FF / MF / SMF HT/NX

High temperature, chemical resistant depth filter with NANO-technology for the removal of water and oil aerosols as well as solid particles from compressed air and gases.

ultrafilter depth filter with NANO-technology

Product description:

The ***ultrafilter*** industrial depth filter employs binder free, three dimensional NANO fiber fleece.
A prefilter medium 1 µm is integrated and realizes an effective two sage filtration.
Stainless steel end caps and special filter media allows working temperatures up to +180°C.

Characteristics:

By utilizing various filtration mechanisms, such as retention by direct impact, sieve effect and diffusion effect. Liquid aerosols and solid particles down to 0,01 µm are being retained in the filter.

Applications:

The industrial depth filter is for example being utilised in the following industries

- Chemical industry
- Petrochemical industry
- Pharmaceutical industry
- Plastic industry
- General machine fabrication
- Air conditioning technology
- Food industry
- Paint industry
- Beverage industry
- Process industry for instrumentation and control air

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Technical Data

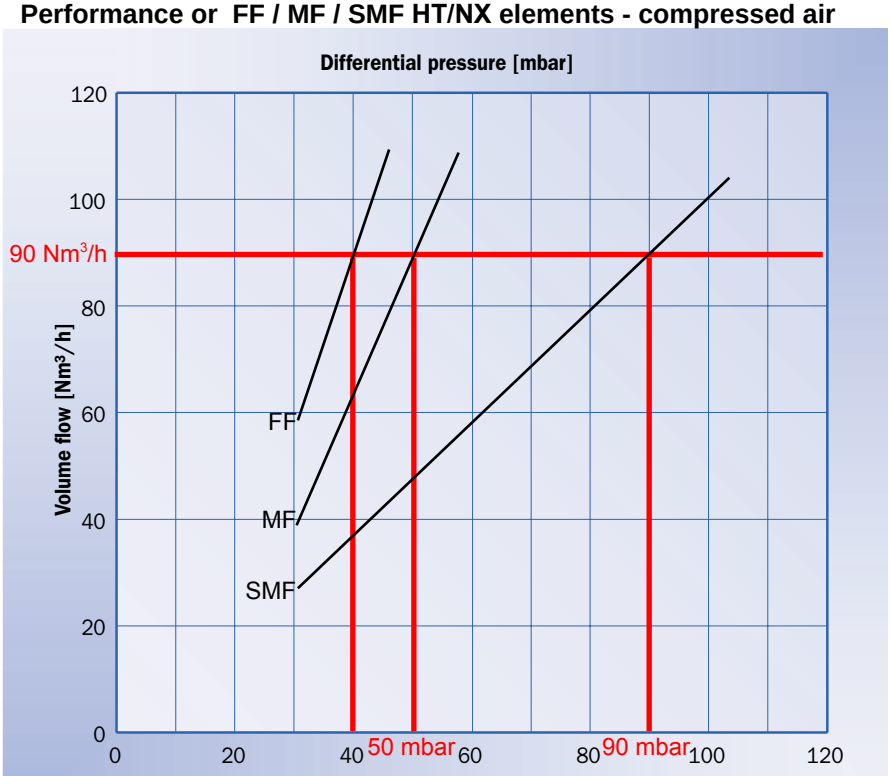
ULTRAFILTER
THE FILTRATION MANUFACTURER
Kronsbein ultrafilter ®

Element FF / MF / SMF HT/NX

Features:	Benefits:
Expanded inner and outer stainless steel sleeves for the secure hold of the filter medium	No danger of corrosion - large openings ensure low differential pressure drop and high throughput
Binder free depth filter medium made out of NANO fiber fleece	Low differential pressure drop; high throughput - reduces energy costs!
Removal of liquid aerosols and solid particles down to 0.01 µm	Validated retention effiency, high level of security and safety
Large surface area large void volume (> 98%)	High dirt holding capacity; guaranteed service life time

Materials & max. working temperature:	
Outer foam sock	Aramid needle felt
Max. working temperature	+180°C
Support sleeves - inner and outer	Stainless steel 1.4404 / 316L
Pre-and after filter medium	Cerex pleated
Filter medium	Binder free ultra fiber borosilicate
Bonding	Plastic steel
End caps	Aluminium
2 O-Rings	Viton - silicon free and free of parting compound (Standard)

Performance or FF / MF / SMF HT/NX elements - compressed air



These curves define the flow of a 10/30 filter element at standard conditions (1 bar abs; 20°C; F. = 70%)

Validation:
Validation of high-effiency filters by Technical University of Amberg

Retention rate related to particles:
FF = 1µm - 99,9999% (99,8%*) MF = 0,1µm - 99,9999% (99,98%*) SMF = 0,01µm - 99,9999% (99,98%*) * tested according to ISO 12500-3

Residual oil content at an inlet concentration of 10mg/m³ according to ISO 12500-1		
FF	=	0,3 mg/m³
MF	=	0,1 mg/m³
SMF	=	< 0,01 mg/m³

Max. differential pressure:
5 bar at 20°C, irrespective of system pressure

Initial differential pressure at nominal flow (dry):		
FF	=	0,04 bar (40 mbar)
MF	=	0,05 bar (50 mbar)
SMF	=	0,09 bar (90 mbar)

Elemente type	Correction factor Filter surface KF
02/05	0.08
03/05	0.10
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	3.20
30/50	5.65

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