Van Borselen Filters High-Performance Filter VBPFF / VBPMF / VBPSMF With nanotechnology



High performance filters from Van Borselen Filters

- Van Borselen Filters high-performance depth filters for removal of water and oil aerosols as well as particles from compressed air and gases.
- ◆ Thanks to the unique combination of binderfree, non-woven nanofibre filter media & pleating technology, a reduction in energy costs of 70% is achieved, as well as an improved filtration performance.
- The new nanofibre material from Van Borselen Filters 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





Advantages and benefits

- 450% greaterfilter 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

Features

- Binderfree, thermally welded nanofilter media
- Oleophobe filter media
- Pleated filter media
- Support sleeves of stainless steel (316L)

Benefits

- Low differential pressure and high particle load
- Rejects oil and water
- 450% more filtration surface, higher particle load capacity, low air flow speed
- Extremely large free flow, secure and long operation

Materials

End caps

 Support sleeves inner/outer : Stainless steel 1.4301

Pre- and after filter medium : Peated Cerex

Outer foam sock : • HT/CR sock up to 120 oC • HT/NX sock up to 180 oC

: Binderfree nanofibres Filter medium : Polyurethane Bonding

: Stainless steel : Perbunan, silicon free and free of parting compounds 0-rings

Туре	Residual oil content at		Oil retention rate acc. to
.,,,,,	3mg/m ³	10mg/m³	ISO 12500-1
VBPFF	<0,1 ppm	0,2 ppm	99,6%
VBPMF	<0,03 ppm	0,03 ppm	99,7%
VBPSMF	<0,01 ppm	0,02 ppm	99,8%

Validation

Validation of Van Borselen Filters highperformance filters by University Amberg

Retention rate at a particle size of 0,01 µm (ISO 8573-1)

VBPFF = 99.999% VBPMF = 99.99998% VBPSMF = 99,99999%

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

Max. differential pressure

5 bar at 20 oC, independant from operation pressure

Start-up differential pressure

VBPFF = 0.04 bar VBPMF = 0.08 bar

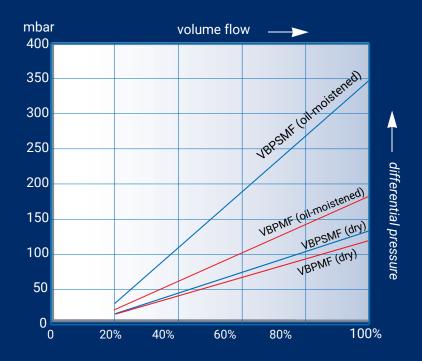
VBPSMF = 0,09 bar

Operating Temperature

T_{max} = 180 °C $T_{min} = -85 \, ^{\circ}\text{C}$

Element	Correction Factor
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

Differential pressure VBPMF/VBPSMF element including filter housing in dry and oil-moistenend condition (acc. to ISO 12500-1).



VAN BORSELEN FILTERS



ABOUT US

With over 100 years of experience, we have developed deep expertise in filtration and separation. Van Borselen Filters is located in Zoetermeer, where an enthusiastic team of filtration and separation specialists is dedicated to serving our clients.





Excellent service



High-standard products





