



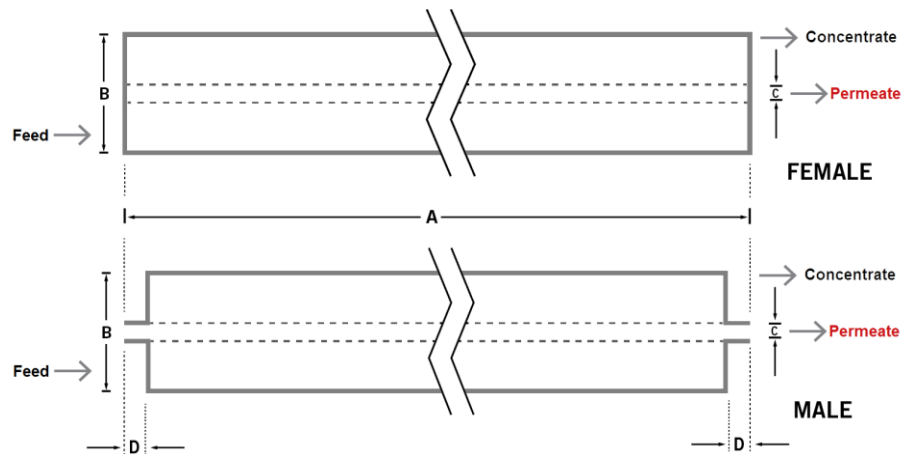
# MICRODYN RO

## High Rejection Brackish Water RO Elements

The MICRODYN RO series of brackish water RO membranes is ideal for water purification applications. These elements feature our best membrane for directly replacing competitive RO products and offer very high solute rejection. MICRODYN RO elements are available in standard 4" and 8" spiral-wound designs to meet all of your new equipment and direct replacement needs.

<b>MEMBRANE CHARACTERISTICS</b>	<b>Membrane Chemistry</b>	Thin-Film Composite Polyamide	
	<b>Construction</b>	Spiral-Wound Membrane Element with Fiberglass Outerwrap	
	<b>Stabilized Salt Rejection (%)</b>	99.5	
	<b>Minimum Salt Rejection (%)</b>	99.0	
<b>ELEMENT SPECIFICATIONS</b>	<b>Model</b>	MICRODYN RO 4040-BW	MICRODYN RO 8040-BW-400
	<b>Permeate Flow – m<sup>3</sup>/d (GPD)<sup>a</sup></b>	9.1 (2,400)	40.5 (10,700)
	<b>Membrane Area – m<sup>2</sup> (ft<sup>2</sup>)<sup>b</sup></b>	7.9 (85)	37.2 (400)

### PHYSICAL DIMENSIONS



<b>Model</b>	MICRODYN RO 4040-BW	MICRODYN RO 8040-BW-400
<b>Dim. A – mm (inches)</b>	1,016 (40.0)	1,016 (40.0)
<b>Dim. B – mm (inches)</b>	99 (3.9)	201 (7.9)
<b>Dim. C – mm (inches)<sup>c</sup></b>	19.1 (0.75)	28.6 (1.125)
<b>Permeate Tube<sup>d</sup></b>	Male	Female
<b>Element Weight – kg (lb)<sup>e</sup></b>	4 (9)	16 (36)

<sup>a</sup> Test conditions: 2,000 ppm NaCl, 15.5 bar (225 psi), 25°C (77°F), 15% recovery, pH 8.0, 30 minutes operation. Flow rates will be no more than 15% below the values shown. Product specifications may change without notice as design revisions occur.

<sup>b</sup> All models on this sheet have fiberglass outer wrap and diamond shaped feed spacers.

<sup>c</sup> Diameters for Dimension "C" are as follows. For Female elements, "C" is the Inner Diameter. For Male elements, "C" is the Outer Diameter.

<sup>d</sup> Male elements have a protruding permeate tube, indicated as "D" in the diagram. Dimension "D" is 1.0 in (25.4 mm).

<sup>e</sup> Shipping weight is dependent on packaging material and quantity shipped.

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## OPERATING PARAMETERS

<b>Maximum Operating Pressure</b>	41 bar (600 psi)
<b>Maximum Operating Temperature</b>	45°C (113°F)
<b>Cleaning pH Range<sup>1</sup></b>	1.0 – 12.0
<b>Chlorine Tolerance<sup>2</sup></b>	< 0.1 ppm
<b>Maximum Pressure Drop</b>	1 bar (15 psi) per element 4 bar (60 psi) per housing
<b>Maximum SDI<sub>15</sub></b>	5.0
<b>Maximum Turbidity</b>	1.0 NTU

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## IMPORTANT INFORMATION

<b>Start-up:</b>	MICRODYN-NADIR 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 <i>Element Start-Up Guide – System Start-Up</i> (TSG-O-005).
<b>Cleaning:</b>	MICRODYN RO membrane elements must be cleaned periodically to ensure proper operation and to prevent membrane damage. Please see <i>Membrane Cleaning Guide – Water Application Elements</i> (TSG-C-001).
<b>Storage:</b>	MICRODYN RO membrane elements must be stored appropriately to ensure proper operation and to prevent membrane damage. Please see <i>Element Storage Guides</i> (TSG-O-009 & TSG-O-010).

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<sup>1</sup> Refer to temperature and pH limits in *Membrane Cleaning Guide - Water Application Elements* (TSG-C-001).

<sup>2</sup> Pretreatment is recommended for the removal of free chlorine and other oxidizing agents to prevent damage to membranes. Oxidizing agents, such as free chlorine, in contact with polyamide membranes may result in shortened operating life or membrane failure. Such oxidation damage is excluded from warranty. Refer to *Membrane Operating Guide - Recommendations for Water Purification* (TSG-O-012).



Headquarters  
MICRODYN-NADIR GmbH  
Building D512  
Kasteler Straße 45  
65203 Wiesbaden  
Germany  
info@microdyn-nadir.de  
www.microdyn-nadir.de

USA Office  
MICRODYN-NADIR US, Inc.  
93 South La Patera Lane  
Goleta, CA 93117  
USA  
info@microdyn-nadir.com  
www.microdyn-nadir.com/en  
www.microdyn-nadir.com/triseip

China Office  
MICRODYN-NADIR (Xiamen) Co. Ltd.  
No. 66 Jinting North Road Xinglin  
Xiamen, China 361022  
infochina@microdyn-nadir.com

Singapore Office  
MICRODYN-NADIR Singapore Pte. Ltd.  
18 Tuas Avenue 8  
639233 Singapore  
info@microdyn-nadir.com