

ultrex® P-GS

Filter for the removal of particles from gases, liquids and steam.

Product description:

The ultrex® filter consists of a regenerable weldless filter pipe made from sintered stainless steel. The retention rate extends from 1 µm to 25 µm.

Features:

The ultrex® filter retains contaminants, such as particles, abrasion of valves and sealings as well as rust. An improved steam quality ensures longer service life of the filters to be sterilized and increases the efficiency of the entire process.

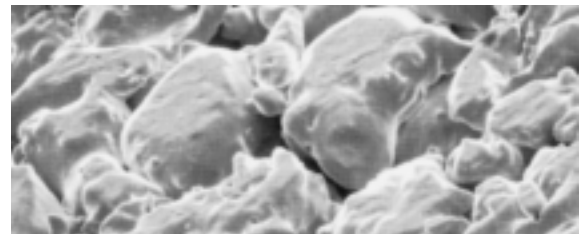
The ultrex® filter element offers the possibility of a particularly economic filtration, since the filter medium can be regenerated by ultrasonic bath. This is especially essential at high particle loads. The porosity level is more than 50% which ensures high particle and dirt holding as well as a good flow rate at a low differential pressure.

The heavy-duty construction of the ultrex® filter is designed to withstand a maximum differential pressure up to 75 psid. The filter may also be used in a temperature range of -4°F up to 410°F.

The ultrex® P-GS –
sintered stainless steel
steam filter



SEM of the
ultrex® media



Applications:

The ultrex® filter is, among others, designed and developed for the following applications:

- Breweries
- Chemical industry
- Pharmaceutical industry
- Food and beverage
- Aseptic packaging
- Electronic industry
- Dairy industry
- Plastic industry

Technical alterations reserved (Date 10/00)

ultrex II® P-GS

Features:	Benefits:
Filter medium and end caps made from stainless steel	Good durability against most liquids, gases and aggressive steams
Retention rate of 1 µm, 5 µm and 25 µm (98% efficiency for steam and 100% efficiency for gases)	Exactly defined particle retention rate at given pore size
Sintered stainless steel filter medium with a porosity level of more than 50%	High dirt holding capacity, good flow rate at low differential pressure
Available in 13 sizes	Optimum filter size for the individual application
Regenerable with ultrasonic bath	Filtration costs reduced to a minimum, in particular for high dirt load
Components made from stainless steel	Permanent operation at temperatures from -4°F to 300°F, up to 410°F with welded end caps
Stainless steel sintering technology	No use of additives or other chemical binders needed

Technical data

Materials:	
Filter medium:	Sintered SS 316L
End caps:	Stainless steel 304
Bonding material:	Plastic steel*
O-Rings:	EPDM**

* > 300°F welded end caps
 ** Silicone, Buna N, Viton, Aflas or Kalrez on request

Absolute retention rates:
1 µm, 5 µm, 25 µm

Filtration surface:
1/2 cm² for 10" element (10/30) For other sizes see correction factor (CF)

Dimensions:						
Element size	A inch	B inch	Ø C o.d. nominal width	Ø D inch	CF	
03/10	3	0.5	1.2 (3/4")	1.65	0.12	
04/10	4	0.5	1.2 (3/4")	1.65	0.17	
04/20	4	0.55	1.5 (1")	2	0.19	
05/20	5	0.55	1.5 (1")	2	0.25	
05/25	5	0.55	1.5 (1")	2.44	0.32	
07/25	7	0.55	1.5 (1")	2.44	0.47	
05/30	5	0.6	2.5 (2")	3.4	0.46	
07/30	7	0.6	2.5 (2")	3.4	0.68	
10/30	10	0.6	2.5 (2")	3.4	1.00	
15/30	15	0.6	2.5 (2")	3.4	1.55	
20/30	20	0.6	2.5 (2")	3.4	2.10	
30/30	30	0.6	2.5 (2")	3.4	3.28	
30/50	30	0.6	3.6 (3")	5.5	5.89	

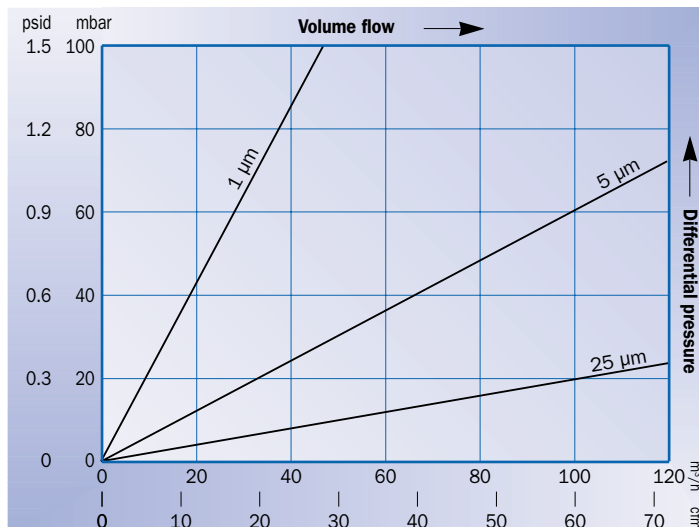
Maximum differential pressure:	
Operating temp. [°F]	Differential pressure [psid]
70	75

Temperatur range (constant operation):
-4°F to 410°F*

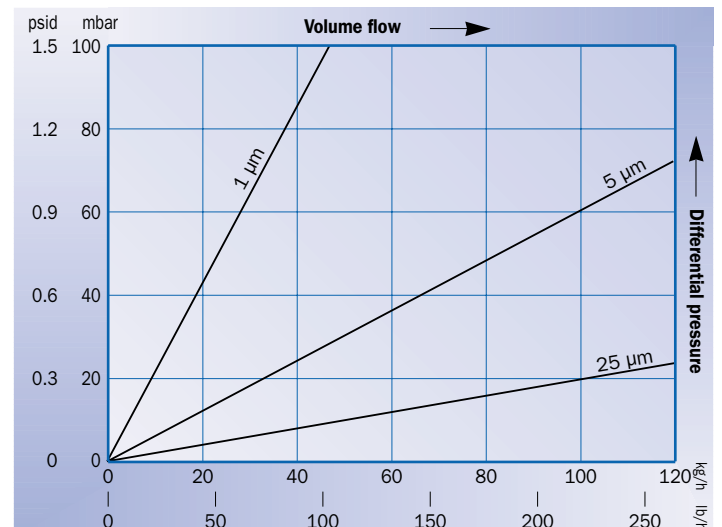
* > 300°F welded endcaps required

Conversion factor for steam temperature				
Steam temperature °F	212	250	285	320
Conversion factor	0.5	1	2	3

Flow rate of a 10" P-GS element – air



Flow rate of a 10" P-GS element – saturated steam, 121°C (250°F)



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