



POLYFLOW II Filter Cartridges

- liquid filters
- polypropylene

POLYFLOW II's random fibre polypropylene depth media provides long on-stream life and high retention efficiencies. While many polypropylene depth media are nominally rated and cannot meet their actual claimed retention efficiency, POLYFLOW II has been engineered to meet exacting performance claims.

The all polypropylene construction ensures a broad range of chemical compatibility making POLYFLOW II cartridges particularly suitable for the filtration of aggressive and viscous chemicals and solvents. They do not suffer from hydrolysis in aggressive solutions which would result in the contamination of the process fluid.

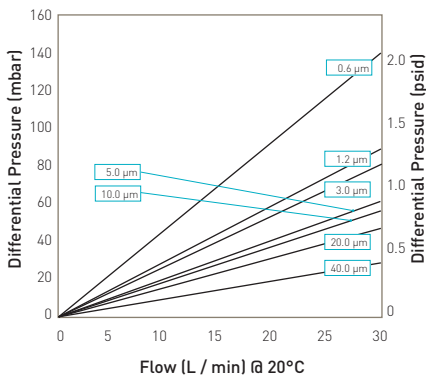
Extensive research has resulted in filter media with continuously graded fibre density giving progressively finer particulate retention through the depth of the media. This combined with optimised media pleating density gives POLYFLOW II cartridges exceptional lifetime performance.

Features and Benefits

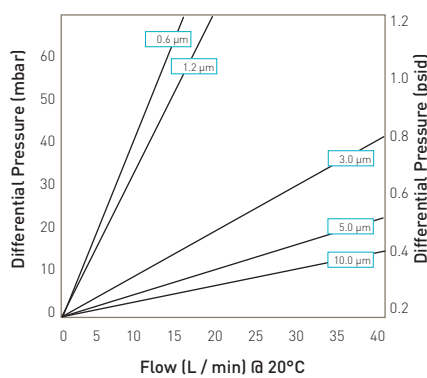
- Broad chemical compatibility allows use in most applications
- High retention efficiency provides excellent protection for downstream filters
- Available in 0.6 to 30 micron
- Available in Disposable and Demi format
- Absolute rated beta 10,000 filters



Performance Characteristics



10'' Size (250 mm) Cartridge



Demi Cartridge

Specifications

Materials of Construction

- Filtration Media : Polypropylene
- Upstream Support : Polypropylene
- Downstream Support : Polypropylene
- Inner Support Core : Polypropylene
- Outer Protection Cage : Polypropylene
- End Caps : Polypropylene
- End Cap Insert : Polypropylene (if applicable)
- Standard o-rings/gaskets : Nitrile

Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

Temperature °C	Temperature °F	Max. Forward dP (bar)	Max. Forward dP (psid)
20	68	5.0	72.5
40	104	4.0	58.0
60	140	3.0	43.5
80	176	2.0	29.0
90	194	1.0	14.5
>100 (steam)	>212 (steam)	0.3	4.0

Steam Sterilisation

POLYFLOW II cartridges can be repeatedly steam sterilised in situ or autoclaved at up to 130°C (266°F). They can be sanitised with hot water at up to 80°C (176°F). Demi cartridges and capsules can be autoclaved for up to 25 cycles (30 minutes) at 135°C (275°F). They are all compatible with most sanitising agents.

Recommended Rinse Volume

Prior to use - 10 litres per 10" (250 mm) filter cartridge.

Effective Filtration Area (EFA)

10" (250 mm) 0.5 m² (5.38 ft²)

Retention Characteristics

The retention characteristics of POLYFLOW II have been determined by a single-pass technique using suspensions of ISO 12103 Part 1 A2 Fine and A4 Course test dust in water.

Media Code	Micron Rating at Various Efficiencies				
	>99.99%	99.98%	99.90%	99%	90%
006	0.60	0.57	0.54	0.32	0.20
012	1.20	0.95	0.90	0.70	0.50
030	3.00	2.80	1.80	1.00	0.70
050	5.00	4.70	4.50	3.50	1.00
100	10.00	8.00	7.00	4.80	2.80
200	20.00	16.00	14.00	10.00	6.00
400	40.00	32.00	28.00	20.00	12.00

Applications

- Solvent filtration
- Liquid clarification
- Recirculating liquid
- General water filtration
- Reagent-grade chemicals
- Final product clarification
- Feedstock filtration

Ordering Information

Cartridges

P2 - [] 0 [] [] - [] - [] []

Code Insert style	Code End Fitting	Code Length (Nominal)	Code Micron	Code Seal	Code Gasket Thickness
1 None (std)	0 DOE (C)	10 10" (250 mm)	006 0.6	0 Buna N	1 5mm [0.200"]
5 Encapsulated Stainless steel	1 DOE	20 20" (500 mm)	012 1.2	1 EPDM	2 3mm [0.125"]
6 Encapsulated Polysulphone	2 Flat / 226	30 30" (750 mm)	030 3.0	2 Silicone	4 (1) 5mm [0.200"] and (1) 3mm [0.125"]
A* Short neck	3 Flat / 222	40 40" (1000 mm)	050 5.0	4 Viton**	N No Gaskets
	6 Flat / 020 / Internal		100 10.0	5* FEP Viton	
	7 Fin / 226		200 20.0	6* FEP Silicone	
	8 Fin / 222		400 40.0	N None	
	G 213 / Internal / O-ring DOE				
	H 213 / Internal / O-ring recessed blank				
	R 222 / Recessed Blank				

*Code 3 and 8 only

*O-rings only

Capsules

22 - C [] B [] [] - [] - [] []

Code Size	Code Inlet Connection	Code Outlet Connection	Code Micron	Code Vent O-ring Material
H Half Size	B 1/4" Hose Barb	B 1/4" Hose Barb	006 0.6	0 Nitrile
S Standard Size	H 1/2" Hose Barb	H 1/2" Hose Barb	012 1.2	1 EPDM
D Double Size	S 1 1/2" Sanitary Flange	S 1 1/2" Sanitary Flange	030 3.0	2 Silicone
	D Quick Disconnect	D Quick Disconnect	050 5.0	4 Viton**
	P 1/4" NPT (Male)	P 1/4" NPT (Male)	100 10.0	N None
	J 1/2" NPT (Male)	J 1/2" NPT (Male)		Z No vents
	K 3/8" NPT (Female)	K 3/8" NPT (Female)		
	G Swagelok	G Swagelok		

**Viton is a registered trademark of E.I. DuPont de Nemours & Co., Inc

Demi Cartridges

22 - MDBMM - [] - []

Code Micron	Code o-rings
006 0.6	0 Nitrile
012 1.2	1 EPDM
030 3.0	2 Silicone
050 5.0	4 Viton
100 10.0	N None

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