

# ultrafilter high-performance filter FF / MF /SMF with nanotechnology



## High performance filter ultrafilter

■ ultrafilter high-performance depth filter for removal of water and oil aerosols as well as particles from compressed air and gases.

■ Thanks to the unique combination of binder-free, non-woven nanofibre filter media and pleating technology, a reduction in energy costs of 70 % is achieved, as well as an improved filtration performance.

■ The new nanofibre material from ultrafilter is oleophobic, which means oil and water are actively rejected, so the differential pressure drop and therefore operation costs are reduced to a minimum compared with a conventional filter element.

## Advantages and benefits

- 450 % greater filter media compared to standard elements
- lower differential pressure
- improved filtration efficiency
- greater dirt-capturing capacity
- 70 % less energy costs

## Applications

- chemical and petrochemical industry
- pharmaceutical industry
- food & beverage
- plastic industry
- process filtration
- instrumentation air

# ultrafilter nanofilters FF, MF, SMF

Features:	Benefits:
Binderfree, thermally welded nanofilter media	Low differential pressure and high particle load
Oleophobe filter media	Rejects oil and water
Pleated filter media	450 % more filtration surface, higher particle load capacity, low air flow speed
Support sleeves of stainless steel (316L)	Extremely large free flow, secure and long operation

Validation
Validation of ultrafilter high-performance filters by University Amberg

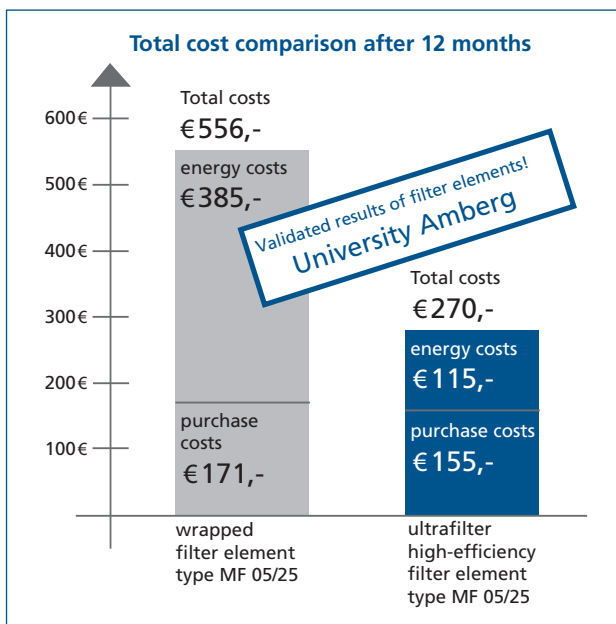
Retention rate at a particle size of 0,01 µm
FF = 99,999 %
MF = 99,99998 %
SMF = 99,99999 %

Materials:	
outer foam sock	<ul style="list-style-type: none"> <li>• blue polyurethane foam sock up to 80 °C</li> <li>• HT/CR sock up to 120 °C</li> <li>• HT/NX sock up to 180 °C</li> </ul>
Support sleeved inner/outer	Stainless steel 1.4301
Pre- and after filter medium	pleated Cerex
Filter medium	binderfree nanofibres of borosilicate
Bonding	Polyurethane
End caps	Aluminium
O-rings	Perbunan, silicon free and free of parting compounds

Residual oil content at an inlet of 3 mg/m³
FF = 0,1 mg/m³
MF = 0,03 mg/m³
SMF = <0,01 mg/m³

Max. differential pressure
5 bar at 20 °C, independant from operation pressure

Start-up differential pressure
FF = 0,04 bar
MF = 0,08 bar
SMF = 0,09 bar



element	correction factor
02/05	0,04
03/05	0,08
03/10	0,12
04/10	0,17
04/20	0,19
05/20	0,25
05/25	0,32
07/25	0,47
07/30	0,68
10/30	1,0
15/30	1,55
20/30	2,10
30/30	3,28
30/50	5,89

Technical alterations reserved.



### **ultrafilter trykluftprogram:**

ultrafilter valideret trykluft program indenfor, filter, Køletørrer samt adsorptionstørrer.

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ultrafilter validated Compressed air filter program with filter, dryer and desiccant dryer.



### **Trykluftfilter:**

Trykluftfilter til brug for håndværkere, værksteder og til mindre kritiske applikation i industrien.

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Compressed air filter for use by craftsmen, workshops, and for less critical applications in the industry.



### **Procesfiltrering:**

Procesfilter for luft og Gas samt væskefiltrering fra 3M / Cuno , sterilfilter, dampfilter samt Membran filtrering.

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Process filter for air / gas and liquid filtration, sterile filter steam filter, and Membran filtration.



### **Adsorptionstørrer**

Service og reservedele til Anderberg adsorptionstørrer.

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Service and spare parts for Anderberg adsorption dryers.



### **Nitrogen og Oxygen systemer**

Produktion af egen nitrogen eller oxygen, med et modul opbygget system som kan udvides efter behov.

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Producing own nitrogen or oxygen, with a modular system which can be expanded as needed.



### **Måleinstrumenter**

Måleudstyr til måling og overvågning af trykluft- og nitrogen udstyr.

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Measuring equipment for measuring and monitoring of compressed air and nitrogen plant.



### **Service:**

Vi tilbyder opstart og montering af alle vores produkter. og kan tilbyde serviceaftaler på alle vores produkter.

Vi har samarbejdspartner i Danmark, Sverige, Norge, Finland, og Island.

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We offer start-up and installation of all our products. And we can offer service on all our products. We have partner in Denmark, Sweden, Norway, Finland, Iceland.

### **ultrafilter Skandinavien ApS**

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