

Defender® FP-Series RMF with PowerBump® System



DEVELOPED BY NEPTUNE BENSON

The FP-Series was designed by Neptune Benson, the world's respected and trusted regenerative media filter (RMF) manufacturer. With over 60 years of experience serving the aquatics market and thousands of RMFs installed worldwide, it's no surprise that Neptune Benson continues to develop innovative products that make pools cleaner and provide a superior bather experience.

EXPANDING THE ENVELOPE

An expanded portion of the aquatics market can now take advantage of the many benefits offered by regenerative media filters. The FP-Series is suitable for small to mid-size aquatics venues requiring flow rates between 107-300 gpm (24-68 m³/hr). With a small footprint in terms of both size and cost, the FP-Series is BIG on capability, packing many features found in our classic Defender® product line.

REGENERATIVE MEDIA VS SAND FILTRATION

Sand and regenerative media filters both operate on the principle of mechanical filtration. Sand filters trap particles in water throughout the depth of their bed. When the bed becomes dirty/loaded, it is cleaned by backwashing, a process that sends considerable amounts of water to drain. RMFs trap particles on the surface of flexible tubes coated with perlite media. When the perlite becomes loaded, RMFs regenerate by bumping, a process in which no water is lost*.

PERFORMANCE

Compared to typical sand filters, the FP-Series RMF removes higher levels of particles in the critical 1-10 micron range without the use of flocculants or coagulants*, delivering superior water quality and significant operational savings - up to:

Water	90%
Energy	50%
Chemicals	30%
Space	75%

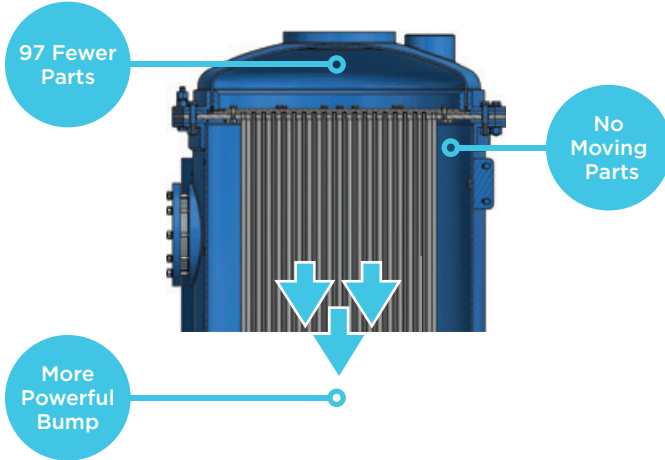
AT A GLANCE

- Flow rates up to 300 gpm (68 m³/hr)
- Compact size fits through 36" (91 cm) doorways
- Non-metallic fiberglass vessel eliminates corrosion concerns
- PowerBump® System eliminates moving parts
- Fully-automatic controller makes bumping quick and easy
- Certified to NSF-50



*Water is sent to drain during periodic perlite media replacement.
*Results available upon request.

POWERBUMP® SYSTEM



MORE POWERFUL

Drives up to 25 times more water through the flex-tubes, creating up to a 40% stronger impulse.

MORE RELIABLE

Simpler design improves reliability, reduces size and facilitates maintenance.

ALL NEW POWERBUMP SYSTEM

The FP-Series RMF is revolutionary in how it operates. Constructed from corrosion-resistant fiberglass (FRP), the filter features our patent pending[†] PowerBump System. As opposed to bumping by pneumatically raising/lowering a tube sheet, the FP-Series bumps hydraulically, using only the flow of water. Doing so delivers a more powerful regeneration, driving up to 25 times more water through the flexible tube elements and creating up to a 40% stronger impulse. It also eliminates moving parts thereby simplifying design, improving reliability, and facilitating maintenance.

[†]Pending in some jurisdictions

SPECIFICATIONS

Model	FP-24-36-366
Bumping Method	PowerBump® System
Material of Construction	Fiberglass (FRP)
Flow Rate	107-300 gpm (24-68 m ³ /hr)
Filtration Rate	0.5-1.4 gpm/ft ² (1.2-3.4 m ³ /hr/m ²)
Filtration Area	214 ft ² (19.9 m ²)
Max Operating Pressure	50 psi (3.5 bar)
System Height	76.85" (195.5 cm)
System Width	32.5" (82.6 cm)
Tank Volume	105 gal (0.40 m ³)
Connections	Flanged 4" (10.2 cm)
Regeneration	Push-Button Automatic
Dry Weight	384 lbs (174.2 kg)
Operating Weight	1,202 lbs (545 kg)
Access Port Size	6" (15.2 cm) with Viewing Window
Perlite Charge	17 lbs (7.7 kg)

