

# DURASLICK™ NF Series

## Nanofiltration

### Low Fouling NF

Duraslick™ is a new family series of membrane elements engineered for use with fouling-prone brackish water applications. Duraslick is designed to utilize an innovative three-layer membrane, of which a proprietary middle layer creates extreme smoothness, and provide a high rejection of sodium chloride.

Independent studies have demonstrated that Duraslick NF elements are superior to standard polyamide spiral wound membrane elements for desalination of difficult feed water sources. Duraslick NF elements retrofit existing systems to obtain lower fouling, reduced overall energy usage, increased membrane service life and an extension of operating time between required cleanings, which in turn reduces expenditures on required chemicals. Duraslick NF-HS elements are specially designed for comparatively higher solid levels. The Duraslick NF element construction features a fiberglass outer wrap.

### ELEMENT SPECIFICATIONS

MODEL	FLOW GPD (m <sup>3</sup> /d)	REJECTION AVE.	ACTIVE AREA FT <sup>2</sup> (m <sup>2</sup> )
DURASLICK NF 2540	690 (2.6)	96.0%	24 (2.2)
DURASLICK NF 4040	2,200 (8.3)	96.0%	78 (7.2)
DURASLICK NF 4040 HS	1,700 (6.4)	96.0%	61 (5.6)
DURASLICK NF 8040	10,200 (38.6)	96.0%	350 (32.5)
DURASLICK NF 8040 HS	7,600 (28.8)	96.0%	263 (24.4)

Specification is based on a 2,000 mg/L MgSO<sub>4</sub> solution at 100 psi (690 kPa) operating pressure, 77°F (25°C) and 15% recovery. Individual flux may vary +25%-15%. Average salt rejection after a minimum of 24 hours of continuous operation.

### OPERATING AND DESIGN PARAMETERS

#### DURASLICK™

TYPICAL OPERATING PRESSURE	TYPICAL OPERATING PROCESS FLUX	MAXIMUM PRESSURE	MAXIMUM TEMPERATURE	RECOMMENDED pH	CHLORINE TOLERANCE
100 psig (690 kPa)	10-15 GFD (15-25 LMH)	600 psig (4,137 kPa)	122°F (50°C)	Optimum Rejection pH: 5.5-7.0 Operating pH Range: 2.0-11.0 Cleaning pH Range: 1.0-11.5	1,000 ppm-hrs., Dechlorination recommended



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MAXIMUM PRESSURE DROP	ELEMENTS PER PRESSURE VESSEL					
	1	2	3	4	5	6
$\Delta P$ - psig (kPa)	10 (69)	20 (138)	30 (207)	38 (262)	45 (310)	50 (345)

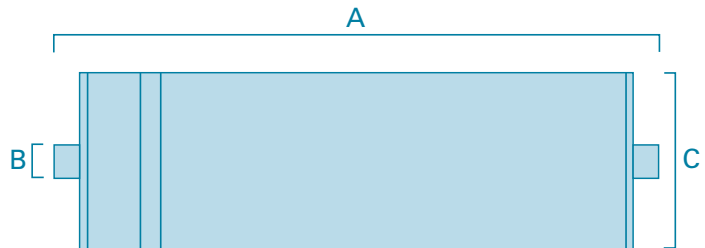
### ELEMENT DIMENSIONS AND WEIGHT

#### MODEL NUMBER LEGEND

DURASLICK NF 4040 HS

Membrane Type    NF=Nanofiltration    HS=High Solids

Element Size



MODEL	DIMENSIONS INCHES(MM)			DRY BOXED
	A	B	C	WEIGHT LBS (KG)
DURASLICK NF 2540*	40.00 (1016)	0.750 (19)	2.40 (61)	5 (2.3)
DURASLICK NF 4040*	40.00 (1016)	0.750 (19)	3.88 (99)	12 (5.5)
DURASLICK NF 4040 HS*	40.00 (1016)	0.750 (19)	3.88 (99)	12 (5.5)
DURASLICK NF 8040	40.00 (1016)	1.125 (29)	7.88 (200)	32 (14.5)
DURASLICK NF 8040 HS	40.00 (1016)	1.125 (29)	7.88 (200)	32 (14.5)

\* Element includes external permeate tube.  
Length includes ATDs. Elements are shipped dry.



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