Fulflo® MP Filter Vessel

ASME code R.O. pre-filter membrane protector (MP) filter vessel

MP filter vessels are ideal for a wide range of filtration applications including pre-filtration of brackish, process and sea water. All MP Series vessels are built in accordance with ASME boiler and Pressure Vessel Code, U stamp. All MP vessels have dual purpose bottom seats for use with either double-open-end or 222 O-ring design.



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Benefits

- Flow rates from 108gpm to 3520gpm
- Maximum design pressure is 150psi (10.3bar) at 250°F (121°C)
- 304L or 316L stainless steel
- Stainless steel welded attachments
- Swing bolt closure for quick opening, with hex nuts for use with pneumatic tools
- Optional stainless steel bolting and davit assembly
- Horizontal vessels provide for easy cartridge installation
- Dual purpose cartridge seats for use with double open end and 2-222 O-ring single-open-end cartridges
- Glassbead blasted exteriors
- Passivated interior and exterior surfaces to remove free carbon and protect against corrosion
- Buna-N O-ring closure seal provides positive cover sealing
- Horizontal vessel utilizes removable internal cartridge support plate
- Large size clean and dirty drain for uniform piping and valve size

Applications

- Brackish and Sea Water
- Semiconductor Process Water
- Boiler Feed Water
- Reverse Osmosis Pre-filtering
- Potable Water
- Electronic Rinse Water
- Deionized Water

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ENGINEERING YOUR SUCCESS.

Fulflo® MP Filter Vessel

Fulflo® MP Filter Series throughput based on flow of water (in gpm) per 10-inch cartridge

10 inch Cartridges	Filter Model	At 3gpm† per 10 inch		At 3.5gpm per 10 inch		At 4.5gpm per 10 inch		At 5gpm per 10 inch	
		gpm‡	mgd	gpm	mgd	gpm	mgd	gpm	mgd
VERTICAL VESSELS									
36	MP12-3-3FK1	108	0.2	126	0.2	162	0.2	180	0.3
48	MP12-4-4FK1	144	0.2	168	0.3	216	0.3	240	0.3
63	MP21-3-4FK1	189	0.3	221	0.4	284	0.4	315	0.5
84	MP21-4-4FK1	252	0.4	294	0.5	378	0.5	420	0.6
87	MP29-3-4FK1	261	0.4	305	0.5	392	0.6	435	0.6
105	MP35-3-6FK1	315	0.5	368	0.6	473	0.7	525	0.8
116	MP29-4-6FK1	348	0.5	406	0.7	522	0.8	580	0.8
120	MP40-3-6FK1	360	0.5	420	0.7	540	0.8	600	0.9
140	MP35-4-6FK1	420	0.6	490	0.8	630	0.9	700	1.0
156	MP52-3-6FK1	468	0.7	546	0.9	702	1.0	780	1.1
160	MP40-4-6FK1	480	0.7	560	0.9	720	1.0	800	1.2
208	MP52-4-8FK1	624	0.9	728	1.2	936	1.3	1040	1.5
258	MP86-3-8FK1	774	1.1	903	1.5	1161	1.7	1290	1.9
309	MP103-3-8FK1	927	1.3	1082	1.8	1391	2.0	1545	2.2
344	MP86-4-10FK1	1032	1.5	1204	2.0	1548	2.2	1720	2.5
412	MP103-4-10FK1	1236	1.8	1442	2.4	1854	2.7	2060	3.0
472	MP118-4-12FK1	1416	2.0	1652	2.7	2124	3.1	2360	3.4
704	MP177-4-14FK1	2115	3.0	2464	4.1	3168	4.6	3520	5.1
HORIZONTAL VESSELS									
120	MP40H-3-6FK1	360	0.5	420	0.7	540	0.8	600	0.9
156	MP52H-3-6FK1	468	0.7	546	0.9	702	1.0	780	1.1
160	MP40H-4-6FK1	480	0.7	560	0.9	720	1.0	800	1.2
208	MP52H-4-8FK1	624	0.9	728	1.2	936	1.3	1040	1.5
258	MP86H-3-8FK1	774	1.1	903	1.5	1161	1.7	1290	1.9
309	MP103H-3-8FK1	927	1.3	1082	1.8	1391	2.0	1545	2.2
344	MP86H-4-10FK1	1032	1.5	1204	2.0	1548	2.2	1720	2.5
412	MP103H-4-10FK1	1236	1.8	1442	2.4	1854	2.7	2060	3.0
472	MP118H-4-12FK1	1416	2.0	1652	2.7	2124	3.1	2360	3.4
704	MP177H-4-14FK1	2112	3.0	2464	4.1	3168	4.6	3520	5.1

† Actual flow rate is dependent on fluid viscosity, micron rating, contaminant and media type. Consult flow charts for each application.
‡ gpm =gallons per minute; mgd = millions of gallons per day

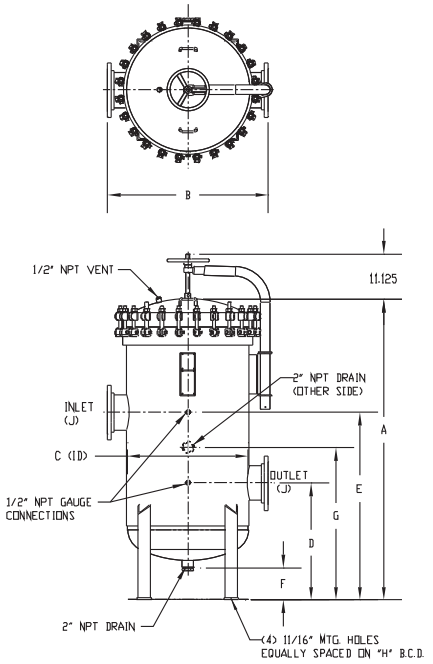
Optional Shell O-Ring/Gasket* refer to price book for details.

Specifications are subject to change without notification.
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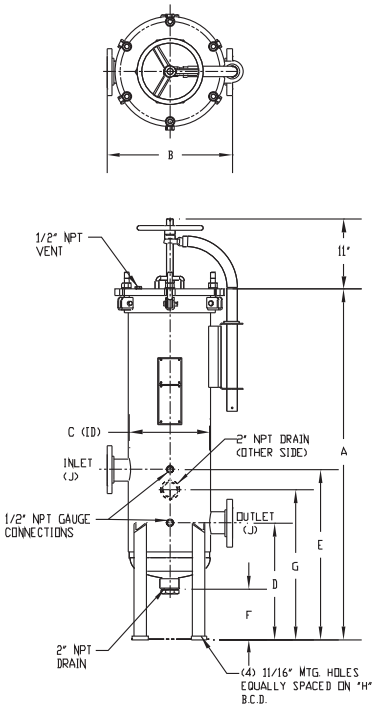
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Fulflo® MP Filter Vessel

ALL OTHER MODELS



MP12, MP21



Design Specifications

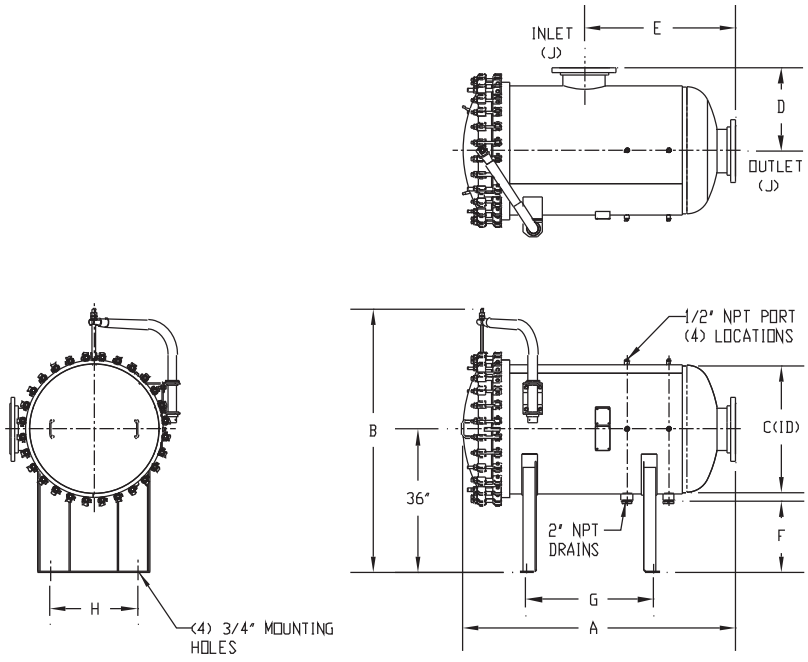
No. & Model	Cartridges		Dimensions (in.)									Shipping Weight (lbs.)
	Qty.	Length (in.)	A	B	C	D	E	F	G	H	J	
MP12-3-3FK1	12	30	67.75	20.00	12.813	18.50	27.00	8.00	23.75	12.50	3 NPS	390
MP12-4-4FK1	12	40	77.75	20.00	12.813	18.50	27.00	8.00	23.75	12.50	4 NPS	420
MP21-3-4FK1	21	30	68.75	24.00	16.063	19.25	27.75	8.00	24.50	15.75	4 NPS	500
MP21-4-4FK1	21	40	78.75	24.00	16.063	19.25	27.75	8.00	24.50	15.75	4 NPS	530
MP29-3-4FK1	29	30	75.25	26.00	18.063	22.00	33.25	8.00	28.25	17.88	4 NPS	570
MP29-4-6FK1	29	40	85.25	26.00	18.063	22.00	33.25	8.00	28.25	17.88	6 NPS	620
MP35-3-6FK1	35	30	76.00	28.00	20.063	22.50	34.00	8.00	28.75	19.88	6 NPS	650
MP35-4-6FK1	35	40	86.00	28.00	20.063	22.50	34.00	8.00	28.75	19.88	6 NPS	680
MP40-3-6FK1	40	30	77.00	30.00	22.063	23.00	34.25	8.00	29.25	21.88	6 NPS	710
MP40-4-6FK1	40	40	87.00	30.00	22.063	23.00	34.25	8.00	29.25	21.88	6 NPS	750
MP52-3-6FK1	52	30	80.75	32.00	24.063	25.50	40.00	8.00	32.75	23.75	6 NPS	790
MP52-4-8FK1	52	40	90.75	32.00	24.063	25.50	40.00	8.00	32.75	23.75	8 NPS	860
MP86-3-8FK2	86	30	86.75	40.00	30.063	29.00	46.50	8.00	37.75	30.00	8 NPS	1280
MP86-4-10FK2	86	40	96.75	40.00	30.063	29.00	46.50	8.00	37.75	30.00	10 NPS	1380
MP103-3-8FK2	103	30	87.75	42.00	32.063	29.50	47.00	8.00	38.25	32.00	8 NPS	1410
MP103-4-10FK2	103	40	97.75	42.00	32.063	29.50	47.00	8.00	38.25	32.00	10 NPS	1510
MP118-4-12FK2	118	40	102.00	46.00	36.063	32.50	52.25	8.00	42.00	35.88	12 NPS	1830
MP177-4-14FK2	176	40	107.00	54.00	42.063	35.00	57.00	8.00	45.50	42.00	14 NPS	2650

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Design Specifications

No. & Model	Cartridges		Dimensions (in.)									Shipping Weight (lbs.)
	Qty.	Length (in.)	A	B	C	D	E	F	G	H	J	
MP40H-3-6FK1	40	30	55.50	60.0	22.063	15.00	32.00	23.00	23.00	12.00	6 NPS	850
MP40H-4-6FK1	40	40	65.50	60.0	22.063	15.00	36.00	23.00	32.00	12.00	6 NPS	880
MP52H-3-6FK1	52	30	55.25	61.0	24.063	16.00	32.00	22.00	23.00	14.00	6 NPS	920
MP52H-4-8FK1	52	40	65.25	61.0	24.063	16.00	36.00	22.00	32.00	14.00	8 NPS	990
MP86H-3-8FK1	86	30	60.25	64.0	30.063	20.00	34.00	19.00	24.00	20.00	8 NPS	1490
MP86H-4-10FK1	86	40	68.25	64.0	30.063	20.00	38.00	19.00	32.00	20.00	10 NPS	1560
MP103H-3-8FK1	103	30	60.75	66.0	32.063	21.00	34.00	18.00	24.00	22.00	8 NPS	1620
MP103H-4-10FK1	103	40	68.75	66.0	32.063	21.00	38.00	18.00	32.00	22.00	10 NPS	1700
MP118H-4-12FK1	118	40	72.00	67.0	36.063	23.00	40.00	16.00	32.00	26.00	12 NPS	2040
MP177H-4-14FK1	176	40	74.75	77.6	42.063	27.00	41.00	13.00	32.00	32.00	14 NPS	2820

Ordering Information

MP ☐ ☐ – ☐ – ☐ ☐

Material of Construction	
Code	Description
4L	304 LSS
6L	316L SS

Cartridge Qty.	
Orientation	Range
Vertical	12-176
Horizontal	40-176

Design Series	
Code	Description
Blank	Vertical
H	Horizontal

Cartridge Length	
Code	Inches
3	30
4	40

Inlet | Outlet Flange Options
Code
3F
4F
6F
8F
10F
12F
14F

Coverlift Option	
Code	Description
No symbol	None
K1	Mechanical
K2	Hydraulic

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