

# POLYFLOW II

## Liquid filter cartridges



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.

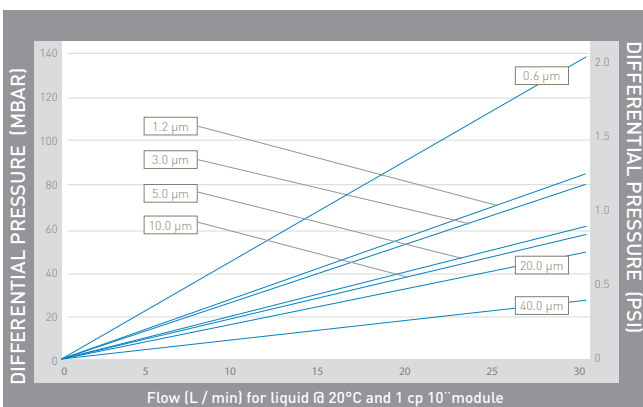
The all polypropylene construction ensures a broad range of chemical compatibility making Polyflow II cartridges particularly suitable for the filtration of aggressive and viscous chemicals and solvents. They do not suffer from hydrolysis in aggressive solutions which would result in the contamination 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	Benefits
Absolute rated efficiency 99.98% (β5000).	Provides excellent protection for downstream filters.
All polypropylene media, supports and hardware, thermally welded.	Broad range of chemical compatibility with low extractables.
Available in a comprehensive range of end cap configurations.	Simple retrofitting to existing systems and housings.
High surface area graded density pleated configuration.	Low clean differential pressure and excellent dirt holding capacity.

- ✓ Solvent filtration
- ✓ Feedstock filtration
- ✓ Final product clarification
- ✓ Reagent-grade chemicals

APPLICATIONS





# POLYFLOW II

## Liquid filter cartridges

### 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: <i>(if applicable)</i>	Stainless steel

#### Recommended Operating Conditions

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

Temperature		Max Forward dP	
°C	°F	(bar)	(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). 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" (250mm) filter cartridge.

#### Effective Filtration Area:

10" (250mm) 0.5m<sup>2</sup> (5.38ft<sup>2</sup>).

#### 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 Coarse test dust in water.

Media Code	>99.99% 10000	>99.98% 5000	99.90% 1000	99% 100	90% 10
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	10.0	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

### Ordering information

#### CARTRIDGES

P2 - [ ] 0 [ ]

Code	Insert Style
1	None (std)
5	Stainless steel

Code	End Fitting
1	DOE
2	Flat / 226
3	Flat / 222
7	Fin / 226
8	Fin / 222
G	213 / Internal / o-ring DOE
H	213 / Internal / o-ring recessed blank
R	222 / Recessed blank

Code	Length (Nominal)
10	10" (250mm)
20	20" (500mm)
30	30" (750mm)
40	40" (1000mm)

Code	Micron
006	0.6
012	1.2
030	3.0
050	5.0
100	10.0
200	20.0
400	40.0

Code	Seal
0	Buna N
1	EPDM
2	Silicone
4	Viton
5*	FEP Viton
6*	FEP Silicone
N	None

Code	Gasket Thickness
1	5mm (0.200")
2	3mm (0.125")
4	(1) 5mm (0.200") and (1) 3mm (0.125")
N	No gasket

#### CAPSULES

22 - C [ ] B [ ]

Code	Size
H	Half
S	Standard
D	Double

Code	Inlet Connection
B	1/4" Hose barb
H	1/2" Hose barb
S	1 1/2" Sanitary flange
D	Quick disconnect
P	1/4" NPT (Male)
J	1/2" NPT (Male)
K	3/8" NPT (Female)
G	Swagelok

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B	1/4" Hose barb
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Code	Micron
006	0.6
012	1.2
030	3.0
050	5.0

Code	Seal
0	Nitrile
1	EPDM
2	Silicone
4	Viton
N	None
Z	No vents

