



Better Air is Our Business®



AmericanAirFilter®

VariCel® and VariCel® with Antimicrobial

Extended Surface, Supported Pleated Filters

Engineering Data

Supplement to Bulletin AFP-1-158

^(1,2) Nominal Size (Inches) (W x H x D)	⁽³⁾ Rated Airflow Capacity (SCFM)	Resistance (in. w.g.)			Gross Media Area (ft ²)		^(1,2) Nominal Size (Inches) (W x H x D)	⁽³⁾ Rated Airflow Capacity (SCFM)	Resistance (in. w.g.)		Gross Media Area (ft ²)
		⁽⁴⁾ Initial		Recom- mended Final	Standard	⁽⁶⁾ XL Series			⁽⁴⁾ Initial	Recom- mended Final	
		Standard	Series								
⁽⁶⁾Rated Filter Face Velocity — 500 FPM							⁽⁶⁾Rated Filter Face Velocity — 250 FPM				
24 x 24 x 12	2000	.58	.56	1.5	125	175	24 x 24 x 6	1000	.38	1.5	60
⁽⁷⁾ 24 x 24 x 12	2000	.58	.56	1.5	132	187	⁽⁷⁾ 24 x 24 x 6	1000	.38	1.5	63
20 x 25 x 12	1750	.58	.56	1.5	108	152	20 x 25 x 6	875	.38	1.5	52
20 x 24 x 12	1650	.58	.56	1.5	103	145	20 x 24 x 6	825	.38	1.5	49
20 x 20 x 12	1400	.58	.56	1.5	84	118	20 x 20 x 6	700	.38	1.5	40
18 x 24 x 12	1500	.58	.56	1.5	91	129	18 x 24 x 6	750	.38	1.5	44
16 x 25 x 12	1400	.58	.56	1.5	84	118	16 x 25 x 6	700	.38	1.5	40
16 x 20 x 12	1100	.58	.56	1.5	65	92	16 x 20 x 6	550	.38	1.5	31
12 x 24 x 12	1000	.58	.56	1.5	57	80	12 x 24 x 6	500	.38	1.5	27
⁽⁶⁾Rated Filter Face Velocity — 500 FPM							⁽⁶⁾Rated Filter Face Velocity — 250 FPM				
24 x 24 x 12	2000	.56	-	1.5	105	-	24 x 24 x 6	1000	.31	1.5	50
⁽⁷⁾ 24 x 24 x 12	2000	.56	-	1.5	113	-	⁽⁷⁾ 24 x 24 x 6	1000	.31	1.5	54
20 x 25 x 12	1750	.56	-	1.5	90	-	20 x 25 x 6	875	.31	1.5	43
20 x 24 x 12	1650	.56	-	1.5	86	-	20 x 24 x 6	825	.31	1.5	41
20 x 20 x 12	1400	.56	-	1.5	70	-	20 x 20 x 6	700	.31	1.5	33
18 x 24 x 12	1500	.56	-	1.5	76	-	18 x 24 x 6	750	.31	1.5	36
16 x 25 x 12	1400	.56	-	1.5	70	-	16 x 25 x 6	700	.31	1.5	33
16 x 20 x 12	1100	.56	-	1.5	54	-	16 x 20 x 6	550	.31	1.5	26
12 x 24 x 12	1000	.56	-	1.5	47	-	12 x 24 x 6	500	.31	1.5	22
⁽⁶⁾Rated Filter Face Velocity — 500 FPM							⁽⁶⁾Rated Filter Face Velocity — 250 FPM				
24 x 24 x 12	2000	.39	.37	1.5	105	175	24 x 24 x 6	1000	.16	1.5	50
⁽⁷⁾ 24 x 24 x 12	2000	.39	.37	1.5	113	187	⁽⁷⁾ 24 x 24 x 6	1000	.16	1.5	54
20 x 25 x 12	1750	.39	.37	1.5	90	152	20 x 25 x 6	875	.16	1.5	43
20 x 24 x 12	1650	.39	.37	1.5	86	145	20 x 24 x 6	825	.16	1.5	41
20 x 20 x 12	1400	.39	.37	1.5	70	118	20 x 20 x 6	700	.16	1.5	33
18 x 24 x 12	1500	.39	.37	1.5	76	129	18 x 24 x 6	750	.16	1.5	36
16 x 25 x 12	1400	.39	.37	1.5	70	118	16 x 25 x 6	700	.16	1.5	33
16 x 20 x 12	1100	.39	.37	1.5	54	92	16 x 20 x 6	550	.16	1.5	26
12 x 24 x 12	1000	.39	.37	1.5	47	80	12 x 24 x 6	500	.16	1.5	22

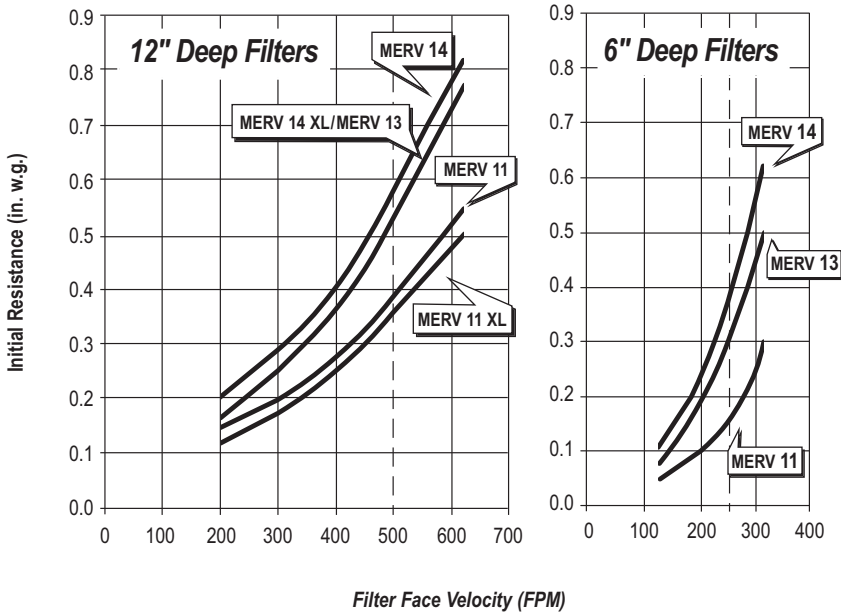
- (1) Width and height dimension are interchangeable. VariCel filters can be installed with the pleats either vertical or horizontal.
- (2) Actual dimensions are 5/8" less than nominal. (24" x 24" is 23 3/8" x 23 3/8").
- (3) SCFM (Standard Cubic Feet per Minute): Rated Airflow Capacity at "Standard" Conditions - 68°F (20°C) at Sea Level (29.92" of Mercury).
- (4) All performance data is based on the ASHRAE 52.2-2007 test method. Performance tolerances conform to Section 7.4 of ARI Standard 850-84.
- (5) XL Series VariCel filters are available with single header and double header construction, 12" deep, and MERV 14 and MERV 11 efficiencies.
- (6) VariCel filters can be operated up to 125% of rated filter face velocity.
- (7) Full size 24" x 24" actual face dimensions. Available in double header construction only.

AmericanAirFilter®

VariCel® and VariCel® with Antimicrobial

Performance Information

Initial Resistance vs. Filter Face Velocity



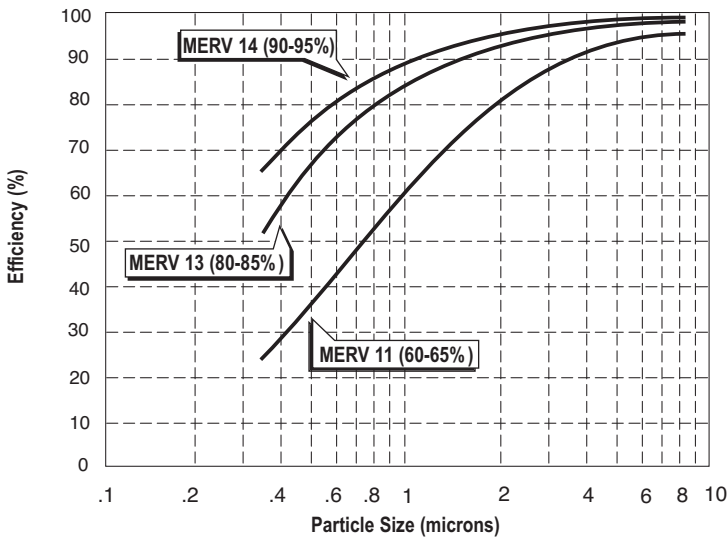
12" deep filters are rated at 500 FPM filter face velocity.
 6" deep filters are rated at 250 FPM filter face velocity.
 Recommended final resistance for all VariCel filters is 1.5 in. w.g.

Operating Temperature Limits

VariCel Filter Models	Temperature Limit	
Types SH, DH, XL	350°F	177°C
Type HT-500	500°F	260°C
Type HT-725	750°F	385°C
Type HT-900	900°F	482°C
Type NH	200°F	93°C

Underwriters Laboratories Inc. Classification:
 All VariCel filters are Class 1. Testing was performed according to UL Standard 900 and CAN 4-S111.

Efficiency by Particle Size*



* Tested in accordance with ASHRAE Standard 52.2-2007

AAF®
 INTERNATIONAL
 10300 Ormsby Park Place Suite 600
 Louisville, Kentucky 40223-6169
 www.aafintl.com
 Customer Service 888.AAF.2003
 Fax 888.223.6500



AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.

ISO Certified Firm

©2010 AAF International
 The USGBC Member logo is a trademark owned by the U.S. Green Building Council and is used by permission.