

AstroCel® I HTP

HIGH TEMPERATURE HEPA FILTERS



- High temperature resistance up to a peak of 752°F (400°C) to protect ultra clean processes
- Handling high airflow rates up to 1236 CFM for critical processes
- Stainless steel construction prevents potential damage from heat stretching
- Uses elastic fiberglass sealant eliminating cracking or particle shedding seen with ceramic
- Free of silicone to safeguard air quality

The AstroCel I HTP high temperature HEPA filter from AAF is designed to provide excellent protection of high temperature processes in ultra clean environments that can be found in industries such as pharmaceutical or electronics. It supports compliance with the most stringent requirements so that the high output quality requirements can be realized at minimized failure costs.



Stainless steel structure for superior durability during heating and cooling.

Reliable High Temperature Operation

In continuous service, the AstroCel I HTP filter offers a maximum temperature resistance of 662°F (350°C), with a peak of 752°F (400°C) for one hour. The robust all stainless steel structure prevents the media damage caused by thermal stresses where materials with different expansion coefficients are used during temperature rising and falling. The elastic fiberglass media sealant is not prone to integrity breaches from stress cracks giving a superior durability. Thorough heat-cycle tests have confirmed damage-free construction and consistent performance in pressure drop and efficiency at 662°F (350°C). Bias crimped separators in combination with stabilizer bars inside the media pack ensure the uniformity of the media pack is maintained in operation. The AstroCel I HTP filter offers a unique combination of high temperature operation and superior durability, optimizing process results and limiting unscheduled downtimes.

High Air Quality Conditions

The AstroCel I HTP filter provides a high air quality level with a particulate collection efficiency of $\geq 99.97\%$ for 0.3 μm particles at a nominal airflow of 1236 CFM. With this high airflow rate, ventilation can be optimized for enabling speedy temperature control. The silicone-free construction of the AstroCel I HTP filter further enhances the air purity level during the various steps of the sterilization process, without the risk of siloxane contamination. For critical process applications in which no concessions can be made to quality and yields, the new AstroCel I HTP filter from AAF provides the right solution for ensuring that the strict air cleanliness conditions are met.

Beneficial Total Cost of Ownership

The features described above can allow for a significant reduction in heating and cooling times, reducing the total cycle times of batch processes, increasing production throughput and reducing overall cost.

Applications

Pharmaceutical: dry heat sterilization and depyrogenation

Electronics: clean oven for LCD and TFT manufacturing

Food and Beverage: drying facilities

Chemical: cleaning and drying for laboratory research

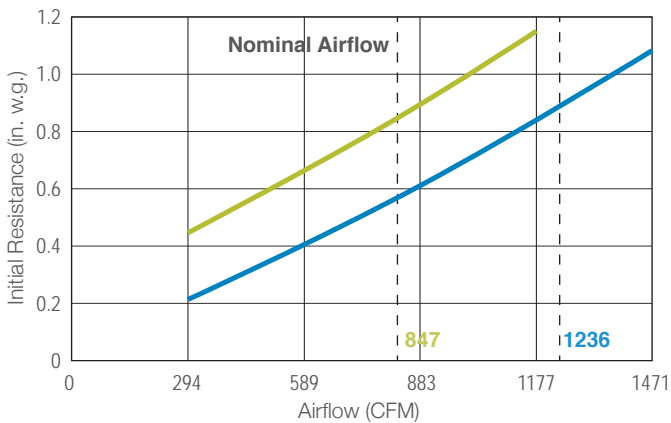
AstroCel® I HTP

Product Information

Nominal Sizes (in.)			Rated Airflow Capacity CFM	Efficiency (%) at 0.3 µm	Rated Resistance (in. w.g.)		Operating Temperatures °F / °C		Shipping Weight (lbs.)
W	H	D			Initial	Final Maximum	Continuous	Peak	
24	24	5.875	847	≥ 99.97	1.0	2.0	662 / 350	752 (1h) / 400	29
24	24	11.50	1236	≥ 99.97	1.0	2.0	662 / 350	752 (1h) / 400	48

Performance Data

Resistance to Airflow



- AstroCel® I HTP - 24 x 24 x 5.875
- AstroCel® I HTP - 24 x 24 x 11.50

Tests performed under ambient conditions (68°F).

Standard Configuration

Filter media	
Material	Ultrafine microglass
Pack design	Deep-pleat
Separator	Stainless steel with tapering in cross oblique position
Filter frame	
Material	Stainless steel with 2 vertical support bars
Sealant	Elastic fiberglass
Gasket	
Material	Laminated fiberglass



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

ISO Certified Firm
AFP-1-115 12/14

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**IMPORTANT
FILTERS SHOULD BE CONDITIONED PRIOR
TO USE AT HIGH TEMPERATURE**

**IMPORTANTE
LOS FILTROS DEBEN ACONDICIONARSE ANTES DE
USARSE A ALTAS TEMPERATURAS**

1. EQUIPMENT MANUFACTURER'S MANUAL SHOULD BE REVIEWED FOR SPECIFIC INSTRUCTIONS ABOUT EQUIPMENT, BEFORE START-UP.
2. HIGH TEMPERATURE CONDITIONING:
 - a. RAMP OVEN TEMPERATURE 1.5°C / MINUTE (35°F / MINUTE) INCREMENTS TO MAX. FILTER RATING:
RED RTV SEALANT FILTERS 260°C (500°F)
BLACK CEMENT FILTERS 400°C (750°F)
 - b. HOLD AT THIS TEMPERATURE FOR TWO HOURS OR UNTIL SMOKE CEASES.

1. ANTES DEL ENCENDIDO, ES NECESARIO CONSULTAR LAS INSTRUCCIONES DEL EQUIPO EN EL MANUAL DEL FABRICANTE.
2. ACONDICIONAMIENTO A ALTAS TEMPERATURAS:
 - a. INCREMENTE LA TEMPERATURA DEL HORNO EN RAMPA EN INCREMENTOS DE 1.5°C / MINUTO (35°F / MINUTO) A LA CALIFICACION MAXIMA DEL FILTRO:
SELLACOR RTV ROJO FILTRO 260°C (500°F)
CEMENTO NEGRO FILTRO 400°C (750°F)
 - b. MANTENGA ESTA TEMPERATURA DURANTE DOS HORAS O HASTA QUE EL HUMO SE DETIENE.

PLEASE NOTE THAT DURING THIS PROCEDURE SOME SMOKE MAY OCCUR WHEN THE FILTER IS BEING BROUGHT UP TO TEMPERATURE. THIS PROCESS SHOULD BE COMPLETED PRIOR TO USE OF FILTERS IN STERILIZING OVENS.

TENGA EN CUENTA QUE DURANTE ESTE PROCEDIMIENTO DE ELEVACIÓN DE LA TEMPERATURA PUEDE PRODUCIRSE UN POCO DE HUMO. ES NECESARIO COMPLETAR EL PROCESO ANTES DE USAR LOS FILTROS EN HORNOS DE ESTERILIZACIÓN.

NOTES:

- 1 COPY ABOVE INSTRUCTIONS TEXT ONLY FOR PLACEMENT IN FILTER CARTON. DO NOT COPY ENTIRE DRAWING.

NEXT ASSEMBLY (S) :
1002674(D), 1580356(D), 1602614(D), 1762491(B)

C	GAC	21SEP2018	GC	21SEP2018	RAL	21SEP2018	(A02373) REVISED INSTRUCTIONS TO INCLUDE RTV & FURNACE CEMENT	<small>CONFIDENTIAL</small> <small>©2015 AAF INTERNATIONAL. ALL RIGHTS RESERVED. THIS DRAWING AND THE INFORMATION CONTAINED OR REFERENCED HEREIN REMAINS THE EXCLUSIVE PROPERTY OF AAF INTERNATIONAL AND IS LOANED IN STRICT CONFIDENCE WITH THE UNDERSTANDING THAT IT WILL NOT BE REPRODUCED NOR USED FOR ANY PURPOSE, EXCEPT FOR WHICH IT WAS LOANED. THIS DRAWING SHALL BE IMMEDIATELY RETURNED OR DESTROYED UPON REQUEST AND IS SUBJECT TO ALL OTHER TERMS AND CONDITIONS OF ANY WRITTEN AGREEMENT OR PURCHASE ORDER TO WHICH IT RELATES.</small>		THIRD ANGLE PROJECTION	MODELED BY: -	DATE: --	TITLE	ESTIMATED WEIGHT:	DRAWING NUMBER	
B	GAC	10AUG06	R.L.S.	10AUG06	NAB	11AUG06	(A01241) ADDED SPANISH TRANSLATION				DRAWN BY: SCA	DATE: 6JUN00	INSTRUCTION, ASTROCEL I HT		3004199	
A	S.A.	14JUN00	TSR	14JUN00	TSW	14JUN00	(A00627) ADDED NOTE 1			TOLERANCE UNLESS NOTED OTHERWISE	CHECKED BY: TSR	DATE: 6JUN00		SECTION NUMBER	SHEET SIZE	REV.
REV	DWG BY	DATE	CHK BY	DATE	APPR BY	DATE	DESCRIPTION OF CHANGE			± 1/32" - ± 1/2"	APPROVED BY: TSW	DATE: 6JUN00		105	A	SHEET 1 OF 1