

Ultramesh P-SM

Pre- and final filter for particle removal from aqueous solutions, water and other liquids, as well as gases, with an absolute retention rate

The Ultramesh P-SM – regenerable stainless steel mesh filter for liquid media



Product description:

The Ultramesh filter consists of a regenerable stainless steel mesh, with stainless steel outer guard and endcaps. The retention rate extends from 5 µm up to 250 µm.

Features:

The Ultramesh filter element offers an especially economical pre- and final filtration, where the stainless steel mesh can be regenerated by ultrasonic bath or back flushed.

This is especially important at higher particle loads. The contact points of the mesh material are welded firmly together, which guarantees a constant pore diameter, even under extreme operating conditions.

The heavy-duty construction of the Ultramesh filter is also suitable for high-viscosity liquids and can withstand a differential pressure of up to 5 bar (flow from outside to inside). In addition, the filter can be used for temperatures up to 200°C.

Applications:

The Ultramesh stainless steel filter is designed and developed for the following applications:

- Water filtration
- Chemicals
- Solvents
- Pharmaceutical industry
- Food and beverage
- Syrup
- Cosmetics
- Paints
- Salt- and Seawater
- Coolants
- Compressed air and other gases

Ultramesh P-SM

Features:	Benefits:
Filter media, outer guard and endcaps are made of stainless steel	Good durability against most liquids and gases
Heavy-duty construction	Can also be used for high-viscosity liquids
Welded contact points of the filter media	Constant pore diameter under all operating and process conditions
Multi layered stainless steel mesh media	Absolute retention rate from 5 µm up to 250 µm
Available in 13 sizes	Optimum filter size for the individual application
Multiple regeneration with ultrasonic bath	Minimum filtration costs, especially at high contaminant load
All stainless steel construction	Temperature range from -50°C up to 200°C*
Backflushable	In-line-installation, ease of operation

Materials:	
Filter media:	Stainless steel mesh 1.4301 (304)
Inner core:	SS 1.4301 (304)
Endcaps:	SS 1.4301 (304)
Bonding material:	SS 1.4301 (304)
O-Rings:	Plastic steel* EPDM**

* > 150°C welded endcaps
 ** Silicone, Perbunan, Viton, Aflas or Kalrez on request

Absolute retention rate:
5 µm, 25 µm, 50 µm, 100 µm, 250 µm

Filtration surface:
494 cm ² for 10" element (10/30) For other sizes see correction factor (CF)

Maximum differential pressure:*	
Operating temperature [°C]	Differential pressure [bar]
20	5

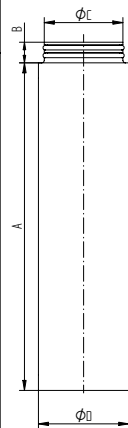
* In flow-through direction with back-flush: 1,5 bar

Temperatur range:
- 50°C to 200°C *

* > 150°C welded endcaps
 > 200°C on request

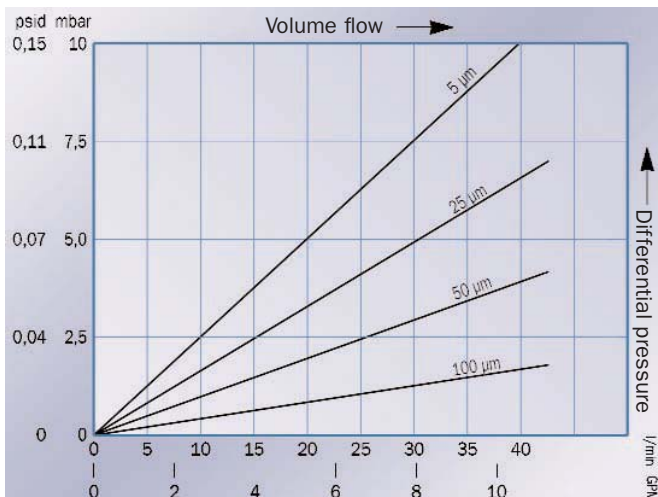
Regeneration:
Ultrasonic bath Backflush ($\Delta p < 1$ bar)

Dimensions:					
Element size	A mm	B mm	Ø C*	Ø D mm	CF
03/10	76	12	3/4"	42	0,12
04/10	104	12	3/4"	42	0,17
04/20	104	14	1"	52	0,19
05/20	128	14	1"	52	0,25
05/25	128	14	1"	62	0,32
07/25	180	14	1"	62	0,47
05/30	128	16	2"	86	0,46
07/30	180	16	2"	86	0,68
10/30	254	16	2"	86	1,00
15/30	381	16	2"	86	1,55
20/30	508	16	2"	86	2,10
30/30	762	16	2"	86	3,28
30/50	762	16	2"	140	5,89



* Plug- type connection with double-o-ring

Flow rate of a 10" P-SM element – water



Flow rate of a 10" P-SM element – air

