

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™ SF 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 | | |

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 1.4404/316L |
| Support coats | SS 1.4404/316L |
| End caps | SS 1.4404/316L |
| 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

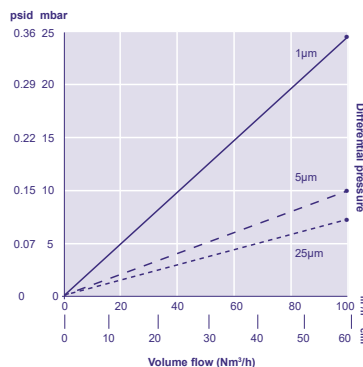
Max. differential pressure

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, 1bar



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

