

HDC® II Junior Style Filter Cartridges

HDC II High Dirt Capacity Polypropylene Filters



HDC II Junior Style Filter Cartridges (including Sealkleen™ cartridges) are high dirt capacity pleated polypropylene filters constructed with a proprietary technique: varying the fiber diameter instantaneously and continuously to produce a pore-size distribution from coarse (upstream) to fine (downstream) while maintaining constant void-volume throughout the depth of the filter medium. This unique construction means that more contaminants are trapped in the outer and inner layers of the medium, thereby substantially increasing its dirt-holding capacity, and the service life of the filter.

Sealkleen and Junior **HDC II** style filters are available in absolute removal ratings from 0.6 µm to 40 µm. The all-polypropylene construction of these filters make them compatible with an extremely wide range of fluids. Cartridges with a P option are optimized for pharmaceutical applications.

All materials of construction are FDA-listed materials per 21 CFR.

Features and Benefits

Varied Fiber Diameter

- Extraordinarily high dirt-holding capacity

Fixed Pore Structure

- No solids unloading under variations in flow or pressure differential
- Fibers will not migrate or become dislodged and contaminate process fluid

Pure Polypropylene Construction

- Extremely good chemical compatibility with a wide range of fluids
- No surfactants or binder resins
- Cartridges can be in situ steam-sterilized

Quality and Bio-Safety

Biological Tests

- Meets USP Biological Reactivity, In Vivo, for Class VI-121 °C plastics

Effluent Quality Tests*

- Meets Cleanliness per USP Particulates in Injectables
- Non-Pyrogenic per USP Bacterial Endotoxins (< 0.25 EU/mL)
- Meets Total Organic Carbon and Water Conductivity per USP Purified Water, pH per USP Sterile Purified Water

* Per lot sample soak or rinse-up flush aliquots.

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Technical Specifications

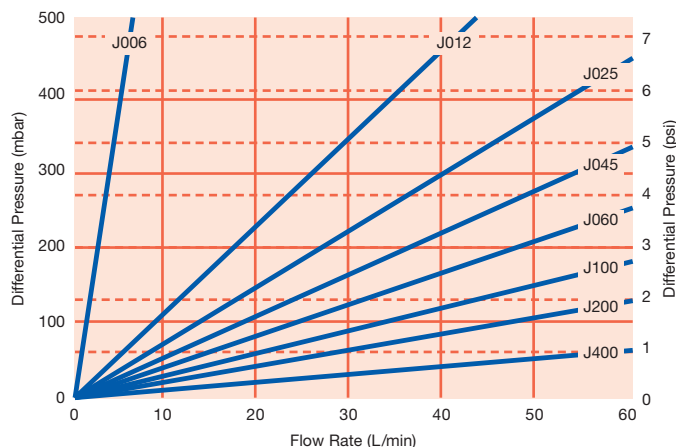
Operational Limits

| | | |
|--------------------------------------|--------------------|-----------------------------|
| Operating Temperature | 50 °C (122 °F) | 80 °C (176 °F) (Maximum) |
| Maximum Differential Pressure | 5.5 bard (80 psid) | 4.1 bard (60 psid) |

Nominal Filter Area

| Grade | SLK7001 Style | MCY4463 and SLK7002 Styles |
|-------|--|--|
| J006 | 0.11 m ² (1.2 ft ²) | 0.22 m ² (2.4 ft ²) |
| J012 | 0.12 m ² (1.3 ft ²) | 0.25 m ² (2.7 ft ²) |
| J025 | 0.14 m ² (1.6 ft ²) | 0.25 m ² (2.7 ft ²) |
| J045 | 0.14 m ² (1.6 ft ²) | 0.25 m ² (2.7 ft ²) |
| J060 | 0.07 m ² (0.8 ft ²) | 0.15 m ² (1.7 ft ²) |
| J100 | 0.09 m ² (1.0 ft ²) | 0.19 m ² (2.1 ft ²) |
| J200 | 0.09 m ² (1.0 ft ²) | 0.19 m ² (2.1 ft ²) |
| J400 | 0.06 m ² (0.7 ft ²) | 0.25 m ² (2.7 ft ²) |

Typical Liquid Flow Rates for SLK7002 and MCY4463 Styles



Sterilization

| | |
|--------------------------------------|--|
| Steam-sterilizing Temperature | Up to 140 °C (284 °F) in situ or autoclave |
|--------------------------------------|--|

Note: Differential pressures are for liquids with a viscosity of 1 cP. Differential pressures for liquids at other viscosities can be conservatively estimated by multiplying the indicated differential pressure by the viscosity in cP. To obtain the total pressure drop of a complete filter assembly the housing pressure drop must be added. Please refer to the relevant housing literature or contact Pall.

Ordering Information

Sealkleen Style

Single open-ended 57 mm (2.25 in.) diameter element (excluding flange). Incorporates a patented sealing arrangement that eliminates any chance of fluid bypass via the seal, from the upstream side of the filter element to the downstream side. The housing elastomeric O-ring is placed on a special flange, which is an integral part of the element outlet end cap.

SLK

| Code | Nominal Length | HDC II Filter Grade | Removal Rating | Code | Filter Grade |
|------|------------------|---------------------|-----------------------|------|----------------|
| 7001 | 2.5 in. (66 mm) | J006 | 0.6 µm ⁽¹⁾ | P | Pharmaceutical |
| 7002 | 5.2 in. (133 mm) | J012 | 1.2 µm | Omit | Other |
| | | J025 | 2.5 µm | | |
| | | J045 | 4.5 µm | | |
| | | J060 | 6.0 µm | | |
| | | J100 | 10.0 µm | | |
| | | J200 | 20.0 µm | | |
| | | J400 | 40.0 µm | | |

Junior Style (MCY)

Single open-ended 57 mm (2.25 in.) diameter element with single external O-ring seal contained in the outlet end cap. Cartridge nominal length of 133 mm (5.25 in.).

MCY

| Code | Nominal Length | HDC II Filter Grade | Removal Rating | Code | Filter Grade | Code | O-ring Option |
|------|------------------|---------------------|-----------------------|------|-----------------|------|---------------|
| 4463 | 5.2 in. (133 mm) | J006 ⁽¹⁾ | 0.6 µm ⁽¹⁾ | P | Pharmaceutical* | H4 | Silicone |
| | | J012 | 1.2 µm | | | | |
| | | J025 | 2.5 µm | | | | |
| | | J045 | 4.5 µm | | | | |
| | | J060 | 6.0 µm | | | | |
| | | J100 | 10.0 µm | | | | |
| | | J200 | 20.0 µm | | | | |
| | | J400 | 40.0 µm | | | | |

Other O-ring options on request.

* Pall pharmaceutical-grade filters are designed for use in conformance with CGMP in Manufacturing, Processing, Packing or Holding of Drugs (21CFR210) and CGMP for finished Pharmaceuticals (21CFR211.72) including batch release certificate and full traceability.

⁽¹⁾ Extrapolated value.