

## Pasteurizer Replacement Filter Family For “Sterile” Filtration of Beer

Pasteurizer Replacement filter cartridges are a family of pre-filters and hydrophilic membrane filters designed for reliable retention of spoilage microorganisms in the filtration of beer in the CFS NEO system or standard housings.

### Description

The Pasteurizer Replacement filter cartridge family was developed and validated for removal of beer spoilage microorganisms in the CFS NEO system or standard housings.

There are 7 family members providing reduction in microbial spoilage organisms from beer. Five of the cartridges are constructed from microbial removal membranes with a correlated integrity test value. Two of the cartridges are pre-filters designed not only to protect the selected downstream final membrane filter but also aid in the removal of beer spoilage organisms. The single open ended (SOE) configuration is designed to fit into the sanitary housings on the CFS NEO system to ensure effective microbial reduction and assembly integrity.

Pasteurizer Replacement filter cartridges are suitable for exposure to repeated hot water sanitization and *in situ* steam sterilization cycles for longer service life in the CFS NEO system. The optimized support and drainage materials, provide increased mechanical strength during operation, repeated hot water, chemical and steam sanitization and thus, high throughput.

#### Features

Cartridges resistant to numerous sanitization cycles

Hydrophilic membranes

Validated with beer spoilage microorganisms

Individually serialized cartridges

Integrity testable

#### Benefits

- Process reliability
- Economical operation
- Consistent filtrate quality

- Easy to wet and integrity test
- Microbial stabilization of beer

- Brand protection
- Increased process safety

- Full traceability

- Brand protection
- Documentation for quality records



### Quality

- Cartridges produced in a controlled environment
- Manufactured according to ISO 9001:2015 certified Quality Management System
- All final filters are 100% integrity tested before manufacturing release

### Food Contact Compliance

Please refer to the Pall website <https://www.pall.com/en/food-beverage/compliance-and-safety.html> for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.

## Microbial Removal Rating

| Test Organism Log Reduction Value (LRV) |   |                                     |                                     |
|---|---|-------------------------------------|-------------------------------------|
| Final Membrane Filters                  | <i>Serratia marcescens</i> (ATCC 14756) | <i>Lactobacillus brevis</i> in beer | <i>Pediococcus damnosus</i> in beer |
| ABN4PAREM7WH4                           | 11                                      | 8.5                                 | 9                                   |
| AB4PAREQWH4                             | 8                                       | 8                                   | 7                                   |
| AB+PAREQII+W+                           | 8                                       | 8                                   | 7                                   |
| ABN4PAREV7WH4                           | 7.5                                     | 9                                   | 8                                   |
| ABN4PAREY7WH4                           | 6                                       | 8                                   | 8                                   |
| Pre-filters                             | <i>Serratia marcescens</i> (ATCC 14756) | <i>Lactobacillus brevis</i> in beer | <i>Pediococcus damnosus</i> in beer |
| AB4PAREG7WH4                            | 4                                       | —                                   | —                                   |
| AB4PAREJ7WH4                            | 2.5                                     | —                                   | —                                   |

Challenges were performed at a level of  $\geq 10^7$  per  $\text{cm}^2$  of effective filtration area on new and unused filters. For detailed information regarding microbial removal please contact Pall for the appropriate technical performance guide.

+See next page for construction and ordering details

\* Filters provided a yeast free effluent when challenged.

## Materials of Construction and Part Numbers for Ordering

**Table 1: Pre-filters**

| Part Number  | Media and hardware description                    |
|--------------|---|
| AB4PAREG7WH4 | All polypropylene media and hardware construction |
| AB4PAREJ7WH4 | All polypropylene media and hardware construction |

**Table 2: Standard Final Membrane Filters<sup>1</sup>**

| Part Number   | Media and hardware description   |
|---------------|--|
| ABN4PAREM7WH4 | Nylon 6:6 filter media in a Nylon 6-10 filter construction                     |
| AB4PAREQ7WH4  | Supor® polyethersulfone filter membrane in a polypropylene filter construction |
| AB+PAREQII+W+ | Supor polyethersulfone filter membrane in a polypropylene filter construction  |
| ABN4PAREV7WH4 | Nylon 6:6 filter media in a Nylon 6-10 filter construction                     |
| ABN4PAREY7WH4 | Nylon 6:6 filter media in a Nylon 6-10 filter construction                     |

<sup>1</sup> See next page for full ordering information for the PAREQII filter part numbers

CFS NEO system



# Ordering Information for Extended Line of Supor Polyethersulfone Filter Membrane in Polypropylene Laid Over Pleat Configuration

## Cartridge Part Number

AB  PAREQII  W    
 Table 1                  Table 2          Table 3      Table 4

This is a guide to the Part Numbering structure only. For specific options, please contact Pall.

**Table 1: Nominal Length**

| Code | Description   |
|------|---------------|
| 1    | 254 mm (10")  |
| 2    | 508 mm (20")  |
| 3    | 762 mm (30")  |
| 4*   | 1016 mm (40") |

\* 40" filter elements are suitable for use in a CFS system

**Table 2: Adaptor**

| Code | Description   |
|------|---|
| 3    | SOE – single open end with flat closed end and external 222 O-rings         |
| 7    | SOE – single open end with fin end, 2 locking tabs and external 226 O-rings |
| 8    | SOE – single open end with fin end and external 222 O-rings                 |
| 28   | SOE – single open end with fin end, 3 locking tabs and external 222 O-rings |

**Table 3: O-Ring Seal Material**

| Code | Description               |
|------|---------------------------|
| H4   | Silicone Elastomer        |
| J    | Ethylene Propylene Rubber |



**Table 4: Sterilization and Sanitization**

| Media     | Temperature     | Cumulative Exposure Time*/cycles |
|-----------|-----------------|----------------------------------|
| Steam     | 125 °C (257 °F) | 125 x 20 min cycles              |
| Hot water | 90 °C (194 °F)  | 200 x 30 min cycles              |

\*Measured under laboratory test conditions. The actual cumulative time depends on the process conditions. For applications requiring sterilization or sanitization Pall recommends the use of Code 7 adaptors to ensure filter sealing after cooling. Cartridges should be cooled to system operating temperature prior to use. Contact Pall for recommended procedures.



+1-866-905-7255 **Food and Beverage toll free**  
 foodandbeverage@pall.com

**Corporate Headquarters**  
 Port Washington, NY, USA  
 +1-800-717-7255 toll free (USA)  
 +1-516-484-5400 phone

**European Headquarters**  
 Fribourg, Switzerland  
 +41 (0)26 350 53 00 phone

**Asia-Pacific Headquarters**  
 Singapore  
 +65 6389 6500 phone

Visit us on the Web at [www.pall.com/foodandbev](http://www.pall.com/foodandbev)

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*IF APPLICABLE* Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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