

BRHNY-Series Bio-Burden Reduction Grade Nylon Plus+

BRHNY-Series Bio-Burden Reduction Grade Nylon Plus+ filter cartridges feature Nylon 6,6 membrane with an advanced positively-charged surface modification that is highly efficient in capturing submicronic particulate matter much finer than the stated mechanical rating. This offers a well-proven capability for highly efficient retention of haze, colloids, and color bodies. Specific to its use in medical applications, pyrogenic endotoxins are effectively removed as is well-documented in field use, industry journals, and laboratory data. Superior microbial retention is achieved to deliver a stable and consistent effluent. The BRHNY+ series offers a more cost-effective alternative to hollow-fiber cartridges in many high-purity applications.



Cartridges are manufactured in a cleanroom environment and are flushed with 18 megohm ultra-high purity water to ensure cleanliness, low extractables, and quick rinse-up for service use. Tolerant of repeated hot water sanitization and *in-situ* steam sterilization cycles for maximum service life. Each element is 100% integrity tested to Global Filter standards to assure consistent and optimal performance.

Endotoxin Removal

Bacterial endotoxin is the pyrogen of greatest concern in the pharmaceutical and medical device industries. BRHNY+ filter elements have demonstrated capability to remove bacterial endotoxin to below a 0.005 EU/milliliter detection limit at all data points in independent testing.

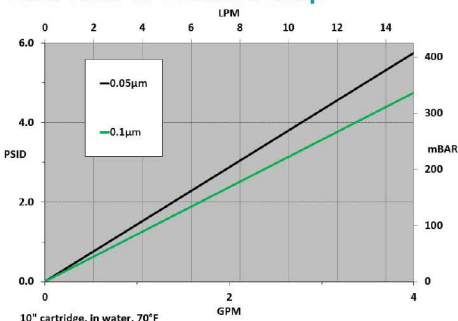
Microbial Retention Performance

Grade	Challenge Microbe	Log Reduction Value (LRV)
0.1 μ	<i>Brevundimonas diminuta</i>	9.1
0.05 μ		>10.1

Typical Applications

- Medical device reprocessing
- Water for Injection (WFI)
- Endotoxin removal
- Pyrogen removal

Flow Rate vs Pressure Drop



Construction Materials

- Membrane**.....Positively-charged Nylon 6,6
- Support Media**.....Polypropylene
- End Caps**.....Polypropylene
- Center Core**.....Polypropylene
- Outer Support Cage**.....Polypropylene
- O-Rings/Gaskets**.....EPDM, Silicone

Sanitization/Sterilization

- Filtered Hot Water**.....80°C for 30 min.
- Steam Sterilization**.....121°C for 30 min., multiple cycles

Chemicals: Cartridges are compatible with most chemical sanitizing agents.

Note: Stainless steel insert option required for all cartridges being hot water sanitized or steam sterilized.

Dimensions

- Length:** 10 to 40 inches (25.4 to 101.6 cm) nominal
- Outside Diameter:** 2.70 inches (7.0 cm) nominal

Operating Conditions

- Change Out ΔP (recommended)**..... 35 PSID
- Temperature (max)**..... 176°F (80°C)
- Differential Pressure (max)**..... 50 PSID (3.4 bar) at 68°F (20°C)

Toxicity

All polypropylene components meet the specifications for biological safety per USP Class VI – 121°C for plastics.

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are deemed safe for use in contact with foodstuffs in accordance with EU Directives 1935/2004, and/or 10/2011.

AAMI Standard TIR34 Compliance

The BRHNY+ is a key component of water systems required to be compliant to AAMI Standard #TIR34: Water for the Reprocessing of Medical Devices. The BRHNY+ delivers highly efficient scavenging of microbes and endotoxin when used in a properly-designed system maintained to TIR34 recommended practices. This assures continued compliance of the system to meet the highest standards of cleanliness and user confidence.

Ordering Information

BRHNY+	Rating (μ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
	0.05		10" (25.4 cm)		3 = 222 w/ Fin	E = EPDM		CS = 316SS Compression Spring
			20" (50.8 cm)		4 = 222 w/ Flat Cap			S = Silicone
	30" (76.2 cm)		6 = 226 w/ Flat Cap					
	40" (101.6 cm)		7 = 226 w/ Fin					
	0.1				16 = 213 Internal O-Ring			
					28 = 222 3-tabs w/ Fin			

DISCLAIMER: Filtration data presented is representative of performance observed in controlled laboratory testing. It is not given as a warranty, specification or statement of fitness for use. Specific performance can vary widely depending on contaminant type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required. For additional technical support, a product Performance Guide is available upon request.