



Defender® Virtuo regenerative media filter

Premier solution for 8' high ceiling applications

Features

- Compatible with 8' high ceilings
- 436–1,235 sq. ft. filtration area
- Flow rates up to 1,800 gpm
- NSF-50 certified
- 10 year warranty

Aquatics applications

- Water Parks
- Swim Schools
- Health Clubs
- Municipal Pools
- Competition Pools
- Surf Parks
- Interactive Water Features

The proven choice for superior water quality

Established in 1956, Neptune Benson has proudly served the commercial aquatics industry for over six decades. Our line of Defender® regenerative media filters (RMFs) was first introduced over 20 years ago and has grown to over 4,750 installations in 50 countries.

Defender filters are widely known for providing superior water quality as well as lowering operational costs compared to sand filtration.

Expanding the portfolio

We offer a broad product range to meet the needs of aquatic facilities, both large and small. We are proud to add the Defender Virtuo to our trusted portfolio. Designed to fit in 8' ceiling mechanical rooms with flow rates up to 1,800 gpm, the Defender Virtuo offers:

- **New construction savings:** Easily fits into a pump room with a standard 8' ceiling, saving time and costs associated with building higher-ceiling pump rooms
- **Easy retrofit:** Simplify renovations with easier maneuverability/handling in pump rooms with low ceilings
- **A broad filtration range:** Six new models from 436–1,235 sq. ft. provide more filter sizing options, allowing you to select the model best suited for your application

Benefits compared to sand filtration

- Higher particulate removal in the critical 1–10 micron range to enhance water quality and bather experience
- Up to 90% water savings, 50% energy savings, 30% chemical savings, 75% footprint savings for overall operational savings and reduced environmental impact

System controller



RMF operations are controlled through a high resolution LCD control panel. Crisp real-time graphics depicting system status, user-friendly on-screen menus, and touchscreen navigation make operation simple and intuitive. Remote monitoring capabilities allow system data access from outside the mechanical room.

Defender product family



Defender Standard Height

Defender Reduced Height

Defender Assero®

Defender Virtuo

Defender Virtuo filter capacities and ratings

| Model | Filter Area (ft ²) | Recommended Flow Rate Range (0.5–1.4 gpm/ft ²) | Overall Height (in) | Tank Volume (gal) |
|---------------|--------------------------------|--|---------------------|-------------------|
| SP-33-36-732 | 436 | 218–610 | 79.5 | 236 |
| SP-39-36-948 | 550 | 275–770 | 79.2 | 328 |
| SP-43-36-1182 | 700 | 350–980 | 79.8 | 406 |
| SP-47-36-1440 | 850 | 425–1,190 | 79.3 | 470 |
| SP-50-36-1698 | 1,000 | 500–1,400 | 80.0 | 537 |
| SP-55-36-2076 | 1,235 | 618–1,729 | 80.4 | 635 |

Note: Recommended flow range is suggested to optimize performance. The filter is NSF listed for up to 2.0 gpm/sq.ft. flow rate. Contact Neptune-Benson for applications for higher than the recommended flow range.

Defender Virtuo connection sizes, footprint, and weights

| Model | Inlet/Outlet (in) | Drain (in) | Footprint (ft ²) | Perlite (lb) | Shipping Weight (lb) | Operating Weight (lb) |
|---------------|-------------------|------------|------------------------------|--------------|----------------------|-----------------------|
| SP-33-36-732 | 6 | 3 | 20 | 35 | 1,858 | 3,819 |
| SP-39-36-948 | 8 | 4 | 25 | 44 | 2,600 | 5,331 |
| SP-43-36-1182 | 8 | 4 | 28 | 56 | 2,900 | 6,282 |
| SP-47-36-1440 | 8 | 4 | 32 | 68 | 3,200 | 7,118 |
| SP-50-36-1698 | 10 | 4 | 35 | 79 | 3,400 | 7,875 |
| SP-55-36-2076 | 10 | 4 | 40 | 98 | 3,800 | 9,088 |

Note 1: Tank connection sizes based on velocity not to exceed 10.0 ft/s.

Note 2: The required perlite media is based on 1/8" thickness which is recommended for optimal performance.