

DEFENDER® FP-SERIES RMF

FEATURING POWERBUMP™ SYSTEM



DEVELOPED BY NEPTUNE BENSON

The FP-Series was designed and developed by Neptune Benson, an Evoqua company, the world's most respected and trusted RMF leader. With 60+ years of experience serving the commercial aquatics market and thousands of systems installed worldwide, it's no surprise that Neptune Benson continues to develop innovative products that make pools cleaner, safer and healthier for your bathers. With the FP-Series an expanded portion of the commercial aquatics market segment can now take advantage of the same capabilities and quality found in our legendary Defender® filters!

DESIGNED FOR AQUATIC FACILITIES

Designed with advanced modeling tools and validated through extensive laboratory and field testing, the FP-Series RMF is suitable for small to medium 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 the classic Defender® RMF product line.

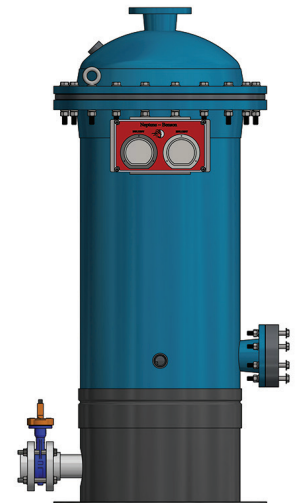
REGENERATIVE MEDIA VS SAND FILTRATION

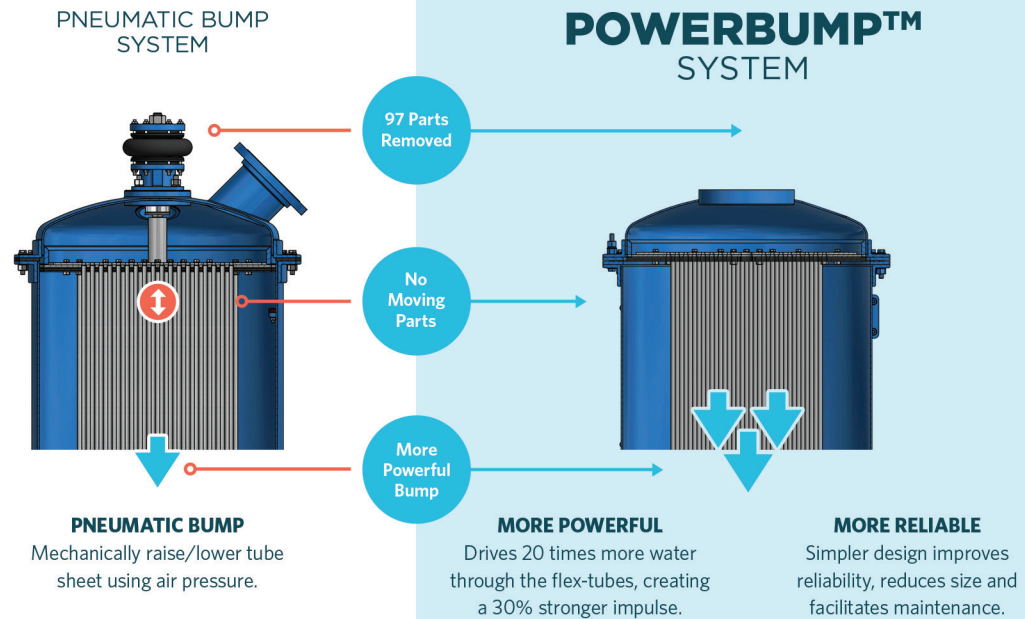
Sand and regenerative media filters (RMFs) both operate on the principle of mechanical filtration. Sand filters trap particles in water throughout the depth of their sand bed. When the bed becomes dirty/loaded, it is cleaned by backwashing, a process that sends considerable amounts of water to drain. 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. As compared to typical sand filters, RMFs provide superior 1 vs 20-30 micron particulate removal and significantly reduce the amount of water wasted to drain. In addition to achieving better water quality compared to traditional sand filtration, RMF technology delivers:

- 90% Water Savings
- 75% Space Savings
- 50% Energy Savings
- 30% Chemical Savings

AT A GLANCE

- Flow rates between 107-300 gpm (24-68 m³/hr)
- Compact size fits through standard 36" doorways
- Non-metallic fiberglass vessel eliminates corrosion concerns
- PowerBump™ System eliminates moving parts
- Fully-automatic controller makes bumping quick and easy
- Integrated diffuser evenly distributes water flow





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 20 times more water through the flexible tube elements and creating a 30% 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	76.32" (194 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	310 lbs (141 kg)
Operating Weight	1,202 lbs (545 kg)
Perlite Charge	17 lbs (7.7 kg)



Certified to NSF/ANSI Standard-50 by IAPMO R&T

334 Knight Street Suite 3100 Warwick, RI 02886 USA

+1 (866) 926-8420 (toll-free) +1 401-821-2200 (toll) www.evoqua.com



Defender and PowerBump are trademarks of Evoqua Water Technologies LLC, its subsidiaries or affiliates in some countries. All other trademarks are those of their respective owners.

Images do not necessarily depict facilities comprising Evoqua's products or services.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.

© 2020 Evoqua Water Technologies LLC Subject to change without notice AQ-FP SERIES-DS-1220