

Nuclear AstroCel® III

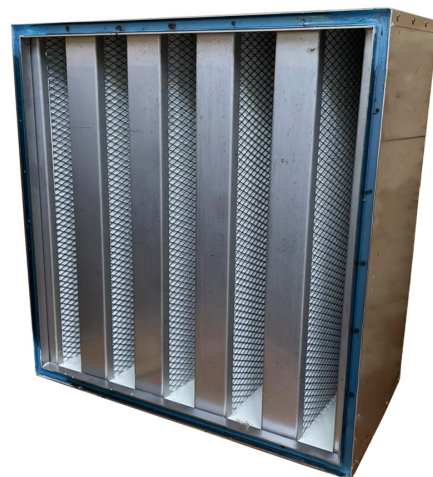
High capacity HEPA filter for nuclear environments

| Forms an integral part of AAF's Nuclear Filtration System

Description

Designed to optimize airflow while minimizing space requirements, the Nuclear AstroCel® III offers a compact yet effective solution. Constructed with either 304 or 409 stainless steel which offers durability and reliability. Featuring 304 SS faceguards to shield the filter media to ensure longevity and efficient performance. The ¾" gelatinous seal track provides superior sealing with flexibility. Optional extractor clips facilitate effortless removal, particularly beneficial for multi-width systems.

Manufactured under the rigorous standards of an ASME NQA-1 Quality Assurance Program, our filters guarantee superior quality and consistency. Every filter undergoes thorough testing at 20% and 100% rated flow, validating efficiency and performance standards.



Product highlights

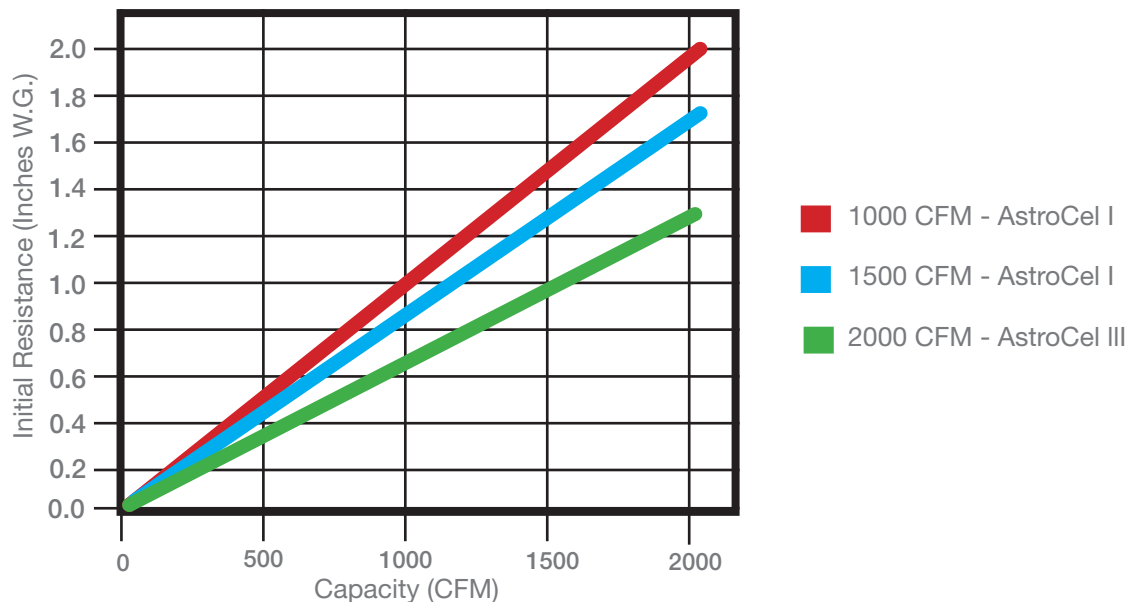
- | 2,000 CFM at 1.3 in. w.g.
- | 24" x 24" x 11.5" actual size for compatibility with existing systems
- | 99.97% efficiency for 0.3 micron particles
- | ASME AG-1 qualified
- | UL 586 qualified
- | 304 or 409 stainless steel construction options
- | 304 SS faceguards to protect the filter media
- | Gelatinous seal or Gasket Seal

Filter model details

Part Number	Cell Side Material	Seal Type	Extractor Clips	Gasket Location
105-3187703-001	304 SS	Gel	No	-
105-3187703-002	409 SS	Gel	No	-
105-3187703-003	304 SS	Gel	Yes	-
105-3187703-004	409 SS	Gel	Yes	-
105-3016466-001	304 SS	Gasket	-	Both Sides
105-3016466-002	409 SS	Gasket	-	Both Sides
105-3016466-003	304 SS	Gasket	-	AES Only
105-3016466-004	409 SS	Gasket	-	AES Only

Nuclear AstroCel® III

Comparative Air Flow / Resistance



Performance Data

Flow Capacity:	2000 CFM at 1.3 in. w.g. initial pressure drop (3400 M³/hr at 0.30 kPa).
Efficiency:	99.97% on 0.3 micron particles.
Resistance at Rated Flow:	Initial resistance of 1.3 in. w.g. (0.32 kPa). Recommended final resistance of 2 to 3 in. w.g. (0.5 to 0.75 kPa). Design maximum 10 in. w.g. (2.5 kPa).
Max. Temperature Limit:	250°F (121°C) continuous service.
Filter Size and Weight:	24" W x 24" H x 11.5" D, 75 lbs. (610 mm x 610 mm x 290 mm D: 34.02 kg).
Media Surface Area:	400 sq. ft. (37 M²).
Production Tests:	1. Pressure drop at rated flow. 2. Penetration test at 100% and 20% rated flow. Each filter is tested and labeled with certified test results and serial number.
Qualification Standards:	Media: MIL-F-51079 & ASME AG-1 Section FN (2019, 2023) & Mandatory App. FC-I (2012) Filter: UL 586 & ASME AG-1 Section FC

About AAF® Nuclear

The AAF® Nuclear team has been around for nearly 60 years, establishing and offering safety related and non-safety designed, engineered, and tested nuclear filter systems and cooling systems. Nuclear Solutions is a P&I business unit within AAF® International that is led out the Louisville, KY headquarters. The US based Nuclear® Solutions Business provides Nuclear Solutions to the following groups: US DOE, US DOD, and commercial and government owned global nuclear plants in Asia, Europe, and North America. The AAF Nuclear Program is NUPIC Audited and our team members are active members on various sub committees of the ASME AG-1, Code on Nuclear Air and Gas Treatment.

©2024 AAF International
ISO Certified Firm | NQA-1 | 10 CFR 50 App. B | 10 CFR Part 21
9920 Corporate Campus Drive, Suite 2200, Louisville, KY 40223 | 1.800.477.1214 | nuclear@aanl.com | www.aanl.com

American Air Filter Company, Inc. has a policy of continuous product improvement. This document is provided for informal review and establishes no commitment or contract. We reserve the right to change any designs, specifications and products without notice, and we make no warranties regarding the subject matter of this document. Any use, copying or distribution of this document or any part of this document without our permission is prohibited.