

MW series

industrial oil/water separation UF elements

The M-Series Ultrafiltric* membranes are made of polyacrylonitrile (PAN) polymer. This membrane is characterized by a pore size of 0.01 microns with an approximate molecular weight cut-off of 20K-50K Dalton. To avoid fouling by "free" oils, the MW-series elements have been engineered to be extremely **hydrophilic** (water attracting) as compared to conventional membranes that are oleophilic (oil attracting).

MW Elements are used for oil/water separation and suspended solids removal. They are also used as pretreatment of process water before reverse osmosis or nanofiltration.

Table 1: Element Specification

Membrane	M-series, polyacrylonitrile			
Model	Spacer mil (mm)	Active area ft ² (m ²)	Outer wrap	Part number
MW2540F30	30 (0.76)	28 (2.6)	Fiberglass	1233383
MW4040F50	50 (1.27)	62 (5.8)	Fiberglass	3050562
MW8040C50	50 (1.27)	264 (24.7)	Cage	1220654
MW8040F50	50 (1.27)	269 (25.0)	Fiberglass	1229852

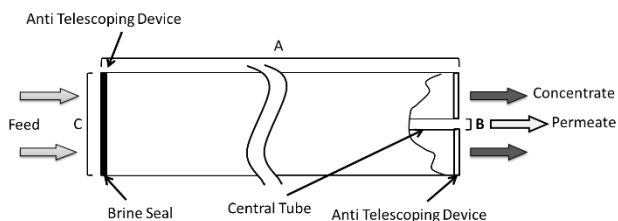


Figure 1: Element Dimensions Diagram, Female 8040

Water Technologies & Solutions fact sheet

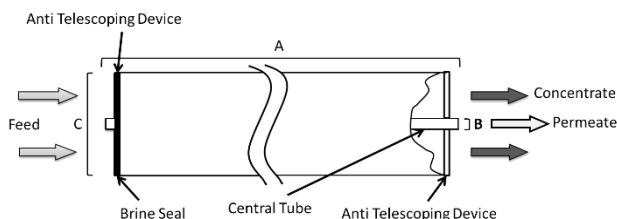


Figure 2: Element Dimensions Diagram, Male 2540 & 4040

Table 2: Dimensions and Weight

Model	Type	Dimensions, inches (cm)			Boxed Weight lbs (kg)
		A	B	C	
MW2540F30	Male	40.0 (101.6)	0.75 (1.9)	2.4 (6.1)	4 (1.8)
MW4040F50	Male	40.0 (101.6)	0.75 (1.9)	3.9 (9.9)	9 (4.1)
MW8040C50	Female	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	29 (13.2)
MW8040C50	Female	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	29 (13.2)

Table 3: Operating and CIP parameters

Typical Operating Flux	5 - 20 GFD (8 - 34 LMH)
Maximum Operating Pressure	100psi (700kPa)
Maximum Temperature	For fiberglass elements ¹ : Continuous operation: 122°F (50°C) Clean-In-Place (CIP): 122°F (50°C) For cage elements: Continuous operation: 176°F (80°C) Clean-In-Place (CIP): 122°F (50°C)
pH Range⁴	Continuous operation: 3-9, Clean-In-Place (CIP): 2-11 ²
Maximum Pressure Drop	Over an element: 15psi (103kPa) Per housing: 60psi (414kPa)
Chlorine Tolerance	200,000 ppm-hours

¹ Element sized 8040 can be used and flushed at higher temperature. Please contact your SUEZ representative for further technical recommendations.

² Please refer to Cleaning Guidelines Technical Bulletin TB1194.

Note Oil/water separation applications require the selection of materials compatible with the content of the highly concentrated solution.