



**Koch Filter Corporation**  
Filtration Products Crafted with Pride

# *DuraMAX 4v™*

*High Capacity Extended Surface  
Minipleat Filter*



- MERV 11-15 performance rating (ASHRAE test standard 52.2-2007)
- Five efficiencies: 65, 75, 85, 95 and 98%
- High capacity minipleat design
- Superior dust holding capacity, low pressure drop, extended filter life and energy savings
- Microfiberglass or Synthetic filter media
- 194 ft<sup>2</sup> of media in a 24 x 24 x 12" frame
- Rigid lightweight plastic frame
- Incinerable
- UL Class 2 Standard 900

**Koch Filter Corporation...Durable. Reliable. Versatile.**

Bulletin No. K-996B

## DuraMAX 4v™ High Efficiency Extended Surface Minipleat Filters



The **Koch Filter Corporation DuraMAX 4v** is a rigid, extended surface air filter, engineered to provide maximum performance and prolonged filter lifecycles, even in the most difficult environments. The durable, rugged construction of the DuraMAX 4v make it the filter of choice in filtration systems with high velocities or variable air volumes. DuraMAX 4v is constructed with an all plastic frame so it is easily incinerated after use.

### Low Pressure Drop Reduces Energy Costs

DuraMAX 4v provides an unequaled combination of low pressure drop and high efficiency through the use of our unique minipleat design. This high capacity minipleat design allows a nominal 24 x 24 x 12 filter to incorporate 194 square feet of filter media. This increased extension of the media surface area insures low pressure drop, which results in lower energy costs to the user.

### Extended Filter Life

Another benefit of the increased media area is extremely high Dust Holding Capacity, which significantly prolongs the service life of the filter. Fewer filter changes translate into substantially reduced maintenance and disposal costs.

### Engineered Versatility

In order to meet the wide range of requirements found in today's complex air filtration systems, DuraMAX filters are available in five ASHRAE efficiencies (65, 75, 85, 95, and 98%). The filter is offered in three standard sizes (24 x 24 x 12, 20 x 24 x 12, and 12 x 24 x 12). Single or double header configurations are available. The DuraMAX is also available in a medium capacity version known as the DuraMAX2v™. The 2v model offers most of the same filtration benefits as the 4v model, but has approximately 50% less filter media for applications where initial purchase price is of paramount concern. See Bulletin K- 1205A for more information on the DuraMAX 2v.

## DuraMAX 4v™ Applications

The DuraMAX 4v is an extremely durable filter, yet is also lightweight and compact. This combination makes the DuraMAX an ideal choice for a tremendous variety of applications. The DuraMAX4v is constructed with an all-plastic frame and is completely incinerable after use.



### Power Generation, Petrochemical and Industrial Plants

Gas turbine and compressor air intakes

### Automotive Manufacturing Plants

Paint booths and assembly areas



### Medical and Pharmaceutical Facilities

Operating rooms, critical care areas, clean rooms, and research laboratories

### Commercial Buildings

General HVAC for office buildings, universities, sports arenas and museums



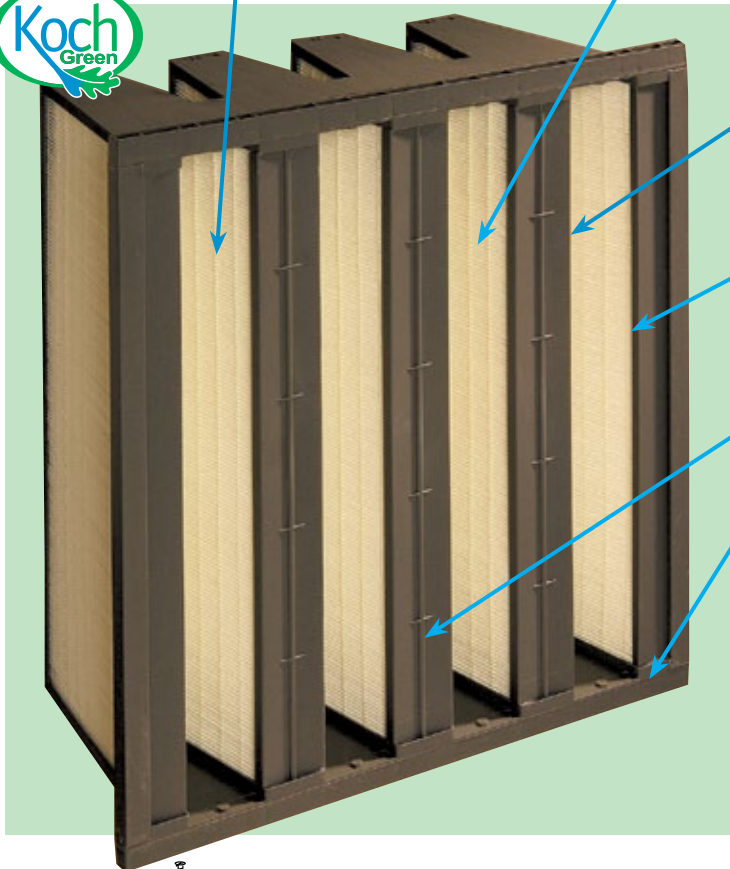
# DuraMAX 4v™ Construction and Technical Data

## High Capacity Mini-pleat Design

Provides low resistance to airflow and reduced energy costs

## High Efficiency Microfiberglass Filter Media

Provides high efficiency and superior dust holding capacity for prolonged service life. **DuraMAX 4v is also available with 100% Synthetic Filter Media. Please consult Bulletin No. PB-906B.**



## Thermoplastic Glue-Bead Separators

Ensures consistent media spacing and aerodynamic airflow

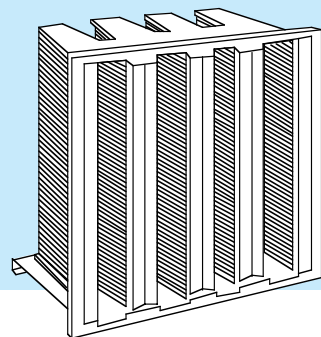
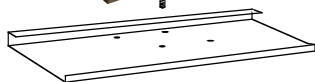
## Specialized Media Sealant

Secures media to frame and eliminates air bypass

## Durable Plastic Frame Components

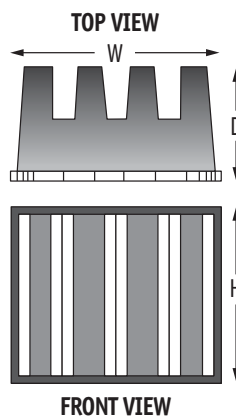
Makes the DuraMAX 4v lightweight, yet extremely rigid and easy to install. The all-plastic frame makes the DuraMAX 4v completely incinerable after use.

The DuraMAX is also available in a medium capacity version known as the DuraMAX 2v™. The 2v model offers most of the same filtration benefits as the 4v model, but has approximately 50% less filter media for applications where initial purchase price is of paramount concern. See Bulletin K-1205B for more information on the DuraMAX 2v.



## Double Header Model

DuraMAX 4v is offered in two header designs. Standard single header (above), and double header model (left) for housings requiring double header configuration for proper installation.



## DuraPURE Dimensions\*

	NOMINAL	ACTUAL
H	24"	23 <sup>3</sup> / <sub>8</sub> "
	20	19 <sup>3</sup> / <sub>8</sub>
	12	11 <sup>3</sup> / <sub>8</sub>
W	24	23 <sup>3</sup> / <sub>8</sub>
D	12	11 <sup>1</sup> / <sub>2</sub>

## Metric Conversion Table

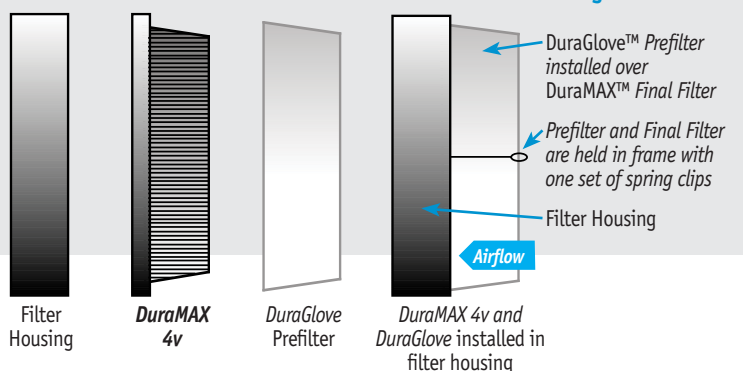
1.0 inches	2.54 cm
1 ft <sup>2</sup>	.093 m <sup>2</sup>
1 FPM	.005/m second
1 CFM	1.7 m <sup>3</sup> /hour
1.0 in. w.g.	249 Pa

## Reverse-Mount Installations

DuraMAX Filters are generally installed with the flat face of the filter as the air-entry side and the "v" side of the filter as the air exit side. However, for inlet air housings where space is at a premium, DuraMAX can also be installed with the "v" side as the air entry. A DuraGlove™ Synthetic Cube placed over the "v" section of the DuraMAX, creates a unitary, easy to install prefilter/final filter combination. The DuraGlove can be held in place with existing 12" spring clips.

Detailed instructions on installing a reverse-mount DuraMAX 4v are available from your Koch representative.

## DuraMAX4v Filters can be Reverse-Mounted in the Filter Housing





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## DuraMAX 4v™ Product Information

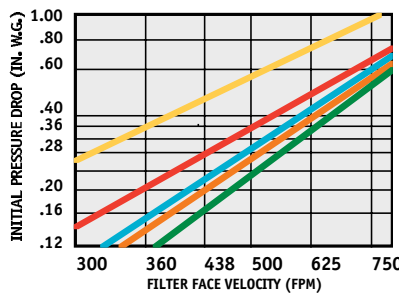
DuraMAX 4v Series	ASHRAE Efficiency	Nominal Size (HxWxD)	Actual Size (HxWxD)	Rated Airflow Capacity (CFM)			Rated Initial Pressure Drop (in. w.g.)			Media Area (Sq.Ft.)
				STANDARD	MEDIUM	HIGH	STANDARD	MEDIUM	HIGH	
<b>DuraMAX 4v 98 - MERV 15</b>										
DM4V-981	98%	24 x 24 x 12"	23 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	2000	2500	3000	.61	.81	nr*	194
DM4V-982	98%	20 x 24 x 12	19 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1675	2100	2500	.61	.81	nr*	162
DM4V-983	98%	12 x 24 x 12	11 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1000	1250	1500	.61	.81	nr*	98
<b>DuraMAX 4v 95 - MERV 14</b>										
DM4V-901	95%	24 x 24 x 12	23 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	2000	2500	3000	.36	.51	.64	194
DM4V-902	95%	20 x 24 x 12	19 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1675	2100	2500	.36	.51	.64	162
DM4V-903	95%	12 x 24 x 12	11 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1000	1250	1500	.36	.51	.64	98
<b>DuraMAX 4v 85 - MERV 13</b>										
DM4V-801	85%	24 x 24 x 12	23 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	2000	2500	3000	.27	.40	.60	194
DM4V-802	85%	20 x 24 x 12	19 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1675	2100	2500	.27	.40	.60	162
DM4V-803	85%	12 x 24 x 12	11 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1000	1250	1500	.27	.40	.60	98
<b>DuraMAX 4v 75 - MERV 12</b>										
DM4V-701	75%	24 x 24 x 12	23 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	2000	2500	3000	.26	.41	.59	194
DM4V-702	75%	20 x 24 x 12	19 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1675	2100	2500	.26	.41	.59	162
DM4V-703	75%	12 x 24 x 12	11 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1000	1250	1500	.26	.41	.59	98
<b>DuraMAX 4v 65 - MERV 11</b>										
DM4V-601	65%	24 x 24 x 12	23 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	2000	2500	3000	.25	.38	.60	194
DM4V-602	65%	20 x 24 x 12	19 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1675	2100	2500	.25	.38	.60	162
DM4V-603	65%	12 x 24 x 12	11 $\frac{3}{8}$ x 23 $\frac{3}{8}$ x 11 $\frac{1}{2}$ "	1000	1250	1500	.25	.38	.60	98

\*nr-operation at this velocity is not recommended

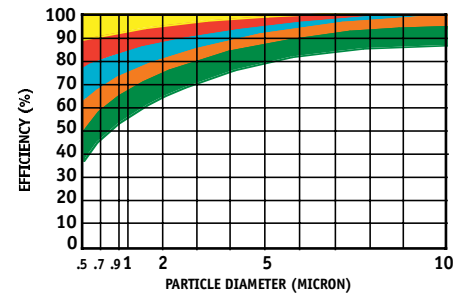
### Additional Product Information

- Width and height dimensions are interchangeable. DuraMAX filters may be installed with the pleats in either vertical or horizontal position.
- MERV is Minimum Efficiency Reporting Value. MERV Ratings listed are based on ASHRAE Test Standard 52.2-2007.
- Temperature limitation: 200°F.
- Recommended final pressure drop: 2.0" w.g.
- Maximum Burst Pressure: 10" w.g.
- Degradation Pressure: 15" w.g.
- DuraMAX 4v filters are classified as Underwriter's Laboratories Class 2. Testing conducted according to U.L. Standard 900.

**Resistance vs. Airflow**



**Efficiency vs. Particle Size**



DuraMAX 4v 98 (Yellow) DuraMAX 4v 95 (Red) DuraMAX 4v 85 (Blue) DuraMAX 4v 75 (Cyan) DuraMAX 4v 65 (Green)  
Color coding is for informational purposes only and does not represent color coding of actual filter media.

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Kansas City, MO • Louisville, KY\* • Madbury, NH • Nashville, TN • Rancho Cucamonga, CA\*

\*Denotes manufacturing site.

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Look for the Koch Green icon! Whenever you see the Koch Green icon, we are identifying a product that meets or exceeds our criteria in one or more of the following categories: Earns LEED Points, Reduces Energy Costs, Extends Filter Lifecycles, Conserves Resources, and Improves Indoor Environmental Quality.

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