



Fuel Cell Cathode Air Cleaner



PROVEN FILTRATION, FUTURE REDEFINED



RELIABLE PROTECTION FOR FUEL CELLS



Our Donaldson Fuel Cell Air Cleaner is specially designed for hydrogen PEM fuel cells, making it the perfect solution for your fuel cell needs. It excels at eliminating harmful chemical pollutants and dust, all while offering a compact design, and a long lifespan. It's the ultimate solution to optimize your fuel cell applications.

Protection against chemical contaminants

Our specialized Cathode Intake Air Cleaner has been meticulously designed to effectively eliminate a broad spectrum of chemical pollutants commonly present in the surrounding atmosphere. These harmful contaminants have the potential to induce temporary or permanent deterioration of your fuel cell system. By implementing our solutions, we guarantee the safeguarding of the cathode side air loop and catalyst layer against these detrimental substances. This, in turn, optimizes system performance and efficiency while significantly prolonging the operational lifespan.

Protection against dust and particles

Airborne particles like dust, soot, and fine contaminants pose a serious risk to vital components such as compressors, humidifiers, and fuel cell stacks. Our precision-engineered air filter efficiently captures both large and tiny particles, ensuring your equipment remains dust-free. This proactive filtration safeguards your gear and enhances performance and reliability. Trust in our air filter for lasting system protection and efficiency.

Compact and Robust Housing

Our Cathode Intake Air Filter not only excels at filtration but is also compact and easy to install, fitting seamlessly into tight and limited spaces. Specifically designed for heavy-duty applications like on-highway trucks and off-highway machinery, these systems include a wide range of accessories, from mounting components to pre-cleaners and inlet/outlet parts, ensuring durability and convenience.

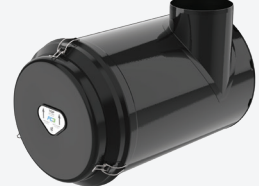
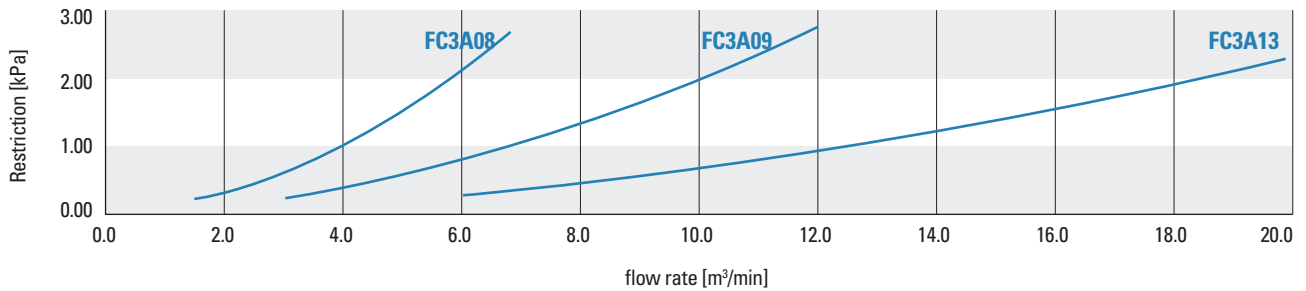


CATHODE AIR CLEANER

FC3A08 · FC3A09 · FC3A13

Technical Specifications

Restriction versus flow rate



Model	FC3A08	FC3A09	FC3A13
Gross Power Fuel Cell	5 - 70 kW	60 - 140 kW	130 - 350 kW
Dimensions (D x L)	227 x 359 mm	267 x 433 mm	349 x 597 mm
Adsorption of	sulfur dioxide, nitrogen oxides, ammonia ^A , volatiles, toluene, n-butane		
Order Information			
Full system	G080781	G092591	G130534 ^B
Spare Primary Filter	P646583	P646111	P959203
Spare Safety Filter	P643115	P690454	P957270
Accessories	Please contact Donaldson or check the Donaldson catalog.		

^A Please contact Donaldson or sales representatives if you need the solution for the high levels of ammonia. (e.g. near livestock)

^B Various options for the housing are available. Please contact Donaldson or check the catalog for FRG 13 SL variants.

Service Interval

Conventional air filters rely on air restriction for lifespan assessment, but this doesn't apply to chemical capacity. This is crucial, especially for FC3 products. Our filters are designed to reach their particulate capacity before their chemical capacity is depleted in normal conditions. The rate of chemical capacity decline depends on each application's unique environmental conditions, so filter designs must consider this factor.

Donaldson is your trusted partner, dedicated to understanding your application's specific needs and customizing solutions accordingly. For a comprehensive understanding and our product range, connect with Donaldson or check the Donaldson Air Catalogue.

PROVEN FILTRATION FUTURE REDEFINED



Fuel Cell and Battery Vent

Enclosure venting technologies to help equalize the pressure within the stack or battery pack while keeping water and other contaminants out



Flat Sheet Humidifier

Flat sheet humidifier to transfer humidity from outlet gasses to inlet air



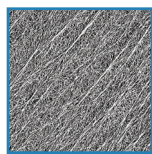
Fuel Cell Air Cleaner

Cathode Intake Air Cleaner to protect the hydrogen fuel cell removing the chemical contaminants, dust and other harmful particles



Droplet Separator

Efficient droplet removal from gas streams to protect the high-speed recuperator wheel from erosion



Tetratex® Ionomer backbone

Providing the structural backbone for the ionomer in the Membrane Electrode Assembly (MEA).



Coolant Ion Exchanger

Capturing ions to keep coolant conductivity within specifications



H₂ Gas Filtration

High pressure and low pressure H₂ gas filtration to remove particles, oil and gaseous contaminants

For more information about Donaldson's Hydrogen Fuel Cell Solutions, or to speak with a specialist regarding a custom solution for your application, visit donaldson.com/hydrogen-fuel-cell or contact us at hydrogenfuelcell@donaldson.com.

For more information, visit [Donaldson.com](https://donaldson.com)



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Brochure No. F111694 ENG 07/24

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