



## V-FORCE®

*High Efficiency Extended Surface Mini-Pleat Filters*



### *Featuring Dynamic Double-V Design*

- Exceeds LEED/Green requirement of MERV 13
- Classified per UL Standard 900
- All Plastic Construction
- 100% Synthetic Media
- Fully Incinerable
- Moisture Resistant
- Chemical Resistant
- Lower Energy Cost
- Rigid Cell Design
- Low Resistance
- Light Weight



# V-FORCE®

## High Efficiency Extended Surface Mini-Pleat Filters

V-FORCE filters offer an excellent option for applications currently using rigid cell style extended surface filters. They are a good replacement for corrugated separator style or supported pleat style rigids.

- All Plastic Construction
- 100% Synthetic Media
- Fully Incinerable
- Moisture and Chemical Resistant
- Rigid Cell Design
- Low Resistance
- Light Weight

*V-FORCE filters are made with four mini-pleat media packs fashioned into two V-shaped assemblies. The inset photo shows that the end panels are made with a notch to attach the spring latch used to secure the filter in the holding frame for reverse flow installations.*



### All Plastic Construction – No Metal Components

V-FORCE filters are made from high strength, high impact polystyrene plastic. They contain no metal components. No rust, no corrosion.

### 100% Synthetic Media – Durable, Damage Resistant

V-FORCE filters are made with synthetic media. It is extremely durable, resists tearing and abrasion, and is highly damage resistant. No more media damage during shipping, handling, or installation. *This media is just plain tough.*

### Fully Incinerable – Aids Disposal

All plastic components with synthetic media make V-FORCE filters completely incinerable. Growing restrictions on landfills in many areas make incineration the most viable disposal option.

### Moisture and Chemical Resistant

High impact polystyrene plastic components and synthetic media make V-FORCE filters suitable for installation in systems where high moisture is present. They are also unaffected by some chemical or corrosive conditions.

### Rigid Cell Design – Handles Difficult Operating Conditions

Rigid cell design mini-pleat packs, all plastic components and 100% synthetic media make V-FORCE filters ideal for use in the most demanding installations, including variable air volume, high air flow, turbulence, repeated fan shut down, high moisture and some chemical or corrosive conditions.

### Low Resistance – Saves Energy

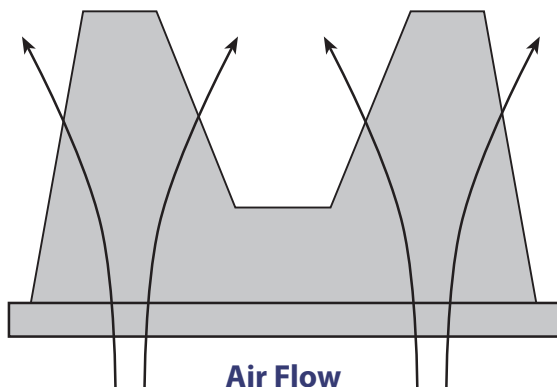
The Double-V design consisting of four mini-pleat media packs with glue bead separators enable V-FORCE filters to operate at low resistance to air flow. The wide open entrance into the filter creates a dynamically shaped air flow pattern for minimum pressure drop and maximum energy savings.

### Light Weight – Saves on Shipping, Transporting

Compare the weight of V-FORCE filters to other high efficiency rigid filters. Less weight reduces shipping costs and simplifies transporting them to and from the plenum. Installation is also faster and easier.



### Filter Top View



### Dynamic Double-V Design Creates Low Resistance

The Double-V design presents a wide open entrance into the filter allowing air to freely enter and exit at very low resistance. The mini-pleat media packs are set at an angle to the direction of the incoming air to direct air flow through the pleat packs and out the back side with minimum restriction.

*The Double-V design creates a wide open entrance into the filter resulting in low resistance and full use of media.*

### Economical Upgrade for Other Rigid Cell Filters

**V-FORCE** filters are an ideal upgrade for other styles of rigid cell filters, including corrugated separator style and supported pleat style. The Dynamic Double-V design provides an unbeatable combination of low resistance, high dust holding capacity and competitive price compared to these products.

### Mini-Pleat Media Packs Made with Glue Bead Separators

The media is pleated into mini-packs using continuous glue bead separators. This creates a high ratio of media area to filter face area for low resistance, high dust holding capacity and long service life.

The glue bead separators bond the pleats into a highly rigid pack that maintains uniform spacing in all types of operating conditions. The pleats hold their shape and do not deform or collapse as the dirt load builds and resistance rises. Uniform pleat spacing allows dirt to load evenly over every square inch of filter surface area. The media is fully utilized with no blocking off.

### Corrugated Separator Style



### Supported Pleat Style



*If you are using other styles of rigid cell extended surface filters, compare performance and price to **V-FORCE** filters.*

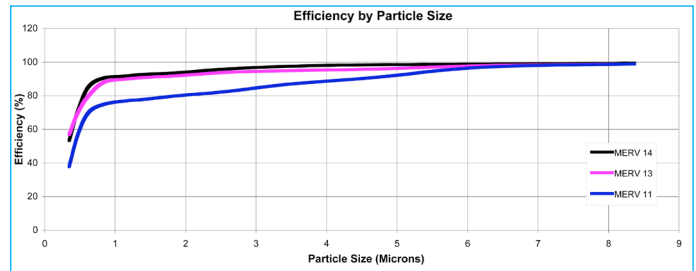
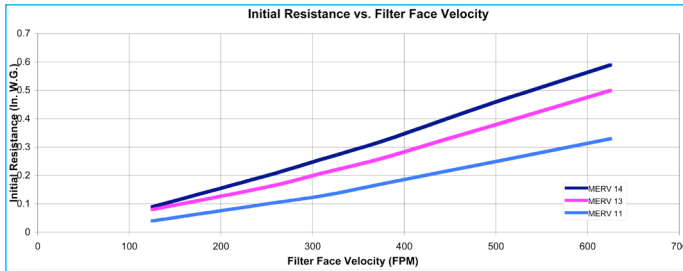
# V-FORCE®

High Efficiency Extended Surface Mini-Pleat Filters

Model Number	Nominal Size Inches (HxWxD)	Actual Size Inches (HxWxD)	Rated Air Flow Capacity (CFM)	Initial Resistance (In. W. G.) @Rated Air Flow	Recommended Final Resistance (In. W. G.)
<b>MERV 14</b>					
VPP2V-S-9503	12x24x12	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1000	.46"	1.5"
VPP2V-S-9504	24x24x12	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	2000	.46"	1.5"
VPP2V-S-9515	20x24x12	19 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1650	.46"	1.5"
VPP2V-S-9513	20x20x12	19 <sup>3</sup> / <sub>8</sub> x 19 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1400	.46"	1.5"
<b>MERV 13</b>					
VPP2V-S-8503	12x24x12	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1000	.38"	1.5"
VPP2V-S-8504	24x24x12	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	2000	.38"	1.5"
VPP2V-S-8515	20x24x12	19 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1650	.38"	1.5"
VPP2V-S-8513	20x20x12	19 <sup>3</sup> / <sub>8</sub> x 19 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1400	.38"	1.5"
<b>MERV 11</b>					
VPP2V-S-6503	12x24x12	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1000	.25"	1.5"
VPP2V-S-6504	24x24x12	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	2000	.25"	1.5"
VPP2V-S-6515	20x24x12	19 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1650	.25"	1.5"
VPP2V-S-6513	20x20x12	19 <sup>3</sup> / <sub>8</sub> x 19 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1400	.25"	1.5"

1. All performance data is based on the ASHRAE 52.2-2007 Test Standard. Data based on 24x24 size at a test velocity of 492 FPM.
2. Width and height dimensions are interchangeable. **V-FORCE** filters can be installed with the pleats vertical or horizontal
3. Continuous Operating Temperature: 140°F (60°C).

**Underwriters Laboratories Inc. Classification:** V-FORCE filters are classified per UL Standard 900.



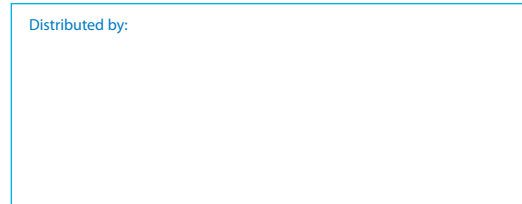
A-VF-0113



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