

CLARIFLOW® WATER SERVICE GRADE

Hydrophilic Polyethersulfone (PES) Membrane for Cost-Effective Water Purification



Clariflow Water Service Grade cartridges are cost-effective alternatives to Clariflow Electronics and General Grade cartridges for the filtration of a variety of aqueous based liquids.

The Water Service cartridge is built around a unique polyethersulfone (PES) membrane that is inherently hydrophilic, and so does not contain added surfactants or wetting agents. As such, it is known for clean filtrates, and also offers competitive flow rates, extended service life, and excellent resistance to hydrolysis.

Water Service cartridges are fabricated under cleanroom conditions, and each electronics grade (WE) version is pre-flushed with deionized water and integrity tested before shipment.

BENEFITS

- Reliable and cost-effective to reduce expenses
- Broad chemical compatibility allows use in most applications
- Good resistance to hydrolysis allows extended use in UPW systems
- High flow rate / low differential pressure reduces system wear and tear

APPLICATIONS

- Deionized and RO Water Filtration
- Chemical Filtration
- Liquid Clarification
- Recirculating Liquids
- Wine and Beer Clarification
- Juices
- Bottled Water

SPECIFICATIONS

LIQUID FLOW RATES*

0.04 µm	0.7 gpm/psid (3.84 lpm/100 mbar)
0.1 µm	1.3 gpm/psid (7.14 lpm/100 mbar)
0.2 µm	2.6 gpm/psid (14.27 lpm/100 mbar)
0.45 µm	3.8 gpm/psid (20.86 lpm/100 mbar)

*For fluids with viscosity of 1 cP [per 10-inch (250 mm) cartridge equivalent]

MATERIALS OF CONSTRUCTION

Membrane:	Polyethersulfone
Support Layers:	Polypropylene
Structure:	Polypropylene

All components meet USP-XXIV Class VI-121°C criteria and are thermally bonded to assure integrity and reduce extractables.

MAXIMUM DIFFERENTIAL PRESSURE

Forward:	80 psid (5.5 bar) @ 75°F (24°C)
	40 psid (2.8 bar) @ 180°F (82°C)
Reverse:	50 psid (3.4 bar) @ 75°F (24°C)

CHEMICAL COMPATIBILITY

Cartridges are chemically compatible with most ultra-pure chemicals, solvents and sanitizing agents.

INTEGRITY TEST VALUES (ELECTRONICS WE GRADE ONLY)

FILTER RATING	MINIMUM WATER BUBBLE POINT*		DIFFUSIONAL FLOW	TEST PRESSURE	
				psig	bar
µm	psig	bar	cc/min		
0.04	45	3.1	≤35	55	3.8
0.1	70	4.8	≤50	55	3.8
0.2	40	2.8	≤30	32	2.2
0.45	30	2.1	≤30	24	1.7

*Tested in a 60/40 IPA/DI Water

BULK PACKAGING

Bulk packaged in case quantities to reduce material disposal.

10"	28 per carton
20"	12 per carton
30"	12 per carton
40"	9 per carton

