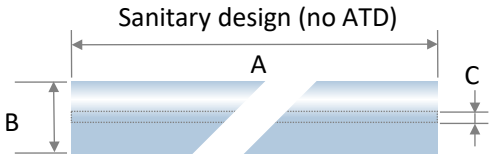
UNISOL Food & Dairy MPV020 Elements

Sanitary MPV020 Spiral Wound Elements

SH MPV020 Series

Description	UNISOL sanitary MPV020 is a Polyvinylidene Flouride (PVDF) membrane It is available in a wide variety of element designs for food, dairy and process separations as well as water purification. The SH Series are designed with temperature operating resistance up to 80°C (176 °F)	
Characteristics	Membrane Chemistry	Polyvinylidene Flouride (PVDF)
	Nominal MWCO	MPV020 with 100,000 Daltons
	Outer wrap	Net wrap
	Regulatory Status	Compliant with US FDA CFR Title 21, EC Reg. No. 1935/2004, and EU Reg. No. 10/2011. Halal certificate by the Islamic Food and Nutrition Council of America (IFANCA). Kosher certificate by Committee of Kashrut.
Limits	Max Operating Pressure	6.9 bar (100 psi) at 80°C (176°F)
	Max Pressure Drop	1.0 bar (14.5 psi) per element @30°C (86°F) 0.3 bar (5 psi) per element @70°C (158°F)
	Max. Operating Temperature	80 °C (176 °F)
	Max. Cleaning Temperature	80 °C (176 °F)
	pH Range	Operating: 2 – 10
Area ft^2 (m^2)	SH MPV020 3838 C	58 (5.4)

Dimensions



Size /mm (inch)	A[1]	⌀B[2]	⌀C[3]
SH MPV020 3838 C	965 (38)	96 (3.8)	21.1 (0.831)

[1] Tolerance: ±0.5mm
[2] Tolerance: -2~0 mm
[3] 3838 tolerance: ±0.1mm

(1) For the purpose of improvement, specifications may be updated periodically
(2) Consult UNISOL Membrane Technology when intend to operate at elevated pressure, temperature, concentrations.
(3) For the product name, please refer to the annex in the last page

Handling	**Water quality for cleaning and diafiltration.** Maximum feed turbidity is 1NTU. Maximum feed SDI is 5.0 (15minutes test). **Operation.** Stated operational conditions are valid and the rules for installation, cleaning, water and preservation have to be adhered. UNISOL approved cleaning detergent, anti-foam, polymers, other chemicals and filter-aids lubricants can be applied only. For further questions, do not hesitate to contact our service engineer. **Lubricants.** During installation, use only water or glycerin to lubricate seals. The use of petroleum or vegetable-based oils or solvents may damage the element and void any warranty. **Preservation and Storage.** Plan ahead to use new membranes. The element should be stored in a sealed bag, at 4 – 30 °C (39 – 86 °F). Storage solutions should be made with: 1 % w/w sodium metabisulfite. **Chemical Exposure.** Residual chlorine concentration during cleaning cycle (CIP) should be 150 ppm @ pH 10.5 or higher. Chlorine concentration should never exceed 200 ppm. **Cleaning.** UNISOL modules may be put into production after having gone through the first cleaning prescribed by UNISOL on product packing notes or given differently by UNISOL.

Annex

Nomenclature: SH-MPV020–8038-B

SH	MPV020	8038	B
Design/Application	Membrane	Diameter & Length	Feed spacer
SH Sanitary Design (High Temperature)	**MPV020**	3838 3840 4338 6338 6438 **8038**	**B: 31mil /0.8mm (diamond)** C: 46mil/1.1mm (diamond) E: 65mil /1.6mm (diamond) F: 80mil /2.0mm (diamond)