

Tekfil™ Nylon

Meltblown depth filter cartridge

The Tekfil™ Nylon depth filter cartridge is manufactured from 100% virgin nylon with no added binders, resins or adhesives. Its unique four-layer graded construction ensures true depth filtration, which greatly increases dirt holding capacity and filtration efficiency.

The moulded centre core gives a very strong construction enabling higher operating temperatures and pressures. Tekfil™ Nylon cartridges are suitable for applications involving solvents, hydrocarbons and aromatics



Features and Benefits

- Absolute removal ratings from 1 to 100 micron
- Nylon moulded centre core
- Beta 5000 at stated micron rating
- Four-layer construction gives true graded depth filtration leading to high dirt holding capacity and long service life
- Full range of thermally bonded end caps available
- Constructed from 100% nylon with no added binders, resins or adhesives
- Cartridge incinerates to trace ash for environmentally safe disposal
- Certified to NSF42 and FDA CFR Title 2



Features and Benefits

- Tekfil™ Nylon cartridges**
 Extensive research and selection of the latest and most advanced Nylon meltblown filter media, results in improved performance, leading to extended filter life at a given efficiency.
- Graded depth media**
 The graded structure of the media provides prefiltration of the process fluid prior to the absolute rated final layer. This combination provides economy of use and a smaller process footprint.
- High degree of chemical compatibility**
 Constructed entirely of Nylon.
- Absolute removal ratings**
 Tekfil™ Nylon cartridges are validated using recognised industry standard test methods.
- Environmentally friendly**
 Tekfil™ Nylon filters are environmentally friendly, all spent cartridges can be readily incinerated to trace ash.

Cartridge Construction

The high quality robust nylon construction of Tekfil™ Nylon cartridges, allows for excellent chemical compatibility with a wide range of fluids.

The meltblown nylon media provides a bonded matrix thus eliminating fibre migration.

The inherent structural stability of the Tekfil™ Nylon, prevents 'channelling' and avoids the risk of particle unloading even under impulse conditions.

The Tekfil™ Nylon fusion bonded construction ensures cartridge integrity. No surfactants or bonding agents are used, minimising extractables.

| Code | Micron Rating | Length | Adapters | Gasket |
|---------------------------------------|------------------|---------------------------|---------------------------|--------------|
| TYN (nominal) | 01 = 1 micron | 5 | A = Code 3 | D = Nitre |
| TAY (absolute) | 05 = 5 micron | 9.7/8 | B = Code 7 | A = EPDM |
| OD = 63mm ID = 28mm (+/- 0.5mm) | 10 = 10 micron | 10 | C = Code 8 | B = Silicone |
| | 25 = 25 micron | 20 | F = N SOE | G = FEP |
| | 50 = 50 Micron | 30 | G = G DOE (short length) | C = Viton |
| | 75 = 75 Micron | 40 | H = G SOE | |
| | 100 = 100 Micron | (Other Lengths available) | J = 216 (218), fin | |
| | | | K = Code 2 | |
| | | | J = 216 (218), fin | |
| | | | L = 223, fin (no lugs) | |
| | | | M = DOE | |
| | | | S = Code 28, fin (3 lugs) | |
| | | T = 223, flat (no lugs) | | |
| | | U = 224, fin | | |
| | | V = 226, fin | | |
| | | Y = BS832, flat | | |

Example: TAY05S1BB

Specifications

Materials of Manufacture

Filter media: Nylon
End fittings: Nylon

Cartridge Dimensions (Nominal)

Diameter: 63mm (2.5")
Length: 254mm (10"),
508mm (20"),
762mm (30"),
1016mm (40")

Gaskets and O-Rings

FEP encapsulated, Silicone, Viton®, Nitrile or Nylon felt available for non crush-fit end adapters.

Maximum Differential Pressure

4.2 bar @ 20°C
2.0 bar @ 80°C
0.5 bar @ 150°C

Recommended Differential Pressure

2 bar up to 50°C

Operating Temperature:

Maximum continuous: 150°C

Operating Temperature

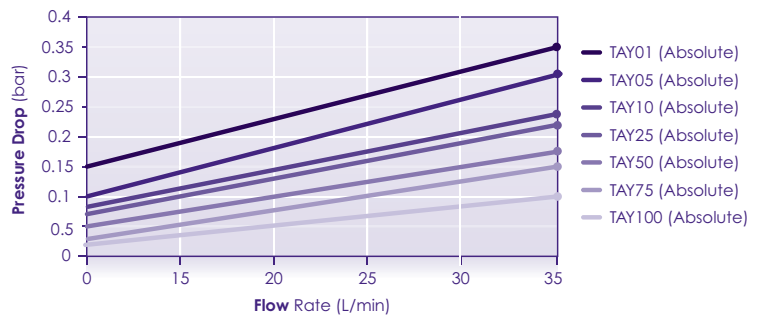
Maximum continuous: 80°C (176°F)

Extractables

Minimum total extractables.

Clean Water Flow Rates

- Typical clean water flow rate:
A 254mm (10") Tekfil™ Nylon single cartridge exhibits the flow- ΔP characteristics indicated below, for solutions with a viscosity of 1 centipoise.
- Other solutions:
For solutions with a viscosity of greater than 1 centipoise, multiply the indicated differential pressure by the viscosity in centipoise.



Additional Information

Range

Suitable for use in **Porvair** filter housings and as direct replacements for existing cartridges, Tekfil™ Nylon cartridges can be supplied with end fittings to suit most hardware installations without modification. They are available in lengths of 10, 20, 30 and 40 inches, and in a choice of removal ratings from 1 to 100 micron.

Material Conformity and Validation

The bio-safety of all materials used in the manufacture of Tekfil™ Nylon cartridges is assured by FDA approval to Title 21CFR.177.

Registered to ISO 9001, **Porvair Filtration Group** procedures are subject to high standards of quality assurance as demonstrated through its Drug Master File status.

Chemical Compatibility

The Tekfil™ Nylon materials of construction are compatible with a wide range of chemicals and solvents, however care must be taken to select the appropriate seal material. Advice on chemical compatibility is available. Since operating conditions vary considerably between applications, verification by the end user is recommended.

Filter Housings

Please contact a **Porvair Filtration Group** representative for further information on our range of filter housings.



Porvair Filtration Group Ltd.

Queensway
Stem Lane, New Milton,
Hampshire, BH25 5NN, UK
Tel: +44 (0)1425 612010
Email: info@porvairfiltration.com

Porvair Filtration Group Inc.

301 Business Lane
Ashland, Virginia 23005, USA
Tel: +1 804 550 1600
Email: infoUS@porvairfiltration.com

Porvair Filtration Group

Chengdong Area
Square Industrial Park, North District
Xiaonan Economic Development Zone
Xiaogan, 432000, China
Tel: +86 (0)712 2878955
Email: infoCN@porvairfiltration.com

www.porvairfiltration.com

Porvair Filtration India PVT. Ltd.

Gangotri Glacier Annex, Kavesar
Opposite Vijay Nagari, Off Ghodbunder Road
Thane (W), 400607, India
Tel: +91 22 25 976464 / +91 22 25 976465
Email: infoIN@porvairfiltration.com

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