

Ultrac A

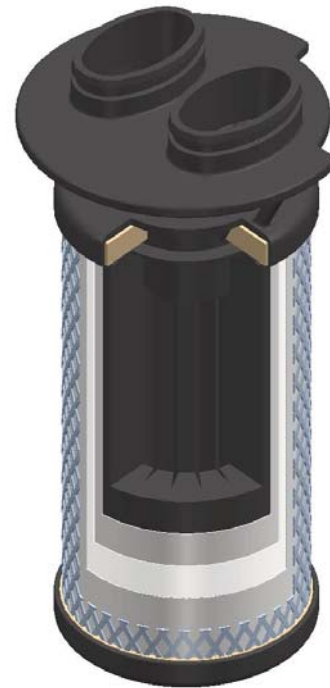
Activated Carbon Vapor Filter Element

Adsorption filter for the removal of oil, hydrocarbons and odors vapors.

Donaldson Ultrac A adsorption filter

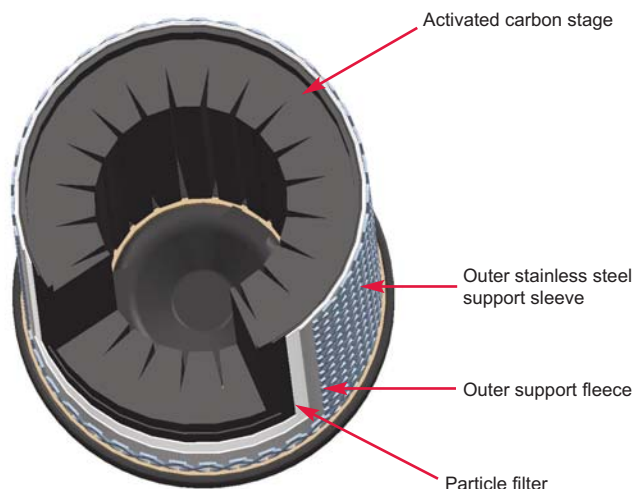
elements incorporate two stages of filtration. The first stage contains activated carbon for removal of oil, hydrocarbon and odor vapors through adsorption. The second filtration stage consists of binder-free borosilicate depth media, supported by microfiber polyamide fleece, for removal of particulate contamination in the air or gas stream. These filtration stages are followed and supported by an outer stainless steel core, which also protects the element against pressure shock.

Flow distribution into and through the element has been optimized by the use of a carefully designed inlet/outlet end cap incorporated into the element itself. Flow direction through the element is inside-to-outside, which minimizes pressure drop and assures full utilization of both layers of filter media. Residual oil content is less than 0.003 ppm with an inlet challenge of 0.01 ppm (might require recommended prefiltration).



Ultrac A Activated Carbon Vapor Filter Element

Adsorption Filter Design



Applications

The Donaldson Ultrac A adsorption filter is ideal in the following industries and applications:

- Chemical
- Petrochemical
- Pharmaceutical
- Beverage
- Prefiltration of sterile air
- Filling machines
- Packaging machines
- Food industry
- Breathing air supply
- Process (instrumentation and control air)

Ultrac A

Features

Benefits

Optimized flow distributor at filter inlet	Reduces flow resistance, minimizing pressure drop resulting in energy savings; equalized flow through entire surface for full utilization of media
Activated carbon granules embedded in support foam	Prevents abrasion of activated carbon material
High density packing of activated carbon on inside surface of support foam	High adsorption capacity and improved efficiency for optimum performance throughout element life
Microfiber polyamide fleece support layer after borosilicate media	Improves overall particle retention rate, achieving ISO Class 2 quality (ISO 8573-1)

Specifications

Recommended Application Temperature	+50°F +104°F (Tmax = +140°F)
Recommended Prefiltration	Residual oil content < 0.01 PPM, e.g. by submicrofilter
Retention Rate	Residual oil content < 0.003 PPM with appropriate prefiltration
Initial Differential Pressure at Nominal Flow	1.45 psi

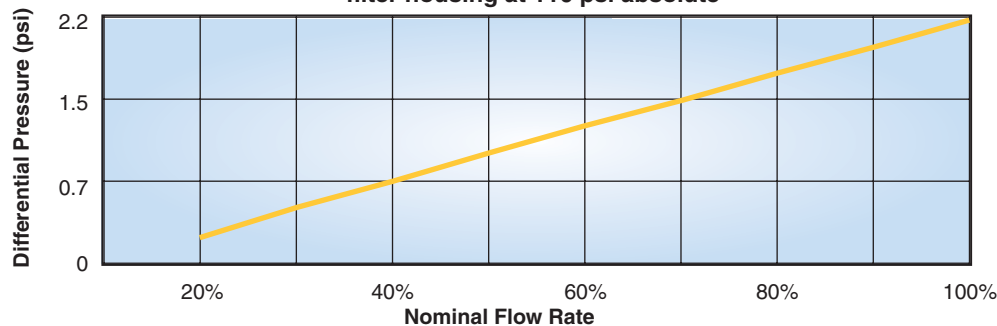
A Element Typical Adsorption Effectiveness

Oil Vapor	VERY GOOD
Benzene	VERY GOOD
Ethane	SLIGHT
Toluene	VERY GOOD
Acetic Acid	VERY GOOD
Methanol	GOOD
Acetone	GOOD
Isopropyl Ether	VERY GOOD
Methyl Acetate	GOOD
Sulfuric Acid	VERY GOOD
Hydrogen Sulphide	POOR
Chlorine	GOOD
Freon	POOR
Ammonia	POOR
Citrus Fruits	VERY GOOD
Perfumes	VERY GOOD

Materials

Adsorption Stage	Activated carbon granulate, embedded in PUR ester carrier material
Filter Medium	Binder-free borosilicate
Support Fleece	Polyamide fleece
Bonding	Polyurethane
End Caps	Glass-fiber reinforced polymer
Two O-Rings	Perbunan®: silicone free and free of compound (standard)
Support Sleeves	304 Stainless steel

Differential pressure of A - filter element including filter housing at 116 psi absolute



* Perbunan® is a registered trademark of LANXESS Deutschland GmbH.



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