

SERFILCO®

MEGA-FLO® FILTRATION SYSTEMS

BULLETIN
F-304D
NOV. 2002

Compact, high flow, efficient and durable systems designed to handle a variety of solutions including —

Electroplating, Printed Circuit Board, Waste and Water Treat, Fume Scrubber, Cooling Tower Reservoir and more!



*Typical filter chamber/
carbon chamber arrangement*

FEATURES

- **High flow rate** — 8,500 - 21,000 GPH
- **Non-metallic, corrosion resistant**
PVC construction (to 140° F) with polypropylene or CPVC pump
PPP high temperature polypropylene construction (to 180° F) with polypropylene or CPVC pump
(See a chemical resistance guide.)
- **High capacity** — to 130 cartridge (455 sq. ft. of solids holding capacity)
- **Optional 21 - 84 lb. capacity carbon chamber**
- **Optional 30 gallon slurry tank**
- **Standard NEMA 4X motor starter with overload protection**

BENEFITS

- **Easy cartridge changeout**
- **Improve finished goods and process quality, minimize scrap and rework**
- **Reduce chemical consumption by maintaining solution quality**
- **Minimize bath maintenance and downtime with high flow continuous particle removal**

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 construction for applications to 140° F or SERFILCO's exclusive PPP polypropylene construction for applications to 180° F.

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 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.

SERFILCO — worldwide leader in service, dependability and design for over 40 years!

MEGA-FLO Specifications and ordering information

Standard MEGA-FLO systems include:

- PVC or PPP 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.
- NEMA 4X 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', 'H' or 'F'.

Series 'HE' single or double seal pumps are available in CPVC or PPP polypropylene. Series 'H' single or double seal pumps are constructed of CPVC. Both 'HE' and 'H' pumps feature EPDM elastomers and silicon carbide seals. Double seal pumps include SERFILCO's award winning DRI-STOP® seal 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 (140° F) or PPP polypropylene (180° F) construction. Accommodates 130 cartridges for PVC and 110 cartridges for PPP. Rugged machined shell, base and cover provide non-metallic solution contact.

The cover includes a 316 stainless steel reinforcing plate and lift handles. The chamber includes a 0 - 60 PSI gauge with guard assembly, vent valve assembly and EPDM elastomers.

PPP chamber with magnetic drive or mechanical seal pump

PRICE CODE NUMBER	FLOW GPH @ 60 Hz	MEDIA	PUMP HP (RPM)	PUMP TYPE **	FLANGE CONNS. SUCT. x DISCH.	DIMENSIONS L x W x H	SHIPPING WEIGHT Lbs.
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66 CARTRIDGE SYSTEMS (231 s. f. *)

PPJ66F2750	8,500	22 - 30"	5.0 (3450)	F	3" x 3"	32¾" x 22" x 60"	300
PPJ66HE450	9,000	22 - 30"	5.0 (3450)	HE	3" x 3"	25¼" x 22" x 60"	300
PPJ66H3250	12,000	22 - 30"	5.0 (1725)	H	3" x 3"	32¾" x 22" x 64"	325
PPJ66H4375	18,000	22 - 30"	7.5 (1725)	H	4" x 3"	32¾" x 22" x 64"	350

88 CARTRIDGE SYSTEMS (308 s. f. *)

PPJ88F2750	8,500	22 - 40"	5.0 (3450)	F	3" x 3"	32¾" x 22" x 70"	320
PPJ88HE450	9,000	22 - 40"	5.0 (3450)	HE	3" x 3"	25¼" x 22" x 70"	320
PPJ88H3250	12,000	22 - 40"	5.0 (1725)	H	3" x 3"	32¾" x 22" x 74"	345
PPJ88H4375	18,000	22 - 40"	7.5 (1725)	H	4" x 3"	32¾" x 22" x 74"	370

110 CARTRIDGE SYSTEMS (385 s. f. *)

PPJ110F2750	8,500	22 - 20" + 30"	5.0 (3450)	F	3" x 3"	32¾" x 22" x 80"	340
PPJ110HE450	9,000	22 - 20" + 30"	5.0 (3450)	HE	3" x 3"	25¼" x 22" x 80"	340
PPJ110H3250	12,000	22 - 20" + 30"	5.0 (1725)	H	3" x 3"	32¾" x 22" x 84"	365
PPJ110H4375	18,000	22 - 20" + 30"	7.5 (1725)	H	4" x 3"	32¾" x 22" x 84"	390
PPJ110H4310	21,000	22 - 20" + 30"	10 (1725)	H	4" x 3"	32¾" x 22" x 84"	415

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

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

MEGA-FLO Specifications and ordering information**PVC chamber with magnetic drive or mechanical seal pump**

PRICE CODE NUMBER	FLOW GPH @ 60 Hz	MEDIA	PUMP HP (RPM)	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 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 50"	280
PJ52F2910	12,000	26 - 20"	10.0 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 50"	295
PJ52HE450	9,000	26 - 20"	5.0 (3450)	HE	3" x 3"	25 ¹ / ₄ " x 22" x 50"	280
PJ52H3250	12,000	26 - 20"	5.0 (1725)	H	3" x 3"	32 ³ / ₄ " x 22" x 54"	305
PJ52H4375	18,000	26 - 20"	7.5 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 54"	330
PJ52H4310	21,000	26 - 20"	10.0 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 54"	355

78 CARTRIDGE SYSTEMS (273 s. f. *)

PJ78F2750	8,500	26 - 30"	5.0 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 60"	300
PJ78F2910	12,000	26 - 30"	10.0 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 60"	315
PJ78HE450	9,000	26 - 30"	5.0 (3450)	HE	3" x 3"	25 ¹ / ₄ " x 22" x 60"	300
PJ78H3250	12,000	26 - 30"	5.0 (1725)	H	3" x 3"	32 ³ / ₄ " x 22" x 64"	325
PJ78H4375	18,000	26 - 30"	7.5 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 64"	350
PJ78H4310	21,000	26 - 30"	10.0 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 64"	375

104 CARTRIDGE SYSTEMS (364 s. f. *)

PJ104F2750	8,500	26 - 40"	5.0 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 70"	320
PJ104F2910	12,000	26 - 40"	10.0 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 70"	335
PJ104HE450	9,000	26 - 40"	5.0 (3450)	HE	3" x 3"	25 ¹ / ₄ " x 22" x 70"	320
PJ104H3250	12,000	26 - 40"	5.0 (1725)	H	3" x 3"	32 ³ / ₄ " x 22" x 74"	345
PJ104H4375	18,000	26 - 40"	7.5 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 74"	370
PJ104H4310	21,000	26 - 40"	10.0 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 74"	395

130 CARTRIDGE SYSTEMS (455 s. f. *)

PJ130F2750	8,500	26 - 20" + 30"	5.0 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 80"	340
PJ130F2910	12,000	26 - 20" + 30"	10.0 (3450)	F	3" x 3"	32 ³ / ₄ " x 22" x 80"	355
PJ130HE450	9,000	26 - 20" + 30"	5.0 (3450)	HE	3" x 3"	25 ¹ / ₄ " x 22" x 80"	340
PJ130H3250	12,000	26 - 20" + 30"	5.0 (1725)	H	3" x 3"	32 ³ / ₄ " x 22" x 84"	365
PJ130H4375	18,000	26 - 20" + 30"	7.5 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 84"	390
PJ130H4310	21,000	26 - 20" + 30"	10.0 (1725)	H	4" x 3"	32 ³ / ₄ " x 22" x 84"	415

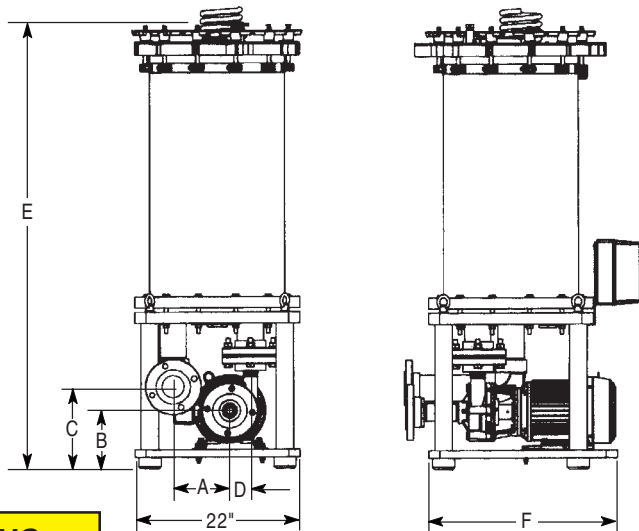
* s. f. is square feet of surface area or solids holding capacity using Valuwound or Maxi-Depth filter cartridges. (See Bulletin M-109.) Order cartridges separately.

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

MEGA-FLO Dimensions and options

PUMP / HP	A	B	C	D	E†	F
'HE' / 5.0	7-5/8"	8"	11-3/4"	2-3/4"	59-3/4"	25-1/4"
'F' / 5.0	7-3/4"	7-3/4"	11-3/4"	2-1/2"	59-3/4"	32-3/4"
'F' / 7.5	7-3/4"	7-3/4"	11-3/4"	2-1/2"	59-3/4"	32-3/4"
'H' / 5.0	6-7/8"	10-7/8"	16-5/8"	3-5/8"	64-1/4"	32-3/4"
'H' / 7.5	7-1/4"	10-1/8"	16-5/8"	3-1/4"	64-1/4"	32-3/4"
'H' / 10.0	6-3/4"	9-5/8"	16-5/8"	3-3/4"	64-1/4"	32-3/4"

† 'E' 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 or PPP polypropylene construction with PVC internal canisters for bulk granular carbon. Order carbon separately (See Bulletin M-305). The chamber includes a flow control valve, EPDM elastomers and all piping.

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

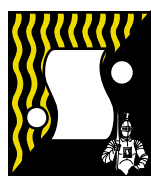
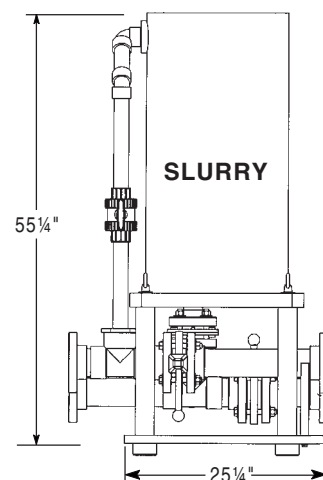
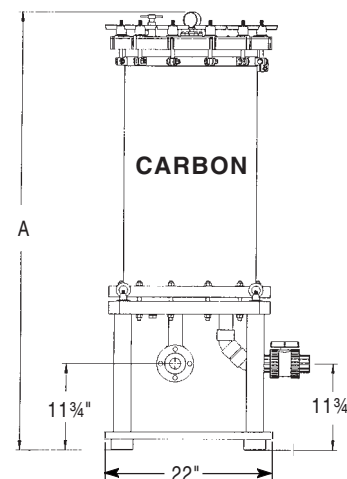
¹ Chamber mounted on MEGA-FLO base (add 16" to length [F] dimension above)

² Stand alone component as shown

³ Maximum recommended flow U.S. GPM

Slurry Tank: Useful for chemical mixing / additions, precoating or pump priming, this chamber is constructed of PVC or PPP 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	PPP
'HE'	4 ft.	88-3420-3P	88-3420-3PP
'F'		88-3429-3P	88-3429-3PP
'H' (5 HP)		88-3430-3P	88-3430-3PP
'H' (7.5 / 10 HP)		88-3431-3P	88-3431-3PP



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