

Compfil™ PF

Pleated Steel Particle Filter for Gases, Liquids and Steam



The Compfil™ PF filter consists of a regenerable, pleated filter tube made of stainless steel. Due to its robust construction, the Compfil™ PF is designed for maximum differential pressures up to 10 bar. It can be used in a temperature range from -20-210°C without any problems. From a temperature of 180°C, however, special O-rings are required.

The separation efficiency ranges from 1-25µm in order to reliably retain impurities. The improved steam quality not only extends the service life of the filters to be sterilized, but also increases the cost effectiveness of the entire process. All filter elements have been manufactured without the use of binders or other chemical additives.

Ordering Information

Product Code: 1 - 2 - 3 - 4			
Compfil™ type	Element size	Connection	Micron rating
PF	0310	U Plug Connections <i>For any non-standard connections please enquire with our Sales Team.</i>	01 05 25
	0410		
	0420		
	0520		
	0525		
	0530		
	0725		
	0730		
	1030		
	1530		
	2030		
	3030		
	1050		
	3050		

Typical Applications

- Aseptic packing
- Plastics
- Electronics
- Dairy
- Pharmaceutical
- Breweries
- Food and beverages
- Chemicals
- Fermentation

Features and Benefits

- **Filter media and end caps made of stainless steel**
Good durability against most liquids, gases and aggressive steams. Temperature range from -20°C (-4°F) up to 210°C (410°F).
- **Retention rate of 1, 5 and 25µm (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.
- **Regenerable with ultrasound and backwashing**
Filtration costs reduced to a minimum, in particular for high dirt load.
- **Stainless steel sintering technology**
No use of additives or other chemical binders needed.

Specifications

Materials of Manufacture

Filter media	SS 1.4404/316/316L
Support coats	SS 1.4404/316/316L
End caps	SS 1.4404/316/316L
O-Rings	EPM as standard. Silicone, Buna N, Viton®, FEP (Fluoraz) on request

Filtration surface

0,18 m² per 10" element (10/30) (250 mm)

Temperature range

-20°C (-4°F) to 210°C (410°F).

> 180°C only with special O-rings

Conversion factor for steam temperature

Steam temperature °C	110,121,140,160
Steam temperature °F	212, 250, 285, 320
Conversion factor	0,5,1,2,3

Dimensions

Absolute separation rates

1-25µm

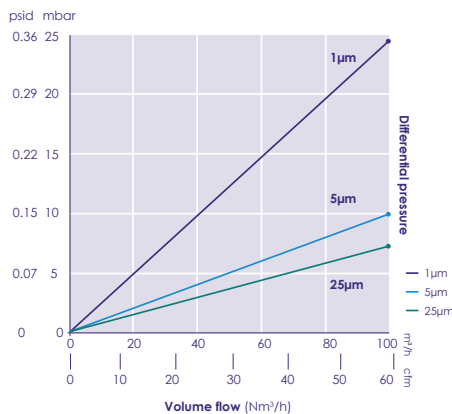
Max. differential pressure

10bar (145psi)

Dimensions

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
10/50	254mm (10")	16mm (0.62")	76mm (3")	86mm (3.4")	1,45
30/50	762mm (30")	16mm (0.62")	76mm (3")	140mm (5.5")	5,89

Flow rate of a 10" PF Air, 20°C, 1 bar



Flow rate of a 10" PF Steam, 121°C, 2 bar

