



SPIRA-CEL® OX Industry

UH Series

SPIRA-CEL® OX modules have an outstandingly high stability against temperature and pH. They may be used to clean caustic solutions and may be used in biotechnological applications where extreme cleaning conditions are required. NADIR® UH hydrophilic polyethersulfone (PESH) membranes offer consistent separations for applications where a more hydrophilic membrane is required.

Membrane Characteristics

Membrane	Nominal M.W.C.O. (Da)
NADIR® UH004	4,000
NADIR® UH030	30,000
NADIR® UH050	50,000

Maximum Operating Pressure.....	10 bar (145 psi)
Maximum Operating Temperature.....	80°C (167°F)
Operating pH Range.....	3.0 – 14.0
Cleaning pH Range ¹	2.0 – 14.0
Maximum Pressure Drop.....	2 bar (29.0 psi) @ 5 – 50°C per element 1.3 bar (18.9 psi) @ 50 – 65°C per element 0.5 bar (7.3 psi) @ 65 – 80°C per element 2 bar (29.0 psi) @ 80°C per housing

¹ Refer to temperature and pH limits in *Membrane Cleaning Guide – Water Application Elements (TSG-C001)*.

Design Information

MICRODYN-NADIR has the versatility to customize elements to meet customers' specific needs. Please contact MICRODYN-NADIR for information on customized solutions.

Model	Membrane Area m ² (ft ²)	Feed Spacer Thickness (mil) ^a
SPIRA-CEL® OX UH004 4040C	6.0 (65)	46
SPIRA-CEL® OX UH030 4040C	6.0 (65)	46
SPIRA-CEL® OX UH050 4040C	6.0 (65)	46

^a All models on this sheet have fiberglass outer wrap, ATDs attached, and diamond shaped feed spacers.



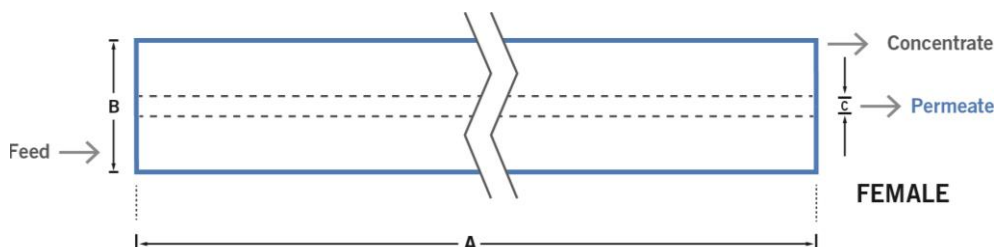
Product Specification (continued)

Physical Dimensions

Model	Element Weight kg (lbs) ^b	Dimensions, mm (inches)			Permeate Tube
		A	B	C ^c	
SPIRA-CEL® OX UH004 4040C	4 (9)	1,016 (40.0)	101.5 (4.0)	16.0 (0.63)	Female
SPIRA-CEL® OX UH030 4040C	4 (9)	1,016 (40.0)	101.5 (4.0)	16.0 (0.63)	Female
SPIRA-CEL® OX UH050 4040C	4 (9)	1,016 (40.0)	101.5 (4.0)	16.0 (0.63)	Female

^b Shipping weight is dependent on packaging material and quantity shipped.

^c Dimension "C" is the Inner Diameter.



Important Information

Start-up: 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 *Element Start-Up Guide – System Start-Up* (TSG-O-005).

Cleaning: SPIRA-CEL® membrane elements must be cleaned periodically to ensure proper operation and to prevent membrane damage. Please see *Membrane Cleaning Guide – Water Application Elements* (TSG-C001).

Storage: SPIRA-CEL 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).

Customizable Specialty Elements

MICRODYN-NADIR 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 MICRODYN-NADIR to customize a product that satisfies your specific requirements.

Solving Unmet Needs with Customized Products



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