

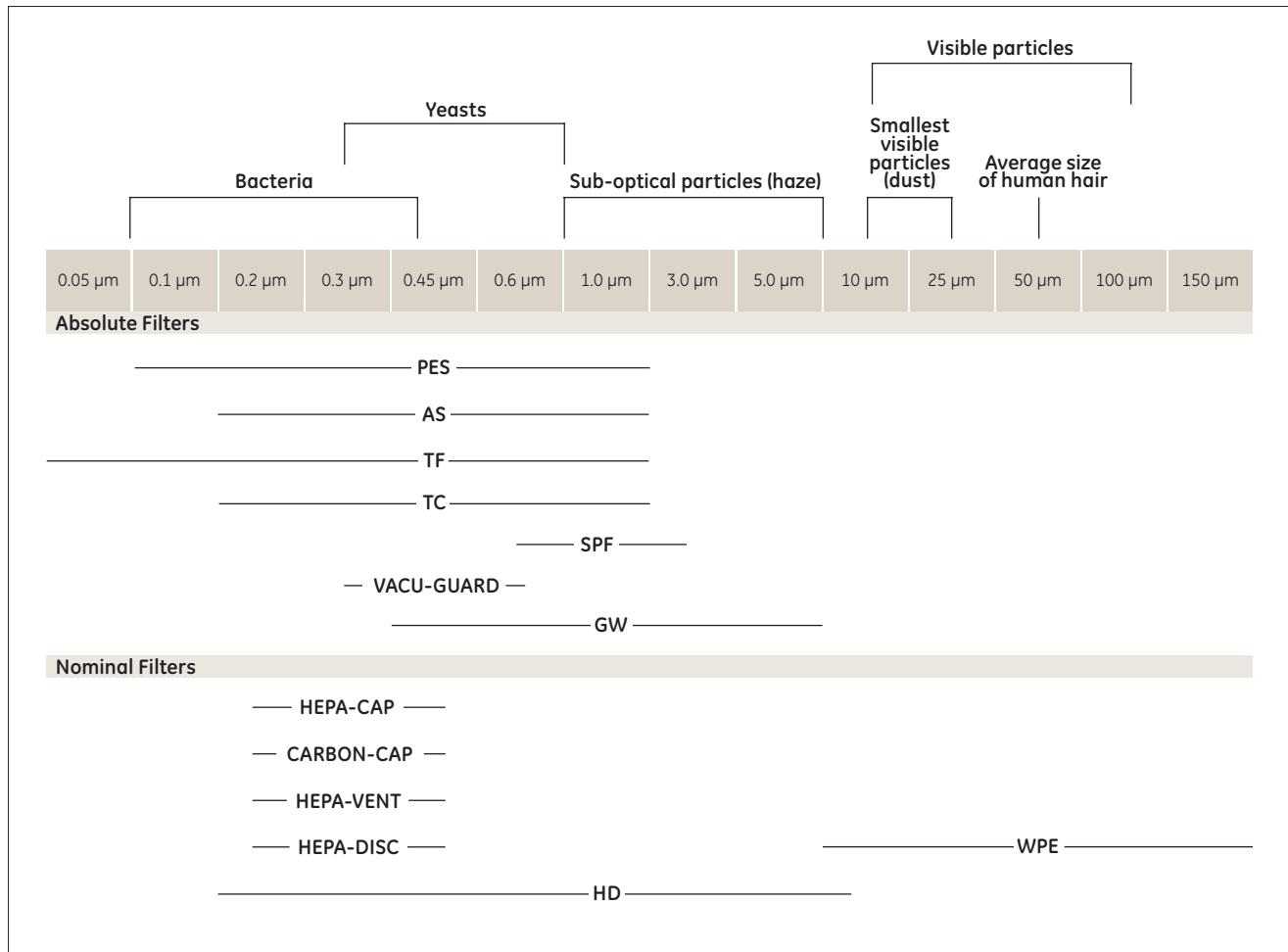
# Capsule Filters

Whether you are conducting research, pilot manufacturing or filtering large volumes or hard-to-filter samples, Whatman has a filtration solution to fit your needs.

Whatman products are manufactured with the highest quality materials, under exacting clean room conditions using ISO-controlled manufacturing processes. We offer a variety of pore sizes and filter materials to choose from, and all of our capsules are free of adhesives to ensure product purity. For the most reliable performance in any application, trust the comprehensive line of Whatman capsule filtration devices.



## Product Overview – Capsule Filters



# Polycap AS

Polycap™ AS (Aqueous Solution) is recommended for filtering aqueous solutions. It combines a Glass Microfiber (GMF) prefilter and a nylon membrane, prolonging the life of the filter and allowing larger volumes and difficult samples to be filtered easily.

## Features and Benefits

- First layer (GMF) acts as a prefilter to ensure longer membrane (0.2, 0.45, and 1.0 µm) life and higher filtration efficiency
- Nylon membrane layer is inherently hydrophilic, has low extractables, is biosafe, and has excellent flow rates
- Ultra-clean, containing no surfactant or mold release agents
- Housing thermally fused (no glues, adhesives or extraneous materials)
- Integrity-testable by bubble point, pressure decay or forward flow methods
- Provides highly effective filtration area in a small size
- Autoclavable; some presterilized with gamma irradiation
- Manufactured in clean room facilities under ISO Quality Systems

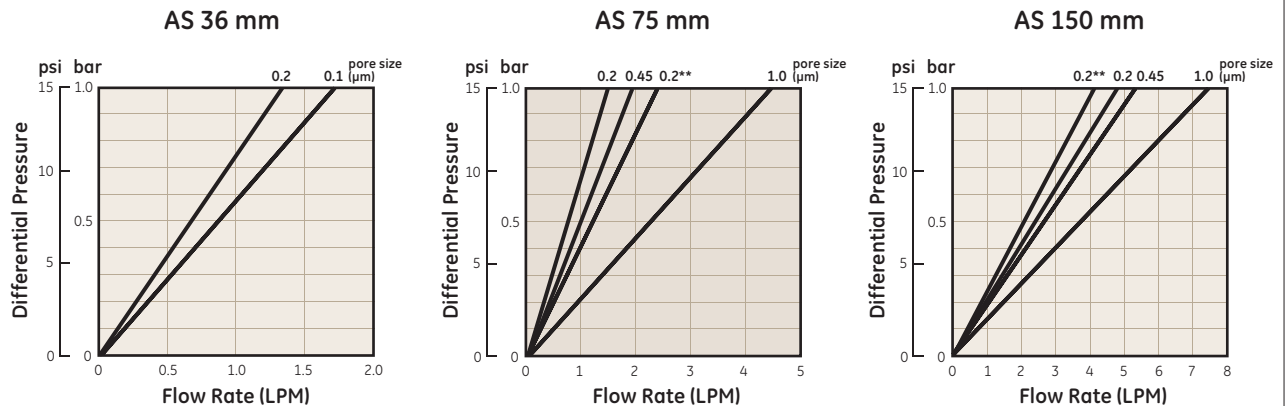
## Applications

- Admixtures
- Biologicals
- Buffers
- Cleaning/rinsing solutions
- Enzymes
- Immunologicals
- Irrigation solutions
- Nutrients
- Ophthalmic solutions
- Pharmaceutical solutions
- Reagent preparation
- Salt solutions
- Therapy solutions
- Tissue culture media
- Viral suspensions



Polycap AS with filling bell

## Water Flow Rates\*



\* Flow rates are indicative and vary by type of end fitting  
 \*\* Sanitary connectors

## Technical Properties – Polycap AS

Housing	Polypropylene
Vent	On inlet
Prefilter	Glass microfiber double laminated with polyolefin monofilament nonwoven
Membrane	Nylon
Support system	Polypropylene
Sealing	Heat-fused
Maximum pressure	60 psi (4.1 bar)
Endotoxin level	LAL tested, ≤ 0.5 EU/ml
Biosafety	Materials pass USP Class VI
Sterilization	Certain filter devices have been sterilized.* Capsules may be autoclaved at 121°C for 20 min (maximum 132°C). However, an integrity test should be performed after autoclaving. Filling bell is not autoclavable but is detachable.
Filtration Area	36 mm capsule: 400 cm <sup>2</sup> (62 in <sup>2</sup> ) 75 mm capsule: 820 cm <sup>2</sup> (127 in <sup>2</sup> ) 150 mm capsule: 1650 cm <sup>2</sup> (256 in <sup>2</sup> )
IPA Bubble Point	0.2 µm membrane: > 1.1 bar (16 psi) 0.45 µm membrane: > 0.69 bar (10 psi) 1.0 µm membrane: > 0.14 bar (3 psi)

\* Sterile and nonsterile options offered

## Ordering Information – Polycap AS

Pore Size (µm)	Catalog Number	Media	Prefilter	Connections		Sterile	Quantity/Pack
				Inlet	Outlet		
<b>Polycap AS 36</b>							
0.2	6708-3602	Nylon	GMF	1/2 SB	1/2 SB	Yes	1
0.2	6705-3602	Nylon	GMF	SB	SB	Yes	1
0.2	6709-3602	Nylon	GMF	MNPT	SB	Yes	1
0.2	2606T	Nylon	GMF	FNPT	FNPT	No	5
0.2	2606NS	Nylon	GMF	SB	SB	No	5
0.45	6708-3604	Nylon	GMF	1/2 SB	1/2 SB	Yes	1
0.45	6705-3604	Nylon	GMF	SB	SB	Yes	1
0.45	2607NS	Nylon	GMF	SB	SB	No	5
1.0	6705-3610	Nylon	GMF	SB	SB	Yes	1
1.0	2608NS	Nylon	GMF	SB	SB	No	5
<b>Polycap AS 36 Plus Filling Bell</b>							
0.2	6706-3602	Nylon	GMF	SB	SB	Yes	1
<b>Polycap AS 75</b>							
0.2	6709-7502	Nylon	GMF	MNPT	SB	Yes	1
0.2	6708-7502	Nylon	GMF	1/2 SB	1/2 SB	Yes	1
0.2	6705-7502	Nylon	GMF	SB	SB	Yes	1

cont.

Pore Size (µm)	Catalog Number	Media	Prefilter	Connections Inlet	Outlet	Sterile	Quantity/Pack
<b>Polycap AS 75</b>							
0.2	2706	Nylon	-	-	-	-	5
0.2	2706T	Nylon	GMF	FNPT	FNPT	No	5
0.2	6709-7504	Nylon	GMF	MNPT	SB	Yes	1
0.45	6705-7504	Nylon	GMF	SB	SB	Yes	1
0.45	6708-7504	Nylon	GMF	1/2 SB	1/2 SB	Yes	1
0.45	2707NS	Nylon	GMF	SB	SB	No	1
1.0	6705-7510	Nylon	GMF	1/2 SB	1/2 SB	Yes	1
<b>Polycap AS 75 Plus Filling Bell</b>							
0.2	6706-7502	Nylon	GMF	SB	SB	Yes	1
<b>Polycap AS 150</b>							
0.2	2806T	Nylon	GMF	FNPT	FNPT	No	1
0.2	2806	Nylon	GMF	1/2 HB	1/2 HB	Yes	5
0.2	2805	Nylon	GMF	1 1/2 sanitary	1 1/2 SB	Yes	5
0.45	2807	Nylon	GMF	1/2 SB	1/2 SB	Yes	5
1.0	2808*	Nylon	GMF	1/2 SB	1/2 HB	Yes	5

\* Product is only available in the Americas

FNPT – Female National Pipe Thread  
GMF – Glass Microfiber Filter  
HB – Hose Barb

MNPT – Male National Pipe Thread  
1/2 SB – Stepped Barb for 10-12 mm (3/8"-1/2") tubing  
SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing

## Polycap HD

Polycap HD (Heavy Duty) is a well-engineered product that offers high filtration efficiency and excellent filtrate purity due to its materials and methods of manufacture.

Polycap HD provides an advantage in process applications as its performance characteristics fit between gross filters and microporous membrane filters used for final filtration.

### Features and Benefits

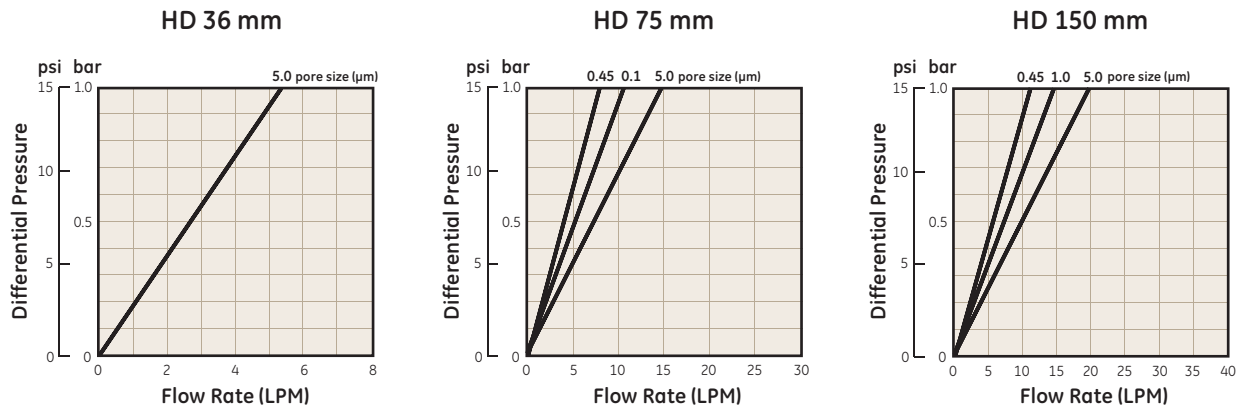
- 100% polypropylene filter media, support system, and housing allows usage with a broad range of solutions, pH and temperature
- High flow and high retention capacity
- Materials of construction are FDA approved for food contact
- Able to be sterilized by autoclaving with steam at 121°C for 20 min
- Manual vent with luer lock to bleed air from upstream or serve as an injection or sample port
- Available in 0.2, 0.45, 1.0, 5.0 or 10 µm pore sizes and a variety of end-fitting configurations
- Manufactured in a Class 10,000 clean room in an ISO certified manufacturing plant



**Applications**

- Buffers
- Clean air and gas equipment
- Cosmetics and personal care products
- Food and beverage
- General fine filtration
- Inks and pigments
- Pharmaceutical solutions
- Photographic emulsions and make-up water
- Prefiltration for RO/UF/MF membranes
- Reagents
- Sample preparations
- Semiconductor and magnetic media
- Solvents

**Water Flow Rates\***



\* Flow rates are indicative and vary by type of end fitting. X-rated with 90% removal efficiency.

**Technical Properties – Polycap HD**

Housing	Polypropylene
Vent	On Inlet
Filter media	Polypropylene
Support system	Polypropylene
Biosafety	Materials pass USP Class VI
Filtration area	36 mm capsule: 400 cm <sup>2</sup> (62 in <sup>2</sup> ) 75 mm capsule: 820 cm <sup>2</sup> (127 in <sup>2</sup> ) 150 mm capsule: 1650 cm <sup>2</sup> (256 in <sup>2</sup> )
Sterilization	Capsules autoclavable at 121°C for 20 min (maximum temperature is 132°C)
Maximum pressure	4.1 bar (60 psi)

## Ordering Information – Polycap HD (Non-Sterile)

Pore Size (µm)	Catalog Number	Media	Prefilter	Connections Inlet	Outlet	Quantity/Pack
<b>Polycap HD 36</b>						
0.2	2610	PP	No	SB	SB	5
0.45	2610T	PP	No	FNPT	FNPT	5
0.45	2611	PP	No	SB	SB	5
1.0	6703-3610	PP	No	SB	SB	1
1.0	6707-3612	PP	No	MNPT	SB	1
1.0	2611T	PP	No	FNPT	FNPT	5
5.0	6703-3650	PP	No	SB	SB	1
5.0	2612T	PP	No	FNPT	FNPT	5
10.0	6703-3611	PP	No	SB	SB	1
10.0	2613T	PP	No	FNPT	FNPT	5
20.0	6703-3621	PP	No	SB	SB	1
20.0	2614T	PP	No	FNPT	FNPT	5
<b>Polycap HD 75</b>						
0.45	2710T	PP	No	FNPT	FNPT	5
0.45	2710	PP	No	HB	HB	5
1.0	6703-7510	PP	No	1/2 SB	1/2 SB	1
1.0	2711T	PP	No	FNPT	FNPT	5
5.0	6703-7550	PP	No	1/2 SB	1/2 SB	1
5.0	2712M	PP	No	MNPT	MNPT	5
5.0	2712T	PP	No	FNPT	FNPT	5
5.0	2712	PP	No	HB	HB	5
10.0	6703-7511	PP	No	1/2 SB	1/2 SB	1
10.0	2713M	PP	No	MNPT	MNPT	5
10.0	2713T	PP	No	FNPT	FNPT	5
10.0	2713	PP	No	1/2 HB	1/2 HB	5
20.0	6703-7521	PP	No	1/2 SB	1/2 SB	1
20.0	2714T	PP	No	FNPT	FNPT	5
20.0	2714	PP	No	HB	HB	5
<b>Polycap HD 150</b>						
0.45	6703-9502	PP	No	HB	HB	1
0.45	2810	PP	No	HB	HB	5
0.45	2810T	PP	No	FNPT	FNPT	5
1.0	6703-9504	PP	No	HB	HB	1
1.0	2811	PP	PP	HB	HB	5
1.0	2811T	PP	No	FNPT	FNPT	5
5.0	6703-9510	PP	No	HB	HB	1
5.0	2812	PP	No	HB	HB	5
5.0	2812T	PP	No	FNPT	FNPT	5

FNPT – Female National Pipe Thread

HB – 1/2 Hose Barb

MNPT – Male National Pipe Thread

PP – Polypropylene

1/2 SB – Stepped Barb for 10-12 mm (3/8"-1/2") tubing

SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing

cont.

Pore Size (µm)	Catalog Number	Media	Prefilter	Connections Inlet	Outlet	Quantity/Pack
<b>Polycap HD 150</b>						
10.0	2813T	PP	No	FNPT	FNPT	5
10.0	2813	PP	No	HB	HB	5
20.0	2814T	PP	No	FNPT	FNPT	5
20.0	2814	PP	No	HB	HB	5
20.0	6703-7521	PP	No	1/2 SB	1/2 SB	1

FNPT – Female National Pipe Thread      PP – Polypropylene  
 HB – Hose Barb                                      1/2 SB – Stepped Barb for 10-12 mm (3/8"-1/2") tubing  
 MNPT – Male National Pipe Thread      SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing

## Polycap SPF

Polycap SPF (Serum Prefilter) is an exceptional product that is optimized for prefiltration applications and is typically used upstream of a Polycap AS or a Polycap PES capsule.

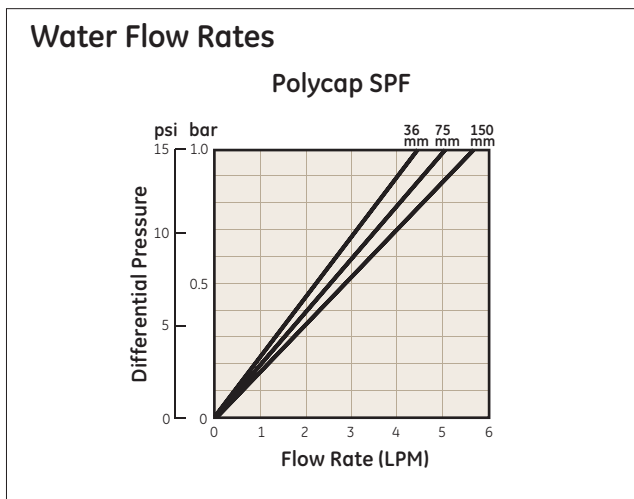
Serum is difficult to filter because it contains a high degree of loading of complex particulates, lipids, triglycerides, and lipoproteins that clog filters. When filtering serum without proper prefiltration, membrane filters clog rapidly.

### Features and Benefits

- Three layers of special media: fine and ultrafine Glass Microfiber (GMF) and polyethersulfone membrane
- Excellent for hard-to-filter solutions such as serums and protein solutions
- Able to be sterilized by autoclaving with steam
- Manufactured under ISO manufacturing system
- Suitable for filtering serums, viral suspensions, nutrients, biologicals, immunologicals, enzymes, and buffers
- Prefilters help extend the life of the final filter

### Applications

- Biologicals
- Buffers
- Diagnostic standards
- Enzymes
- Immunologicals
- Nutrients
- Serum prefiltration
- Tissue culture media
- Viral suspensions



## Technical Properties – Polycap SPF

Housing	Polypropylene
Vent	On inlet
Prefilter	Two layers of glass microfiber
Membrane	Polyethersulfone (PES)
Support system	Polypropylene
Sealing	Heat-fused
Maximum pressure	60 psi (4.1 bar)
Sterilization	Autoclave at 121°C for 20 min (132°C max)
Filtration area	36 mm capsule: 260 cm <sup>2</sup> (40 in <sup>2</sup> ) 75 mm capsule: 535 cm <sup>2</sup> (83 in <sup>2</sup> ) 150 mm capsule: 1100 cm <sup>2</sup> (170 in <sup>2</sup> )

## Ordering Information – Polycap SPF (Nonsterile)

Pore Size (µm)	Catalog Number	Media	Prefilter	Connections Inlet	Outlet	Quantity/Pack
<b>Polycap SPF 36</b>						
1.0	6705-3600	PES	GMF	SB	SB	1
<b>Polycap SPF 75</b>						
1.0	6705-7500	PES	GMF	SB	SB	1
<b>Polycap SPF 150</b>						
1.0	2820	PES	GMF	HB	HB	5

GMF – Glass Microfiber Filter    PES – Polyethersulfone  
HB – 1/2 Hose Barb                SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing

## Polycap TC

Polycap TC (PES) is available with and without a filling bell. They are disposable, dual layer Polyethersulfone (PES) membrane filtration capsules that provide efficient filtration for critical aqueous solutions.

The PES membrane is inherently hydrophilic, has low extractables, is biosafe, has excellent flow rates, and exhibits low protein binding.





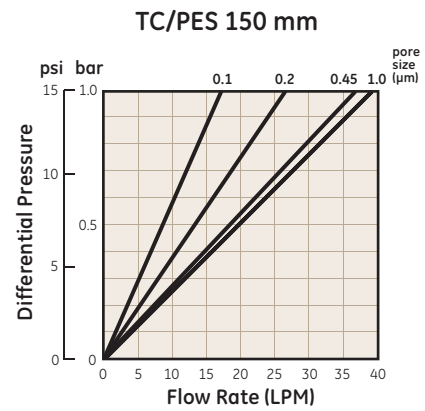
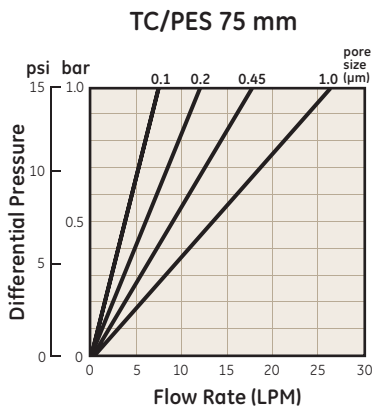
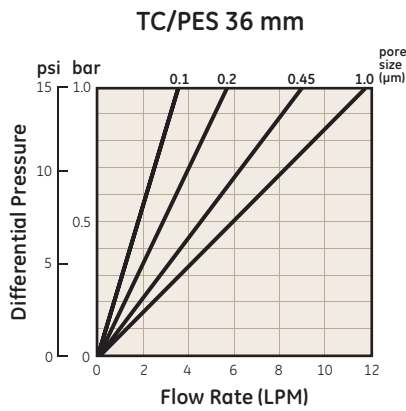
**Features and Benefits**

- Polycap TC/PES 0.2/0.1, 0.2/0.2, and 0.8/0.2 µm capsules pass the HIMA Challenge Test for Sterilizing Grade Filters
- 100% integrity-tested during manufacturing; results are correlated to microbial retention
- Housing thermally fused (no surfactants or mold releasing agents)
- Integrity-testable by bubble point, pressure decay or forward flow methods
- Available in sterile and nonsterile versions with a filling bell option
- Manufactured in clean room facilities under ISO Quality Systems
- PES membrane protein adsorption characteristics:
  - HSA 0.4 µg/cm<sup>2</sup>
  - Insulin 2.0 µg/cm<sup>2</sup>
  - Gammaglobulin 1.5 µg/cm<sup>2</sup>

**Applications**

- Aqueous solutions
- Biologicals
- Buffers
- Cleaning/rinsing solutions
- Enzymes
- High-quality water
- Particle counting solutions
- Pharmaceutical solutions
- Reagent preparation
- Salt solutions
- Tissue culture media
- Virus suspensions

**Water Flow Rates\***



\* Flow rates are indicative and vary by type of end fitting

## Technical Properties – Polycap TC

Housing	Polypropylene
Vent	On inlet
Membrane	Polyethersulfone (PES)
Support system	Polypropylene
Sealing	Heat-fused
Maximum pressure	60 psi (4.1 bar)
Flow direction	If there is a prefilter, it is located on the inlet side and flow should follow arrows
Endotoxin level	LAL tested, ≤ 0.5 EU/ml
Biosafety	Materials pass USP class VI
Sterilization	Certain filter devices have been sterilized.* Capsule may be autoclaved at 121°C for 20 min (maximum 132°C). However, an integrity test should be performed after autoclaving.
Filtration area	36 mm capsule: 440 cm <sup>2</sup> (72 in <sup>2</sup> ) 75 mm capsule: 930 cm <sup>2</sup> (144 in <sup>2</sup> ) 150 mm capsule: 1900 cm <sup>2</sup> (302 in <sup>2</sup> )
Water bubble point (final membrane)	0.1 µm > 3.2 bar (46 psi) 0.2 µm > 2.7 bar (40 psi) 0.45 µm > 2.1 bar (30 psi) 1.0 µm > 1.1 bar (16 psi)

\* Sterile and nonsterile options offered

## Ordering Information – Polycap TC

Pore Size (µm)	Catalog Number	Media	Connections Inlet	Outlet	Sterile	Quantity/Pack
<b>Polycap TC 36</b>						
0.2/0.1	6714-3601	PES	SB	SB	Yes	1
0.2/0.2	6714-3602	PES	SB	SB	Yes	1
0.2/0.2	6717-3602	PES	1/2 SB	1/2 SB	Yes	1
0.2/0.2	2622NS	PES	HB	SB	No	5
0.65/0.45	6714-3604	PES	SB	SB	Yes	1
<b>Polycap TC 36 Plus Filling Bell</b>						
0.2/0.1	6715-3601	PES	SB	SB	Yes	1
0.2/0.2	6715-3602	PES	SB	SB	Yes	1
0.2/0.2	6716-3612	PES	1/2 SB	SB	No	1
0.2/0.2	6716-3602	PES	MNPT	SB	No	1
0.65/0.45	6715-3604	PES	SB	SB	Yes	1
0.8/0.2	6715-3682	PES	SB	SB	Yes	1
MNPT – Male National Pipe Thread		1/2 SB – Stepped Barb for 10-12 mm (3/8"-1/2") tubing				cont.
PES – Polyethersulfone		SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing				

### Ordering Information – Polycap TC

Pore Size (µm)	Catalog Number	Media	Connections Inlet	Outlet	Sterile	Quantity/Pack
<b>Polycap TC 75</b>						
0.2/0.1	6714-7501	PES	SB	SB	Yes	1
0.2/0.2	6714-7502	PES	SB	SB	Yes	1
0.2/0.2	2742C	PES	1/2 SB	1/2 SB	Yes	5
0.2	2742M	PES	MNPT	MNPT	No	5
0.65/0.45	6717-7504	PES	1/2 SB	1/2 SB	Yes	1
0.65/0.45	6714-7504	PES	SB	SB	Yes	1
1.0/1.0	6717-7510	PES	1/2 SB	1/2 SB	Yes	1
<b>Polycap TC 75 Plus Filling Bell</b>						
0.2/0.1	6715-7501	PES	SB	SB	Yes	1
0.2/0.2	6715-7502	PES	SB	SB	Yes	1
0.2/0.2	6716-7502	PES	MNPT	SB	Yes	1
0.65/0.45	6718-7504	PES	1/2 SB	SB	No	1
0.8/0.2	6715-7582	PES	SB	SB	Yes	1
<b>Polycap TC 150</b>						
0.2/0.1	6717-9501	PES	1/2 SB	1/2 SB	Yes	1
0.2/0.2	6717-9502	PES	1/2 SB	1/2 SB	Yes	1
0.2/0.2	6704-9502	PES	1 1/2" Sanitary	1 1/2" Sanitary	No	1
0.65/0.45	6717-9504	PES	1/2 SB	1/2 SB	Yes	1
1.0/1.0	6717-9510	PES	1/2 SB	1/2 SB	Yes	1
<b>Polycap TC 150 Plus Filling Bell</b>						
0.2/0.2	6718-9502	PES	1/2 SB	1/2 SB	Yes	1
0.8/0.2	6718-9582	PES	1/2 SB	1/2 SB	Yes	1
MNPT – Male National Pipe Thread		1/2 SB – Stepped Barb for 10-12 mm (3/8"-1/2") tubing				
PES – Polyethersulfone		SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing				

# Polycap TF

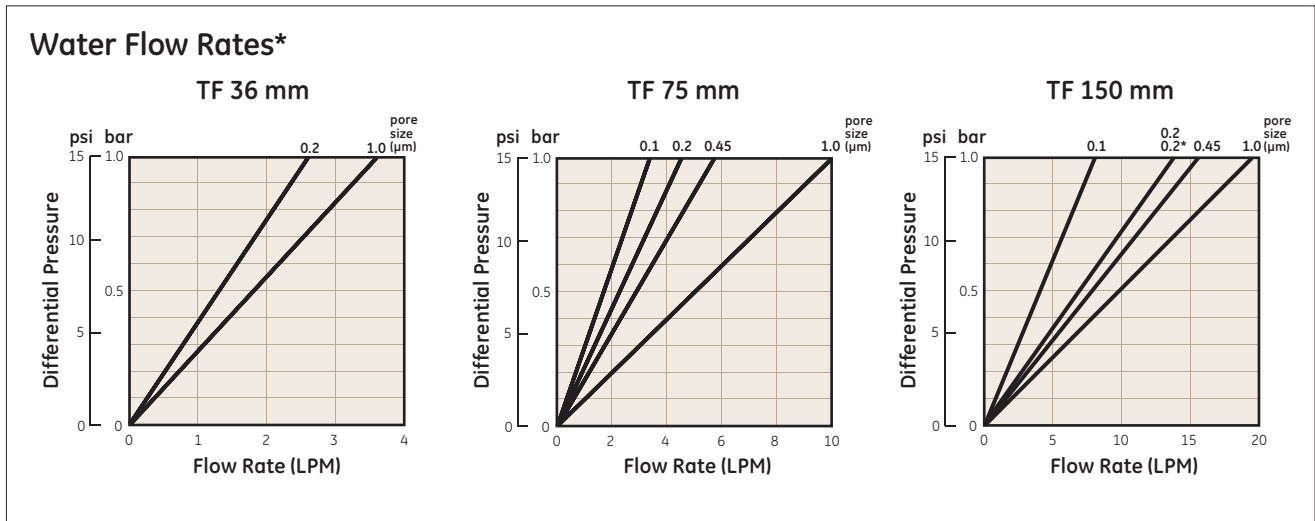
Polycap TF filter devices are among the finest disposable encapsulated filters. These capsules are made with durable, hydrophobic Polytetrafluoroethylene (PTFE) membranes in a polypropylene housing and are designed for use with organic solvents and chemically aggressive solutions.

## Features and Benefits

- Resistant to most solvents, autoclavable, and integrity-testable
- Available in 0.05, 0.1, 0.2, 0.45, and 1.0  $\mu\text{m}$  pore sizes
- 0.05  $\mu\text{m}$  capsules designed for ultra-clean applications; 1.0  $\mu\text{m}$  used for extended life and filtration of highly contaminated solutions
- Able to be sterilized by autoclaving with steam or EtO
- Manufactured under very clean conditions in a Class 10,000 clean room and under ISO Quality Systems

## Applications

- Venting
- Inline filtration
- Isolation
- Electronics
- Pharmaceutical
- Biotech
- Laboratory
- Other uses



## Technical Properties – Polycap TF

Housing	Polypropylene
Membrane	PTFE
Vent	On inlet
Support system	Polypropylene
Sealing	Heat-fused
Maximum pressure	60 psi (4.1 bar)
Flow direction	Supported bi-directionally. Certain applications may require orientation, i.e., vents. Reverse flow only for low-pressure applications.
Biosafety	Materials pass USP Class VI
Sterilization	May be autoclaved at 121°C for 20 min (maximum 132°C). Multiple autoclave cycles are possible. However, the responsibility for reuse is with the operator. The device should be protected from cross contamination. An integrity test should be performed after autoclaving. Compatible with EtO sterilization.
Filtration area	36 mm capsule: 500 cm <sup>2</sup> (77 in <sup>2</sup> ) 75 mm capsule: 1,000 cm <sup>2</sup> (155 in <sup>2</sup> ) 150 mm capsule: 2,000 cm <sup>2</sup> (310 in <sup>2</sup> )
IPA bubble point	0.05 µm membrane: > 2.4 bar (35 psi) 0.1 µm membrane: > 1.7 bar (25 psi) 0.2 µm membrane: > 0.9 bar (13 psi) 0.45 µm membrane: > 0.5 bar (7 psi) 1.0 µm membrane: > 0.2 bar (3 psi)

## Ordering Information – Polycap TF (Nonsterile)

Pore Size (µm)	Catalog Number	Media	Connections		Quantity/Pack
			Inlet	Outlet	
<b>Polycap TF 36</b>					
0.1	6711-3601	PTFE	MNPT	SB	1
0.2	6711-3602	PTFE	MNPT	SB	1
0.2	6710-3602	PTFE	1/2 SB	1/2 SB	1
0.2	6700-3602	PTFE	SB	SB	1
0.2	2601T	PTFE	FNPT	FNPT	5
0.2	2601	PTFE	SB	SB	5
0.45	6711-3604	PTFE	MNPT	SB	1
0.45	6710-3604	PTFE	SB	SB	1
0.45	2602S	PTFE	1 1/2" Sanitary	1 1/2" Sanitary	5
1.0	6700-3610	PTFE	SB	SB	1
1.0	2603T	PTFE	FNPT	FNPT	5
1.0	2603	PTFE	SB	SB	5

cont.

Pore Size (µm)	Catalog Number	Media	Connections Inlet	Outlet	Quantity/Pack
<b>Polycap TF 75</b>					
0.05	6711-7505	PTFE	MNPT	SB	1
0.1	6700-7501	PTFE	SB	SB	1
0.1	6711-7501	PTFE	MNPT	SB	1
0.1	2700M	PTFE	MNPT	MNPT	5
0.1	2700T	PTFE	FNPT	FNPT	5
0.2	6711-7502	PTFE	MNPT	SB	1
0.2	6710-7502	PTFE	SB	SB	1
0.2	6700-7502	PTFE	SB	SB	1
0.2	2702M	PTFE	MNPT	MNPT	5
0.2	2702T	PTFE	FNPT	FNPT	5
0.45	6711-7504	PTFE	MNPT	SB	1
0.45	6710-7504	PTFE	1/2 SB	1/2 SB	1
0.45	6700-7504	PTFE	SB	SB	1
0.45	2703T	PTFE	FNPT	FNPT	5
1.0	6700-7510	PTFE	SB	SB	1
1.0	6701-7510	PTFE	1/2 SB	1/2 SB	1
1.0	2704T	PTFE	FNPT	FNPT	5
<b>Polycap TF 150</b>					
0.1	2800T	PTFE	FNPT	FNPT	5
0.2	2802	PTFE	HB	HB	5
0.2	2802T	PTFE	FNPT	FNPT	5
0.2	2801	PTFE	1 1/2" Sanitary	1 1/2" Sanitary	5
0.45	2803	PTFE	HB	HB	5
0.45	2803T	PTFE	FNPT	FNPT	5
1.0	2804T	PTFE	FNPT	FNPT	5

FNPT – Female National Pipe Thread  
 HB – Hose Barb  
 MNPT – Male National Pipe Thread

PTFE – Polytetrafluoroethylene  
 1/2 SB – Stepped Barb for 10-12 mm (3/8"-1/2") tubing  
 SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing

## Polycap GW

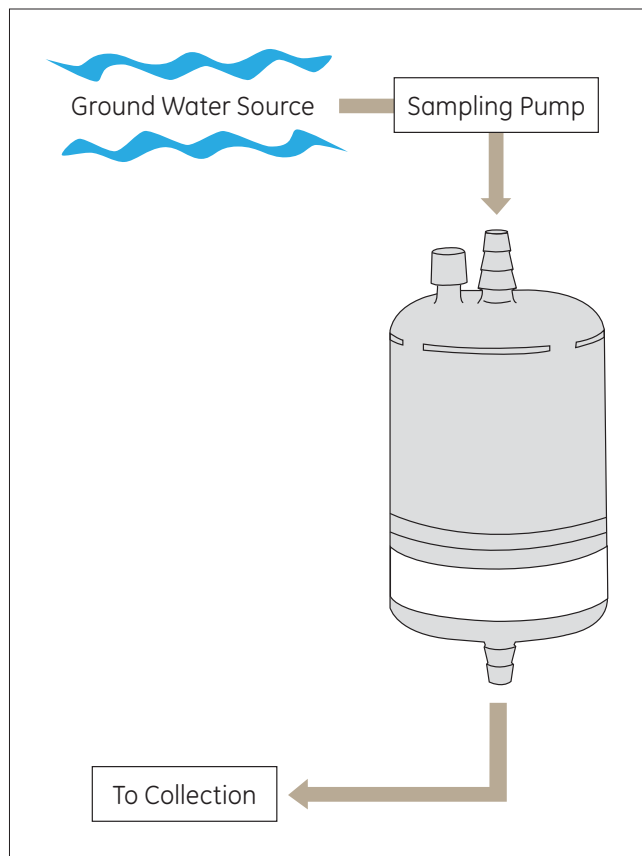
The US Environmental Protection Agency (EPA) and local Departments for Environmental Protection protocols specify filtering ground water samples with a 0.45 µm filter when analyzing dissolved or suspended metals (EPA Method 3005). Specifically designed with field sampling in mind, the Whatman Polycap Ground Water sampling capsule can be used as a convenient inline filter unit.

### Features and Benefits

- Connects directly to outlet of a sampling pump
- Easy to use
- Filtration membrane is encapsulated in durable polypropylene housing
- Also available in 1.0 µm and 5.0 µm filters, as required by US and regional EPA test methods
- Large surface area optimized to provide at least 600 cm<sup>2</sup> of effective filtration area to ensure rapid sample collection
- Housing components thermally fused (no glues, adhesives, metals, epoxies or extraneous materials)
- Suitable for filtration procedure outlined in EPA Method 3005 for ground water analysis
- Stepped hose barb fittings allow for connection with various size tubings
- Lot number printed on each unit for traceability

### Applications

- Filter ground water samples before dissolved metal analysis



## Technical Properties – Polycap GW

Housing	Polypropylene
Filter media	0.45 µm: PES filter 1.0 µm: Polypropylene filter 5.0 µm: Polypropylene filter
Inlet/outlet	1/4 to 3/8 in (6-9 mm) Stepped Barb (SB)
Support system	Polypropylene
Vent	On Inlet
Filtration area	600 cm <sup>2</sup> (93 in <sup>2</sup> )
Wetting characteristics	Hydrophilic
Maximum pressure	60 psi (4.1 bar)
Water flow rate at 1.0 bar (14.5 psi)	60 l/min
Flow direction	Flow should follow arrows

## Ordering Information – Polycap GW

Pore Size (µm)	Catalog Number	Media	Connections		Quantity/Pack
			Inlet	Outlet	
<b>Polycap GW 75</b>					
0.45	6714-6004	PES	SB	SB	1
0.45	6724-6004	PES	SB	SB	100
1.0	6703-6010	PP	SB	SB	1
1.0	6723-6010	PP	SB	SB	100
5.0	6703-6050	PP	SB	SB	1
5.0	6723-6050	PP	SB	SB	100

PES – Polyethersulfone

PP – Polypropylene

SB – Stepped Barb for 6-10 mm (1/4"-3/8") tubing

## Carbon Cap

This filter capsule is suitable for adsorption of organics from air and removal of color, organics, and chlorine from water.

Carbon Cap™ is a capsule filter that is filled with high-purity, high-efficiency, acid-washed, granular-activated carbon and a pleated HEPA filter. It is made specially to meet the requirements for continuous column percolation purification processes.



Carbon Cap

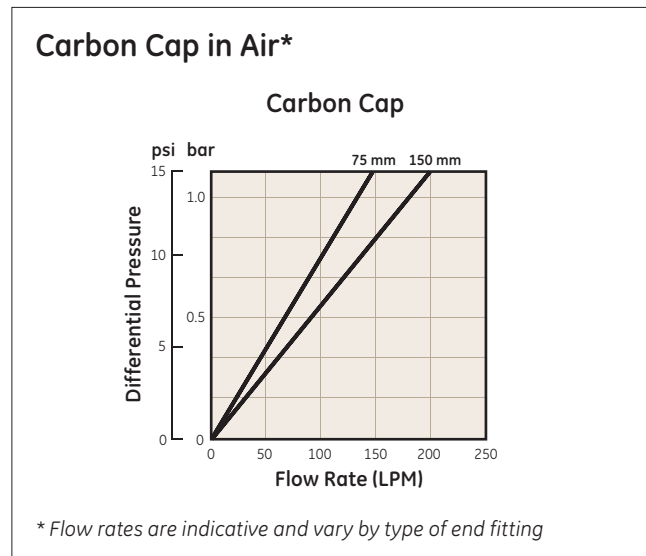
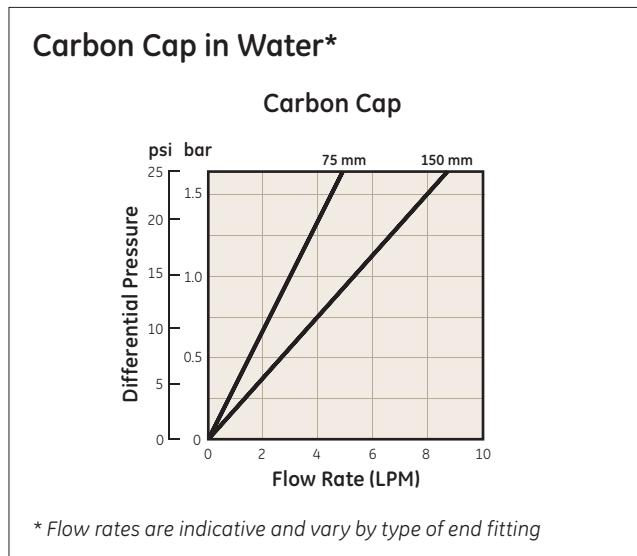


**Features and Benefits**

- Carbon acts as an adsorption media
- Pleated glass microfiber filter structure
- Retains 99.97% of particles greater than 0.3 µm
- Large surface area of activated carbon for effective operation
- Two sizes of capsules available to suit your specific application

**Applications**

- Water, chemical, and reagent purification
- Removes noxious odors, oil mists, and contaminants
- Compressed air lines and vacuum pumps
- Instrument outlet exhausts
- Eliminates a potential health hazard from the workplace



**Technical Properties – Carbon Cap**

Housing	Polypropylene
Filter media	Activated carbon with a pleated HEPA cartridge
Support system	Polypropylene
Sealing	Heat-fused
Maximum pressure	60 psi (4.1 bar)
Surface area (activated carbon)	Carbon Cap 75 capsule: 26,000 m <sup>2</sup> (40 g of activated carbon) Carbon Cap 150 capsule: 82,000 m <sup>2</sup> (126 g of activated carbon)

**Ordering Information – Carbon Cap**

Description	Catalog Number	Quantity/Pack
Carbon Cap 75	6704-7500	1
Carbon Cap 150	6704-1500	1
Carbon Cap 150 Sanitary TC	2022S	5