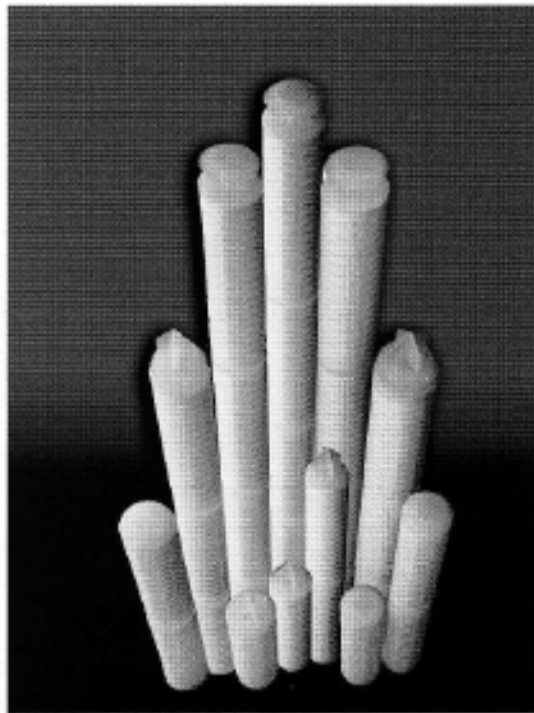


PROFLOW™ II ABR

Pleated PTFE membrane cartridge for sterile venting and gas delivery



The Proflow™ II Aerosol Bacterial Retentive (ABR) cartridge (0.2 µm) is validated to produce sterile air utilizing a bacterial aerosol challenge (See the Validation Guide for the test protocol). This methodology best emulates the actual bacterial removal action of the filter in use as a hydrophobic vent. Proflow™ II ABR exhibits some of the highest air flow rates for sterilizing grade air filters built of pleated expanded PTFE membrane. Users who require the ultimate in flow rate for tank venting and sterile air supply will find the Proflow™ II ABR to be their filter of choice.

This cartridge is fabricated, 100% integrity tested, and packaged utilizing a certified cleanroom to guarantee consistent performance and quality.

BENEFITS

- Fully validated for sterilizing-grade performance
- Broad chemical compatibility allows use in most applications
- Long service life minimizes changeout frequency
- Low differential pressure reduces energy costs
- Integrity tested to ensure quality

APPLICATIONS

- Fermenter
 - Formulation tank
 - RO and WFI storage tank
 - Starter culture vessels
- Air Supply
- Fermentor air
 - Container purge air
 - Aseptic packaging air

SPECIFICATIONS

Materials of Construction:

Membrane	PTFE
Support layers	Polypropylene
Structure	Polypropylene

All components meet USP XXIII class VI -121°C criteria and are thermally bonded to assure integrity.

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)

Effective Filtration Area:

10-inch (250 mm) cartridges	9.3 ft ² (0.86 m ²)
5-inch (127 mm) cartridges	4.6 ft ² (0.43 m ²)

Bacterial Retention:

Proflow™ II ABR 0.2 µm will provide a sterile effluent when challenged with up to 10⁷/cm² CFU of *Brevundimonas diminuta* per element using an Aerosolized Bacteria Challenge. The 0.2 µm version has also been shown to be > 99.99 percent efficient for the removal of phiX-174 bacteriophage virus when challenged with at least 10⁸ virus/10" length. In both cases cartridges were challenged after 100 one-hour steam cycles at 145°C.

Steam and Sterilization:

Cartridges have been validated to withstand over 100 one-hour steam cycles at 145°C

Integrity Test Values:

(in 60/90 IPA/water) Flow per 10" cartridge

FILTER RATING	BUBBLE POINT*		DIFFUSIONAL FLOW			
	µm	psig	bar	TEST PRESSURE		
				cc/min	psig	bar
0.1	≥ 21	1.5	≤ 25	17	1.2	
0.2 - 10 inch	≥ 13	0.9	≤ 15	10	0.7	
0.2 - 5 inch	≥ 13	0.9	≤ 10	10	0.7	
0.45	≥ 5	0.3	≤ 50	5	0.3	
1.0**	≥ 1	0.07	≤ 100	1	0.07	

*Tested in 60/40 IPA/DI water

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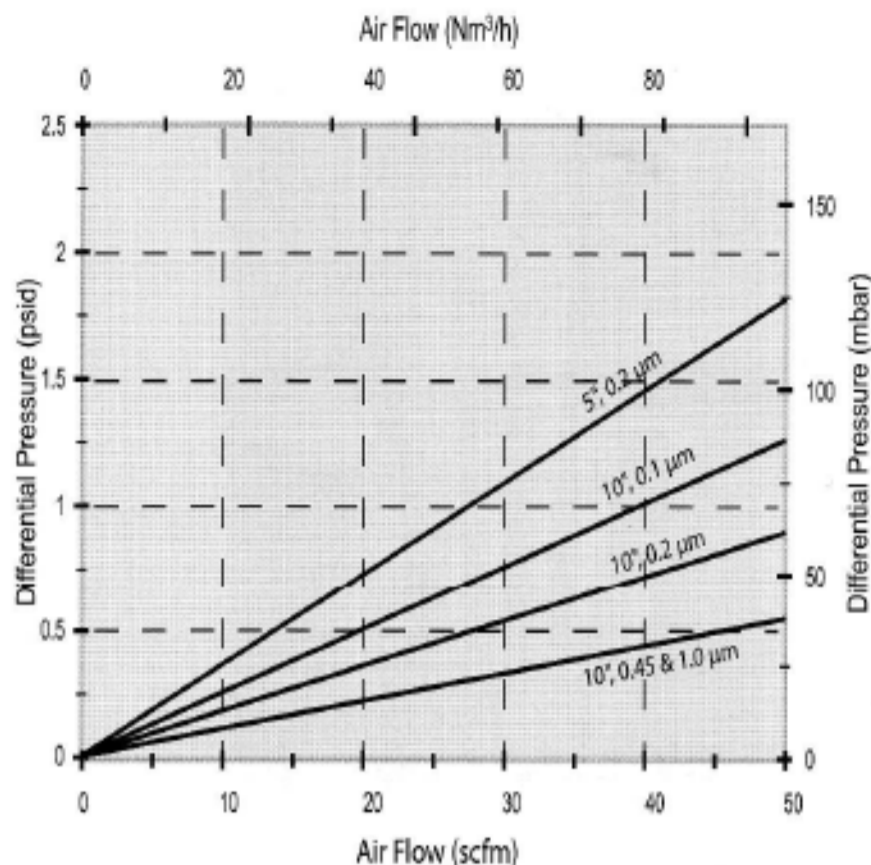
PERFORMANCE ATTRIBUTES

Air in Flow Rates, Typical *

10 inch (250 mm) cartridges

0.1 µm	40 scfm/psid (98.5 Nm ³ /h/100 mbar)
0.2 µm	55 scfm/psid (135.4 Nm ³ /h/100 mbar)
0.45 µm	90 scfm/psid (221.6 Nm ³ /h/100 mbar)
1.0 µm	90 scfm/psid (221.6 Nm ³ /h/100 mbar)

*At 75°F (24°C) and an inlet pressure of 15 psia (1 bar)



ORDERING INFORMATION

Each cartridge is identified with a product number, pore size and lot number for traceability.

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Insert Style		End Fitting		Nominal Length		Filter Rating		O-ring Material	
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	Length (mm)	CODE	(µm)	CODE	DESCRIPTION
5	Encapsulated Stainless Steel	2	226/Flat	05*	5" (130)	002	0.2	0	Buna N
6	Encapsulated Polysulfone (std)	3	222/Flat	10	10" (250)	004	0.45	1	EPR
		7	226/Fin	20	20" (500)	010	1.0	2	Silicone
		8	222/Fin	30	30" (750)			4	Viton®
				40	40" (1000)			5	FEP Encapsulated Viton®
								6	FEP Encapsulated Silicone
								N	None

* 5 inch (130 mm) cartridge available only in the 0.2 µm rating. All cartridges are 2.75 inches (70 mm) O.D.

TECHNICAL SUPPORT AND PRODUCT INFORMATION

Parker provides our customers with unsurpassed product consistency and cost efficiency. Our experienced professionals can help you select the right solution for your application. Orders can be emailed directly to PAFsales@parker.com. For additional information contact your local distributor. Information on product specifications, applications and chemical compatibility can be found on our web site at www.parker.com or through the Oxnard office.

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