

# REVOLUTION POCKET (MERV 11)

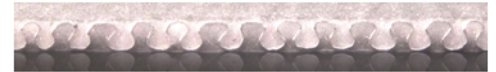
## HIGH EFFICIENCY EXTENDED SURFACE POCKET FILTER

### FEATURES

- 100% mechanical filtration ensures permanent efficiency
- Synthetic media utilizing “waves” to increase the surface area
- Resistant to humid environments
- Increased filter life

### IDEAL FOR:

- Hospitals
- Food and Pharmaceutical processing
- Airports
- Schools
- Data Centers
- Paint Booths
- Office Complexes
- Gun ranges
- Computer rooms



### CONSTRUCTION

- Sonic Sealed — Leak Free
- Self-Supporting
- Galvanized Steel Frame
- Aerodynamic internal channels

### PERFORMANCE DATA

Rating	MERV 11 @ 1968CFM
Dust Holding Capacity	961.4 grams
Initial Resistance	.183 in w.g.
Final Resistance	1.50 in w.g.

### PART NUMBER GUIDE

Prefix	Efficiency	Filter Size WxHxD	Pockets	Gasket	Hanger	Header
RV = Revolution	MERV 11 65%		3P	Blank - None	Blank - None	Blank-Standard 7/8"
			4P	R = Rear Load	1-Loops, 2 corners	CB- 1-1/8"
			5P			
			6P	F = Front Load	2-Middle of Pocket	Example: RV1124242208F= Revolution Bag, MERV 11 Efficient, 24x24x22, 8 pockets, Gasket on air exit side of header
			7P			
			8P			
			9P	S= One Vertical Side		
			10P	BS= Both Vertical Sides		
			11P	P=Perimeter		
			12P			

### Rensa Filtration

966 Corporate Boulevard, Ste. 150  
1-630-FILTERS | 1-630-345-8377

# REVOLUTION POCKET (MERV 13-A)

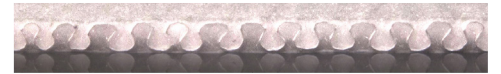
## HIGH EFFICIENCY EXTENDED SURFACE POCKET FILTER

### FEATURES

- Synthetic media utilizing “waves” to increase the surface area
- Resistant to humid environments
- Increased filter life
- U.L. Classified

### IDEAL FOR:

- Hospitals
- Schools
- Office Complexes
- Food and Pharmaceutical processing
- Data Centers
- Gun ranges
- Airports
- Paint Booths
- Computer rooms



### CONSTRUCTION

- Sonic Sealed — Leak Free
- Self-Supporting
- Galvanized Steel Frame
- Aerodynamic internal channels

### PART NUMBER GUIDE

Prefix	Efficiency	Filter Size WxHxD	Pockets	Gasket	Hanger	Header
RV = Revolution	MERV 13 85%		3P	Blank - None	Blank - None	Blank-Standard 7/8"
			4P	R = Rear Load	1-Loops, 2 corners	CB- 1-1/8"
			5P			
			6P	F = Front Load	2-Middle of Pocket	Example: RV1324242208F= Revolution Bag, MERV 13 Efficient, 24x24x22, 8 pockets, Gasket on air exit side of header
			7P			
			8P	S= One Vertical Side		
			9P			
			10P	BS= Both Vertical Sides		
			11P			
			12P	P=Perimeter		

### PERFORMANCE DATA | Filter Size: 24x24x12 (10 Pocket)

Rating	MERV 13-A @ 1968 cfm
Initial Resistance	0.285 in w.g.
Dust Holding Capacity	>750 grams*
Final Resistance	1.50 in w.g.
Recycling	97% recyclable

\*Iso Fine Dust

### Rensa Filtration

966 Corporate Boulevard, Ste. 150  
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## REVOLUTION POCKET (MERV 14)

Our Revolution Pockets are extended surface bag filters that utilize a unique proprietary synthetic depth-loading media utilizing pre-formed pocket waves in the manufacturing process to increase the effective media area by more than 2.4x in the same space. This proprietary manufacturing process greatly enhances the dust holding capacity vs. generic “me-too” pocket filters in the market today, more importantly the unique synthetic fiber matrix will not lose its efficiency compared to other synthetic or “electrostatic” pocket or bag filters used in the market, the Revolution Pocket is a “sustainable filter” and will not lose its efficiency during its operational life.

The Revolution is manufactured with galvanized header to ensure its rigidity while providing a leak-proof design. The pockets are formed and sonically welded to eliminate the need for stitching throughout the pocket. The Revolution extended surface filters can be used in general HVAC systems, surface finishing plants, hospitals, pharmaceutical plants, food processing plants, telecommunication stations, and industrial environments where sustained performance and high dust-holding capacity is required.

This filter has been tested to ASHRAE 52.2-2012



**NANO WAVE MEDIA**



### BENEFITS:

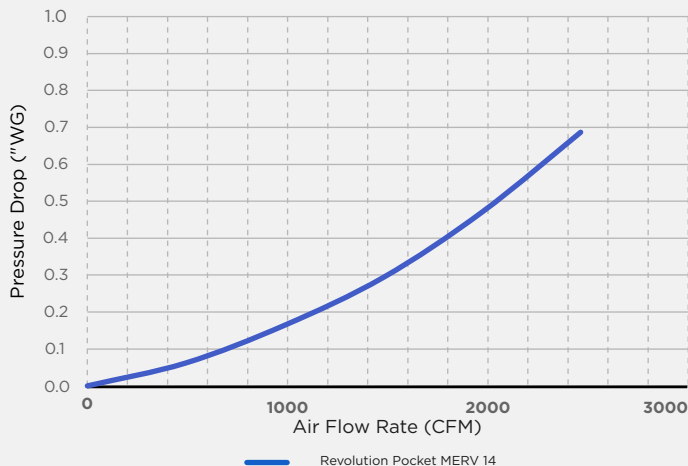
- Sustainable filter efficiency
- Low pressure drop ( $\Delta P$ )
- Patented dust pocket waves throughout media
- High dust holding capacity
- V formed heat-sealed pockets for better air flow
- 100% RH resistance
- Maximum Temperature 140°F (60°C)

PERFORMANCE	RESULTS
Pressure Drop @ 1,968 CFM	0.50" w.g. (124.5 Pa)
Particle Size Efficiency @ 5 $\mu$ m	100%
Burst Strength Pressure Test:	12.0" w.g. (3000 Pa)
Sustainable Efficiency:	ASHRAE MERV 14
Dust Hold Capacity:	776 grams @ 1.50" w.g.

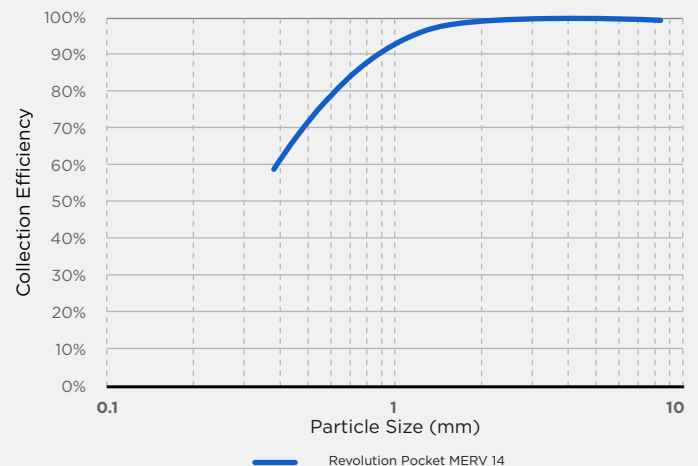
### APPLICATIONS



### PRESSURE DROP CURVE



### PARTICLE SIZE EFFICIENCY



## PERFORMANCE TECHNICAL DATA

Viskon-Aire® Model Number	MERV Rating EN779	Actual Dimensions Inches (mm)			Capacity CFM (m³/hr)	Initial Pressure Drop inches w.g. (Pa)	Pockets	Media Area ft² (m²)
		Width	Height	Depth				
Revolution RV1424242208	14 (F8)	23- 5/16" (592)	23- 5/16" (592)	22" (559)	2,000 (3,400)	0.50" w.g. (124 Pa)	8	58 ft² 5.39 m²
Revolution RV1412242204	14 (F8)	11- 5/16" (287)	23- 5/16" (592)	22" (559)	1,000 (1,700)	0.50" w.g. (124 Pa)	4	29 ft² 2.69 m²
Revolution RV1424242608	14 (F8)	23- 5/16" (592)	23- 5/16" (592)	26" (660)	2,000 (3,400)	0.46" w.g. (114 Pa)	8	66 ft² 6.1 m²
Revolution RV1412242604	14 (F8)	11- 5/16" (287)	23- 5/16" (592)	26" (660)	1,000 (1,700)	0.46" w.g. (114 Pa)	4	34 ft² 3.15 m²

## PERFORMANCE DATA NOTES FOR VISKON-AIRE FILTERS

1. Pressure drop represents inches of water (0.50" w.g) for a 22" depth filter while the 26" depth is 0.46" with the filter being in a clean condition at 2,000 CFM. Final pressure drop is recommended to 1.5" w.g., however, it is recommended that the pressure drop change should be selected based on lifecycle costing that optimizes the best energy savings.
2. Efficiency is based upon ASHRAE Test Standard 52.2-2012

## PRODUCT SHIPPING & PACKAGING INFORMATION

Filter Size	Actual Dimensions Inches (mm)			Weight Lbs (kg)	Packaging	Carton Dimensions Inches (mm)
	Width	Height	Depth			
Revolution RV1424242208	23- 5/16" (592)	23- 5/16" (592)	22" (559)	6.5 lbs (2.95 kg)	4 per carton	25"x25"x12" (635x635x305)
Revolution RV1412242204	11- 5/16" (287)	23- 5/16" (592)	22" (559)	3.75 lbs (1.70 kg)	4 per carton	12"x25"x12" (305x635x305)
Revolution RV1424242608	23- 5/16" (592)	23- 5/16" (592)	26" (660)	7 lbs (3.18 kg)	4 per carton	25"x25"x12" (635x635x305)
Revolution RV1412242604	11- 5/16" (287)	23- 5/16" (592)	26" (660)4	4 lbs (1.81 kg)	4 per carton	12"x25"x12" (305x635x305)

We have a policy of continuous research & development and reserves the right to change the design and specifications without notice.

Unique proprietary synthetic depth-loading media with pre-formed pocket waves **increases effective media area by 2.5x** in the same space.

**Other Synthetic Media**  
Flat surface for low DHC

**Revolution Media**  
Pockets for high DHC

**Fiberglass Media**  
Glass fiber shedding

# Revolution Pocket Filters (MERV 16)

100% Mechanical Filter with Extended Surface Pockets

With a unique proprietary synthetic depth-loading media utilizing pre-formed pocket waves in the manufacturing process, the effective media area is increased by more than 2.4x in the same space. This proprietary manufacturing process greatly enhances the dust holding capacity. The unique synthetic fiber matrix will not lose its efficiency compared to other synthetic or “electrostatic” pocket or bag filters used in the market.



### BENEFITS

- 2.4x more effective media area for a 15-30% lower pressure drop
- High DHC (790 gms) with Low IR (0.34”) for a 8 pocket 22” depth filter
- 40% estimated energy savings after 1 year of usage

### APPLICATIONS

- Industrial environments where sustained performance & high dust-holding capacity is required
- Surface Finishing Plants
- Telecommunications Stations
- Pharmaceutical Plants
- Food Processing Plants
- General HVAC Systems
- Data Centers
- Hospitals

Performance	Results
Pressure Drop @ 1,968 CFM	0.34” w.g. (124.5 Pa)
Particle Size Efficiency @ 5µm	100%
100% Burst Strength Pressure Test	12.0” w.g. (3000 Pa)
Sustainable Efficiency:	ASHRAE MERV 16
Dust Hold Capacity	791 grams @ 1.50” w.g.

US AQI Efficiency		PM1 <sub>52.2</sub>	PM2.5 <sub>52.2</sub>	PM10 <sub>52.2</sub>
Particles	MERV 16	98	98	98
	MERV 15	90	91	93
	MERV 14	80	85	88
	MERV 13	63	75	81
Gases	MERV 12	43	63	72
	MERV 11	28	50	63
	MERV 10	15	36	52
	MERV 9	8	25	43
	MERV 8	5	16	35

The Revolution Pocket Filters have been tested to ASHRAE 52.2-2012 Appendix J



## BENEFITS

- Galvanized header ensures rigidity while providing leak-proof design
- “Sustainable filter” - will not lose efficiency during operational life
- Low pressure drop ( $\Delta P$ )
- Patented dust pocket waves throughout media
- High dust holding capacity
- V formed heat-sealed pockets for better air flow
- 100% RH resistance
- Maximum emperature 140°F (60°C)



Nano Wave Media



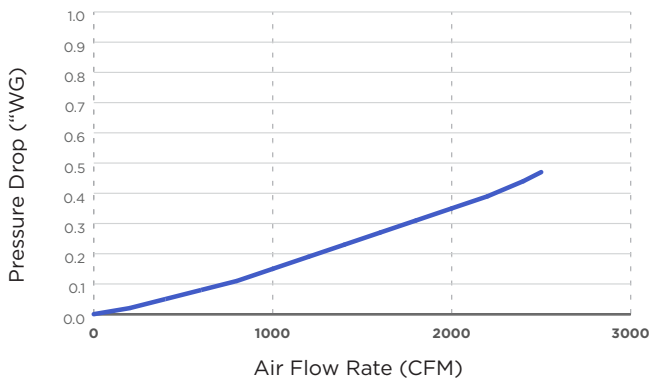
## Performance Technical Data

Model Number	MERV Rating EN779	Actual Dimensions Inches (mm)			Capacity CFM (m <sup>3</sup> /hr)	Initial Pressure Drop inches w.g. (Pa)	Pockets	Efficiency
		Width	Height	Depth				
Revolution RV1624242208	16	23- 5/16" (592)	23- 5/16" (592)	22" (559)	2,000 (3,400)	0.34" w.g. (84.7 Pa)	8	58 ft <sup>2</sup> 5.39 m <sup>2</sup>
Revolution RV1612242204	16	11- 5/16" (287)	23- 5/16" (592)	22" (559)	1,000 (1,700)	0.34" w.g. (84.7 Pa)	4	29 ft <sup>2</sup> 2.69 m <sup>2</sup>

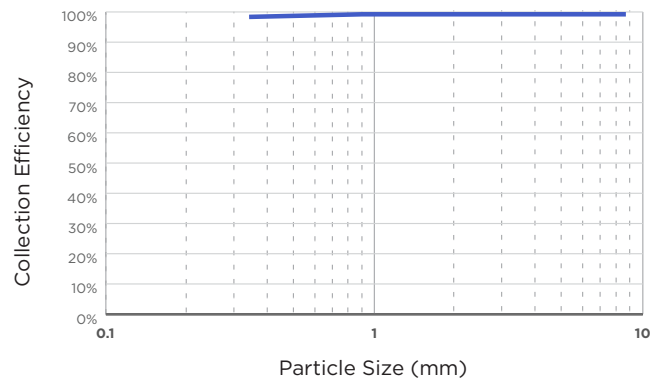
## Product Shipping & Packaging Information

Filter Size	Actual Dimensions Inches (mm)			Weight Lbs (kg)	Packaging	Carton Dimensions Inches (mm)
	Width	Height	Depth			
Revolution RV1624242208	23- 5/16" (592)	23- 5/16" (592)	22" (559)	6.5 lbs (2.95 kg)	4 per carton	25"x25"x12" (635x635x305)
Revolution RV1612242204	11- 5/16" (287)	23- 5/16" (592)	22" (559)	3.75 lbs (1.70 kg)	4 per carton	12"x25"x12" (305x635x305)
Revolution RV1624242608	23- 5/16" (592)	23- 5/16" (592)	26" (660)	7 lbs (3.18 kg)	4 per carton	25"x25"x12" (635x635x305)
Revolution RV1612242604	11- 5/16" (287)	23- 5/16" (592)	26" (660)	4 lbs (1.81 kg)	4 per carton	12"x25"x12" (305x635x305)

Pressure Drop Curve



Particle Size Efficiency



### Filter Performance Data Notes:

1. Pressure drop represents inches of water (0.34" w.g) for a 22" depth filter with the filter being in a clean condition at 2,000 CFM. Final pressure drop is recommended to 1.5" w.g., however, it is recommended that the pressure drop change should be selected on the basis of life cycle costing that optimizes the best energy savings in HVAC systems.
2. Efficiency is based upon ASHRAE Test Standard 52.2-2012 Appendix J.