

# Ultipor<sup>®</sup> GF Plus Series Filter Elements

# Description

Ultipor® GF Plus filters have a pleated high area construction for long service life. The medium uses a binder resin which coats the glass fibers, imparting a positive zeta potential in aqueous service. The resin also bonds the glass fibers to a polyester substrate, producing a rugged composite medium. Applications for such filters are numerous as most suspensions are negatively charged in aqueous solution, including not only particles but bacteria and viruses. Some Ultipor GF Plus filter grades efficiently remove sub-microscopic haze from a wide variety of pharmaceuticals and cosmetics, including colognes.

Ultipor GF Plus filters have a fixed pore construction which precludes unloading or media migration.

Ultipor GF Plus elements with polypropylene hardware in a double open-ended UNI CAP configuration are rated to withstand differential pressures of 5.2 bard (75 psid) @ 38°C (100°F) and 3.1 bard (45 psid) @ 82°C (180°F).

When constructed in a single open-ended AB configuration, the element can withstand differential pressures of 5.2 bard (75 psid) @ 27°C (80°F) and 3.8 bard (55 psid) up to 82°C (180°F).



Ultipor GF Plus Filter

# **Removal ratings**

| Cartridge Grade | Liquid Service <sup>3</sup><br>Rating in Microns at % Efficiency |        | Aqueous Clean Pressure Drop<br>Per 25.4 cm (10 in) Module | Typical Aqueous Flow<br>Per 25.4 cm (10 in) Cartridge |
|-----------------|--|--------|---|---|
|                 | 99%  | 99.98% | (MBARD/LPM) / (PSID/GPM) <sup>4</sup>                     | (LPM/GPM)   |
| U010Z           | 0.6 <sup>2</sup>   | 1      | 3.09 / 0.17   | 7.6 - 11.4 / 2-3                                      |
| U2-20Z          | 0.8 <sup>2</sup>   | 2      | 2.55 / 0.14   | 7.6 - 11.4 / 2-3                                      |
| U030Z           | 2.0  | 3      | 1.82 / 0.10   | 7.6 - 11.4 / 2-3                                      |
| U6-40Z          | 3.2  | 6      | 0.91 / 0.05   | 11.4 - 18.9 / 3-5                                     |
| U100Z           | 6.0  | 10     | 0.55 / 0.03   | 11.4 - 18.9 / 3-5                                     |
| U200Z           | 17.0   | 20     | 0.36 / 0.02   | 11.4 - 18.9 / 3-5                                     |
| U400Z           | 25.0   | 40     | 0.27 / 0.015  | 15.1 - 26.5 / 4-7                                     |

# **Ordering Information**

#### DOE - Pall Part Number = PUY 2 3 SOE - Pall Part Number = AB 2 5 1 4

| Table 1 |                              |  |  |  |
|---------|------------------------------|--|--|--|
| Code    | Cartridge<br>lengths (cm/in) |  |  |  |
| 1       | 25.4 / 10                    |  |  |  |
| 2       | 50.8 / 20                    |  |  |  |
| 3       | 76.2 / 30                    |  |  |  |
| 4       | 102 / 40                     |  |  |  |

### Table 2

| Code   | Cartridge |
|--------|-----------|
| U010Z  | U010Z     |
| U2-20Z | U2-20Z    |
| U030Z  | U030Z     |
| U6-40Z | U6-40Z    |
| U100Z  | U100Z     |
| U200Z  | U200Z     |
| U400Z  | U400Z     |

#### 0 Tak

| Table 3 |                             |  |  |  |
|---------|-----------------------------|--|--|--|
| Code    | Gasket<br>option            |  |  |  |
| J       | Ethylene<br>propylene (std) |  |  |  |
| H13     | Nitrile                     |  |  |  |
| Н       | Fluorocarbon<br>elastomer   |  |  |  |

### Table 4

| Code | End Fittings                |                            |  |  |
|------|-----------------------------|----------------------------|--|--|
|      | O-ring fitting<br>I.D. (In) | O-ring<br>replacement size |  |  |
| 3, 8 | 1 1/4                       | 222                        |  |  |
| 7    | 1 ½                         | 226                        |  |  |

<sup>1</sup> These grades are particularly useful as prefilters, in addition to providing absolute removal efficiency.

Table 5

O-ring option

Silicone

elastomer Ethylene

propylene

Fluorocarbon

Code

JH4

Н

J

<sup>2</sup> Extrapolated value.

<sup>3</sup> Liquid service ratings are based on a modified OSU F-2 protocol for recording removal efficiency based on particle counting techniques.

Pressure drop in MBARD/LPM (PSID/GPM) for water for a single 25.4 cm (10 in) module. Multiply this value by the required flow to determine the total aqueous pressure drop. Next, for fluids other than water, multiply by viscosity in centipoise. If this calculated pressure drop is excessive, then divide this value by the number of 25.4 cm (10 in) modules required to reduce this pressure drop to an acceptable level.



**Fuels and Chemicals** 

25 Harbor Park Drive Port Washington, NY 11050 +1 516 484 3600 telephone +1 888 873 7255 toll free US

Portsmouth - UK +44 (0)23 9233 8000 telephone +44 (0)23 9233 8811 fax industrialeu@pall.com

#### Visit us on the Web at www.pall.com

Pall Corporation has offices and plants throughout the world. For Pall representatives in your area, please go to www.pall.com/contact.

Because of technological developments related to the products, systems, and/or services described herein, the data and procedures are subject to change without notice. Please consult your Pall representative or visit www.pall.com to verify that this information remains valid.

© Copyright 1989, 2015, Pall Corporation. Pall, PALL and Ultipor are trademarks of Pall Corporation ® indicates a trademark registered in the USA. Filtration. Separation. Solution.sm and BETTER LIVES. BETTER PLANET. are service marks of Pall Corporation.

# Housing Information

Housings are available in either polypropylene, carbon steel, or stainless steel and can accommodate 1 to 152, 10 in modules per housing.

**Better Lives** 

Better Planet.