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### **STERILE AIR & STEAM**

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Proces Air
Process Air Prefilter Element
Sterile Depth Filter Element
Process Filter Housing
Sterile Membrane Filter
Sanitary Air Filter Housing

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Finding The Right Size Dryer
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### Icon Guide Certificate(s) Material(s) Flow FDA or PED? You find any For filter elements this is describing Recommended max. flow unless the filter media. certificate here. otherwise described. Surface Roughness Dimensions Filtration Rate Ra The roughness of the filter housing For filter elements this describes the The micron rating of the filter surface. Described in µm. length. element. Inlet/Outlet Connection Effectivity Diameter Refer to the table if the filterhousing The cartridge diameter of filter Describes the retention of particles has various connection sizes. elements. equal to the micron rating. End Cap **Differential Pressure** Pressure P Recommended max. diff. pressure See guides for overview of end Recommended max. pressure caps. unless otherwise described. unless otherwise described. **O-ring Material** Temperature Dew Point °C Recommended max. temperature

unless otherwise described.



Describes the standard o-ring. We can supply different materials.



Describes the achievable dew points.



### THE SCANDINAVIAN FILTRATION PARTNER

Ultrafilter Scandinavia offers a wide selection of filtration products for compressed air, liquids and gas. We have stock in Denmark and from here we distribute all of our products to Scandinavia and the Baltic countries.

Ultrafilter Scandinavia is a part of the Ultrafilter Group. Production is in Germany and we have several subsidiaries in Europe and the United States.

In all countries, you can buy our products on local websites. Information about our products as well as brochures and manuals can be found on our website. We can adapt all of our filtration products to your needs, and we offer visits from our consultants in order to find the right solution for you. We also offer on going service on our products once they are installed.

We have many different kinds of compressed air filters that are compatible with compressed air systems of all brands. We also offer compressed air dryers, adsorption and membrane dryers in addition to auto drain compressors, compressed air tanks and oil-water separators. Additionally, we have a sterile compressed air filter for food and beverage applications.

We offer all kinds of filters for liquids such as bag filters, absolute filters and membrane filters, with industrial applications, such as coolant. We have a great deal of experience with filter solutions for the food and beverage industry, and our products are approved by EC 1935/2004 as well as FDA. We also have filters for drinking water.

We have one of the best generators for manufacturing nitrogen and oxygen and for filtering all kinds of gas like methane and bio gas.

Ultrafilter design and manufacture components and systems for the purification of compressed air, technical gases and liquids.







### **PROCES AIR**

Our sterile filters are all FDA CFR article 21 / EC 1935/2004 validated and approved. "Sterile" means "free of microorganisms that are capable of reproducing itself".

A more scientific definition of sterile is that a filter is defined as "sterilizing filter", when exposed to a concentration of 107 microorganisms (Brevundimonas diminuta) per. cm<sup>2</sup> filter area and the filtrate is 100% sterile and therefore not containing microorganisms, such as bacteria.

Coli and streptococci typically have a size between 0,3 microns and 9 microns, resulting in that the sterile filter has a Filtration of 0,2 microns or better.

In sterile filtration of compressed air, there are differentiated between two types of filter: the depth filter (P-SRF) and membrane filter (PF-PT and PF-PP).

For the food industry, the recommended standard is a depth filter, and for use in the pharmaceutical, fine chemical or biotech industries, we recommend membrane filters. Both filters are optimally placed close to the point of use.

It is recommended that installed a central desiccant dryer as well as a coalescing micro filter and activated carbon filter, to secure dry and oil-free compressed air at the sterile filters, thereby extending the life of the filter.

### **Depth Filter**

A depth filter typically consists of multiple layers of metallic, polymeric or inorganic material - typically used a variety of silicon, called borosilicate. This type of filter is distinguished by a high filtration capacity and high degree of stability during use and sterilization. This type of filter is about 99.9999% effective compared to a give micron size.

### **Membrane Filter**

A membrane filter is made of polymeric plastic film - typically polypropylene, these filters have less particle retention capacity, which is solved by prefiltration. The membranes have a 100% retention rate and is available in several filtration degrees.









### PROCESS AIR PREFILTER ELEMENT P-FF / P-MF / P-SMF / P-AK

### **Technical Data**

▶ Binderfree nanofibres, Pleated cerex
▶ 0,01 µm
99,999% - 99,99999%
○ -20°C to 80°C
△ P Max. 5 bar @ 20°C
○ Stainless steel SS304 end caps
○ Perbunan Gasket (others available)

All our standard coalescing, particulate and activated carbon filters are available as pre-filters for our stainless steel filter housings for critical installations.

Thanks to the unique combination of binder free, non-woven nanofiber filter media and our special pleating techniques, we can achieve a reduction of energy costs up to 70%, at a higher than regular efficiency.

The new nanofiber material from ultrafilter is oleo phobic, which means that the oil and water particles are actively rejected in order to keep a low differential pressure drop, and consequently the operating costs are reduced to a minimum compared with a conventional filter element.

All metal components on the prefilter elements are made of stainless steel.

Туре	Filtration rate	Effectivity	Residual oil content	Max. differential pressure			
P-FF	0,01 µm	99,999%	0,1 mg/m³	5 bar at 20°C			
P-MF	0,01 µm	99,99998%	0,03 mg/m³	5 bar at 20°C			
P-SMF	0,01 µm	99,99999%	<0,01 mg/m <sup>3</sup>	5 bar at 20°C			
P-AK	Activated Carbon	N/A	0,003 mg/m³	2 bar at 20°C			



### STERILE DEPTH FILTER ELEMENT P-SRF





Technical Data
Borosilicate
<b>μ</b> 0,2 μm
99,99998%
[ <b>]°</b> -20°C to 200°C
Stainless steel SS304 end caps
O Silicone (others available)
Bacterial retention: LRV > 7/cm <sup>2</sup> for
T1 Coliphagen
Regeneration: 100 times

The P-SRF is a wounded depth filter with inner and outer guard end caps made of stainless steel. Consisting of a three-dimensional borosilicate depth media, the P-SRF achieves a void volume of 95%, ensuring a high containment capacity at high flow rates and low differential pressure. A retention rate of >99.99998% related to 0.2 µm is achieved during operation.

All components meet the FDA requirements for the contact with food in accordance with the CFR requirements (code of federal regulations) tilte 21.

Corresponds to cGMP requirements (current Good Manufacture Practice) and is manufactured according to DIN EN ISO 9001.

P-SRF has passed the toxicological test according to USP XX Class VU for plastics.

### Depth Filter

A depth filter typically consists of multiple layers of metallic, polymeric or inorganic material - typically used a variety of silicon, called borosilicate. This type of filter is distinguished by a high filtration capacity and high degree of stability during use and sterilization. This type of filter is about 99.9999% effective compared to a give micron size.





### PROCESS FILTER HOUSING

### **Technical Data**



J<sup>°</sup> 200°C (250°C as option)

O EPDM seal (others on request)

 0006-0192:
 16 bar

 0288:
 12 bar

 0432-1920:
 10 bar

 25 bar on request



P-EG filter housings in stainless steel, designed for purification of compressed air and other technical gases.

With this filter you can achieve low differential pressure at high flow rates. P-EG Filter housings are available in 18 different sizes from 60 to 19200 Nm3/ hour.

The P-EG is our first-choice housing for most process air applications. Such as pre-filtration, sterile filtration and steam filtration.











**BSP** 

Correction factor

ASA (weld)

**DIN / ANSI** 

DJF		A	SA (	weit	<i></i>			ANG	21		I.									
Model	F	low				С	onne	ectior	n in/o	ut				F	ilter E	Elem	ent			
Model	m	n³/h			BSP	)		ASA	<u> </u>		DIN			Size	•		Qty			
P-EG 0006		60		R 1⁄4"			DN10				DN10			03/10			1			
P-EG 0009	9	90		R 3⁄8"			DN10				DN10			04/10			1			
P-EG 0012	1	120		R 1⁄2"			DN15				DN15			04/20			1			
P-EG 0018	1	180			R ¾"			DN20	)		DN20	)		05/20			1			
P-EG 0027	2	270			R 1"			DN25	5		DN25	;	05/25			1				
P-EG 0036	3	360			R 1¼	,		DN32	2		DN32	2		07/25	5	1				
P-EG 0048	4	480			R 1½	"		DN40	)		DN40	)		07/30	)	1				
P-EG 0072	7	720			R 2"		DN50 DN50					10/30			1					
P-EG 0108	1	080		R 2"			DN50			DN50			15/30				1			
P-EG 0144	1	440		R 21⁄2"			DN65			DN65			20/30			1				
P-EG 0192	1	920			R 3"			DN80	)		DN80	)	30/30			30/30		1		
P-EG 0288	2	880			R 3"			DN80	)		DN80	)		30/50			1			
P-EG 0432	4	320			N/A			N/A			DN10	0		20/30			3			
P-EG 0576	5	760			N/A			N/A			DN10	0	30/30			3				
P-EG 0768	7	680			N/A			N/A			DN15	0	30/30				4			
P-EG 1152	11	1520			N/A			N/A			DN15	0	30/30				6			
P-EG 1536	15	5360			N/A			N/A			DN20	0	30/30			8				
P-EG 1920	19	9200			N/A			N/A			DN20	0	30/30				10			
Correction factor:																				
Operating pressure	ba	ar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		

0,9

1

1,1

1,2

1,4

1,5

1,6

1,75

1,9

0,75

0,6

0,5

0,25

K1

0,36

2,1

2

### STERILE MEMBRANE FILTER Ultra-Mem PF-PT / PF-PP





### 

For critical applications in sterile filtration, use of a hydrophobic PTFE membrane is recommended, especially in applications such as pharmaceutical industry and biotechnology. PTFE membranes are also well suited for sterile steam applications.

For certain chemicals and applications, polypropylene membranes are available.

### Membrane Filter

A membrane filter is made of polymeric plastic film - typically polypropylene, these filters have less particle retention capacity, which is solved by prefiltration. The membranes have a 99,999999% retention rate and is available in several filtration degrees.



Model	PF-PT	PF-PT PLUS	PF-PP							
Filtrationrates	0,02 to 0,45 µm	0,2 µm	0,1 to 0,2 μm							
Material	ePTFE	ePTFE	Polypropylene							
Applications										
Sterile process gases	•	•	•							
Fine chemicals and solvents			•							
Photoresists and developers			•							
Biotechnology	•	•								
Powder handling and tabletting	•	•	•							



### SANITARY AIR FILTER HOUSING

### **Technical Data**

### 304 or 316L

**Ra** 0,8 (0,4 optional)

- **[]°C** 200°C
- 0006-0192: 16 bar 0432-1920: 10 bar
- Code Y (UF) or Code 7
- O EPDM (others available)
- PED

PG-EG stainless steels have been developed for the purification of compressed air and other technical gases in pharmaceutical, biotechnology and chemical industries.

PG-EG houses are "first choice" in critical applications in sterile filtration.

All PG-EG filter housings to a certain size have been etched and passivated on the inner surface to a quality of Ra 0,8. The outer surface has this quality or better for every PG-EG sanitary filter housing.





Tri-clamp ASME



Dairy Union DIN 11851



Flange EN1092-1



Weld End

Model					Flow Connection							Filt	lemei	ement			
Model			m³/h (clamp)							Size		Q	ty				
PG-EG 0032	2		45				DN25						05/3		1		
PG-EG 0072	2				90			DN40						10/3		1	
PG-EG 0108	8		135					DN50						15/3		1	
PG-EG 0144	4		180					DN65						20/3		1	
PG-EG 0192	2		270					DN80						30/3		1	
PG-EG 0432	2		540					DN100						20/3	3	3	
PG-EG 0576	6		810					DN100						30/3	3	3	
PG-EG 0768	8		1080				DN150						30/3	4			
PG-EG 1152	2		1620				DN150						30/3	6			
PG-EG 1536	6		2160					DN200						30/3	8		
PG-EG 1920	C		2700 DN200							30/30			10				
orrection factor:																	
Operating pressure	bar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction factor	K1	0,25	0,36	0,5	0,6	0,75	0,9	1	1,1	1,2	1,4	1,5	1,6	1,75	1,9	2	2,1

### STEAM FILTER P-GS





### Technical Data Sintered steel SS316L I μm, 5 μm or 25 μm 98 (steam) / 100% (gasses) C -20°C to 210°C P Max. 5 bar Stainless steel SS304 end caps Code Y (UF), DOE or Code 7 EPDM (others available)

The ultrafilter P-GS filter is designed for removal of particles from gases, liquids and particularly steam.

The P-GS consists of a restorable weldless filter pipe made from sintered stainless steel. The filter is well suited for culinary steam – where contact with production machines and end product is needed.

The P-GS is suited for use in temperatures ranging from -20°C to 210°C and has a maximal differential pressure tolerance of 5 bar.

### **OPTIONS**



Viton Seal



**Fluoraz Seal** 



Silicone Seal

Welded End Caps

Applications	1 µm	5 µm	25 µm
Food Contact	•		
General use of steam		•	
Pre-filtration of steam			•

	FILTER HOUSING FOR STEAM P-EG
OF THE AIR & STREET	
Technical Data	
SS304 or SS316L	
<b>Ra</b> 1,2	
[ <b>∬</b> ° 200°C	
🕑 0006-0192: 16 bar	
0288: 12 bar	
0432-1920: 10 bar 25 bar on request	
EPDM seal (others available)	



For our PG-S steam filters we use our P-EG filter housing with flange connections.

With this filter you can achieve low differential pressure at high flow rates. P-EG Filter housings are available in 12 different sizes, in either 304 or 316 stainless steel.

For particularly high quality demands, we offer our sanitary filter housing PG-EG for steam filtration.

Medal		Flow (kg/h)		Connection	Filter	
Model	1 µm	5 µm	25 µm	DIN	Housing	Element Size
P-GS 0006	6	19	30	DN10	P-EG 0006	03/10
P-GS 0009	8	25	40	DN10	P-EG 0009	04/10
P-GS 0012	12	37	59	DN15	P-EG 0012	04/20
P-GS 0018	18	58	93	DN20	P-EG 0018	05/20
P-GS 0027	23	75	120	DN25	P-EG 0027	05/25
P-GS 0036	28	88	141	DN32	P-EG 0036	07/25
P-GS 0048	31	100	160	DN40	P-EG 0048	07/30
P-GS 0072	42	135	216	DN50	P-EG 0072	10/30
P-GS 0108	77	245	392	DN50	P-EG 0108	15/30
P-GS 0144	103	330	528	DN65	P-EG 0144	20/30
P-GS 0192	163	520	832	DN80	P-EG 0192	30/30
P-GS 0288	250	800	1280	DN80	P-EG 0288	30/50

Flow rate at 121°C saturated steam

### Correction factor:

Operating pressure	bar	1	2	4	6	10
Saturated steam temp.	°C	100	121	140	160	180
Correction factor	K1	0,5	1	2	3	5



Both depth and membrane sterile filters can be sterilized in-line with steam or externally by autoclave. It is recommended to sterilize a sterile filter after every production batch or at least after 14 days.

Sterilization temperature is between 110°C - 140°C, respectively for 30 and 10 min.

- 1. Valve (1) and valve (4) closes.
- 2. Drain valve (2) opens.
- 3. Valve (3) opens and steam flow into the filter housing.

4. After reaching a temperature of 100 ° C, the steam begins to condense at the same time that there is only opened to the valve (2), the pressure being built up to the desired sterilization temperature.

5. After reaching the steam temperature starts the actual sterilization within the ages:

- Saturated steam 121 ° C 30 minutes
- Saturated steam 131 ° C 20 minutes
- Saturated steam 141 ° C 10 minutes

When sterilization rounded cast of valve (2), after which valve (3) & (1) open slowly and valve (4) closes slowly - and then start the process over again.



P-BE filter are used to ensure 100% sterility in the storage vessels of pharmaceutical products, chemicals, food or of fermenters. The filter acts as sterile breather for the content of the vessel. The P-BE is a depth filter and works both ways, and protects the surrounding area from exposure to the contents of the vessel.

The two-part housing is user-friendly designed and has a splash protection to prevent liquids coming in contact with the filter media.

The filter element can be sterilized for continuous use up to 100 times. Regeneration is done by in-line steam or externally in autoclave.

Medel	Flow	(m³/h)	Connection*	Filter E	lement
Model	∆p = 20 mbar	∆p = 40 mbar	Connection*	Size	Qty
P-BE 0006	5	9	DN32	03/10	1
P-BE 0027	12	24	DN40	05/25	1
P-BE 0032	17	35	DN50	05/30	1
P-BE 0072	35	70	DN50	10/30	1
P-BE 0144	70	140	DN80	20/30	1
P-BE 0192	105	210	DN80	30/30	1
P-BE 0432	210	420	DN100	20/30	3
P-BE 0576	315	630	DN100	30/30	3
P-BE 0768	420	840	DN150	30/30	4
P-BE 1152	630	1260	DN150	30/30	6
P-BE 1536	840	1680	DN200	30/30	8
P-BE 1920	1050	2010	DN200	30/30	10

\*Milk Pipe fitting acc. DIN 11851 or flange acc. DIN 2633

VENT FILTER PTFE Ultra-Vent	STATE AIR & STRAN
	Technical Data
ANALYSICS DE LE CREATE DE LE CR	ePTFE and Polypropylene
	<b>μ</b> 0,1 μm or 0,2 μm
	99,9998%
The survey and the survey of t	[J <sup>•</sup> c] 80°C
	<u> </u>
And A	1⁄2" BSP male thread
Annual Annual Annual and an annual	O Silicone Gasket (others available)
THE LEVEL	2,5" or 5"

Our PTFE Vent filter cartridges are manufactured using a highly hydrophobic ePTFE membrane and are designed for autoclave venting and small vessel venting. The enhanced ePTFE membrane offers exceptionally high gas flow rates at low pressure differentials.

The vent filter cartridges are designed with a ½" BSP male thread for autoclave and small vessel venting applications, and the hydrophobic characteristics of the ePTFE membrane makes the Vent filter cartridge particularly suitable for rapid vacuum breaks in autoclaves.

Medel		<b>O</b> ommontion	Dimensions (mm)				
Model	Filtration Rate	Connection	Length	Diameter			
Ultra-Vent 2,5"	0,2 µm	1/2"	64	70			
Ultra-Vent 5,0"	0,2 µm	1/2"	127	70			



### FINDING THE RIGHT SIZE DRYER

The flows mentioned in the dryer tables are based on specific operating conditions. To calculate the right size dryer you should use the correction factors below.



### **Refrigeration Dryers**

The formular below can be used to calculate the correct capacity of both the UD 50Hz and UD 60Hz.

### Flow x K1 x K2 x K3 x K4

Operating Pressure bar (g)	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction factor K1	0,71	0,82	0,90	0,96	1,00	1,04	1,07	1,09	1,11	1,13	1,15	1,16	1,18	1,19
Compressed Air Inlet Temperature	30		35	40		45	5	0	55	6	0	65		70
Correction factor K2	1,23	3	1,00	0,8	1	0,66	0,	57	0,52	0,	48	0,44	(	0,40
Ambient Temperature	20	25	30	35	40	45	50		Dewpo	oint	3	5	7	9
Correction factor K3	1,05	1,00	0,95	0,89	0,84	0,78	0,72	Corr	ection fa	actor K4	1,00	1,24	1,38	1,40

### **High Pressure Refrigeration**

The formular below can be used to calculate the correct capacity of UD HP.

### Flow x K1 x K2 x K3 x K4

Operating Pressure bar (g)	25	30	35	40	45	50	Compressed Air Inlet Temperature		35		45		70
Correction factor K1	0,94	0,97	0,99	1,00	1,01	1,01	Correction factor K2		1		0,77	(	0,46
Ambient Temperature	20	25	30	35	40	45	50 Dewpoint			3	5	7	9
Correction factor K3	1,05	1,00	0,90	0,90	0,84	0,79	0,73	Correction factor	K4	1,00	1,12	1,25	1,41



### **Membrane Dryer**

The formular below can be used to calculate the correct capacity of the UFM membrane dryer.

### Flow x K1

Operating Pressure bar (g)	4	5	6	7	8	9	10	11	12
Correction factor K1	0,41	0,56	0,76	1,0	1,22	1,48	1,76	1,86	2,22

### **HeatLess HL**

For calculating capacity on our HeatLess HL adsorption dryer, use the correction factor below.

### Flow x K1

Corre	ection		Operating Pressure (bar g)											
facto	or K1	4	5	6	7	8	9	10	11	12	13	14	15	16
	35	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,55	1,60	1,65	1,70	1,76
Inlet	40	0,55	0,66	0,77	0,88	0,99	1,10	1,21	1,32	1,43	1,54	1,65	1,70	1,76
temp. (°C)	45 *	0,42	0,50	0,59	0,67	0,76	0,84	0,92	1,01	1,09	1,17	1,26	1,34	1,42
	50 **	0,35	0,41	0,48	0,55	0,62	0,69	0,76	0,83	0,90	0,96	1,03	1,10	1,17

\* PDP -25°C \*\*PDP -20°C

### VarioBlo

The capacity of the VarioBlo heat regnerated adsorption dryer can be calculated with the formular below.

### Flow x K1 (x K2 - For PDP -70°C)

Corre	ection		Op	erating	erating Pressure (bar g)							
facto	or K1	4	5	6	7	8	9	10				
	30	0,71	0,86	1,00	1,15	1,18	1,25	1,37				
Inlet	35	0,62	0,75	0,87	1	1,12	1,25	1,37				
temp. (°C)	40	0,38	0,54	0,67	0,82	0,92	1,07	1,21				
· · /	43	-	0,33*	0,45**	0,54**	0,61***	0,72	0,80				
* PDP -2	0°C	**PDP -2	25°C	***PDP	-30°C							

Corre	Correction Operating Pressure (bar g)								
facto	or K2	4	5	6	7	8	9	10	
Inlet	30	-	0,90	0,90	0,80	0,80	0,80	0,80	
temp.	35	-	0,80	0,80	0,80	0,80	0,80	0,80	
(°C)	40	-	-	-	-	-	0,70	0,70	

### WATER CONTENT IN AIR

The table below shows the water content in compressed air at different temperatures. This is useful for calculating the capacity of dryers.



<b>Dew Point</b> °C	g/Nm³	ppm	Dew Point °C	g/Nm³	ppm
-100	0,0000111	0,0138	0	4,84	6020
-90	0,0000767	0,0953	1	5,21	6480
-80	0,000434	0,54	2	5,59	6953
-70	0,0027	2,57	3	6,02	7487
-60	0,00857	10,7	4	6,45	8022
-55	0,0166	20,6	5	6,91	8595
-50	0,0317	39,4	6	7,41	9216
-48	0,0399	49,6	7	7,94	9875
-46	0,0507	69,0	8	8,51	10584
-44	0,0642	80,1	9	9,10	11318
-42	0,0816	101,5	10	9,74	12114
-40	0,102	126,9	11	10,4	12935
-38	0,127	158	12	11,1	13806
-36	0,159	197,8	13	11,9	14800
-34	0,197	245	14	12,7	15796
-32	0,244	303	15	13,5	16791
-30	0,301	374	16	14,4	17885
-28	0,371	461	17	15,4	19030
-26	0,454	564	18	16,4	20396
-24	0,554	689	19	17,4	21641
-22	0,675	840	20	18,5	23020
-20	0,816	1015	21	19,7	24502
-19	0,899	1118	22	21,0	26120
-18	0,989	1231	23	22,3	27736
-17	1,09	1356	24	23,7	29477
-16	1,19	1480	25	25,1	31219
-15	1,31	1630	26	26,7	33209
-14	1,43	1779	27	28,3	35200
-13	1,57	1953	28	30,0	37312
-12	1,72	2140	29	31,8	39551
-11	1,80	2338	30	33,6	41791
-10	2,06	2562	35	44,6	55472
-9	2,25	2798	40	58,5	71761
-8	2,45	3047	45	76,0	94527
-7	2,68	3333	50	97,8	120399
-6	2,92	3632	55	125	155472
-5	3,18	3955	60	158	196652
-4	3,46	4303	70	247	307212
-3	3,77	4690	80	376	467662
-2	4,10	5100	90	556	691542
-1	4,46	5547			

### **COMPRESSOR CAPACITY**



You can use this table to find the compressor capacity and size the filtration accordingly.

m³/h	m³/min	l/sek	cfm	kW	HP
5	0,08	1,39	2,9	0,5	0,7
10	0,17	2,78	5,9	1,1	1,5
15	0,25	4,17	8,8	1,5	2,0
20	0,33	5,56	11,8	2,2	3,0
25	0,42	6,94	14,7	3,0	4,0
35	0,58	9,72	20,6	4,0	5,5
50	0,83	13,89	29,4	5,5	7,5
65	1,08	18,06	38,3	7,5	10
80	1,33	22,22	47,1	9,0	
100	1,67	27,78	58,9	11,0	15
125	2,08	34,72	73,6	13,0	
150	2,50	41,67	88,3	15,0	20
175	2,92	48,61	103,0	15,0	25
225	3,75	62,50	132,4	22,0	30
300	5,00	83,33	176,6	30,0	40
375	6,25	104,17	220,7	37,0	50
450	7,50	125,00	264,9	45,0	60
550	9,17	152,78	323,7	55,0	75
650	10,83	180,56	382,6	65,0	85
750	12,50	208,33	441,4	75,0	100
850	14,17	236,11	500,3	90,0	115
1000	16,67	277,78	588,6	90,0	120
1175	19,58	326,39	691,6	110,0	150
1350	22,50	375,00	794,6	132,0	175
1500	25,00	416,67	882,9	160,0	215
1650	27,50	458,33	971,2	160,0	215
1950	32,50	541,67	1147,7	200,0	270
2250	37,50	625,00	1324,3	200,0	270
2750	45,83	763,89	1618,6	250,0	335
3500	58,33	972,22	2060,0	315,0	425
4000	66,67	1111,11	2354,3	400,0	535

# **COMPRESSED AIR FILTRATION**







## LIQUID FILTRATION



### **END CAP CONFIGURATIONS**

Our proces filter elements are available with a wide range of different end cap configurations. This ensures compatibility with nearly any filter housing and lets us replace elements from other brands.



### **ULTRAFILTER STANDARD END CAPS**











Code 7 - 226 + Fin



Code 8 - 222 + Fin





### **ADITIONAL END CAPS**

Configuration	Top End			Outlet End		
name	End Fitting	Seal	Quantity	End Fitting	Seal	Quantity
Code 2	Flat	None		Open with lugs	O-ring 226	2
Code 3	Flat	None		Open	O-ring 222	2
Code 7	Fin	None		Open with lugs	O-ring 226	2
Code 8	Fin	None		Open	O-ring 222	2
Code 9	Recess	None		Flat open	O-ring 213	1
Code 18 (retro fit)	Flat	None		Open	O-ring 222	2
Code 28 (S)	Fin	None		Open with 3 lugs	O-ring 222	2
Code Y (UF)	Flat	None		Open	O-ring BS832	2
N SOE	Recess	None		Flat open	O-ring 213	1
G SOE	Flat	None		Flat open	O-ring BS118	2
G DOE 10"	Flat open	Flat gasket	1	Flat open	Flat gasket	1
DOE 9¾"	Flat open	Flat gasket	1	Flat open	Flat gasket	1

If you don't find your desired end cap configuration, contact Ultrafilter for availability.



### THE SCANDINAVIAN FILTRATION PARTNER

### **SHOP ONLINE**

At www.ultra-filter.com you will find a wide selection of filtration products ready for you to order.



### **ABOUT US**

Ultrafilter Scandinavia offers a wide selection of filtration products for compressed air, liquids and gas. We have stock in Denmark and from here we distribute all of our products to Scandinavia and the Baltic countries.

Ultrafilter Scandinavia is a part of the Ultrafilter group. Our production facility is in Germany and we have several subsidiaries in Europe.

You can buy our products on local websites. Information about our products as well as brochures and manuals can be found on our website (www.ultra-filter.com).

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