

Section 5



Commercial & Industrial Products

Flow-Max[®] Commercial Quality Filter housings

Made in 316 stainless steel for increased durability.

Check out these many features and benefits:

- 100% stainless steel for durability.
- All 316 stainless steel construction.
- Convenient band clamp lid closure is standard for easy cartridge replacement.
- Pipe fittings are readily accessible for easy installation.
- Adjustable top plate accepts variable length cartridges for more options.
- Two drains provided for clean and dirty fluids.
- Legs and mounting tabs are available.



- Knife edge seals are provided at both ends of all DOE cartridges for superior performance.
- Rated for temperatures to 250° F. (No plastic holding rods.)
- Pressure rating to 150 psi.
- Housings for pressures to 300 psi are available.
- Optional sanitary connections.
- Models to accept DOE, 222 and cartridges with 226 end caps.
- Protective poly-coat over stainless steel standard finish.
- Electro-polishing is available.
- Standard, Premium Series and Jumbo models are in stock for immediate shipment.

Specifications

Material:	Multi-cartridge and Jumbo filter housings are constructed using 316L stainless steel.
Pressure rating:	Housings are rated for pressures to 150 psi (10 bar).
Temperature:	Filters are rated for temperatures to 250° F (121° C). Please consider cartridges to be used.
Gaskets & seals:	Buna-N is standard. Viton, EDPM and Teflon are available.
Finish:	Protective poly-coat over stainless is standard finish. Electro-polishing available.
Pressure drop:	Initial pressure drop is <1 psi at designed flow rates for housings only.
Cartridge types:	Housings are designed to accept DOE cartridges. Adapters for 222 & 226 cartridges available.

Models



4 & 5 round models



7 round



12 round



22 round



Premium Series

Flow-Max® Jumbo Cartridge Filter Housings

Single cartridge models for the most "user friendly" filtration possible!



Model "90"

Model "170"

Model "40"

Flow-Max® commercial quality jumbo cartridge filter housings in 316SS

Model No.	Max. Flow (GPM)	Cartridge Style	Number Of Cartridges	Pipe Size	Lid Closure	Shipping Wt. (Lbs.)
FMJCH40	50	"40"	1	2" NPT	V-Band	31
FMJCH90	100	"90"	1	2" NPT	V-Band	56
FMJCH170	150	"170"	1	2" NPT	V-Band	62

Note: Commercial quality jumbo cartridge housings are rated for pressures to 150 PSI (10 bar) and temperatures to 140°F with standard jumbo cartridges and 250°F using high temp cartridges. Pressure gauges included and installed on inlets and outlets.



User friendly Flow-Max jumbo cartridges are easy to install, easy to service and easy to replace!



Adjustable compression cap provides superior sealing for both ends of the jumbo cartridge.

Model
FMJCH170

Flow-Max[®] Jumbo Cartridge Filter Housings

ASME design models.



Flow-Max filter housing for single jumbo cartridges with swing-bolt lid closure, made to ASME design standards. Flange fittings are optional.



Flow-Max[®] jumbo cartridge



Flow-Max filter housing for multiple jumbo cartridges with swing-bolt lid closure, and davit, made to ASME design standards. Flange fittings are standard.

Flow-Max[®] jumbo cartridge housings, made to ASME standards

Model No.	Max. Flow (GPM)	Cartridge Style	Number Of Cartridges	Pipe Size	Lid Closure	Shipping Wt. (Lbs.)
FMJCH40-HD	50	"40"	1	2" NPT	Swing-Bolt	75
FMJCH90-HD	100	"90"	1	2" NPT	Swing-Bolt	100
FMJCH170-HD	150	"170"	1	2" NPT	Swing-Bolt	125
FMJCH3X170-HD	450	"170"	3	4" flange	Swing-Bolt & Davit	250
FMJCH5X170-HD	750	"170"	5	6" flange	Swing-Bolt & Davit	500
FMJCH8X170-HD	1,200	"170"	8	8" flange	Swing-Bolt & Davit	950

Note: Industrial quality jumbo cartridge housings are made to ASME design standard in 304SS. "U" stamp is available by special request and cost. Filter housings are rated for pressures to 150 PSI (10 bar) and temperatures to 140°F using standard jumbo cartridges and 250°F using high temp jumbo cartridges. ASME design housings come with pressure ports; pressure gauges are additional. 316SS is available by special quote.

Flow-Max[®] industrial quality filter housings for jumbo cartridges, made to ASME design standards and rated for pressures to 300 PSI.

Model No.	Max. Flow (GPM)	Cartridge Style	Number Of Cartridges	Pipe Size	Lid Closure	Shipping Wt. (Lbs.)
FMJCH40-HDHP	50	"40"	1	2" NPT	Swing-Bolt	95
FMJCH90-HDHP	100	"90"	1	2" NPT	Swing-Bolt	120
FMJCH170-HDHP	150	"170"	1	2" NPT	Swing-Bolt	140

Note: Industrial quality jumbo cartridge housings are made to ASME design standards in 304SS.

Optional "U" Stamp for ASME certification

Description

U stamp to certify ASME design compliance (available only with housings made to ASME standards).

Note: For ASME "U" stamp, add ASME after product code.

Package Filtration System

Standard and custom systems with Flow-Max jumbo cartridge filter housings.



Typical applications

- Cooling towers
- Surface water filtration
- Ground water remediation
- Waste water
- Process water
- General water filtration
- Small community drinking water systems

Parallel systems, fully assembled with filters, centrifugal separator and controls

Fully assembled systems include Flow-Max® jumbo cartridge filter(s), constructed in 316L stainless steel, centrifugal separator, inlet / outlet pressure gauges for separator and filter(s), electrically actuated automatic 1" purge valve for separator. 110v-1ph-60hz NEMA-3R control panel with purge clock & timer, schedule 80 PVC piping, 2" bronze isolation valve between separator outlet and filter inlet, fully mounted on painted, carbon Unistrut skid.

Part No.	Max Flow Rate GPM	Housing	Number	Filter Housings Pipe Size	Separator Pipe Size	Purge Pipe Size	Optional Pump HP
FMPFS-50	50	FMJCH-90	1	2"	1-1/4"	1"	2
FMPFS-75	75	FMJCH-90	1	2"	1-1/2"	1"	3
FMPFS-100	100	FMJCH-170	1	2"	2"	1"	5
FMPFS-150	150	FMJCH-170	2	2"	2-1/2"	1"	5
FMPFS-200	300	FMJCH-170	2	2"	3"	1"	7.5

Systems with filter housings, installed in series for two and three "step" filtration

Two step and three step models with centrifugal separator and all other specifications described above.

Part No.	Max Flow Rate GPM	Housing	Number	Filter Housing Pipe Size	Separator Pipe Size	Purge Pipe Size	Optional Pump HP
FMPFS-100-2-S	100	FMJCH-90	2	2"	1-1/4"	1"	3
FMPFS-100-3-S	100	FMJCH-90	3	2"	2"	1"	5
FMPFS-150-2-S	150	FMJCH-170	2	2"	2-1/2"	1"	5
FMPFS-150-3-S	150	FMJCH-170	3	2"	2-1/2"	1"	5

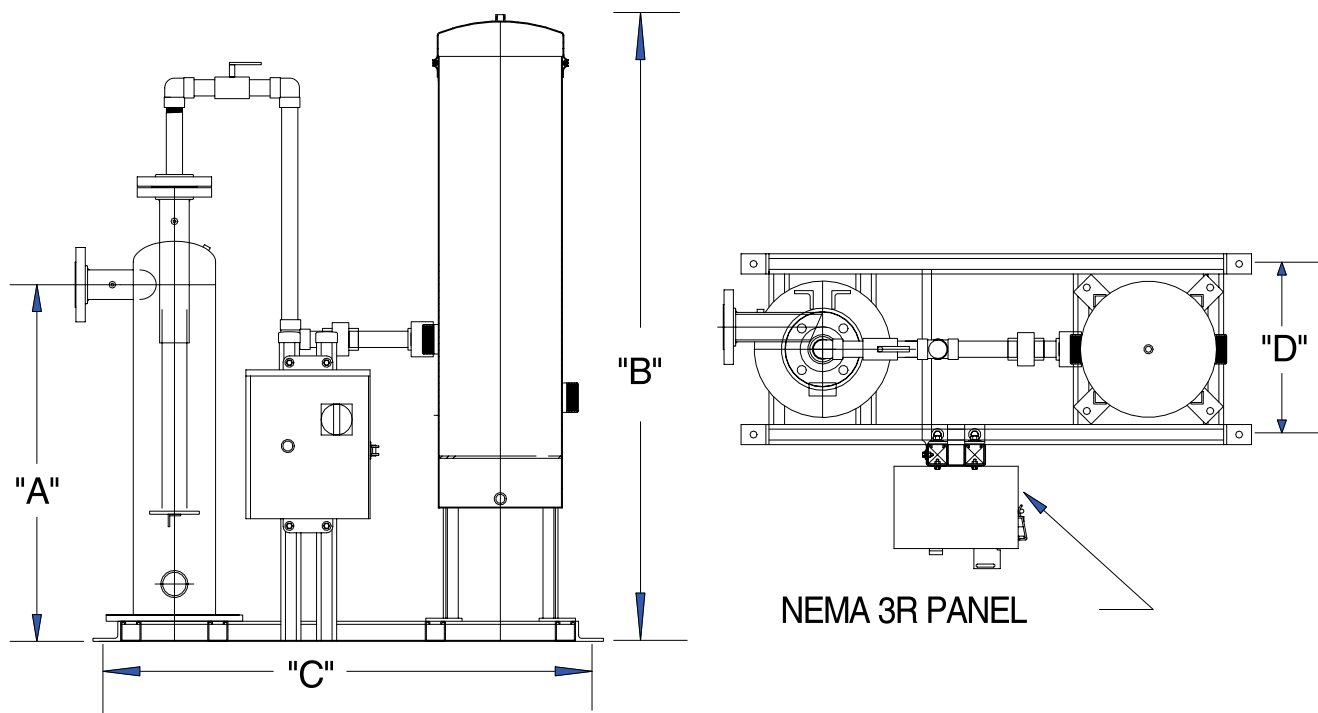
Flowmatic® three-stage systems for zero discharge, with filter housing, separator and bag filter

Systems include Flow-Max® jumbo cartridge filters, constructed in 316L stainless steel, epoxy coated carbon steel cyclone separator, #2, stainless steel bag filter (installed on outlet of the separator for zero discharge), pressure gauges and NEMA-3R control panel and time clock for automatic purge for separator, schedule 80 piping and 2" bronze isolation valve between separator outlet and cartridge filter. Systems with and without pumps are available.

Part No.	Max Flow Rate GPM	Housing	Number	Filter Housings Pipe Size	Separator Pipe Size	Purge Pipe Size	Optional Pump HP
FMPFS-50-90-B	100	FMJCH-90	1	2"	1-1/4"	1"	2
FMPFS-100-170-B	150	FMJCH-170	1	2"	2"	1"	5

Filtration Systems

Skid mounted filtration systems with filter housings, centrifugal separator, control for automatic purge, piping and shut-off valves, fully assembled, ready for installation. Systems may be shipped directly to your job site.



FLOW-MAX Filtration System

FLOW-MAX MODEL NUMBER	FLOW RATE	SEPARATOR PORT SIZE	PURGE SIZE	FILTER PORT SIZE	A	B	C	D
FMPFS-50	50 GPM	1" FLGD	1"	2"	26.50"	47.13"	39.13"	13.75"
FMPFS-75	75 GPM	1 1/4" FLGD	1"	2"	27.87"	47.13"	39.13"	13.75"
FMPFS-100	100 GPM	1 1/2" FLGD	1"	2"	27.87"	47.13"	39.13"	13.75"

Systems without centrifugal separators, with filter housings installed in parallel for higher flow rates and models with filter housings installed in series for "step" filtration using cartridges with different micron ratings, for surface water filtration.

Parallel systems (with filter housings installed in parallel for higher flow rates)

Part Number	Pipe Size For Filters	Number Filter Housings (Model FMJCH170)	Pipe Size Inlet & Outlet	Max. Flow Rate (GPM)
FMFS-P-1	2"	1	2"	150
FMFS-P-2	2"	2	3"	300
FMFS-P-3	2"	3	4"	450
FMFS-P-4	2"	4	4"	600
FMFS-P-6	2"	6	6"	900
FMFS-P-8	2"	8	8"	1,200

Note: Flow rates are for guidelines only. Actual flow rates depend on solids content, micron rating and a number of other factors.

Series systems (with filter housings installed in series for "step" filtration)

Part Number	Pipe Size For Filters	Number Filter Housings (Model FMJCH170)	Pipe Size Inlet & Outlet	Max. Flow Rate (GPM)
FMFS-S-2	2"	2	2"	150
FMFS-S-3	2"	3	2"	150

Note: Flow rates are for guidelines only. Actual flow rates depend on solids content, micron rating and a number of other factors.

Flow-Max[®] Jumbo Filter Cartridges

With cellulose-free synthetic and mesh media in a wide range of micron ratings.



Standard Synthetic Media



Flow-Max jumbo filter cartridge



PP Mesh Media

Model 40

Filter Housing Model	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
40	1 Absolute	FMHC-40-1A	N. A.	1
	0.35	FMHC-40-0.35	N. A.	1
	1	FMHC-40-1	N. A.	1
	5	FMHC-40-5	N. A.	1
	20	FMHC-40-20	N. A.	1
	50	FMHC-40-50	FMHC-40-50M	1
	100	FMHC-40-100	N. A.	1
	150	N. A.	FMHC-40-150M	1

Model 90

Filter Housing Model	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
90	1 Absolute	FMHC-90-1A	N. A.	1
	0.35	FMHC-90-0.35	N. A.	1
	1	FMHC-90-1	N. A.	1
	5	FMHC-90-5	N. A.	1
	20	FMHC-90-20	N. A.	1
	50	FMHC-90-50	FMHC-90-50M	1
	100	FMHC-90-100	N. A.	1
	150	N. A.	FMHC-90-150M	1

Model 170

Filter Housing Model	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
170	1 Absolute	FMHC-170-1A	N. A.	1
	0.35	FMHC-170-0.35	N. A.	1
	1	FMHC-170-1	N. A.	1
	5	FMHC-170-5	N. A.	1
	20	FMHC-170-20	N. A.	1
	50	FMHC-170-50	FMHC-170-50M	1
	100	FMHC-170-100	N. A.	1
	150	N. A.	FMHC-170-150M	1

Flow-Max[®] High Temp Jumbo Cartridges

Ideal for high temperature industrial water and oil filtration.

Applications

- High temperature industrial water filtration
- Lubricating oil
- Cutting fluids
- Solvents
- Distillate fuel
- Fuel oil
- Hydraulic fluids

Specifications	Data
Maximum temperature	250°F (121°C)
Minimum temperature	-20°F (-29°C)
Maximum pressure	70 PSID (482 k PA)
Recommended change out	25 PSID (172 k PA)
Media	Phenolic impregnated cellulose
End caps, cores, outer body	Electro plated tin



Jumbo Model 40 (7-3/4" x 9-5/8") for flow rates to 50 GPM

Part Number	Model Number	Length	Micron	No. / case
FMPIC-40-5-HT	40	9-5/8"	5	1
FMPIC-40-20-HT	40	9-5/8"	20	1
FMPIC-40-50-HT	40	9-5/8"	50	1

Jumbo Model 90 (7-3/4" x 19-1/2") for flow rates to 100 GPM

Part Number	Model Number	Length	Micron	No. / case
FMPIC-90-5-HT	90	19-1/2"	5	1
FMPIC-90-20-HT	90	19-1/2"	20	1
FMPIC-90-50-HT	90	19-1/2"	50	1

Jumbo Model 170 (7-3/4" x 30-3/4") for flow rates to 150 GPM

Part Number	Model Number	Length	Micron	No. / case
FMPIC-170-5-HT	170	30-3/4"	5	1
FMPIC-170-20-HT	170	30-3/4"	20	1
FMPIC-170-50-HT	170	30-3/4"	50	1

Note: Jumbo 40, 90 and 170 cartridges listed above fit in Flow-Max housings only.

Important:

Phenolic impregnated cellulose cartridges are not suitable for potable water. Do not use with faucet.

Flow-Max® Commercial Filters

316 stainless steel filter housings with easy, safe and secure band-clamp lid closure.



4 & 5 Round Models



12 Round



22 Round



Premium Series

Flow-Max® commercial quality multi-cartridge stainless steel filter housings (316 stainless steel)

Model Number	Round	Max. Flow Rate (GPM) Pleated	Max. Flow Rate (GPM) Depth	Pipe Size	Drain Size (NPT)	No. Of Standard Cartridges	Cartridge Options (Lengths)
FM4X1-1	4	25	25	1" NPT	1/2"	4	9-3/4" - 10"
FM5X1	5	30	25	2" NPT	1/2"	5	9-3/4" - 10"
FM4X2	4	60	40	2" NPT	1/2"	4	20"
FM4X3	4	90	60	2" NPT	1/2"	4	29-1/4" or 30"
FM4X4	4	120	80	2" NPT	1/2"	4	40"
FM5X4	5	150	100	2" NPT	1/2"	5	40"
FM12X3	12	250	180	3" flange	1/2"	12	29-1/4" or 30"
FM12X4	12	300	240	3" flange	1/2"	12	40"
FM22X3	22	500	330	4" flange	1/2"	22	29-1/4" or 30"
FM22X4	22	600	440	4" flange	1/2"	22	40"

Flow-Max® Premium Series housings with mounting legs and pressure gauges

Model Number	Round	Max. Flow Rate (GPM) Pleated	Max. Flow Rate (GPM) Depth	Pipe Size	Drain Size (NPT)	No. Of Standard Cartridges	Cartridge Options (Lengths)
FMPS4X2	4	60	40	2" NPT	1/2"	4	20"
FMPS5X3	5	120	75	2" NPT	1/2"	5	29-1/4" or 30"
FMPS5X4	5	150	100	2" NPT	1/2"	5	40"
FMPS7X4	7	200	140	2" NPT	1/2"	7	40"

Note: Flow rates shown above are for guidelines only. Actual flow rates are based on cartridge type, micron rating, solids content and a number of other factors