Compfil™ DF
Sterile Depth Filter for Process Air and Gases

The Compfil™ DF filter is a wound depth filter or pleated depth filter, with stainless steel end caps, inner and outer guard. Consisting of a three dimensional borosilicate depth media, the DF achieves a void volume of 95%, ensuring a high containment capacity at high flow rates and low differential pressure. During operation, the filter achieves a retention rate of > 99.99998% related to 0.01 µm.

The Compfil™ DF is manufactured in accordance with cGMP requirements and to DIN EN ISO:9001. All components meet the FDA requirements for contact with food in accordance with the CFR requirements (Code of Federal Regulations) title 21.

Typical Applications:
- Aseptic packing
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage
- Pharmaceutical
- Water treatment systems

Features and Benefits
- **Robust construction**
  Due to the outer guard and end caps’ stainless steel construction, the filter exhibits high mechanical and thermal stability, proving an excellent choice for chemical and numerous aggressive gases.
- **Non fibre releasing element**
  Manufactured without the use of binders or other chemical additives.
- **Absolute retention rate of 99.99998% related to 0.01µm**
  Validated retention rate, integrity testable with DOP test according to HIMA.
- **Three-dimensional borosilicate depth filter media**
  High waste containment capacity, low differential pressure and high flow rate.
- **Biologically and chemically inert**
  No breeding ground for separated microorganism.
- **200 sterilisation cycles guaranteed**
  High economical efficiency and low filtration costs.
- **Available in 13 sizes**
  Optimum filter size for individual application.
- **Stainless steel core and end-caps**
  Temperature range from -20 to 200°C (-4 to 392°F).
- **Meets industry standards**
  Corresponds to cGMP requirements and is manufactured according to DIN EN ISO:9001.
  DF has passed the toxicological test according to USP XX Class VU for plastics.
  All components meet the FDA requirements for contact with food in accordance with the CFR requirements (Code of Federal Regulations) title 21.
Materials of Manufacture

Filter media: Borosilicate
Membrane support: Polyester
Inner core: Stainless steel 1.4301/304
Outer core: Stainless steel 1.4301/304
End caps: Stainless steel 1.4301/304
Bonding materials: Silicone
O-rings: Silicone (standard), Buna N, EPDM, Viton®

Filtration Surface

494cm² (5,317ft²) per 10” element

Maximum Differential Pressure

50bar (73psi), independent of operation pressure of flow direction

Operating Temperature

-20 to 200 ºC (-4 to 392ºF)

Sterilisation

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

In-line sterilisation with slow speed saturated steam:
max. 121ºC (250ºF) for 30 minutes
max. 131ºC (268ºF) for 20 minutes
max. 141ºC (286ºF) for 10 minutes

Autoclave:
125ºC (257ºF) for 30 minutes

Bacterial Retention

LRV > 7/cm² (1.09in²) for T1 Coliform

Absolute Retention Rate

99.99998 % related to 0.01µm

Flow rates

See graph. Flow rate of a 10” SRF element at 1bar.

Product Code:

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<th>Element type</th>
<th>Media construction</th>
<th>Connection</th>
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<td>Code 3</td>
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<td>K Code 2</td>
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<td>M DOE</td>
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<td>Code 5</td>
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<td>Code 6</td>
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<td>U Plug</td>
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Dimensions

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<tr>
<th>Element size</th>
<th>A (mm) (in)</th>
<th>B (mm) (in)</th>
<th>C (Ø mm) (in)</th>
<th>D (Ø mm) (in)</th>
<th>CF Flange</th>
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<td>76 (3)</td>
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