Microcap™ GPP

General Pleated Depth Polypropylene Capsule Filters



Microcap™ GPP general service grade capsules are used for the removal of particulate contaminants from water, inks, dyes and speciality chemicals.

Made with polypropylene microfibre media and designed with the maximum filtration area, these filters can remove large amounts of particulate and other contaminants over a long filter life. Microcap™GPP capsules protect critical membrane filters downstream by removing 99.9% of contaminants at the rated pore size.

Polypropylene depth media filters perform the critical upstream clarification of products. When used in final filtration systems, the filters protect the high-value membrane filters used downstream. Polypropylene depth media capsule filters are rinsed during production to remove manufacturing debris from the capsules.

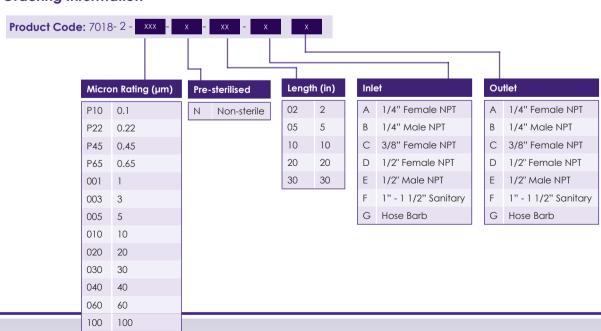
Typical Applications

- Chemicals
- Acids and bases
- Cosmetics
- · Process water
- · Inks and dyes

Features and Benefits

- 99.9% efficiency at the rated pore size.
- Protect critical membrane filters downstream.
- · Wide range of high efficiency retention ratings.
- · High capacity for long life.

Ordering Information



Specifications

Materials of Manufacture

Housing: Polypropylene

Filtration media: Pleated polypropylene

depth media

Media support:

End caps:

Centre core:

Outer support cage:

Sealing method:

Polypropylene

Polypropylene

Polypropylene

Thermal bonding

Sanitisation/Sterilisation

Autoclave: 120°C (250°F), 30 min, 5+

cycles

Chemical sanitisation: Industry standard

concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected

chemicals.

Note: Microcap™GPP

capsules are not to be used in steam.

Flow Rate

The following table represents typical water flow at a one psi (69bar) pressure differential across a single 2 inch capsule with 1.0 ft² (0.093 m²) of media with 1/2" FNPT ports. The liquid test fluid is water at ambient temperature. Higher pressure drops are acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Maximum Operating Parameters

Liquid operational pressure: 5.5bar (80psi) at 20°C

(68°F)

Gases operational pressure: 60psi (4.1bar) at 20°C

(68°F)

Operating temperature: 43°C (110°F) at 2.1bar

(30psi) in water

Forward differential pressure: 3.4bar (50psi) at 20°C

(68°F)

Reverse differential pressure: 2.7bar (40psi) at 20°C

(68°F)

Outer support cage: Polypropylene

Recommended changeout

pressure: 2.4bar (35psi)

| Media | Capsule length | | | | | | | | |
|-----------------------------------|---|---|---|---------------------|---------------------|--|--|--|--|
| | 2" | 5" | 10" | 20" | 30" | | | | |
| Pleated polypropylene depth | 1.0ft ² (0.09m ²) | 2.8ft ² (0.26m ²) | 5.8ft ² (0.54m ²) | 11.6ft² (1.08m²) | 17.4ft² (1.62m²) | | | | |

Average – Filtration area varies with media thickness and porosity.

Integrity Test Information

Each capsule assembly is integrity tested before release. Field duplication of these tests is not practical because of the absence of commercial portable testing equipment.

| Pore size (µm) | 0.10 | 0.22 | 0.45 | 0.65 | 1.0 | 3.0 | 5.0 | 10 | 20 | 30 | 40 | 60 | 100 |
|----------------|------|------|------|------|------|------|-------|-------|-------|--------|--------|--------|--------|
| GPM | 0.20 | 0.60 | 1.0 | 1.2 | 1.6 | 2.4 | 3.2 | 3.6 | 4.0 | >4.0 | >4.0 | >4.0 | >4.0 |
| LPM | 0.76 | 2.27 | 3.78 | 4.54 | 6.05 | 9.08 | 12.11 | 13.62 | 15.14 | >15.14 | >15.14 | >15.14 | >15.14 |

For approximate flow rates for 5" through 30" capsules, refer to the appropriate cartridge data sheet

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