

Compfil™ PC

Sterile Depth Filter for Process Air and Gases



Compfil™ PC is a pleated depth filter with inner and outer guard and end caps made of stainless steel. Consisting of a three-dimensional borosilicate depth media, the PC achieves a void volume of 95%, ensuring a high containment capacity at high flow rates and low differential pressure. A retention rate of >99.99999995% related to 0.2µm > 99.99999995% related to 0.02µm is achieved during operation. The retention for nano-sized particles (0.003µm) is larger than 99.99999991% as verified in a DIN EN 1822 adopted test.

All components meet the FDA requirements for indirect contact with food in accordance with the CFR requirements (code of federal regulations) title 21 and EC/1935/2004 for indirect food contact use.

Ordering Information

Product Code:				
	1	2	3	4
Compfil™ type	Element size	Media construction		Connection
PC	0310	P	Pleated depth	B Code 7
	0410			K Code 2
	0420	C	Cylindrical / wound	M DOE
	0520			S 3-Lug
	0525			U Plug Connection
	0725			
	0730			
	1030			
	0530			
	2030			
	3030			
	3050			

Typical Applications

- Aseptic packing
- Biotechnology
- Fermentation
- Chemicals
- Pharmaceutical
- Food and beverage (brewery, dairies)

Features and Benefits

- **Outer guard and endcaps made of stainless steel**
High mechanical and thermal stability, good durability against chemicals and numerous aggressive gases. Temperature range from -20°C (-4°F) up to 200°C (392°F).
- **Three-dimensional borosilicate depth filter media**
High waste containment capacity, low differential pressure, high flow rate.
- **Biologically and chemically inert**
No breeding ground for separated microorganism.
- **200 sterilisation cycles guaranteed**
High economical efficiency and low filtration costs.
- **100% integrity tested**
Guaranteed quality
- **Available in 13 sizes**
Optimum filter size for individual application.

Specifications

Materials of Manufacture

Filter media	Borosilicate
Impregnation	PTFE
Outer core	SS 1.4301
Inner core	SS 1.4301
Inner layer	SS 1.4301
End caps	SS 1.4301
Bonding material	Silicone

Bacterial retention

LRV > 9/cm² for viruses and phages.

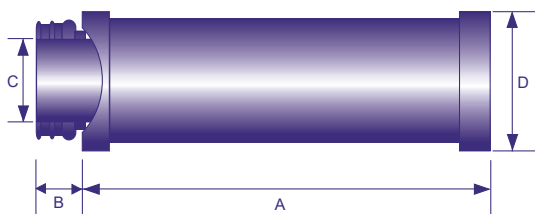
Temperature range

-20°C (-4°F) up to 200°C (392°F).

Filtration surface

8,400cm² per 10" element (10/30) (254mm).

Dimensions



Sterilisation

In-line sterilisation with slow speed saturated steam:

max. 121°C (250°F) for 30 minutes

max. 131°C (277°F) for 20 minutes

max. 141°C (286°F) for 10 minutes

Autoclave: 125°C (257°F) for 30 minutes

PC filter elements are guaranteed for 200 sterilisation cycles without loss of integrity.

Retention rate

99.99999995% related to 0.2µm

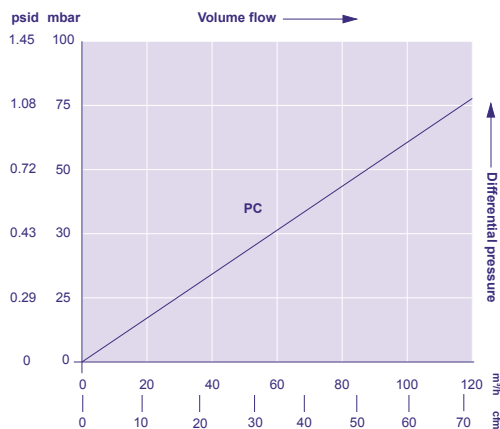
99.99999995% related to 0.02µm

99.99999991% related to 0.003µm

Max. differential pressure

5bar (73psi), independent of operating pressure of flow direction.

Flow rate of a 10" PC element at 8 bar abs



Element size (inch)	A mm (in)	B mm (in)	C Ø mm (in)	DØ mm (in)	Correction factor
03/10	76mm (3")	12mm (0.47")	19mm (0.75")	42mm (1.6")	0.12
04/10	104mm (4")	12mm (0.47")	19mm (0.75")	42mm (1.6")	0.17
04/20	104mm (4")	14mm (0.55")	25mm (1")	52mm (2.0")	0.19
05/20	104mm (4")	14mm (0.55")	25mm (1")	52mm (2.0")	0.19
05/25	128mm (5")	14mm (0.55")	25mm (1")	62mm (2.5")	0.32
05/30	128mm (5")	16mm (0.62")	51mm (2")	86mm (3.4")	0.46
07/25	180mm (7")	14mm (0.55")	25mm (1")	62mm (2.5")	0.47
07/30	180mm (7")	16mm (0.62")	51mm (2")	86mm (3.4")	0.68
10/30	254mm (10")	16mm (0.62")	51mm (2")	86mm (3.4")	1.00
15/30	381mm (15")	16mm (0.62")	51mm (2")	86mm (3.4")	1.55
20/30	508mm (20")	16mm (0.62")	51mm (2")	86mm (3.4")	2.10
30/30	762mm (30")	16mm (0.62")	51mm (2")	86mm (3.4")	3.28
30/50	762mm (30")	16mm (0.62")	51mm (2")	140mm (5.5")	5.89

PF0769 / Dec 201 / Rev 1: June 2021