



PRECISION FILTRATION. PURE PERFORMANCE. 

BioSafe Junior Series

Compact High-Precision Filter Cartridges for Small-Scale Processes



Direct Drop-In Mini Replacement
(PP, PES, PTFE, NY, PVDF)

Multi-Media Versatility



HIGH PRECISION
FILTRATION



RELIABLE
PROTECTION



COMPACT &
EFFICIENT



SUPERIOR FLOW
PERFORMANCE





mikropore

Engineered Precision and Versatility for Small-Batch Efficiency

The BioSafe Junior Series is designed to bring premium, absolute-rated filtration performance to compact systems, laboratories, and low-volume production lines. Engineered as a universal direct drop-in replacement for standard mini-cartridge brands, this series eliminates the need for expensive system modifications. With a lightweight yet rugged construction, it enables quick, tool-free replacements, effectively reducing operational downtime.

Advanced Engineering Advantages

1 Universal Multi-Media Capability

To accommodate diverse chemical and fluid demands, the Junior series can be customized with Polypropylene (PP), hydrophilic Polyethersulfone (PES), hydrophobic Polytetrafluoroethylene (PTFE), Nylon 66, or Polyvinylidene Fluoride (PVDF) membranes.

3 Adhesive-Free Thermal Welding

Component assembly utilizes state-of-the-art thermal fusion technology. By eliminating resin glues, binders, or bonding agents, the structural seams offer maximum mechanical resilience with zero chemical leaching risks.

2 Secure Interchange Adapters

Available in two high-integrity configurations:

- Adapter 214: Single Open End (SOE) with internal O-ring seal
- Adapter 216: SOE featuring twin locking ears and double external O-rings

4 Validated Critical Safety

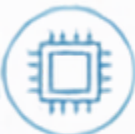
Developed to meet rigid medical and biological criteria:

- Certified endotoxin profile: < 0.25 EU/ml
- Ultra-low total extractable data
- Pharmaceutical grade validation

APPLICATIONS & SPECIFICATIONS

Typical Point-of-Use & Compact Applications

1 Typical Point-of-Use & Compact Applications

	Biopharmaceuticals: Sterile filtration, clarification, and bioburden reduction in low-volume active ingredient (API) manufacturing and laboratory solutions.		Sanitary Ventilation: Small-scale sterile process gases and sterile air-breathing vents for pilot storage vessels or small product carboys.
	Advanced Electronics: Localized point-of-use ultrapure water and specially chemical/photoresist dispensing loops in semiconductor cleanrooms.		Fine Chemicals: Precision purification of optical resins, protective guns, high-grade solvents, and diagnostic reagents.

2 Technical Working Characteristics

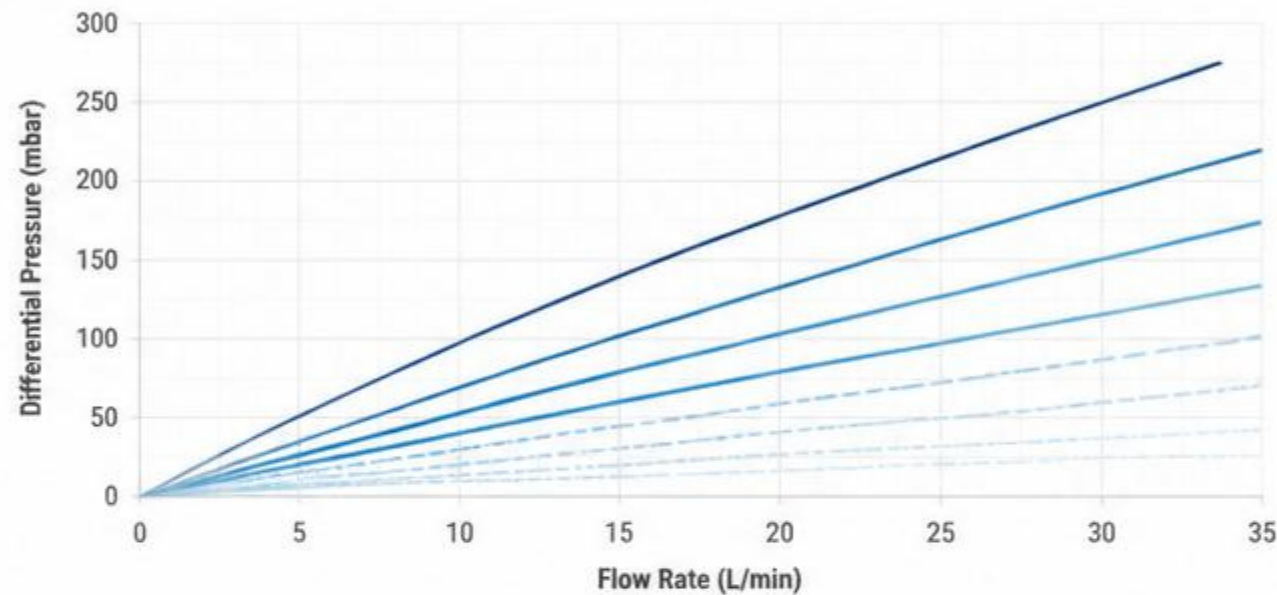
	Normal Operating Temperature:	Up to 60 °C (140 °F)
	Maximum Operating Temperature:	80 °C (176 °F) at ΔP · 1.0 bar (14 psi)
	Maximum Forward Differential Pressure:	4.2 bar (60 psi) at 25 °C
	Maximum Reverse Differential Pressure:	2.1 bar (30 psi) at 25 °C
	High-Temperature Sterilization:	Qualified for continuous saturated steam sterilization for 30 minutes at 135 °C (275 °F).



PERFORMANCE CURVES & SELECTION CHART

The optimized pleat configuration fits up to 0.23 m² of effective filtration area into a compact 5-inch footprint, ensuring an excellent flow velocity to pressure ratio.

1 PERFORMANCE CURVES



Test conditions: 10-inch element (125 mm) in water at 20 °C. Data shown for reference only.

Micron Rating

- 0.10 µm
- 0.20 µm
- 0.45 µm
- 0.65 µm
- 1.00 µm
- 5.00 µm
- 10 µm
- 50 µm



about
0.23 m²
and
5-inch
footprint.

High effective filtration area in a compact format for superior performance and space efficiency.

2 PART NUMBER / SELECTION CONFIGURATOR

Build your custom Mikropore Junior part number using the matrix below:

SERIES & GRADE	FILTER MEDIA TYPE	MICRON RATING	ADAPTER TYPE	ELEMENT LENGTH	SEAL MATERIAL
BSJ-P = (Pharma) BSJ-F = (Food/Bev) BSJ-E = (Electronics)	PP = Polypropylene PES = Polyethersulfone PTFE = Hydrophobic PTFE NY = Nylon 66 PVDF = Polyvinylidene	010 = 0.1 µm 020 = 0.2 µm 045 = 0.45µm 065 = 0.65µm 100 = 1.0µm 500 = 5.0µm 1000 = 10µm 5000 = 50µm	214 = SOE / Internal O-ring 216 = SOE / Locking Ears	070 = 70 mm 125 = 125mm	S = Silicone E = EPDM V = Viton N = NBR



ORDERING
EXAMPLE

BSJ-P-PTFE-020-216-070-S (BioSafe Junior Pharmaceutical Grade, Hydrophobic PTFE Media, 0.2 µm rating, 216 adapter, 70mm length, Silicone seals).

REGULATORY STANDARDS

- Materials meet FDA food contact regulations and conform to USP Class VI Biological Test specifications for plastics. Certified non-fiber releasing matrix.



For verified housing dimension drawings, chemical compatibility tables, or specific media challenge data sheets, please consult our sales application engineering desk.

COMMERCIAL CONTACTS



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