

*New Design and Improved Performance*

# *Multi-Pleat XL11™*

*MERV 11 Extended Surface Pleated  
Panel Filters*



- Upgrade from standard pleated filters
- MERV 11 efficiency rating
- Dual-layered filter media
- Low pressure drop
- Superior efficiency
- High dust holding capacity



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

Bulletin No. K-602

# Multi-Pleat XL11 MERV 11 Extended Surface Pleated Panel Filters



The Koch **Multi-Pleat XL11** is a medium efficiency extended surface pleated panel filter, engineered to provide higher initial efficiencies and better overall performance than standard pleated filters.

The **Multi-Pleat XL11** carries a MERV 11 fractional efficiency rating in accordance with ASHRAE Test Standard 52.2. The filter will also provide an Initial Dust Spot Efficiency of 45%, and an Average Dust Spot Efficiency of 55-60% in accordance with ASRAE Rest Standard 52.1.

The MERV 11 efficiency ratings provided by the **Multi-Pleat XL11** make the filter an excellent upgrade from disposable filters and ordinary pleated filters in applications such as hospitals, laboratories and pharmaceutical plants, commercial office buildings, and in any system in which a higher degree of clean air is required.

## Multi-Pleat XL11 Construction

The **Multi-Pleat XL11** is produced with a highly specialized, dual-layered 100% synthetic media, developed by Koch Filter Corporation specifically for use in extended surface air filters. The new media is composed of an upstream electrostatically enhanced layer (the E-layer), and a downstream mechanical layer (the M-layer).

### Combination Electrostatic and Mechanical Media

The dual-layered construction of Multi-Pleat Series XL11 overcomes a common problem found in single-layered electrostatically charged filters. In filters produced with single-layered media, the effectiveness of the electrostatically charged media decreases over time as the filter becomes dirty and the charge dissipates.

The unique dual-layered media design of the Multi-Pleat XL11 greatly reduces this problem. As the effectiveness of the electrostatically enhanced E-layers decreases, the downstream mechanical M-layer takes over. The M-layer steps up to provide better continuing overall performance and excellent dust holding capacity.

Moisture resistant beverage board frame maintains rigidity even in high humidity environments.

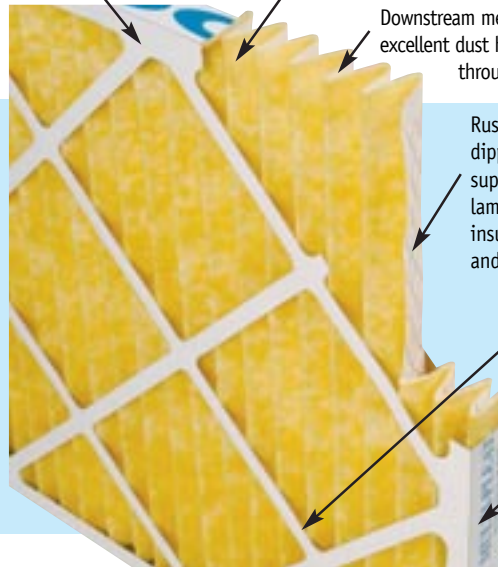
Upstream electrostatically charged **E-Layer** provides high initial efficiencies.

Downstream mechanical **M-Layer** provides excellent dust holding capacities and efficiencies throughout the filter's lifecycle.

Rust resistant galvanized-dipped expanded metal support grid is totally laminated to media to insure even pleat spacing and structural support.

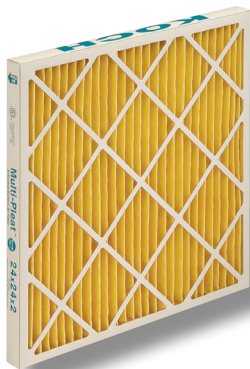
Pleats are bonded to frame to guarantee consistent pleat configuration and total media utilization.

Frame is double-walled with reinforced corners to insure rigidity in the toughest applications.



## Two Media Area Capacity Levels

The **Multi-Pleat XL11** is an extremely versatile line of pleated panel filters which can be used in a wide variety of filtration systems worldwide. In order to meet the different requirements found in these applications, Koch offers the XL11 Series in two media area capacity levels.



### Standard Capacity

Standard Capacity **XL11-SC** filters provide a combination of efficiency, economy, and excellent overall performance. Standard Capacity XL11 filters are an excellent choice in applications where filter change schedules are based on preventive maintenance schedules.



### High Capacity

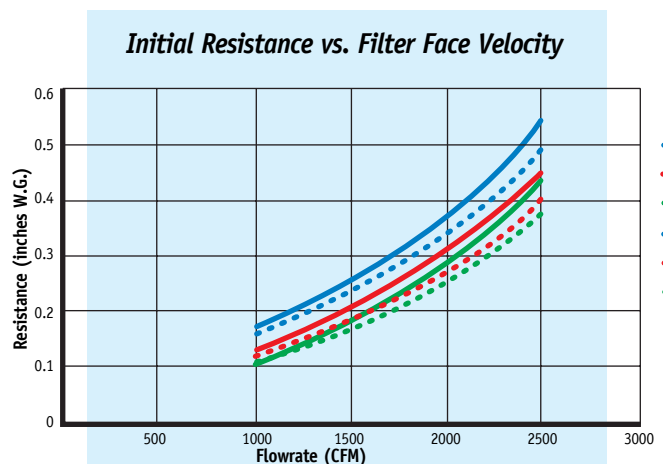
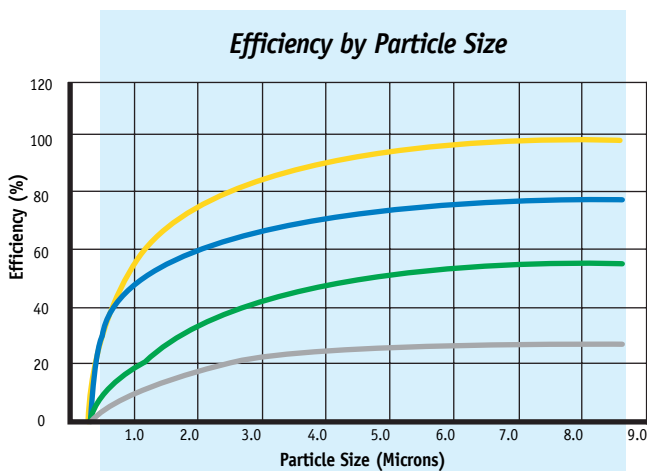
High Capacity **XL11-HC** filters are similar in construction to the Standard Capacity but have the added advantage of approximately 30% more media. The additional media results in extended filter life, making the XL11-HC the ideal filter for use in filtration systems where filter change schedules are predicated on recommended final pressure drop readings.

# Multi-Pleat XL11 Technical Data

Standard Capacity XL11-SC			High Capacity XL11-HC			
Size (Nominal)	Size (Actual in inches)	Capacity (CFM) Low/Med/High @300 500 625 (FPM)	Resistance (in W.G.) Low/Med/High/Final @300 500 625 (FPM)	Media Area (Sq. Ft.)	Resistance (in W.G.) Low/Med/High/Final @300 500 625 (FPM)	Media Area (Sq. Ft.)
10x20x1	9-7/8x19-7/8x7/8	425/ 700/ NR	.16/.37/NR/1.0	2.2	.15/.34/NR/1.0	3.2
12x24x1	11-3/8x23-3/8x7/8	600 / 1000 / NR	.16/.37/NR/1.0	3.2	.15/.34/NR/1.0	4.6
14x20x1	13-7/8x19-7/8x7/8	590 / 980 / NR	.16/.37/NR/1.0	3.1	.15/.34/NR/1.0	4.5
14x25x1	13-7/8x24-7/8x7/8	730 / 1215 / NR	.16/.37/NR/1.0	3.9	.15/.34/NR/1.0	5.6
15x20x1	14-7/8x19-7/8x7/8	625 / 1050 / NR	.16/.37/NR/1.0	3.3	.15/.34/NR/1.0	4.8
16x20x1	15-1/2x19-1/2x7/8	670 / 1115 / NR	.16/.37/NR/1.0	3.6	.15/.34/NR/1.0	5.1
16x25x1	15-1/2x24-1/2x7/8	840 / 1400 / NR	.16/.37/NR/1.0	4.5	.15/.34/NR/1.0	6.4
20x20x1	19-1/2x19-1/2x7/8	840 / 1400 / NR	.16/.37/NR/1.0	4.5	.15/.34/NR/1.0	6.4
20x25x1	19-1/2x24-1/2x7/8	1050 / 1740 / NR	.16/.37/NR/1.0	5.6	.15/.34/NR/1.0	8.0
24x24x1	23-3/8x23-3/8x7/8	1200 / 2000 / NR	.16/.37/NR/1.0	6.4	.15/.34/NR/1.0	9.2
12x24x2	11-3/8x23-3/8x1-3/4	600 / 1000 / 1200	.14/.31/.51/1.0	6.2	.13/.28/.49/1.0	9.2
14x20x2	13-3/4x19-3/4x1-3/4	590 / 980 / 1215	.14/.31/.51/1.0	6.1	.13/.28/.49/1.0	8.9
14x25x2	13-3/4x24-3/4x1-3/4	730 / 1215 / 1520	.14/.31/.51/1.0	7.5	.13/.28/.49/1.0	12.0
15x20x2	14-3/4x19-3/4x1-3/4	625 / 1050 / 1310	.14/.31/.51/1.0	6.5	.13/.28/.49/1.0	9.6
16x20x2	15-1/2x19-1/2x1-3/4	670 / 1115 / 1400	.14/.31/.51/1.0	6.8	.13/.28/.49/1.0	10.2
16x25x2	15-1/2x24-1/2x1-3/4	840 / 1400 / 1740	.14/.31/.51/1.0	8.7	.13/.28/.49/1.0	12.8
18x24x2	17-1/2x23-1/2x1-3/4	900 / 1500 / 1875	.14/.31/.51/1.0	9.3	.13/.28/.49/1.0	13.8
20x20x2	19-1/2x19-1/2x1-3/4	840 / 1400 / 1740	.14/.31/.51/1.0	8.7	.13/.28/.49/1.0	12.8
20x24x2	19-1/2x23-1/2x1-3/4	1000 / 1675 / 2100	.14/.31/.51/1.0	10.3	.13/.28/.49/1.0	15.3
20x25x2	19-1/2x24-1/2x1-3/4	1050 / 1740 / 2170	.14/.31/.51/1.0	10.8	.13/.28/.49/1.0	16.0
24x24x2	23-3/8x23-3/8x1-3/4	1200 / 2000 / 2500	.14/.31/.51/1.0	12.4	.13/.28/.49/1.0	18.4
25x25x2	24-3/8x24-3/8x1-3/4	1310 / 2170 / 2720	.14/.31/.51/1.0	13.5	.13/.28/.49/1.0	20.0
12x24x4	11-3/8x23-3/8x3-3/4	600 / 1000 / 1250	.13/.29/.45/1.0	11.6	.12/.27/.43/1.0	14.0
16x20x4	15-1/2x19-1/2x3-3/4	670 / 1115 / 1400	.13/.29/.45/1.0	12.9	.12/.27/.43/1.0	15.6
18x24x4	17-1/2x23-3/8x3-3/4	900 / 1500 / 1875	.13/.29/.45/1.0	17.4	.12/.27/.43/1.0	21.0
20x20x4	19-1/2x19-1/2x3-3/4	840 / 1400 / 1740	.13/.29/.45/1.0	16.1	.12/.27/.43/1.0	19.4
20x24x4	19-1/2x23-3/8x3-3/4	1000 / 1675 / 2100	.13/.29/.45/1.0	19.3	.12/.27/.43/1.0	24.0
20x25x4	19-1/2x24-1/2x3-3/4	1050 / 1740 / 2170	.13/.29/.45/1.0	20.1	.12/.27/.43/1.0	24.3
24x24x4	23-3/8x23-3/8x3-3/4	1200 / 2000 / 2500	.13/.29/.45/1.0	23.2	.12/.27/.43/1.0	28.0
24x24x6	23-3/8x23-3/8x5-3/4	1200 / 2000 / 2500	.14/.30/.43/1.0	35.6	.12/.28/.41/1.0	45.2

## Additional Multi-Pleat XL8 Product Information

MERV (Minimum Efficiency Reporting Value) • Recommended Final Pressure Drop is 1.0" w.g. • Performance data is based on ASHRAE Test Standards 52.1-1999 and 52.2-2007. Recommended maximum continuous operational temperature is 200°F. • Multi-Pleat XL8 filters are classified as Underwriter's Laboratories Class 2 according to U.L. Standard 900.





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