



# TurboClean® Beverage Microfiltration Elements

TurboClean® Beverage MF elements are designed for clarification of products such as wine and vinegar. They feature a polyvinylidene fluoride (PVDF) microfiltration (MF) membrane, a parallel feed spacer, polysulfone components and a rugged TurboClean® hard shell. The patented TurboClean hard shell offers a safe and sanitary operating system with none of the stagnant areas created by the brine seals of fibreglassed membrane elements where bacterial growth is often found. With 60% less bypass flow than net-wrapped elements, TurboClean elements deliver energy savings, the most effective cleaning and sanitizing and the best performance.

## MEMBRANE CHARACTERISTICS

<b>Membrane</b>	PVDF MF
<b>Nominal Pore Size (µm)</b>	0.2

## DESIGN INFORMATION

<b>Model</b>	<b>Membrane Area m² (ft²)</b>	<b>Feed Spacer Thickness (mil)<sup>a</sup></b>
<b>TurboClean® Bev 8040-MF</b>	26.9 (290)	47

<sup>a</sup> This model has a TurboClean sanitary outer wrap and parallel feed spacers. This model includes anti-telescoping devices (ATDs) attached to the ends of the element and one interconnector. A brine seal is not included and is not required.

## OPERATING PARAMETERS

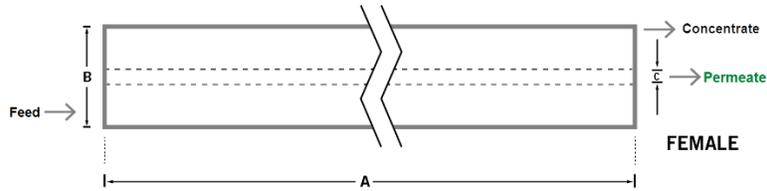
<b>Maximum Operating Pressure</b>	10.3 bar (150 psi)
<b>Maximum Operating Temperature</b>	50°C (122°F)
<b>Cleaning pH Range<sup>1</sup></b>	1.0 - 12.0
<b>Cleaning Chlorine Tolerance</b>	200 ppm (sanitization) at pH ≥ 10.5
<b>Maximum Pressure Drop</b>	1.4 bar (20 psi) per element; 6 bar (80 psi) per housing

<sup>1</sup> Refer to temperature and pH limits in our Membrane Cleaning Guides.

PHYSICAL DIMENSIONS

Model	Element Weight kg (lb) <sup>b</sup>	Dim. A mm (inches)	Dim. B mm (inches)	Dim. C <sup>c</sup> mm (inches)	Permeate Tube
TurboClean® Bev 8040-MF	16 (36)	1,016 (40.0)	201 (7.9)	28.6 (1.125)	Female

c Shipping weight is dependent on packaging material and quantity shipped.  
 d Dimension "C" is the Inner Diameter.



IMPORTANT INFORMATION

- Start-up:** MANN+HUMMEL Water & Fluid Solutions recommends flushing elements for 30 minutes at low pressure and discarding permeate during the flush prior to operation. For a more detailed start-up procedure, please see Element Start-Up Guide – System Start-Up (TSG-O-005).
- Cleaning:** TurboClean® membrane elements must be cleaned periodically to ensure proper operation and to prevent membrane damage. Please see our Membrane Cleaning Guides.
- Storage:** TurboClean membrane elements must be stored appropriately to ensure proper operation and to prevent membrane damage. Please see Element Storage Guides (TSG-O-009 & TSG-O-010).
- Regulatory:** This model uses FDA (CFR Title 21) compliant materials.

CUSTOMIZABLE SPECIALTY ELEMENTS

MANN+HUMMEL Water & Fluid Solutions offers a full range of membranes and element designs for challenging water and process applications. Technologies include low-fouling RO, submerged UF, continuous high temperature, ultra-high pressure, unique sanitary designs and more. Contact us to customize a product that satisfies your specific requirements.

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