IMF-Series Filters

Fiberglass Reinforced Plastic

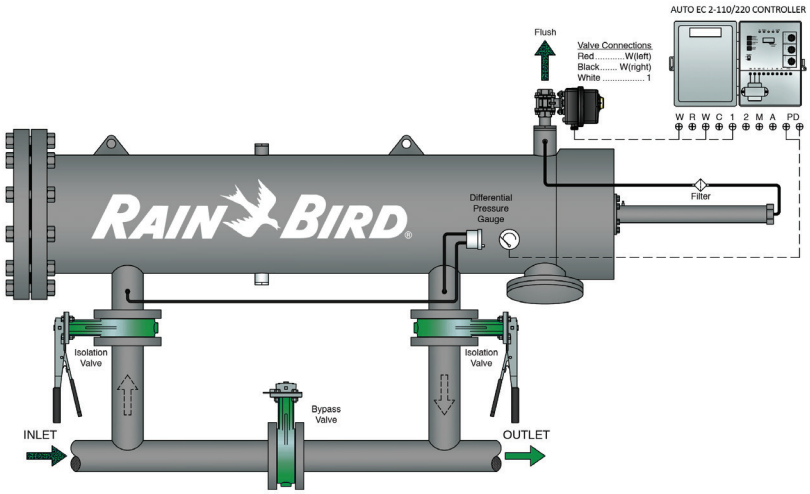
The IMF-Series Fiberglass Reinforced Plastic (FRP) Series filters offer an ideal solution for corrosion resistance in brackish, brine and seawater filtration applications. Fiberglass Reinforced Plastic is a composite material made of a plastic reinforced by fine fibers made of glass. All wetted components of the IMF-Series self-cleaning filters are constructed from seawater- resistant plastic or other high alloy materials.

IMF-Series self-cleaning water filters are available in water line pressured (hydraulic) and motor driven (electric) models with an on-line, or in-line flange configuration to accommodate simple installation. They will easily fit any new or existing line configuration.

A two-stage screening distinguishes the IMF-Series filters. A coarse screen is responsible for straining out large debris from the water source, and the fine screen cleans water to the designated micron rating.

IMF-*Series (Hydraulic)*

IMF-*Series (Electric)*



How it Works

The unit consists of two stages of filtration, a coarse screen pre-filter and a fine screen. Suspended solids accumulate on the inner surface of the fine screen, building up a filter layer which eventually restricts the filter and creates a pressure differential. Once the pressure differential reaches a preset level a rinse cycle is initiated by the controller. The solids are removed from the fine screen using a concentrated backwashing method which aggressively sucks the accumulated dirt off the screen where it is carried to drain via the rinse valve. The dirt collector rotates while it moves linearly, ensuring the entire screen is cleaned each cycle. The process takes a matter of seconds, without interruption of system flow.

Performance Characteristics:

- Flow Rate: 15 – 4,500 gpm
- Flush cycle duration: 6 – 20 seconds
- Flush valve size: single 1" or a single 2"
- Screen opening: 5µ – 4000µ
- Temperature: 150º F
- Flush Volume: 15 – 110 gallons per backwash
- Working pressure: 35 – 150 psi

IMF-Series (FRP) Performance Data

Line Size (in)	Max Flow Rate (gpm)	F+ Series Hydraulic Filter Model	Minimum Inlet Pressure During Rinse Cycle (PSI)	F+ Series Electric Filter Model	Minimum Inlet Pressure During Rinse Cycle (PSI)	Screen Area in^2	Screen Area ft^2	Flush Line Size (in.)	Rinse Duration (Seconds)	Flush Volume (Gallons)
2	200	HS-F-02-A	35	ES-F-02-A	15	432	3	1.5	10 to 30	15 to 50
3	300	HS-F-03-A	35	ES-F-03-A	15	432	3	1.5	10 to 30	15 to 50
4	500	HS-F-04-A	35	ES-F-04-A	15	432	3	1.5	10 to 30	15 to 50
6	650	HS-F-06-A	35	ES-F-06-A	15	432	3	1.5	10 to 30	15 to 50
4	500	HS-F-04-B	35	ES-F-04-B	15	756	5.25	1.5	10 to 30	15 to 50
6	1000	HS-F-06-B	35	ES-F-06-B	15	756	5.25	1.5	10 to 30	15 to 50
8	1400	HS-F-08-B	35	ES-F-08-B	15	756	5.25	1.5	10 to 30	15 to 50
4	500	HS-F-04-C	35	ES-F-04-C	15	1008	7	1.5	10 to 30	15 to 50
6	1000	HS-F-06-C	35	ES-F-06-C	15	1008	7	1.5	10 to 30	15 to 50
8	1700	HS-F-08-C	35	ES-F-08-C	15	1008	7	1.5	10 to 30	15 to 50
10	1900	HS-F-10-C	35	ES-F-10-C	15	1008	7	1.5	10 to 30	15 to 50
4	500	HS-F-04-D	35	ES-F-04-D	15	1332	9.25	2	10 to 30	35 to 110
6	1000	HS-F-06-D	35	ES-F-06-D	15	1332	9.25	2	10 to 30	35 to 110
8	2000	HS-F-08-D	35	ES-F-08-D	15	1332	9.25	2	10 to 30	35 to 110
10	2000	HS-F-10-D	35	ES-F-10-D	15	1332	9.25	2	10 to 30	35 to 110
10	2700	HS-F-10-E	35	ES-F-10-E	15	1764	12.25	2	10 to 30	35 to 110
12	3100	HS-F-12-E	35	ES-F-12-E	15	1764	12.25	2	10 to 30	35 to 110
12	3600	HS-F-12-F	35	ES-F-12-F	15	2196	15.25	2	10 to 30	35 to 110
14	3600	HS-F-14-F	35	ES-F-14-F	15	2196	15.25	2	10 to 30	35 to 110
16	3600	HS-F-16-F	35	ES-F-16-F	15	2196	15.25	2	10 to 30	35 to 110
12	4000	HS-F-12-G	35	ES-F-12-G	15	2592	18	2	10 to 30	35 to 110
14	4500	HS-F-14-G	35	ES-F-14-G	15	2592	18	2	10 to 30	35 to 110
16	4500	HS-F-16-G	35	ES-F-16-G	15	2592	18	2	10 to 30	35 to 110

Hydraulic Controllers

Model	Power
F-2-110V	110/220V AC
F-2-9V	9V DC

Electric Controllers

Model	Power
F-2-110-NEMA4X	110/220V AC
Auto-EC-4-PLC	110/220V AC

- The flow rates shown above are based on water quality of 25 PPM or better (good quality water).
- For water with particulate load greater than 25 PPM please consult Rain Bird for appropriate flow de-rating.
- Note: Filters with bypass manifolds quoted upon request.
- Drawings of standard filter models listed above are available on industrial.rainbird.com

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