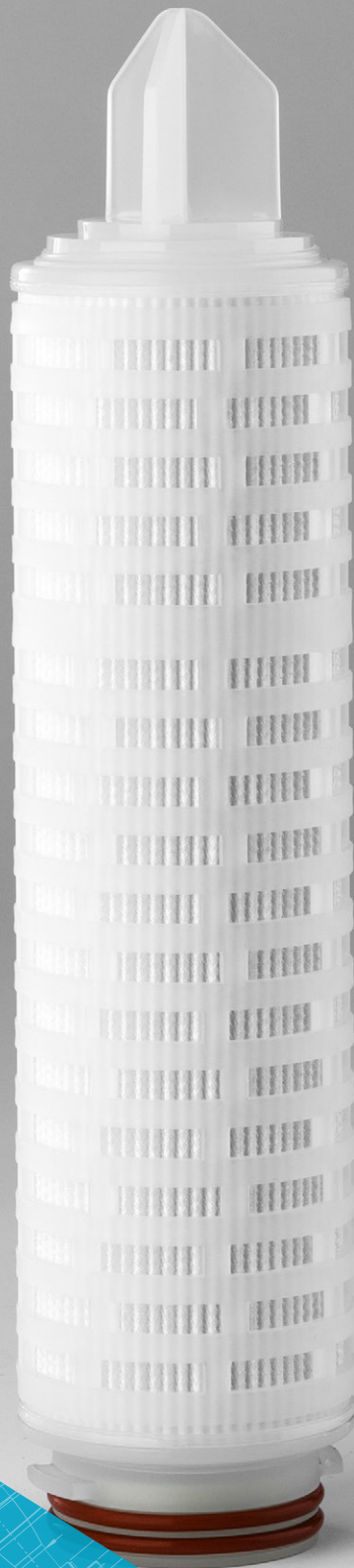


Atlas Copco



PFP-D
pleated
polypropylene
fiber filters



PFP-D pleated polypropylene fiber filters

Product description

Introduction

PFP-D filters provide reliable and efficient filtration with a maximum service life for critical and heavy-duty applications in Food & Beverage, Pharmaceutical and Chemical industries.

The filters effectively retain particles through multilayers of melt blown PP fiber. The filter media with support layers is integrated into a robust cage or housing making it suitable for nearly all operation, service and cleaning conditions. and sterilization of valuable fluids used in Food & Beverage, Pharmaceutical and Chemical industries.

Devices

PFP-D filters are available in a wide range of scalable, cartridges, mini cartridges and capsules that allow for fast and easy scale-up of your production. From laboratory-scale filters to production-scale assemblies, all filters incorporate the same media and identical materials of construction, eliminating the need to requalify filter units as processes are scaled up.

Compatibility

PFP-D filters are completely made from polypropylene utilizing thermal welding techniques to seal all the components thus optimizing device integrity, thus assuring a broad chemical compatibility with a large number of solvents, acids and bases. Polypropylene is a highly chemically resistant material, enabling the filters to be chemically regenerated. The all polypropylene construction guarantees a small extractable footprint.

Documentation

PFP-D filters are designed, developed and manufactured in accordance with a ISO 9001 certified Quality Management System. A Validation Guide is available for compliance with regulatory requirements.

All the materials used comply with the European Union Regulation (EC) No. 1935/2004 as well as the Regulation (EU) No. 10/2011. concerning plastic materials and articles intended to come into contact with foodstuffs. These guidelines for plastics allow the use in food and beverage applications. All materials used meet the requirements of the CFR Title 21.



Key features

- Wide range of ratings and devices
- High flow and low pressure drop
- Thermally bonded: no surfactants or binders
- Wide chemical compatibility

Applications

Thanks to its chemical compatibility PFP-D filters are widely used in Food & Beverage, Pharmaceutical, Cosmetics and Chemical Industries.

- Retention of particles in liquids
- Pre-filtration for final membrane filters
- Edible liquids: bottled water, beer, wine, spirits, juices, soft drinks, non-carbonated drinks, etc.
- Non-edible liquids: water, serums, formulations, WFI, aggressive solvents, chemicals, etc.



Technical data

Micron ratings (µm)

0,2/0,5/0,8/1/1,2/1,5/2/3/5/10/20/50/70 µm

Cartridge length

10"/20"/30"/40"

Cartridge diameter

71 mm

Effective filtration area (typical)

0,26 m²

Material of construction

Filter media	Polypropylene
Core	Polypropylene
Cage	Polypropylene
End caps	Polypropylene + reinforcement
Housing	Polypropylene
Seal	Silicone, Viton, EPDM

Maximum operating temperature

80°C (cartridges), 60°C (capsules)

Maximum differential pressure forward (cartridges)

6,9 bar @25°C, 2,4 bar @80°C

Maximum differential pressure reverse (cartridges)

3,0 bar @25°C, 1,0 bar @80°C

Maximum differential pressure forward (capsules)

5,2 bar @38°C, 3,1 bar @60°C

Sterilization SIP (cartridges)

20 cycles for 30 minutes @125°C, 0,3 bar dP

Hot water sanitization (cartridges)

50 cycles for 30 minutes @85°C

Regulatory compliance

TOC/Conductivity @25°C

Autoclaved filter effluent meets USP<643> for Total Organic Carbon and USP<645> for Water Conductivity per WFI requirements after UPW flush of specified volume.

Non-fiber releasing

Non-fiber releasing component materials meet the criteria for a "non-fiber releasing filter" as per 21 CFR 210,3(b)(6).

Bacterial endotoxin

Aqueous extraction of autoclaved filter contains <0,25 EU/ml as determined by Limulus Amebocyte Lysate (LAL), USP <85>.

Biosafety

Meets criteria of USP <88> Biological Reactivity Test for class VI-121°C plastics.

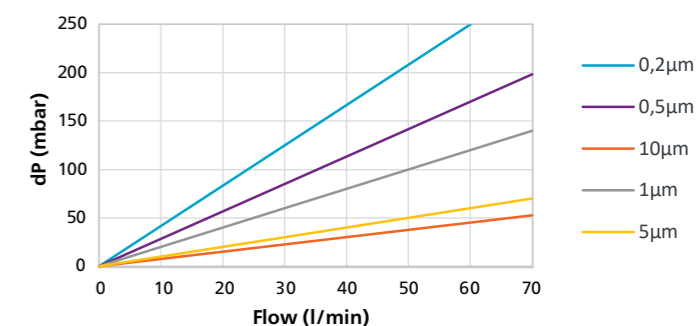
Indirect food additive

The product complies with food contact regulation 21 CFR §177 - 182 and (EC) No 1935/2004 and subsequent amendments.

Quality assurance

For each filter cartridge an electronic Certificate of Conformity is available, detailing relevant test data, biological safety information and product approvals against the specific batch number and part number for the filter. The filter cartridges are manufactured in a controlled clean room environment that generally meets the requirements for ISO 14644-1 Class 8 Cleanrooms.

Flow rate



Note: 10" cartridge tested with water @20°C, 1,005 cP (typical flow rate)

Protecting process, products and people

Atlas Copco's process filters optimize your productivity while protecting your process, product and consumers. Our portfolio of cartridges and housings covers all your filtration needs. The products are made from proven, high quality materials from reputable suppliers and manufactured in a controlled environment subjected to strict QA/QC procedures.

Product configuration

Cartridges

Series	Rating (µm)	Length	End cap	Seal
PFP-D	0,5	5"	C2 (2x226 O-ring + 2 tabs/flat)	S (Silicone)
	0,8	10"	C3 (2x222 O-ring/flat)	E (EPDM)
	1	20"	C7 (2x226 O-ring + 2 tabs/fin)	V (Viton)
	3	30"	C8 (2x222 O-ring/fin)	
	5	40"	C28 (2x222 O-ring + 3 tabs/fin)	
	10		DOE (flat + gasket/flat + gasket)	
	20			



Example: PFP-D 1um 20" C3 S

Mini cartridges

Series	Rating (µm)	Style	Seal
PFP-D	0,2	J2,5T/J5T	S (Silicone)
	0,5	J2,5B1	E (EPDM)
	1,2	J2,5I/J3I/J5I	V (Viton)
	2	J1,5F/J5F	
	5	J2,5S/J5S	
	10	J1,5E/J2,5E/J5E	
	20		



Example: PFP-D 0,5um J2,5B1 S

Capsules

Series	Rating (µm)	Style	Length ¹	Std
PFP-D	0,2	C1	5"	P
	0,5	C2/C3	10"	
	1,2	C4/C5	20"	
	1,5	C6/C7	30"	
	2	C8		
	5	C9/C10		
	10			
	20			
	50			
70				

¹ = for C4/C5

Example: PFP-D 2um C8 P

PFP-D 2um C4 20" P

