

UNISOL Food & Dairy NF Elements

Sanitary NF Spiral Wound Elements

SN UNF604 Series

Description UNISOL sanitary Nano-filtration (NF) membrane elements are used by food and dairy processors for a variety of desalting, purification and other separations. All UNF604 elements have very low monovalent salt rejection, with pore size in the range of 1,000Daltons.

Characteristics	Membrane	UNF604
	Material	Polypiperazine
	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 by the Islamic Food and Nutrition Council of America (IFANCA). Kosher certificate by Committee of Kashrut.

Limits	Max. Operating Pressure	55 bar (800psi)
	Max. Pressure Drop	1 bar (14.5 psi)
	Max. Operating Temperature	50 °C (122 °F)
	Max. Cleaning Temperature	55 °C (131 °F)
	Operating pH range	2 – 10
	Cleaning pH Range	1.8 – 11
	Free Chlorine Tolerance	Non-detectable

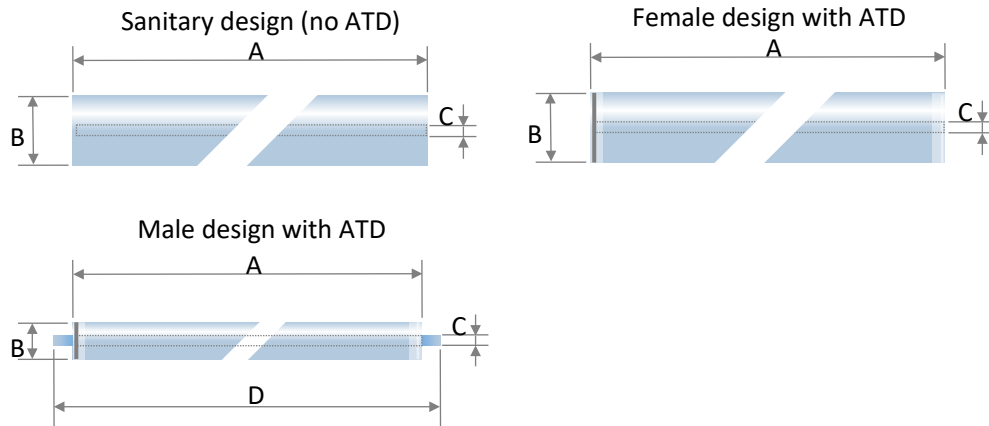
Area	Spacer	31 mil	46 mil	65 mil
ft ² (m ²)	2540	24 (2.2)	19 (1.8)	/
	3838	75 (7.0)	58 (5.4)	/
	3840	81 (7.5)	62 (5.8)	/
	6338	226 (21)	172 (16)	142 (13.2)
	8038	344 (32)	290 (27)	225 (20.9)
	8040	355 (33)	269 (25)	/

⁽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.

Dimensions



Size mm (inch)	A ^[1]	∅B ^[2]	∅C ^[3]	D	Permeate tube	ATD
2540	965 (38)	62 (2.4)	19 (0.7485)	1016 (40)	Male	NO
3838	965 (38)	96 (3.8)	21.1 (0.831)	/	Female	NO
3840	1016 (40)	96 (3.8)	21.1 (0.831)	/	Female	NO
6338	965 (38)	160 (6.3)	28.9 (1.138)	/	Female	NO
8038	965 (38)	200.5 (7.9)	28.9 (1.138)	/	Female	NO
8040	1016 (40)	200.5 (7.9)	28.9 (1.138)	/	Female	With

^[1] Tolerance: ±0.5mm

^[2] Tolerance: -2~0mm

^[3] 3840/4040-M tolerance: 0~+0.1mm, 3838 tolerance: ±0.1 mm, 6338/8038/8040 tolerance: -0.2~0mm

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 CIP would be <0.1ppm

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: SN- UNF604–8038-B

SN	UNF604	8038	B
Design/Application	Membrane	Diameter & Length	Feed spacer
SN	UNF604	3838	B: 31mil /0.8mm (diamond)
Sanitary Design		3840	C: 46mil/1.1mm (diamond)
		4338	E: 65mil /1.6mm (diamond)
		6338	F: 80mil /2.0mm (diamond)
		6438	
		8038	