	33	4	11
M*30-1	33 ¹ / ₄	4 ¹ / ₄	12

* C for carbon steel, 4S for 304SS or 6S for 316SS





SERIES 'M' Filter Chambers (cont'd)

C-201_P

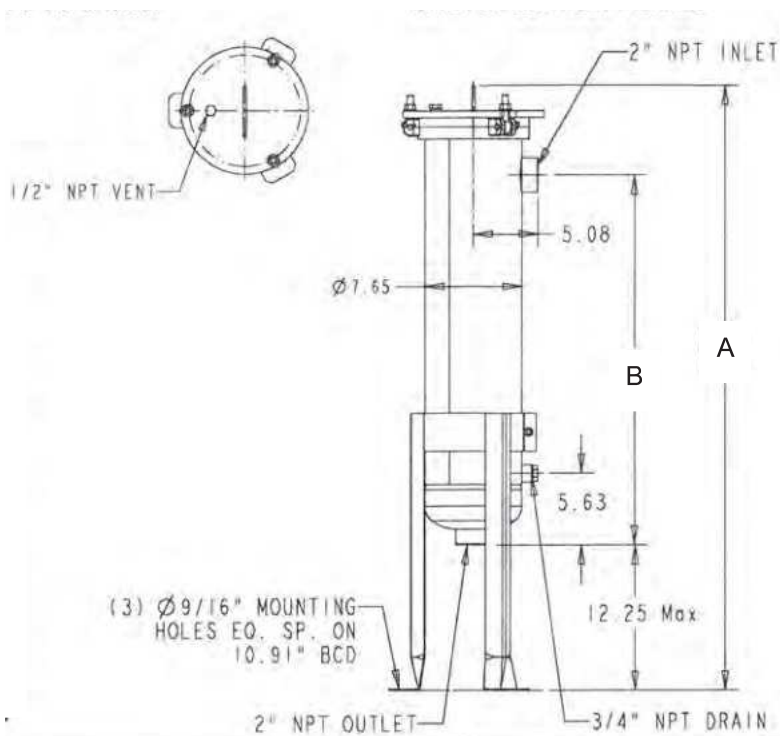
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MULTIPLE CARTRIDGE CHAMBERS

STEEL - Painted two-part epoxy gray on exterior.					
MODEL	MATERIAL	MAXIMUM PRESSURE	PORT SIZE	NO. FILTER CARTRIDGES	PRICE CODE NO.
S50(1)-2	Carbon steel with mounting legs Buna N gasket	100 PSI	2" MNPT	5	78-0882
S100(2)-2				10	78-0883
S150(3)-2				15	78-0884

STAINLESS STEEL					
MODEL	MATERIAL	MAXIMUM PRESSURE	PORT SIZE	NO. FILTER CARTRIDGES	PRICE CODE NO.
SS50(1)-2	304 stainless steel w/mounting legs Buna N gasket	100 PSI	2" MNPT	5	78-0885
SS100(2)-2				10	78-0886
SS150(3)-2				15	78-0887

Viton® elastomers: Add -V to Model and suffix V to Price Code Number.



MODEL NO.	DIMENSIONS (In.)		SHIP WT. (lbs.)
	A	B	
(S)S50(1)-2	38	19	57
(S)S100(2)-2	48	29	67
(S)S150(3)-2	58	39	77



SERIES 'K' METAL CARTRIDGE & BAG FILTER CHAMBERS

185

C-207_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



PROCESS WATER / CLEANERS PARTS WASHERS / CHEMICALS

- Carbon steel, 304 or 316 stainless steel construction
- Large capacity
 - 448 cartridge
 - 26.4 sq.ft multi-bag
- 150 PSI OR 300 PSI pressure rating
- Swing bolt cover closure
- Consult Sales Department for options

The Series 'K' Metal Filter Chambers provide excellent value and are available in either a cartridge or bag design and with a choice of carbon steel, 304 or 316 stainless steel construction. Cartridge chambers range in size from a single 10" cartridge to 448-10" cartridge capacity. Bag chambers are from 0.5 sq. ft. to 26.4 sq. ft. of surface area.

These chambers are ideal for either recirculatory or single pass filtration in either series or parallel flow configurations. They are offered in a wide range of sizes, styles and options to meet most applications that require a metal filter chamber.

CARTRIDGE CHAMBERS



SINGLE, 3 & 6 - ROUND CARTRIDGE CHAMBERS

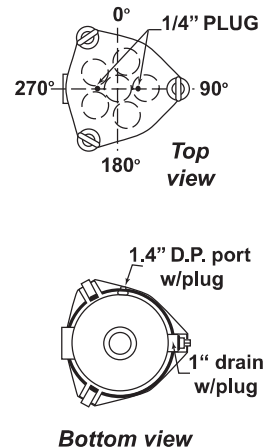
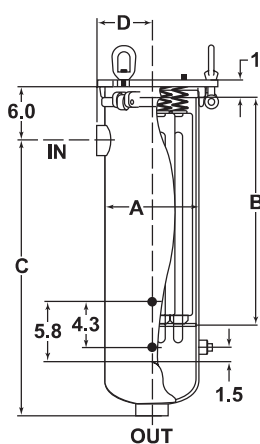
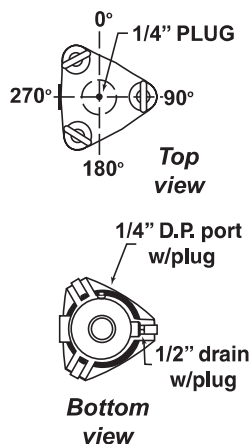
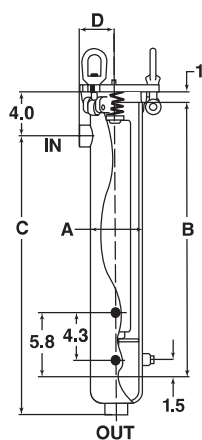
FEATURES:

- Carbon steel or stainless steel construction
- EPDM elastomers standard (Viton® optional)
- Swing bolt cover closure with eye nuts
- 300 PSI pressure rating (single)
150 PSI pressure rating
(3-round and 6-round)
- 316 SS internals
- Differential, drain, and vent ports
- Adjustable support legs
- 2-part epoxy finish on carbon steel



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**TO ORDER, use Price Code Number**

MODEL NUMBER ^{1,2}	NUMBER OF 10" CARTS.	CONN. SIZE	PRICE CODE NO. ^{1,2}	DIMENSIONS (in)				SHIP WT. (lbs)
				A	B	C	D	
SINGLE CARTRIDGE CHAMBERS								
KCS10S-1	1	1" NPT	78-1850	4.5	12.5	14.7	3.5	34
KCS20S-1	2		78-1851	4.5	22.5	24.7	3.5	42
KCS30S-1	3		78-1852	4.5	32.5	34.7	3.5	50
KCS40S-1	4		78-1853	4.5	42.5	44.7	3.5	58
3-ROUND CHAMBERS								
KCS60(2)S-1 1/2	6	1 1/2" NPT	78-1854	6.6	24.5	23.8	4.1	85
KCS90(3)S-1 1/2	9		78-1855	6.6	34.5	33.8	4.1	110
KCS120(4)S-1 1/2	12		78-1856	6.6	44.5	43.8	4.1	135
6-ROUND CHAMBERS								
KCS120(2)S-2	12	2" NPT	78-1857	8.6	24.5	23.8	5.4	120
KCS180(3)S-2	18		78-1858	8.6	34.5	33.8	5.4	145
KCS240(4)S-2	24		78-1859	8.6	44.5	43.8	5.4	170

¹ Model and Price Code Number shown for carbon steel construction.- for 304 SS change **first S** in Model No. to **4SS** and add **S4** to Price Code No.- for 316 SS change **first S** in Model No. to **6SS** and add **S6** to Price Code No.² For Viton elastomers, add **-V** to Model No. and **V** to Price Code No.**SINGLE****3-ROUND
and 6-ROUND**

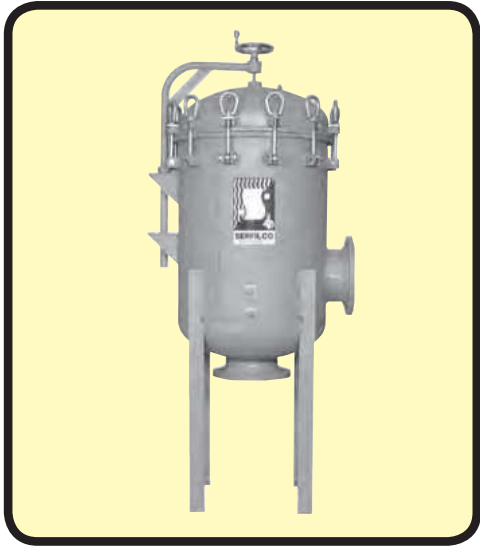


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MULTI-ROUND CARTRIDGE CHAMBERS

FEATURES:

- Carbon steel or stainless steel construction
- EPDM elastomers standard (Viton optional)
- Bearing assisted davit assembly
- Swing bolt cover closure with eye nuts
- 150 PSI pressure rating
- 316 SS internals
- Differential, drain and vent ports
- Heavy duty support legs
- 2-part epoxy finish on carbon steel

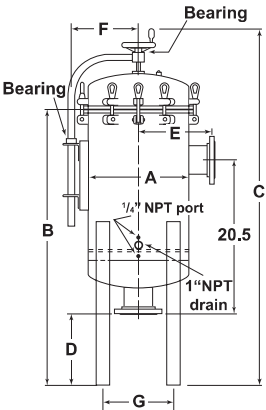


Consult Sales Department for options

Filter cartridges ordered separately
see Bulletin M-109

TO ORDER, use Price Code Number

MODEL NUMBER ^{1,2}	NO. OF 10" CARTS.	DIA. A (in)	CONN. SIZE FLANGE	PRICE CODE NO ^{1,2}	DIMENSIONS (in)			SHIP WT (lbs)
					B	C	D	
KCS330(3)S-3F	33	12	3"	78-1860	54.7	70.9	10.0	410
KCS440(4)S-3F	44	12	3"	78-1861	64.7	80.9	12.5	420
KCS600(3)S-4F	60	16	4"	78-1862	55.7	71.9	10.0	480
KCS800(4)S-4F	80	16	4"	78-1863	65.7	81.9	12.5	490
KCS1040(4)S-4F	104	18	4"	78-1864	66.2	81.4	12.5	545
KCS1500(3)S-6F	150	24	6"	78-1865	57.2	73.4	12.5	635
KCS2000(4)S-6F	200	24	6"	78-1866	67.2	83.4	16.5	645
KCS2340(3)S-6F	234	30	6"	78-1867	57.9	74.1	12.5	705
KCS3360(3)S-8F	336	36	8"	78-1868	60.5	76.4	16.5	1010
KCS4480(4)S-8F	448	36	8"	78-1869	70.5	86.4	20.7	1150



¹ Model and Price Code Number shown for carbon steel construction.

- for 304 SS change **first S** in Model No. to **4SS**

and add **S4** to Price Code No.

- for 316 SS change **first S** in Model No. to **6SS** and

add **S6** to Price Code No.

² For Viton elastomers add **-V** to Model No.

and **V** to Price Code No.

DIA. A	E	F	G
12"	11.0	9.2	10.0
16"	13.0	10.8	11.5
18"	14.0	11.8	12.0
24"	17.0	14.8	16.5
30"	20.0	17.8	20.8
36"	25.0	20.8	24.7



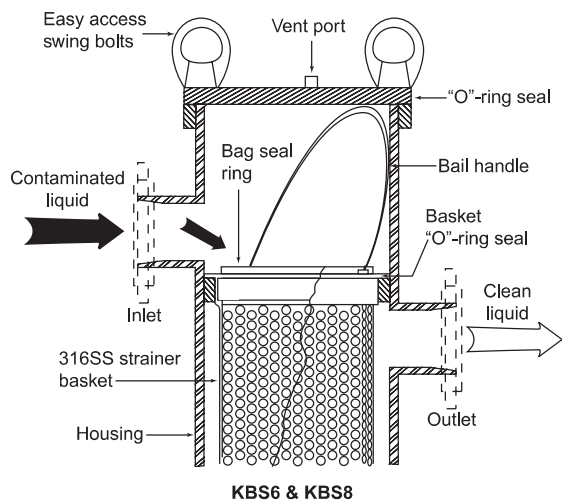
BAG CHAMBERS

SINGLE BAG CHAMBERS

FEATURES:

- Carbon steel or stainless steel construction
- EPDM elastomers standard (Viton optional)
- Swing bolt cover closure with eye nuts
- 300 PSI pressure rating (4" dia.)
150 PSI pressure rating (6" & 8" dia.)
- 316 SS strainer basket
- Differential, drain and vent ports
- Adjustable support legs
- 2-part epoxy paint on carbon steel

Consult Sales Department for options
Filter bags ordered separately



Single Bag Chambers
4", 6", 8" Dia.



SERIES 'K' METAL FILTER CHAMBERS

C-207_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

SPECIFICATIONS

Housing lid has a 3-bolt swing closure with a vent port. Connections are as noted with standard side inlet and bottom outlet.

Housing is supplied with two differential pressure ports to measure the differential pressure across the filter bag. A two-part epoxy finish is applied on the carbon steel vessels to maximize the life of the housing; stainless steel vessels are supplied with a

satin finish. Basket material is constructed of 316 stainless steel with 9/64" perforations to act as a strainer or to accept a liquid filter bag. Basket for KBS6 and KBS8 chamber seats onto an "O"-ring in the basket support. Adjustable tripod leg assembly is supplied with housing.

KBS4 chamber is rated at 300 PSI. KBS6 and KBS8 chambers are rated at 150 PSI.

TO ORDER, use Price Code Number

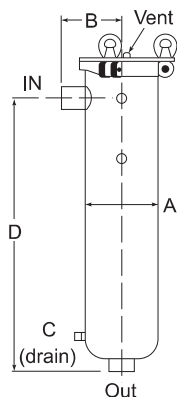
MODEL NUMBER ^{1,2}	SURFACE AREA (sq. ft.)	DIA. A (in)	BASKET SIZE (in)	CONN. SIZE	PRICE CODE NO. ^{1,2}
KBS406-1	0.5	4.5	3.9 x 6 (#3)	1" NPT	78-1800
KBS412-1	1.0	4.5	3.9 x 12 (#4)	1" NPT	78-1801
KBS618-11/2	2.0	6.6	5 x 18 (#8)	1 1/2" NPT	78-1802
KBS630-11/2	3.4	6.6	5 x 30 (#9)	1 1/2" NPT	78-1803
KBS815-2	2.3	8.6	6.7 x 15 (#1)	2" NPT	78-1804
KBS830-2	4.4	8.6	6.7 x 30 (#2)	2" NPT	78-1805

¹ Model and Price Code Number shown for carbon steel construction.

- for 304 SS change **S** in Model No. to **4SS** and add **S4** to Price Code No.

- for 316 SS change **S** in Model No. to **6SS** and add **S6** to Price Code No.

² For Viton elastomers, add **-V** to Model No. and **V** to Price Code No.



Threaded (NPT)
Bottom outlet

MODEL NUMBER	DIMENSIONS (in)			SHIP WT. (lbs)
	B	C	D	
KBS406-1	3.0	0.5	12.3	35
KBS412-1	3.0	0.5	17.5	40
KBS618-1 1/2	4.2	.75	25.3	90
KBS630-1 1/2	4.2	.75	35.2	115
KBS815-2	5.3	1.0	24.7	115
KBS830-2	5.3	1.0	36.2	135

Side outlet and flanged connections also available



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MULTI-ROUND BAG CHAMBERS

FEATURES:



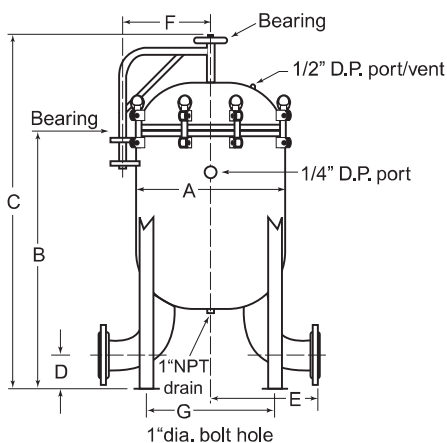
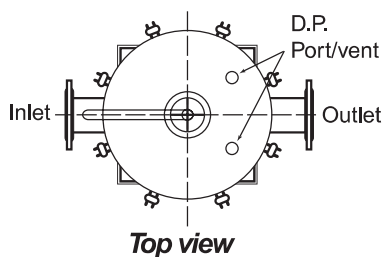
- Carbon steel or stainless steel construction
- EPDM elastomers standard (Viton optional)
- Uses multiple #2 size bags
- Bearing assisted davit assembly
- Swing bolt cover closure with eye nuts
- 150 PSI pressure rating
- 316 SS strainer basket
- Differential, drain and vent ports
- Heavy duty support legs
- 2-part epoxy finish on carbon steel

Consult Sales Department for options

Filter bags ordered separately

TO ORDER, use Price Code Number

MODEL NUMBER ^{1,2}	SURF. AREA ³ (sq.ft)	NUMBER OF BASKETS	DIA. A (in)	CONN. SIZE FLANGE	PRICE CODE NO. ^{1,2}	DIMENSIONS (in)						SHIP WT. (lbs)
						B	C	D	E	F	G	
KBS1830-3F	8.8	2	18	3"	78-1810	43.0	59.0	5.8	11.0	11.9	12.0	435
KBS2230-4F	13.2	3	24	4"	78-1811	52.0	70.0	6.5	14.5	15.0	16.5	555
KBS2430-4F	17.6	4	24	4"	78-1812	52.5	70.0	6.5	14.5	15.0	16.5	590
KBS3030-6F	26.4	6	30	6"	78-1813	50.5	71.0	8.0	19.1	18.0	20.8	850

¹ Model and Price Code Number shown for carbon steel construction.- for 304 SS change **S** in Model No. to **4SS**and add **S4** to Price Code No.- for 316 SS change **S** in Model No. to **6SS** andadd **S6** to Price Code No.² For Viton elastomers, add **-V** to Model No. and **V** to Price Code No.³ Basket size 6.7" x 30" (#2)



TWIN CAPACITY BAG CHAMBER



FEATURES:

- 2 Model KBS830 housings with common connections
- Increased flow rates
- Lower differential pressure
- Carbon steel or stainless steel construction

MODEL NUMBER ^{1,2}	SURF. AREA ³ (sq.ft)	CONN. SIZE	PRICE CODE NO. ^{1,2}
KBS882-3F	8.8	3" FNPT	78-1806

¹ Model and Price Code Number shown for carbon steel construction.

- for 304 SS change **S** in Model No. to **4SS**
and add **S4** to Price Code No.

- for 316 SS change **S** in Model No. to **6SS** and
add **S6** to Price Code No.

² For Viton elastomers, add **-V** to Model No. and **V** to Price Code No.

³ Basket size 6.7" x 30" (#2)

OEM 100 PSI BAG CHAMBER



Our OEM, 100 PSI liquid bag housing offers a superb quality vessel for lower pressure applications. The vessel has a dome base and includes all of the favorable features of our standard 150 PSI vessel.

FEATURES:

- Carbon steel or 304 stainless steel construction
- 100 PSI pressure rating
- Low pressure drop with #12 size bag
- Strainer basket
- Side and bottom outlets



MODEL NUMBER ^{1,2}	SURF. AREA ³ (sq.ft)	CONN. SIZE	PRICE CODE NO. ^{1,2}
KBS100-2	5.5	2" NPT	78-1807

¹ Model and Price Code Number shown for carbon steel construction.

- for 304 SS change **S** in Model No. to **4SS**
and add **S4** to Price Code No.

² For Viton elastomers, add **-V** to Model No. and **V** to Price Code No.

³ Basket size 8" x 30" (#12)

**SERIES 'K' METAL FILTER CHAMBERS**

C-207_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**INITIAL and REPLACEMENT FILTER BAGS**

- Polypropylene felt bags
- Heavy duty handle
- Carbon steel ring
- Other bags available (consult sales dept.)

3 SIZE BAG 0.5 sq.ft

MICRON RATING	MODEL	PRICE CODE NUMBER
5	FB-K05K3S	88-1565 A
10	FB-K010K3S	88-1565 B
25	FB-K025K3S	88-1565 C
50	FB-K050K3S	88-1565 D
100	FB-K0100K3S	88-1565 E

4 SIZE BAG 1.0 sq.ft

MICRON RATING	MODEL	PRICE CODE NUMBER
5	FB-K05K4S	88-1566 A
10	FB-K010K4S	88-1566 B
25	FB-K025K4S	88-1566 C
50	FB-K050K4S	88-1566 D
100	FB-K0100K4S	88-1566 E

8 SIZE BAG 2.0 sq.ft

MICRON RATING	MODEL	PRICE CODE NUMBER
5	FB-K05K8S	88-1567 A
10	FB-K010K8S	88-1567 B
25	FB-K025K8S	88-1567 C
50	FB-K050K8S	88-1567 D
100	FB-K0100K8S	88-1567 E

1 SIZE BAG 2.3 sq.ft

MICRON RATING	MODEL	PRICE CODE NUMBER
5	FB-K05K1S	88-1568 A
10	FB-K010K1S	88-1568 B
25	FB-K025K1S	88-1568 C
50	FB-K050K1S	88-1568 D
100	FB-K0100K1S	88-1568 E

9 SIZE BAG 3.4 sq.ft

MICRON RATING	MODEL	PRICE CODE NUMBER
5	FB-K05K9S	88-1569 A
10	FB-K010K9S	88-1569 B
25	FB-K025K9S	88-1569 C
50	FB-K050K9S	88-1569 D
100	FB-K0100K9S	88-1569 E

2 SIZE BAG 4.4 sq.ft

MICRON RATING	MODEL	PRICE CODE NUMBER
5	FB-K05K2S	88-1570 A
10	FB-K010K2S	88-1570 B
25	FB-K025K2S	88-1570 C
50	FB-K050K2S	88-1570 D
100	FB-K0100K2S	88-1570 E

12 SIZE BAG 5.5 sq.ft

MICRON RATING	MODEL	PRICE CODE NUMBER
5	FB-K05K12S	88-1571 A
10	FB-K010K12S	88-1571 B
25	FB-K025K12S	88-1571 C
50	FB-K050K12S	88-1571 D
100	FB-K0100K12S	88-1571 E



FILTRATION AND PURIFICATION GUIDE FOR METAL FINISHING SOLUTIONS

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TF-139_G

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

PROCESS	pH	TEMPERATURE °F	TURNOVERS / HOUR	SURFACE AREA ft. ² /per 100 GAL.	MEDIA FIBER / CORE	MICRON DENSITY	CARBON TREATMENT	MATERIALS	
								PREFERRED	ALTERNATE
Anodizing, Decorative	<1.0	60 - 80	2 - 4X	7.0 - 10.5	Polypro / Polypro	10 - 20	N / A	CPVC / Viton	PVDF / Viton
Anodizing, Hard	<1.0	30 - 35	2 - 4X	7.0 - 10.5	Polypro / Polypro	10 - 20	N / A	CPVC / Viton	PVDF / Viton
Nickel Acetate Seal	5.5	190 - 200	2 - 3X	7.0 - 10.5	Polypro / SS	10 - 20	N / A	PVDF / Viton	316SS / Viton
Brass, Bronze (CN)	>10.0	100 - 140	2 - 4X	7.0 - 10.5	Polypro / SS	10 - 20	N / A	PP / EPDM	PVC / EPDM
Cadmium (CN)	>10.0	80 - 100	2 - 4X	7.0 - 10.5	Polypro / Polypro	10 - 20	N / A	CPVC / EPDM	PP / EPDM
Cadmium, Sulfate	1.0	70 - 90	2 - 4X	7.0 - 10.5	Polypro / Polypro	10 - 20	N / A	CPVC / EPDM	PP / EPDM
Cadmium, Chloride	7.5	70 - 90	2 - 4X	7.0 - 10.5	Polypro / Polypro	10 - 20	N / A	CPVC / EPDM	PP / EPDM
Cleaner, Soak	>10.0	90 - 200	2 - 4X	10.5 - 17.5	Polypro / Polypro	15 - 50	N / A	316SS / EPDM	PP / EPDM
Cleaner, Electro	>8.0	50 - 90	2 - 4X	10.5 - 17.5	Polypro / Polypro	15 - 75	N / A	PP / EPDM	PVC / EPDM
Chromium (Hex.)	<1.0	100 - 140	2 - 3X	7.0 - 10.5	HI-PERF	10 - 20	N / A	CPVC / Viton	PVDF / HYPALON
Chromium (Tri.)	2.5	70 - 80	2 - 4X	10.5 - 14.0	Polypro / Polypro	5 - 15	Periodic	CPVC / EPDM	PVC / EPDM
Copper (CN)	12.0	70 - 140	2 - 4X	7.0 - 10.5	Polypro / SS	10 - 20	Periodic	PP / EPDM	CPVC / EPDM
Copper, Sulfate	<1.0	70 - 80	2 - 6X	10.5 - 14.0	Polypro / Polypro	5 - 15	Periodic	CPVC / EPDM	PP / EPDM
Copper, Fluoroborate	<1.0	70 - 90	2 - 4X	7.0 - 10.5	Polypro / Polypro	5 - 15	Periodic	CPVC / EPDM	PP / EPDM
Copper, Pyrophosphate	8.0	110 - 140	2 - 5X	7.0 - 10.5	Polypro / Polypro	5 - 15	Periodic	PP / EPDM	CPVC / EPDM
Copper, Electroless	13.0	80 - 120	4 - 10X	7.0 - 10.5	Polypro / Polypro	1 - 10	N / A	CPVC / EPDM	PP / EPDM
Gold, Acid	3.5 - 5.0	80 - 120	3 - 6X	7.0 - 10.5	Polypro / Polypro	1 - 10	Periodic	PP / EPDM	CPVC / EPDM
Gold, Neutral	6.0 - 7.0	80 - 120	3 - 6X	7.0 - 10.5	Polypro / Polypro	1 - 10	Periodic	PP / EPDM	CPVC / EPDM
Gold, Alkaline (CN)	8.0 - 12.0	100 - 140	3 - 5X	7.0 - 10.5	Polypro / Polypro	5 - 15	Periodic	PP / EPDM	CPVC / EPDM
Iron, Chloride	3.0	120 - 140	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	Periodic	CPVC / EPDM	PP / EPDM
Lead, Fluoborate	1.0	90 - 100	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	N / A	CPVC / EPDM	PVDF / Viton
Nickel, Watts	4.0 - 5.0	120 - 160	2 - 5X	7.0 - 10.5	Polypro / Polypro	5 - 15	Periodic	CPVC / EPDM	PP / EPDM
Nickel, Woods	2.0	120 - 140	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	Periodic	CPVC / EPDM	PVC / EPDM
Nickel, Sulfamate	4.0	100 - 130	2 - 5X	7.0 - 10.5	Polypro / Polypro	5 - 15	Periodic	CPVC / EPDM	PP / EPDM
Nickel, Electroless	4.0 - 6.0	180 - 200	6 - 12X	7.0 - 10.5	Polypro / Polypro	1 - 10	N / A	CPVC / Viton	PVDF / Viton
Nickel, Electroless	>10.0	120 - 190	6 - 12X	7.0 - 10.5	Polypro / Polypro	1 - 10	N / A	CPVC / Viton	—
Palladium, Amine	8.0 - 9.0	80 - 120	3 - 5X	7.0 - 10.5	Polypro / Polypro	1 - 10	N / A	PP / EPDM	—
Palladium - Nickel	8.0 - 9.0	80 - 120	3 - 5X	7.0 - 10.5	Polypro / Polypro	1 - 10	N / A	PP / EPDM	—
Rhodium	1.0	100 - 120	3 - 5X	7.0 - 10.5	Polypro / Polypro	1 - 10	Periodic	CPVC / EPDM	PP / EPDM
Silver (CN)	12.0	70 - 85	3 - 5X	7.0 - 10.5	Polypro / Polypro	5 - 15	Periodic	PP / EPDM	CPVC / EPDM
Tin, Sulfuric	<1.0	70 - 85	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	Periodic	CPVC / Viton	PVC / Viton
Tin, MSA	2.0	70 - 120	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	Periodic	CPVC / Viton	PP / Viton
Tin, Alkaline	12.0	140 - 160	2 - 3X	10.5 - 14.0	Polypro / Polypro	20 - 30	N / A	PP / EPDM	—
Tin - Nickel	2.5	140 - 160	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	Periodic	CPVC / Viton	PP / EPDM
Tin - Lead, MSA	2.0	70 - 100	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	Periodic	CPVC / Viton	PP / EPDM
Tin - Lead, Fluoborate	1.0	70 - 100	2 - 3X	7.0 - 10.5	Polypro / Polypro	10 - 20	Periodic	CPVC / EPDM	PVC / EPDM
Zinc, Chloride	5.0 - 6.0	70 - 120	3 - 5X	14.0 - 17.5	Polypro / Polypro	20 - 30	Periodic	CPVC / EPDM	PVC / EPDM
Zinc - Cobalt	5.0 - 6.0	70 - 100	3 - 5X	14.0 - 17.5	Polypro / Polypro	20 - 30	Periodic	CPVC / EPDM	PVC / EPDM
Zinc, Alkaline	>13.0	70 - 100	2 - 4X	10.5 - 14.0	Polypro / Polypro	20 - 30	N / A	PP / EPDM	316SS / EPDM
Zinc (CN)	>13.0	70 - 100	2 - 4X	10.5 - 14.0	Polypro / SS	20 - 30	N / A	PP / EPDM	316SS / EPDM

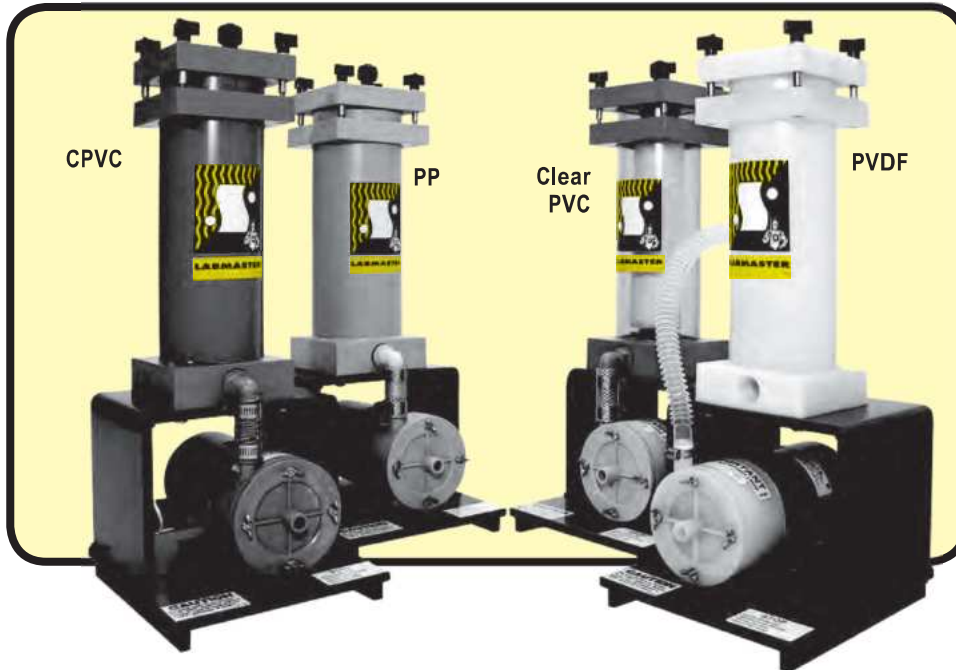
NOTES:

- Use information as a guide only. Contact SERFILCO Sales Department for specific recommendations.
- Maximum temperature for materials:
PLASTICS: PVC - 130°F; PP - 150°F; CPVC - 180°F; PVDF - 200°F
ELASTOMERS: EPDM - 180°F; Viton® - 200°F; Hypalon® - 200°F
- Surface area is measured in sq. ft. and based on depth wound cartridges (each 2½" diameter x 10" long unit = 3.5 sq. ft. in equivalent dirt loading).
- Increasing the surface area improves efficiency and prolongs the time interval between media change.
- Increased turnover allows the use of coarser media to increase solids holding capacity.
- For best results, **continuous** filtration should be used in every application.
- Periodic carbon treatment is most efficient when using optional carbon filtration chamber.
- Above 180°F consider using steel or stainless steel.
 PP or Polypro = Polypropylene N / A = Not applicable
 SS = Stainless Steel

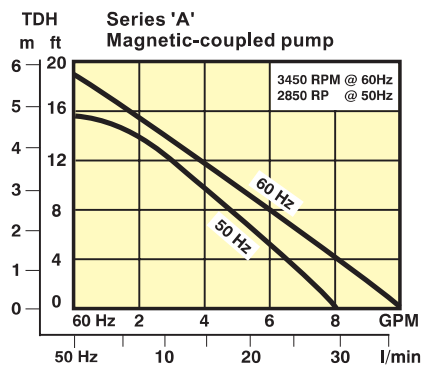
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KEEP PROCESS FLUIDS CLEAN
For Tanks to 100 Gallons



COMPACT, ECONOMICAL & DEPENDABLE
FILTRATION



- **Non-metallic solution contact**
Select materials of construction for compatibility with solutions, operating temperature and pressure.
 - PCL** - Clear PVC (Polyvinyl Chloride) with PP (Polypropylene) pump
 - PPL** - Polypropylene
 - CL** - CPVC - Chlorinated Polyvinyl Chloride
 - KL** - PVDF - Polyvinylidene Fluoride
- **Flow rate 345 GPH @ 60 Hz**

MADE IN USA



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

LABMASTER Filtration Systems are compact, corrosion resistant and extremely simple to operate. Choice of construction materials allows use with most liquids, including harsh chemicals at elevated temperatures.

Seal-less Magnetic-Coupled Pump

Systems utilize Series 'A' magnetic-coupled pumps and are available in a variety of engineered plastics to suit chemistry and temperature, including PP, CPVC and PVDF.

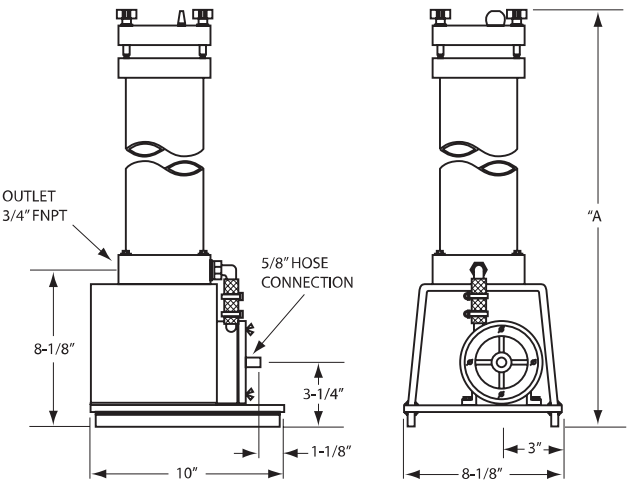
Filter Chamber

Choice of 10", 20" or 30" size chamber. Constructed of clear PVC, PP, CPVC or PVDF. Standard elastomers are EPDM (FKM with PVDF). Chambers accept depth wound, pleated, and carbon cartridges.

TO ORDER

LABMASTER SYSTEM NO.				FLOW RATE U.S. GPH	MEDIA	SOLIDS AREA Sq. Ft.	"A" DIM. Inches	SHIPPING WEIGHT Lbs.
PCL	PPL	CL	KL					
PCL1A6	PPL1A6	CL1A6	KL1A6	345	1 - 10"	3.5	21¾	23
PCL2A6	PPL2A6	CL2A6	KL2A6	345	2 - 10"	7.0	31¾	30
PCL3A6	PPL3A6	CL3A6	KL3A6	345	3 - 10"	10.5	41¾	37

DIMENSIONS



OPTIONAL

DESCRIPTION	ADD TO SYSTEM NO.
Viton elastomers on filter chamber and pump	V
Optional motor 230V/1/50-60	change 6 to 5 in system number

DESCRIPTION	PRICE CODE NO.
Hose Kit (Includes priming kit) PVC & CPVC	99-1600
PP	99-1601
Priming kit	99-0160
Filter Media - order separately. Refer to Bulletin M-109 (cartridge) or M-305 (carbon).	





COMPACT, ECONOMICAL FILTRATION AND PURIFICATION

Flow rates to 600 GPH @ 60 Hz



The SERFILCO Labmaster 'LX' Series is engineered to provide reliable, high performance filtration in a small package.

These compact pump and filter systems are popular for use on small tank production in the electronics industry and in precious metal plating, as well as for laboratory and pilot plant runs.

Featuring SERFILCO's non-metallic, leak-proof Series 'X' magnetic coupled pumps and industry proven Series 'L' filter chambers, these systems provide high flow and high turnover rates, assuring continuous particle removal. Labmaster 'LX' systems are available with or without a carbon or resin purification chamber.

- **Seal-less magnetic drive pumps**

Labmaster 'LX' filtration systems feature highly efficient seal-less magnetic coupled pumps for total solution containment and reliable performance to 1.3 S.G. The pumps are available in polypropylene or PVDF.

- **Filter chamber**

Constructed of clear PVC, CPVC, polypropylene or PVDF to ensure chemical and temperature compatibility in a wide range of applications.

The standard chamber accepts double open end (DOE) depth wound, pleated, melt blown, and carbon cartridges. A 222 "O"-ring seat for single open end (SOE) cartridges is available.

- **Simple carbon or resin treatment**

The systems are also available with optional purification chambers in polypropylene, PVC or CPVC with reusable ABS canister offering a low-cost, but effective method of continuously or periodically removing organic impurities from plating baths and other chemical solutions.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**SPECIFICATIONS****Standard Labmaster 'LX' systems include:**

- System flow rates to 600 GPH
- Series 'X' magnetic coupled pump good to 1.3 S.G.
- Series 'L' filter chamber — for 10", 20" or 30" cartridges
- Corrosion resistant PVC hooded mounting base
- EPDM elastomers standard
- Stainless steel external fasteners
- Polypropylene vent valve or PVDF vent plug
- Order hose kit separately

**CAUTION:** Do not use vinyl hose when system is to be used at 150°F (66°C) or higher.**PCL Polypropylene pump, clear PVC chamber***

Systems for mild acid (non-fluoride) and alkalis including electroless copper and gold.

CL Polypropylene pump and CPVC filter chamber*

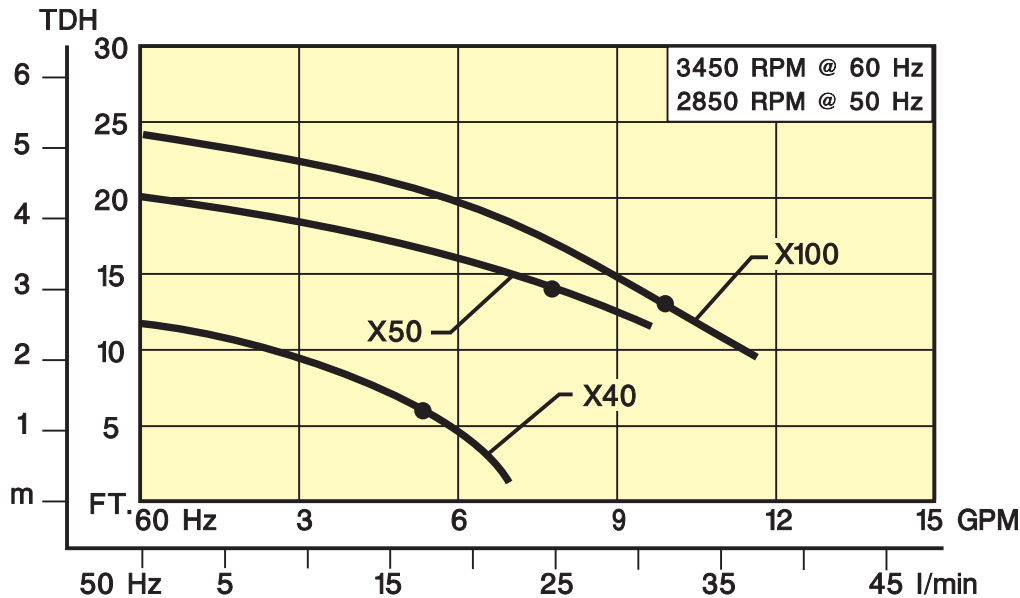
Systems for nickel sulfamate, acid copper, copper cyanide, zinc chloride and most fluoborate baths

PPL Polypropylene pump and filter chamber*

Systems for nickel sulfamate, acid copper, copper cyanide, and zinc chloride.

KL PVDF pump and filter chamber*

Systems for electroless nickel and nickel acetate seal.

** Consult a chemical resistance guide to confirm material /solution compatibility.***PERFORMANCE**



LABMASTER 'LX' FILTRATION SYSTEMS Ordering Information

F-212_E

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**TO ORDER, use System Number**

SYSTEM NO.				MEDIA ² No - length.	PUMP			CONNS. ¹	SHIPPING WEIGHT (lbs.)
PCL	PPL	CL	KL ¹		MODEL	HP ³	FLOW ⁴		
PCL1X40	PPL1X40	CL1X40	KL1X40	1 - 10"	X40	1/40	330	5/8" hose barb	25
PCL2X40	PPL2X40	CL2X40	KL2X40	1 - 20"					30
PCL3X40	PPL3X40	CL3X40	KL3X40	1 - 30"					35
PCL1X50	PPL1X50	CL1X50	KL1X50	1 - 10"	X50	1/15	465	3/4" hose barb	25
PCL2X50	PPL2X50	CL2X50	KL2X50	1 - 20"					30
PCL3X50	PPL3X50	CL3X50	KL3X50	1 - 30"					35
PCL1X100	PPL1X100	CL1X100	KL1X100	1 - 10"	X100	1/10	600	3/4" hose barb	25
PCL2X100	PPL2X100	CL2X100	KL2X100	1 - 20"					30
PCL3X100	PPL3X100	CL3X100	KL3X100	1 - 30"					35

¹ PVDF systems have NPT connections.² Order filter media separately³ Standard motors are 100-110V/1/50-60 with 6 ft. cord and 60 Hz plug. Optional 230V/1/50-60 motor available.⁴ U.S. GPH @ 60 Hz, see flow curve.**ACCESSORIES**

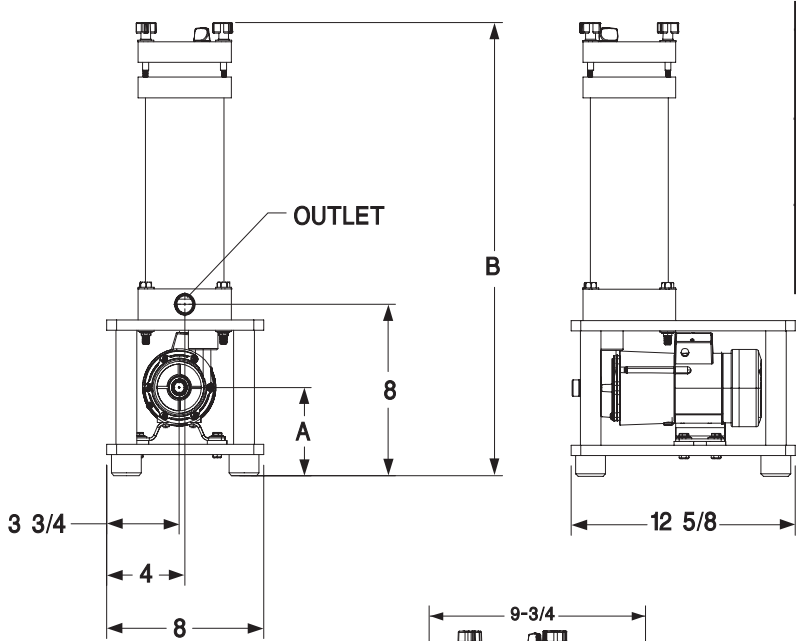
DESCRIPTION	ADD TO SYSTEM NO.
Viton elastomers on filter chamber and pump	V
Optional motor 230V/1/50-60	-5

DESCRIPTION	PRICE CODE NO.	
	X40	X50 & X100
Hose Kit (Includes priming kit)	PVC & CPVC 99-1600	99-1602
	PP 99-1601	99-1603
Filter Media - order separately. Refer to Bulletin M-109 (cartridge) or M-305 (carbon)		

CARBON PURIFICATION CHAMBER with flow control valve, hose & drain	PRICE CODE NO.	
	CPVC	PVC
Includes ABS mini-canister / CPVC or clear PVC chamber for 0.9 lbs. granular carbon 10" canister 2.1 lbs. granular carbon 20" canister 3.2 lbs. granular carbon 30" canister	O-C1CM O-C2CM O-C3CM	O-P1CM O-P2CM O-P3CM
Includes CPVC or clear PVC chamber for 1.2 lbs. granular carbon 2.5 lbs. granular carbon 3.8 lbs. granular carbon	O-C1C O-C2C O-C3C	O-P1C O-P2C O-P3C
Includes CPVC or clear PVC chamber for 0.6 lbs. 10" carbon cartridge 1.2 lbs. 20" carbon cartridge 1.8 lbs. 30" carbon cartridge	O-C1CC O-C2CC O-C3CC	O-P1CC O-P2CC O-P3CC

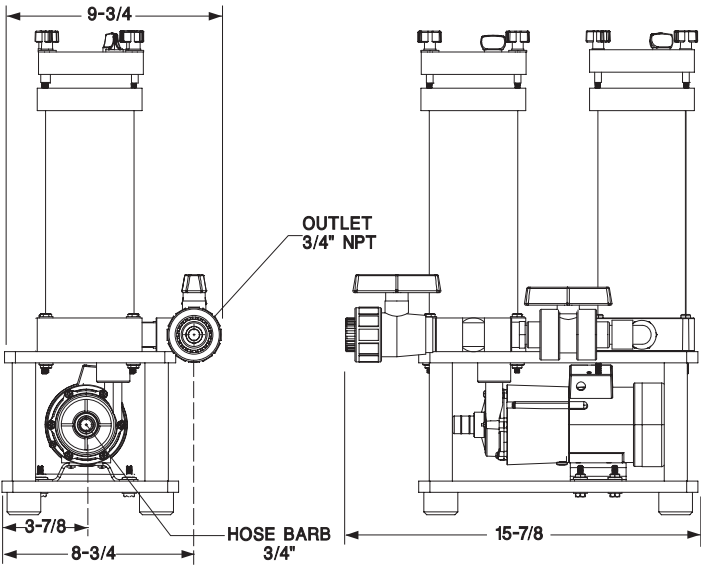


DIMENSIONS



SYSTEM NO.	A	B
1 X 40	3 3/4"	21 1/2"
2 X 40		31 1/2"
3 X 40		41 1/2"
4 X 40		51 1/2"
1 X 50	4"	21 1/2"
2 X 50		31 1/2"
3 X 50		41 1/2"
4 X 50		51 1/2"
1 X 100	4"	21 1/2"
2 X 100		31 1/2"
3 X 100		41 1/2"
4 X 100		51 1/2"

LABMASTER 'LX'
FILTRATION SYSTEMS
with OPTIONAL CARBON
PURIFICATION CHAMBER





COMPACT, ECONOMICAL FILTRATION AND PURIFICATION

- **Flow rates to 2400 GPH @ 60 Hz**
(7400 LPH @ 50 Hz)
- **Non-metallic solution contact**
Select materials of construction for compatibility with solutions, operating temperature and pressure.

SPACE-SAVER Systems are compact, corrosion resistant and extremely simple to operate. Choice of construction materials allows use with most liquids, including harsh chemicals at elevated temperatures. Standard elastomers are EPDM with CPVC or polypropylene systems, and Viton with PVDF systems.

- **Choice of pump**

Seal-less magnetic drive pump:

Series 'B' seal-less magnetic coupled pumps provide total solution containment and reliable performance. The pumps are CPVC, polypropylene, or PVDF.

Mechanical Seal Pumps:

Series 'HC' or 'HK' direct drive pumps are available with either single or double mechanical seals. The pumps are CPVC or PVDF.

- **Filter Chamber**

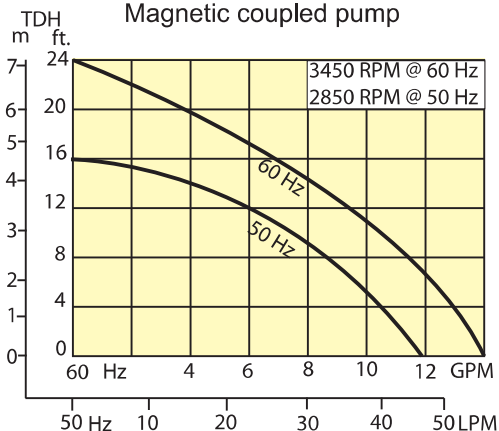
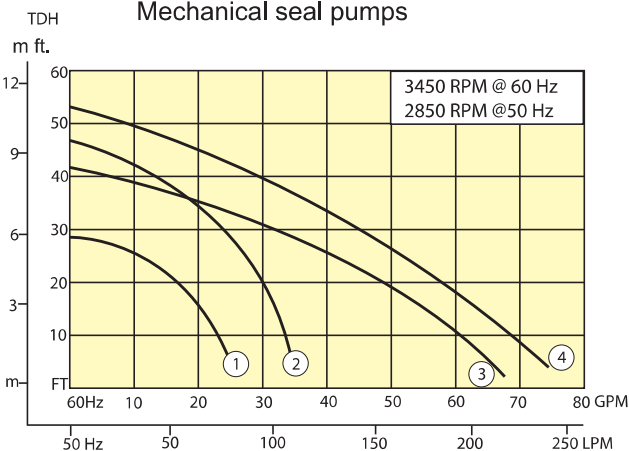
Series 'S', three cartridge chamber, is available in CPVC, polypropylene, or PVDF.

- **Simple carbon or resin treatment**

Space-saver systems are also available with optional carbon purification chambers for carbon cartridges or fillable canisters.

**Standard SPACE-SAVER systems include:**

- Non-metallic solution contact
- Corrosion resistant mounting base.
- Stainless steel or corrosion resistant external hardware and fasteners.
- Vent valve assembly
- Pressure gauge guard assembly included with all cartridge / sleeve systems.
- Systems 1 HP and up 230-460V/3/50-60 Hz, others 115-230V/1/50-60 Hz.
- Optional hose kits available (See Bulletin A-215)

FLOW CURVES**Series 'B'**
Magnetic coupled pump**Series 'HC' & 'HK'**
Mechanical seal pumps**TO ORDER, use System Number****Systems with magnetic drive pump and CPVC, polypropylene or PVDF filter chamber**

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft)	Suct./Disch FNPT Connections (inches)	Shipping Weight (lbs)
	GPH @60Hz	LPH @50 Hz									
CS6B6	600	2000	B	1/6	10	8	S	3-20"	21	3/4 H X 1	73
CS9B6	600	2000	B	1/6	10	8	S	3-30"	31.5	3/4 H X 1	75
CS12B6	600	2000	B	1/6	10	8	S	3-40"	42	3/4 H X 1	78

¹ Listed system includes CPVC chamber and pump

To order system with polypropylene chamber and pump, change the C to PP in system No.

To order system with PVDF chamber and pump, change the C to K in system No.





2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

TO ORDER, use System Number**Systems with CPVC or PVDF direct drive pump and CPVC or PVDF filter chamber**

System Number ¹	Flow Rate		Pump Series	Pump HP ²	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft)	Suct./Disch FNPT Connections (Inches)	Shipping Weight (lbs)
	GPH @60Hz	LPH @50 Hz									
CS6HC103	1200	3700	HC	1/3	12	10	S	3-20"	21	1 X 1	56
CS9HC103	1200	3700	HC	1/3	12	10	S	3-30"	31.5	1 X 1	66
CS12HC103	1200	3700	HC	1/3	12	10	S	3-40"	42	1 X 1	76
CS9HC208	1800	5600	HC	3/4	20	16	S	3-30"	31.5	1 X 1	120
CS12HC208	1800	5600	HC	3/4	20	16	S	3-40"	42	1 X 1	140
CSH9HK310	2400	7400	HK	1.0	18	14	S	3-30"	31.5	1 1/2 X 1 1/4	125
CSH12HK310	2400	7400	HK	1.0	18	14	S	3-40"	42	1 1/2 X 1 1/4	135
CSH9HK415	3000	9500	HK	1.5	23	18	S	3-30"	31.5	1 1/2 X 1 1/4	130

¹ Listed system includes CPVC chamber and pump

To order system with PVDF chamber and pump, change the C to K in system No.

² To order pump with double mechanical seal - change HC to HCD or HK to HKD in System No.**OPTIONAL**

VITON ELASTOMERS	ADD TO SYSTEM NO.
Filter chamber and pump	V

DESCRIPTION	PRICE CODE NO.
MOTOR STARTERS - NEMA 4X Watertight push button	
115 - 230V/1/50-60 230 - 460V/3/50-60	O-MS1P O-MS3P
Add -S to Motor Starter PCN when ordering motor starter for use with DRI-STOP® Pump Protector. <i>example:</i> O-MS1P-S Important: Specify operating voltage.	
DRI-STOP® PUMP PROTECTOR	
DRI-STOP 2R ³ DRI-STOP 3 ⁴	O-2DS2R O-DS3C
³ DRI-STOP 2R for use with double mechanical seal pumps. ⁴ DRI-STOP 3 for use with magnetic drive or single mechanical seal pumps.	
OPERATING VOLTAGE	
1 horsepower & above - Single phase Under 1 horsepower - Three phase	O-1PH O-3PH

DESCRIPTION	PRICE CODE NO.	
CARBON PURIFICATION CHAMBER with flow control valve, hose & drain Order carbon media from Bulletin M-305	CPVC	PP
Includes ABS mini-canister / CPVC chamber for 2.1 lbs granular carbon 20" canister 3.2 lbs. granular carbon 30" canister	O-C2CM O-C3CM	- -
Includes PVC canister / CPVC chamber for 7.5 lbs. granular carbon 5" x 28" canister (PVC canister / PVC chamber - O-1528)	O-1528C	-
Includes CPVC or polypropylene chamber for 1.2 lbs 20" carbon cartridge 1.8 lbs 30" carbon cartridge 3.0 lbs 5" x 28" Maxi-carb cartridge	O-C2CC O-C3CC O-1528M	O-P2CC O-P3CC O-PP1528M
50 Hz OPERATION		
Single Phase @ 50 Hz Three phase @ 50 Hz	O-150H O-350H	

Important:

Filter media is ordered separately. Refer to Bulletin M-109 (cartridges & sleeves) or M-305 (carbon)

**CAUTION:** Do not use vinyl hose when system is to be used at 150°F (66°C)
System suction and discharge should be hard piped.
Refer to Bulletin A-213 for installation fittings



COMPACT, HIGH FLOW FILTRATION, CARBON OR RESIN PURIFICATION

Flow rates to 1200 GPH @ 60 Hz



The SERFILCO Space-Saver 'SX' Series is engineered to provide reliable, high performance filtration in a small package.

These compact pump and filter systems are popular for use on small to medium size tank production in the electronics industry and in precious metal plating.

Featuring SERFILCO's new, non-metallic, leak-proof Series 'X' magnetic coupled pumps and industry proven Series 'S' filter chambers, these systems provide high flow and high turn-over rates, assuring continuous particle removal. Space-Saver 'SX' systems are available with or without a carbon or resin purification chamber.

- **Seal-less magnetic drive pumps**

Space-Saver 'SX' filtration systems feature highly efficient seal-less magnetic coupled pumps for total solution containment and reliable performance. The pumps are available in polypropylene or ETFE.

- **Filter chamber**

Constructed of PVC, CPVC, polypropylene or PVDF to ensure chemical and temperature compatibility in a wide range of applications.

The standard chamber accepts double open end (DOE) depth wound, pleated, melt blown, cleanable sleeve and carbon cartridges. A 222 "O"-ring seat for single open end (SOE) cartridges is optional.

- **Simple carbon or resin treatment**

Space-Saver 'SX' systems are also available with optional purification chambers in PVC or CPVC with reusable ABS canister offering a low-cost, but effective method of continuously or periodically removing organic impurities from plating baths and other chemical solutions.





SPECIFICATIONS

Standard SPACE-SAVER 'SX' systems include:

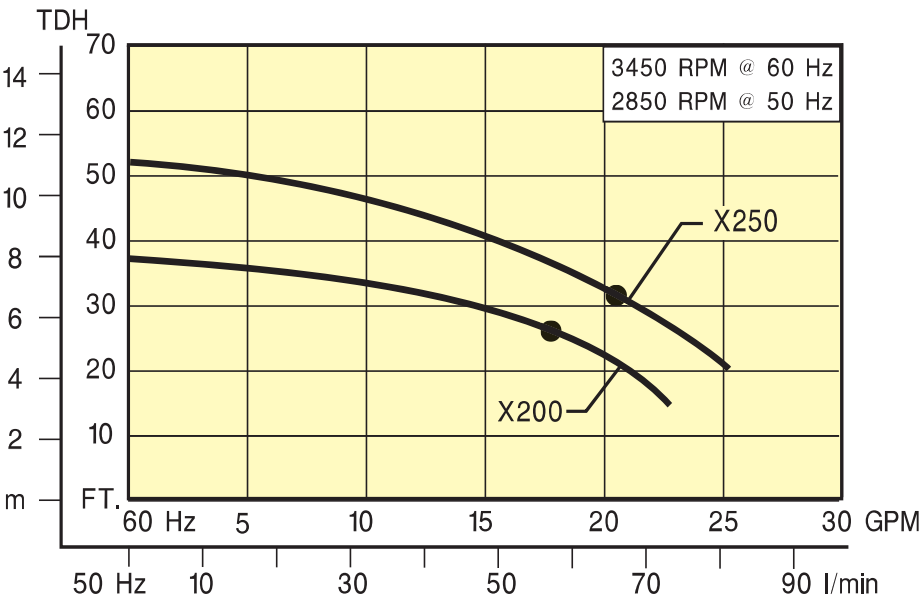
- System flow rates to 1200 GPH
- Series 'X' magnetic coupled pump with 1" NPT connections
- Series 'S' filter chamber with 0 - 30 PSI pressure gauge and guard assembly.
- EPDM elastomers standard
- Corrosion resistant PVC hooded mounting base
- Stainless steel external fasteners
- Polypropylene vent valve or PVDF vent plug

PS PVC chamber with polypropylene pump *
PPS Polypropylene chamber and pump *

CS CPVC chamber and polypropylene pump *
KS PVDF chamber and ETFE pump *

* Consult a chemical resistance guide to confirm material / solution compatibility.

PERFORMANCE



- Realistic system flow



SPACE-SAVER 'SX' FILTRATION Ordering Information

F-213_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**TO ORDER, use System Number**

SYSTEM NO.				MEDIA ¹ No - lgth.	PUMP			CONNS.	SHIPPING WEIGHT (lbs.)
PS	PPS	CS	KS		MODEL	HP ²	FLOW ³		
PS3X200	PPS3X200	CS3X200	KS3X200	3 - 10"	X200	1/5	1000	1" NPT	40
PS6X200	PPS6X200	CS6X200	KS6X200	3 - 20"					45
PS9X200	PPS9X200	CS9X200	KS9X200	3 - 30"					50
PS12X200	PPS12X200	CS12X200	KS12X200	3 - 40"					55
PS3X250	PPS3X250	CS3X250	KS3X250	3 - 10"	X250	1/3	1200	1" NPT	45
PS6X250	PPS6X250	CS6X250	KS6X250	3 - 20"					50
PS9X250	PPS9X250	CS9X250	KS9X250	3 - 30"					55
PS12X250	PPS12X250	CS12X250	KS12X250	3 - 40"					60

¹ Order filter media separately.²

Optional 230V/1/50-60 motor available.

³**ACCESSORIES**

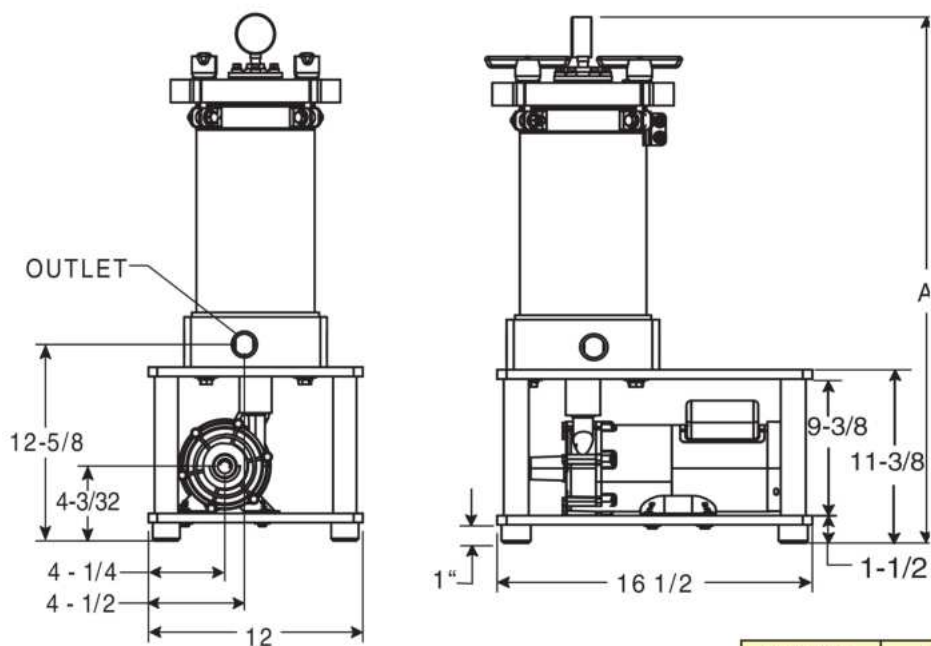
DESCRIPTION	ADDTO SYSTEM NO.
Viton elastomers on filter chamber and pump	V
Optional motor 230V/1/50-60	-5

CARBON PURIFICATION CHAMBER ⁴ with flow control valve, hose & drain	PRICE CODE NO.	
	CPVC	PVC
Includes ABS mini-canister / CPVC or clear PVC chamber for 0.9 lbs. granular carbon 10" canister 2.1 lbs. granular carbon 20" canister 3.2 lbs. granular carbon 30" canister	O-C1CM O-C2CM O-C3CM	O-P1CM O-P2CM O-P3CM
Includes CPVC or clear PVC chamber for 1.2 lbs. bulk granular carbon 2.5 lbs. bulk granular carbon 3.8 lbs. bulk granular carbon	O-C1C O-C2C O-C3C	O-P1C O-P2C O-P3C
Includes CPVC or clear PVC chamber for 0.6 lbs. 10" carbon cartridge 1.2 lbs. 20" carbon cartridge 1.8 lbs. 30" carbon cartridge	O-C1CC O-C2CC O-C3CC	O-P1CC O-P2CC O-P3CC

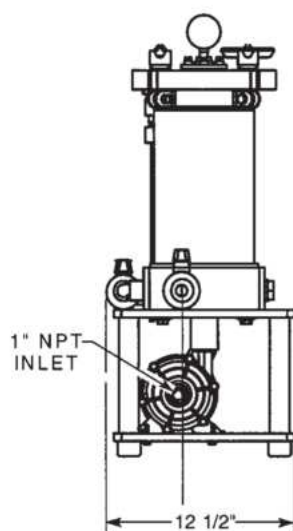
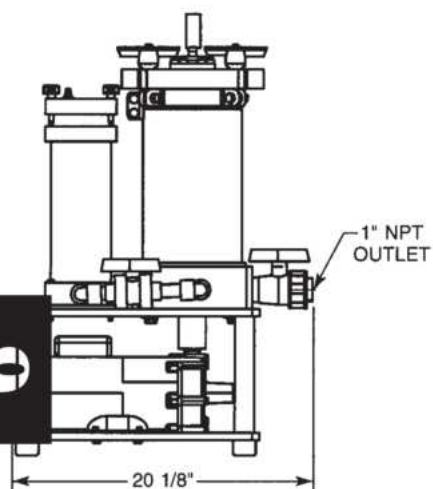
⁴ Order carbon media from Bulletin M-305



DIMENSIONS



SYSTEM SIZE	A
10"	30 ³ / ₈ "
20"	40 ³ / ₈ "
30"	50 ³ / ₈ "
40"	60 ³ / ₈ "



**SPACE-SAVER 'SX'
FILTRATION SYSTEMS
with OPTIONAL CARBON
PURIFICATION CHAMBER**



SPACE-SAVER® 'SM' FILTRATION SYSTEMS

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F-214_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

COMPACT, HIGH FLOW FILTRATION DRY RUN CAPABILITY

Flow rates to 3200 GPH @ 60 Hz



For use with process liquids requiring —

non-metallic solution contact, positive containment, high level of solution clarity, minimal downtime and maintenance. Especially suitable for:

**PRINTED CIRCUIT BOARD PROCESSING,
ELECTROPLATING, CLEANERS, RINSES**

The SERFILCO Space-Saver 'SM' Series is engineered to provide reliable, high performance filtration in a small package.

These systems feature our Series 'M' extended dry run magnetic coupled pump and industry proven, rugged design, Series 'S' filter chamber. The system package includes a corrosion resistant PVC hooded mounting base which protects the pump and motor and supports the filter chamber at a convenient height for cartridge changing.

Systems are available in CPVC, PVC or polypropylene with a polypropylene pump, or in PVDF with a PVDF pump. EPDM elastomers are standard. External hardware is stainless steel.

Standard Space-Saver 'SM' systems include:

- Series 'M' magnetic coupled pumps *which can run dry without damage!*
- Corrosion resistant PVC hooded mounting base
- Series 'S' filter chamber with 0 - 60 PSI pressure gauge and guard assembly
- EPDM elastomers standard
- Filter chamber bottom inlet for low pressure drop
- Stainless steel external fasteners and a polypropylene vent valve or PVDF vent plug
- Hard piping and wet testing prior to shipment



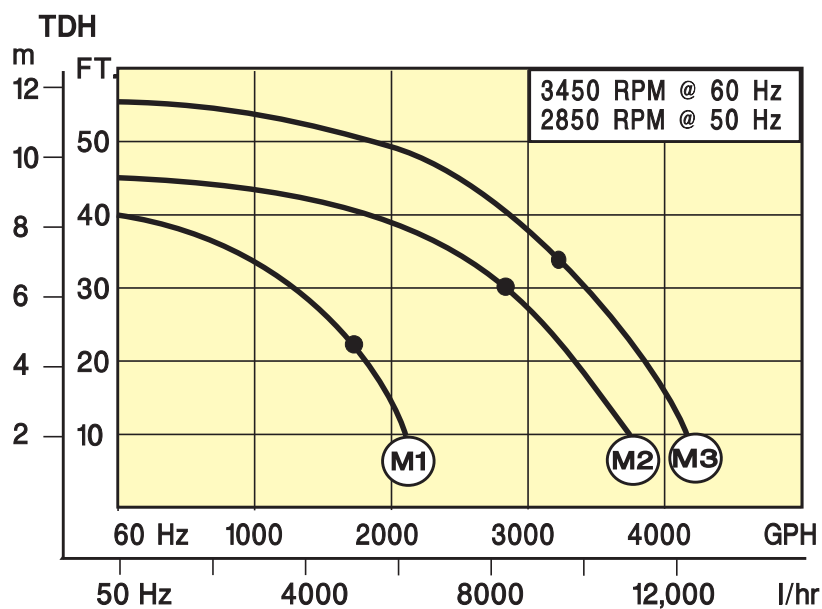
2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**SPECIFICATIONS**

SYSTEM SIZE	FLOW RATE		PUMP HP ¹	PUMP MAX. PSI	CART. CHANGE PSI	MEDIA ² SOLIDS AREA	Sq. ft. SUCT. / DISCH.	CONNECTIONS Inches HOSE KIT	PRICE CODE NO.
	GPH	LPH							
J6M105 J9M105 J12M105	1,700	5,100	½	17	15	3 - 20" 3 - 30" 3 - 40"	21 31.5 42	1 x 1 FNPT	99-1608
J6M208 J9M208 J12M208	2,700	8,100	¾	19	17	3 - 20" 3 - 30" 3 - 40"	21 31.5 42	1½ x 1¼ FNPT ³	99-1610
J6M310 J9M310 J12M310	3,200	9,600	1.0	24	21	3 - 20" 3 - 30" 3 - 40"	21 31.5 42	1½ x 1¼ FNPT ³	99-1610

¹ Less than 1.0 HP — single phase standard
1.0 HP and above — three phase standard

² Order media separately. Refer to Bulletin M-109.

³ PVDF systems 1½" X 1" FNPT

PERFORMANCE

- Realistic system flow



SPACE-SAVER 'SM' FILTRATION Ordering Information

F-214_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**TO ORDER, use System Number**

SYSTEM NUMBER				DIMENSIONS L x W x H Inches	SHIPPING WEIGHT Lbs.
PS	PPS	CS	KS		
PSJ6M105	PPSJ6M105	CSJ6M105	KSJ6M105	24 x 13 x 41	100
PSJ9M105	PPSJ9M105	CSJ9M105	KSJ9M105	24 x 13 x 51	110
PSJ12M105	PPSJ12M105	CSJ12M105	KSJ12M105	24 x 13 x 61	120
PSHJ6M208	PPSHJ6M208	CSHJ6M208	KSJ6M208	24 x 13 x 41	105
PSHJ9M208	PPSHJ9M208	CSHJ9M208	KSJ9M208	24 x 13 x 51	115
PSHJ12M208	PPSHJ12M208	CSHJ12M208	KSJ12M208	24 x 13 x 61	125
PSHJ6M310	PPSHJ6M310	CSHJ6M310	KSJ6M310	24 x 13 x 41	110
PSHJ9M310	PPSHJ9M310	CSHJ9M310	KSJ9M310	24 x 13 x 51	120
PSHJ12M310	PPSHJ12M310	CSHJ12M310	KSJ12M310	24 x 13 x 61	130

PS PVC chamber and polypropylene pump ***CS** CPVC chamber and polypropylene pump ***PPS** polypropylene chamber and pump ***KS** PVDF chamber and pump *

* Consult a chemical resistance guide to confirm material / solution compatibility.

ACCESSORIES

VITON ELASTOMERS	ADD TO SYSTEM NO.
Filter chamber and pump	V

DESCRIPTION	PRICE CODE NO.
MOTOR STARTERS - NEMA 4X Watertight push button	
115 - 230V/1/50-60 230 - 460V/3/50-60	O-MS1P O-MS3P
Add -S to Motor Starter PCN when ordering motor starter for use with DRI-STOP Pump Protector. i. e. O-MS1P-S Important: Specify operating voltage.	
OPERATING VOLTAGE	
1 horsepower & above - Single phase Under 1 horsepower - Three phase	O-1PH O-3PH
50 Hz OPERATION	
Single phase @ 50 Hz Three phase @ 50 Hz	O-150H O-350H

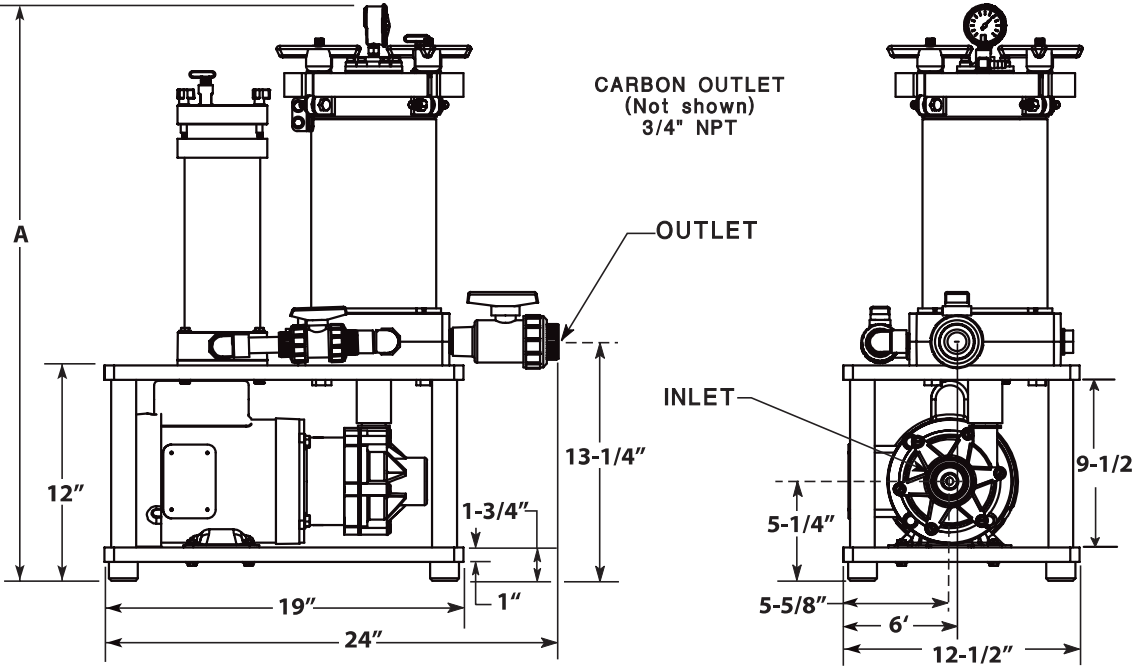
DESCRIPTION	PRICE CODE NO.	
CARBON PURIFICATION CHAMBER with flow control valve, hose & drain Order carbon media from Bulletin M-305	CPVC	PVC
Includes ABS mini-canister / CPVC or clear PVC chamber for 2.1 lbs. granular carbon 20" canister 3.2 lbs. granular carbon 30" canister	O-C2CM O-C3CM	O-P2CM O-P3CM
Includes PVC canister / CPVC or clear PVC chamber for 7.5 lbs. granular carbon 5" x 28" canister	O-1528C	O-1528
Includes CPVC or clear PVC chamber for 1.2 lbs 20" carbon cartridge 1.8 lbs 30" carbon cartridge 3.0 lbs 5" x 28" Maxi-carb cartridge	O-C2CC O-C3CC O-1528M	O-P2CC O-P3CC —





DIMENSIONS

Shown with optional purification chamber



SYSTEM SIZE	DIMENSION 'A'
J6	41"
J9	51"
J12	61"



SPACE-SAVER 'J' FILTRATION SYSTEMS

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F-215_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

COMPACT, HIGH FLOW FILTRATION, CARBON OR RESIN PURIFICATION

Flow rates to 6000 GPH



The SERFILCO Space-Saver 'J' Series is engineered to provide reliable, high performance filtration in a small package.

These compact pump and filter systems are popular for use on medium sized production tanks in the electronics and metal finishing industries.

Featuring SERFILCO's non-metallic, leak-proof magnetic coupled pumps and industry proven Series 'J' filter chambers, these systems provide high flow and high turnover rates, assuring continuous particle removal. Space-Saver 'J' systems are available with or without a carbon or resin purification chamber.

- **Choice of pump**

Seal-less magnetic drive pumps:

Highly efficient seal-less magnetic coupled pumps provide total solution containment and reliable performance. The pumps are polypropylene with EPDM "O"-ring.

Mechanical seal pumps:

Single or double mechanical seals constructed of CPVC with EPDM elastomers and the highest grade, longest lasting silicon carbide seal faces.

- **Filter chamber**

Constructed of PVC or CPVC with EPDM elastomers to ensure chemical and temperature compatibility.

The standard chamber accepts double open end (DOE) depth wound, pleated, melt blown, cleanable sleeve and carbon cartridges. A 222 "O"-ring seat for single open end (SOE) cartridges is available.

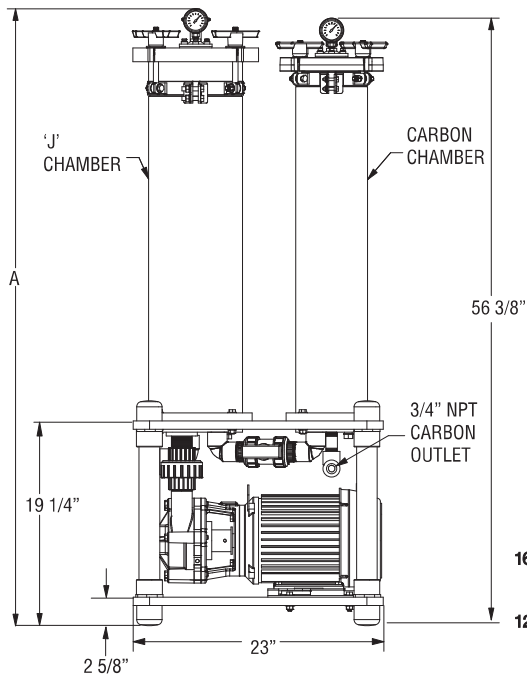
- **Simple carbon or resin treatment**

Space-Saver 'J' systems are also available with optional purification chambers in PVC or CPVC with reusable PVC canister offering a low-cost, but effective method of continuously or periodically removing organic impurities from plating baths and other chemical solutions.

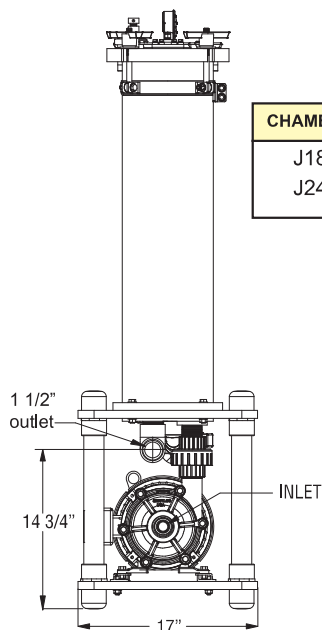




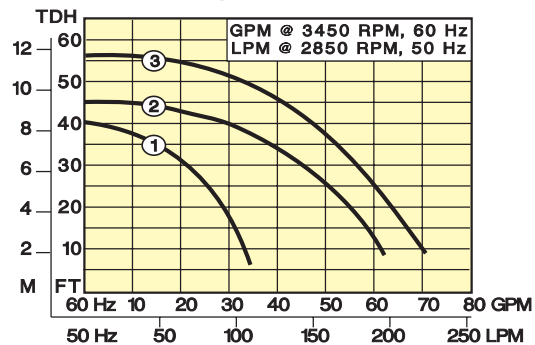
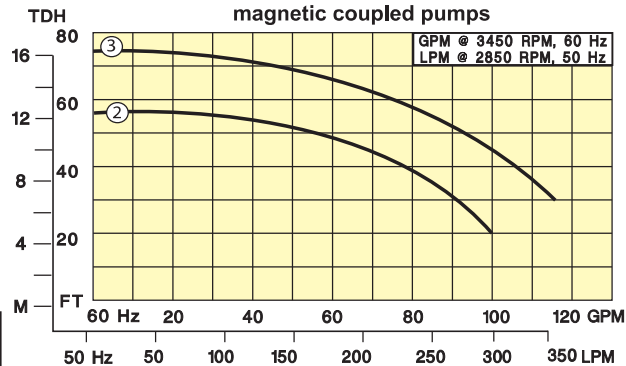
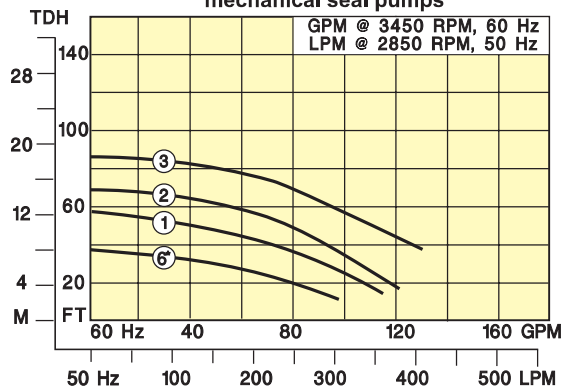
DIMENSIONS



CHAMBER	A
J18	57 1/8"
J24	67 1/8"



FLOW CURVES

MODELS M 1, 2 & 3
magnetic coupled pumpsMODELS FE 2 & 3
magnetic coupled pumpsMODELS HE 6, 1, 2 & 3
mechanical seal pumps

* 1.0 HP 'HE' pump is 1725 RPM @ 60 Hz, 1450 RPM @ 50 Hz



SPACE-SAVER 'J' FILTRATION SYSTEMS Specifications

F-215_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

All Space-Saver 'J' systems include the following standard features:

- Non-metallic solution contact
- Stainless steel external fasteners
- Swing bolt chamber closures
- EPDM elastomers standard
- Corrosion resistant PVC hooded base
- Corrosion resistant vent valve
- Industrial duty SERFILCO pump
- Hard piping and wet testing prior to shipping
- Glycerin filled stainless steel pressure gauge
- Silicon carbide seals on mechanical seal pumps
- Filter chamber bottom inlet for low pressure drop

Systems with polypropylene magnetic drive pump and CPVC or PVC¹ filter chamber

System Number	Flow Rate		Pump Series	Pump HP ³	Pump Max. PSI	Cartridge Change PSI	Filter Chamber Series	Media	Solids Area (sq. ft.)	Suction / Disch. Connections (inches)	Shipping Weight (lbs.)
	GPH @ 60 Hz	LPH @ 50 Hz									
CJ18M105	1,800	5,700	M	½	20	16	J	6 - 30"	63	1 x 1 FNPT	130
CJ24M105	1,800	5,700	M	½	20	16	J	6 - 40"	84	1 x 1 FNPT	140
CJ18M208	2,700	8,500	M	¾	24	20	J	6 - 30"	63	1½ x 1½ FNPT	135
CJ24M208	2,700	8,500	M	¾	24	20	J	6 - 40"	84	1½ x 1½ FNPT	145
CJ18M310	3,600	11,300	M	1.0	28	23	J	6 - 30"	63	1½ x 1½ FNPT	145
CJ24M310	3,600	11,300	M	1.0	28	23	J	6 - 40"	84	1½ x 1½ FNPT	155
CJ18FE215	4,700	14,800	FE	1.5	25	24	J	6 - 30"	63	2 x 1½ FNPT	155
CJ24FE215	4,700	14,800	FE	1.5	25	24	J	6 - 40"	84	2 x 1½ FNPT	165
CJ18FE320	5,000	17,300	FE	2.0	32	30	J	6 - 30"	63	2 x 1½ FNPT	170
CJ24FE320	5,000	17,300	FE	2.0	32	30	J	6 - 40"	84	2 x 1½ FNPT	180

Systems with CPVC single or double seal² direct drive pump and CPVC or PVC¹ filter chamber

System Number	Flow Rate		Pump Series	Pump HP ³	Pump Max. PSI	Cartridge Change PSI	Filter Chamber Series	Media	Solids Area (sq. ft.)	Suction / Disch. Connections (inches)	Shipping Weight (lbs.)
	GPH @ 60 Hz	LPH @ 50 Hz									
CJ18HE610	3,000	9,500	HE	1.0 ⁴	16	14	J	6 - 30"	63	2 x 1½ FNPT	155
CJ24HE610	3,000	9,500	HE	1.0 ⁴	16	14	J	6 - 40"	84	2 x 1½ FNPT	165
CJ18HE115	4,500	14,200	HE	1.5	24	19	J	6 - 30"	63	2 x 1½ FNPT	155
CJ24HE115	4,500	14,200	HE	1.5	24	19	J	6 - 40"	84	2 x 1½ FNPT	165
CJ18HE220	5,500	17,300	HE	2.0	29	26	J	6 - 30"	63	2 x 1½ FNPT	145
CJ24HE220	5,500	17,300	HE	2.0	29	26	J	6 - 40"	84	2 x 1½ FNPT	155
CJ18HE330	6,000	18,900	HE	3.0	36	32	J	6 - 30"	63	2 x 1½ FNPT	150
CJ24HE330	6,000	18,900	HE	3.0	36	32	J	6 - 40"	84	2 x 1½ FNPT	160

¹ Listed system includes CPVC chamber. To order system with PVC chamber, change the **C** to **P** in System No.

² To order pump with double mechanical seal, change **HE** to **HED** in System No.

³ Less than 1.0 HP — single phase standard.
1.0 HP and above — three phase standard.

⁴ 1.0 HP 'HE' pump is 1725 RPM @ 60 Hz,
1450 RPM @ 50 Hz



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**OPTIONAL****CARBON PURIFICATION CHAMBER**

DESCRIPTION		ADD TO END OF SYSTEM NO.
Includes integral carbon chamber and flow control valve. Carbon outlet ¾" NPT	PVC chamber, Single 5" x 28" canister, 7.5 lbs. capacity	P
	CPVC chamber, Single 5" x 28" canister, 7.5 lbs. capacity	C
	CPVC chamber, Single 5" x 28" Maxi-Carb cartridge, 3.0 lbs. carbon	M

Order carbon media from Bulletin M-305.

VITON® ELASTOMERS	ADD TO END OF SYSTEM NO.
Filter chamber and pump	V

MOTOR STARTERS

NEMA 4X Watertight push button (mounted and wired)		PRICE CODE NO.
Add -S to motor starter Price Code No. when ordering motor starter for use with DRI-STOP® Pump Protector		
		115 - 230V/1/50-60
IMPORTANT: Specify operating voltage		230 - 460V/3/50-60
		O-MS1P
		O-MS3P

DRI-STOP® PUMP PROTECTOR

DRI-STOP 2R for use with double mechanical seal pump.	O-2DS2R
DRI-STOP 3 for use with magnetic drive or single mechanical seal pump.	O-DS3C

OPERATING VOLTAGE

1 horsepower and above - Single phase	O-1PH
Under 1 horsepower - Three phase	O-3PH

50 Hz OPERATION

Single phase @ 50 Hz	O-150H
Three phase @ 50 Hz	O-350H

**System PPG36HE115**

- 12-30" cartridge filter chamber
- 1.5 HP single seal pump
- Optional motor starter
- 5,000 GPH

COMPACT, ECONOMICAL FILTRATION AND PURIFICATION

- **Flow rates to 8500 GPH @ 60 Hz**
(26,800) LPH @ 50 Hz
- **Non-metallic solution contact**
Polypropylene
CPVC
PVC
PVDF systems available
- **Choice of pump: magnetic coupled, single
or double mechanical seal**
Self-priming available

Super Space-Saver Filtration Systems have gained wide approval for recirculatory purification of most electroplating and chemical process solutions.

Choose a basic filtration system with your choice of media, pump and filter chamber. Then select from a wide variety of optional equipment to customize your system.

Call us and we'll help you select the perfect system for your application.

The following pages contain a representative sampling of standard Super Space-Saver systems.

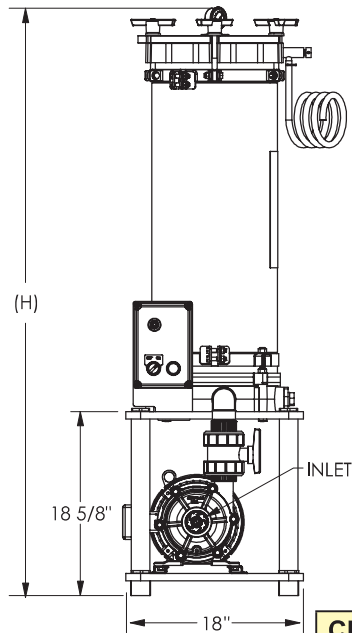
SUPER SPACE-SAVER SYSTEMS **include the following standard features:**

- Non-metallic solution contact
- Stainless steel external fasteners
- Swing bolt chamber closures
- EPDM elastomers standard, Viton optional
- Corrosion resistant hooded base
- Flow control valve between pump and filter
- Drain valve on filter chamber
- Industrial duty SERFILCO pump
- Hard piping and wet testing prior to shipping
- Corrosion resistant vent valve
- Silicon carbide seals on mechanical seal pumps
- Glycerin filled 316 SS pressure gauge and guard assembly

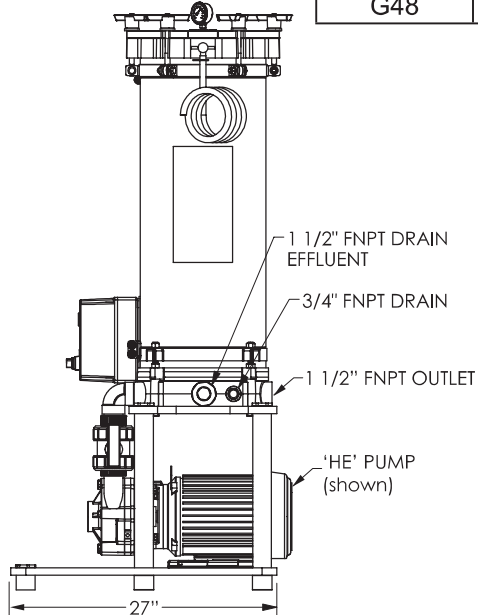




DIMENSIONS

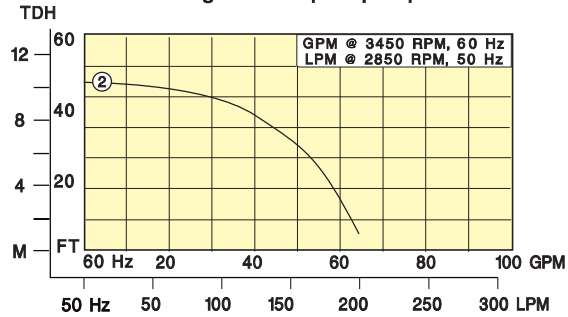


CHAMBER	H
G24	50"
G36	60"
G48	70"

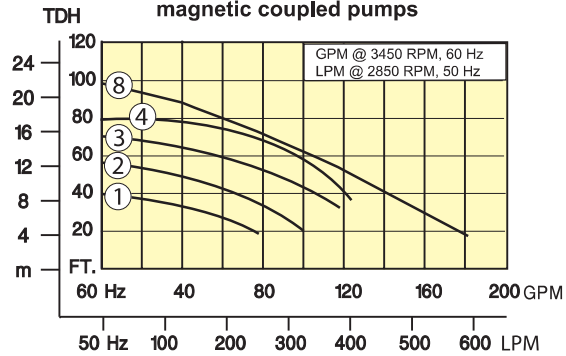


FLOW CURVES

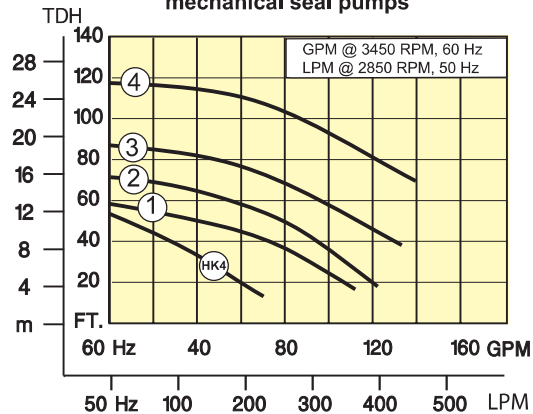
MODEL M 2
magnetic coupled pump



MODELS FE 1, 2, 3, 4, & F8
magnetic coupled pumps



MODELS HK 4, HE 1, 2, 3 & 4
mechanical seal pumps



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431*CPVC or Polypropylene direct drive² pump with CPVC, PVC or Polypropylene¹ filter chamber*

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft)	Suct. / Disch FNPT Conns. (inches) ³	Overall Dimensions (in.) (L x W x H)	Ship. Weight (lbs)
	GPH @ 60 Hz	LPH @ 50 Hz										
CG24HK415	3,000	9,400	HK	1.5	23	19	G	12 - 20"	84	1 1/2 x 1 1/2	27 x 18 x 50	180
CG36HK415	3,000	9,400	HK	1.5	23	19	G	12 - 30"	126	1 1/2 x 1 1/2	27 x 18 x 60	190
CG48HK415	3,000	9,400	HK	1.5	23	19	G	12 - 40"	168	1 1/2 x 1 1/2	27 x 18 x 70	205
CG24HE115	4,200	13,200	HE	1.5	24	20	G	12 - 20"	84	2 x 1 1/2	27 x 18 x 50	205
CG36HE115	4,200	13,200	HE	1.5	24	20	G	12 - 30"	126	2 x 1 1/2	27 x 18 x 60	215
CG48HE115	4,200	13,200	HE	1.5	24	20	G	12 - 40"	168	2 x 1 1/2	27 x 18 x 70	230
CG24HE220	5,400	17,000	HE	2.0	27	24	G	12 - 20"	84	2 x 1 1/2	27 x 18 x 60	215
CG36HE220	5,400	17,000	HE	2.0	27	24	G	12 - 30"	126	2 x 1 1/2	27 x 18 x 60	225
CG48HE220	5,400	17,000	HE	2.0	27	24	G	12 - 40"	168	2 x 1 1/2	27 x 18 x 70	240
CG24HE330	6,500	20,500	HE	3.0	36	33	G	12 - 20"	84	2 x 1 1/2	27 x 18 x 50	220
CG36HE330	6,500	20,500	HE	3.0	36	33	G	12 - 30"	126	2 x 1 1/2	27 x 18 x 60	230
CG48HE330	6,500	20,500	HE	3.0	36	33	G	12 - 40"	168	2 x 1 1/2	27 x 18 x 70	245
CG36HE450	8,500	26,800	HE	5.0	51	48	G	12 - 30"	126	2 x 1 1/2	27 x 18 x 60	245
CG48HE450	8,500	26,800	HE	5.0	51	48	G	12 - 40"	168	2 x 1 1/2	27 x 18 x 70	260

¹ Listed system includes CPVC chamber: To order system with PVC chamber - Change **C** to **P** in System No.For polypropylene systems, change **C** to **PP** in System Number. For PVDF systems, consult Sales Department.² To order pump with double mechanical seal - Change **HK** to **HKD** or **HE** to **HED** in System No.³ Series 'HK' pump has 1 1/2" MNPT connection.

Systems are 230-460/3/50-60

OPTIONAL

OPTIONAL ELASTOMERS	PRICE CODE NO.
Viton elastomers	O-GV
MOTOR STARTERS - NEMA 4X Watertight push button	
230 - 460V/3/50-60	O-MS3P
Add -S to Motor Starter PCN when ordering motor starter for use with DRI-STOP Pump Protector. i. e. O-MS1P- S Important: Specify operating voltage.	
DRI-STOP® PUMP PROTECTOR	
DRI-STOP 2R for use with double mechanical seal pumps	O-2DS2R
DRI-STOP 3 for use with magnetic drive or single mechanical seal pumps.	O-DS3C
50 Hz OPERATION	
Three phase @ 50 Hz	O-350H

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2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431*Polypropylene magnetic drive pump with CPVC, PVC or Polypropylene¹ filter chamber*

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft)	Suct./Disch FNPT Conns. (inches)	Overall Dimensions (in.) (L x W x H)	Ship. Weight (lbs)
	GPH @60Hz	LPH @50 Hz										
CG24M210	3,000	9,500	M	1.0	20	16	G	12 - 20"	84	1 ½ x 1 ½	27 x 18 x 50	185
CG36M210	3,000	9,500	M	1.0	20	16	G	12 - 30"	126	1 ½ x 1 ½	27 x 18 x 60	195
CG48M210	3,000	9,500	M	1.0	20	16	G	12 - 40"	168	1 ½ x 1 ½	27 x 18 x 70	210
CG24FE110	3,900	12,300	FE	1.0	18	16	G	12 - 20"	84	2 x 1 ½	27 x 18 x 50	205
CG36FE110	3,900	12,300	FE	1.0	18	16	G	12 - 30"	126	2 x 1 ½	27 x 18 x 60	215
CG48FE110	3,900	12,300	FE	1.0	18	16	G	12 - 40"	168	2 x 1 ½	27 x 18 x 70	230
CG24FE215	4,700	14,800	FE	1.5	25	24	G	12 - 20"	84	2 x 1 ½	27 x 18 x 50	215
CG36FE215	4,700	14,800	FE	1.5	25	24	G	12 - 30"	126	2 x 1 ½	27 x 18 x 60	225
CG48FE215	4,700	14,800	FE	1.5	25	24	G	12 - 40"	168	2 x 1 ½	27 x 18 x 70	240
CG24FE320	6,000	18,900	FE	2.0	32	30	G	12 - 20"	84	2 x 1 ½	27 x 18 x 50	225
CG36FE320	6,000	18,900	FE	2.0	32	30	G	12 - 30"	126	2 x 1 ½	27 x 18 x 60	235
CG48FE320	6,000	18,900	FE	2.0	32	30	G	12 - 40"	168	2 x 1 ½	27 x 18 x 70	245
CG36FE430	6,900	21,800	FE	3.0	35	21	G	12 - 30"	126	2 x 1 ½	27 x 18 x 60	250
CG48FE430	6,900	21,800	FE	3.0	35	21	G	12 - 40"	168	2 x 1 ½	27 x 18 x 70	260
CG36F850	8,500	26,800	F2x2	5.0	42	34	G	12 - 30"	126	2 x 1 ½	27 x 18 x 60	250
CG48F850	8,500	26,800	F2x2	5.0	42	34	G	12 - 40"	168	2 x 1 ½	27 x 18 x 60	260

Polypropylene magnetic drive pump with CPVC, PVC or Polypropylene¹ filter chamber

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft)	Suct./Disch FNPT Conns. (inches)	Overall Dimensions (in.) (L x W x H)	Ship. Weight (lbs)
	GPH @60Hz	LPH @50 Hz										
CG24FES215	3,900	12,300	FES	1.5	22	16	G	12 - 20"	84	1 ½ x 1 ½	27 x 18 x 50	210
CG36FES215	3,900	12,300	FES	1.5	22	16	G	12 - 30"	126	1 ½ x 1 ½	27 x 18 x 60	220
CG48FES215	3,900	12,300	FES	1.5	22	16	G	12 - 40"	168	1 ½ x 1 ½	27 x 18 x 70	235
CG24FES320	4,700	14,800	FES	2.0	29	24	G	12 - 20"	84	1 ½ x 1 ½	27 x 18 x 50	220
CG36FES320	4,700	14,800	FES	2.0	29	24	G	12 - 30"	126	1 ½ x 1 ½	27 x 18 x 60	230
CG48FES320	4,700	14,800	FES	2.0	29	24	G	12 - 40"	168	1 ½ x 1 ½	27 x 18 x 70	245
CG24FES430	6,000	18,900	FES	3.0	35	30	G	12 - 20"	84	1 ½ x 1 ½	27 x 18 x 50	230
CG36FES320	6,000	18,900	FES	3.0	35	30	G	12 - 30"	126	1 ½ x 1 ½	27 x 18 x 60	240
CG48FES430	6,000	18,900	FES	3.0	35	30	G	12 - 40"	168	1 ½ x 1 ½	27 x 18 x 70	250

¹ Listed system includes CPVC chamber. To order system with PVC chamber — change **C** to **P** in System Number
For polypropylene systems, change **C** to **PP** in System Number.
For PVDF systems, consult Sales Department



GUARDIAN® FILTRATION SYSTEMS

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F-301_K

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



- **Flow rates to 8500 GPH @ 60Hz**
(31,500 LPH @ 50Hz)
- **Non-metallic solution contact**
PVC, CPVC, polypropylene or
PVDF systems available
- **Choice of pump:** magnetic coupled, single
or double mechanical seal, self-priming
- **Choice of media:** cartridge, disc, bag
(See Bulletin F-155 for disc systems
and Bulletin F-513 for bag systems)

The following pages contain a representative sampling of standard Guardian systems. Consult Sales Department for additional selections.

Guardian Filtration Systems have gained wide approval for recirculatory purification of most electroplating and chemical process solutions. They have proven to be a reliable workhorse for over three decades. With hundreds of systems in service around the globe, you can be confident a Guardian Filtration System will improve the

clarity of your process solutions, increase production quality, and reduce process cost.

Choose a basic filtration system with your choice of media, pump and filter chamber. Then select from a wide range of optional equipment to customize your system. Call us and we'll help you select the perfect system for your application.

Guardian systems include the following standard features:

- Non-metallic solution contact
- Stainless steel external fasteners
- Swing bolt chamber closures
- EPDM elastomers standard, Viton optional
- Corrosion resistant PVC base
- Flow control valve between pump and filter
- Drain valve on filter chamber
- Industrial duty SERFILCO pump
- Hard piping and wet testing prior to shipping
- Corrosion resistant vent valve
- Silicon carbide seals on mechanical seal pumps
- Glycerin filled 316 SS pressure gauge and guard assembly





CPVC single or double seal² direct drive pump and CPVC or PVC filter chamber¹

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft.)	Suct. / Disch FNPT Conns. (inches)	Overall Dimensions (in.) (L x W x H)	Ship. Weight (lbs)
	GPH @ 60 Hz	LPH @ 50 Hz										
CG24HE115H	4,200	13,200	HE	1.5	24	20	G	12 - 20"	84	2 x 1 1/2	50 x 24 x 32	205
CG36HE115H	4,200	13,200	HE	1.5	24	20	G	12 - 30"	126	2 x 1 1/2	50 x 24 x 42	215
CG48HE115H	4,200	13,200	HE	1.5	24	20	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	230
CG36HE220H	5,400	17,000	HE	2.0	27	24	G	12 - 30"	126	2 x 1 1/2	50 x 24 x 42	225
CG48HE220H	5,400	17,000	HE	2.0	27	24	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	240
CG60HE220H	5,400	17,000	HE	2.0	27	24	G	12 - 50"	210	2 x 1 1/2	50 x 24 x 62	250
CG36HE330H	6,500	20,500	HE	3.0	36	32	G	12 - 30"	126	2 x 1 1/2	50 x 24 x 42	235
CG48HE330H	6,500	20,500	HE	3.0	36	32	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	245
CG60HE330H	6,500	20,500	HE	3.0	36	32	G	12 - 50"	210	2 x 1 1/2	50 x 24 x 62	255
CG36HE450H	8,500	26,800	HE	5.0	50	45	G	12 - 30"	126	2 x 1 1/2	50 x 24 x 42	250
CG48HE450H	8,500	26,800	HE	5.0	50	45	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	260
CG60HE450H	8,500	26,800	HE	5.0	50	45	G	12 - 50"	210	2 x 1 1/2	50 x 24 x 62	270
CG96HE450H	8,500	26,800	HE	5.0	50	45	(2)G	24 - 40"	336	2 x 2	66 x 24 x 52	395
CG120HE450H	8,500	26,800	HE	5.0	50	45	(2)G	24 - 50"	420	2 x 2	66 x 24 x 62	425
CG96HE575H	10,000	21,500	HE	7.5	60	45	(2)G	12 - 40"	336	2 x 2	66 x 24 x 52	440
CG120HE575H	10,000	21,500	HE	7.5	60	45	(2)G	12 - 50"	420	2 x 2	66 x 24 x 62	470

Listed system includes CPVC chamber. To order system with PVC chamber — change the first C to P in System No. and Model No.

² To order pump with double mechanical seal — change HE to HED in System.

Polypropylene magnetic drive pump and CPVC, PVC or polypropylene filter chamber¹

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft.)	Suct. / Disch FNPT Conns. (inches)	Overall Dimensions (in.) (L x W x H)	Ship. Weight (lbs)
	GPH @ 60 Hz	LPH @ 50 Hz										
CG24M210H	3,000	13,200	M	1.0	20	16	G	12 - 20"	84	1 1/2 x 1 1/2	50 x 24 x 32	185
CG36M210H	3,000	13,200	M	1.0	20	16	G	12 - 30"	126	1 1/2 x 1 1/2	50 x 24 x 42	195
CG48M210H	3,000	13,200	M	1.0	20	16	G	12 - 40"	168	1 1/2 x 1 1/2	50 x 24 x 52	210
CG36FE110	3,900	12,300	FE	1.0	18	16	G	12 - 30"	126	2 x 1 1/2	50 x 24 x 42	215
CG48FE110	3,900	12,300	FE	1.0	18	16	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	230
CG60FE110	3,900	12,300	FE	1.0	18	16	G	12 - 50"	210	2 x 1 1/2	50 x 24 x 62	240

Listed system includes CPVC chamber. To order system with PVC chamber — change the first C to P in System No. and Model No.

For polypropylene systems, change the first C to PP in system No. For PVDF systems consult Sales Dept.



Polypropylene magnetic drive pump and CPVC, PVC or polypropylene filter chamber ¹ (Cont.)

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft.)	Suct. / Disch FNPT Conns. (inches)	Overall Dimensions (in.) (L x W x H)	Ship. Weight (lbs)
	GPH @ 60 Hz	LPH @ 50 Hz										
CG36FE215H	4,700	14,800	FE	1.5	25	24	G	12 - 30"	126	2 x 1 1/2	50 x 24 x 42	225
CG48FE215H	4,700	14,800	FE	1.5	25	24	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	240
CG60FE215H	4,700	14,800	FE	1.5	25	24	G	12 - 50"	210	2 x 1 1/2	50 x 24 x 62	250
CG36FE320H	6,000	18,900	FE	2.0	32	30	G	12 - 30"	126	2 x 1 1/2	50 x 24 x 42	235
CG48FE320H	6,000	18,900	FE	2.0	32	30	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	245
CG60FE320H	6,000	18,900	FE	2.0	32	30	G	12 - 50"	210	2 x 1 1/2	50 x 24 x 62	255
CG48F850H	8,500	26,800	F2x2	5.0	45	33	G	12 - 40"	168	2 x 1 1/2	50 x 24 x 52	260
CG60F850H	8,500	26,800	F2x2	5.0	45	33	G	12 - 50"	210	2 x 1 1/2	50 x 24 x 62	270
CG96F850H	8,500	26,800	F2x2	5.0	45	33	(2)G	24 - 40"	336	2 x 2	66 x 24 x 52	395
CG120F850H	8,500	26,800	F2x2	5.0	45	33	(2)G	24 - 50"	420	2 x 2	66 x 24 x 62	425
CG96F910H	10,000	31,500	F2x2	10.0	53	42	(2)G	24 - 40"	336	2 x 2	66 x 24 x 52	460
CG120F910H	10,000	31,500	F2x2	10.0	53	42	(2)G	24 - 50"	420	2 x 2	66 x 24 x 62	490

Polypropylene Self-priming magnetic drive pump and CPVC, PVC or polypropylene filter chamber ¹

System Number	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Cartridge Change PSI	Filter Series	Media	Solids Area (sq. ft.)	Suct. / Disch FNPT Conns. (inches)	Overall Dimensions (in.) (L x W x H)	Ship. Weight (lbs)
	GPH @ 60 Hz	LPH @ 50 Hz										
CG24FES110H	3,000	13,200	FES	1.0	19	16	G	12 - 20"	84	1 1/2 x 1 1/2	50 x 24 x 32	200
CG36FES110H	3,000	13,200	FES	1.0	19	16	G	12 - 30"	126	1 1/2 x 1 1/2	50 x 24 x 42	210
CG48FES110H	3,000	13,200	FES	1.0	19	16	G	12 - 40"	168	1 1/2 x 1 1/2	50 x 24 x 52	220
CG36FES215H	3,900	12,300	FES	1.5	22	16	G	12 - 30"	126	1 1/2 x 1 1/2	50 x 24 x 42	210
CG48FES215H	3,900	12,300	FES	1.5	22	16	G	12 - 40"	168	1 1/2 x 1 1/2	50 x 24 x 52	220
CG60FES215H	3,900	12,300	FES	1.5	22	16	G	12 - 50"	210	1 1/2 x 1 1/2	50 x 24 x 62	230
CG36FES320H	4,700	14,800	FES	2.0	29	24	G	12 - 30"	126	1 1/2 x 1 1/2	50 x 24 x 42	220
CG48FES320H	4,700	14,800	FES	2.0	29	24	G	12 - 40"	168	1 1/2 x 1 1/2	50 x 24 x 52	230
CG60FES320H	4,700	14,800	FES	2.0	29	24	G	12 - 50"	210	1 1/2 x 2 1/2	50 x 24 x 62	240
CG36FES430H	6,000	18,900	FES	3.0	35	30	G	12 - 30"	126	1 1/2 x 1 1/2	50 x 24 x 42	230
CG48FES430H	6,000	18,900	FES	3.0	35	30	G	12 - 40"	168	1 1/2 x 1 1/2	50 x 24 x 52	240
CG60FES430H	6,000	18,900	FES	3.0	35	30	G	12 - 50"	210	1 1/2 x 1 1/2	50 x 24 x 62	250

Listed system includes CPVC chamber. To order system with PVC chamber — change the first **C** to **P** in System No. and Model No.
For polypropylene systems, change the first **C** to **PP** in System No. For PVDF systems consult Sales Dept.





Customize your Guardian with the following options

SLURRY TANK and VALVES			
SV4 For chemical mixing, pump priming or precoating. Includes polyethylene tank w/CPVC frame, CPVC piping and four CPVC ball valves and tank strainer.	SURFACE AREA (sq. ft.)	SLURRY CAPACITY (gal.)	PRICE CODE NO.
	84	7	O-2084
	126	11	O-2072
	168 +	18	O-2090
SV6 Same as above, plus backwash and bypass valves.	84	7	O-2085
	126	11	O-2073
	168 +	18	O-2091

MOTOR STARTERS		
NEMA 4X Watertight push button (mounted and wired)		PRICE CODE NO.
Add -S to motor starter Price Code No. when ordering motor starter for use with DRI-STOP® Pump Protector IMPORTANT: Specify operating voltage	115 - 230V/1/50-60	O-MS1P
	230 - 460V/3/50-60	O-MS3P
DRI-STOP® PUMP PROTECTOR		
DRI-STOP 2R for use with double mechanical seal pump.		O-2DS2R
DRI-STOP 3 for use with magnetic drive or single mechanical seal pump.		O-DS3C

CARBON PURIFICATION CHAMBER		
Includes extended base, adapter kit, flow control valve and drain valve.		
DESCRIPTION	CARBON CAPACITY	PRICE CODE NO.
PVC chamber and internal canister(s) for use with granular carbon. For CPVC chamber, add C to end of Price Code No.	Single 5" x 28" canister, 7.5 lbs. capacity	O-1528
	Triple 5" x 28" canister, 22.5 lbs. capacity	O-3528
	Triple 5" x 48" canister, 42 lbs capacity	O-3548

Order carbon media from Bulletin M-305.

PORTABLE	PRICE CODE NUMBER
Two fixed wheels, two swivel casters, pull handle	O-2042
OPERATING VOLTAGE 50 Hz	
Single phase @ 50 Hz Three phase @ 50 Hz Specify operating voltage	O-150H O-350H
ELASTOMERS	
Viton Elastomers	O-4V



COMPACT, ECONOMICAL FILTRATION AND PURIFICATION

SPACE-SAVER



SUPER
SPACE-SAVER



GUARDIAN



- **Flow rates to 6000 GPH @ 60 Hz**
(19000 LPH @ 50 Hz)
- **Non-metallic solution contact**
Select materials of construction for compatibility with solutions, operating temperature and pressure.

Bag Systems are corrosion resistant and extremely simple to operate. Choice of construction materials allow use with most liquids, including harsh chemicals at elevated temperatures.

- **Choice of pump**
Seal-less magnetic drive pumps:
Series 'B' seal-less magnetic coupled pumps are available in CPVC, polypropylene or PVDF with EPDM "O"-rings. Series 'M' and 'FE' pumps are polypropylene or PVDF with EPDM "O"-rings.

Mechanical Seal Pumps:
Series 'HC', 'HK' or 'HE' direct drive pumps are available with either single or double mechanical seals. The pumps are CPVC or PVDF with EPDM "O"-rings.

Self Priming Pumps:
Series 'FES' magnetic coupled self priming pumps are available in polypropylene or PVDF with EPDM "O"-rings.

- **Filter Chamber**
Space-Saver systems utilize Series 630 & 640 single bag chambers with surface area up to 5.0 sq. ft. Super Space-Saver and Guardian system utilize Series 1235 & 1255 multi-bag chambers with surface area up to 19.5 sq. ft. All bag chambers feature a bottom in bottom out design which simplifies bag changes.



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**Standard BAG FILTRATION systems include:**

- Non-metallic solution contact
- Corrosion resistant mounting base.
- Industrial duty SERFILCO pump
- Stainless steel or corrosion resistant external hardware and fasteners.
- Vent valve assembly
- Glycerin filled 316 SS pressure gauge and guard assembly
- Systems 1 HP and up 230-460V/3/50-60 Hz, others 115-230V/1/50-60 Hz.
- Flow control valve between pump and filter (Super Space-Saver and Guardian)

TO ORDER, use System Number**SPACE-SAVER SYSTEMS****Systems with magnetic drive pump and PVC, CPVC, polypropylene or PVDF filter chamber**

System Number ¹	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Filter Series	Bag Area (sq. ft)	Suct./Disch FNPT Connections (inches)	Shipping Weight (lbs)
	GPH @60Hz	LPH @50 Hz							
CSBF3.5B6	600	2,000	B	1/6	10	630	3.5	3/4 H X 1	75
CSBF5B6	600	2,000	B	1/6	10	640	5.0	3/4 H X 1	80
CSBF3.5M108	1,700	5,100	M	3/4	17	630	3.5	1 x 1	90
CSBF5M108	1,700	5,100	M	3/4	17	640	5.0	1 x 1	90
CSBF5M210	2,700	8,100	M	1.0	20	640	5.0	1 1/2 x 1	95

¹ Listed system includes CPVC chamber and pump

To order system with PVC chamber and CPVC pump, change the C to P in system No.

To order system with polypropylene chamber and pump, change the C to PP in system No.

To order system with PVDF chamber and pump, change the C to K in system No.

Systems with CPVC or PVDF direct drive pump and PVC, CPVC or PVDF filter chamber

System Number ¹	Flow Rate		Pump Series	Pump HP ²	Pump Max. PSI	Filter Series	Bag Area (sq. ft)	Suct./Disch FNPT Connections (inches)	Shipping Weight (lbs)
	GPH @60Hz	LPH @50 Hz							
CSBF3.5HC103	900	2,800	HC	1/3	12	630	3.5	1 x 1	62
CSBF5HC103	900	2,800	HC	1/3	12	640	5.0	1 x 1	85
CSBF5HC208	1,600	5,000	HC	3/4	20	640	5.0	1 x 1	95
CSB5HK310	2,500	7,900	HK	1.0	18	640	5.0	1 1/2 x 1	105

¹ Listed system includes CPVC chamber and pump

To order system with PVC chamber and CPVC pump, change the C to P in system No.

To order system with PVDF chamber pump, change the C to K in system No.

² To order pump with double mechanical seal - change HC to HCD or HK to HKD in System No.

**TO ORDER, use System Number****SUPER SPACE-SAVER
OR GUARDIAN SYSTEMS*****Polypropylene magnetic drive pump with CPVC, PVC, or Polypropylene² filter chamber***

System Number ^{1, 2}	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Filter Series	Bag Area (sq. ft)	Suct./Disch FNPT Connections (inches)	Shipping Weight (lbs)
	GPH @60 Hz	LPH @50 Hz							
CGBF12M210	3,000	9,500	M	1.0	20	1235	12.0	1 1/2 x 1 1/2	195
CGBF19M210	3,000	9,500	M	1.0	20	1255	19.5	1 1/2 x 1 1/2	210
CGBF12FE110	3,500	11,100	FE	1.0	18	1235	12.0	2 x 1 1/2	215
CGBF19FE110	3,500	11,100	FE	1.0	18	1255	19.5	2 x 1 1/2	230
CGBF12FE215	4,500	14,200	FE	1.5	25	1235	12.0	2 x 1 1/2	225
CGBF19FE215	4,500	14,200	FE	1.5	25	1255	19.5	2 x 1 1/2	240
CGBF12FE320	5,500	17,400	FE	2.0	32	1235	12.0	2 x 1 1/2	235
CGBF19FE320	5,500	17,400	FE	2.0	32	1255	19.5	2 x 1 1/2	250

¹ Listed system includes CPVC chamber and pump

To order system with PVC chamber and CPVC pump, change the C to P in system No.

To order system with polypropylene chamber and pump, change the C to PP in system No.

² Listed system is a Super Space-Saver

For a Guardian System (mounted on a flat base) add H to System No.

CPVC or Polypropylene direct drive² pump with CPVC, PVC, or Polypropylene filter chamber

System Number ^{1, 2}	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Filter Series	Bag Area (sq. ft)	Suct./Disch FNPT Connections (inches)	Shipping Weight (lbs)
	GPH @60 Hz	LPH @50 Hz							
CGBF12HK415	2,500	7,900	HK	1.5	23	1235	12.0	1 x 1 1/2	190
CGBF19HK45	2,500	7,900	HK	1.5	23	1255	19.5	1 1/2 x 1 1/2	205
CGBF12HE115	9,000	12,600	HE	1.5	24	1235	12.0	2 X 1/2	215
CGBF19HE115	4,000	12,600	HE	1.5	24	1255	19.5	2 x 1 1/2	230
CGBF12HE220	5,000	15,800	HE	2.0	27	1235	12.0	2 x 1 1/2	225
CGBF19HE220	5,000	15,800	HE	2.0	27	1255	19.5	2 x 1 1/2	240
CGBF12HE330	6,000	1,900	HE	3.0	36	1235	12.0	2 x 1 1/2	230
CGBF19HE330	6,000	1,900	HE	3.0	36	1255	19.5	2 x 1 1/2	245

¹ Listed system includes CPVC chamber and pump

To order system with PVC chamber and CPVC pump, change the C to P in system No.

To order system with polypropylene chamber and pump, change the C to PP in system No.

² Listed system is a Super Space-Saver

For a Guardian System (mounted on a flat base) add H to System No.

2900 MacArthur Blvd Northbrook, IL USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**Polypropylene self-priming magnetic drive pump with CPVC,
PVC or Polypropylene¹ filter chamber**

System Number ^{1, 2}	Flow Rate		Pump Series	Pump HP	Pump Max. PSI	Filter Series	Bag Area (sq. ft)	Suct./Disch FNPT Connections (inches)	Shipping Weight (lbs)
	GPH @60Hz	LPH @50 Hz							
CGBF12FES215	3,500	11,100	FES	1.5	22	1235	12.0	1 x 1 1/2	220
CGBF19FES215	3,500	11,100	FES	1.5	22	1255	19.5	1 1/2 x 1 1/2	235
CGBF12FES320	4,500	14,200	FES	1.5	29	1235	12.0	1 1/2 x 1 1/2	230
CGBF19FES320	4,500	14,200	FES	2.0	29	1255	19.5	1 1/2 x 1 1/2	245
CGBF12FES430	5,500	17,400	FES	3.0	35	1235	12.0	1 1/2 x 1 1/2	240
CGBF19FES430	5,500	17,400	FES	3.0	35	1255	19.5	1 1/2 x 1 1/2	240

¹Listed system includes CPVC chamber and pump

To order system with PVC chamber and CPVC pump, change the C to P in system No.

To order system with polypropylene chamber and pump, change the C to PP in system No.

²Listed system is a Super Space-Saver

For Guardian System (mounted on a flat base) add H to System No.

IMPORTANT: Filter media is ordered separately. Refer to Bulletin C-307 for 630
& 640 chambers or Bulletin C-308 for 1235 & 1255 chambers.**OPTIONAL**

DESCRIPTION		PRICE CODE NO.	
MOTOR STARTERS - NEMA 4X Watertight push button			
115 - 230V/1/50-60 230 - 460V/3/50-60 Add -S to Motor Starter PCN when ordering motor starter for use with DRI-STOP® Pump Protector. i. e. O-MS1P- S Important: Specify operating voltage.		O-MS1P O-MS3P	
DRI-STOP® PUMP PROTECTOR			
DRI-STOP 2R for use with double mechanical seal pumps. DRI-STOP 3 for use with magnetic drive or single mechanical seal pumps.		O-2DS2R O-DS3C	
DESCRIPTION	PRICE CODE NO.	DESCRIPTION	PRICE CODE NO.
VITON ELASTOMERS		OPERATING VOLTAGE	
Series 'S' chambers	O-SV	1 horsepower & above - Single phase	O-1PH
Series 'G' chambers	O-GV	Under 1 horsepower - Three phase	O-3PH
PRIMING CHAMBER		50 Hz OPERATION	
Pump Series B & HC - polypropylene	O-PC4	Single Phase @ 50 Hz	O-150H
Pump Series HK - Noryl / PVC	O-PC6	Three phase @ 50 Hz	O-350H



GUARDIAN® DISC FILTRATION SYSTEMS

227

F-155_H

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

For Plating & PCB Manufacturing or wherever efficient particle removal is required



- **Flow rates to 8500 GPH @ 60Hz**
(26,800 LPH @ 50Hz)
- **Non-metallic solution contact**
PVC, CPVC, polypropylene
- **Standard slurry tank with valves**
Prime pump, mix and add chemicals, rinse or pre-coat filters
- **Quiet, efficient centrifugal pumps —**
Single seal, double seal or magnetic-coupled
Handles most electroplating chemical applications

SERFILCO's Guardian Disc Filtration Systems incorporate all the latest pump, filter and media technology with proven non-metallic materials and manufacturing techniques to provide a truly superior filtration system for your dollar.

Guardian disc filtration systems include many standard features not available on competitive models. Standard systems are built on a rugged corrosion resistant "fork lift

friendly" PVC mounting base. The systems include mechanical seal or magnetic-coupled pump and slurry tank with valves. Piping, valves and connections are all CPVC hard pipe with EPDM "O"-rings.

Even with all these features and benefits, the Guardian disc filtration system is competitively priced.

FEATURES

PUMP:

Industry proven Series 'M', Series 'FE' or Series 'F' magnetic coupled pumps are constructed of glass reinforced polypropylene with EPDM 'O'-rings. The Series 'HE' direct drive pump, which is constructed of CPVC with EPDM elastomers, is available with either single or double mechanical seals and features silicon carbide seal faces.

All pump motors are chemical service, continuous duty, TEFC. 3/4" HP systems are 115-230V/1/50-60 Hz while systems 1 HP and above are 230-460V/3/50-60 Hz. All motors have a 1.15 service factor.

FILTER:

The industry proven Series 'G' filter chamber features PVC or all CPVC construction with EPDM elastomers at all connections to assure solution containment. The cover closure uses convenient T-handles with stainless steel hardware.

In addition, a 0-60 psi gauge with guard and gasketed vent valve assembly are standard. The chamber base also includes additional drain ports for convenient servicing.

FILTER DISCS:

Molded high purity polypropylene discs are designed for optimum performance and high dirt loading area. Disc column has a positive O.D. seal and twist lock for easy disc removal. Disc media is available in 5, 10, 20 or 40 micron rating. Carbon impregnated discs are also available.

SLURRY TANK:

The standard polyethylene slurry tank is properly sized for each system and includes all accessory valves to easily accomplish several tasks. The slurry tank and valve package can be used for:

- pre-coat filter aid and / or carbon
- solution make-up or additions
- pump priming

In addition, slurry tanks are adequately sized to store solution during chamber maintenance.





2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

Systems with polypropylene magnetic drive pump and CPVC or PVC¹ filter chamber

SYSTEM NUMBER	FLOW RATE		PUMP SERIES	PUMP HP ²	PUMP MAX. PSI	NO. OF DISCS	SURFACE AREA		SUCTION/DISCH. CONNS.	OVERALL DIM. (In.)	SHIP. WEIGHT
	GPH @ 60 Hz	LPH @ 50 Hz					ft. ²	m ²			
CGD15M210H	3000	9450	M	1.0	24	31	15	1.4	1½ x 1½	50 x 24 x 25	185
CGD30M210H	3000	9450	M	1.0	24	65	30	2.8	1½ x 1½	50 x 24 x 35	195
CGD45M315H	4500	14,175	M	1.5	28	99	45	4.2	1½ x 1½	50 x 24 x 45	205
CGD60FE320H	6000	17,300	FE	2.0	32	130	60	5.6	2 x 1½	66 x 24 x 35	325
CGD90FE430H	6900	18,900	FE	3.0	35	198	90	8.4	2 x 1½	66 x 24 x 45	345
CGD90F850H	8500	26,800	F	5.0	45	198	90	8.4	2 x 1½	66 x 24 x 45	355

Systems with CPVC single or double seal³ direct drive pump and CPVC or PVC¹ filter chamber

CGD15HE610H	3000	9450	HE	1.0	16	31	15	1.4	2 x 1½	50 x 24 x 25	185
CGD30HE610H	3000	9450	HE	1.0	16	65	30	2.8	2 x 1½	50 x 24 x 35	195
CGD45HE115H	4500	14,175	HE	1.5	24	99	45	4.2	2 x 1½	50 x 24 x 45	205
CGD60HE220H	5500	17,300	HE	2.0	29	130	60	5.6	2 x 1½	66 x 24 x 35	325
CGD90HE330H	6000	18,900	HE	3.0	36	198	90	8.4	2 x 2½	66 x 24 x 45	345
CGD90HE450H	8500	26,800	HE	5.0	50	198	90	8.4	2 x 2½	66 x 24 x 45	355

¹ Listed system includes CPVC chamber.To order system with PVC chamber — change the **C** to **P** in System No. and Model No.² 1.0 HP and above — three phase standard.³ To order pump with double mechanical seal — change **HE** to **HED** in System No.FILTER DISC MEDIA AND OPTIONS
Use Price Code Number to order

FILTER DISC MODEL NUMBER	MICRON RATING	PRICE CODE NUMBER (carton of 100)
CE 5 x 10	5	78-1612
CE 10 x 10	10	78-1613
CE 20 x 10	20	78-1614
CE 40 x 10	40	78-1615
C x 10 Carbon	10	78-1616

PORTABLE OPTION

Pull handle, 2 wheels on axle, and two swivel casters.

PRICE CODE NO.

O-2042

Filter disc media ordered separately.

CARBON PURIFICATION CHAMBER OPTIONS

For continuous or batch carbon treatment. Choose carbon capacity of 7.5 to 42 lbs. Carbon chamber option includes a larger system base (24" x 66"), piping and flow control valve. Chamber is PVC with swing bolt cover closure. Internal canisters are PVC, elastomers are EPDM. For use with granular carbon.

CAPACITY	CANISTER	PRICE CODE NO.
7.5 lbs.	single 5" x 28"	O-1528
22.5 lbs.	triple 5" x 28"	O-3528
42 lbs.	triple 5" x 48"	O-3548

Order carbon media from Bulletin M-305

OPTIONAL

Viton® elastomers on filter chamber and pump

ADD TO SYSTEM NO.

V



COMPACT, HIGH FLOW, EFFICIENT AND DURABLE SYSTEMS DESIGNED TO HANDLE A VARIETY OF SOLUTIONS

**METAL FINISHING, CHEMICAL, WATER AND
WASTE TREATMENT, FUME SCRUBBER,
COOLING TOWER RESERVOIR AND MORE!**

FEATURES

- **High flow rate** — 8,500 - 21,000 GPH
- **Non-metallic, corrosion resistant**
PVC construction
CPVC construction
PP high temperature polypropylene construction
(See a chemical resistance guide.)
- **High capacity** — to 130 cartridge
(455 sq. ft. of solids holding capacity)
- **Optional carbon chamber to 84 lb capacity**
- **Optional 30 gallon slurry tank**
- **Standard NEMA 4X motor starter with overload protection**

BENEFITS

- **Easy cartridge change out**
- **Improve finished goods and process quality, minimize scrap and rework**
- **Reduce chemical consumption by maintaining solution quality**

MEGA-FLO Filtration Systems are compact, high flow, high capacity systems which are corrosion resistant, easy to install and simple to operate.

You can choose PVC, CPVC or PP high temperature polypropylene construction.

Systems are available with a single or double mechanical seal pump or with a magnetic coupled polypropylene pump to meet almost any application. Double seal pumps are recommended for use with solutions having ferrous metal particles, excessive abrasives and for solutions which crystallize when cooled. In addition, the double water flush seal pump is an excellent choice for applications requiring dry-run operation.

Filter chambers feature rugged machined construction with oversized ports for low pressure differential. Low pressure drop and high surface area (solids holding capacity) mean long periods of high flow, continuous dirt removal between cartridge changes.

Select a system which will provide 7.0-10.5 square ft. of solids holding area per 100 gallons of solution. Flow rate should be 2 - 10 tank turnovers per hour. Coarse media and high flows are desirable for high dirt load applications. Increasing the number of cartridges reduces solution flow per cartridge, improves efficiency and reduces cartridge consumption.



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**Standard MEGA-FLO systems include:**

- PVC, CPVC or polypropylene construction.
- Corrosion resistant mounting base.
- Stainless steel external hardware and fasteners.
- Swing bolt chamber closure.
- Flange connections.
- PSI gauge guard assembly and vent valve.
- NEMA4X watertight motor starter with overload protection.
- 230-460V/3/50-60 Hz, TEFC motors

SYSTEM: MEGA-FLO filtration systems are built on a rugged hooded base assembly which protects the pump motor and supports the filter chamber. This design allows maximum filtration performance while requiring minimal floor space.

PUMP: Your choice — Series 'HE', 'HF' or 'F'.

Series 'HE' and 'HF' single or double seal pumps are available in CPVC or PPP polypropylene. Both 'HE' and 'HF' pumps feature EPDM elastomers and silicon carbide seals. Double seal pumps include pump protector.

Series 'F' 2 x 2 magnetic-coupled pumps are constructed of glass reinforced polypropylene with Viton® 'O'-ring.

All pump motors are chemical service, continuous duty, TEFC with two-part epoxy paint. Motors are 230-460V/3/50-60Hz with 1.15 service factor.

FILTER: Choice of PVC, CPVC or polypropylene construction. Accommodates 130 cartridges for PVC or CPVC and 110 cartridges for PP. Rugged machined shell, base and cover provide non-metallic solution contact.

The cover includes a stainless steel reinforcing plate and lift handles. The chamber includes a 0-60 PSI gauge guard assembly, vent valve assembly and EPDM elastomers.

POLYPROPYLENE CHAMBER WITH MAGNETIC DRIVE OR MECHANICAL SEAL PUMP

SYSTEM NUMBER	FLOW GPH @ 60 Hz	MEDIA	PUMP HP	PUMP TYPE **	FLANGE CONNS. SUCT. x DISCH.	DIMENSIONS L x W x H	SHIPPING WEIGHT Lbs.
66 CARTRIDGE SYSTEMS (231 s. f. *)							
PPJ66F2750	8,500	22 - 30"	5.0	F	3" x 3"	30" x 24" x 70"	300
PPJ66HE450	9,000	22 - 30"	5.0	HE	3" x 3"	30" x 24" x 70"	300
PPJ66HF175	12,000	22 - 30"	7.5	HF	3" x 3"	30" x 24" x 70"	315
PPJ66HF210	18,000	22 - 30"	10.0	HF	3" x 3"	30" x 24" x 70"	340
88 CARTRIDGE SYSTEMS (308 s. f. *)							
PPJ88F2750	8,500	22 - 40"	5.0	F	3" x 3"	30" x 24" x 80"	320
PPJ88HE450	9,000	22 - 40"	5.0	HE	3" x 3"	30" x 24" x 80"	320
PPJ88HF175	12,000	22 - 40"	7.5	HF	3" x 3"	30" x 24" x 80"	335
PPJ88HF210	18,000	22 - 40"	10.0	HF	3" x 3"	30" x 24" x 80"	360
110 CARTRIDGE SYSTEMS (385 s. f. *)							
PPJ110F2750	8,500	22 - 20" + 30"	5.0	F	3" x 3"	30" x 24" x 90"	340
PPJ110HE450	9,000	22 - 20" + 30"	5.0	HE	3" x 3"	30" x 24" x 90"	340
PPJ110HF175	12,000	22 - 20" + 30"	7.5	HF	3" x 3"	30" x 24" x 90"	355
PPJ110HF210	18,000	22 - 20" + 30"	10.0	HF	3" x 3"	30" x 24" x 90"	380
PPJ110HF315	21,000	22 - 20" + 30"	15.0	HF	3" x 3"	30" x 24" x 90"	405

* s. f. is square feet of surface area or solids holding capacity using Valuound or Maxi-Depth filter cartridges. (See Bulletin M-109.) Order cartridges separately.

** To order double seal pump, change **HE** to **HED** or **HF** to **HFD** in Price Code Number.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**PVC OR CPVC¹ CHAMBER WITH MAGNETIC DRIVE OR MECHANICAL SEAL PUMP**

SYSTEM NUMBER	FLOW GPH @ 60 Hz	MEDIA	PUMP HP	PUMP TYPE **	FLANGE CONNS. SUCT. x DISCH.	DIMENSIONS L x W x H	SHIPPING WEIGHT Lbs.
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52 CARTRIDGE SYSTEMS (182 s. f. *)

PJ52F2750	8,500	26 - 20"	5.0	F	3" x 3"	30" x 24" x 56"	280
PJ52F2910	12,000	26 - 20"	10.0	F	3" x 3"	30" x 24" x 56"	295
PJ52HE450	9,000	26 - 20"	5.0	HE	3" x 3"	30" x 24" x 56"	280
PJ52HF175	12,000	26 - 20"	7.5	HF	3" x 3"	30" x 24" x 56"	295
PJ52HF210	18,000	26 - 20"	10.0	HF	3" x 3"	30" x 24" x 56"	320
PJ52HF315	21,000	26 - 20"	15.0	HF	3" x 3"	30" x 24" x 56"	345

78 CARTRIDGE SYSTEMS (273 s. f. *)

PJ78F2750	8,500	26 - 30"	5.0	F	3" x 3"	30" x 24" x 66"	300
PJ78F2910	12,000	26 - 30"	10.0	F	3" x 3"	30" x 24" x 66"	315
PJ78HE450	9,000	26 - 30"	5.0	HE	3" x 3"	30" x 24" x 66"	300
PJ78HF175	12,000	26 - 30"	7.5	HF	3" x 3"	30" x 24" x 66"	315
PJ78HF210	18,000	26 - 30"	10.0	HF	3" x 3"	30" x 24" x 66"	340
PJ78HF315	21,000	26 - 30"	15.0	HF	3" x 3"	30" x 24" x 66"	365

104 CARTRIDGE SYSTEMS (364 s. f. *)

PJ104F2750	8,500	26 - 40"	5.0	F	3" x 3"	30" x 24" x 76"	320
PJ104F2910	12,000	26 - 40"	10.0	F	3" x 3"	30" x 24" x 76"	335
PJ104HE450	9,000	26 - 40"	5.0	HE	3" x 3"	30" x 24" x 76"	320
PJ104HF175	12,000	26 - 40"	7.5	HF	3" x 3"	30" x 24" x 76"	335
PJ104HF210	18,000	26 - 40"	10.0	HF	3" x 3"	30" x 24" x 76"	360
PJ104HF315	21,000	26 - 40"	15.0	HF	3" x 3"	30" x 24" x 76"	385

130 CARTRIDGE SYSTEMS (455 s. f. *)

PJ130F2750	8,500	26 - 20" + 30"	5.0	F	3" x 3"	30" x 24" x 86"	340
PJ130F2910	12,000	26 - 20" + 30"	10.0	F	3" x 3"	30" x 24" x 86"	355
PJ130HE450	9,000	26 - 20" + 30"	5.0	HE	3" x 3"	30" x 24" x 86"	340
PJ130HF175	12,000	26 - 20" + 30"	7.5	HF	3" x 3"	30" x 24" x 86"	355
PJ130HF210	18,000	26 - 20" + 30"	10.0	HF	3" x 3"	30" x 24" x 86"	380
PJ130HF315	21,000	26 - 20" + 30"	15.0	HF	3" x 3"	30" x 24" x 86"	405

¹ Listed systems include PVC chamber. To order system with CPVC chamber — change **P** to **C** in system number

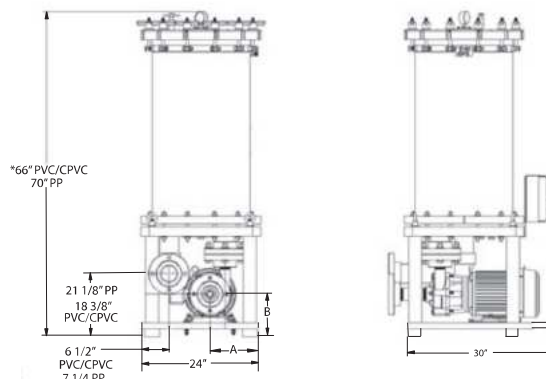
* s. f. is square feet of surface area or solids holding capacity using Valuwood or Maxi-Depth filter cartridges. (See Bulletin M-109.) Order cartridges separately.

** To order double seal pump, change **HE** to **HED** or **HF** to **HFD** in Price Code Number.

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PUMP / HP	A	B
'HE' / 5.0	12-1/4"	8"
'F' / 5.0	12-3/16"	7-3/4"
'F' / 10.0	12-3/16"	7-3/4"
'HF' / 7.5	9-1/2"	8-3/4"
'HF' / 10.0	9-1/2"	8-3/4"
'HF' / 15.0	9-1/2"	8-3/4"

* Overall height dimension reflects 30" chamber. Add 10" for 40" chamber, add 20" for 50" chamber and subtract 10" for 20" chamber.



OPTIONS

Carbon Purification Chambers: Providing a convenient, economical and efficient means of continuous or periodic organic removal, these chambers feature PVC, CPVC or polypropylene construction for bulk granular carbon. PVC chamber has PVC internal canisters while CPVC and PP chambers have polypropylene canisters. Chambers include flow control valve, EPDM elastomers and all piping. Order carbon separately (See Bulletin M-305).

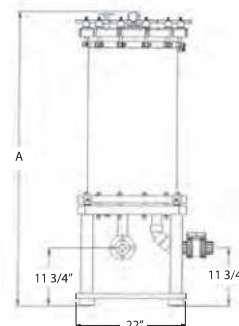
CARBON CAPACITY lbs.	FLOW RATE GPM ³	CANISTERS no. / size ⁴	PRICE CODE NO.			A (in.)
			PVC	CPVC	PPP	
21 lbs. ¹	10	3 / 5" x 28"	O-3430 P	O-3430 C	O-3430 PP	40-11/16
36 lbs. ¹	17	3 / 5" x 48"	O-3431 P	O-3431 C	O-3431 PP	60-11/16
49 lbs. ²	23	7 / 5" x 28"	O-3432 P	O-3432 C	O-3432 PP	59-3/4
84 lbs. ²	39	7 / 5" x 48"	O-3433 P	O-3433 C	O-3433 PP	79-3/4

¹ Chamber mounted on MEGA-FLO base (add 16" to length)

² Stand alone component as shown

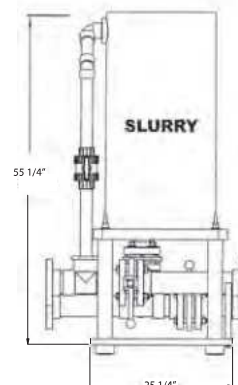
³ Maximum recommended flow U.S. GPM

⁴ PP canisters are less than 5" dia with 15% less capacity.



Slurry Tank: Useful for chemical mixing / additions, precoating or pump priming, this chamber is constructed of PVC, CPVC or polypropylene and has a 30 gallon capacity. Includes 4 valves and all necessary piping.

FOR USE WITH PUMP TYPE:	MAXIMUM LIFT	PRICE CODE NO.		
		PVC	CPVC	PP
'HE'	4 ft.	88-3420-3P	88-3420-3C	88-3420-3PP
'F'		88-3429-3P	88-3429-3C	88-3429-3PP
'HF'		88-3430-3P	88-3430-3C	88-3430-3PP





FOR THOSE WHO DEMAND THE FINEST IN PARTICLE RETENTION

***ELECTROPLATING / CHEMICAL / PCB
PETROCHEMICAL / WATER TREATMENT
PHARMACEUTICAL / PHOTOGRAPHIC***

FEATURES:

- **Flow rates: 7,200 to 19,000 GPH @ 60 Hz**
- **Non-metallic solution contact**
Rubber lined steel chambers with
magnetic-coupled polypropylene pumps
or CPVC mechanical seal pumps
(See a chemical resistance chart)
- **Cartridge or horizontal disc**
- **Solids loading area:**
420, 630 or 840 sq. ft. using cartridges
60, 78 or 105 sq. ft. using discs

OPTIONAL —

Slurry tank with 3 additional flow control valves
for pump priming, precoating and . . .

Carbon purification chamber for organics removal

These filtration systems include design features gained through more than 50 years of experience in developing chemically resistant pumps, filter chambers and systems. High flow rates to quickly remove particles, together with large surface area for solids loading are combined to provide extended operating life of solutions and improve product quality. A wide choice of media is available to best serve your application. Optional carbon chamber and slurry tank make the system extremely versatile.

Sentry filtration systems are engineered to provide efficient removal of particles or organic impurities from a wide range of chemical and plating solutions to 160°F. Chambers and pumps feature non-metallic solution contact. All external steel surfaces are painted two-part epoxy grey enamel. All internals are CPVC.



System shown with
optional 1528
carbon chamber



System shown with
optional 3548
carbon chamber
and SV3-60 slurry tank



**The following pages contain a representative
sampling of available standard systems.**



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

CHOOSE YOUR SYSTEM**FIRST, SELECT****Seal-less Magnetic-Coupled Pump**

Systems may be selected with magnetic-coupled pumps which provide protection from vapor and liquid leaks. Pumps are available in polypropylene to meet a variety of chemical and temperature applications.

OR SELECT**Single or Double Seal Pump**

Systems with mechanical seals should be selected whenever excessive abrasives or ferrous metal particles are present. Standard single and double seal pumps are CPVC and feature silicon carbide (SiC) seal faces with EPDM elastomers.



Sentry disc chamber with cover removed

THEN SELECT**Filter Chamber for solids holding capacity***

Chambers are constructed of rubber lined steel for acid solutions. They accept Maxi-Depth® wound, pleated, cleanable sleeve, or carbon cartridges. **

Chambers allow for simultaneous filtration and purification by using carbon cartridges. A separate purification chamber with flow control valve is available.

* Select a system which will provide 3.5 - 7.0 square ft. of solids holding area per 50 gallons of solution. Flow rate should be 2-10 tank turnovers per hour, depending on clarity desired. Coarse media and high flows are desirable for high dirt load applications. Increasing the number of cartridges reduces solution flow per cartridge, improves efficiency and reduces cartridge consumption. System comes complete with flow control valve between pump and filter chamber. When unit is de-energized, flow control valve may be closed to maintain prime during media change.

** Chambers provided with the following Series 'CR' systems are for cartridges.

To specify system for use with discs –

Change CR1200 in System No. to DR60

Change CR1800 in System No. to DR78

or Change CR2400 in System No. to DR105

**RUBBER LINED CHAMBER with
MAGNETIC DRIVE POLYPROPYLENE PUMP**

Pump includes fluoride-resistant ceramic spindle with EPDM elastomers.

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. 1	SOLIDS AREA 2 Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200F650	7200	30	120	420	F, 5, CR	2"	48 x 48 x 64	1300
CR1800F650	7200	30	180	630			48 x 48 x 72	1400
CR2400F650	7200	30	240	840			48 x 48 x 87	1600

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. 1	SOLIDS AREA 2 Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200F850	9600	45	120	420	F, 5, CR	2"	48 x 48 x 64	1325
CR1800F850	9600	45	180	630			48 x 48 x 72	1425
CR2400F850	9600	45	240	840			48 x 48 x 87	1625

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. 1	SOLIDS AREA 2 Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200F910	12000	55	120	420	F, 10.0, CR	3"	48 x 48 x 64	1365
CR1800F910	12000	55	180	630			48 x 48 x 72	1465
CR2400F910	12000	55	240	840			48 x 48 x 87	1665





SENTRY FILTRATION / PURIFICATION SYSTEMS with single or double mechanical seal pumps*

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RUBBER LINED CHAMBER with DIRECT DRIVE CPVC PUMP

Pump includes silicon carbide mechanical seal with EPDM elastomers.

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. ¹	SOLIDS AREA ² Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200HE330	7500	36	120	420	HE, 3, CR	2"	48 x 48 x 64	1300
CR1800HE330	7500	36	180	630			48 x 48 x 72	1400
CR2400HE330	7500	36	240	840			48 x 48 x 87	1600

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. ¹	SOLIDS AREA ² Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200HE450	8500	50	120	420	HE, 5, CR	2"	48 x 48 x 64	1325
CR1800HE450	8500	50	180	630			48 x 48 x 72	1425
CR2400HE450	8500	50	240	840			48 x 48 x 87	1625

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. ¹	SOLIDS AREA ² Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200HE575	9600	60	120	420	HE, 7.5, CR	2"	48 x 48 x 64	1365
CR1800HE575	9600	60	180	630			48 x 48 x 72	1465
CR2400HE575	9600	60	240	840			48 x 48 x 87	1665

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. ¹	SOLIDS AREA ² Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200H875	15000	27	120	420	H, 7.5, CR	3"	48 x 48 x 72	1475
CR1800H875	15000	27	180	630			48 x 48 x 87	1675
CR2400H510	19000	50	240	840	H, 10, CR		48 x 48 x 87	1750



NOTE:

* To order pump with double mechanical seal - Change **HE** to **HED** or **H** to **HD** in System No.

¹ No. of 10" cartridges. Order separately. See Bulletin M-109.

² With Maxi-Depth cartridges. See Bulletin M-109.

SENTRY systems include:

- Stationary steel mounting base coated with corrosion resistant 2-part epoxy paint.
- Motors are 230-460V/3/50-60, TEFC, 1725 or 3450 RPM. Systems wired for 230V/3/60 unless otherwise specified.
- Piping is solvent sealed CPVC, with EPDM "O"-rings at threaded connections.
- O-60 PSI pressure gauge with gauge guard.
- Two flow control valves — one between pump and filter, second at filter discharge.
- Ball valves are solvent sealed CPVC at filter inlet and outlet.
- Capped tee on filter inlet and outlet for drains or field installation of bulk carbon.
- CPVC vent valve assembly.
- 1" drain valve on filter.

Available for all models:

Granular carbon purification chamber installed on filter discharge with flow control valve is an available option. This allows filtered solution to pass through the activated carbon on a convenient "ON-OFF" basis before returning to the process tank. In addition to pump priming and chemical mixing, optional slurry tank with three additional valves allows precoating of media with filter aid and/or carbon. See Optional on the next page.

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OPTIONS

DESCRIPTION	PRICE CODE NO.
MOTOR STARTERS - NEMA 4X Watertight push button	
230 - 460V/3/50-60 (3 - 7.5 H.P.) 230 - 460V/3/50-60 (10 - 15 H.P.) NOTE: Specify operating voltage O-MS3P-S is required for any size system ordered with a DRI-STOP® Pump Protector.	O-MS3P O-MS3P-S
DRI-STOP® PUMP PROTECTOR	
DRI-STOP 2R for use with double mechanical seal pumps.	O-2DS2R
DRI-STOP 3 for use with magnetic drive or single mechanical seal pumps.	O-DS3C
DAVIT COVER LIFT	
For Model: DR78 / CR180 DR105 / CR240	78-1603 78-1604
SLURRY TANK and VALVES	
For chemical mixing, pump priming or precoating. Includes polyethylene tank, three additional CPVC flow control valves, steel frame. Completely piped and assembled with filter and pump on a standard base. 30 gal. slurry w/3 add'l valves 60 gal. slurry w/3 add'l valves	O-SV3-30 O-SV3-60

DESCRIPTION	PRICE CODE NO.
CARBON PURIFICATION CHAMBER Order carbon media from Bulletin M-305.	
Includes adapter kit, flow control valve, drain valve and 10 ft. of nylon reinforced vinyl hose, PVC chamber and internal canister(s) for use with granular carbon. Single 5" x 28" canister, 7.5 lbs. capacity Triple 5" x 28" canister, 22.5 lbs. capacity Triple 5" x 48" canister, 42 lbs capacity	O-1528 O-3528 O-3548
Chamber for single 5" x 28" Maxi-Carb cartridge (3.0 lbs. carbon) Polypropylene CPVC	O-PP1528M O-1528M

Standard Sentry with two flow control valves

DISC MEDIA

SENTRY FILTRATION SYSTEMS			
CARTRIDGE		DISC	
MODEL	SOLIDS AREA Square feet	MODEL	SOLIDS AREA Square feet
CR1200	420	DR60	60
CR1800	630	DR78	78
CR2400	840	DR105	105

FILTER DISCS, CELLULOSE Packaged in carton of 250		
DISC MODEL	MICRON RATING	PRICE CODE NO.
CE5x24	5	78-1420
CE10x24	10	78-1421
CE20x24	20	78-1422
CE40x24	40	78-1423



SERIES 'M' FILTRATION SYSTEMS

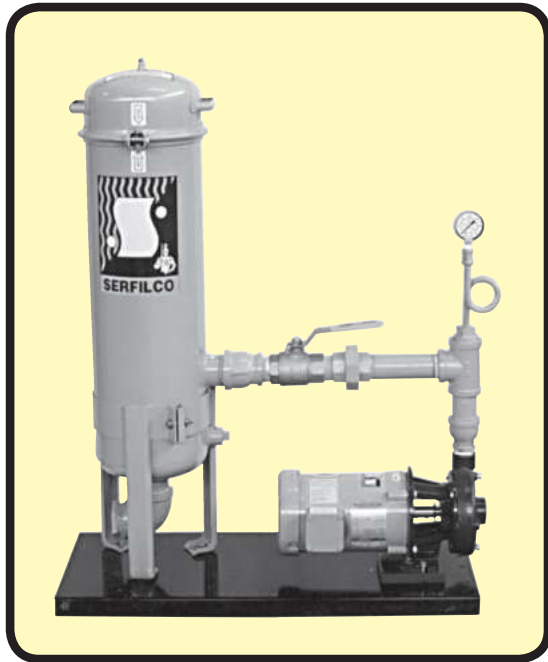
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F-211_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

STAINLESS STEEL OR STEEL

FOR: CLEANERS, RINSES, QUENCH, CUTTING AND HYDRAULIC OILS



FEATURES

- High flow rates to 9,000 GPH
- Wide selection of standard systems including self-priming models
- Filter area from 15 to 60 square feet
- Uses standard 10", 20" or 30" double open end (DOE) cartridges
- Rugged construction, all hard piped and mounted on a vinyl coated steel base
- Compact! More flow and surface area than many systems of similar dimensions
- Easy to operate — standard flow control valve, pressure gauge and vent valve assembly

BENEFITS

- Improve finished goods quality, minimize scrap and rework
- Extend process solution life with continuous dirt removal
- Minimize downtime for tank maintenance and sludge removal with high flow, large surface area
- Protect heaters and other in-tank equipment
- Economical to operate — highly durable and efficient cast centrifugal pumps and low PSI drop chambers with easy cartridge change
- Low installation cost — pre-packaged systems offer more flow and surface area than competitive models

SPECIFICATIONS

SYSTEM:

Models consist of a filter chamber, a cast centrifugal single or double seal pump, TEFC motor, flow control valve, piping, vent valve and pressure gauge, all mounted on a rugged vinyl coated steel base.

PUMP:

The Series 'HCI' (cast iron) and 'HSS' (cast 316 stainless steel) horizontal pumps feature a compact, close-coupled design. A high efficiency, semi-open impeller minimizes clogging and, since the components are cast, there are no welds to break. Also, cast construction provides corrosion resistance that is superior to welded styles.

The self-priming Series 'SP' pumps are constructed of cast iron for dependable duty in a variety of applications. The pumps include a 316 stainless steel shaft, 316 stainless steel fasteners, and cast iron mounting bracket.

They feature a semi-open impeller which is also constructed of 316 stainless steel.

Standard pump elastomers are EPDM. Viton® is available. Motors are TEFC, 208-230-460V, 3Ø, 3450 RPM @ 60 Hz or 380-415V, 3Ø, 2850 RPM @ 50 Hz. Specify operating voltage when ordering.

FILTER CHAMBER:

Constructed of 304 stainless steel or carbon steel with an external coat of 2-part epoxy grey paint. The chamber gasket is Buna-N. Chamber features 100 PSI design with oversized inlet and outlet connections to minimize pressure drop. Available for 5 - 10", 20" or 30" double open end cartridges providing 17.5, 35 or 52.5 square feet of dirt holding capacity respectively. Single bolt V-clamp cover closure allows quick and easy media change.





Specifications and Ordering Information

F-211_D

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SPECIFICATIONS and ORDERING INFORMATION

SYSTEM NUMBER ¹	FLOW GPH @ 60 Hz	MAX. PUMP PSI	PUMP HP	MEDIA	SURFACE AREA Sq. Ft. ⁴	CONNECTIONS SUCTION x DIS-CHARGE ²	DIMENSIONS L x W x H	SHIPPING WEIGHT. Lbs.
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STAINLESS STEEL or STEEL SYSTEMS³

SS10HSS110H	2,500	21	1.0	5 - 20"	35	1 1/4" x 2"	30" x 13" x 39"	150
SS15HSS110H	2,500	21	1.0	5 - 30"	52.5	1 1/4" x 2"	30" x 13" x 49"	160
SS10HSS315H	3,500	30	1.5	5 - 20"	35	1 1/4" x 2"	30" x 13" x 39"	155
SS15HSS315H	3,500	30	1.5	5 - 30"	52.5	1 1/4" x 2"	30" x 13" x 49"	165
SS10HSS420H	4,000	34	2.0	5 - 20"	35	1 1/4" x 2"	30" x 13" x 39"	170
SS15HSS420H	4,000	34	2.0	5 - 30"	52.5	1 1/4" x 2"	30" x 13" x 49"	180
SS10HSS520H	4,500	40	2.0	5 - 20"	35	1 1/4" x 2"	30" x 13" x 39"	170
SS15HSS520H	4,500	40	2.0	5 - 30"	52.5	1 1/4" x 2"	30" x 13" x 49"	180
SS10HSS715H	5,500	20	1.5	5 - 20"	35	2" x 2"	30" x 13" x 39"	165
SS15HSS715H	5,500	20	1.5	5 - 30"	52.5	2" x 2"	30" x 13" x 49"	175
SS15HSS820H	7,500	30	2.0	5 - 30"	52.5	2" x 2"	30" x 13" x 49"	190
SS15HSS930H	9,000	36	3.0	5 - 30"	52.5	2" x 2"	30" x 13" x 49"	195

STEEL SYSTEMS (SELF-PRIMING)

S10SP10H	3,500	24	1.0	5 - 20"	35	1 1/2" x 2"	30" x 13" x 39"	160
S15SP10H	3,500	24	1.0	5 - 30"	52.5	1 1/2" x 2"	30" x 13" x 49"	170
S10SP15H	4,500	32	1.5	5 - 20"	35	1 1/2" x 2"	30" x 13" x 39"	180
S15SP15H	4,500	32	1.5	5 - 30"	52.5	1 1/2" x 2"	30" x 13" x 49"	190
S10SP20H	6,500	34	2.0	5 - 20"	35	1 1/2" x 2"	30" x 13" x 39"	185
S15SP20H	6,500	34	2.0	5 - 30"	52.5	1 1/2" x 2"	30" x 13" x 49"	195
S10SP30H	7,500	37	3.0	5 - 20"	35	1 1/2" x 2"	30" x 13" x 39"	195
S15SP30H	7,500	37	3.0	5 - 30"	52.5	1 1/2" x 2"	30" x 13" x 49"	205

¹ To order double mechanical water flush seal, change **HSS** to **HSSD** or **HCI** to **HCID** in System No.

² FNPT x FNPT.

³ To order steel system, change **SS** to **S** and **HSS** to **HCI** in System No.

⁴ With 2 1/2" diameter nominal string wound filter cartridges. Order media separately. Refer to Bulletin M-109.

OPTIONAL EQUIPMENT

DESCRIPTION	PRICE CODE NO.	DESCRIPTION	PRICE CODE NO.
MOTOR STARTER - Assembled & installed <i>Specify operating voltage.</i> Watertight NEMA 4X magnetic push-button with overload protection. For Start / Stop operation	O-MS3P	Dri-Stop® 2R Recommended for use with double mechanical water flush seal pump. Automatically de-energizes pump motor when cooling water flow is interrupted. Eliminates costly dry run repairs. Requires MS3P-S motor starter, electric and water source.	O-2DS2R
As above, but includes low voltage control circuit required for use with Dri-Stop 2R	O-MS3P-S		



STEEL OR STAINLESS STEEL CONSTRUCTION

FEATURES

- **Flow rates 1,500 - 9,000 GPH @ 60 Hz**
(7,875 - 28,350 LPH @ 50 Hz)
- **Heavy duty cast 316 SS or cast iron centrifugal single or double seal pumps 1.0 - 5.0 HP (.75 - 3.2 kW)**
- **Heavy duty filter chambers carbon steel, 304SS or 316SS** (rated to 150 PSI)
- **High filter surface area**
(to 280 sq. ft solids loading area)
- **Flow control valve between pump and filter chamber**
- **Differential, drain and vent ports standard on filter system chamber**
- **For use with stainless steel or polypropylene media** (See Bulletins M-109 and M-309.)



FILTER CHAMBER:

The series 'K' filter chamber is available in carbon steel, 304 stainless steel, or 316 stainless with an EPDM cover gasket (Viton optional). The chamber is 150 PSI design with quick swing closure, and also includes differential, drain and vent parts.

PUMP:

The series 'HSS', cast 316 stainless steel, or 'HCI', cast iron, centrifugal pumps feature a compact, close-coupled design. A high efficiency, semi-open impeller minimizes clogging, and since the components are cast, there are no welds to break. Also, cast construction provides corrosion resistance that is superior to welded styles.

The pump is available with a single seal or with a double seal which uses external liquid as a flush. Motors are TEFC, 208-230-460V, 3 ϕ , 3450 RPM, 60 Hz.

The SERFILCO KNIGHT filtration systems feature the most durable pumps and filter chambers in our product line. They are designed to provide years of trouble-free service in demanding applications. The KNIGHT systems are intended for use where thermoplastic systems are unsuitable due to chemical and / or temperature limitations.

SYSTEM:

Models offer a choice of 304 or 316 stainless steel filter chamber with a cast centrifugal 316SS pump, or a carbon steel filter chamber with cast iron pump. Systems include a flow control valve between pump and filter, piping and 0-60 PSI pressure gauge, all mounted on a rugged vinyl coated steel base plate.




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The following systems and specifications depict a representative sampling of the Knight product line. Standard systems are shown for stainless steel or carbon steel construction. Stainless steel systems have a 304SS or 316SS filter chamber with a 316SS pump. Carbon steel systems have a carbon steel filter chamber with a cast iron pump. EPDM elastomers are standard for both.

Consult Sales Department for systems with self-priming pumps or for special systems featuring titanium pumps, Teflon lined chambers and special seals for use with external applications such as black oxide.

SPECIFICATIONS AND ORDERING INFORMATION

304 stainless steel chamber with 316SS pump- single mechanical seal

SYSTEM NUMBER ^{1,2,3}	FLOW		MAX. PUMP PSI	PUMP HP	MEDIA	SUR- FACE AREA sq. ft.*	CONNECTIONS SUCTION X DISCHARGE	DIMENSIONS L x W x H	SHIPPING WEIGHT lbs.
	GPH@ 60 Hz	LPH@ 50 Hz							
K4S6HSS110 K4S9HSS110 K4S12HSS110	1,500	4,725	21	1.0	3 - 20 " 3 - 30 " 3 - 40 "	21 32 42	1¼" NPT x 1½" NPT	30 x 13 x 37" 30 x 13 x 47" 30 x 13 x 57"	145 170 195
K4S12HSS215 K4S18HSS215	2,500	7,875	26	1.5	6 - 20 " 6 - 30 "	42 63	1¼" NPT x 2" NPT	33 x 18 x 37" 33 x 18 x 47"	180 205
K4S18HSS420 K4S24HSS420	3,500	11,025	30	2.0	6 - 30 " 6 - 40 "	63 84	1¼" NPT x 2" NPT	33 x 18 x 47" 33 x 18 x 57"	215 240
K4S18HSS620 K4S24HSS620	4,500	14,175	19	2.0	6 - 30 " 6 - 40 "	63 84	2" NPT x 2" NPT	33 x 18 x 47" 33 x 18 x 57"	225 250
K4S33HSS730 K4S44HSS730	7,500	23,625	28	3.0	11 - 30 " 11 - 40 "	116 154	2" NPT x 3" F	50 x 18 x 73" 50 x 18 x 83"	540 550
K4S44HSS950 K4S60HSS950 K4S80HSS950	9,000	28,350	32	5.0	11 - 40 " 20 - 30 " 20 - 40 "	154 210 280	2" NPT x 3" F	50 x 18 x 83" 50 x 18 x 74" 50 x 18 x 84"	550 610 620

¹ For Viton elastomers, add - V to System Number.

² For 316 stainless steel filter chamber change K4s to K6s in System Number.

³ For double mechanical seal pump change HSS to HSSD in System Number.

* with 2½" diameter nominal string wound cartridges. Order media separately. Refer to Bulletins M-109 and M-309.

Motors are TEFC, 230-460V/3Ø/60 Hz. Consult Sales Dept. for explosion-proof, 50 Hz or 1Ø motors.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**Carbon steel chamber with cast iron pump – single mechanical seal**

SYSTEM NUMBER ^{1,2}	FLOW		MAX. PUMP PSI	PUMP HP	MEDIA	SURFACE AREA sq. ft.*	CONNECTIONS SUCTION X DISCHARGE	DIMENSIONS L x W x H	SHIPPING WEIGHT lbs.
	GPH@ 60 Hz	LPH@ 50 Hz							
KS6HCl110 KS9HCl110 KS12HCl110	1,500	4,725	21	1.0	3 - 20 " 3 - 30 " 3 - 40 "	21 32 42	1 1/4" NPT x 1 1/2" NPT	30 x 13 x 37" 30 x 13 x 47" 30 x 13 x 57"	145 170 195
KS12HCl215 KS18HCl215	2,500	7,875	26	1.5	6 - 20 " 6 - 30 "	42 63	1 1/4" NPT x 2" NPT	33 x 18 x 37" 33 x 18 x 47"	180 205
KS18HCl420 KS24HCl420	3,500	11,025	34	2.0	6 - 30 " 6 - 40 "	63 84	1 1/4" NPT x 2" NPT	33 x 18 x 47" 33 x 18 x 57"	215 240
KS18HCl620 KS24HCl620	4,500	14,175	19	2.0	6 - 30 " 6 - 40 "	63 84	2" NPT x 2" NPT	33 x 18 x 47" 33 x 18 x 57"	225 250
KS33HCl730 KS44HCl730	7,500	23,625	28	3.0	11 - 30 " 11 - 40 "	116 154	2" NPT x 3" F	50 x 18 x 73" 50 x 18 x 83"	510 520
KS44HCl950 KS60HCl950 KS80HCl950	9,000	28,350	39	5.0	11 - 40 " 20 - 30 " 20 - 40 "	154 210 280	2" NPT x 3" F	50 x 18 x 83" 50 x 18 x 74" 50 x 18 x 84"	520 580 590

¹ For Viton elastomers, add -V to System Number.² For double mechanical seal pump change HCl to HClD in System Number.

* with 2 1/2" diameter nominal string wound cartridges. Order media separately. Refer to Bulletins M-109 and M-309.

Motors are TEFC, 230-460V/3Ø/60 Hz. Consult Sales Dept. for explosion-proof, 50 Hz or 1Ø motors.

OPTIONAL EQUIPMENT

DESCRIPTION	PRICE CODE NO.
MOTOR STARTER - Assembled & installed Specify operating voltage. Watertight NEMA 4X magnetic push-button with overload protection. For Start / Stop operation	O-MS3P
As above, but includes low voltage control circuit required for use with Dri-Stop 2R	O-MS3P-S

DESCRIPTION	PRICE CODE NO.
Dri-Stop® 2R Recommended for use with double mechanical water flush seal pump. Automatically de-energizes pump motor when cooling water flow is interrupted. Eliminates costly dry run repairs. Requires MS3P-S motor starter, electric and water source.	O-2DS2R

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ADMIRAL[®] FILTRATION SYSTEMS

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F-501_P

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



COMPACT, ECONOMICAL FILTRATION AND PURIFICATION

FOR IN-TANK OR OUT-OF-TANK INSTALLATION

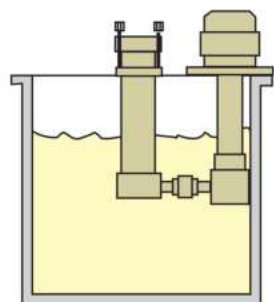
Admiral filtration systems are available for a wide range of tank sizes from laboratory scale to large production requirements. Corrosion resistance is achieved by the use of a variety of engineering plastics such as CPVC, PVC, PP and PVDF with stainless steel external parts.

- **Flow rates to 7000 GPH**
(31,500 LPH @ 50Hz)
- **Non-metallic solution contact**
PVC, CPVC, Polypropylene or PVDF systems available
EPDM elastomers (Viton optional)
- **Runs dry without damage**
- **Rugged construction designed for minimum maintenance**

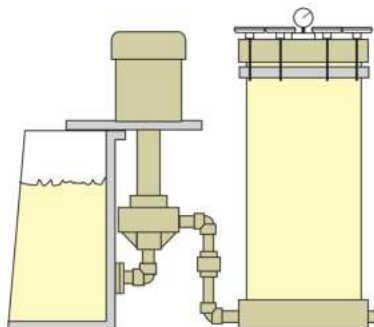
NOTE:

Hose, pipe and fittings required to connect the pump to the filter chamber and plumb to the tank must be ordered separately. Request Bulletin A-213.

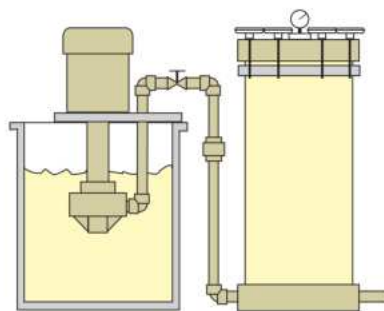
TYPICAL INSTALLATIONS



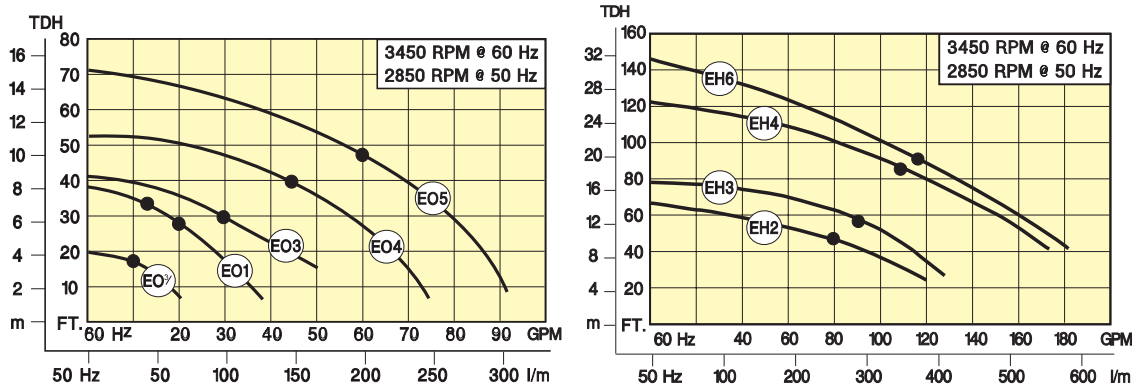
PUMP AND FILTER IN TANK



PUMP AND FILTER OUT OF TANK



PUMP IN TANK AND
FILTER OUT OF TANK

**PERFORMANCE****SPECIFICATIONS***To order, use System No.***CPVC filter chamber with CPVC pump ¹**

SYSTEM NUMBER	PUMP SERIES & CURVE	SYSTEM		FILTER CHAMBER		MOTOR ² HP	IN/ OUT (In. NPT)	WEIGHT Lbs.
		GPH	LPH	SERIES	CARTRIDGES			
CLEO1/8 CL2EO1/8	EO3/4	600	1,900	L	1 - 10" 1 - 20"	1/8	1 x 3/4	25 30
CL2EO103 CL3EO103	EO1	900	2,800	L	1 - 20" 1 - 30"	0.3	1 1/4 x 1	45 50
CS3EO103 CS6EO103	EO1	1,200	3,750	S	3 - 10" 3 - 20"	0.3	1 1/4 x 1	55 65
CS6EO308 CS9EO308 CS12EO308	EO3	1,800	5,600	S	3 - 20" 3 - 30" 3 - 40"	0.75	1 1/4 x 1	70 80 90
CSH9EO410 CSH12EO410	EO4	2,700	7,500	S	3 - 30" 3 - 40"	1.0	1 1/2 x 1 1/4	85 95

¹ For PVC chamber, change first **C** to **P** in System Number.
For polypropylene system, change first **C** to **PP** in System Number.
For PVDF system consult Sales Department.

² Motors less than 1.0 HP are 115-230/1/50-60, TEFC.
Motors 1.0 HP and above are 230-460/3/60 or 190-380-415/3/50, TEFC.



SPECIFICATIONS

To order, use System No.

CPVC filter chamber with CPVC pump ¹

SYSTEM NUMBER	PUMP SERIES & CURVE	SYSTEM		FILTER CHAMBER		MOTOR ² HP	IN / OUT (In. NPT)	WEIGHT Lbs.
		GPH	LPH	SERIES	CARTRIDGES			
CG12EO515 CG24EO515	EO5	3,600	11,300	G	12 - 10" 12 - 20"	1.5	1½ x 1½	160 170
CG24EH220 CG36EH220	EH2	4,800	15,000	G	12 - 20" 12 - 30"	2.0	2 x 1½	205 215
CG24EH330 CG36EH330 CG48EH330	EH3	5,400	16,800	G	12 - 20" 12 - 30" 12 - 40"	3.0	2 x 1½	225 235 245
CG36EH450 CG48EH450 CG60EH450	EH4	6,600	19,600	G	12 - 30" 12 - 40" 12 - 20" + 12 - 30"	5.0	2 x 1½	235 245 255
CG48EH675 CG60EH675	EH6	7,000	21,800	G	12 - 40" 12 - 20" + 12 - 30"	7.5	2 x 2	255 265

¹ For PVC chamber, change first **C** to **P** in System Number. ² Motors are 230-460/3/60 or 190-380-415/3/50, TEFC.
For polypropylene system, change first **C** to **PP** in System Number.
For PVDF system consult Sales Department.

ACCESSORIES

VITON ELASTOMERS	ADD TO SYSTEM NO.
Filter chamber and pump	V

DESCRIPTION	PRICE CODE NO
MOTOR STARTER - NEMA 4X Watertight push button	
115 - 230V/1/50-60	O-MS1P
230 - 460V/3/50-60	O-MS3P
Important: Specify operating voltage.	
OPERATING VOLTAGE	
1 horsepower & above - Single phase	O-1PH
Under 1 horsepower - Three phase	O-3PH

DESCRIPTION	PRICE CODE NO.	
	CPVC	PVC
CARBON PURIFICATION CHAMBER with flow control valve, hose & drain Order carbon media from Bulletin M-305		
Includes ABS mini-canister / CPVC or clear PVC chamber for		
0.9 lbs. granular carbon 10" canister	O-C1CM	O-P1CM
2.1 lbs. granular carbon 20" canister	O-C2CM	O-P2CM
3.2 lbs. granular carbon 30" canister	O-C3CM	O-P3CM
Includes PVC canister / CPVC or PVC chamber for		
7 lbs. granular carbon 1-528 canister	O-1528C	O-1528
21 lbs. granular carbon 3-528 canister	O-3528C	O-3528



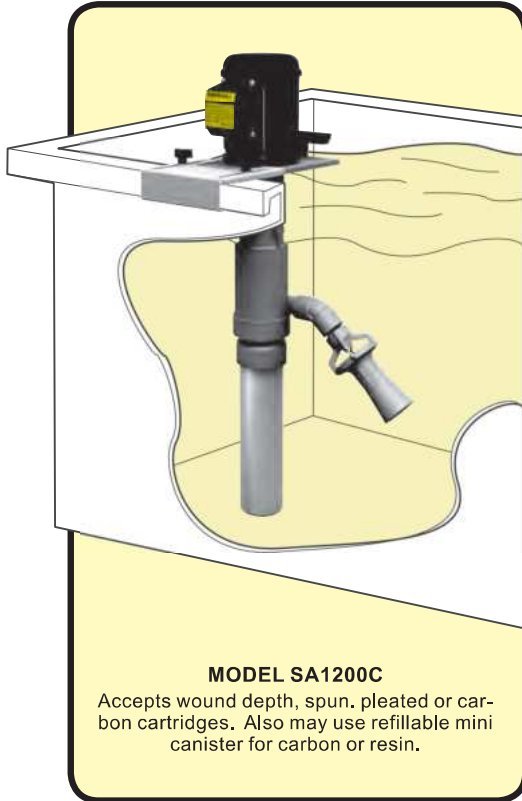
SUB-ADMIRAL[®] IN-TANK FILTRATION SYSTEMS

245

F-506_G

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

FILTRATION OR PURIFICATION WITH HIGH AGITATION FOR SMALL, MEDIUM AND LARGE TANKS



- **Non-metallic solution contact**
CPVC or polypropylene construction.
(See a chemical resistance chart)
- **Polypropylene discharge eductor**
Provides high rate of agitation with filtration.
- **High filtration rate without eductor**
Flows to 2,500 GPH @ 60 Hz (7800 LPH @ 50 Hz)
- **In-tank filtration**
No floorspace required
Leakproof
- **Easy cartridge charge**
- **Vertical cantilever pump**
Seal less
Runs dry

The **Sub-Admiral Filter System** is supplied with an eductor to create additional circulation without requiring a larger pump or more horsepower. One GPM of filter discharge through the eductor nozzle induces an additional four GPM of solution through the eductor. With aggressive agitation and filtration, most processes will operate more efficiently and provide greater consistency in quality. The Sub-Admiral System may also be configured without the eductor to achieve a maximum filtration rate.

The **Sub-Admiral Filter System** includes a seal-less cantilever pump, eductor and suction extension and is field serviceable. Pump has no bearings and thus can run dry. May also be used for transferring liquids with or without the filter.

10

**GENERAL SPECIFICATIONS**

The **Sub-Admiral In-Tank Filtration Systems** feature a pump with a cantilevered, sleeved stainless steel shaft which eliminates bearings and seals, resulting in a pump that can run dry without damage. A vapor seal between the rotating shaft and the support column helps protect the motor. The mounting plate has the pump mounted off-center to allow clearance when mounting to the tank flange.

Standard models constructed of CPVC or polypropylene, for non-metallic solution contact.

Standard elastomers are EPDM. Most models feature pump motors that are chemical duty design. Eductors are molded of polypropylene and threaded to the pump discharge port. They provide 5 gallons of clean agitation for each gallon discharged from the pump.

All systems are provided with mounting bracket and handle for easy installation and removal.

MODEL SA1200 Model EO 3/4 Pump - Single Column						
SYSTEM NUMBER	MODEL	MATERIAL	LENGTH		SHIP WT.	
			w/ 10"	w/ 20"		
C11EO	SA1200C	CPVC & EPDM	20"	30"	Lbs.	Kg
PP11EO	SA1200 PP	PP & EPDM			11	5

MODEL SA3000 Model EO 1 Pump - Twin Column						
SYSTEM NUMBER	MODEL	MATERIAL	LENGTH		SHIP WT.	
			w/ 10"	w/ 20"		
C21EO	SA1300C	CPVC & EPDM	27"	37"	Lbs.	Kg
PP21EO	SA1300 PP	PP & EPDM			31	16.4

All motors are 115/203V/1/50-60

For Viton "O"-ring add -V to System Number.

* Lengths shown are from underside of mounting plate to bottom of cartridges.

Filter cartridges ordered separately.

See *Bulletin M-109* and *Bulletin M-305*

PERFORMANCE						
MODEL	HORSEPOWER	DISCHARGE NPT	NO CARTS	W/O EDUCTOR	WITH EDUCTOR	
				FILTER GPH	FILTER GPH	AGT GPH
SA1200	1/8	3/4"	1-20"	1200	650	3250
SA3000	1/3	1"	2-20"	2500	1350	6750



ADMIRAL® 'EOL' FILTRATION SYSTEMS

247

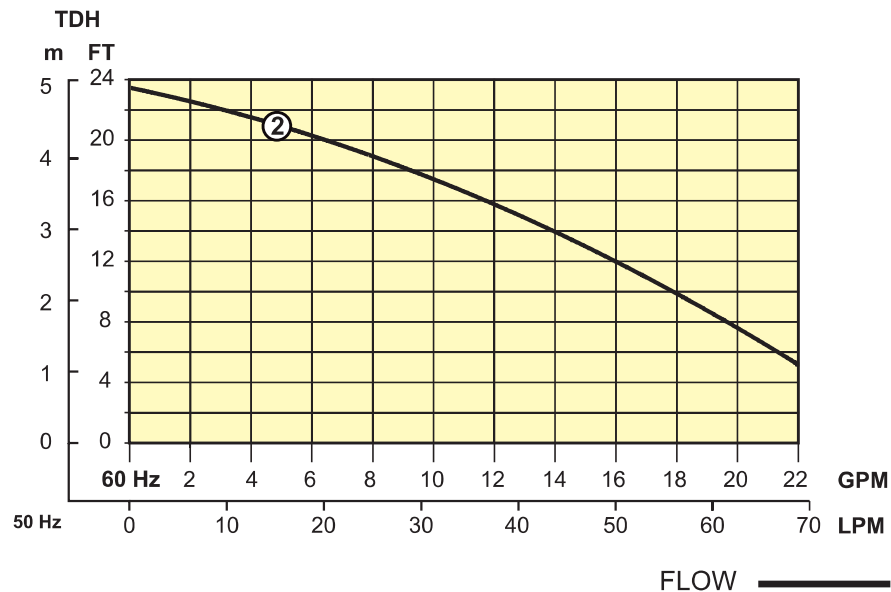
F-514

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

For Acid, Aqueous or Alkaline Solutions



- **Flow rates to 1,000 GPH**
- **Non-metallic solution contact**
Select materials of construction for compatibility with solutions, operating temperature and pressure.
- **PCL** - Clear PVC with CPVC pump
PPL - Polypropylene
CL - CPVC
KL - PVDF
EPDM elastomers standard; Viton optional
- **Runs dry without damage**
- **Compact, lightweight**
- **For 10", 20", or 30" cartridge lengths**
- **For in-tank or out-of-tank mounting**



10



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ADMIRAL 'EOL' Filtration Systems consist of a vertical, dry-run capable pump and a single column filter chamber all mounted in a compact configuration using a common mounting plate.

PUMP:

The Series 'EO-3/4' pump is a vertical cantilever design without bearings or seals and can run dry without damage. Materials of construction are either CPVC, polypropylene or PVDF. The pump features a TFE vapor seal to protect the motor and a compound impeller which prevents liquid pumping up the column while providing efficient performance at low horsepower. Motors are 115-230V/1/50-60 Hz, TEFC with 8 ft. cord and plug.

FILTER CHAMBER:

Choice of 10", 20" or 30" size chamber. Constructed of clear PVC, PP, CPVC, or PVDF. Standard elastomers are EPDM (FKM with PVDF). Chambers accept depth wound, pleated, cleanable sleeve and carbon cartridges and requires no tools for cartridge changing. The

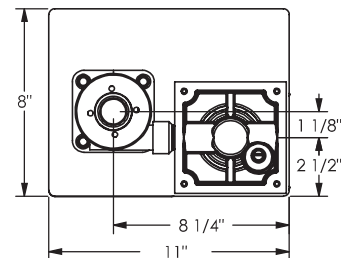
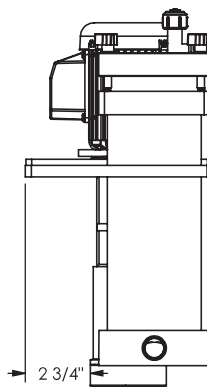
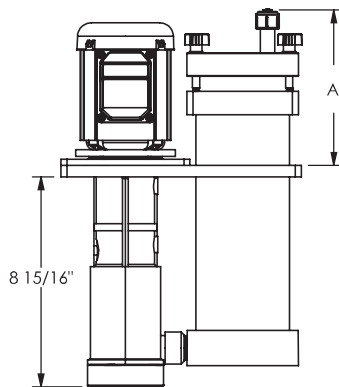
TO ORDER, use System Number

SYSTEM NUMBER				MEDIA No - lgth.	DIM A. (Inches)	PUMP		MAX (U.S. GPH) *	CONNS.	SHIPPING WEIGHT (lbs.)
PVC	PP	CPVC	PVDF			MODEL	HP			
PLL1EO	PPL1EO	CL1EO	KL1EO	1 - 10"	6 5/8"	EO 3/4	1/8	1000	1" X 3/4"	17
PLL2EO	PPL2EO	CL2EO	KL2EO	1 - 20"	16 5/8"					19
PLL3EO	PPL3EO	CL3EO	KL3EO	1 - 30"	26 5/8"					21

* See flow curve

¹ Order filter media separately. Refer to Bulletin M-109.

OPTIONAL	ADD TO SYSTEM NO.
Viton® elastomers on filter chamber and pump	V



TOP VIEW



ADMIRAL 'EOS' FILTRATION SYSTEMS

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F-510_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

For acid, alkaline or aqueous solutions



FEATURES

- **Flow rates from 1800 to 4200 GPH**
- **Non-metallic solution contact**
Polypropylene, CPVC or PVDF with EPDM elastomers. Viton® elastomers optional.
- **Runs dry without damage**
- **High filter surface area**
3 – 20", 30" or 40" cartridges
- **Compact package**
- **Designed for reservoir installation**
- **Economical OEM replacement**

BENEFITS

- **Improve finish goods quality, eliminate scrap and rework**
- **Reduce chemical consumption by maintaining solution quality**
- **Minimize downtime and maintenance with dry-run capable Series 'EO' pump and high surface area Series 'S' chamber**
- **Higher continuous flow and filter area than competitive systems**
- **Easy media change – no tools required**

SPECIFICATIONS

SYSTEM:

ADMIRAL 'EOS' filtration systems consist of a vertical, dry-run capable pump, and a three column filter chamber for 3 – 20", 30" or 40" filter cartridges. The pump includes a suction strainer and is mounted with the chamber in a compact configuration using a common mounting plate. Systems are available in polypropylene, CPVC or PVDF.

FILTER:

Industry proven for ease of service and reliability, the Series 'S' filter chamber will accommodate a variety of filter media including string wound, pleated, melt-blown or carbon cartridges. The ruggedly constructed chamber features a low pressure drop for long intervals of continuous high flow. The chamber includes a swing bolt cover closure with 'T'-handles, so no tools are required and cartridge changing is quick and convenient. Also included is a 0 - 30 psi gauge with guard and vent plug. The chamber features totally non-metallic solution contact and stainless steel external hardware.

PUMP:

The Series 'EO' pump benefits from proven design features gained through over 50 years of experience in developing chemically resistant vertical pumps.

The unique design of this pump includes a fully sleeved stainless steel shaft threaded into a chemical duty motor. This eliminates weak shaft connections, pump bearings, spindles, bushings and liners, resulting in a chemical duty pump which can run dry indefinitely, providing years of trouble-free service.

A labyrinth and a TFE vapor seal between the rotating shaft and the support column protect the motor. The compound impeller prevents liquid from rising in the column, even at maximum TDH, while the fully enclosed bottom impeller provides efficient flow performance at low horsepower.

All models are injection molded of polypropylene, CPVC or 100% pure PVDF. The stainless steel shaft is fully sleeved with the same material from which the pump is constructed. Fasteners are stainless steel. The chemical duty motor has a stainless steel nameplate and is dual range 50 and 60 Hz.

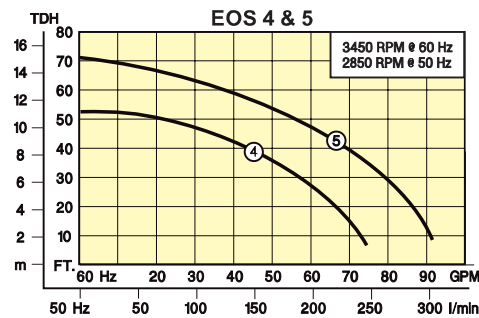
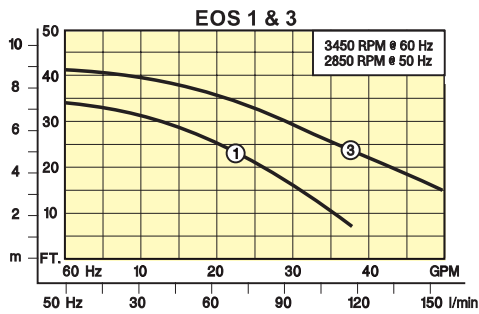
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ADMIRAL 'EOS' FILTRATION SYSTEM Flow Curves

F-510_A

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MODEL	DIMENSIONS (Inches)																
	A	B	C	D	E	F	G*	H	J	K	L	M	N	P	Q	R	CONNECTIONS
EOS 1 & 3	11	5½	20	4¼	4½	5¼	25⅞	12⅞	3⅝	9½	13⅜	2⅝	6⅝ ₁₆	8 sq.	1¼	1½	¼" FNPT x 1" FNPT
EOS 4 & 5	12	7	22	5	5⅜	5⅝	25⅞	12⅞	3⅝	9½	13⅜	2⅝	8⅝ ₁₆	8 sq.	1¼	1½	1½" FNPT x 1¼" FNPT

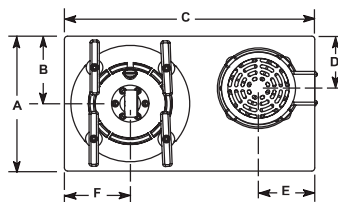
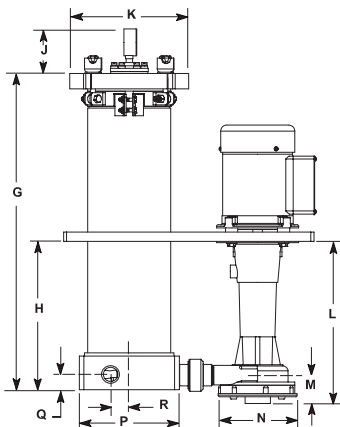
* 35⅞ for 9 cartridge models, 45⅞ for 12 cartridge models.

FLOW **	HP	MEDIA SYSTEM	NUMBER			SHIPPING WT Lbs.
			POLYPROPYLENE	CPVC	PVDF	
6 CARTRIDGE SYSTEMS (21 s. f. *)						
1800	.33	3 – 20" or 6 – 10"	PPS6EO1	CS6EO1	KS6EO1	55
2400	.75		PPS6EO3	CS6EO3	KS6EO3	60
3300	1.0		PPS6EO4	CS6EO4	KS6EO4	65
4200	1.5		PPS6EO5	CS6EO5	KS6EO5	70
9 CARTRIDGE SYSTEMS (31.5 s. f. *)						
1800	.33	3 – 30" or 9 – 10"	PPS9EO1	CS9EO1	KS9EO1	55
2400	.75		PPS9EO3	CS9EO3	KS9EO3	60
3300	1.0		PPS9EO4	CS9EO4	KS9EO4	65
4200	1.5		PPS9EO5	CS9EO5	KS9EO5	70
12 CARTRIDGE SYSTEMS (42 s. f. *)						
1800	.33	3 – 40" or 12 – 10"	PPS12EO1	CS12EO1	KS12EO1	55
2400	.75		PPS12EO3	CS12EO3	KS12EO3	60
3300	1.0		PPS12EO4	CS12EO4	KS12EO4	65
4200	1.5		PPS12EO5	CS12EO5	KS12EO5	70

* s. f. is square feet of surface area or dirt holding capacity with Valuound or Maxi-Depth (Bulletin M-109) filter cartridges. Order cartridges separately.

** Flow is GPH @ 60 Hz.

OPTIONAL	ADD TO SYSTEM NO.
Viton® elastomers on filter chamber and pump	V



TOP VIEW



Electroplating, printed circuit board, fume scrubber

FEATURES

- Flow rates from 5,800 to 10,000 GPH
- Non-metallic solution contact
CPVC with EPDM elastomers
Viton® elastomers optional
- Runs dry without damage
- High filter surface area —
6-20", 30" or 40" cartridges
- Handles temperatures to 180°F
(See a chemical resistance chart)
- Compact package
- Designed for reservoir installation
- Economical OEM replacement

BENEFITS

- Improve finished goods quality, eliminate scrap and rework
- Reduce chemical consumption by maintaining solution quality
- Minimize downtime and maintenance with dry-run 'EH' pump
- Higher continuous flow and filter area than original equipment systems
- Easy cartridge change — no tools required



SPECIFICATIONS

SYSTEM:

ADMIRAL 'EHJ' filtration systems consist of a CPVC pump and filter chamber, assembled on a 2-piece modular PVC mounting plate. The mounting plate is joined with a rabbet joint and secured with 316 stainless steel hardware. The pump discharge and filter inlet are connected by a union fitting. This arrangement allows simplified installation and convenient pump removal for reservoir or pump maintenance. The standard mounting plate is 22" x 12" overall. Custom plates are available.

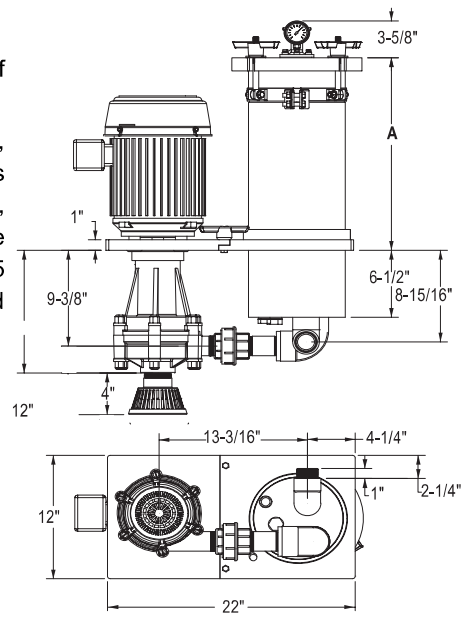
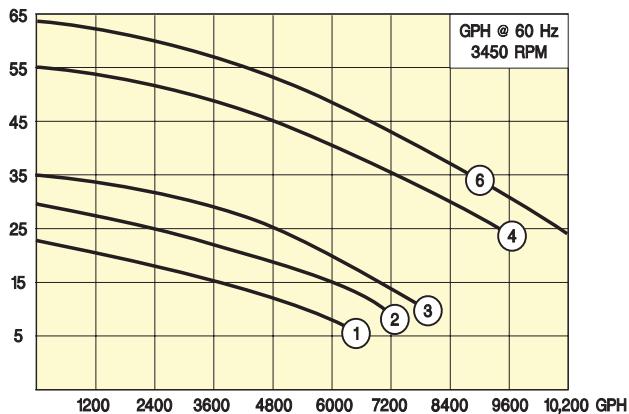
FILTER:

Innovative design with oversized inlet and outlet allows extended intervals of high flow operation with minimal pressure drop. The chamber is constructed of CPVC with EPDM elastomers and is available with 6 - 20", 30" or 40" cartridge capacity. Chamber includes swing bolt cover closure with 'T'-handles, therefore, no tools are required for easy cartridge changing. Also included is a 0 - 60 psi gauge with guard assembly and a vent valve assembly designed to direct vent mist back to the reservoir. Chamber features totally non-metallic solution contact and stainless steel external hardware.

2900 MacArthur Blvd Northbrook, IL, USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**PUMP:**

Industry leading Series 'EH' pumps will provide years of quiet, efficient, trouble-free operation.

Constructed of CPVC with standard EPDM elastomers, TFE vapor seal and polyethylene suction strainer. These pumps provide totally non-metallic solution contact. The cantilever shaft, Series 'EH' pump will even run dry without damage. Motors are 1.5 to 7.5 HP, 230-460V/3 ϕ /50-60Hz, 2850/3450 RPM with 1.15 service factor. They are chemical service, TEFC with oversized bearings, two-part epoxy paint and stainless steel tag.



DIMENSIONS	
MEDIA LENGTH	HEIGHT A
20"	18-5/8"
30"	28-5/8"
40"	38-5/8"

SPECIFICATIONS and ORDERING INFORMATION

CURVE NO.	ORDER NUMBER	FLOW GPH @ 60 Hz	MEDIA *	SURFACE AREA Ft. ²	PUMP HP	DISCHARGE CONNECTION	SHIPPING WEIGHT Lbs.
1	CJ12EH115	5,800	6 - 20"	42	1.5	1½" MNPT	125
	CJ18EH115		6 - 30"	63			135
2	CJ12EH220	6,300	6 - 20"	42	2.0	1½" MNPT	130
	CJ18EH220		6 - 30"	63			140
3	CJ12EH330	6,900	6 - 20"	42	3.0	1½" MNPT	150
	CJ18EH330		6 - 30"	63			160
	CJ24EH330		6 - 40"	84			170
4	CJ12EH450	8,800	6 - 20"	42	5.0	1½" MNPT	155
	CJ18EH450		6 - 30"	63			165
	CJ24EH450		6 - 40"	84			175
6	CJ12EH575	10,000	6 - 20"	42	7.5	1½" MNPT	170
	CJ18EH575		6 - 30"	63			180
	CJ24EH575		6 - 40"	84			190

* NOTE: Order filter cartridges separately. Refer to Filter Media.

Specifications subject to change without notice.

OPTIONAL	ADD TO SYSTEM NO.
Viton® elastomers on filter chamber and pump	V

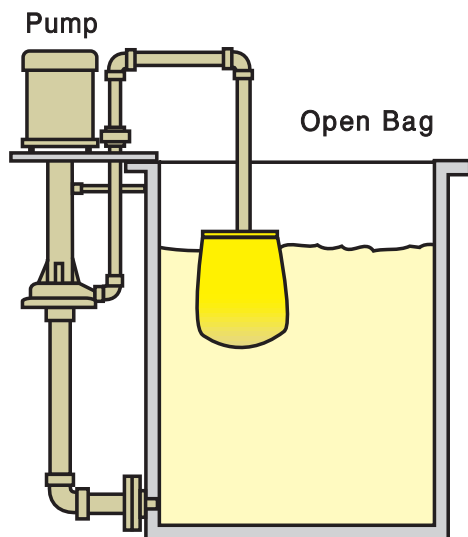


OPEN BAG FILTER SYSTEMS

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F-509_E

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*Typical arrangement with
vertical seal-less pump*

BAG FILTER ASSEMBLIES

Open bag filters are ideal for applications where quick change reusability of a gravity filter is desired. The filter bags are attached to a manifold with cam-lock quick-disconnect couplings for minimal downtime when servicing and they can be repeatedly washed and reused for fast, long-lasting payback on the cost of their installation. Bag filters are available in CPVC or PVDF materials and single or multiple bag assemblies.

Bags are available in retention ratings from coarse filtration at 100 micron to fine filtration at 1 micron.

BAG FILTER SYSTEM
TO ORDER, use System Number

CPVC PUMP and FILTER ASSEMBLY¹

SYSTEM NUMBER ¹	FLOW RATE GPH	NO. OF BAGS	PUMP SERIES	FILTER AREA Sq. Ft.	MOTOR HP MOTOR HT.	& PUMP LENGTH SHIPPING	WEIGHT Lbs.
CB.5EO3/4	720	1	EO	0.5	1/8	6" & 9-1/2"	16
CB1EO3/4	770	2		1.0			21
CB2.2EO1	1200	1	EO	2.2	1/3	8-1/2" & 13-1/4"	43
CB4.4EO1	1500	2		4.4			48
CB2.2EO3	2400	1	EO	2.2	3/4	9-1/2" & 13-1/4"	48
CB4.4EO3	2700	2		4.4			53
CB2.2EO4	3200	1	EO	2.2	1.0	10-1/2" & 13-1/4"	48
CB4.4EO4	3400	2		4.4			53

¹ To order PVDF system, change **C** to **K** in System Number. CPVC system includes quick-connect coupling, 6 ft. vinyl wire reinforced hose, pump and motor and bag assembly. Hose is not included with PVDF systems which require hard piping. All motors are 1-phase TEFC, except for 1.0 HP, which is 3-phase. The 1-phase motors include 8 ft. of 3-wire cord and plug, wired for 115 volt operation unless otherwise requested.

Consult pump bulletins P-312 and P-300 for additional pump specifications. Order bags separately from chart on page 2. Twin bag assemblies include two ball valves.



CAUTION: Do not use vinyl hose when system is to be used at 150°F (66°C) or higher. System suction and discharge should be hard piped. Refer to Bulletin A-213 for installation fittings.

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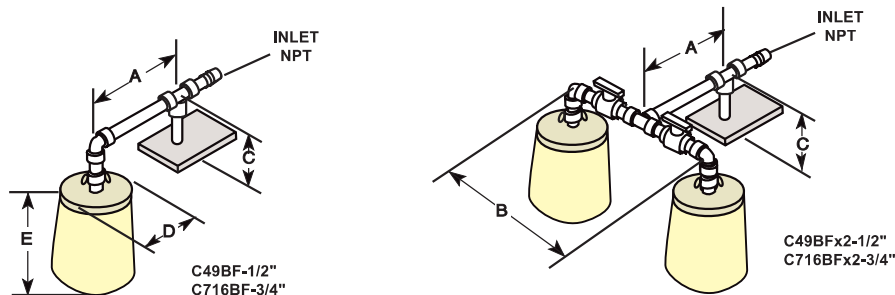
OPEN BAG FILTERS

F-509_E

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BAG FILTER ASSEMBLY

Bag Filter Assembly includes quick-connect coupling, mounting bracket, piping and pipe fittings. Twin bag assemblies include two ball valves. Note: PVDF systems are supplied without hose adapter; assembly requires hard piping.



TO ORDER, use Price Code Number¹

MODEL ¹	PRICE CODE NUMBER	BAG FILTER AREA ² Sq. Ft.	PIPE SIZE (NPT INLET)	NUMBER OF BAGS	DIMENSIONS (inches)					SHIPPING WEIGHT Lbs.
					A	B	C	D	E	
C49BF-1/2 C49BFx2-1/2	88-1010 A 88-1013 A	.5 1.0	1/2"	1 2	8	— 12	6 3/4	4	9	5 10
C716BF-3/4 C716BFx2-3/4	88-1580 88-1580-2	.5 1.0	3/4"	1 2	8	— 12	7	7	16	5 10
C716BF-3/4 C716BFx2-3/4	88-1011 A 88-1012 A	2.2 4.4	3/4"	1 2	8 1/4	— 12	7	7	16	8 13
C716BF-1 1/2 C716BFx2-1 1/2	88-1581 88-1581-2	2.2 4.4	1"	1 2	8 1/4	— 12	7	7	16	8 13
C716BF-1 1/2 C716BFx2-1 1/2	88-1582 88-1582-2	2.2 4.4	1 1/2"	1 2	8 1/4	— 12	7	7	16	8 13

¹ To order PVDF assembly —
change **C** to **K** in Model Number and add K to Price Code No.

² Order bags separately from
chart below

INITIAL and REPLACEMENT BAGS w/polypropylene "O"-ring

MATERIAL	MICRON	.5 SQ. FT.	PRICE CODE NO.	2.2 SQ. FT. PRICE	CODE NO.
Polypropylene	1	FB-PP01x.5	88-0849 F	FB-PP01x2	88-0848 F
	5	FB-PP05x.5	88-0849 A	FB-PP05x2	88-0848 A
	10	FB-PP10x.5	88-0849 B	FB-PP10x2	88-0848 B
	25	FB-PP25x.5	88-0849 C	FB-PP25x2	88-0848 C
	50	FB-PP50x.5	88-0849 D	FB-PP50x2	88-0848 D
	100	FB-PP100x.5	88-0849 E	FB-PP100x2	88-0848 E



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Automatic, Permanent media, High flow systems for —
**Filtering Metal Finishing Process Solutions and Cleaners,
and for Polishing Clarified Treated Waste Treatment Streams**

FEATURES

- *Produces sparkling clean solutions*
- *Automatic, microprocessor controlled —*
Markedly reduces operating and maintenance costs
- *Permanent media —* Eliminates media disposal and replacement
- *High flows —* 50 to 500 GPM
- *Corrosion resistant —* Chambers are PVC lined or hard rubber lined steel with PVC or CPVC piping and pumps for process solutions. Systems for non-corrosive solutions are suitably designed with high quality materials as well.
- **CE** Conforming

BENEFITS

- *Dramatically reduces media and disposal costs.*
- *Improves finished goods and process quality, significantly increases yields, practically eliminates scrap and rework.*
- *Reduces chemical consumption by maintaining solution quality.*
- *Minimizes solution maintenance with high flow, continuous particle removal.*
- *Satisfy regulatory requirements by polishing clarifier overflow.*

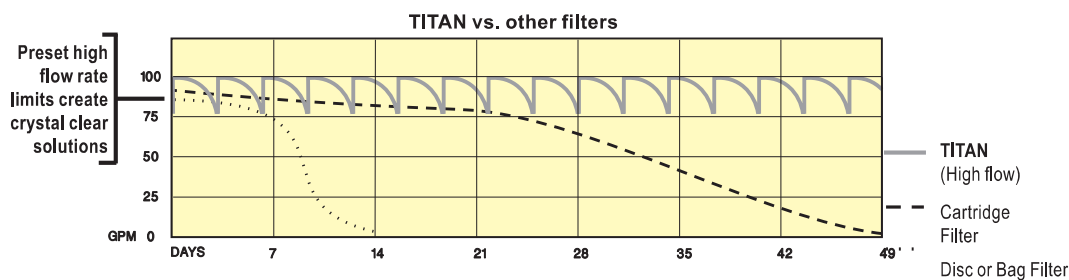


Unique to any other filtration system available, the TITAN series is the result of SERFILCO's ongoing commitment to developing "up flow" and "down flow" permanent media filtration technology.

The combination of high flow permanent media, automatic operation and proven success makes the SERFILCO TITAN superior to any other filter available.

Easy to install and operate, manufactured with high quality corrosion resistant materials, TITAN systems will provide years of trouble-free operation.

Hundreds of customers around the world have achieved dramatic improvement in quality while reducing costs using the automatic permanent media TITAN.



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The SERFILCO TITAN is a series of automatic backwash systems which use permanent filter media of a specific size, shape and density that creates a filter bed through which contaminated solution is fed at controlled limits of flow and pressure. Microprocessor control automatically maintains constant design flow without compacting particles onto the media bed.

The automatic cycle, programmed for optimum use of backwash fluid, responds automatically to a preset minimum flow rate. Prior to the automatic backwash cycle, process solutions are purged from the system with low pressure air. During the backwash cycle, particles exit the chamber without media migration. The process occurs within minutes, resulting in an extremely efficient backwash for each filter cycle. Re-establishment of the filtration cycle returns the system to design flow.

TITAN systems are specifically designed for use with most aqueous process solutions including cleaners, plating and other metal finishing solutions, and treated final effluents. Each TITAN system incorporates a corrosion resistant filter chamber for use with permanent media and has electri-

cally actuated valves, an efficient centrifugal pump, a digital electronic flow meter, pre-wired control panel and pre-programmed microprocessor. Automatic control components are housed in a NEMA 12 enclosure, factory wired and test cycled for all microprocessor programs.

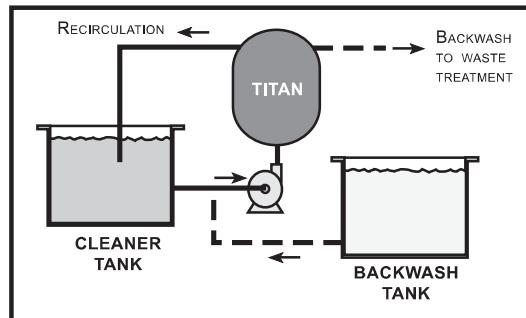
Cleaner models have a steel chamber, piping and valves and a cast iron single seal pump. Metal finishing models have PVC lined or hard rubber lined steel chambers with PVC piping and valves. Models designated ALK have single seal cast iron pumps; models designated AC have double seal CPVC pumps. Treated waste models have PVC lined steel chambers with PVC piping and valves. Models W-50, W-100, W-150 have double seal CPVC pumps. Models W-200 and larger have single seal cast iron pumps.

All units are skid-mounted, though large sizes have the chamber located separately. External metallic surfaces are painted with two coats of a two-part epoxy enamel. All fasteners are stainless steel. Prior to shipment, all units are wet tested to insure piping integrity, flow rate and complete system operation. Media is purchased and shipped separately. If required, backwash and recirculation tanks are also available from SERFILCO.

FILTRATION SYSTEMS FOR CLEANERS

Designed specifically for cleaners and parts washers.

- **AQUEOUS SOLUTIONS and CLEANERS to 190°F**
Extend cleaner life almost indefinitely
Drastically decrease costly dumps



SEQUENCE OF OPERATION

- | | |
|--|--|
| A. Filtration | C. Backwash with clean water |
| B. Air purge solution back to cleaner tank | D. Air purge backwash to waste treatment |

MODEL	MAX. FLOW* GPM	HP	SYSTEM DIMENSIONS (In.)		CONNS. IN & OUT (NPT)	SHIP. WT. (Lbs.)	PRICE CODE NO.
			L x W x H	FILTER DIA. **			
CLN50	50	1.0	42 x 54 x 78	24	1½"	950	S-2934 1
CLN100	100	3.0		36		1250	S-2934 2

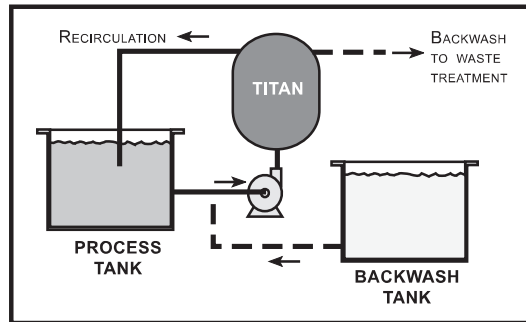
* Full flow, flooded suction, no discharge restriction (U.S. GPM @ 60 Hz)

** Chamber is mounted on system base.



- **FOR ACID OR ALKALINE SOLUTIONS –**
acid or alkaline zinc, and bright nickel plating solutions, anodizing and phosphating solutions
- **OPTIONAL CARBON PURIFICATION**

Designed specifically for metal finishing solutions. Improve finished goods quality, minimize scrap and rework, reduce chemical consumption and maintain a crystal clear bath, with high flow, automatic, permanent media TITAN systems.



SEQUENCE OF OPERATION

- Filtration
- Air purge solution back to process tank
- Backwash with clean water
- Air purge backwash to waste treatment

MODEL MAX.	FLOW* GPM	HP	SYSTEM DIMENSIONS (Inches)		CONNS. IN & OUT (NPT)	SHIP. WT. (Lbs.)	PRICE CODE NO.
			L x W x H	FILTER DIA.			
P50 AC P50 ALK	50	1.5	42 x 54 x 78	24 **	1½"	900	S-2926 1 S-2926 2
P70 AC P70 ALK	70	3.0	48 x 64 x 78	36 **	2"	1250	S-2933 1 S-2933 2
P150 AC P150 ALK	150	5.0	48 x 64 x 78	42 ***	3"	1650	S-2930 1 S-2930 2
P200 AC P200 ALK	200	7.5	48 x 64 x 78	48 ***	3"	1900	S-2931 1 S-2931 2
P300 AC P300 ALK	300	10.0	48 x 64 x 78	60 ***	4"	2800	Consult Sales Dept.

* Full flow, flooded suction, no discharge restriction (U.S. GPM @ 60 Hz)

** Filter chamber mounted on system base

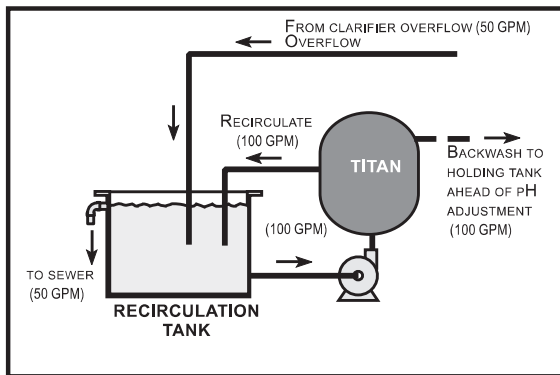
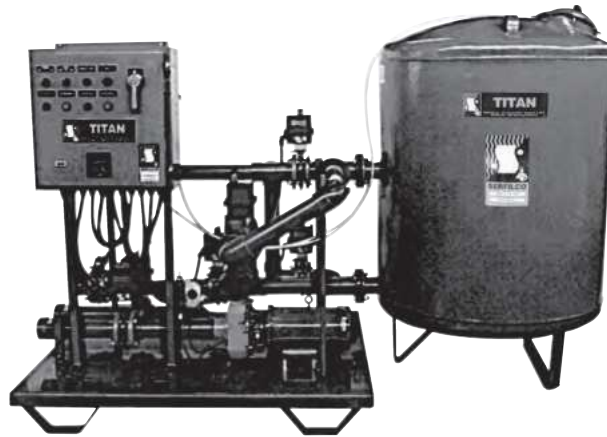
*** Free standing chamber

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**TREATED WASTE****Flow rates to 500 GPM**

Capture low ppm suspended solids exiting in clarifier overflow.

OPTIONAL CARBON PURIFICATION

Designed specifically for aqueous and treated waste applications. Satisfy regulatory requirements easily and economically with flow rates to 500 GPM. A TITAN filtration system continuously recirculating clarifier overflow will capture escaping solids and can achieve 0.5 ppm with proper recirculation. In fact, polished water can be re-used in non-critical rinses.

**SEQUENCE OF OPERATION**

- A. Filtration
- B. Air scrub
- C. Backwash to waste treat with polished water from recirculation tank

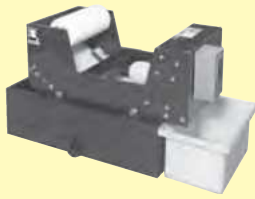
MODEL	MAX. FLOW* GPM	FLOW FROM CLARIFIER (GPM)	HP	SYSTEM DIMENSIONS (In.)		CONNS. IN & OUT	SHIP. WT. (Lbs.)	PRICE CODE NO.
				L x W x H	FILTER DIA.			
W50	50	10 - 25	1.5	42 x 54 x 78	24 **	1½" NPT	850	S-2920
W100	100	26 - 50	3.0	42 x 54 x 78	36 **	2" NPT	1150	S-2921
W150	150	51 - 75	5.0	42 x 54 x 78	42 ***	3" NPT	1600	S-2931
W200	200	76 - 100	5.0	42 x 54 x 78	48 ***	3" NPT	1850	S-2922
W300	300	101 - 150	7.5	42 x 54 x 78	60 ***	4" Flange†	2400	S-2923
W400	400	151 - 200	10.0	42 x 54 x 78	66 ***	4" Flange†	2800	S-2924
W500	500	201 - 250	15.0	48 x 64 x 78	72 ***	6" Flange	3300	S-2925

* Full flow, flooded suction, no discharge restriction (U.S. GPM @ 60 Hz)

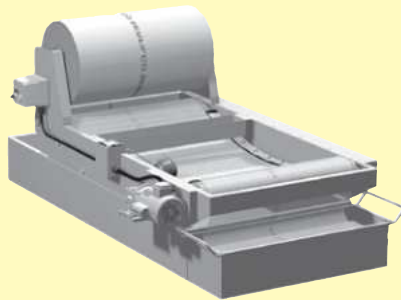
** Filter chamber mounted on system base

*** Free standing filter chamber

† 4" flanges also have interior 4" NPT threads.



MODEL DF-1.5



MODEL DF-11

AUTOMATIC DISPOSABLE FABRIC FILTRATION SYSTEMS FOR:

PHOSPHATING / PARTS WASHERS
MACHINE TOOL COOLANTS
INDUSTRIAL WASTE WATER
PROCESS OR COOLING WATER
WATER WALL SPRAY BOOTHS
TREATED PLATING WASTE

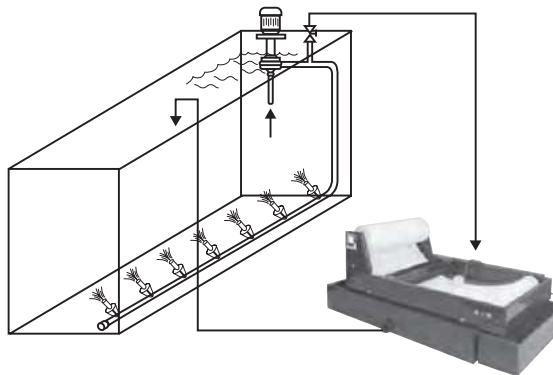
- **Unattended operation**
Automatically indexing media allows continuous filtration, even with varying input or solids content.
- **Choice of materials**
Carbon steel or 316 stainless steel
- **Sizes for any application**
From 1.5 to 113 sq. ft. of filter surface area
Flow rates to 650 GPM @ 80 micron
- **Low operating cost**

SYSTEM OPERATION

This system is totally automatic and responds to wide variations in flow rate and solids concentration. Pump the contaminated solution to the diffuser tray which distributes flow across the full width of the filter bed. Particle separation starts immediately via gravity flow through the media to the clean reservoir below the conveyor frame. Filtered solution can then gravity drain to waste or be returned to the process via a pump.

Gravity flow allows gentle accumulation and settling of solids on the filter fabric. The concave configuration of the media bed accommodates the flow rate and maximizes solids loading on the fabric. As the media gradually becomes laden with solids, the solution level will slowly rise until the float switch activates the conveyer drive motor. Consumed fabric is advanced to the sludge box as fresh media is simultaneously indexed to the solution flow.

TYPICAL INSTALLATION





SPECIFICATIONS

SERIES S

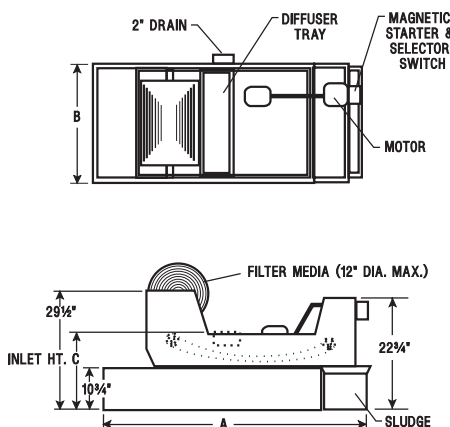
CARBON STEEL reservoir, frame, shafts, bearings and sprockets. Models 1.5 to 16.5 feature a 316 stainless steel conveyor belt. Larger models have galvanized belt with optional 304 or 316 stainless steel. Units are coated with corrosion resistant 2-part epoxy paint.

SERIES SS

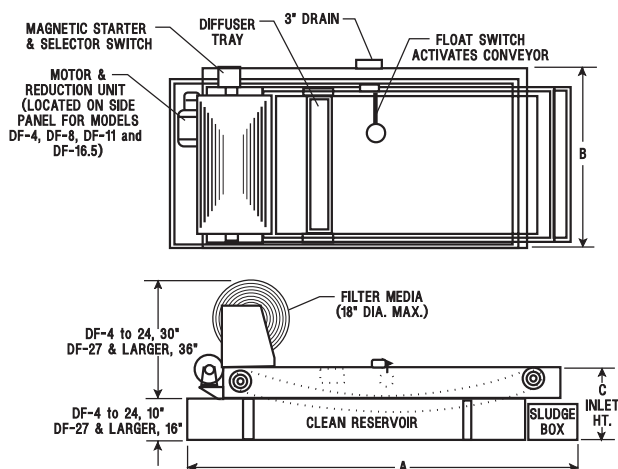
316 STAINLESS STEEL reservoir, frame, shafts, bearings, sprockets and conveyor belt. Non-wetted surfaces such as fabric bracket, motor bracket and gear reducer are carbon steel.

All units include: float switch, sludge box (HDPE on Models 1.5 and 4), filtrate reservoir which serves as a support for mounting the conveyor frame, drain, single phase drive motor and starter. Standard edge seals are PVC, 140°F maximum. EPDM and silicon rubber edge seals are optional. Order filter media separately.

**Model
DF-1.5**



**Models DF-4
to DF-113**



FILTER MODEL	FILTER AREA	TANK CAPACITY	115V/1/60 DRIVE MOTOR	OVERALL DIMENSIONS (INCHES)			INLET HEIGHT (INCHES)	MEDIA WIDTH	APPROX. SHIPPING WEIGHT	FABRIC MICRON RATING				
				LENGTH	WIDTH	HEIGHT				5	10	25	40	80
	SQ. FT.	GAL.	HP	A	B		C	IN.	LBS.	GPM FLOW RATE				
DF-1.5	1.5	20	1/15	55	21.5	35.5	17	13	225	2	3	4	6	9
DF-4	4	49	1/3	75	28	40	19	16.5	320	5	6	10	14	23
DF-8	8	90	1/3	71	50	40	19	33	580	10	12	20	28	45
DF-11	11	115	1/3	90	50	40	19	33	760	14	17	28	39	62
DF-16.5	16.5	160	1/3	90	67	40	19	50	1025	20	25	42	58	93
DF-19	19	160	1/3	89	62	40	18	50	1025	24	29	48	67	108
DF-24	24	200	1/3	104	62	40	18	50	1420	30	36	60	84	136
DF-27	27	400	1/2	136	68	52	30	50	2400	34	41	68	95	153
DF-29	29	500	1/2	162	68	52	30	50	3110	36	44	73	102	164
DF-40	40	600	1/2	194	68	52	30	50	3750	50	60	100	140	226
DF-57	57	900	3/4	259	68	52	30	50	5250	71	80	143	200	323
DF-96	96	1370	3/4	380	68	52	30	50	7700	120	144	240	336	544
DF-113	113	1575	1	427	68	52	30	50	8655	142	160	286	400	646



SERIES 'DF' FILTRATION SYSTEMS

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F-701_U

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2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

TO ORDER, use Price Code Number

FILTER AREA (SQUARE FEET)	SERIES S		SERIES SS	
	MODEL	PRICE CODE NO.	MODEL	PRICE CODE NO.
1.5	DFS-1.5-S	49-1414	DFS-1.5-SS	49-1413A
4	DFS-4-S	49-1000	DFS-4-SS	49-1038A
8	DFS-8-S	49-1003	DFS-8-SS	49-1040A
11	DFS-11-S	49-1006	DFS-11-SS	49-1042A
16.5	DFS-16.5-S	49-1007	DFS-16.5-SS	49-1043A
19	DF-19-S	49-0015	DF-19-SS	49-0048A
24	DF-24-S	49-0018	DF-24-SS	49-0050A
27	DF-27-S	49-0021	DF-27-SS	49-0052A
29	DF-29-S	49-0024	DF-29-SS	49-0054A
40	DF-40-S	49-0027	DF-40-SS	49-0056A
57	DF-57-S	49-0030	DF-57-SS	49-0058A
96	DF-96-S	49-0074	—	—
113	DF-113-S	49-0075	—	—

OPTIONAL EQUIPMENT

DESCRIPTION		PRICE CODE NO.
FLOAT ACTIVATED LEVEL CONTROL SWITCH FOR RESERVOIR PUMP NEMA 1. For single phase motors to 1 1/2 HP @ 115V or 2 HP @ 230VAC. Used as a pilot device on three phase magnetic motor starters. Complete with float ball and mounted in reservoir tank for pump-down operation. Separate motor starter is required for 3-phase motor (see below).		49-0162
RESERVOIR PUMP INSTALLATION AND WIRING		49-0173
MOTOR STARTER FOR RESERVOIR PUMP 3 phase with transformer (HAND-OFF-AUTO) 1 phase with transformer (HAND-OFF-AUTO)		O-MS3S O-MS1S
EDGE SEALS Models 1.5 - 8 Models 11 - 16.5 Models 19 - 113	EPDM 200°F max.	SILICON RUBBER 300°F max.
	49-0500 A 49-0651 A N/A	49-0500 B 49-0651 B C/F
CONVEYOR BELTS For Series DF-19S through DF-113S (Standard belts are galvanized steel.) 304 stainless steel 316 stainless steel		ADD TO PRICE CODE NO.
		B C

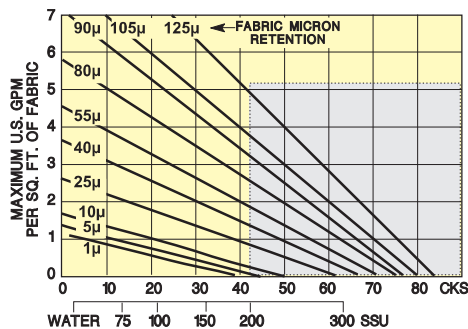
RESERVOIR PUMPS (not installed)

FLOW		HORSEPOWER		CAST IRON		POLYPROPYLENE		CPVC	
GPM @ TDH (ft.)		CI	PP & CPVC	MODEL	PRICE CODE NO.	MODEL	PRICE CODE NO.	MODEL	PRICE CODE NO.
5	11	1/8	1/8	SCI 1.5	49-0149-1	EO3/4PP	39-3122B	EO3/4C	39-3222B
15	11	1/4	—	SCI 4	49-0150	—	—	—	—
24	20	1/2	1/3	SCI 8	49-0151	EOPP1	39-1121 A	EOC1	39-1221 A
40	24	3/4	3/4	SCI 15	49-0153	EOPP3	39-1123 C	EOC3	39-1223 C
75	20	1	1	SCI 24	49-0156	EOPP4	39-2124 J	EOC4	39-2224 J
115	35	2	2	SCI 29	49-0158 A	EHP2	45-0623	EHC2	45-0123
145	25	3	5	SCI 40	49-0159	EHP5	45-0645	EHC5	45-0145
200	35	5	7 - 1/2	SCI 57	49-0160 A	EFP5	45-2254	EFC5	45-2054

NOTE: Motors less than 1 HP are 1 phase, 1 HP and up are 3 phase. 3 phase motors require a separate motor starter.



FLOW RATE CHART



SIZING INSTRUCTIONS:

1. Select the desired micron retention fabric from the Fabric Selection Chart.
2. Using the Flow Rate Chart, determine the flow per square foot for the selected viscosity.
3. Divide the total flow (GPM) you desire by the number obtained in step 2. The resultant is the size, in square feet of filter area required.

FABRIC SELECTION CHART

APPLICATION		MICRON									
		125	105	90	80	55	40	25	10	5	1
Paint spray booth - water	WATER SOLUTIONS	•	•	•	•	•	•	•			
Zinc & iron phosphating		•	•	•	•	•	•	•			
Caustic washing solutions		•	•	•	•	•	•	•	•	•	•
Waste treat - metal hydroxide		•	•	•	•	•	•	•	•	•	•
Grinding - steel		•	•	•	•	•	•	•	•	•	•
Grinding - cast iron		•	•	•	•	•	•	•	•	•	•
Grinding - aluminum				•	•	•	•	•	•	•	•
Grinding - carbide				•	•	•	•	•	•	•	•
Belt grinding - steel		•	•	•	•	•	•	•	•	•	•
Belt grinding - zinc		•	•	•	•	•	•	•	•	•	•
Grinding - hard plastics			•	•	•	•	•	•	•	•	•
Grinding - soft plastics			•	•	•	•	•	•	•	•	•
Grinding - steel roll			•	•	•	•	•	•	•	•	•
Grinding - brass			•	•	•	•	•	•	•	•	•
Grinding - bronze			•	•	•	•	•	•	•	•	•
Grinding - aluminum			•	•	•	•	•	•	•	•	•
Lapping (Oil 30 - 100)	OIL 100-150 SSU					•	•	•	•	•	•
Honing (Oil 20 - 100)						•	•	•	•	•	•
Quenching			•	•	•	•	•	•	•	•	•
Grinding - aluminum	OIL 150-250 SSU		•	•	•	•	•	•	•	•	•
Belt grinding - steel		•	•	•	•	•	•	•	•	•	•
Belt polishing - zinc copper		•	•	•	•	•	•	•	•	•	•
Belt grinding - steel	OIL 150-250 SSU	•	•	•	•	•	•	•	•	•	•
Thread grinding - steel		•	•	•	•	•	•	•	•	•	•
Flute - tap die grinding		•	•	•	•	•	•	•	•	•	•
Crush & form grinding	SYNTHETIC	•	•	•	•	•	•	•	•	•	•
Machine tool turning/milling		•	•	•	•	•	•	•	•	•	•
		•	•	•	•	•	•	•	•	•	•

DISPOSA-FABRIC MEDIA, use Price Code No. to order

MODEL NO. *	MICRON	-13" WIDTH*			-16 1/2" WIDTH*			-33" WIDTH			-50" WIDTH*		
		YARDS PER ROLL	PRICE CODE NO.	WEIGHT (LBS)	YARDS PER ROLL	PRICE CODE NO.	WEIGHT (LBS)	YARDS PER ROLL	PRICE CODE NO.	WEIGHT (LBS)	YARDS PER ROLL	PRICE CODE NO.	WEIGHT (LBS)
PE	SF-W125	125	100	P-49-0257 1B	2	500	49-0090 1B	13	500	49-0091 1B	26	500	49-0092 1B
	SF-W105	105	100	49-0258 1B	2	500	49-0093 1B	13	500	49-0094 1B	26	500	49-0095 1B
	SF-W090	90	100	49-0259 1B	2	500	49-0165 1B	13	500	49-0166 1B	26	500	49-0167 1B
RAYON/PE	SF-W080	80	100	49-0260 B	3	500	49-0099 B	15	500	49-0100 B	30	500	49-0101 B
	SF-W040	40	100	49-0263 B	3	500	49-0108 B	15	500	49-0109 B	30	500	49-0110 B
	SF-W025	25	100	49-0264 B	3	500	49-0111 B	15	500	49-0112 B	30	500	49-0113 B
	SF-W010	10	50	49-0266 B	3	200	49-0114 B	12	200	49-0115 B	24	200	49-0116 B
	SF-W005	5	50	49-0267 B	3	200	49-0117 B	15	200	49-0118 B	30	200	49-0119 B
	SF-W001	1	50	49-0268 B	4	200	49-0120 B	18	200	49-0121 B	36	200	49-0122 B

* Add width to Model No. - **Example:** SF-W125-13"



DISPOSABLE FABRIC FILTER

Typical Applications Include:

STRAINING - Paints & varnishes

FILTERING - Chemicals, cutting and grinding fluids, oil

PILOT TESTING - Waste treatment, phosphating

Simply place the **ROLL-A-FILTER** on top of an open drum or recirculating tank and pour or route the liquid to be filtered into the filter tray. When the filter fabric accumulates enough solids, as indicated by the liquid pool, pull it forward, tear/cut it off and discard. The handles on the filter media support basket provide an easy and clean method of lifting and discarding the sludge laden media.

All units are made of heavy gauge steel, and are designed with integral clean catch basin with center discharge hole. Units conveniently install over sumps to eliminate frequent cleanout.

- Steel construction coated with chemically resistant, oven cured two-part epoxy paint.
- Heavy duty perforated steel filter media support basket with handles
- Rugged steel support frame and sloped bottom basin
- Safe tear bar / cutting guide
- Models RAF-2S & -3S conveniently fit standard 55 gallon drums

TO ORDER

MODEL NUMBER	NOMINAL DIMENSIONS L x W x H	MEDIA WIDTH	FILTERING AREA	SHIPPING WEIGHT	PRICE CODE NO.
	Inches				
RAF-2S	28 x 19 x 5	18	2-1/3	19	79-0278
RAF-3S	28 x 25 x 5	24	3-1/4	34	79-0279
RAF-4S	47 x 25 x 5	24	6	46	79-0280
RAF-5S	47 x 37 x 5	36	9	61	79-0281
RAF-6S	59 x 37 x 5	36	12	74	79-0282

Note: Flow capacities vary greatly depending on liquid and volume of solids.

DISPOSABLE FABRIC MEDIA (Order separately)

	PART NUMBER	APPROXIMATE MICRON RATING	APPLICATION	APPROXIMATE MICRON RATING	PRICE CODE NUMBER		
					18"	24"	36"
PE	W105	105	Straining paint / Coarse filtration	150	49-0175-1	49-0176-1	49-0177-1
	W090	90	Fine straining / Paint Filtration / Light oil	150	49-0178-1	49-0179-1	49-0180-1
RAYON/PE	W080	80	Coarse Filtration	150	49-0181	49-0182	49-0183
	W040	40	Medium filtration	150	49-0187	49-0188	49-0189
	W025	25	Fine filtration	150	49-0190	49-0191	49-0192
	W010	10	Very fine filtration	75	49-0193	49-0194	49-0195
	W005	5	Ultra fine filtration	75	49-0240	49-0241	49-0242
	W001	1	Ultra fine filtration	75	49-0243	49-0244	49-0245



SERIES 'CB' CARTRIDGE / BAG FILTRATION SYSTEM

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F-601_J

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



For recirculating filtration on a reservoir

- COMPLETELY PRE-ENGINEERED AND ASSEMBLED
- QUICK CHANGE REUSABLE FILTER MEDIA MEANS FAST PAYBACK
- PERMITS WATER REUSE
- PREVENTS NOZZLE PLUGGING
- PROVIDES BETTER CLEANING
- PREVENTS POLLUTION
- NO BACKWASH REQUIRED
- AVAILABLE WITH AUTOMATIC ON / OFF PUMP CONTROL

The Cartridge / Bag system is a 2-stage liquid-solid separation system designed to provide high solids loading capabilities for applications requiring recirculating filtration of a process reservoir. Typical applications include the removal of particles from glass and plastic in bottle washing operations and the removal of board fiber, wheel grit, copper and other metals from water used in PC board deburring and scrubbing equipment.

The first stage employs a primary filter tank containing 8 gravity flow filter bags to collect bulk particles separated from rinse water. This stage provides 17.6 ft.² of filter surface area and is capable of filtering particles from 100 micron to 5 micron, depending upon the micron rating of the filter bags selected. The filter bags are

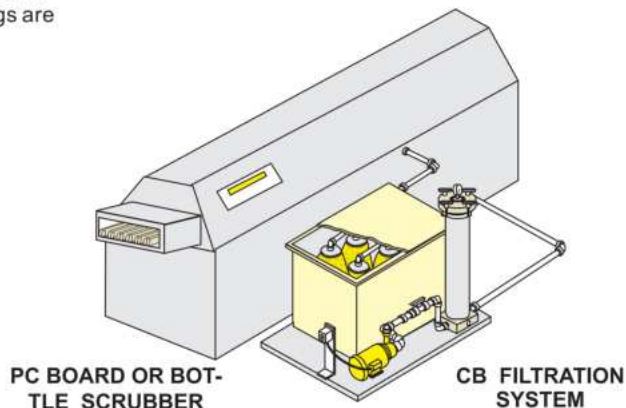
attached to a manifold with cam-lock quick-disconnect couplings for minimal down-time when servicing. The manifold includes an overflow vent which prevents back-up of system flow.

A circulating pump can be manually activated, or automatically activated with an optional level control, to transfer the filtered water from the primary filter tank to the second stage. This stage consists of a final trap filter chamber which uses a 2 micron pleated paper filter cartridge with 32 sq. ft. of surface area to polish the water so that clear water can be recycled to the process or discharged to a drain.



FEATURES:

- Flow control valve
- High solids loading
- Vinyl coated steel base





SPECIFICATIONS

Entire system constructed of corrosion resistant materials for long service life.

PRIMARY FILTER TANK

Eight 5, 10, 25, 50 or 100 micron polypropylene filter bags (order separately) with quick-disconnect couplings provide 17.6 sq. ft. (1.6 sq. m) total area primary filtration by gravity flow to a 36" x 24" x 32" (914 x 610 x 813 mm) deep polyethylene reservoir. Reservoir provided with cover.

AVAILABLE WITH:**PVDF CENTRIFUGAL PUMP**

Provides 30 U. S. GPM at 18 PSI @ 60 Hz (95 LPM at 1.2 bar @ 50 Hz) with Viton® mechanical seal and "O"-ring. Flow control valve on 1" PVC pipe between pump and final filter.

or

NORYL® SELF-PRIMING CENTRIFUGAL PUMP

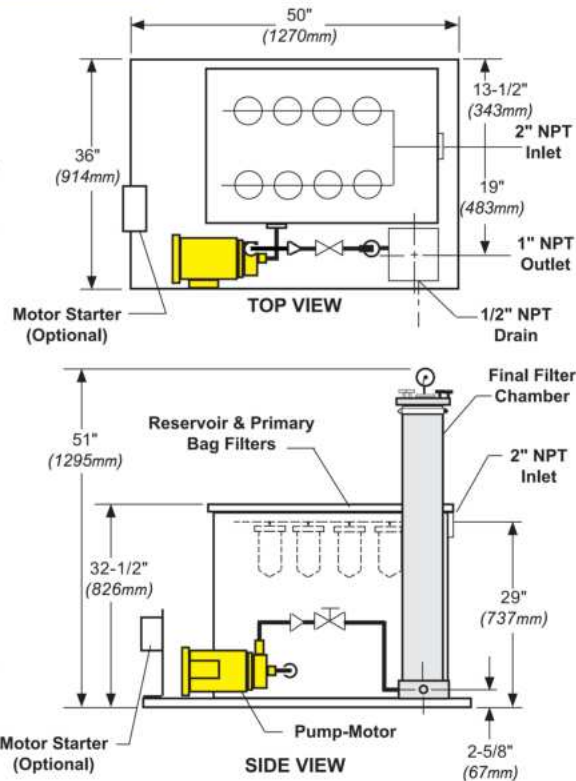
Provides 30 U. S. GPM at 21 PSI @ 60 Hz (95 LPM at 1.4 bar @ 50 Hz) with Viton® mechanical seal and "O"-ring. Flow control valve on 1" PVC pipe between pump and final filter.

FINAL TRAP FILTER CHAMBER

Constructed of PVC with quick opening swing bolts and tee handles. Supplied with pressure gauge. Includes one 4" x 36" pleated paper filter cartridge of 2 micron, 32 sq. ft. (3.0 sq. m.) expanded filter area.

VINYL COATED STEEL BASE

Approximate shipping weight - 200 lbs. (91 kg.)

**TO ORDER, use Price Code Number**

MODEL with PVDF end suction 'K' pump	MOTOR TEFC, 1.5 HP 3450 RPM @ 60 Hz 2850 RPM @ 50 Hz	PRICE CODE NO.
CBF 65x58 1½x1½K3V(M2)-C1.5	115-230V/1/60	2750
CBF 65x58 1½x1½K3V(M2)-D1.5	230V/460V/3/60 380V/3/50	2751

MODEL with NORYL self-priming 'G' pump	MOTOR TEFC, 1.0 HP 3450 RPM @ 60 Hz 2850 RPM @ 50 Hz	PRICE CODE NO.
CBF 65x58 GNOKCVN-C1.0	115-230V/1/60	2733
CBF 65x58 GNOKCVN-D1.0	230V/460V/3/60 380V/3/50	2734

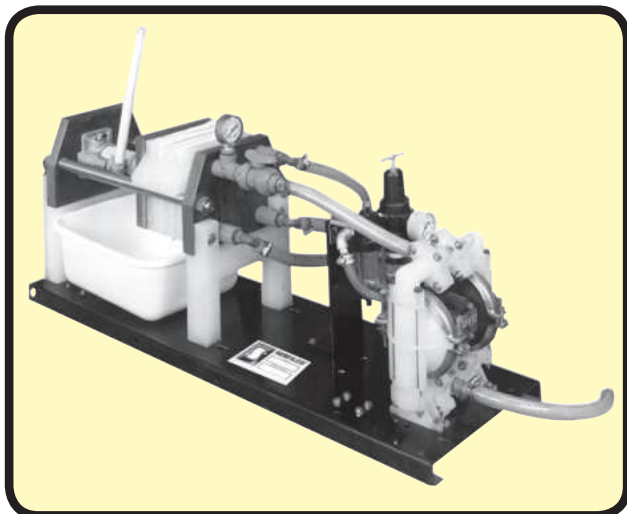
Registered trademarks:
Noryl - General Electric; Viton - DuPont Dow Elastomers
Specifications subject to change without notice.

OPTIONAL

DESCRIPTION	PRICE CODE NO.
LEVEL CONTROL (motor starter required) Automatic on / off pump control	O-1490
MOTOR STARTER Watertight push button, 115-230V/1/50-60 230-460V/3/50-60 Note: Add -S to motor starter PCN when ordering motor starter for use with O-1490 level control, i.e., O-MS3P-S	O-MS1P O-MS3P
FILTER MEDIA (Bags ordered separately, 1 cartridge included in original equipment.) Bags - Polypropylene, size 7" x 16" (8 req'd) 5 micron 10 micron 25 micron 50 micron 100 micron	88-0848A 88-0848B 88-0848C 88-0848D 88-0848E
Replacement pleated cartridge 2 micron (1 required)	PL436-2-4



For Lab Analysis - Small Batch Production - Field Testing



- PLATE AND FRAME DESIGN**
 Dual capacity- Can be used with one or two frames for adjusted volume -
 .01 cu. ft. (283 cm³) or .02 cu. ft. (566 cm³)
 Area per frame - 17in² (110 cm²)
- INCLUDES POLYPROPYLENE PLATES AND FILTER CLOTH**
 Suitable for most waste solutions
- AIR DIAPHRAGM PUMP**
 Polypropylene construction
 Flows adjustable to 5 GPM (15.7 LPM)
 Pressure adjustable to 60 PSI
 (4.22 kg/cm²)

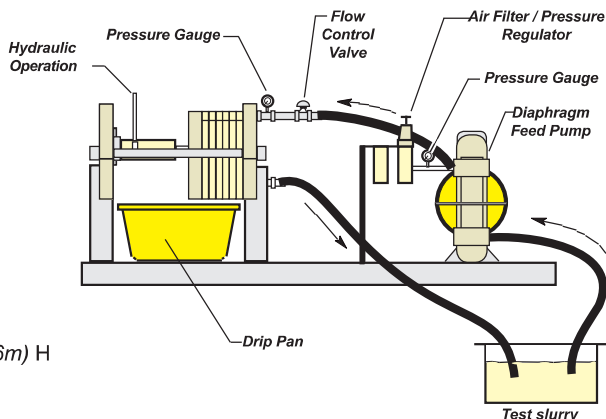
The **Lab Filter Press** is designed for lab analysis and small batch production. This press is also very useful for testing for upscaling to full production-size semi-automatic or manually operated presses. Includes polypropylene plates, filter cloth, air diaphragm pump, pneumatic controls, pressure gauges, inlet

flow control valve, hoses, manual hydraulic pump and drip pan. Entire assembly is mounted on a vinyl coated steel base. Flow pattern is corner inlet with three individual corner discharge lines.

TO ORDER

LAB FILTER PRESS	PRICE CODE NO.
MODEL .02 - 7PPMH	43-0857
REPLACEMENT CLOTHS (4 Req'd.)	PRICE CODE NO.
SF - 7 x 7	43-0822

Dimensions: 42" (1.1m) L x 13" (.33m) W x 22" (.56m) H
Shipping Weight: 95 Lbs (43 kg.)
Maximum operating temperature: 150° F (66° C)



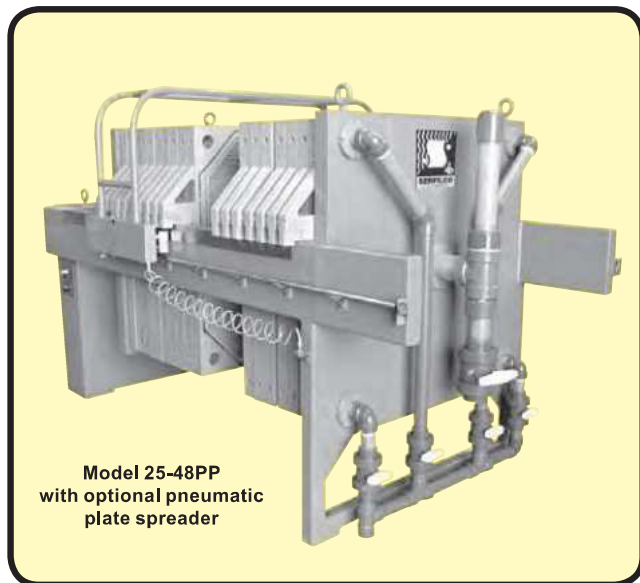


RECESSED PLATE FILTER PRESS

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F-705_T

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Model 25-48PP
with optional pneumatic
plate spreader

LIQUID / SOLID SEPARATION FOR:

WASTE & SEWAGE TREATMENT
BREWING / CEMENT / CERAMIC
MINING & PLATING INDUSTRIES
FOOD & VARNISH PROCESSING
CHEMICALS

- **MANUAL HYDRAULIC**
0.6 to 3 cu.ft.expandable
- **SEM -AUTOMATIC**
1 to 50 cu.ft. expandable
- **AIR BLOWDOWN MANIFOLD**
- **CORROSION RESISTANT**
- **40-60% SOLIDS CONCENTRATION**
- **LOW ENERGY REQUIREMENT**
- **EASY DROPOUT CLEANING**

The **Recessed Plate Filter Press** will compact sludges to a dry cake with a density that is dependent upon the ultimate compaction pressure and the characteristics of the particular sludge.

Each pressload will require from 2-4 hours cycle time. To insure adequate time, the press should be sized for at least 8 hours working capacity. The table and formula below can be utilized to size your press. You can confirm your sizing and evaluate the process

for your application with a laboratory-sized model. Contact our Sales Dept. to arrange a pilot test.

Presses feature structural steel frame, coated with tough chemical resistant epoxy paint. The high-density molded polypropylene filter plates are light-weight, corrosion resistant and are fitted with special polypropylene quick cake release filter cloths. Presses also feature an air-actuated hydraulic system for opening and closing, automatic self-compensating hydraulic system and a conveniently located operator control console.

TO SIZE YOUR PRESS, the following information is required:

SLUDGE TYPE	% OF CAKE DRY WEIGHT SOLIDS	AVERAGE DRY WEIGHT/ CUBIC FOOT
Biological Sludge	15-25	15
Metal Hydroxide Sludge	25-40	25
Lime Treated Sludge	15-60	30

- Total gallons to be processed in selected press in specified period, e.g., U.S gals./8 hours. Twenty-four hours can be used to insure adequate capacity.
- Percent by weight of filterable suspended solids.
- Average dry weight per cubic foot for a particular sludge (obtained from table.)

CALCULATIONS:

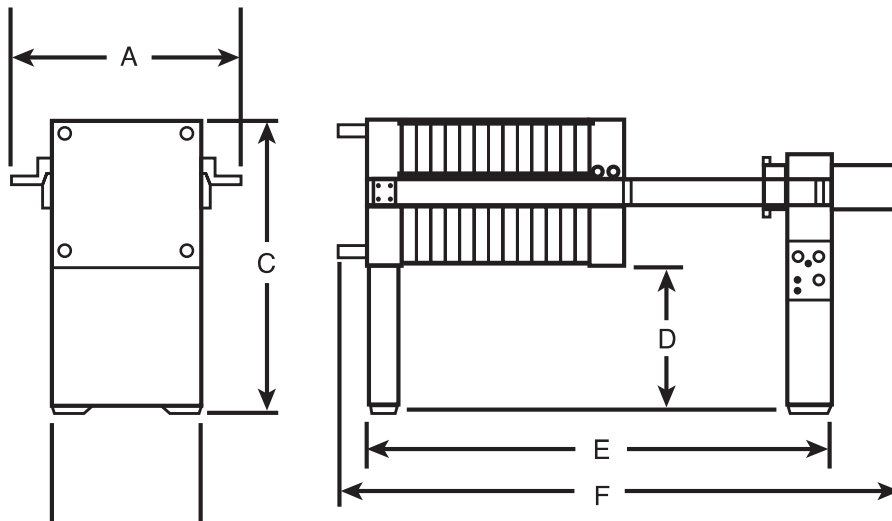
$$\frac{A \times B \times 8.33 \text{ LBS./GAL.}}{C} \quad \text{OR} \quad \frac{(\text{U.S. GALS. / 8 HRS.}) \times (\% \text{ SUSPENDED SOLIDS}) \times 8.33 \text{ LBS./GAL.}}{(\text{AVERAGE LBS. DRY WT. / CUBIC FT.})} = \text{CU. FT. CAPACITY FOR A DURATION}$$



SPECIFICATIONS

SIZE	MODEL	NOMINAL CAPACITY (CU. FT.)	IN-OUT NPT & SQUARE PLATE SIZE	NO. OF CHAMBERS	SLUDGE HOPPER (CU FT.)	DIMENSIONS (IN.)						APROX. WEIGHT (LBS.)
						A	B	C	D	E	F	
MANUAL HYDRAULIC												
AA	0.6-18PPMH	0.6	1½" x 1" (470mm) 18.5"	4	6	32	24	61	48	37	52	800
	1-18PPMH	1		7	6					41	56	850
	2-18PPMH	2		13	6					55	70	940
	3-18PPMH	3		20	6					73	87	1060
SEMI-AUTOMATIC												
A	1-24PP	1	2½" x 1½" (630mm) 24.8"	3	6	39	31	56	30	57	84	1700
	2-24PP	2		7	14					67	93	1900
	3-24PP	3		10	14					74	100	2050
	4-24PP	4		14	14					80	107	2150
	5-24PP	5		17	14					89	116	2300
B	6-31PP	6	3" x 2" (800mm) 31.5"	12	14	48	40	63	30	82	109	4200
	8-31PP	8		16	17					92	119	4450
	10-31PP	10		20	17					102	129	4900
	15-31PP	15		30	2 X 14					127	154	5500
	20-31PP	20		40	2 X 14					152	179	6000
D	25-48PP	25	4" x 2" (1200mm) 47.2"	19	60	66	58	97	49	105	133	11,380
	30-48PP	30		60	116					144	11,850	
	40-48PP	40		60	141					169	13,100	
	50-48PP	50		38	2 X 60					163	191	14,000

DIMENSIONS





RECESSED PLATE FILTER PRESS

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TO ORDER, use Price Code Number

MODEL	CUBIC FEET	PRICE CODE NUMBER	
		NON-GASKETED	GASKETED
0.6-18PPMH	0.6	43-0804	43-0804 G
1-18PPMH	1	43-0805	43-0805 G
2-18PPMH	2	43-0806	43-0806 G
3-18PPMH	3	43-0807	43-0807 G
1-24PP	1	43-0601	43-0601 G
2-24PP	2	43-0602	43-0602 G
3-24PP	3	43-0603	43-0603 G
4-24PP	4	43-0604 A	43-0604 AG
5-24PP	5	43-0605 A	43-0605 AG

MODEL	CUBIC FEET	PRICE CODE NUMBER	
		NON-GASKETED	GASKETED
6-31PP	6	43-0606	43-0606 G
8-31PP	8	43-0608	43-0608 G
10-31PP	10	43-0610	43-0610 G
15-31PP	15	43-0615 A	43-0615 AG
20-31PP	20	43-0620 A	43-0620 AG
25-48PP	25	43-0625 A	43-0625 AG
30-48PP	30	43-0630 A	43-0630 AG
40-48PP	40	43-0640	43-0640 G
50-48PP	50	43-0650	43-0650 G

OPTIONAL EQUIPMENT

Other options such as high-pressure units, pre-coat and body feed systems, catwalks, platforms and ladders are available and will be quoted upon request.

DESCRIPTION	PRICE CODE NO.
Air diaphragm pump, ½" - 14 GPM	55-7287
Polypropylene w/nitrile 1" - 40 GPM	55-7602
See Bulletin P-605 1 ½" - 130 GPM	55-7615
Drum disposal system ¹ - w/extended legs & chute Semi-automatic 24"	43-0648
Self-dumping sludge hopper 6 cu. ft. (36" L x 42" W x 27" H)	43-0641
14 cu. ft. (48" L x 42" W x 27" H)	43-0643
17 cu. ft. (60" L x 42" W x 27" H)	43-0681
60 cu. ft. (60" L x 60" W x 48" H)	43-0682
PRESS-FULL indicator	43-0668

DESCRIPTION	PRICE CODE NUMBER			
FOR PLATE SIZE	18"	24"	31"	48"
Pneu. plate spreader	-	43-0680	43-0656	43-0658
Safety light curtains	-	-	43-0659	43-0661
Replacement cloth Non-gasketed Gasketed	SF-U18* SF-U18*_G	SF-U24* SF-U24*_G	SF-U31* SF-U31*_G	SF-U48* SF-U48*_G
Expander piece (For the future addition of up to 10 plates) ²	43-0672	43-0673	43-0674	43-0675
Additional plates (each)	43-0676	43-0677	43-0678	43-0679
Automatic pump control ³ 3 stage 4 stage	43-0662 43-0670			
Hydraulic interlock for feed pump air supply	43-0671			

¹ AA Size - Manual Hydraulic units are designed to drop sludge directly into 55 gal. drums.

² Standard press allows for the addition of 4 plates.

³ Allows progressively increasing air pressure on diaphragm pump to attain a denser, drier cake.

* To designate cloth position, add to Price Code Number:
H Head T Tail M Intermediate



HAND-CARRY
for remote or field servicing



TRANS-O-FILTER
w/optional coalescing chamber



OIL RECONDITIONING STATION
for salvaging oils in large volume

For renewal of:

Hydraulic fluids / Lubricating oils
Cutting fluids / Oil & water based coolants
EDM — dielectric fluids / Synthetic oils

- **Protect expensive machinery** from damaging dirt and abrasives
- **Quick payback** - Save disposal costs, re-use filtered liquid and lower biocide usage
- **No down-time** while restoring liquid to original level of cleanliness
- **Optional coalescers** to separate immiscible fluids

Oil contamination is the major cause of hydraulic equipment failure. Even fresh oil, right from the drum, may contain contaminants at levels exceeding new equipment manufacturers' standards. Petroleum products such as hydraulic fluids don't wear out. Filter them to like-new condition. Add new product only to make up for losses and to replenish additives.

Trans-O-Filter Systems effectively filter petroleum and synthetic fluids to remove abrasive grit and damaging sludges which contaminate and accumulate in hydraulic and lubricating oil circuits and reservoirs. They protect your machinery and system investments by eliminating pump damage, scored cylinders and the malfunction of valves and controls attributed to the destructive action of dirty or rancid oil. These systems offer you high flow rates and large dirt holding capacities in very compact packages. Each unit is designed to be completely self-contained; consisting of pump, motor, suction strainer and hoses. Carbon steel filter chamber will accommodate filter media down to 1 micron retention to meet your specific requirements. (Order filter media separately.)

Oil reconditioning stations salvage contaminated oils for further use by removing sludges, water and other suspended foreign material. Systems accelerate natural settling action with controlled elevated temperatures. Residual fine particulate are then removed by a polishing filter of inert depth type media. If removal of oxidation products is desirable, the polishing filter can be equipped with absorbent Fuller's Earth.

Optional coalescing chambers provide a means to separate immiscible fluids such as tramp oil or water. These coalescers will handle dissimilar liquids with specific gravity differences of 0.09 and greater. The resulting effluent contains less than 10 PPM of the discontinuous phase.

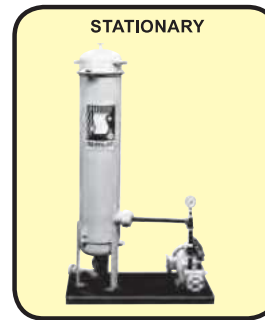
STANDARD TRANS-O-FILTER¹ SYSTEMS INCLUDE:

1. Carbon steel filter chamber with 75 psi maximum rating. "O"-ring closure is EPDM on portable model, Buna-N on all others.
2. Positive displacement self-priming gear pump with built-in relief valve set at 35 psi, Buna-N mechanical seal and 40 mesh suction strainer. Motor: 115-230V/1/60, 1725 RPM, TEFC, with 8 ft. of 3-wire extension cord and 3-prong plug. Units wired 115V standard.
3. Also available with air operated diaphragm pump, polypropylene with Teflon[®] internals.
4. 10' suction and discharge hoses (vinyl on portable; Buna-N and neoprene on others).
5. Petcock vent and drain plug.
6. Pressure gauge mounted on gauge snubber to indicate dirty filter.
7. Completely assembled stationary models mounted on a vinyl coated steel base. Mobile models include 2-wheel upright hand cart with handle.
8. Painted machine tool gray with two-part epoxy paint.
9. Optional coalescing chambers include Pyrex[®] sight glass and coalescing element².

¹ For liquid temperatures up to 200°F. ² For liquid temperatures up to 160°F.

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**HAND-CARRY****MACHINE or
WALL MOUNT****PORTABLE****STATIONARY****HAND-CARRY**

- Remote location service
- Hydraulic door openers
- Escalator / elevator service
- Ideal for machine-tool servicemen
- Small hydraulic reservoirs
- Transfer from drum to machine reservoir and get added benefit of filtration

PORTABLE (on wheels)

- Easy to move to site of required oil filtration
- Includes motor starter (electric drive models)
- Ideal for field service personnel

MACHINE MOUNT

- Ideal for mounting to press or machine tool
- Support / extend original equipment filter system
- Mounts next to oil reservoir
- For permanent installation and continuous duty filtration

STATIONARY

- Provides same filtration as portable models, but mounted on a vinyl coated steel base
- Designed to be piped in place for high flow service on medium to large reservoirs
- Excellent for continuous recirculation of large central oil / coolant storage tanks

TO ORDER, use PRICE CODE NO.

	PRICE CODE NO.	MODEL	FLOW	NO. OF CARTS.*	FILTER SURFACE AREA	SUCTION x DISCHARGE HOSE SIZE	MOTOR H. P.	DIMENSIONS L x W x H	SHIP WT.
			GPH					Inches	Lbs.
HAND-CARRY Includes protective hood and sturdy carrying handle. Painted machine tool gray.	1402 A	S10 1/2S TS3	180	1 - 10"	3.5 sq. ft.	3/8" x 3/8"	1/3	13 x 9 x 15	60
	1429	S20 1/2S TS3		2 - 10"	7.0 sq. ft.			23 x 9 x 15	65

MACHINE MOUNT

With wall mount base plate. Painted machine tool gray.	1430	MMS20 1/2S TS3	180	2 - 10"	7.0 sq. ft.	3/8" x 3/8"	1/3	14 x 14 x 7	60
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	PRICE CODE NO.	MODEL	FLOW	NO. OF CARTRIDGES *	FILTER SUR- FACE AREA	SUCTION x DISCHARGE HOSE SIZE	MOTOR H.P. / SCFM @ PSI	DIMENSIONS L x W x H	SHIP WT.
			GPH					Inches	Lbs
PORTABLE Electric drive models	1405 B	S1(718)1/2 BTS6-P-ST4-PS	360	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	1/2	18 x 17 x 46	115
	1407 B	S50(1) 1/2 BTS3-P-ST4-PS	180	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	1/3	18 x 17 x 46	115
	1410 B	S100(2) 1/2 BTS6-P-ST4-PS	360	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	1/2	18 x 17 x 46	125
	1413 B	S150(3) 1B TS9-P-ST4-PS	540	15 - 10"	52.5 sq. ft.	1" x 1"	1	18 x 17 x 52	130
Air drive models	1437	S1(718) 1/2B PPTF1/2-P-PRV	480	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	5 @ 50	18 x 17 x 46	110
	1438	S50(1) 1/2B PPTF1/2-P-PRV	480	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	5 @ 50	18 x 17 x 46	110
	1439	S100(2) 1/2B PPTF1/2-P-PRV	480	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	5 @ 50	18 x 17 x 46	120
	1440	S150(3) 1B PPTF1-P-PRV	600	15 - 10"	52.5 sq. ft.	1" x 1"	10 @ 40	18 x 17 x 52	145

STATIONARY

Electric drive models	1416 A	S1(718) 1/2STS6-PS	360	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	1/2	30 x 13 x 30	105
	1418 B	S50(1) 1/2STS3-PS	180	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	1/3	30 x 13 x 25	115
	1422 B	S100(2) 1/2STS6-PS	360	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	1/2	30 x 13 x 37	125
	1426 B	S150(3) 1STS9-PS	540	15 - 10"	52.5 sq. ft.	1" x 1"	1	30 x 13 x 47	130
Air drive models	1441	S1(718) 1/2S PPTF1/2-PRV	480	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	5 @ 50	30 x 13 x 30	100
	1442	S50(1) 1/2S PPTF1/2-PRV	480	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	5 @ 70	30 x 13 x 25	95
	1443	S100(2) 1/2S PPTF1/2-PRV	480	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	5 @ 70	30 x 13 x 37	120
	1444	S150(3) 1/2S PPTF1-P-PRV	600	15 - 10"	52.5 sq. ft.	1" x 1"	10 @ 40	30 x 13 x 47	135

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TRANS-O-FILTER OPTIONS

DESCRIPTION	ADD	
	TO END OF MODEL NO.	PRICE CODE NO.
Coalescing chamber with K4x11N element(s) included. 1 element chamber (Portable or stationary models only.)	-1F8	O-1235
By-pass piping including 3 two-way valves for convenient transfer to by-pass filter. (Not for Hand-Carry)	-1/2" -1"	-BP O-1198A O-1199A
Portable base with two swivel and two fixed casters. (For stationary models only.)	-P	O-1428
Push button single phase motor starter with overload protection in water/oil tight enclosure. (Standard with portable models).	-ST4	O-1214
Viton® elastomers	-V	Add to PCN -V

FILTER MEDIA

DESCRIPTION	MICRON RETENTION	PRICE CODE NO.
2½" x 10" depth wound cotton filter cartridges on tinned steel core	5	5C10TC
	10	10C10T
	15	15C10T
	30	30C10T
	50	50C10T
	75	75C10T
4" x 18" depth wound cotton filter cartridges on 304 stn. steel core	100	99C10T
	1	1B18A4
	3	3B18A4
	5	5B18A4
	10	10B18A4
	20	20B18A4
3" x 10" pleated paper cartridges	30	30B18A4
	1	PL310-1
	5	PL310-5
	10	PL310-10

NOTE:

Order filter and coalescing media separately.
Consult Sales Dept. for other cartridges.

COALESCING ELEMENTS

DESCRIPTION*	MODEL NO.	PRICE CODE NO.
Nylon / 304 SS / Buna-N	K4x11N	88-3248
Polypropylene / 304 SS / Buna-N	K4x11P	88-3249
Glass / 304 SS / Buna-N	K4x11G	88-3250

Consult Sales Dept. for custom or special models, custom paint, Viton hose, three-phase motors or explosion-proof motors.

* Media / Core / Cap

OIL RECONDITIONING STATIONS

INCREASE TOOL LIFE, REDUCE PRODUCTION COSTS BY RECYCLING CUTTING OILS FOR RE-USE

PURIFIES ALL TYPES OF LUBRICANTS

The station at right is extremely well suited for screw machine oil coolants. Cutting oil, lapping oil, honing oil, hydraulic oils, synthetic oils, lubricating oils, vacuum pump oils, compression oil and many other special oils can be economically restored.

EASY, LOW COST OPERATION

This station is very compact as well as easy and economical to operate. It features a cone bottom settling tank equipped with a thermostatically controlled electric heating element that raises the temperature of the contaminated oils. This accelerates the natural settling of suspended foreign material into the cone for easy removal. The station also includes a positive displacement pump with a pressure relief valve, a TEFC motor, a pressure filter with gauge and a clean oil storage tank.

Models with a 50, 250, 500, 1000 or 2000 gallon settling capacity are available.



Interconnected valve arrangement enables product to be conveniently transferred according to the need and clarification required.

1. Pump dirty oil from a floor drum to a settling tank.
2. Transfer and filter settled oil from settling tank to storage tank.
3. Recirculate and filter oil in storage tank.
4. Transfer and filter settled oil from settling tank to floor drum.
5. Recirculate and filter oil in floor drum.
6. Draw clean oil from storage tank to container.
7. Pump clean oil from storage tank to container or machine.



CARBON PURIFICATION CHAMBERS

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R-102_T

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FOR GRANULAR CARBON OR MAXI-CARB POWDERED CARBON CARTRIDGES

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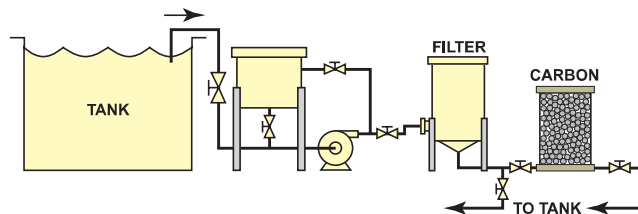
- **Bulk Carbon Chamber**
for maximum amount of granular carbon
- **Carbon Canister Chamber**
for convenient refill of granular carbon and interchangeability with C528PE or C548PE powdered carbon cartridges.

Carbon purification chambers offer a simple, low-cost, but effective method of removing organic impurities from plating baths and other chemical solutions.

- **Smoother, brighter deposits**
- **Fewer rejects**
- **Reduced tank downtime**

Connect to your existing filtration system for continuous carbon treatment. Recommended installation (shown below) provides side-stream flow through carbon for best control of results. One or two months of operation is not unusual before carbon change is necessary.

Complete matched systems — pump, filter, carbon chambers — are available to meet any size and type of production requirement.





CARBON PURIFICATION CHAMBERS Specifications

R-102_T

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MODEL	SERIES	FLOW ¹ GPM	TRAP ² FILTER	CARBON CAPACITY		PRICE CODE NUMBER		
SERIES 'S' & 'G' FOR BULK GRANULAR CARBON				Cu. ft.	Lbs.	PVC	CPVC	PP
CL630CS 1-G3	S	2 - 6	(1) Screen	.42	13	78-1424	78-1424 C	78-1424 PP
CL630CS 1B-G3	S	(Same as above w/bracket)		.42	13	78-1425	78-1425 C	78-1425 PP
CL1230CSIO 1½-G3A	G	5 - 25	(3) Screens	1.6	50	78-1923 P	78-1923 C	78-1923 PP

Chamber made of CPVC, PVC or PP with polypropylene trap screens. Swing bolt cover closure and pressure gauge with diaphragm guard. **When ordering PP chamber, change CL to PPL.**

SERIES 'S' & 'G' w/CANISTER FOR GRANULAR CARBON ³				Cartridge	Lbs.	PVC	CPVC	PP
CL1(528P)CCS 1-G3	S	1 - 5	(1) 03U10U	1	7	78-1427	78-1427 C	78-1427 PP
CL3(528P)CCSIO 1½-G3A	G	3 - 15	(3) 03U10U	3	21	78-1913 P	78-1913 C	78-1913 PP
CL3(548P)CCSIO 1½-G3A	G	6 - 15	(3) 03U20U	3	36	78-1915 P	78-1915 C	78-1915 PP

Chamber made of CPVC, PVC or PP with canister with inlet screen and a built-in trap filter. CPVC and PVC chamber have PVC canister. PP chamber has PP canister. Swing bolt cover closure and pressure gauge with diaphragm guard. **When ordering PVC chamber, change CL to PL in Model Number. To order PP chamber, change CL to PPL.**

SERIES 'S' & 'G' w/MAXI-CARB CARTRIDGE				Cartridge	Lbs.	PVC	CPVC	PP
CL1(528M)CS 1-G3	S	1 - 5	—	1	3	78-1626	78-1626 C	78-1626 PP
CL3(528M)CSIO 1½-G3A	G	3 - 15	—	3	9	78-1963 P	78-1963 C	78-1963 PP
CL3(548M)CSIO 1½-G3A	G	6 - 15	—	3	17	78-1965 P	78-1965 C	78-1965 PP

Chamber made of CPVC, PVC or polypropylene. Swing bolt cover closure and pressure gauge with diaphragm guard. **When ordering PVC chamber, change CL to PL in Model Number. To order PP chamber, change CL to PPL.**

SERIES 'HF' w/CANISTER FOR GRANULAR CARBON ³				Canister	Lbs.	PVC	CPVC
CL7(528P)CCS 2-G3A	HF	10 - 35	(7)03U10U	7	49	78-1669 P	78-1669 C
CL7(548P)CCS 2-G3A	HF	10 - 35	(7)03U20U	7	84	78-1670 P	78-1670 C

Chamber made of CPVC or PVC with PVC canister with inlet screen and a built-in trap filter. Swing bolt cover closure and pressure gauge with diaphragm guard.

When ordering PVC chamber, change CL to PL in model number.

¹ Design flow rates may vary, but the lower value offers the maximum adsorbency and the most efficient purification for each gallon processed.

² To order trap filter cartridges, see Bulletin M-109

³ May also be used with C528PE and C548PE powdered carbon cartridges. See Bulletin M-305. (Ordered separately)

INITIAL AND REPLACEMENT CARBON

GRANULAR ACTIVATED CARBON		
Activated with steam for high adsorption capacity		
COCONUT SHELL BASED		
12 x 30 MESH STANDARD	LBS.	PCN
	10	99-0997-10
	50	99-0997-50



CARBON PURIFICATION SYSTEMS

275

R-103_L

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



Labmaster



Space-Saver



Guardian

***THE BEST AND LOWEST COST WAY
TO PURIFY BRIGHT NICKEL, ACID
COPPER AND SIMILAR SOLUTIONS.***

- **Modular design accommodates custom requirements**
- **Eliminates down-time**
- **Compact pre-engineered systems can be used on multiple baths thus saving in equipment cost**
- **Systems are adaptable to almost any type of use:**
Continuous or intermittent, total or partial flow, with or without pre-filtering
- **Leakproof assembly, easy servicing**
- **Magnetic-coupled pump**
- **Available for use with:**
Bulk carbon, carbon canister or carbon cartridges
- **Optional pre-filter**

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Granular Carbon Purification Systems provide a simple, economical and efficient method of removing organic impurities from electroplating or other chemical solutions.

Three product lines are offered: Labmaster, Space-Saver, and Guardian. The user can choose the particular model that is right for his/her application, flow rates, and the degree of solution purity required. Carbon canisters include trap filter.

Connect the Carbon Purification System to your plating tank to achieve efficient organic removal. Select a system with replaceable carbon cartridges or with a chamber which has removable and refillable bulk carbon canister. The latter also accept C528PE powdered carbon cartridges which are interchangeable with the canisters.

Seal-less, leak-proof pumps are rugged enough for continuous duty in systems that require total flow through the carbon chamber for effective organic removal, or they can be used at partial flow, as required. Units can be connected to a plating bath for continuous carbon treatment, then disconnected and used on another tank. Thus, one system can serve several tanks.

Pre-filters, offered optionally, protect the carbon from contamination by efficient removal of solid impurities that could render the carbon inefficient.

Larger and custom systems available to meet your particular application. Consult Sales Dept. for assistance.

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The following systems are designed for full flow through a filter and purification chamber. These systems are usually used in conjunction with filtration systems which are sized to remove the bulk of solids

from the solution being treated. Therefore, the filters offered on these systems are sized to hold only the solids which have not been picked up with the main filter.

MODEL NUMBER	FLOW RATE ¹ GPM	MAX. PSI	CARBON CHAMBER MEDIA ^{3, 4}	PRE-FILTER CHAMBER CARTRIDGES ⁴	DIM. LxWxH Inches	MOTOR ² TEFC HP	PRICE CODE NUMBER
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LABMASTER® FOR CARBON CARTRIDGES WITH PRE-FILTRATION

PCL10 x PCL10CC ½V APSV	1 - 2		1 of CU10P	1 of 15U10U	10 x 7 x 23		S-0385 B
PCL20 x PCL20CC ½V APSV	1 - 4	9	1 of CU20P	1 of 15U20U	10 x 7 x 33	1/12	S-0386 B
PCL30 x PCL30CC ½V APSV	1½ - 5		1 of CU30P	1 of 15U30U	10 x 7 x 43		S-0387 B

Systems consist of two clear PVC chambers; the first for depth cartridges, the second for carbon cartridges. The pump is magnetic-coupled, made of glass-filled polypropylene. Reinforced vinyl

hoses, 6 ft. suction and 6 ft. discharge with CPVC fittings included. System is mounted on a corrosion resistant base.

SPACE-SAVER® WITH CANISTER FOR CARBON WITHOUT OR WITH PRE-FILTRATION

							w/CPVC Chamber	w/PVC Chamber*
CL1(528)S ¾V BPSV-G3	1½ - 5	13	7 lbs. carbon for 1 canister	—	13 x 9 x 47	1/6	S-0413 A	S-0413 AA
CL1(528)S x PCL30 ¾V BPSV-G3				3 of 15U10U			S-0414 A	S-0414 AA

Systems are assembled without or with clear PVC pre-filter chamber for depth cartridges as indicated and a CPVC carbon chamber with one PVC refillable canister with trap filter for granular carbon. The pump is magnetic-coupled, made of glass-filled polypropylene. Reinforced vinyl hoses, 10 ft. suction and 10 ft. discharge, CPVC and

polypropylene fittings. System, mounted on a corrosion resistant base, includes -G3 pressure gauge on polypropylene gauge guard with EPDM diaphragm.

* For PVC – change **CL** to **PL** in model number.

GUARDIAN® WITH CANISTERS FOR CARBON WITHOUT OR WITH PRE-FILTRATION

							w/CPVC Chamber	w/PVC Chamber*
CL3(528P)CCS ¾C MPLCR 1A-C.5-G3A	4½ - 15	22	21 lbs. carbon for 3 canisters	—	33 x 18 x 53	1/2	S-0357 F	S-0357 FA
CL3(528P)CCS x CL60(2)S ¾C MPLCR1A-C.5-G3A				6 of 15U10U			S-0358 F	S-0358 FA

Systems are assembled without or with CPVC or PVC pre-filter chamber for depth cartridges as indicated and a CPVC carbon chamber with three PVC refillable canisters with trap filter for granular carbon. The pump is magnetic-coupled, made of polypropylene. System, mounted

on a PVC base, includes -G3A pressure gauge on polypropylene gauge guard with EPDM diaphragm and CPVC air release valve. * For PVC – change **CL** to **PL** in Model Number.

OPTIONAL	ADD TO MODEL	PRICE CODE NO.
Portable - addition of two wheels For Labmaster 20" & 30" models and Space-Saver -two fixed wheels, two swivel casters For Guardian	- P - P	O-0191 O-0454
Flow control valve on pump discharge ½" for Labmaster ¾" for Space-Saver, Guardian	-V1 -V1	O-CV12 O-0984
Motor starter with overload protection, push button, waterlight, 1 phase Optional 3-phase (for all systems except Labmaster)	-ST4	O-MS1P O-MS3P
Operating voltage - under 1 HP, 3-phase motor (except Labmaster)	—	O-3PH
50 Hz operation - Consult Sales Dept.	—	—

¹ Design flow rates may vary, but the lower value offers the maximum adsorbency and the most efficient purification for each gallon processed.

² All motors are 115/230V/1/60, 3450 RPM and include 8 ft. of 3-wire cord and plug. Motors are wired for 115V operation, unless otherwise requested.

³ (528P) canister includes 03U10U trap filter cartridge.

⁴ Filter cartridges, carbon cartridges and bulk carbon must be ordered separately. To order: Filter cartridges, see Bulletin M-109
Carbon cartridges, see Bulletin M-109
Bulk carbon, see Bulletin R-102



ION EXCHANGE RESIN CHAMBERS and SYSTEMS

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R-201_M

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GUARDIAN® "SPECIAL"



SPACE-SAVER®

LABMASTER®

- **For PRECIOUS METAL RECOVERY**

These resin systems can recover gold and other metals from plating operations easily and economically. Select the proper resin for gold recovery from acid or cyanide rinse water. Depth of resin column assures good solution contact for maximum metal recovery. Gold is recovered by incinerating the resin. Units have early payback; one cubic foot of resin can retain 70 to 100 troy ounces of gold.

- **For HEAVY METAL REMOVAL/RECOVERY**

Recover heavy metals from metal finishing rinse water and printed circuit board manufacturing. Effluent is suitable for discharge or bath replenishment. Concentrated regenerate can be chemically treated for disposal or possible recovery.

- **For WATER PURIFICATION**

Units provide high quality deionized water when filled with a strong base mixed-bed resin. Product water is low in dissolved solids, CO₂ and silica, with a resistivity of 10 megohms or higher. Resin has built-in resistance color indicator, changing from purple to golden brown to indicate resin exhaustion.

- **NON-METALLIC SOLUTION CONTACT**

- **MAGNETIC COUPLED PUMP (Systems)**

- **EASY SERVICING WITHOUT TOOLS**

CONSTRUCTION

Chambers are available in translucent PVC, PVC, or fiberglass reinforced polyethylene shell, in sizes from 0.15 to 15 cubic feet of resin. Built-in strainers help prevent resin migration. Seal-less magnetic coupled pumps provide leak-proof operation with minimal maintenance. All systems are mounted on a base, ready to connect and operate.

PLUS OPTIONAL . . .

FLOW CONTROL VALVE – For most effective exchange. Recommended to control flow through resin.

RESIN CANISTER CHAMBER – For convenient refill of resin. Trap filters are 30 micron depth wound cartridges.

CHOICE of SYSTEMS – with or without PRE-FILTERS

Pre-filters are highly recommended to remove suspended solids that decrease resin capacity. Installed in-line upstream of the resin, filter can be ordered with the unit or installed separately. Must be sized according to dirt load and volume to be treated.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**SYSTEMS*****For precious metal recovery, heavy metal removal/recovery or purification of rinse water using standard resins.***

Systems are assembled with or without a pre-filter chamber (CPVC base & cover with translucent PVC shell) for depth wound cartridges as indicated, followed by a refillable resin chamber with CPVC cover and base and PVC (PL) shell or translucent PVC shell (PCL), with 250 micron polypropylene strainers to prevent resin migration.

The pump is magnetic coupled, made of glass filled polypropylene. Systems include reinforced vinyl (PVC) hose, CPVC fittings and corrosion resistant base.

To maintain an effective resin surface, these systems should be used in conjunction with suitable filtration systems to remove the bulk of solids from the solution being treated. The pre-filters offered on these systems are sized to hold only the solids which have not been removed by the main filter.

Filter cartridges² and resin³ ordered separately

MODEL	FLOW RATE ¹	MAXIMUM FLOW RATE	MAX PSI	RESIN CHAMBER (cu. ft of resin) ³	FILTER CHAMBER (recommended depth cartridge) ²	HT. (in.)	TEFC MOTOR	SHIP. WT. (lbs.)	PRICE CODE NO.
	GPH								

LABMASTER SYSTEMS FOR BULK RESIN - (A) without pre-filter and (B) with pre-filter

(A) PCL430R 5/8V AAPSV	30	100	8	.15	--	41	1/12 HP 115V/1/50-60	37	0365 A
(B) PCL430R x PCL10 5/8V AAPSV					1 of 15U10U			45	0326 A

System is mounted on a PVC hooded base.

To order system with canister for resin, change **R** to **RC** in Model No. and add **C** to Price Code No.

SPACE-SAVER SYSTEMS FOR BULK RESIN - (A) without pre-filter and (B) with pre-filter

(A) PL630RS 3/4V BAPSV	72	480	13	.5	--	47	1/6 HP 115/230V/ 1/60	95	0383 C
(B) PL630RS x PCL20 3/4V BAPSV					2 of 15U10U			105	0380 D
(A) PCL630RS 3/4V BAPSV	72	480	13	.5	--	47	1/6 HP 115/230V/ 1/60	95	0384 A
(B) PCL630RS x PCL20 3/4V BAPSV					2 of 15U10U			105	0380 C

System is mounted on a PVC hooded base.

To order system with canister for resin, change **RS** to **RCS** in Model No. and add **C** to Price Code No.⁴

To order system with bag resin (one .5 cu. ft. bag), change **RS** to **RBS** in Model No. and add **B** to Price Code No.

GUARDIAN SYSTEMS FOR BULK RESIN - (A) without pre-filter and (B) with pre-filter

(A) PL1230RS 3/4V MPLCR 1A-C.5	400	1200	19	1.8	--	53	1/2 HP 115/230V/1/60	115	2705 B
(B) PL1230RS x PCL20 3/4V MPLCR 1A-C.5					2 of 15U10U			125	2706 B

System is mounted on a vinyl coated steel base.

To order system with canister for resin, change **RS** to **RCS** in Model No. and add **C** to Price Code No.⁴

To order system with bag resin (two .9 cu. ft. bags), change **RS** to **RBS** in Model No. and add **B** to Price Code No.

¹ Recommended flow rate for maximum metal recovery.

² See product bulletin to order filter cartridges.

³ Refer to resin table on next page.

⁴ With canister, total resin capacity will be half and flow rates will be lower.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**OPTIONAL EQUIPMENT**

DESCRIPTION		FOR SYSTEM	Add to MODEL NO.	PRICE CODE NO.
Flow control valve	1/2" NPT 3/4" NPT	Labmaster, Space-Saver, Guardian	-V1	0981 0984
Motor starter w/overload protection, pushbutton, NEMA 4 watertight, 115V/1/50-60		Labmaster, Space-Saver, Guardian	-ST4	MS1P
Portable - two wheels		Space-Saver	-P	0378
Portable - two fixed wheels, two swivel casters		Guardian		0454
Priming chamber for 6 MRGR		Guardian	-PC4	PC4

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RESIN (initial and replacement)		1.0 cu. ft. *
		Price Code Number
For precious metal recovery	Alkaline Acid	1316 1322
For deionizing water, mixed bed resin	(DWI)	1328
See Bulletin R-208 for other resin selections		

* To order .25 cu. fit. add .25 to Price Code Number
To order .5 cu. ft. add .5 to Price Code Number

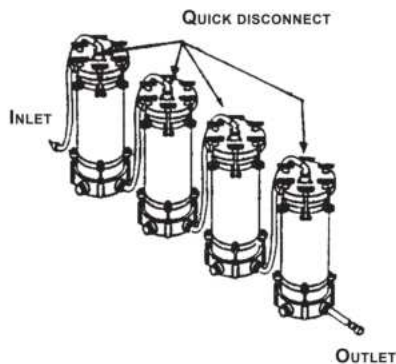
CUSTOM ION EXCHANGE SYSTEMS

This wide selection of resin chambers allows us to offer a variety of custom systems to meet most specific requirements and add to total resin volume for extended recovery.

All systems are connected with vinyl hose and quick disconnect couplings allowing individual chambers to be removed for regeneration without shutting down the system. All systems offer easy operation and service for exhausted resin.

Pre-selected models listed below are 4-chamber models. Systems can be ordered with 2, 3, 4 or more resin chambers in series or parallel to meet a wide range of required resin capacities and flow rates. Systems can be ordered with or without pump and on a square or rectangular base, all ordered separately - consult Sales Department.

Bag chambers available for either one .5 cu. ft. bag or two .9 cu. ft. bags. With the choice of additional chambers, the amount of cation versus anion resin can be adjusted as required.



MODEL PL1230RS x 4 1V

Pre-selected 4-chamber models

MODEL NUMBER	CU. FT. OF RESIN	PRICE CODE NO.
PL630RSx4 3/4V ¹	2	2860
PL640RSx4 3/4V ¹	2.4	2861
PL1230RSx4 1V ¹	7.2	2863
PL1250RSx4 1V	12.0	2864

¹ For bag resin chamber, change **RS** to **RBS** in Model No. and add **B** to Price Code No.
For canister resin chamber, change **RS** to **RCS** in Model No. and add **C** to Price Code No.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**ION EXCHANGE CHAMBERS**

**For in-line use with existing pressure piping (such as city water)
or separate pump or recirculation, with pre-filter if required.**

SERIES 'L' CHAMBER for bulk resin

Chamber has CPVC base & cover with translucent PVC shell with ¾" NPT inlet and outlet ports, one 250 micron trap filter screen for use with bulk resin.

MODEL	INITIAL FLOW RATE ¹ (GPH)	RESIN CAPAC. (cu. ft.)	SHIP WT. (lbs.)	PRICE CODE NUMBER
PCL30R-¾	30 - 100	.15	9	78-1633P

To order chamber with canister for resin, change **R** to **RC** in Model Number and add **C** to Price Code No.

For mounting bracket, add Price Code No. 44-3200 1.

SERIES 'S' & 'G' CHAMBERS for bulk resin

PVC chambers with three 250 micron screens for use with bulk resin. Series 'S' - ¾" hose inlet and 1" NPT outlet ports, Series 'G' - ¾" hose inlet and 1½" NPT outlet ports.

PCL630RS-1 ²	100 - 480	.5	30	78-1637
PCL640RS-1 ²		.7	50	78-1638
PL1230RSIO-1½-G3A	200 - 480	1.8	90	78-1943P
PL1250RSIO-1½-G3A		3.0	100	78-1945P

¹ Flow rates may vary as indicated. The lower value is maximum capacity for the most efficient recovery from each gallon processed.

² For bag resin chamber, change **RS** to **RBS** in Model No. and add **B** to Price Code No.

For canister resin chamber, change **RS** to **RCS** in Model Number and add **C** to Price Code No.

NOTE: With canister, total resin capacity will be half and flow rates will be lower.

SERIES 'GR' CHAMBERS for bulk resin

These economical and durable chambers are manufactured from high density polyethylene and fiberglass reinforced for superior strength. One-piece construction is one third the weight of steel and will not corrode or leak. Smaller chambers have molded polypropylene bases. Models GR2472 and GR3072 have heavy duty bases. Chambers are NSF approved. Maximum operating pressure: 150 PSI @ 120°F.

MODEL / CONNS.	TANK CAPACITY (cu. ft.)	NOM. DIMENSIONS DIA. x HEIGHT (inches)	SHIPPING WEIGHT (lbs.)	RESIN CAPACITY ³ (cu. ft.)		FLOW RATE ⁴ (GPM)	PRICE CODE NUMBER
				50% EXP.	20% EXP.		
GR1252-¾	2.9	12.0 x 52.2	27	1.5	2.3	1.5 - 11.5	78-1336
GR1354-¾	3.7	13.0 x 54.3	30	1.8	3.0	1.8 - 15.0	78-1337
GR1465-1	5.5	14.3 x 65.4	42	2.25	4.4	2 - 22	78-1338
GR1665-1	6.5	16.0 x 65.4	45	3.25	5.2	3 - 25	78-1339
GR2472-2	10	24 x 81.8	195	5	8	5 - 40	78-1340
GR3072-2	15	30 x 83.5	272	7.5	12	7.5 - 60	78-1341

Trap screen: ABS .013" wide slot on all models.

³ 50% expansion of bed for backwash / regeneration. See specification sheet for resin to be used.

20% expansion for swelling for non-regeneration system. See individual resin specification sheet.

⁴ Based on 1 - 5 GPM/cu. ft. of resin. See individual resin specification sheet.

**BULK RESIN MUST BE ORDERED SEPARATELY. SEE PREVIOUS PAGE AND BULLETIN R-208.
ALL ION EXCHANGE CHAMBERS / SYSTEMS CAN BE USED WITH GRANULAR CARBON.
SEE BULLETIN R-103 FOR ADDITIONAL CARBON PURIFICATION CHAMBERS.**



ION EXCHANGE RESINS

R-208_E

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

For: High purity water / Precious metal recovery
Recirculated rinses / Waste treatment
Heavy metal removal

MIXED BED RESIN

FOR MAKE-UP WATER AND RECIRCULATED RINSES **Mixedbed resin** is designed for use in a single column or multiple columns in series to provide water to a 20,000 ohm endpoint (25 ppm). Average quality less than 0.1 ppm prior to breakthrough. Use to demineralize make-up water such as for plating and EDM.

When used in recirculating rinses, the estimated capacity per cu. ft. is 470,000 divided by the MMHOS or 235,000 divided by ppm TDS.

When regenerated and reused, the capacity will only be 50 to 70% of the virgin resin.

Specially blended resin for pure recirculation of EDM systems.

DESCRIPTION	TYPE	PART NO. *
Mixed bed resin	MB400	1328
Mixed bed resin w/indicator dye	MB400IND	1328D

Provides maximum capacity for metallic ions. Not recommended for raw make-up water. Requires monitoring with a conductivity meter.

For gold and silver recovery from rinse water.

Specially blended resin for EDM recirc. systems	MB378	1306
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ANION RESINS

Can hold as much as 120 ounces per cu. ft., but is typically used up to only 50 to 75% of capacity.

Silver photographic solutions can be regenerated in a two-step operation using dilute sulfuric acid and a tap water rinse which causes the silver to precipitate in the resin. After up to 10 cycles the silver is recovered by incineration.

An anion resin in the OH⁻ form, maintains a high pH and helps prevent formation of hydrogen cyanide gas. Capacity for gold is

Resin for acid gold recovery and silver recovery from photographic solution	A600	1322
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100 ounces per cu. ft. maximum. This anion resin is also used in two-step demineralization systems with the cation resin in the hydrogen form.

Supplied in the sodium form, will remove heavy metals from rinse waters for discharge. It will also remove calcium and

Resin for alkaline gold or silver recovery	A600OH	1316
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CATION RESINS

magnesium which will reduce its capacity for copper, nickel, trivalent chromium. We suggest the use of softened rinse water. Same function as the sodium form, but the discharge will be acidic. The cation resin in the hydrogen form is used

DESCRIPTION	TYPE	PART NO. *
Sodium form	C100E	1375

with the anion resin in the OH⁻ form (A600-OH) in two-step demineralization processes.

Specific ion resins have the capacity to remove specific types of metals from waste streams in the presence of other

Hydrogen form	C100H	1376
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SPECIFIC ION RESINS

ions that would normally exhaust the resin. This ability allows the treatment of much larger volumes than with ordinary non-specific resins. Consult the Sales Department for specific details.

* Price per cubic foot.

Consult Sales Department for quantity pricing

Heavy metals removal copper, nickel, chrome, zinc, lead as cations at pH's 5 and below.	S930	1307
Precious metal removal from acid streams including aqua regia at pH 0-6, non-regenerable. Also for mercury removal as cation or anion	S920	1309
Heavy metal removal from waste streams.	S950	1310

and special packaging.

To order .5 cu. ft. bag - add .5B to Part No.

To order .9 cu. ft. bag - add .9B to Part No.



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LIQUID / LIQUID SEPARATION

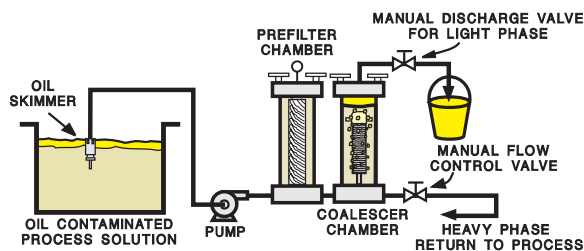
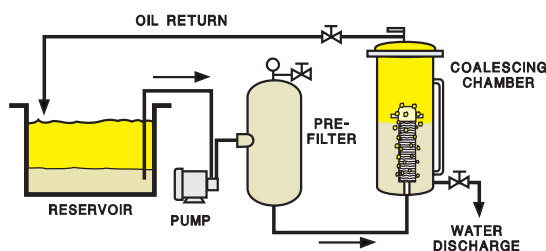
COMPACT, ECONOMICAL LIQUID SEPARATION SYSTEMS FOR USE WITH NON-EMULSIFIED SOLUTIONS UP TO 150°F.

SERFILCO Coalescing Systems are compact, economical, and simple to operate. Remove oils from rinse waters, cleaning solutions, plating solutions or waste effluents. Separate water or tramp oil from hydraulic fluids and machining coolants.

Highly effective systems pump, prefilter and separate non-emulsified fluids having a .09 or greater difference in specific gravity. Solution is pumped through prefilter, then coalescing element where small droplets are held until large enough to float to top of coalescing chamber. Light phase is discharged from top of coalescing chamber, heavy phase is discharged from bottom of coalescing chamber. Unwanted phase is periodically bled off via manual flow control valve. Purified solution is directed back to tank or reservoir for re-use. Recovered effluent contains less than 10 ppm of the discontinuous phase. Carbon purification may be used to polish.

Standard coalescing systems include pump, * prefilter and coalescing chamber with manual light and heavy phase discharge valves. Prefilter media of 5 to 10 micron is required to protect coalescing element. Selecting a system with greater prefilter capacity will reduce prefilter cartridge and coalescing element consumption. If properly protected, coalescing element has indefinite life. Coalescing of fluids with excessive particulate loading is best accomplished when solution is first clarified with separate filtration system.

** Standard pumps are low shear positive displacement: flexible impeller, rotary gear or diaphragm. These pumps minimize emulsification in pump head and have self-priming capabilities. For removal of floating or light phase, pump suction must be connected to overflow weir or optional skimmer assembly. For removal of heavy phase solution, suction connection near tank bottom is recommended.*

OIL SEPARATION FROM AQUEOUS RESERVOIR**WATER SEPARATION FROM OIL RESERVOIR**



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

Plastic coalescing system are best suited for separation of oil from aqueous based solutions. Non-metallic solution contact allows a wide range of chemical compatibility.

Plastic Coalescing systems include:

- Plastic prefilter chamber and coalescer with EPDM gaskets
- Light and heavy phase discharge valves on coalescer
- Corrosion resistant mounting base
- 10 ft. suction and discharge hoses

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AIR OPERATED PLASTIC COALESCING SYSTEMS

- Polypropylene air operated diaphragm pump with Telfon® internals
- Air pressure regulator
- Pump will run dry and self primes to 10 ft.

FLOW		SYSTEM	SCFM @ PSI	PUMP	PREFILTER ¹		COALESCER ¹		DIMENSIONS L x W x H Inches	SHIPPING WEIGHT Lbs.
GPH @ 60 Hz	LPH @ 50 Hz				MEDIA/ CHAMBER SERIES	MATERIALS OF CONST. BASE / SHELL	MEDIA / CHAMBER	MATERIALS OF CONST. BASE / SHELL		
300	1363	S-1386A	2 @ 40	PPTF½"	1-20" / L	PVC/clear PVC	1-2.5"x10" / L	PVC/clear PVC	19" x 10" x 33"	70
300	1363	S-1387	2 @ 40	PPTF½"	1-20" / L	polypropylene	1-2.5"x10" / L	polypropylene	19" x 10" x 33"	70
600	2271	S-1388	10 @ 40	PPTF1"	3-10" / S	polypropylene	1-2.5"x10" / S	PP/clear PVC	29" x 10" x 33"	80
600	2271	S-1389	10 @ 40	PPTF1"	3-10" / S	polypropylene	1-2.5"x10" / S	polypropylene	29" x 10" x 33"	80
600	2271	S-1390	10 @ 40	PPTF1"	3-20" / S	polypropylene	1-2.5"x10" / S	polypropylene	29" x 10" x 33"	90
1500	5678	S-391	30 @ 80	PPTF1"	3-20" / S	polypropylene	1-6"x11" / G	polypropylene	33" x 18" x 33"	100
1500	4578	S-1392	30 @ 80	PPTF1"	3-30" / S	polypropylene	1-6"x11" / G	polypropylene	33" x 18" x 43"	100

ELECTRIC OPERATED PLASTIC COALESCING SYSTEMS

- Epoxy pump with Buna-N Flexible impeller - limited dry run capability
- Pump will self prime to 5 feet when wetted
- 115V/1/60, TEFC, 1725 RPM motor with- 8 ft. of 3-wire cord and plug

FLOW		SYSTEM NUMBER	PUMP HP, MODEL	PREFILTER ¹		COALESCER ¹		DIMENSIONS L x W x H Inches	SHIPPING WEIGHT Lbs.
GPH @ 60 Hz	LPH @ 50 Hz			MEDIA/ CHAMBER SERIES	MATERIALS OF CONST. BASE / SHELL	MEDIA / CHAMBER	MATERIALS OF CONST. BASE / SHELL		
300	945	S-1394	1/3, 1/2 JPH	1-20" / L	polypropylene	1-2.5"x10" / L	polypropylene	14" x 10" x 33"	85
600	1890	S-1395	1/2, 3/4 JENH	3-10" / S	polypropylene	1-2.5"x10" / S	PP/clear PVC	24" x 10" x 33"	95
600	1890	S-1396	1/2, 3/4 JENH	3-10" / S	polypropylene	1-2.5"x10" / S	polypropylene	24" x 10" x 33"	95
600	1890	S-1397	1/2, 3/4 JENH	3-20" / S	polypropylene	1-2.5"x10" / S	polypropylene	24" x 10" x 33"	105
1500	4725	S-1398	1, 1 JEESSNH	3-20" / S	polypropylene	1-6"x11" / G	polypropylene	50" x 18" x 33"	115
1500	4725	S-1399	1, 1 JEESSNH	3-30" / S	polypropylene	1-6"x11" / G	polypropylene	50" x 18" x 43"	115

¹ Filter media and coalescing media ordered separately. See page 4.

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Metal coalescing system are best suited for removing oil from synthetic machining fluids, oils from alkaline solutions or trace water from petroleum base fluids.

Metal Coalescing systems include:

- Metallic prefilter chamber and coalescer with Buna-N gaskets
- Light and heavy phase discharge valves on coalescer
- Sight glass on coalescer
- Corrosion resistant mounting base
- 10 ft. suction and discharge hoses

AIR OPERATED METAL COALESCING SYSTEMS

- Polypropylene air operated diaphragm pump with Teflon® internals
- Pump will run dry and self prime to 10 ft.
- Air pressure regulator

STEEL

FLOW		SYSTEM NUMBER	SCFM @ PSI	PUMP	PREFILTER ¹		COALESCER ¹		DIMENSIONS L x W x H Inches	SHIPPING WEIGHT Lbs.
GPH @ 60 Hz	LPH @ 50 Hz				MEDIA	MATERIALS OF CONST.	MEDIA	MATERIALS OF CONST.		
480	1363	S-1283	5 @ 50	PPTF½"	5-10"	carbon steel	1-4" x 11"	carbon steel	42" x 13" x 37"	150
480	2271	S-1284	5 @ 50	PPTF½"	5-20"	carbon steel	1-4" x 11"	carbon steel	42" x 13" x 37"	160
600	5678	S-1285	10 @ 40	PPTF1"	5-30"	carbon steel	1-4" x 11"	carbon steel	42" x 13" x 37"	170

STAINLESS STEEL

FLOW		SYSTEM NUMBER	SCFM @ PSI	PUMP	PREFILTER ¹		COALESCER ¹		DIMENSIONS L x W x H Inches	WEIGHT Lbs.
GPH @ 60 Hz	LPH @ 50 Hz				MEDIA	MATERIALS OF CONST.	MEDIA	MATERIALS OF CONST.		
480	1363	S-1286A	5 @ 50	PPTF1/2"	5 - 10"	304 stainless steel	5-2.5"x10"	304 stainless steel	42" x 13" x 37"	155
480	2271	S-1287A	5 @ 50	PPTF1/2"	5 - 20"	304 stainless steel	5-2.5"x10"	304 stainless steel	42" x 13" x 37"	165
600	5678	S-1288A	10 @ 40	PPTF1"	5 - 30"	304 stainless steel	5-2.5"x10"	304 stainless steel	42" x 13" x 37"	175

ELECTRIC OPERATED METAL COALESCING SYSTEMS

- Cast iron or 316 stainless steel gear pump - best suited for fluid having lubricity and low particle load
- Pump will self prime to 10 ft.
- 115V/1/60, TEFC, 1725 RPM motor with 8 ft of 3-wire cord and plug

STEEL

FLOW		SYSTEM NUMBER	PUMP HP, MODEL	PREFILTER ¹		COALESCER ¹		DIMENSIONS L x W x H Inches	WEIGHT Lbs.
GPH @ 60 Hz	LPH @ 50 Hz			MEDIA	MATERIALS OF CONST.	MEDIA	MATERIALS OF CONST.		
180	567	S-1277	1/3, TS3	5 - 10"	carbon steel	1-4"x11"	carbon steel	42" x 13" x 37"	175
360	1134	S-1278	1/2, TS6	5 - 20"	carbon steel	1-4"x11"	carbon steel	42" x 13" x 37"	195
540	1701	S-1279	1, TS9	5 - 30"	carbon steel	1-4"x11"	carbon steel	42" x 13" x 37"	215

STAINLESS STEEL

FLOW		SYSTEM NUMBER	PUMP HP, MODEL	PREFILTER ¹		COALESCER ¹		DIMENSIONS L x W x H Inches	SHIPPING WEIGHT Lbs.
GPH @ 60 Hz	LPH @ 50 Hz			MEDIA	MATERIALS OF CONST.	MEDIA	MATERIALS OF CONST.		
180	567	S-1433A	1/2, TSS3	5-10"	304 stainless steel	5-2.5"x10"	304 stainless steel	42" x 13" x 37"	200
300	945	S-1434A	3/4, TSS5	5-20"	304 stainless steel	5-2.5"x10"	304 stainless steel	42" x 13" x 37"	225

¹ Filter media and coalescing media ordered separately. See page 4.

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PREFILTER MEDIA

MICRON	MEDIA	LENGTH (Inches)	CORE	PRICE CODE NO.
5	polypropylene	10	polypropylene	05U10U
5	polypropylene	20	polypropylene	05U20U
5	polypropylene	30	polypropylene	05U30U
10	polypropylene	10	polypropylene	10U10U
10	polypropylene	20	polypropylene	10U20U
10	polypropylene	30	polypropylene	10U30U
5	bleached cotton	10	tinned steel	05C10T
5	bleached cotton	20	tinned steel	05C20T
5	bleached cotton	30	tinned steel	05C30T
10	bleached cotton	10	tinned steel	10C10T
10	bleached cotton	20	tinned steel	10C20T
10	bleached cotton	30	tinned steel	10C30T

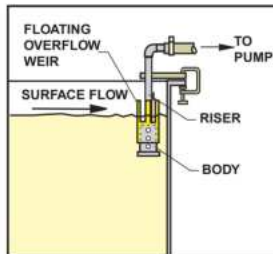
COALESCING MEDIA

MODEL	MATERIAL DESCRIPTION Media, Core, End Caps*	DIMENSIONS I.D. x O.D. x Length	PRICE CODE NUMBER
K2.5 x 10N	Nylon, polypropylene, EPDM	1" x 2.5" x 10"	88-3245
K2.5 x 10P	Polypropylene, polypropylene, EPDM		88-3246
K2.5 x 10G	Glass, polypropylene, EPDM		88-3247
K4 x 11N	Nylon, 304 stainless steel, Buna-N	1.8" x 4" x 11"	88-3248
K4 x 11P	Polypropylene, 304 stainless steel, Buna-N		88-3249
K4 x 11G	Glass, 304 stainless steel, Buna-N		88-3250
K6 x 11NPP	Nylon, Polypropylene, Buna-N	3" x 6" x 11"	88-0816

* Viton® end caps (4 x 11 size only). Minimum order carton quantity. Add -V to Model and Price Code Number.

Note: Carton quantity: 25 of 10", 10 of 11".

SKIMMER ASSEMBLY



Connect to pump suction to skim floating oils or debris. Constructed of polypropylene and CPVC.

MODEL NUMBER	LIQUID LEVEL DIFFERENTIAL	SKIM RATE GPH	INLET / OUTLET **		INLET LENGTH	RISER LENGTH	BRACKET 1/2" THICK	PRICE CODE NO.
			PIPE	PORT				
SK 1/2	2"	to 300	1/2"	3/8"	15"	13"	4" x 2"	99-0479
SK 3/4	3"	to 600	3/4"	1/2"	18"	18"	4" x 2"	99-0498
SK 1	4"	to 900	1"	3/4"	18"	18"	6" x 2"	99-0480

To select skimmer: 1. Determine tank liquid level differential.
This will minimize dry pump operation.
2. Use skim rate as guideline for sizing.** SK 1/2 to SK 1 have NPT inlet and hose
adapter outlet, "C" clamp, hose clamp,
lock screw and elbow hose adapter.
- Consult Sales Dept. for other skimmer
sizes.

OPTIONAL

DESCRIPTION	PRICE CODE NO.
Motor starter Model -ST4	0-MS1P
Portable - 2 wheels and 2 legs on standard mounting base (metal & plastic systems)	0-0191
Sight glass for 1500 GPH coalescing chamber	0-1435
Viton® chamber elastomers / Viton impeller (J-pumps)	Add -V to System No.

**SKIM-DISC****CONTINUOUSLY REMOVES OILS, GREASE AND FLOATING CONTAMINANTS FROM WATER, COOLANTS, CLEANERS AND OTHER AQUEOUS SOLUTIONS**

- Skim rate - 1.5 GPH
- Phenolic or stainless steel disc
For temperatures to 180°F
- Lightweight, easy to install, trouble free

BENEFITS

- Maintains solution surface free of oil
- Extends life of primary solution
- Less cleaning of piece parts
- Simplifies reclamation and disposal
Collected oil can be sold, burned or filtered and reused

The **SERFILCO Skim-Disc** is an inexpensive investment when compared with fluid costs, maintenance costs and process effectiveness. The equipment pays for itself in a very short time. For ease of operation and cost effectiveness SERFILCO oil skimmers outperform other methods.

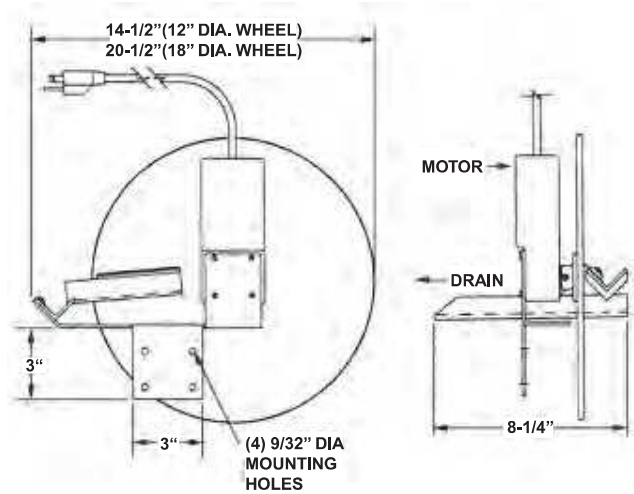
Oil adheres to the slowly rotating disc and is automatically channeled by stationary wiper blades in a collector trough. The Skim-Disc with phenolic disc is ideal for machine tool coolants or other nonaggressive fluids at temperatures below 150° F. The Skim-Disc with stainless steel disc is good to 180°F. With few moving parts, SERFILCO Skim-Disc is easy to install maintain, and simple to operate.

**INSTALLATION**

- Mount the unit with 2-3 inches of the wheel in the fluid.
- Mount in a safe area and protect from spraying fluids.
- A ground fault circuit interrupt device and proper grounding are required for electrical installation.
- Run when oil is floating on the surface. The best time maybe during downtime when the fluid is motionless.



SKIM-DISC



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TO ORDER, use Price Code Number

SKIM-DISC

MODEL	DISC MATERIAL	DISC DIAMETER	SHIPPING WEIGHT	PRICE CODE NO.
SD12 - PH	phenolic	12"	12 lbs	99-0470
SD18 - PH		18"	15 lbs	99-0471
SD12 - SS	stainless steel	12"	13 lbs	99-0468
SD18 - SS		18"	16 lbs	99-0469

Note: Standard voltage is 115V/1/60.
For 220V/1/50, add -5 to Model
and Price Code No.

**DEPTH WOUND FILTER CARTRIDGES**

MAXI-DEPTH, MAXI-WIND, HI-PERF, PUREFYBE and VALUWOUND filter cartridges offer true depth filtration. Wound cartridges are manufactured to provide selective particle retention throughout the media's depth which translates to high solids retention and longer service life with relatively low pressure drop.

MELT BONDED FILTER CARTRIDGES

POLYSPUN melt bonded filter cartridges are manufactured from continuous fibers thermally bonded and spun over a heated mandrel. Controlled graded density construction provides true depth filtration. These cartridges are free of resins, lubricants and antistatic agents; they are non-migrating and suitable for high purity applications.

PLEATED FILTER CARTRIDGES

POLYSERF pleated filter cartridges are manufactured of continuous polypropylene microfibers self-bonded by a unique process that controls media uniformity and density. They provide large surface area for efficient particle removal with very low pressure drops. These cartridges are also free of resins, binders or surfactants for high purity applications.

SLEEVE-TYPE FILTER CARTRIDGES

SERFILCO sleeve-type filter cartridges may be used uncoated or precoated with filter aid. Sleeve cartridges are interchangeable with any regular cartridge of corresponding length. They are re-usable for economical operation and, therefore, minimize disposal costs.

BAG FILTERS

A Bag Filter is shaped like a bag or sack with only the top side open. The bag filter is made of a variety of materials including needled felt and polypropylene, just to name a few. Flow is from inside through the porous material to the outside. Bag filters are available in a variety of micron ratings from 5 to 100. Bag filters are best used to capture large contaminants, or applications with high contaminate loading. One of the best applications for bag filters is ahead of cartridge filters reducing the loading and increasing life.

ROLL FILTER MEDIA

Roll filter media is used by a wide variety of high solid loading, gravity flow, filtration machinery. Generally these are automatic indexing continuous operation filtration machines that use rolls of filtering media. The roll filter media is available in a wide range of widths, lengths and materials such as polypropylene and polyester in nominal micron ratings from 1 to 125.



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SERFILCO offers a wide selection of filter cartridge styles, material selections and porosities to satisfy almost any filtration application in the metal finishing and electronics industries. They can be used with SERFILCO filter chambers and systems or as replacements for other single or multiple cartridge housings.

SERFILCO offers stock cartridges in minimum quantities. They are available for immediate delivery. To meet your annual needs, enter a blanket order with scheduled releases to earn the lowest quantity price, plus gain "just in time" delivery.

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7 REASONS FOR USING DEPTH FILTER CARTRIDGES

- 1 TRUE DEPTH FILTRATION** - wound filter cartridges provide selective particle retention. They are manufactured to provide true depth filtration deficient filtering throughout the path of the fluid. Winding creates diamond-shaped openings that become progressively smaller toward the center tube, to trap progressively smaller particles. Large particles never reach small openings.
- 2 LONGER SERVICE LIFE** - because the wound cartridge so successfully resists clogging, it's not uncommon for a set of cartridges to filter many millions of gallons of fluid before replacement. Fewer filter changes obviously save both labor and materials. More important is that production equipment is shut down less often for filter cartridge service. Such facts are important considerations in selecting the kind of filtration system you install.
- 3 CHEMICAL AND TEMPERATURE COMPATIBILITY** - cartridge windings are made in a variety of materials - polypropylene, nylon, cotton, rayon, orlon and glass to name a few, and other materials on special order. Cores are of polypropylene, stainless steel or tinned steel as standard materials. Various materials also have different temperature tolerances. By selecting the right materials for your needs, you're assured of complete chemical and temperature compatibility.



- 4 EASE OF SERVICE** - depth cartridges do not require highly trained personnel for service. Replacement can be done by almost anyone. On most filter chambers, a top cover is removed, old cartridges are lifted out and new ones are set in place. No solution is lost from the tank. Changing can be done much quicker than filters that use loose media.
- 5 POLLUTION ABATEMENT** - cartridges present no liquid or wastewater pollution problem: spent cartridges are disposed of as solid waste. Where it is necessary to treat them for toxicity or to neutralize them, it can be done in place, with cartridges still in the chamber.
- 6 WIDE CHOICE OF POROSITIES** - wound cartridges reject particles from as low as 0.5 micron to 100 micron. This wide range of porosities expands the customer's ability to tailor his filtration system to his specific need, to select exactly the right cartridge, whether for single pass filtration or recirculation filtration.
- 7 MODULAR DESIGN** - most filter chambers designed for wound cartridges can accommodate several modular sizes of cartridges in diameters of 2.5 inches and standard lengths of 6, 10, 20, 30, and 40 inches. Thus, a chamber might be fitted with 36 10-inch cartridges, or 12 30-inch units, or a combination of more than one size. The choice is the customer's, based on economics and ease of changeover; but filtration efficiency is not impaired, regardless of cartridge size.

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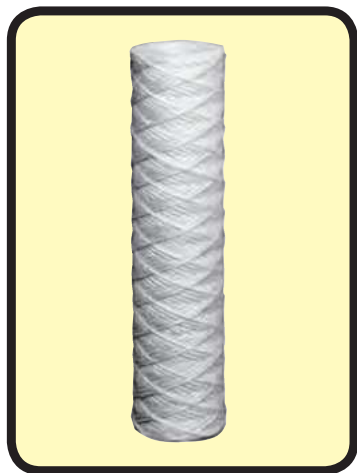
POLYPROPYLENE W/ POLYPROPYLENE CORE

FEATURES

- Full 2½" O.D. provides 3.5 square feet of filter area per 10" length
- Precision wound
- Micron accuracy tested
- Wide selection of media material, cartridge lengths and micron ratings
- Excellent chemical resistance (see TM-110)
- Fits any D.O.E. style vessel

BENEFITS

- Improve finished goods quality, and minimize maintenance and rework with longer continuous high-flow operation
- Save money with lower cost, high surface area
- Reduce inventory, get quantity discounts, and “just-in-time” scheduled releases, by placing blanket order



MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
01U10U	1	10"	30
01U20U		20"	15
01U30U		30"	15
003U4U	3	4"	60
003U6U		6"	30
03U10U		10"	30
03U20U		20"	15
03U30U		30"	15
03U40U	5	40"	10
005U4U		4"	60
05U10U		10"	30
05U20U		20"	15
05U30U		30"	15
05U40U	10	40"	10
010U4U		4"	60
010U6U		6"	30
10U10U		10"	30
10U20U		20"	15
10U30U	15	30"	15
015U4U		4"	60
015U6U		6"	30
15U10U		10"	30
15U20U		20"	15
15U30U		30"	15
15U40U		40"	10

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
20U10U	20	10"	30
20U20U		20"	15
20U30U		30"	15
030U4U	30	4"	60
030U6U		6"	30
30U10U		10"	30
30U20U		20"	15
30U30U		30"	15
50U10U	50	10"	30
50U20U		20"	15
50U30U		30"	15
50U40U		40"	10
75U10U	75	10"	30
75U20U		20"	15
75U30U		30"	15
99U10U	100	10"	30
99U20U		20"	15
99U30U		30"	15
99U40U		40"	10



MAXI-DEPTH WOUND FILTER CARTRIDGES cont'd

M-109_N

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BLEACHED COTTON w/ POLYPROPYLENE CORE

Free of "sizing" and yarn "finish" substances.
Meets FDA regulations for potable water.

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
001C4U	1	4"	60
001C6U		6"	30
01C10U		10"	30
01C20U		20"	15
01C30U		30"	15
003C6U	3	6"	30
03C10U		10"	30
03C20U		20"	15
03C30U		30"	15
03C40U		40"	10
05C10U	5	10"	30
05C20U		20"	15
05C30U		30"	15
010C6U	10	6"	30
10C10U		10"	30
10C20U		20"	15
10C30U		30"	15
015C4U	15	4"	60
015C6U		6"	30
15C10U		10"	30
15C20U		20"	15
15C30U		30"	15
15C40U		40"	10
20C10U	20	10"	30
20C20U		20"	15
20C30U		30"	15
030C6U	30	6"	30
30C10U		10"	30
30C20U		20"	15
30C30U		30"	15
50C10U	50	10"	30
50C20U		20"	15
50C30U		30"	15
50C40U		40"	10
75C10U	75	10"	30
75C20U		20"	15
75C30U		30"	15
99C10U	100	10"	30
99C20U		20"	15
99C30U		30"	15

BLEACHED COTTON w/TINNED STEEL CORE

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
05C10T	5	10"	30
10C10T	10		
15C10T	15		
30C10T	30		
50C10T	50		
75C10T	75		
99C10T	100		

UNBLEACHED COTTON w/TINNED STEEL CORE

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
05B10T	5	10"	30
05B20T		20"	15
05B30T		30"	15
15B10T	15	10"	30
15B20T		20"	15
15B30T		30"	15
30B10T	30	10"	30
30B20T		20"	15
30B30T		30"	15
50B10T	50	10"	30
50B20T		20"	15
50B30T		30"	15
99B10T	100	10"	30
99B20T		20"	15
99B30T		30"	15

Order in carton quantity

MODEL NUMBER IDENTIFICATION

Example of Model Number: 10 U 10 U C -ECS

NOMINAL MICRON RATING	MEDIA MATERIAL		NOMINAL LENGTH	CORE MATERIAL	CORE COVER	EXTENDED CORE
1	B - Unbleached cotton	P - Fibrillated polypropylene	4 (3-7/8")	U - Polypropylene	None - No symbol	None - No symbol
3	C - Bleached cotton	(Purefybe®)	6 (5-7/8")			
5	CU - Carbon & Polypropylene	R - Rayon	8 (7-7/8")	S - 316SS	C - Cover compatible with media	ECU - Polypropylene
10	G - Glass fiber (Unbaked)	U - Polypropylene (Wound & Polyspun®)	9.8 (9-3/4")	A - 304SS		ECS - 316 SS
15	H - Hi-Perf		10 (10")			
20	K - Polyester	W - Potable water polypropylene	19.8 (19-3/4")	T - Tinned Steel		
30	N - Nylon		20 (20")			
50	O - Orlon®		29.8 (29-3/4")			EPS - One piece polypropylene spring & top seal
75			30 (30")			
99 (100)			40 (40")			

Orlon is a registered trademark of DuPont.

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2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**WATER / ACIDS / BASES**

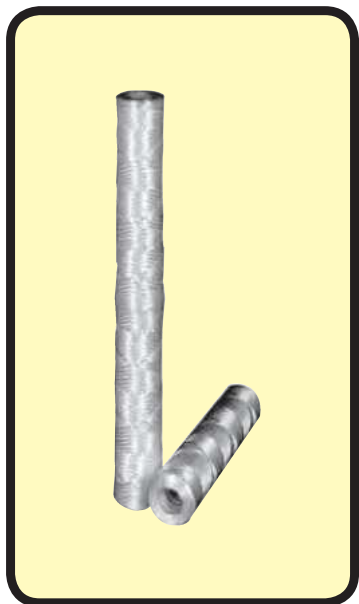
New ValuWound cartridges offer high quality and value in a polypropylene depth filter. Designed for excellent chemical resistance and efficient long life particle removal, these cartridges are the perfect choice for a wide range of applications.

FEATURES

- High quality polypropylene — polypropylene core
- Precision wound
- Micron accuracy tested
- Available 1 - 100 micron rating
- Nominal 2 $\frac{3}{8}$ " O.D.
- Continuous molded cores in 10", 20", 30" or 40" lengths.
- Excellent temperature and chemical compatibility
- Economically priced

MODEL	MICRON	NOMINAL LENGTH	CARTON QTY
1PP10	1	10	30
1PP20		20	15
1PP30		30	15
1PP40		40	10
3PP10	3	10	30
3PP20		20	15
3PP30		30	15
3PP40		40	10
5PP10	5	10	30
5PP20		20	15
5PP30		30	15
5PP40		40	10
10PP10	10	10	30
10PP20		20	15
10PP30		30	15
10PP40		40	10
15PP10	15	10	30
15PP20		20	15
15PP30		30	15
15PP40		40	10

MODEL	MICRON	NOMINAL LENGTH	CARTON QTY
20PP10	20	10	30
20PP20		20	15
20PP30		30	15
20PP40		40	10
30PP10	30	10	30
30PP20		20	15
30PP30		30	15
30PP40		40	10
50PP10	50	10	30
50PP20		20	15
50PP30		30	15
50PP40		40	10
75PP10	75	10	30
75PP20		20	15
75PP30		30	15
75PP40		40	10
100PP10	100	10	30
100PP20		20	15
100PP30		30	15
100PP40		40	10

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**FREE OF EXTRACTABLES, LUBRICANTS,
BINDERS, ANTI-STATIC AND SIZING AGENTS.****APPLICATIONS**

Plating Solutions	Photographics	D.I. & Tap Water
Electronics	PC Board Mfg.	Pharmaceuticals
Coatings	Chemicals	

- **100% Pure polypropylene**
with polypropylene center core
- **Fibrillated fiber, organic-free, non-migrating**
A smooth, firm filter media that can be reused
- **High temperature performance**
Plating solutions and most chemicals to 200°F (93°C)
(see chem. guide TM-110)
- **Length to fit any chamber**
10", 20", and 30" x 2½" nominal O.D.
- **Selective depth filtration**

15

Purefybe is an all polypropylene cartridge wound of fibers free of extractables. It is designed for filtration of electroforming, precious metals and all other plating solutions or applications requiring organic-free filter media. It is also recommended for gelatinous precipitates such

as iron and aluminum hydroxides which can be dissolved with acids. Enter a blanket order with scheduled releases to earn the lowest quantity price, plus gain **"Just in time"** delivery.

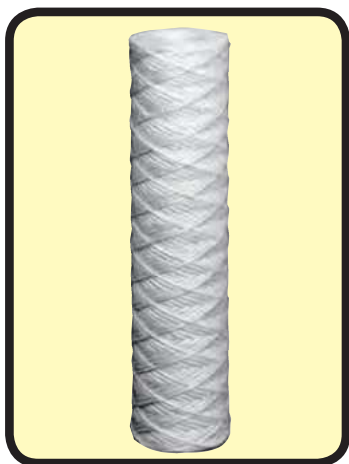
MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
01P10U	1	10"	30
01P20U		20"	15
01P30U		30"	15
03P10U	3	10"	30
03P20U		20"	15
03P30U		30"	15
05P10U	5	10"	30
05P20U		20"	15
05P30U		30"	15
10P10U	10	10"	30
10P20U		20"	15
10P30U		30"	15

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
15P10U	15	10"	30
15P20U		20"	15
15P30U		30"	15
20P10U	20	10"	30
20P20U		20"	15
20P30U		30"	15
25P10U	25	10"	30
25P20U		20"	15
25P30U		30"	15
50P10U	50	10"	30
50P20U		20"	15
50P30U		30"	15
99P10U	100	10"	30
99P20U		20"	15
99P30U		30"	15

Order in carton quantity

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

15

**HI-PERF****FOR CHROMIC / SULFURIC / NITRIC ACIDS**

HI-PERF filter cartridges are constructed of proprietary materials which are specifically designed for chrome plating applications, nitric and sulfuric acid solutions. They are equally well suited for aggressive solvents and bases.

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY
05H10U	5	10	30
05H20U		20	15
05H30U		30	15
05H40U		40	10
15H10U	15	10	30
15H20U		20	15
15H30U		30	15
15H40U		40	10
30H10U	30	10	30
30H20U		20	15
30H30U		30	15
30H40U		40	10
50H10U	50	10	30
50H20U		20	15
50H30U		30	15
50H40U		40	10
99H10U	100	10	30
99H20U		20	15
99H30U		30	15
99H40U		40	10

GLASS FIBER

These cartridges resist all strong oxidizing acids (except hydrofluoric). Especially suitable for hot chromic acid and chrome etch solutions. Glass fiber cartridges can be used at higher temperatures than any of the other fiber type filter media. Glass fiber offers the additional advantage of being impervious to highly corrosive agents. Cartridges are unbaked on a polypropylene core and include a woven glass fiber core cover. Max. 200°C).

2-1/2" nominal diameter



MODEL	MICRON RETENTION RATING	LENGTH	CARTON QTY
05G10UC	5	10	30
05G20UC		20	15
05G30UC		30	15
20G10UC	20	10	30
20G20UC		20	15
20G30UC		30	15

HI-DENSITY COTTON and POLYPROPYLENE**COTTON (.5 micron organic free)**

Wound on a polypropylene core with a hemp core cover. Offers a 0.5 micron (nominal) retention. Free of sizing agents, it is ideal for ultra clean water for the electronics industry and many plating solutions. 1 GPM aqueous flow per 10" length @ 5 PSI pressure drop. (3.78 LPM @ .35 kg/cm²)

MODEL	CARTON QTY
C0 5A10UH	30

2-1/2" nominal diameter x 10"

**POLYPROPYLENE (.5 micron)**

Wound on a corrosion resistant polypropylene core with a polypropylene core cover. Offers a 0.5 micron (nominal) retention. For efficient filtration of plating solutions for electronics. 1 GPM aqueous flow per 10" length @ 2 PSI pressure drop. (3.78 LPM @ .14 kg/cm²). 2-1/2" nominal O.D.

MODEL	LENGTH	CARTON QTY
U0.5A10UC	10	30
U0.5A20UC	20	15
U0.5A30UC	30	15

Order in carton quantity

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**4" DIAMETER X 9¾" LONG**

Maxi-Wind cartridges provide extended solids loading at greater efficiency. Their dirt holding capacity is equivalent to 10 square ft. (.93m²) of surface filtration. They are designed for maximum solids loading at a recommended flow rate of 10 U.S. GPM (38 LPM). For Model GPO10-1 filter chambers and replacement for original equipment cartridges.

POLYPROPYLENE w/POLYPROPYLENE CORE
For good chemical resistance

MODEL	MICRON RETENTION RATING	CARTON QTY *
0.5U9.8U4	.5	10
1U9.8U4	1	
5U9.8U4	5	
10U9.8U4	10	

* Minimum order carton of 10.

PUREFYBE® (Fibrillated polypropylene) w/POLYPROPYLENE CORE
Wound of fibers free of "sizing" and yarn "finish" substances

MODEL	MICRON RETENTION RATING	CARTON QTY *
5P9.8U4	5	10
10P9.8U4	10	
25P9.8U4	25	
50P9.8U4	50	
99P9.8U4	100	

* Minimum order carton of 10.

15**4" DIAMETER X 18" LONG**

These cartridges provide a dirt holding capacity equivalent to 18 sq. ft. of surface filtration. They are designed for maximum solids loading at a recommended flow rate of 18 GPM (68 LPM). For Models (718), CB Filtration Chambers, and as replacement for original equipment cartridges.

**UNBLEACHED COTTON FOR OILS,
SOLVENTS & SEMI-AQUEOUS CLEANERS**

MODEL	MICRON RETENTION RATING	CARTON QTY *
1B18A4	1	5
3B18A4	3	
5B18A4	5	
10B18A4	10	
20B18A4	20	
30B18A4	30	

POLYPROPYLENE FOR GOOD CHEMICAL RESISTANCE

MODEL	MICRON RETENTION RATING	CARTON QTY *
1U18A4	1	5
3U18A4	3	
5U18A4	5	
10U18A4	10	
20U18A4	20	
30U18A4	30	

* Minimum order carton of 5.



CARTRIDGE ORDERING INFORMATION

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M-109_N

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

- Use Model Number to order.
- All cartridges sold in carton quantity only.
- For larger quantities, consult SERFILCO Sales Dept. for quantity pricing.
- Enter a blanket order with scheduled releases to earn the lowest quantity price, plus gain "Just in Time" delivery.
- Minimum order \$50.00
- F.O.B. shipping point
- Specifications subject to change without notice.

TABLE A

DEPTH CARTRIDGE PACKAGING				
LENGTH (in.)	4	6, 10	20, 30	40
CARTON QTY	60	30	15	10

SUBSTITUTIONS AND ACCESSORIES, CORE COVER AND EXTENDED CORE

TABLE B

SUBSTITUTE CORE MATERIAL	
TINNED STEEL -T TO:	
S - 316SS	Replace the last letter "T" in the Model Number with "S", "A" or "U".
A - 304SS	
T - Polypro.	
POLYPROPYLENE -U TO:	
S - 316SS	Replace the last letter "U" in the Model Number with "S", "A" or "T".
A - 304SS	
T - Tinned Steel	

Consult Sales Dept. for other filter media, core materials, diameters, lengths, and micron ratings. See Table E below.

TABLE C

CORE COVER
Add "C" after core material letter in Model Number

TABLE D

EXTENDED CENTER CORE	
MATERIAL	ADD TO MODEL NO.
316SS	-ECS
Polypropylene	-ECU
One piece polypropylene spring & top seal	-EPS

Consult Sales Dept. for other filter media, core materials, diameters, lengths and micron ratings. See Table E below.

TABLE E - MODEL NUMBER IDENTIFICATION

Example of Model Number:

10 U 10 U C -ECS

NOMINAL MICRON RATING	MEDIA MATERIAL		NOMINAL LENGTH	CORE MATERIAL	CORE COVER	EXTENDED CORE
1	B - Unbleached cotton	P - Fibrillated polypropylene	4 (3-7/8")	U - Polypropylene	None - No symbol	None - No symbol
3	C - Bleached cotton	(Purefybe®)	6 (5-7/8")			
5	CU - Carbon & Polypropylene	R - Rayon	8 (7-7/8")	S - 316SS	C - Cover compatible with media	ECU - Polypropylene
10	G - Glass fiber (Unbaked)	U - Polypropylene (Wound & Polyspun®)	9.8 (9-3/4")			
15	H - Hi-Perf		10 (10")	A - 304SS		ECS - 316 SS
20	K - Polyester	W - Potable water polypropylene	19.8 (19-3/4")			
30	N - Nylon		20 (20")			
50	O - Orlon®		29.8 (29-3/4")	T - Tinned Steel		EPS - One piece polypropylene spring & top seal
75			30 (30")			
99 (100)			40 (40")			

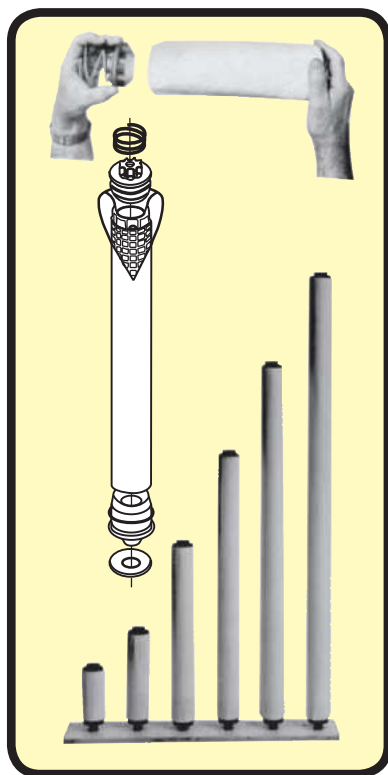
Orlon is a registered trademark of DuPont.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**ECONOMICAL ALTERNATIVE
TO DISC-TYPE FILTER****FEATURES**

- **Interchangeable**
Sleeve cartridges are interchangeable with any regular cartridge of corresponding length and diameter.
- **CPVC and polypropylene construction**
- **15 micron seamless sleeve**
Designed for precoating with all types and grades of filter aid to provide a high quality filtrate; however, may also be used without precoat.
- **Easy to clean**
- **Reusable**

BENEFITS

- **Reduced operating costs**
- **Reduced disposal costs**

15

The SERFILCO Sleeve-Type Filter Cartridge may be used uncoated or with filter aid or filter aid with carbon. As the filters become dirt-laden, they may easily be backwashed, or the sleeves may be removed, rinsed or laundered and put back into service.

This unique design of filter cartridges will not only help reduce operating costs, but will simplify and speed up any pre-coat type filtration process.

Each filter cartridge consists of a polypropylene top and bottom seat, a polypropylene woven fabric sleeve, a polypropylene support mesh, a CPVC support column, EPDM "O"-rings and a vinyl coated spring to assure good sealing.

These filter cartridges can be quickly and easily assembled and re-assembled — no tools are required.

CLEANABLE SLEEVE CARTRIDGES

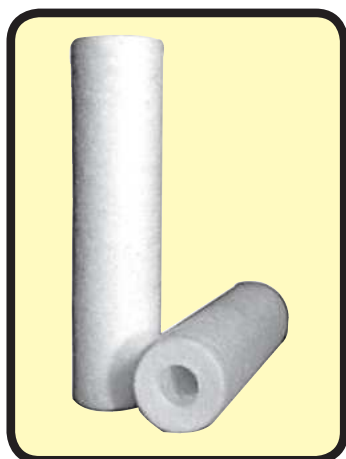
SLEEVE LENGTH X 2-1/2" DIA.	SURFACE AREA SQ. FT.	FOR CHAMBER STYLE		REPLACEMENT SLEEVE ONLY
		SINGLE COLUMN	MULTIPLE COLUMN	
		PRICE CODE NUMBER		
10"	0.6	99-0701	99-0704	88-0161 A
20"	1.2	99-0702	99-0705	88-0162 A
30"	1.8	99-0703	99-0706	88-0163 A
40"	2.4	99-0715	99-0707	88-0164 A
50"	3.0	—	99-0708	88-0165 A

OPTIONAL

DESCRIPTION	PRICE CODE NO.
Viton® elastomers for sleeve assembly	O-VSL

TO ORDER: Use Price Code No.

Viton is a registered trademark of DuPont Dow Elastomers.

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**FREE OF RESINS, LUBRICANTS,
BINDERS & ANTI-STATIC AGENTS****APPLICATIONS**

Plating solutions / Potable water

Tap & D.I. water / Coatings

Electronics / Photographics

FDA Approved for food contact applications

- **100% Pure polypropylene**
Extruded for structural strength without center core
- **High temperature performance**
Plating solutions and most chemicals to 140°F (60°C)
Water to 212°F (100°C)
- **Unique fiber bonding**
Four to five hundred layers of melt-bonded polypropylene fiber
- **Length to fit any chamber** - 9.75", 10", 20", or 30"
- **Selective depth filtration** - 1, 5, 10, 20, 50 or 75 micron

SERFILCO POLYSPUN depth filter cartridges are individually packaged to provide 1 to 75 micron high purity filtration and an organic free, pure polypropylene media. Their outstanding

chemical resistance, fiber free melt-bonded media and excellent flow characteristics present a filter cartridge that meets the tough requirements of today's technology.

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY*
01U9.8	1	9.75	30
01U10		10	30
01U20		20	15
01U30		30	15
05U9.8	5	9.75	30
05U10		10	30
05U20		20	15
05U30		30	15
10U9.8	10	9.75	30
10U10		10	30
10U20		20	15
10U30		30	15

MODEL	MICRON RETENTION RATING	NOMINAL LENGTH	CARTON QTY*
20U10	20	10	30
20U20		20	15
20U30		30	15
30U10	30	10	30
30U20		20	15
30U30		30	15
50U10	50	10	30
50U20		20	15
50U30		30	15
75U10	75	10	30
75U20		20	15
75U30		30	15

MICRON	1	5	10	20	30-75
PRESSURE DROP (PSI) **	5	2	1	.7	.5

** Aqueous flow at 5 U.S. GPM (19 LPM) per 10" length.

* Order in carton quantity



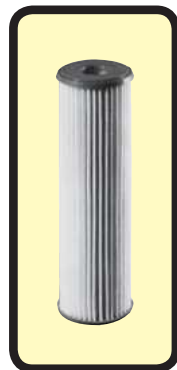
PLEATED FILTER CARTRIDGES

299

M-307_AD-2

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

POLYESTER



Cleanable, reusable in most applications:

This pleated polyester cartridge can be rinsed off and reused a number of times. Center core and end caps are PVC. The center core, end caps and media are all thermally bonded for long life in reusable applications up to 80 PSID. Good for pH 3 to 11. Flow rate is 10 U.S. GPM per 10" length @ 2.5 PSI (38 LPM @.18 kg./cm²) pressure drop. Use at 35° to 160°F (0° to 71°C). 2¾" diameter x 9¾", 19½" or 29¼" long.

**Potable water / Process water
Chemicals / Photographic
Inks / Oils / Waste treatment**

- **High flow rates**
to 10 U.S. GPM (38 LPM) per 10" length
- **Thermally bonded for long life**

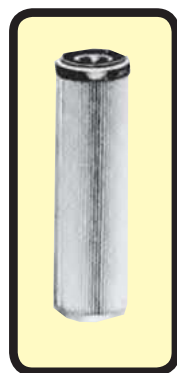
MODEL	LENGTH	AREA	
		FT ²	m ²
PL-P_* x 9¾"	9¾"	4	.37
PL-P_* x 19½"	19½"	8	.74
PL-P_* x 29¼"	29¼"	12	1.1

* Insert micron size desired — 1, 5, 20 or 50.

End cap color code: Tan 1µ, white 5µ, blue 20µ, yellow 50µ. 24 cartridges/case.

Minimum order 6 cartridges.

MICROFIBERGLASS AND POLYESTER



Large surface area for filtering:

This cartridge assures fine filtration and high flow rates. The media is constructed of microfiber glass and polyester (pleated for maximum area). The center core is available in glass fiber reinforced polypropylene or 304 stainless steel. End cap gaskets are Buna-N. Unique 3-layer construction gives pre-filtration plus inner mechanical strength. Use polypropylene core cartridges at temperatures up to 68°F (20°C), stainless steel core cartridges to 250°F (121°C). 2½" diameter.

**Chemicals / Cosmetics / Oils
Magnetic coatings / Electronics
Photographic / Pharmaceuticals**

MICRON RATING		WATER FLOW RATE PER 10" LENGTH			
NOM.	ABS.	@ .5 PSID (.035 kg/cm ² D)		@ 1 PSID (.07 kg/cm ² D)	
		U.S GPM	LPM	U.S GPM	LPM
.45	2	3	11	6	23

Polypropylene Core

MODEL	MICRON	AREA		LENGTH
	NOM.	FT. ²	m ²	
PL-PG.45x10U	.45	8	.74	10"
PL-PG.45x20U		16	1.4	20"
PL-PG.45x30U		24	2.2	30"

304 Stainless Steel Core

MODEL	MICRON	AREA		LENGTH
	NOM.	FT. ²	m ²	
PL-PG.45x10S	.45	8	.74	10"
PL-PG.45x20S		16	1.4	20"
PL-PG.45x30S		24	2.2	30"

Minimum order 6 cartridges.

15



TRI-PLEATED FILTER CARTRIDGE

300

M-207_W

2900 MacArthur Blvd Northbrook, IL USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

Extended surface area for longer service life

APPLICATIONS

D. I. water
Electronics
Photographic

Food • Beverage
Solvents
Pharmaceuticals

Cosmetics
R. O. pre-filter
Plating solutions

FEATURES

- **All polypropylene**
with EPDM or Viton® elastomers
- **Chemical compatibility**
including solvents, acids and bases
- **Nominal pore size**
0.1, 0.45 and 1.0 micron
- **Absolute rated**
1.0, 2.0 and 5.0 micron
- **Organic-free**
no sizing or anti-static agents
- **Length: 10", 20", 30" or 40"**
with double open end gaskets or
single open end "O"-rings



All polypropylene filter cartridge constructed of ultra-fine diameter continuous filaments of polypropylene, formed into thermally bonded and pleated layers of filter media to provide particulate removal in the submicron range. Includes pleated pre-filter, end caps, center core and protective outer cage all of polypropylene. Cartridge is totally free of all sizing, anti-static agents and all organics. Standard end gaskets DOE (double open end) and 222 "O"-rings SOE (single open end) are ethylene propylene.**

Maximum recommended operating temperature:

140°F @ 60 PSID (60°C @ 4.2 kg/cm²D)

180°F @ 10 PSID (82°C @ .7 kg/cm²D)

Maximum recommended operating differential pressure:

60 PSID (4.2 kg/cm²D)

Cartridge is 2.7" diameter.

TO ORDER - Select rating, length and end seal.

MODEL		MICRON RATING		FILTER AREA		FLOW @ 1.0 PSID	
FLAT GASKETS DOE	222 "O"-RINGS SOE			PER 10" CARTRIDGE			
		NOM.	ABS.	FT. ²	m ²	GPM	LPM
PL-U.1x*UL	PL-U.1x*UL-2	0.1	1.0	4.3	.40	2.5	9.5
PL-U.45x*UL	PL-U.45x*UL-2	0.45	2.0	4.6	.43	9	34
PL-U1.0x*UL	PL-U1.0x*UL-2	1.0	5.0	4.9	.45	12	45

* Length. Specify 10", 20", 30" or 40".

** For Viton elastomers, substitute UV for UL in Model No.



TRI-PLEATED FILTER CARTRIDGE

301

M-207_W

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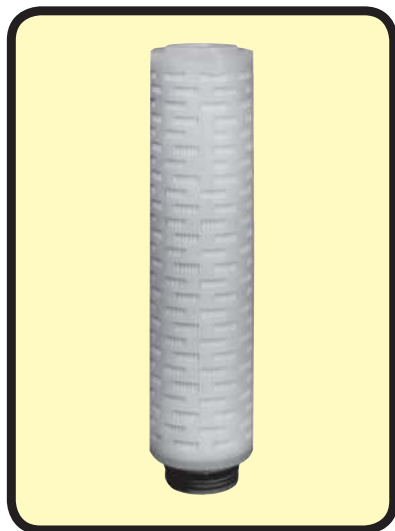
Polypropylene with polysulfone membrane

APPLICATIONS

18 megohm D. I. water
Electronics
Pharmaceuticals

Food • Beverage
Photographic
Reagent grade chemicals

Distilled liquors
Cosmetics
R. O pr -filter



- **Chemical compatibility**
including solvents, acids and bases
- **With EPDM or Viton® elastomers**
- **Absolute pore size**
0.1, 0.2 and 0.45 micron
- **Preflushed with 18 megohm pyrogen-free water prior to shipment**
- **Length: 10", 20", 30" or 40"**
with double open end gaskets or
single open end "O"-rings

15

A pleated polysulfone membrane whose pore size decreases gradually from 10 to 20 micron on the upstream side to the absolute rated 0.1, 0.2 or 0.45 micron on the downstream side. The membrane provides its own cast-in pre-filter to prevent premature loading and extend service life. Includes pleated polypropylene support and drainage layers, end caps, center core and protective outer cage. Cartridge is free of all organics and electrochemical bonding. Standard end gaskets (DOE) and 222 "O"-rings (SOE) are ethylene propylene.**

Each 10" length has 5½ sq. ft. (.51 sq. m) of filter area and will hold more than 150 grams of Arizona fine test dust. Cartridge will withstand water at 200°F (93°C) for extended periods without degradation. Maximum recommended differential pressure, 50 PSID (3.5 kg/cm²D). Cartridge is 2.6" diameter.

TO ORDER - Select rating, length and end seal.

MODEL		ABSOLUTE MICRON RATING	FLOW PER 10" @ 1.0 PSID	
FLAT GASKETS DOE	222 "O"-RINGS SOE		GPM	LPM
PL-UPS.1x*UL	PL-UPS.1x*UL-2	0.1	2	7.6
PL-UPS.2x*UL	PL-UPS.2x*UL-2	0.2	4	15
PL-UPS.45x*UL	PL-UPS.45x*UL-2	0.45	6	23

* Length. Specify 10", 20", 30" or 40".

** For Viton elastomers, substitute **UV** for **UL** in Model No.

Viton is a registered
trademark of
DuPont Dow Elastomers.



CARBON CARTRIDGES

M-305_AB

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

FOR CHEMICALS / PLATING

CARBONEX P

3 IN 1 GRANULAR CARBON FILTER:

Porous polyethylene outer shell which serves as a 50 micron prefilter houses granular activated 99.5+% sulfur-free carbon and encases a 3 micron polypropylene wound polishing filter

on a polypropylene core. Maximum operating temperature 150°F (66°C). EPDM gaskets. Flow rate 2 U.S. GPM (8 LPM) per each 10" length.

MODEL	WT. OF CARB	LENGTH	DIA.	CTN. QTY.
CU10P	7 oz.	10"	2-3/4"	25
CU20P	14 oz.	20"	2-3/4"	12
CU30P	21 oz.	30"	2-3/4"	12

CARBO-FYNE P

POWDERED CARBON FILTER:

Cartridge contains high purity, pre-washed sulfur-free, pulverized activated carbon with 7 micron depth filtration for long life. All non-metallic with polyethylene end caps, polyolefin green net

and polypropylene core. Maximum operating temperature 150°F (66°C). For 3 U.S. GPM (11 LPM) continuous or 1.5 U.S. GPM (5.7 LPM) batch transfer treatment per each 10" length.

MODEL	WT. OF CARB	LENGTH	DIA.	CTN. QTY.
C4P	1.6 oz.	4"	2-3/4"	60
C6P	2.4 oz.	6"	2-3/4"	30
C9.8P	4 oz.	9.75"	2-5/8"	30
C10P	4 oz.	10"	2-3/4"	30
C20P	8 oz.	20"	2-3/4"	30
C30P	12 oz.	30"	2-3/4"	30

CARBO-WIND P

3 IN 1 GRANULAR CARBON FILTER:

Polypropylene outer winding serves as a 50 micron prefilter which houses granular activated 99.5+% sulfur-free carbon followed by a 3 micron polypropylene wound polishing filter

on a polypropylene core. Maximum operating temperature 200°F (93°C). Flow rate 2½ U.S. GPM (9.5 LPM) per each 10" length.

MODEL	WT. OF CARB	LENGTH	DIA.	CTN. QTY.
CU10UP	5 oz.	10"	2-3/4"	20
CU20UP	10 oz.	20"	2-3/4"	12
CU30UP	15 oz.	30"	2-3/4"	12

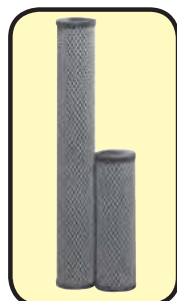
MODEL	WT. OF CARB	LENGTH	DIA.	CTN. QTY.
CUR10UP	3 oz.	10"	2-1/2"	20
CUR20UP	6 oz.	20"	2-1/2"	12
CUR30UP	9 oz.	30"	2-1/2"	12

**CARBO-FYNE PE****POWDERED CARBON FILTER ELECTRONICS:**

Designed for purifying plating solutions used for electronics, memory discs, semi-conductors, etc. where solutions are to be free of organics and particles larger than two micron. All non-metallic with polyethylene end caps, polyolefin blue net

and polypropylene core. Cartridge contains high purity, pre-washed sulfur-free, pulverized activated carbon with 2 micron depth filtration for long life. Maximum operating temperature 150°F (66°C). Flow rate 1.5 U.S. GPM (5.7 LPM).

MODEL	WT. OF CARB	LENGTH	DIA.	CTN. QTY.
C10PE	6 oz.	10"	2-3/4"	30
C20PE	12 oz.	20"	2-3/4"	30

**MAXI-CARB PE****POWDERED CARBON FILTER ELECTRONICS:**

Constructed like Carbo-Fyne PE except oversized for maximum carbon capacity. May be installed in single or triple canister chambers

and are interchangeable in all SERFILCO carbon chambers which use the 528 & 548 refillable bulk granular carbon canisters.

MODEL	WT. OF CARB	LENGTH	DIA.	FLOW (GPM)	CTN. QTY.
C528PE	48 oz.	28"	5"	3 - 5	6
C548PE	90 oz.	48"	5"	5 - 7	6

**MINI-CANISTER P****ABS/PVC/SARAN® CANISTER – FOR GRANULAR CARBON:**

Features a twist-off end cap which permits easy filling with carbon or resin (not included). End cap screens retain contents. Maximum operating temperature is 160°F (71°C). Non-standard lengths available. Flow rates to 2 U.S. GPM (7.6 LPM) per each 10" length. For SERFILCO Series 'L' chambers (see C-105). To order Mini-Canister with CPVC 5/8" hose adapter add H.5 to Model Number, for 3/4" add H.75

MODEL	3" DIA. x LGTH	WT. OF CARB.
4ABS	4"	3 oz.
6ABS	6"	7 oz.
10ABS	10"	14 oz.
20ABS	20"	33 oz.
30ABS	30"	52 oz.
40ABS	40"	71 oz.

GRANULAR ACTIVATED CARBON**COCONUT SHELL BASED**

Steam activated for high absorption capacity

12 x 30 MESH STANDARD	LBS	PCN
	10	99-0997-10
	50	99-0997-50



CARBON CARTRIDGES WATER

304

M-310_L

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

TASTE, ODOR, COLOR AND PARTICLE REMOVAL MATERIALS MEET FDA REGULATIONS FOR POTABLE WATER

CARBONEX W

3 IN 1 GRANULAR CARBON FILTER :

Contains extra high quality granular activated carbon designed to remove or substantially reduce chlorine and other chemicals, unpleasant tastes, odors and sediment from water. Three stage filtration: (1) 50 micron white polyethylene shell

prefilter; (2) activated carbon adsorption bed; (3) polypropylene 3 micron depth wound polishing filter on a polypropylene core. EPDM end gasket / caps. Flow rate 2 U.S. GPM (7.6 LPM) per each 10" length.

MODEL	WT. OF CARB.	LENGTH	DIA.	CTN. QTY.
CU9.8W	7 oz.	9 3/4"	2-3/4"	25
CU19.8W	14 oz.	19 3/4"	2-3/4"	12

CARBO-FYNE W

POWDERED CARBON FILTER:

Pre-washed, pulverized activated carbon, removes or substantially reduces chlorine taste and organic related odors and colors. The 10 micron retention assures turbidity-free water.

Polypropylene core with polyethylene end caps and polyolefin white net. Flow rate to 3 U.S. GPM (11 LPM) per each 10" length.

MODEL	WT. OF CARB.	LENGTH	DIA.	CTN. QTY.
C4W	1.6 oz.	4"	2-3/4"	60
C10W	4 oz.	10"	2-3/4"	30
C20W	8 oz.	20"	2-3/4"	30

CARBO-WIND W

3 IN 1 GRANULAR CARBON FILTER:

Provides one-step removal of sediment, chlorine, chemicals, unpleasant tastes and odor. The depth wound polypropylene prefilter is designed to give maximum sediment removal. It encases a bed of extra high quality granular activated carbon fol-

lowed by a 3 micron depth wound polishing filter on a polypropylene core. Maximum operating temperature 200oF (93oC). Flow rate 2½ U.S. GPM (9.5 LPM) per each 10" length.

MODEL	WT. OF CARB.	LENGTH	DIA.	CTN. QTY.
CU9.8UW	5 oz.	9 3/4"	2-3/4"	20
CU19.8UW	10 oz.	19 3/4"	2-3/4"	12

**CARBON CARTRIDGES WATER**

M-310_L

2900 MacArthur Blvd. Northbrook, IL. USA 60062 **WWW.SERFILCO.COM** (800) 323 - 5431**MAXI-CARB W****POWDERED CARBON FILTER:**

For absorption of undesirable contaminants including chlorine and many organics. Serves as an effective sediment removal filter down to the 1 - 2 micron range. Non-metallic, polyethylene end caps w/rubber gaskets, polyolefin blue net and polypropylene core. Cartridge contains high purity pre-washed sulfur-free, pulverized activated carbon. Maximum operating temperature 180°F (82°C). Flow rate 3 U.S. GPM (11 LPM).

MODEL	WT. OF CARB.	CTN. QTY.
C510W	17 oz.	12

4 5/8" nominal dia. x 9-3/4" long.

Designed to fit SERFILCO GPO10-1 chamber. Bulletin C-101

15SPRING
LOADED**MINI-CANISTER W****ABS/PVC/SARAN® CANISTER – FOR GRANULAR CARBON:**

Features a twist-off end cap which permits easy filling with carbon or resin (not included). End cap screens retain contents. Carbon is used to remove organic substances which cause taste, odor and color in water. Maximum operating temperature is 160°F (71°C). Non-standard lengths available. Flow rates to 2 U.S. GPM (7.6 LPM) per each 10" length. ABS / PVC canister. Saran end screens.

MODEL	3" DIA. x LGTH	WT. OF CARB.
10ABS	10"	14 oz.
20ABS	20"	33 oz.

Designed to fit SERFILCO GPO and GSO chambers. Bulletin C-101

GRANULAR ACTIVATED CARBON**COCONUT SHELL BASED**

Steam activated for high absorption capacity

12 x 30 MESH STANDARD	LBS	PCN
	10	99-0997-10
	50	99-0997-50

To order resin, refer to Bulletin R-208.



STAINLESS STEEL FILTER CARTRIDGES

M-309_E-2

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431**SINTERED POROUS CYLINDER**

Porous media is constructed of grade 316 stainless steel powder, precompressed, formed and heated to sintering temperature in a controlled atmosphere. End supports are also 316 stainless steel. This manufacturing technique offers:

- Precise thickness control to $\pm .005"$.
- A more uniform porous structure and permeability.
- Each particle bonded to several others, thereby leaving no loose particles to migrate into effluent stream.

Result is a reusable, quality filter cartridge with consistent pore size at the eight retention ratings offered.

SPECIFICATIONS —

Dimensions: 2.5" Dia. x 10", 20" or 30" long
End style: DOE
Filter area: .5 ft.² per 10" length
Maximum pressure: 50 Δ P
Maximum temperature: Limited by gasket
Standard gaskets: EPDM (to 250° F)

TO ORDER

MODEL	GPM **	MICRON
PS.2X * L	.1	.2
PS.5X * L	.3	.5
PS2X * L	2	2
PS5X * L	3	5
PS10X * L	18	10
PS20X * L	30	20
PS40X * L	30	40
PS100X * L	30	100

* Length: Specify 10", 20" or 30"

** Flow per 10" length at 2 Δ P water.

Maximum recommended is 30 GPM per cartridge.

OPTIONAL

GASKETS	MAX. TEMP.	CHANGE 'L' in MODEL to
Viton®	400° F	V

Registered trademark: Viton - DuPont Dow Elastomers

- Choose from sintered porous cylinder or pleated wire mesh
- Excellent chemical resistance
- Cleanable and reusable 10", 20", 30" lengths
- High flow rates 25 or 30 GPM per 10" length
- High service temperature to 400° F
- High operating pressure to 50 Δ P

PLEATED WIRE MESH

Media is woven 304 stainless steel wire, pleated for additional filter area and strength, then welded to 304 stainless steel center rings and end supports. This manufacturing technique offers:

- Extended filter area for each 10" length.
- Rigid construction and uniform porosity.
- Positive-crimp end pleat seal prevents particle bypass into effluent stream.

Result is a reusable, quality filter cartridge with consistent pore size at the five retention ratings offered.

SPECIFICATIONS —

Dimensions: 2.5" Dia. x 10", 20" or 30" long
End style: DOE
Filter Area: 10" cart. = 1.7 ft.², 20" cart. = 3.6 ft.², 30" cart. = 5.5 ft.²
Maximum pressure: 50 Δ P
Maximum temperature: Limited by gasket
Standard gaskets: Buna-N (to 250° F)

Consult Sales Department for 316 SS construction.

TO ORDER

MODEL	GPM **	MICRON
PWC40X * B	12	40
PWC75X * B	15	75
PWC100X * B	16	100
PWC150X * B	17	150
PWC230X * B	25	230

* Length: Specify 10", 20" or 30"

** Flow per 10" length at 2 Δ P water.

Maximum recommended is 25 GPM per cartridge.

OPTIONAL

GASKETS	MAX. TEMP.	CHANGE 'B' in MODEL to
Viton®	400° F	V

Consult Sales Department for flow at other viscosities.

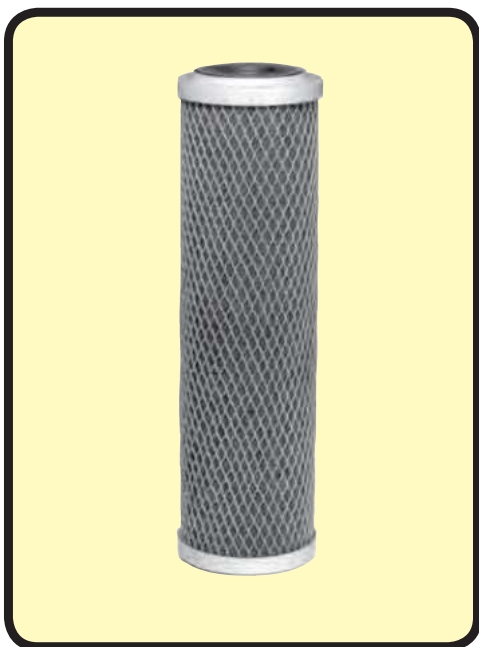


LEAD REMOVAL CARTRIDGES

307

M-308_D

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431



FOR POTABLE WATER POWDERED ACTIVATED CARBON WITH ATS® LEAD REMOVAL SORBENT

- Contains Engelhard Corporation's ATS sorbent, a state-of-the-art ceramic lead removal matrix, along with a blend of premium performing, highly pulverized, activated carbon.
- Offers true-depth type filtration for fine sediment, 1 to 2 micron particle removal.
- Effectively removes both soluble and insoluble lead, foul tastes, odors and free chlorine.
- Is unaffected by pH or the presence of other ions including calcium, magnesium, iron and manganese.
- Bonds internally and irreversibly avoiding the potential hazard of a concentrated solution of lead "avalanching" into the treated water.
- Available in two lengths: 9¾" or 20".
- Constructed of molded polystyrene end caps with thermoplastic rubber gaskets, blue polyolefin outer net and a polypropylene center core "sandwiching" a blend of highly purified activated powdered carbon and ATS lead removal sorbent. Inner layer of heat fused polyolefin fiber media prevents carbon bleed-off.

15

The inert molecular sieve construction of the ATS material internally and irreversibly locks onto any lead in solution reducing the concentration to below U.S. EPA guidelines with a very short contact time. The ATS material works well in hard water as well as in the presence of iron, manganese, magnesium and calcium ions. It functions on the principle of chemically "absorbing" the lead ions rather than insolubilizing the lead and will not put aluminum, copper or zinc ions into the treated water.

The CLR Series has been evaluated against the test protocol as outlined in NSF standard #53 by a certified third-party laboratory. The results show that a standard 9¾" cartridge at 0.75 GPM will effectively reduce a 150 PPB spiked feed of lead to less than 10 PPB for 4000 gallons in a low pH, low alkalinity solution and for 3000 gallons in a high pH, high alkalinity solution.

TO ORDER

MODEL	GPM	LENGTH	DIA	CTN QTY
CLR10W	.5 - 1	9-3/4"	2-3/4"	12
CLR20W	1 - 2	20"	2-3/4"	12



2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

FOR ALL TYPES OF OIL FILTERING — FUEL, LUBE, HYDRAULIC, CUTTING OILS, QUENCH, TRANSFORMER, DIELECTRIC & COALESCING



PL718



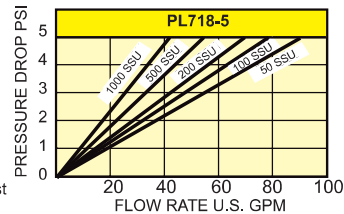
PL310

TYPE 'PL' PLEATED PAPER

Has extremely high flow rate. Performs well on filtration of water and oil. Typical applications: For detergent, straight mineral and residual fuel oils. Water, glycol-water synthetics or oil-water emulsions. PL718 has a metal jacket and center core with vellumoid seals. PL310 has exposed pleats and Buna-N seals. Maximum temperature: 250°F.

MODEL 2-1/8" I.D. x 6" x 18" lg.	MICRON
PL718-1	1
PL718-5	5
PL718-10	10
PL718-20	20
PL718-30	30

6 & up shipped full carton quantity (6/ctn.)
Quantity 1-12 F.O.B. Northbrook, Illinois 18 & up F.O.B. East Coast

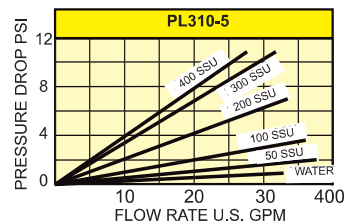


SERFILCO PLEATED PAPER CARTRIDGES

For cartridges of other dimensions or cross reference to other brands, request Bulletin M-205 and Price Sheet M-204.

MODEL 1-1/8" I.D. x 2-5/8" x 10" lg.	MICRON
PL310-1-11B	1
PL310-5-11B	5
PL310-10-11B	10

30 & up shipped full carton quantity (30/ctn.)
Quantity 6-29 F.O.B. Northbrook, Illinois 30 & up F.O.B. East Coast



MODEL 1-5/8" I.D. x 4" x 36 1/2" lg.	MICRON
PL436-2-4	2

PL436 has exposed pleats, PP core, plastisol end caps.
F.O.B. Northbrook, Illinois

TYPE 'C' PURE COTTON



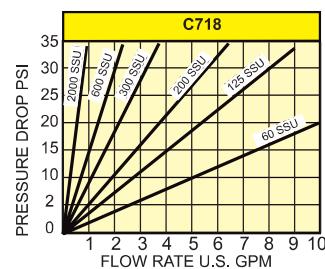
C718

SERFILCO "SPUN-WOUND" COTTON THREAD CARTRIDGES

Has a relatively high flow rate and dirt holding capacity. Retains resiliency and will absorb water. Typical applications: Hydraulic, fuel, quench and diesel engine lube oils; machine tool coolants, solvents, etc. Spun wound all new cotton thread.

MODEL (MATERIAL)	MICRON
C718 (Cotton/stl. core)	10

2-1/8" I.D. x 6-3/4" O.D. x 18" lg.
4 & up shipped full carton quantity (4/ctn.)
Quantity 1-3 F.O.B. Northbrook, Illinois
12 & up F.O.B. East Coast





2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

TYPE 'F' FULLER'S EARTH - Highest quality.

Neutralizes oils which become acidic from long use. Metal encased and bag type.



FOR: FUEL, HYDRAULIC, INSULATING AND LUBRICATING OILS. JET FUELS, QUENCH, ROLLING AND SYNTHETIC HYDRAULIC OILS.

- **Outer retaining bag**
Made from medium permeable duck - strong, yet providing good penetration without sliming over.
- **Inner core fabric**
Stout, heat bonded polyester non-woven material.
Good permeability with orifice size designed to minimize migration.
- **Attapulgate LVM clay**
Especially extruded and calcined to improve porosity and adsorptive characteristics.
- **Packaging**
Each cartridge is poly bagged to prevent moisture contamination.
Metal canister F718C - Individually boxed and palletized.
Cotton bags F718 & F718-4 - Packed 4 per heavy double wall carton for maximum shipping protection.

15**COTTON BAG**

F718 (2-1/8" I.D. x 7" x 19-1/4" lg.)

Bag type to replace:

CFD 6825, Fram C727, Keene LEB 718,
Velcon CO-719B

F718-4 (2-1/4" I.D. x 6-3/4" x 18-1/4" lg.)

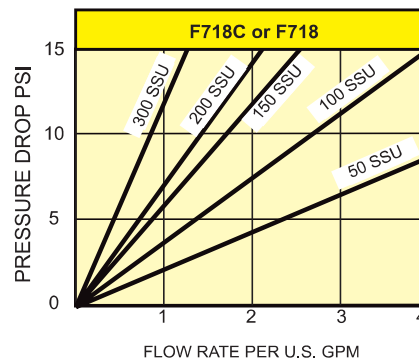
Bag type with permanent center tube to replace:
Velcon CO-718B

METAL CANISTER

F718-C (2-1/8" I.D. x 6-3/4" x 18" lg.)

Canister type to replace:

Banner FCC 18701, CFD 4603, Fram C766-1,
Hilco FFC-00, H-A 718-FEP, Keene D196,
LE 718, Velcon CO-718-CC

**TO ORDER, specify Model**

MODEL	DESCRIPTION
F718-C	METAL CANISTER
F718	COTTON BAG
F718-4	COTTON BAG

4 & up shipped full carton quantity.
Quantity 1-3 F.O.B. Northbrook, Illinois
4 & up F.O.B. East Coast.



EDM FILTER CARTRIDGES

310

M-209_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

Protect your investment - reduce costs with high quality replacement filter cartridges

- Designed for both wire EDM (D.I. water) and Ram/sinker EDM (oil) machines. Meets or exceeds OEM specifications.
- High efficiency filtration for removal of harmful spark erosion residue resulting in improved fluid flushing, cooling & insulating properties.
- Reduce downtime & extend the life of your deionized water or dielectric oil.
- Eliminate hot spots & arcing caused by contaminated dielectric fluids.
- Water resistant paper is phenolic resin impregnated and oven cured.

SPECIFICATIONS								
PART NUMBER	OUTSIDE DIA.	INSIDE DIA.	OVERALL LENGTH	SEAL	CORE	OUTSIDE BODY	BONDING	COMMENT
PL407-5-2	4"	1-1/16"	7-1/2"	Vellumoid	Steel	Plated	PVC	Agietron
PL614-5	6"	3-1/2"	14-1/2"	Buna N	Steel	Plated	PVC	Japax Facet CH 57 EDM
PL614-5-1	6"	1"	14-5/8"	Grommet	Steel	Plated	PVC	Facet C44 (w/handle)
PL614-5-1A	6"	1"	14-5/8"	Grommet	Plated	Plated	PVC	Facet C44P (w/handle)
PL614-5-2	6"	1-1/4"	14-5/8"	Grommet	Steel	Plated	PVC	Charmilles Agietron Facet C54 (w/handle)
PL614-5-2A	6"	1-1/4"	14-5/8"	Grommet	Steel	None	PVC	Facet C54 & CH54PL (w/handle)
PL614-5-2P	6"	1-1/4"	14-5/8"	Grommet	Plated	Plated	PVC	Sodick Charmilles Facet CH56PL (w/handle)
PL614-5-3	6"	1-1/4"	14"	Cork	Steel	Plated	PVC	Japax
PL614-5-5	6"	3-1/2"	14-1/2"	Buna N	Steel	None	PVC	Japax Facet C744
PL614-5-6	6"	3-1/2"	14-1/2"	Buna N	Plated	None	PVC	Japax
PL614-5-16	6"	1-1/4"	14-5/16"	Cork	Steel	Plated	PVC	Japax
PL614-5-16A	6"	1-1/4"	14-5/16"	Cork	Plated	Plated	PVC	Japax
PL614-5-16C	6"	1-1/4"	14-5/16"	Cork	Steel	None	PVC	Japax
PL614-3-20	6"	1-1/4"	14"	Cork	Plated	None	PVC	Japax (w/handle) 3 micron
PL614-5-20	6"	1-1/4"	14"	Cork	Plated	None	PVC	Edmas WF-8 (w/handle)
PL614-5-20A	6"	1-1/4"	14"	Cork	Plated	None	PVC	Japax (w/handle) Water Resistant Paper
PL614-5-20C	6"	1-1/4"	14"	Cork	Steel	None	PVC	Japax (w/handle)
PL614-5-26	6"	3-1/2"	14-1/2"	Buna N	Plated	None	Epoxy	Deionized Water Only
PL614-5-44A	6"	1-1/4"	14"	Vellumoid	Plastic	None	Epoxy	Epoxy Ends
C718	6-1/2"	2-1/8"	18"	Vellumoid	Steel	Sock	N/A	Depth-Cotton Fiber
F718-C	6-1/2"	2-1/8"	18"	Cork	Fiber	Plated	PVC	Clay (Fuller's Earth)_ Oil Acid Removal
PL718-5FP	6"	2-5/8"	18"	Vellumoid	Steel	Plated	PVC	Charmilles Sodick Elox Excello Spartatron
PL718-5-5A	6"	2-1/8"	18"	Vellumoid	Steel	Plated	PVC	Sodic Eltee Pulsitron Spartatron (w/handle)
PL718-5-14BP	6"	2-5/8"	17-7/8"	Buna N	Plated	Plated	PVC	Deionized Water Only
C815-2	7-1/2"	1-1/2"	15-1/8"	Vellumoid	Steel	Sock	N/A	Depth-Cotton Fiber



PL614-5



PL614-5-5



Protect your investment - reduce costs with high quality replacement filter cartridges

- Designed for both wire EDM (D.I. water) and Ram/sinker EDM (oil) machines. Meets or exceeds OEM specifications.
- High efficiency filtration for removal of harmful spark erosion residue resulting in improved fluid flushing, cooling & insulating properties.
- Reduce downtime & extend the life of your deionized water or dielectric oil.
- Eliminate hot spots & arcing caused by contaminated dielectric fluids.
- Water resistant paper is phenolic resin impregnated and oven cured.

15

DESIGN SPECIFICATIONS

PART NUMBER	OUTSIDE DIA.	INSIDE DIA.	OVERALL LENGTH	SEAL	CORE	OUTSIDE BODY	BONDING	COMMENT
PL1011-5	10"	1-3/4"	11"	Vellumoid	Plated	None	PVC	Le Blond Makino (w/handle)
PL1011-5-1	10-1/4"	1-3/4"	11"	Vellumoid	Plated	Plated	PVC	Le Blond Makino (w/handle)
PL1012-5	10-1/4"	1-3/4"	11-5/8"	Buna N	Plated	None	PVC	Le Blond Makino (w/handle)
PL1014	10-1/4"	1-1/4"	13-1/2"	Cork	Plated	None	PVC	Elox CNC Mitsubishi Hitachi
PL1014-3	10-1/4"	1-1/4"	13-1/2"	Cork	Plated	None	PVC	Mitsubishi 3 micron
PL1014-5	10-1/4"	1-1/4"	13-1/2"	Cork	Plated	None	PVC	Mitsubishi (w/handle)
PL1014-5-1	10-1/4"	1-1/4"	13-1/2"	Cork	Plated	Plated	PVC	Mitsubishi Diafilpa (w/handle)
PL1016-5	10-1/4"	1-13/16"	16"	Vellumoid	Plated	Plated	Epoxy	Brother-Racon
PL1214	11-13/16"	1-3/4"	13-1/2"	Vellumoid	Plated	Plated	Epoxy	Hitachi
PL1220-3	11-13/16"	1-5/32"	19-5/8"	None	Plated	Plated	Epoxy	Mitsubishi 3 micron
PL1220-5	11-13/16"	1-5/32"	19-5/8"	None	Plated	Plated	Epoxy	Mitsubishi
PL1220-20	11-13/16"	1-1/8"	19-5/8"	None	Plated	Plated	Epoxy	Mitsubishi
PL1220-5-1	11-13/16"	1-1/8"	19-5/8"	None	Steel	Plated	Epoxy	Mitsubishi
PL1220-5-2	11-13/16"	2-1/4"	20"	None	Plated	Plated	Epoxy	Mitsubishi Bi-directional Flow
PL1312	13-1/2"	1-7/8"	12"	Vellumoid	Plated	Plated	Epoxy	Elox-Fanuc
PL1318-3	13-1/2"	1-7/8"	18"	Vellumoid	Plated	Plated	Epoxy	Elox-Fanuc 3 micron
PL1318-5	13-1/2"	1-7/8"	18"	Vellumoid	Plated	Plated	Epoxy	Elox-Fanuc flat cover/bottom
PL1318-10	13-1/2"	1-7/8"	18"	Vellumoid	Plated	Plated	Epoxy	Elox-Fanuc, 10 micron flat cover/bottom
PL1318-5-1F	13-1/2"	1-7/8"	18"	Buna N	Plated	Plated	Epoxy	Fanuc cone cover/flat bottom
PL1318-5-1S	13-1/2"	1-7/8"	18"	Buna N	Plated	Plated	Epoxy	Sodick flat cover/cone bottom



PL1011-5



PL 1220-5



CHEMICAL RESISTANCE GUIDE FILTER MEDIA

312

TM-110_A

2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

MATERIAL CODES

FILTER MEDIA	CORE MATERIAL
B - Natural Cotton	A - 304 stainless steel S - 316 stainless steel T - Tinned steel U - Polypropylene
C - Bleached Cotton ^{1,2}	
G - Glass Fiber	
H - Hi Perf	
K - Polyester (Dacron®)	
N - Nylon	
O - Acrylic (Orlon®)	
P - Polypropylene, Fibrillated ^{1,2}	
R - Rayon	
U - Polypropylene	
W - Polypropylene ¹ , Potable Water	

NUMERICAL EXPONENTS INDICATE FOLLOWING CONCENTRATIONS		
1. 1%	5. 30%	9. 80%
2. 5%	6. 40%	10. Dilute
3. 10%	7. 50%	11. 96%
4. 20%	8. 5 to 80%	12. Fuming

OK - Acceptable to use media to its maximum recommended operating temperature.

Number - Maximum recommended operating temperature (°F).

NR - Not recommended.

¹ Meets FDA regulations for potable water

² Free of "sizing" and yarn "finish" substances

® Dacron and Orlon are registered trademarks of DuPont.

	B & C		G		H		K		N		O		P, U & W		R	
	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core
Acetaldehyde	200	S,A	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acetic acid, 20%	85	135U,S,A	OK	S	100 ⁸	100U,S,A	200 ²	140U,S,A	—	—	OK ⁸	130U,S,A	OK	135U,S,A	OK ²	135U,S
Acetic acid, glacial	70	135U,S,A	OK	S	70	70U,S,A	200	140U,S,A	—	—	OK	130U,S,A	150	135U,S,A	70	70U,S,T
Acetic anhydride	NR	NR	—	—	NR	NR	NR	NR	—	65	NR	NR	70	135U,S,A,T	—	—
Acetone	OK	80U,S,A,T	OK	S	NR	NR	OK	80U,S,A,T	OK	—	OK	S,A,T	70	70U,S,A,T	OK	S,A,T
Aluminum chloride	130 ²	130U,S,A	—	—	70 ²	70U,S,A	70 ²	70U,S,A	130 ²	130U,S,A	70 ²	70U,S,A	195 ²	135U,S,A	130 ²	130U,S,A
Aluminum fluoride	NR ²	NR	—	—	—	—	NR ²	NR	65U,S,A	—	—	—	135 ²	135U	—	—
Aluminum sulfate	70	70U,S,A	—	—	NR	NR	65	65U,S,A	65U,S,A	—	70	70U,S,A	175	135U,S,A	NR ³	NR
Ammonia, aqueous	NR	NR	NR	NR	NR	NR	—	—	65U,S,A	—	100	S,A,T	—	—	—	—
Ammonium carbonate	OK ³	140U,S,A	—	—	—	—	—	—	120 ³	—	—	—	OK ³	135U,S,A	—	—
Ammonium chloride	—	—	—	—	—	—	70 ³	70U,S,A	NR	—	—	—	135 ³	135U	—	—
Ammonium hydroxide	100 ³	100U,S,A	NR	NR	—	—	65 ³	65U,S,A	NR	00 ³	—	—	195 ³	135U,S,A	70	70U,S,A
Ammonium nitrate	100 ²	100U,S,A	—	—	OK ²	140U,S,A	65 ²	65U,S,A	100U,S,A	—	OK ²	140U,S,A	OK ²	135U,S,A	100 ²	S,A,T
Ammonium phosphate	—	—	—	—	—	—	65	65U,S,A	NR	—	—	—	135	135U,S,A	—	—
Ammonium sulfate	—	—	—	—	—	—	65 ²	65U,S,A	NR	95 ²	—	—	OK ²	195U,S,A	—	—
Amyl acetate	200	S,A,T	—	—	70	S,A,T	NR	NR	S,A,T	65	70	S,A,T	NR	NR	OK	S,A
Amyl alcohol	200	S,A,T	—	—	—	—	65	S,A,T	S,A,T	65	—	—	65	S,A,T	OK	S,A,T
Aniline	—	—	—	—	—	—	NR	NR	S,A,T	65	—	—	175	S,A,T	—	—
Aqua regia	NR	NR	—	—	—	—	NR	NR	S,A,T	NR	—	—	70	70U	—	—
Arsenic acid	NR	NR	OK	S	100	100U,S,A	NR	NR	NR	NR	70	70U,S,A	OK	95U,S,A	—	—
Barium hydroxide	—	—	—	—	—	—	—	—	NR	—	—	—	—	—	—	—
Barium chloride	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Barium sulfate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Benzaldehyde	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Benzene (benzol)	OK	S,A,T	OK	S,A	NR	NR	65	S,A,T	S,A,T	OK	65	S,A,T	NR	NR	OK	S,A,T
Benzene sulfonic acid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Benzoic acid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Borax (sodium borate)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Boric acid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bromine water	NR	NR	—	—	—	—	NR	NR	NR	NR	—	—	NR	NR	—	—



CHEMICAL RESISTANCE GUIDE FILTER MEDIA

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2900 MacArthur Blvd. Northbrook, IL. USA 60062 WWW.SERFILCO.COM (800) 323 - 5431

NUMERICAL EXPONENTS INDICATE FOLLOWING CONCENTRATIONS			OK - Acceptable to use media to its maximum recommended operating temperature. Number - Maximum recommended operating temperature (°F). NR - Not recommended.
1. 1%	5. 30%	9. 80%	
2. 5%	6. 40%	10. Dilute	
3. 10%	7. 50%	11. 96%	
4. 20%	8. 5 to 80%	12. Fuming	

	B & C		G		H		K		N		O		P, U & W		R	
	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core
Butyl acetate	OK	U,A,T	OK	S	OK	S,A	65		OK,S,A		OK,S,A		195S,A	S,A	—	—
Butyl alcohol	OK	140U,S,A,T	OK	S	OK	S,A,T	65		OK,U,S,A,T		OK,U,S,A,T		65S,A	65U,S,A,T	—	—
Butyl amine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Butyl phthalate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Butyric acid	70	70U,S,A	—	—	—	—	—	195	NR	U,S,A	—	NR	65	—	65U,S,A	—
Cadmium cyanide	200	140U,A,T	NR	NR	OK	140U,A,T	—	—	—	—	NR	—	OK	NR	135U,A,T	140
Calcium bisulfite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Calcium chloride	NR	NR	—	—	OK	S	195	NR	S	—	OK	NR	OK	S	NR	NR
Calcium hypochlorite	NR	NR	NR	NR	140	140U	—	—	NR	—	NR	NR	135NR	135U	—	—
Calcium nitrate	NR	NR	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Calcium phosphate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Calcium sulfate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Carbon disulfide	70	S,A,T	—	—	65	S,A,T	NR	65	NR	—	65S,A,T	—	NR	—	—	—
Carbon tetrachloride	OK	100U,S	100	S	OK	S	65	OK	U,S	—	OK	U,S	95	S	95U,S	OK
Carbonic acid	100	100U,S	—	—	100	S,A	NR	—	95	NR	100U,S,A	—	OK	S	135U,S,A	100
Cellosolve	NR	NR	—	—	—	—	NR	—	NR	—	—	—	NR	NR	—	—
Chloroacetic acid	NR	NR	—	—	—	—	NR	—	NR	—	—	—	70	—	70U	—
Chlorine water	NR	NR	—	—	NR	NR	—	—	—	—	NR	—	NR	NR	NR	—
Chlorobenzene	195	S,A	OK	S	195	S,A	195	195S,A	—	—	195S,A	—	NR	S,A	NR	195
Chloroform	OK	65U,S,A	—	—	OK	70U,S,A	65	NR	U,S,A	—	OK	NR	70U	—	70U,S,A	OK
Chlorosulfonic acid	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	NR	—	—
Chromic acid up to 30%	NR	NR	—	—	—	—	—	—	—	—	NR	—	NR	NR	NR	—
Chromic acid, 50%	—	—	—	—	95	S	NR	NR	NR	—	—	NR	—	—	—	—
Citric acid	135	135U,S,A	OK	S,A	NR	NR	65	NR	U,S,A	—	OK	NR	OK	S	135U,S,A	150
Copper chloride	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Copper cyanide	NR	NR	NR	NR	—	—	—	—	—	—	—	—	OK	—	135U,S,A	135
Copper nitrate	NR	NR	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Copper sulfate	135	135U,S	OK	S,A	OK	130U,S,A	65	NR	U,S,A	—	OK	NR	OK	U,S,A	135	135U,S,A
Cresol	OK	S	80	U	70	S	65	—	S	—	NR	—	—	NR	—	185
Cyclohexane	65	S,A,T	—	—	NR	NR	65	195	S,A,T	—	NR	S,A,T	NR	NR	NR	65
Decalin	—	—	—	—	—	—	—	—	—	—	—	—	NR	NR	—	—
Detergents	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diesel fuel	OK	115U,S,A,T	OK	S,A	OK	S,A,T	65	OK	U,S,A,T	—	NR	U,S,A,T	120NR	120U,S,A,T	OK	S,A,T
Dowtherm	65	65U,S,A,T	OK	S,A	—	—	—	—	—	—	—	—	70	—	70U,S,A,T	—
Ethanolamine	65	65U,S,A,T	—	—	—	—	—	—	—	—	—	—	70	—	70U,S,A,T	—
Ether	OK	S,A,T	OK	S,A	OK	S,A,T	65	—	S,A,T	—	NR	—	NR	NR	NR	—
Ethyl acetate	OK	115U,S,A,T	OK	S,A	65	S,A,T	65	65	U,S,A,T	—	NR	—	120NR	120U,S,A,T	65	S,A,T
Ethyl alcohol (ethanol)	OK	120U,S,A,T	OK	S	—	—	OK	195	U,S,A,T	—	—	—	OK	—	135U,S,A,T	OK
Ethylene dichloride	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylene glycol	OK	120U,S,A,T	OK	S,A	OK	70U,S,A,T	OK	65	U,S,A,T	—	65U,S,A,T	—	OK	U,S,A,T	OK	S,A,T
Ferric chloride	NR	NR	140	U	95	95U,S,A,T	140	65	140U	—	195	65U	OK	U,S	195U	NR
Ferric hydroxide	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	NR	—	—
Ferric nitrate	NR	NR	—	—	NR	NR	65	—	65U	S	70	—	OK	U,S	195U	NR
Ferric sulfate	65 ²	65U,S,A	OK	S,A	NR ²	NR	65 ²	65	U,S,A	—	70	U,S,A	OK	U,S	195U	NR
Ferrous chloride	NR	NR	—	—	NR	NR	65	65	65U	—	65	65U	OK	65U	135U	65
Ferrous sulfate	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	NR	—	—
Fluoboric acid	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	NR	—	—
Fluosilicic acid	NR	NR	—	—	—	—	NR	—	NR	—	—	—	70	—	70U	—
Formaldehyde	70	70U,S,70A,T	OK	S,A	OK	130U,S	65 ³	65	U,S,A	—	65	U,S,A	OK	U,S	135U,S	65 ³
Formic acid	NR ³	NR	OK	S,A	OK ³	140U	OK ¹⁰	NR	U,150A	—	100 ³	NR	OK	U	135U,70A	NR
Freons (fluorocarbons)	200	S,A,T	OK	S,A	OK	S,A,T	—	95	—	—	OK	S,A,T	70S,A	70U,S,A,T	195	S,A,T
Fuel oils	OK	S,A,T	—	—	OK	S,A,T	OK	OK	S,A	—	OK	S,A,T	70S,A	TS,A,T	OK	S,A,T
Furfural	65	S,A,T	—	—	—	—	65	—	S,A	—	—	—	NR	NR	—	—
Gasoline	OK	S,A,T	—	—	OK	S,A,T	—	OK	—	—	OK	S,A,T	NR	NR	NR	NR
Glycerine (Glycerol)	70	70U,S,A,T	—	—	NR	NR	—	—	—	—	70	—	70S,A	135U,S,A,T	—	—
Heptane	—	—	—	—	—	—	—	—	—	—	—	—	NR	NR	—	—
Hexane	OK	120U,S,A,T	OK	S,A	—	—	65	65	U,S,A,T	—	65	U,S,A,T	140	—	140U,S,A,T	OK
Hydrobromic acid, 20%	—	—	140	U	70 ⁷	70U	65 ³	NR	65U	—	70 ⁷	NR	140 ⁷	70U	140U	NR
Hydrochloric acid, 0-25%	—	—	140	U	OK ⁵	130U	NR	NR	NR	—	OK ⁵	NR	OK	130U	135U	NR
Hydrochloric acid, 25-37%	—	—	140	U	OK ⁵	130U	—	—	—	—	130 ⁵	—	OK	130U	—	—



CHEMICAL RESISTANCE GUIDE FILTER MEDIA

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NUMERICAL EXPONENTS INDICATE FOLLOWING CONCENTRATIONS			OK - Acceptable to use media to its maximum recommended operating temperature. Number - Maximum recommended operating temperature (°F). NR - Not recommended.
1. 1%	5. 30%	9. 80%	
2. 5%	6. 40%	10. Dilute	
3. 10%	7. 50%	11. 96%	
4. 20%	8. 5 to 80%	12. Fuming	

	B & C		G		H		K		N		O		P, U & W		R	
	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core
Hydrofluoric acid, 10%	70	70U	NR	NR	140	140U	65	65U	NR	NR	140	140U	135U	OK	65	65U
Hydrofluoric acid, 30%	NR	NR	NR	NR	—	—	—	—	—	—	—	—	—	—	—	—
Hydrofluoric acid, 50%	NR	NR	NR	NR	70	70U	65	65U	—	—	70	70U	70U70	—	NR	NR
Hydrogen peroxide, 30%	NR	NR	OK	S,A	100	65U,S,A	65	65U,S,A	NR	NR	100	65U,S,A	100U	OK	100 ²	95U,S,A
Hydrogen peroxide, 50%	NR	NR	OK	S,A	—	—	65 ²	65U	NR	NR	—	—	70U,S,A ²	—	NR ²	NR
Kerosene	OK	65U	OK	S,A	NR	NR	OK	65U,S,A	OK	OK	OK	S,A,65U	S,A,65 ²	—	OK	S,A,T
Ketones	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lactic acid	NR	NR	140	U	OK	140U	65	65U	65U65	—	OK	140U	135U	OK	65	65U
Lead acetate	—	—	—	—	—	—	—	—	—	—	—	—	135U	OK	—	—
Lubricants	OK	65U,S,A,T	—	—	OK	S,A,T	—	—	65U,S,A ²	OK	OK	S,A,70U	S,A,70 ²	OK	S,A,T	—
Magnesium chloride	65	65U,S	—	—	NR	NR	65	65U,S	65U,S	—	70	70U,S	135U	OK	65	S
Magnesium hydroxide	65	65U,S	—	—	—	—	—	—	—	—	—	—	135U	OK	—	—
Magnesium nitrate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Magnesium sulfate	65	65U,S,A	—	—	—	—	—	—	—	—	—	—	135U	OK	65	65U,S,A
Methyl alcohol (methanol)	OK	120U,S,A,T	OK	S,A	OK	U,S,A,T	OK	U,S,A,T	S,A,OK	—	OK	U,S,A,T	S,A,OK	OK	OK	U,S,A,T
Methyl chloride	—	—	—	—	—	—	—	—	212S	OK	—	—	NR	NR	—	—
Methyl ethyl ketone	OK	130U,S,A,T	OK	S	NR	NR	65	65U,S	140U	OK	OK	S,A,70U	S,A,70 ²	—	OK	140U,S,A,T
Methylene chloride	OK	200S&A,95T	212	S,A	NR	NR	95	95S,A	212S	OK	OK	212S & A	NR	—	—	—
Naphtha	OK	65U,S,A,T	OK	S,A	OK	S,A,T	65	65U,S	65U,S	OK	OK	S,A,65U	S,A,65 ²	OK	70U,S,A,T	—
Nickel chloride	70	70U	140	U	OK	70U	65	65U	NR	NR	70	70U	140U40	95	95U	—
Nickel sulfate	70	70U,S,A	OK	S,A	OK	70U,S,A	65	65U,S,A	NR	NR	70	70U,S,A	140U	95	140U,S,A	—
Nitric acid, 10%	70	70U,S,A	OK	S,A	OK	130U,S,A	205	130U,S,A	NR	NR	200	130U,S,A	135U	65	140U,S,A	—
Nitric acid, 20%	NR	NR	250	S,A	OK	130U	65	65U	—	—	145	130U	135U35	NR	NR	—
Nitric acid, 50%	NR	NR	250	S,A	70	70U	65	65U	—	—	70	70U	70U & 70	NR	NR	—
Nitric acid (concentrate)	NR ¹²	NR	125	S,A	NR ¹²	NR	NR ¹²	NR	—	—	NR ¹²	NR	NR ¹²	NR	NR	—
Nitrobenzene	NR	NR	—	—	NR	NR	195	70U,S	U,S195	—	195	70U,S	70U,S70	195	S	—
Oil, vegetable	OK	90U,S,A,T	—	—	NR	NR	65	65U,S,A	NR	NR	NR	NR	70U,S70	OK	100U,S,A	—
Oil, sour crude	140	65U,S,A,T	—	—	OK	S,A,T	OK	65U,S	65U,S	OK	OK	S,A,70U	S,A,70 ²	OK	70U,S,A,T	—
Oleic acid	70	70U,S	—	—	OK ²	70U,S	65 ²	65U,S	NR	NR ²	70 ²	70U,S	135U80 ²	95 ²	140U,S	—
Oxalic acid	NR	NR	—	—	OK	65U,S,A	NR ²	NR	NR	NR ²	65	65U,S	135U80 ²	95 ²	140U,S,A	—
Perchloroethylene	OK	65U,S,A,T	—	—	OK	S,A,T	OK	65U,S,A	S,A,OK	—	OK	S,A,65U	S,A,70 ²	OK	S,A,T	—
Phenol	OK	65U,S	—	—	NR	NR	—	—	NR	NR	NR	NR	65U,S	205	S	—
Phosphoric acid, 0-50%	70 ²	70U,S,200A	212	A	OK ²	210A,S	205 ²	205A,S	65U,S	—	210 ²	210A,S	210A	135 ²	135S & A	—
Phosphoric acid, 50-100%	NR	NR	140	U	OK ²	140U	—	—	NR	NR ²	150 ²	140U	135U35 ²	65 ²	65U & A	—
Potassium bromide	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	—	—	—
Potassium carbonate	—	—	—	—	—	—	—	—	—	—	—	—	NR	—	—	—
Potassium chlorate	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	—	—	—
Potassium chloride	70 ²	135U,S,A	—	—	NR ²	NR	65 ²	65U,S,A	—	—	65 ²	65U,S	135U,S70 ²	65 ²	140U	—
Potassium cyanide	OK ²	120U,S,A	—	—	OK	135U,S,A	—	—	—	—	NR ²	NR	135U,S70 ²	OK ²	S,A	—
Potassium dichromate	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	—	—	—
Potassium hydroxide	OK ²	120U,S,A	NR	NR	OK ²	130U,S,A	120 ²	120U,S	140U	OK ²	195 ²	130U,S	135U,S70 ²	OK ²	140U,S,A	—
Potassium nitrate	NR	NR	—	—	—	—	—	—	—	—	—	—	NR	—	—	—
Potassium permanganate	NR ²	NR	—	—	—	—	NR ²	NR	—	—	—	—	135U,S70 ²	NR ²	NR	—
Potassium sulfate	70 ²	70U,S,A	—	—	NR ²	NR	65 ²	65U,S,A	—	—	NR ²	NR	135U,S70 ²	65 ²	65U,S,A	—
Propyl alcohol	OK	120U	—	—	—	—	—	—	—	—	—	—	65U,S,A ²	—	—	—
Silver nitrate	NR	NR	OK	S,A	OK	130U,S,A	NR	NR	NR	NR	OK	130U,S	135U,S70 ²	NR	NR	—
Soaps	—	—	—	—	—	—	—	—	—	—	—	—	135U,S70 ²	—	—	—
Sodium acetate	65	65U,S,A	—	—	—	—	65	65U,S,A	—	—	—	—	135U,S70 ²	65	65U,S,A	—
Sodium bicarbonate	65	65U,S,A,T	—	—	NR	NR	65	65U,S,A,T	—	—	135	135U,S	135U,S70 ²	65	65U,S,A	—
Sodium bisulfate	NR	NR	—	—	NR	NR	65	65U	—	—	70	70U	135U35	NR	NR	—
Sodium carbonate	65	65U,S,A	—	—	65	65U,S,A	65	65U,S	140U	OK	65	65U,S	140U,S70 ²	—	—	—
Sodium chlorate	NR	NR	—	—	—	—	65	65U,S,A	—	—	—	—	135U,S70 ²	—	—	—
Sodium chloride	OK	120U	—	—	OK ²	140U	OK ²	140U	140U	OK ²	OK	140U	135U	OK ²	140U	—
Sodium cyanide	OK	120U,S,A	—	—	OK	130U,S,A	NR	NR	140U	OK	NR	NR	135U,S70 ²	NR	NR	—
Sodium hydroxide, 20%	65	65U,S,A	NR	NR	—	—	65 ²	65U,S	140U	OK	—	—	135U,S70 ²	NR	NR	—
Sodium hydroxide, 50%	NR ²	NR	NR	NR	OK ²	130U,S,A	—	—	—	—	NR ²	NR	135U,S70 ²	—	—	—
Sodium hypochlorite	NR	NR	NR	NR	NR ²	NR	65 ²	65U,S	95U,S	—	NR	NR	110U80 ²	NR ²	NR	—
Sodium nitrate	65	65U,S,A	OK	S,A	NR	NR	65	65U,S	95U,S	—	135	135U,S	135U,S70 ²	65	65U,S,A	—
Sodium silicate	65	65U,S,A,T	—	—	—	—	65	65U,S,A,T	—	—	—	—	135U,S70 ²	65	S,A,T	—
Sodium sulfate	70	70U,S,A	OK	S,A	NR	NR	65	65U,S	95U,S	—	135	135U,S	135U,S70 ²	65	65U,S,A	—

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FOLLOWING CONCENTRATIONS

1. 1%	5. 30%	9. 80%
2. 5%	6. 40%	10. Dilute
3. 10%	7. 50%	11. 96%
4. 20%	8. 5 to 80%	12. Fuming

OK - Acceptable to use media to its maximum recommended operating temperature.
Number - Maximum recommended operating temperature (°F).
NR - Not recommended.

	B & C		G		H		K		N		O		P, U & W		R	
	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core	Media	Core
Sodium sulfide	65	65U,S	—	—	NR	NR	65	65U,S	—	—	135	135U,S	170	135U,S	65	65U,S
Stannic chloride	65	65U	—	—	—	—	65 ²	65U	65 ²	65U	—	—	70 ⁴	70U	65 ²	65U
Sulfuric acid, 0-10%	100 ²	100U,S	OK	S	145 ²	145U,S	140 ²	140U,S	—	—	145 ²	145U,S	OK ³	135U,S	100 ²	100U,S
Sulfuric acid, 10-75%	NR ⁷	NR	OK	S	65 ⁷	65U	NR ¹¹	NR	NR	NR	65 ⁷	65U	135 ⁷	135U	NR ¹¹	NR
Sulfuric acid (conc.)	NR ¹²	NR	100	S	NR ¹²	NR	NR ¹²	NR	NR	NR	NR ¹²	NR	65 ¹¹	65U,S,A	NR ¹²	NR
Sulfurous acid	NR	NR	140	U	OK	135U	NR	NR	NR	NR	OK	135U	135	135U	—	—
Tannic acid	65	65U,S,A	OK	S,A	OK	135U,S,A	65 ³	65U,S,A	65 ³	65U,S,A	OK	135U,S,A	OK	135U,S,A	135	135U,S,A
Tartaric acid	65	65U,S	—	—	NR	NR	65	65U,S	—	—	135	135U,S	145	135U,S	—	—
Tetrahydrofurane	65	65U,S,A	OK	S,A	NR	NR	65	S,A	95	70U,S,A	NR	NR	70	65U,S,A	OK ³	70U,S,A
Toluene (toluol)	OK	110U,S,A	OK	S,A	NR	NR	65	65U,S,A,T	OK	120U,S,A,T	OK	S,A,T	120	110U,S,A,T	OK	S,A,T
Trichloroethylene	OK	S,A	—	—	NR	NR	65	S,A	65	65U,S,A	OK	S,A	NR	NR	OK	S,A
Triethanolamine	65	65U,S,A,T	—	—	—	—	65	65U,S,A,T	—	—	—	—	70	65U,S,A,T	—	—
Turpentine	OK	65U,S,A,T	OK	S,A	95	S,A,T	65	65U,S,A,T	OK	S,A,T	OK	S,A,T	70	65U,S,A,T	OK	S,A,T
Urea	70	T	—	—	—	—	—	—	—	—	—	—	—	—	65	T
Vinegar	95	95U,S,A	—	—	NR	NR	—	—	NR	NR	NR	NR	135	135U,S,A	100	100U,S,A
Water, deionized	—	—	—	U	OK	—	—	—	—	—	—	—	OK	U,S	—	—
Water, sea (salt)	OK	120U	140	U	OK	135U	140	140U	135	135U	240	135U	OK	135U	140	140U
Xylene (xylol)	OK	S,A,T	—	—	NR	NR	OK	S,A,T	OK	S,A,T	OK	S,A,T	NR	NR	OK	S,A,T
Zinc chloride	—	—	—	—	—	—	—	—	—	—	—	—	120	120U	—	—
Zinc sulfate	—	—	OK	S,A	NR	NR	—	—	NR	NR	OK	U,S,A	OK	U,S,A	—	—

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7 REASONS

FOR USING DEPTH FILTER
CARTRIDGES

- TRUE DEPTH FILTRATION** - wound filter cartridges provide selective particle retention. They are manufactured to provide true depth filtration deficient filtering throughout the path of the fluid. Winding creates diamond-shaped openings that become progressively smaller toward the center tube, to trap progressively smaller particles. Large particles never reach small openings.
- LONGER SERVICE LIFE** - because the wound cartridge so successfully resists clogging, it's not uncommon for a set of cartridges to filter many millions of gallons of fluid before replacement. Fewer filter changes obviously save both labor and materials. More important is that production equipment is shut down less often for filter cartridge service. Such facts are important considerations in selecting the kind of filtration system you install.
- CHEMICAL AND TEMPERATURE COMPATIBILITY** - cartridge windings are made in a variety of materials - polypropylene, nylon, cotton, rayon, orlon and glass to name a few, and other materials on special order. Cores are of polypropylene, stainless steel or tinned steel as standard materials. Various materials also have different temperature tolerances. By selecting the right materials for your needs, you're assured of complete chemical and temperature compatibility.
- Ease of service - depth cartridges do not require highly trained personnel for service. Replacement can be done by almost anyone. On most



filter chambers, a top cover is removed, old cartridges are lifted out and new ones are set in place. No solution is lost from the tank. Changing can be done much quicker than filters that use loose media.

- POLLUTION ABATEMENT** - cartridges present no liquid or wastewater pollution problem: spent cartridges are disposed of as solid waste. Where it is necessary to treat them for toxicity or to neutralize them, it can be done in place, with cartridges still in the chamber.
- WIDE CHOICE OF POROSITIES** - wound cartridges reject particles from as low as 0.5 micron to 100 micron. This wide range of porosities expands the customer's ability to tailor his filtration system to his specific need, to select exactly the right cartridge, whether for single pass filtration or recirculation filtration.
- MODULAR DESIGN** - most filter chambers designed for wound cartridges can accommodate several modular sizes of cartridges in diameters of 2.5 inches and standard lengths of 6, 10, 20, 30, and 40 inches. Thus, a chamber might be fitted with 36 10-inch cartridges, or 12 30-inch units, or a combination of more than one size. The choice is the customer's, based on economics and ease of changeover; but filtration efficiency is not impaired, regardless of cartridge size.