

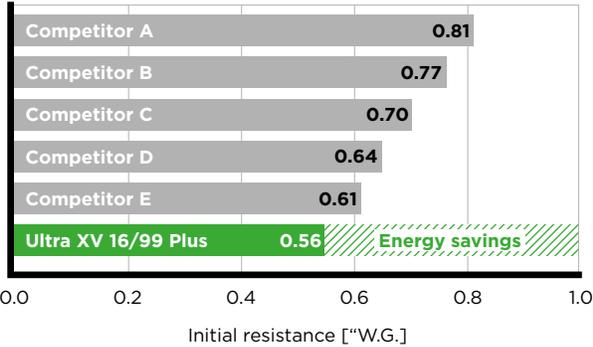
Ultra XV 16/99 Plus  
High Efficiency  
V-Cell Air Filters

# Ultra XV 16/99 Plus Eight-Panel Air Filters



### ENERGY SAVINGS

The benefit of low resistance



### ULTRA™ MEDIA

Ultra is a new generation of media that offers unmatched and innovative performance with MERV 16+ efficiency and ultra low resistance—creating a new industry benchmark for efficiency and energy savings. Ultra media has proven itself in testing utilizing the ASHRAE 52.2-2007 Appendix J test method.

The Ultra MERV 16+ media provides near HEPA performance with results on the ASHRAE 52.2 showing HEPA-like efficiencies. And it does this at a fraction of the pressure drop—typically less than half—to deliver significant energy savings for the end user.

### GREEN / ENERGY SAVINGS

Ultra XV 16/99 Plus offers many features that will benefit your company’s green initiatives. These include energy savings, LEED® IEQ credit, longer service life, reduced waste to landfill, reduced carbon footprint, reduced airborne contaminants, and more.

The low operating resistance can create significant energy savings. The chart above shows the initial resistance of many MERV 16 filters and how switching to the Ultra XV 16/99 Plus can deliver energy savings in the range of 35 - 70% when compared to conventional MERV 16 filters. This was demonstrated in a recent study where this media recorded actual energy savings of 40% compared to micro-glass media.

Additional savings and green credits can be achieved by the long service life of the Ultra XV 16/99 Plus.

# Ultra XV 16/99 Plus

## Superior Performance

### EFFICIENCY

Tri-Dim's Ultra XV 16/99 Plus achieves a MERV 16+ efficiency when tested under the Appendix J of ASHRAE 52.2-2007. Ultra media's performance on critical particle sizes of 1 micron and 0.5 microns exceeds 99%, which makes it ideal for use in medical and other applications where a consistent level of filtration is demanded.

The chart below shows the initial efficiency on 0.3 micron particles of filters of similar efficiency (these are the same filters in the resistance chart on the previous page).

Efficiency performance can be best compared by looking at particle penetration—that is, the number of particles that make it through the air filter. If we assume there is an upstream challenge of 100,000 particles that are 0.3 micron in size, the competitive filters on this chart will let from

2,000 to 11,000 particles pass through the filter into the protected zone.

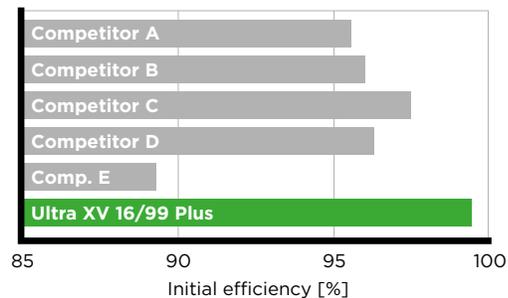
By comparison, the Ultra XV 16/99 Plus would only allow 600 particles to pass through the filter—meaning the reduction in particles from upgrading to the Ultra XV 16/99 Plus ranges from 70% to almost 95%. A small difference in the removal efficiency will have a huge impact on the number of airborne particles.

The main reason you are purchasing an air filter is to remove particulate, and with all the hype and spin it is easy to get distracted. The Ultra XV 16/99 Plus has all the features you are looking for, and it will remove particulate from the air.

The graph below shows the Ultra XV 16/99 Plus efficiency from the ASHRAE 52.2 Appendix J test.

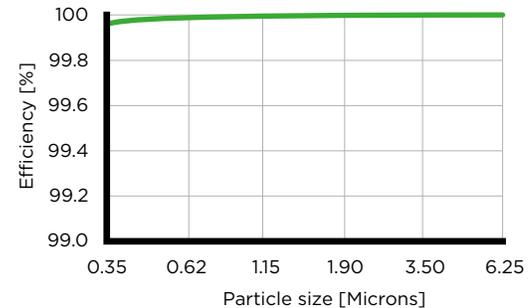
### INITIAL EFFICIENCY

MERV 16 @ 0.3  $\mu\text{m}$



### MINIMUM EFFICIENCY

Appendix J ASHRAE 52.2



# Ultra XV 16/99 Plus

## Technical Data

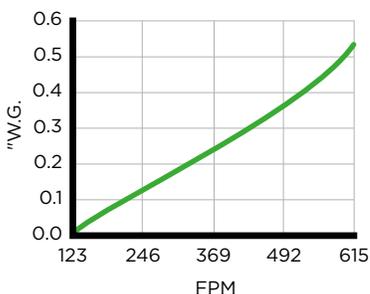
### SPECIFICATIONS

<b>Product</b>	<b>Ultra XV 16/99 Plus</b>
<b>Media</b>	Hybrid
<b>Frame</b>	Plastic w/metal struts (tops/bottoms 97% recycled), or galvanized Z-body frame
<b>Efficiency</b> ASHRAE 52.2 Appendix J (ASHRAE 52.1)	MERV 16+ (99%+) 99%+ (Minimum @ 0.3 - 0.4 $\mu\text{m}$ per Appendix J)
<b>Initial resistance</b> (MERV 16+)	
250 FPM (1.27 m/s)	0.23 "W.G. (57 Pa)
375 FPM (1.90 m/s)	0.35 "W.G. (87 Pa)
500 FPM (2.54 m/s)	0.56 "W.G. (139 Pa)
<b>Final resistance</b>	1.5 "W.G. (373 Pa)
<b>Temperature limit</b>	160 °F (71 °C)

Meet ANSI/UL-900 Requirements

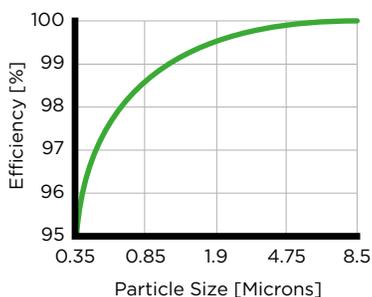
### INITIAL RESISTANCE

vs. Air Flow



### FRACTIONAL EFFICIENCY

vs. Particle Size



Tri-Dim Filter Corporation is committed to continual product development - all descriptions, specifications and performance data are subject to change without notice. Tri-Dim products are manufactured to exacting criteria - there can be a  $\pm 5\%$  variance in filter performance.

### LOCAL REPRESENTATIVE

**MANN+  
HUMMEL**

**TRIDIM**  
A MANN+HUMMEL Company

Tel: 800-458-9835  
info@tridim.com

tridim.com  
mann-hummel.com

1900-12 0220 © MANN+HUMMEL GmbH