# Purolator

# Key ? Pleat

MERV 8 **Standard and High-Capacity** Self-Supported Pleated Filters





- Standard-Capacity MERV 8, MERV-A 8-A
- Automated process delivers consistency and durability
- Durable, self-supporting synthetic media
- No metal, fully incinerable
- Die cut frame with interlocking corners for added strength

## Key Pleat

Standard and High-Capacity Self-Supported Pleated Filters

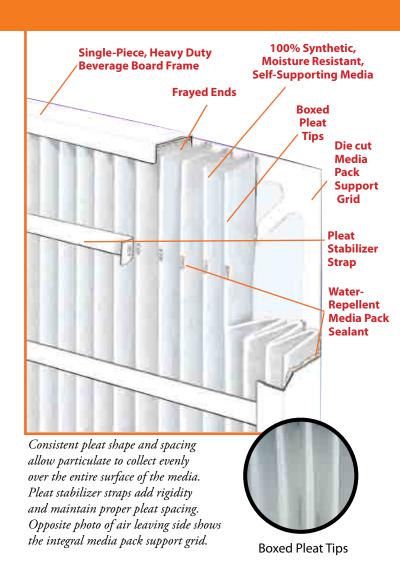


### Process Innovation, Design Excellence and Improved Media

Purolator's self-supporting media and innovative automated manufacturing process produces consistent pleat shape and spacing in each **Key Pleat**. This state-of-the-art media pack is surrounded by a single-piece, beverage board die cut frame, with structural integrity unlike any self-supported filter available today. The **Key Pleat** can endure impact and deformation and return to its original shape, ready for installation. That means you avoid the time and cost that are often wasted replacing damaged wire-backed filters.

#### **Seven-strap Die Cut**

A seven-strap die cut is located on the air-leaving side of the **Key Pleat** providing additional strength and durability to each filter. In combination, the boxed pleat tips provide more surface area and points of contact for the die cut to be securely glued to the media pack. As an example, the pleat tips are glued to the die cut at more than 140 points on a 24"x 24"x 2", **Key Pleat** standard-capacity and 250 points on a high-capacity filter.



### 100% Adhesive Application Ensures Filter Strength

The inside of the die cut frame is completely coated with adhesive to ensure a solid bond at all points of contact with the media pack. The pack is sealed inside the frame and pleat tips are bonded to the stabilizers and diagonal support members.

#### **Water Repellent Adhesive**

The sealant used to bond the frame to the media pack is highly water-repellent. That means that the filters maintain structural integrity even when wet; no delaminating, excessive buckling, or collapsing.

#### **Uniformity of Pleats**

The uniformity of pleat height and spacing ensures optimal performance throughout the useful life of every **Key Pleat** filter. The combination of the self-supporting media and the innovative, automated construction also means low resistance to airflow and cost-effective, environmentally responsible use of energy resources. Additionally, the consistent pleat spacing supports balanced loading, which maximizes the dust holding capacity of the filter and promotes longer service life. Pleats will not bunch or collapse which can cause an increase in pressure drop and potential failure of the filter.

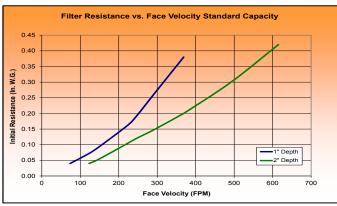
### 100% Synthetic Media Resists Moisture and Damage

**Key Pleat** MERV 8 media is a unique blend of synthetic fibers formed into a mat with high strength and stiffness characteristics. The inherent strength provides rugged durability in operation. The media stiffness, when matched with our automated process, allows totally consistent spacing of the pleats. Blended

Efficiency by Particle Size

90
80
70
60
80
30
20
10
0
1 2 3 4 5 6 7 8 9

Particle Size (Micron)



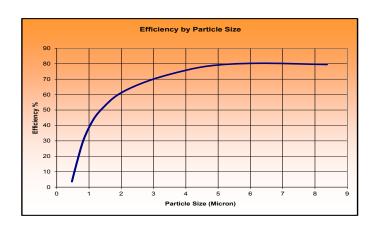
Standard-Capacity (KP)

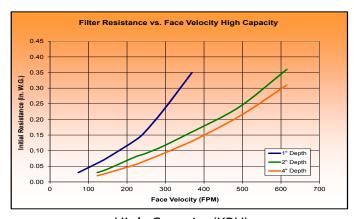
fiber construction allows full depth loading which enhances dust-holding capacity. Media performance is not impacted by high humidity or moisture and the synthetic fibers do not support microbial growth.

**Key Pleat** MERV 8 media operates on mechanical filtration principles which cause particulate efficiency to increase as the media loads. No enhanced electrostatic charge is intentionally applied to the media.

#### **Applications**

The **Key Pleat** is ideal for standard applications with normal airflows of 500 FPM or lower and medium dust-loading conditions. It is not recommended for applications with very high and/or turbulent airflows, higher operating temperatures or excessive dust-loading conditions. Contact your Purolator Sales Representative for assistance with application or technical issues.





High-Capacity (KPH)

# Key Pleat

Standard and High-Capacity Self-Supported Pleated Filters

#### **Technical Data:**



Nominal Size W x H x D	Actual Size W x H x D	Air Flow Capacity (CFM)		Initial Resistance 1"@300 FPM 2", 4"@500 FPM		Gross Media Area (Sq. Ft.)	
		KP 1" 300 FPM 2" 500 FPM	KPH 1" 300 FPM 2" 500 FPM 4" 500 FPM	КР	КРН	КР	КРН
10X20X1 10X24X1 12X12X1 12X20X1 12X24X1 14X14X1 14X20X1 14X20X1 14X25X1 14X30X1 15X20X1 16X16X1 16X20X1 16X24X1 16X20X1 16X22X1 16X30X1 18X18X1 18X20X1 18X24X1 18X25X1 20X22X1 20X22X1 20X22X1 20X22X1 20X24X1 20X25X1 20X30X1* 24X24X1 24X24X1 24X30X1 25X25X1	9-1/2 x 19-1/2 x 3/4 9-3/8 x 23-3/8 x 3/4 11-3/4 x 11-3/4 x 3/4 11-1/2 x 19-1/2 x 3/4 11-3/8 x 23-3/8 x 3/4 13-3/4 x 13-3/4 x 3/4 13-3/4 x 13-3/4 x 3/4 13-3/8 x 23-3/8 x 3/4 13-3/8 x 23-3/8 x 3/4 13-1/2 x 24-1/2 x 3/4 13-1/2 x 19-1/2 x 3/4 13-1/2 x 19-1/2 x 3/4 15-1/2 x 19-1/2 x 3/4 15-1/2 x 19-1/2 x 3/4 15-3/8 x 23-3/8 x 3/4 15-3/8 x 23-3/8 x 3/4 17-3/8 x 19-1/2 x 3/4 17-3/8 x 19-1/2 x 3/4 17-3/8 x 23-3/8 x 3/4 17-1/2 x 24-1/2 x 3/4 19-1/2 x 19-1/2 x 3/4 19-1/2 x 24-1/2 x 3/4 19-1/2 x 24-1/2 x 3/4 19-1/2 x 29-1/2 x 3/4 19-1/2 x 29-1/2 x 3/4 19-1/2 x 29-1/2 x 3/4 23-3/8 x 23-3/8 x 3/4 23-3/4 x 29-3/4 x 3/4	415 500 300 500 600 410 585 700 730 875 625 530 665 800 835 1000 675 750 900 936 830 915 1000 1040 1250 1200 1300	415 500 300 500 600 410 585 700 730 875 625 530 665 800 835 1000 675 750 900 936 830 915 1000 1040 1250	0.27 0.27 0.27 0.27 0.27 0.27 0.27 0.27	0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20	2.3 2.8 1.8 2.8 3.4 2.4 3.3 4.0 4.2 5.2 3.6 3.8 4.6 4.1 4.3 5.2 5.4 4.8 5.5 5.5 5.9 6.1 7.3 7.0 9.1 7.7	3.1 3.5 2.3 3.7 4.4 3.1 5.1 5.4 6.7 4.7 4.0 5.0 5.9 6.3 7.7 5.2 5.6 6.8 7.1 7.1 7.5 7.8 9.4 9.1 11.8 10.0
10X20X2 12X20X2 12X24X2 14X20X2 14X25X2 15X20X2 16X16X2 16X20X2 16X24X2 16X25X2 18X18X2 18X20X2 18X24X2 18X25X2 20X20X2 20X20X2 20X25X2 20X25X2 20X30X2* 24X24X2 25X25X2	9-1/2 x 19-1/2 x 1-3/4 11-1/2 x 19-1/2 x 1-3/4 11-3/8 x 23-3/8 x 1-3/4 13-1/2 x 19-1/2 x 1-3/4 13-1/2 x 19-1/2 x 1-3/4 13-1/2 x 24-1/2 x 1-3/4 15-3/4 x 15-3/4 x 1-3/4 15-3/4 x 15-3/4 x 1-3/4 15-1/2 x 19-1/2 x 1-3/4 15-1/2 x 19-1/2 x 1-3/4 15-1/2 x 24-1/2 x 1-3/4 17-3/4 x 17-3/4 x 1-3/4 17-1/2 x 19-1/2 x 1-3/4 19-1/2 x 19-1/2 x 1-3/4 19-1/2 x 19-1/2 x 1-3/4 19-1/2 x 29-1/2 x 1-3/4 19-1/2 x 29-1/2 x 1-3/4 19-1/2 x 29-1/2 x 1-3/4 23-3/8 x 23-3/8 x 1-3/4 24-1/2 x 24-1/2 x 1-3/4	700 840 1000 980 1220 1050 890 1120 1340 1400 1125 1250 1500 1570 1400 1670 1750 2085 2000 2170	700 840 1000 980 1220 1050 890 1120 1340 1400 1125 1250 1570 1400 1670 1750 2085 2000 2170	0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30	0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24	4.0 4.8 5.7 5.5 6.9 6.0 5.3 6.5 7.5 8.2 6.6 7.3 8.7 9.2 8.0 10.1 11.8 12.9	6.1 7.5 9.0 8.8 11.0 9.5 8.5 10.2 12.2 12.2 12.8 10.6 11.4 13.7 14.3 12.9 15.1 16.2 19.5 18.3 20.5
12X24X4 16X20X4 16X25X4 18X24X4 20X20X4 20X24X4 20X25X4 24X24X4	11-3/8 x 23-3/8 x 3-3/4 15-1/2 x 19-1/2 x 3-3/4 15-1/2 x 24-1/2 x 3-3/4 17-3/8 x 23-3/8 x 3-3/4 19-1/2 x 19-1/2 x 3-3/4 19-3/8 x 23-3/8 x 3-3/4 19-1/2 x 24-1/2 x 3-3/4 23-3/8 x 23-3/8 x 3-3/4	- - - - - - -	1000 1120 1400 1500 1400 1670 1750 2000	-	0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21	- - - - - -	13.0 14.9 18.8 19.7 18.5 22.2 22.3 26.5

<sup>\*</sup> Reverse Pleat

#### **NOTES:**

- 1. MERV 8, MERV-A 8-A
- 2. All performance data is based on the ASHRAE 52.2-2007 Test Standard. Tested at 492 FPM for a 24x24x2 or 24x24x4 size filter.
- 3. Maximum final resistance 1.0" W.G.
- 4. Filters may be installed with the pleats either vertical (preferred) or horizontal.

Underwriters Laboratories, Inc. Classification: Key Pleat filters are classified per UL 900 for flammability only.

Operating Temperature Limits: Maximum operating temperature is  $150^{\circ}F$  (65°C).

Distributed by:



#### www.clcair.com/purolator







P-KEYPLEAT-0814



