

Ultipor® III Filter Elements

Description

Ultipor® III Filter Elements

High performance Pall Ultipor® III filters incorporate state-of-the-art design technology, including a unique patented “helical wrap” pleat support system and composite element structure for unsurpassed strength, performance and service life. The result is a cost-effective solution clearly superior to traditional filter designs.



Element Features:

1. An outer helical wrap tightly bonds to each pleat for uniform, rigid pleat spacing. This minimizes pleat flexing and possible media damage, even under severe cold start or pressure surge conditions.

Benefit: Reliable, consistent performance and resistance to severe operating conditions.

2. Proprietary plastic upstream and downstream support layers have built-in flow channels to prevent media blind-off as pressure drop increases.

Benefit: Extended element life for lower maintenance costs.

3. Media is made up of inert, inorganic fibers securely bonded into a fixed, tapered pore structure that preserves high particle removal efficiency throughout the life of the element. Tapered pores spread particulate through the entire media depth for maximum dirt holding capacity.

Benefit: Consistent filter performance and extended service life.

4. O-ring seals, corrosion resistant end caps and a rugged metal inner core complete the element structure. Coreless Ultipor III elements have no metal components. End caps are reinforced polymer and the core is part of the filter housing. Thus the element is lightweight (60% lighter than traditional designs), crushable, and incinerable.

Benefit: Environmentally friendly product reduces disposal and maintenance costs.

Applications

Specifications

Multi-Pass Filter Rating

Per ISO16889

Standard Elements

Beta ratio = 1000 at 2.5, 5, 7, 12 and 22 $\mu\text{m(c)}$

Dirt-Fuse Elements

Beta ratio = 1000 at 5 and 15 $\mu\text{m(c)}$

Element Collapse Pressure Rating (ISO 2941)

Standard Elements

Pressure Line Filters: 290 psid (20 bar)

Return Line Filters: 150 psid (10 bar)

8310 Series Filters: 100 psid (7 bar)

Spin-Ons

100 psid (7 bar)

Dirt-Fuse Elements

3000 psid (207 bar)

9606 Series - 600 psid (41 bar)

Coreless Elements

150 psid (10 bar)

Fluid Compatibility (ISO 2943)

Compatible with petroleum oils, water glycols, water-oil emulsions and high water content fluids. Fluorocarbon seals are available for industrial phosphate esters, diesters, and specified synthetics.

Flow Fatigue (ISO 3724)

Contact factory; element structure incorporates upstream and downstream medium support to achieve maximum fatigue cycle life.

Fabrication Integrity (ISO 2942)

Fabrication integrity is verified and assured during the manufacturing process by numerous evaluations and inspections including bubble point testing.

Flow vs. Pressure Drop (ISO 3968)

Flow vs. Pressure drop data (psid/gpm) is listed with each filter series. See appropriate filter series page.

Temperature Range

Nitrile Seals:

45 °F (-43 °C) to +225 °F (107 °C)

Fluorocarbon Seals:

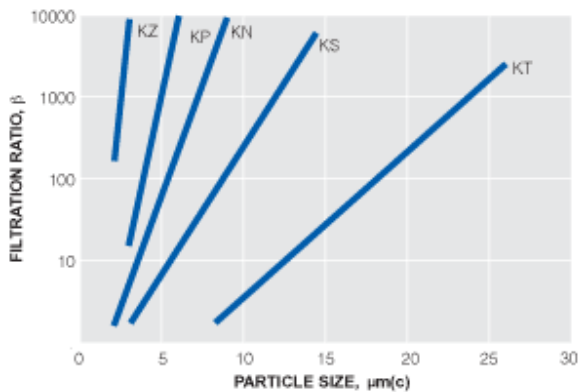
-20 °F (-29 °C) to +250 °F (120 °C)

Note: maximum 140 °F (-60 °C) in water based fluids

Quality Control

All elements are manufactured by Pall to exacting procedures and strict quality controls. Elements are checked against rigorous, ongoing validation test protocols within Pall.

Performance



Filter Element Part Numbering

Example:

HC	9600	F	KP	16	H
1	2	3	4	5	6

1. **HC** Pall Hydraulic / Lube Filter Cartridge
2. **9600** Filter Element Series (9601 for Dirt-Fuse, 9604 for Coreless)
3. **F** Filter Cartridge ("S" for spin-on filter)
4. **KP** Media Grade - 5 μm(c)
5. **16** Nominal Length -16 inches
6. **H** Seal Material - Nitrile ("Z" for Fluorocarbon)

Pall Media Grade	μm(c) Rating for β Value					
	β=2	β=10	β=75	β=100	β=200	β=1,000
Ultipor III						
KZ	<2	<2	<2	<2	2	2.5

KP	<2	<2	3.1	3.3	3.8	5
KN	2.1	3.4	5.0	5.2	5.7	7
KS	3.2	5.5	8.3	8.7	9.7	12
KT	7.2	11	15.8	16.5	18.2	22
Dirt-Fuse						
DP	<2	<2	3.0	3.2	3.8	5
DT	3.3	6.3	10.1	10.7	12	15

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