Ultipor N_{66}

Cold Stabilisation of Beer

Description

This filter has been specifically developed for the filtration of beer, to ensure the secure removal of typical beer spoilage organisms. Thereby providing a microbiologically stable beer for packaging. It has been created with the experience of over 20 years supplying membrane filtration to the brewing industry.

Filter Media - 'Ultipor' 'N_{66}'

This inherently hydrophilic membrane forms the basis of this beer filtration cartridge. Two key features of the media are its high voids volume and narrow pore size distribution. These features provide for high removal efficiencies and excellent flow rates. No wetting agents or binder resins are used in its manufacture.

It has been used to provide cold stabilised beer in hundreds of breweries.

Cartridge Construction

Each individual filter module is constructed with a high media area which ensures high flow rate and a long service life.

Nylon hardware is used in the construction to provided added strength to withstand the rigours of brewery operation.

A bayonet lock and double o-ring seals are incorporated to eliminate beer bypass.

Manufacturing takes place under clean room conditions. Every single module is integrity tested after manufacture via a forward flow test. These results are continually validated against bacterial challenge data. Each filter has a unique serial number for full traceability.

Features and Benefits

- Very long service life
- Excellent removal performance
- 100% Integrity tested in manufacture
- Integrity testable *in situ* for quality assurance
- Construction ensures strength and durability
- All materials meet the specification for biological safety tests per USP for class VI plastics at 121°C
- Designed for both manual and automated (**Pall** CFS) installations
- Good chemical resistance in a range of cleaning fluids

And importantly

- Currently used by breweries around the world to provide fresh, cold stabilised beer.

Technical Information

Materials of Construction

Membrane	**Pall 'Ultipor' 'N_{66}'**
Support and Drainage Layers	Polyester
Endcaps / Adaptors	Nylon 6 -10
Core and Cage	Polypropylene
O-rings	Silicone

Flow-rate / Sizing

Recommended beer flow rate (per 254 mm (AB1) filter)	0.8 - 1.4 hectolitres / hr
Typical clean water flow rate (per 254 mm (AB1) filter)	16.7 l/min (at 100 mbar)

Operating Characteristics

Removal Rating	0.45µm
Typical Removal Efficiency	$T_R > 10^7$ *peddiccocus damnosus* $T_R > 10^7$ *lactobacillus brevis*

Maximum Cumulative Steam Life*

110°C	50 hours
125°C	16 hours

*Actual steam life in service may vary according to conditions.
Maximum differential pressure during steaming is 300mbarg in forward direction.

Typical Filter Area

Each 254mm (AB1) cartridge	0.82m^2

Maximum Differential Pressure

Up to 50°C	5.3 bar
50 - 80°C	4.0 bar

Ordering Information

Pall Part number: A B N [ ] N B 7 B H 4

Code	Nominal length
1	254mm
2	508mm
3	762mm
4	1016mm

Further information available in the Pall 'Membrane Filtration of Beer' brochure

Further details on test methods and operating conditions are available from **Pall**

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PELEH/00R.SH/C.S/04.2000