

# *iLEC*<sup>™</sup> TECHNOLOGY

## LEAK-TIGHT PERFORMANCE



Water Solutions

Look for FILMTEC<sup>™</sup> Elements with *iLEC*<sup>™</sup> Technology in the product table, which lists some of the extra features such as:

- 34 mil feed spacer for improving element cleanability
- Fouling Resistant (FR) membrane
- Semi Conductor Grade for ultra-pure water applications
- Low Energy (LE) membrane

### Boost Performance of RO Systems

*iLEC*<sup>™</sup>, an innovative element coupling technology from Dow Water Solutions, enables sustained higher quality permeate throughout the life of the element by reducing seal leakage.

*iLEC* technology achieves a leak-tight connection between elements and reduces the number of sealing surfaces to a single, axially compressed o-ring. *iLEC* technology is a definitive breakthrough improvement over the traditional sliding couplers.

With proven results in successful operating plants worldwide, *iLEC* technology is available on high performance FILMTEC<sup>™</sup> elements.

### Reasons to Select *iLEC*<sup>™</sup> Technology

- Improved permeate quality
- Lower pressure drop
- Highly reliable o-ring seal
- Leak-tight performance
- Full performance with or without lubricants
- Compatibility with existing connection methods and vessel designs
- Minimizes installation time with leak-tight connect at start-up
- Reduced energy-consuming flow resistance, lower operating expense
- Elimination of permeate interconnectors
- Fewer parts to wear out or that require maintenance

### Features of *iLEC*<sup>™</sup> Technology

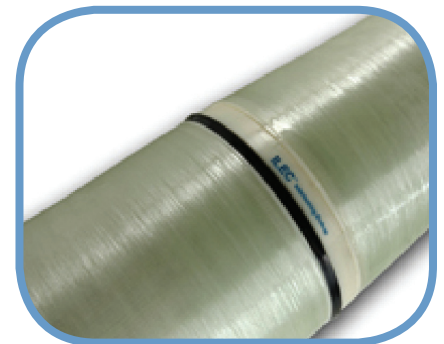
- Mechanically robust connections
- Ability to handle repeated installation cycles
- Easy installation with a clockwise twist
- Immediate connection feedback during installation
- Minimizes rolled o-rings, wear and abrasion

For more information, visit [www.dowwatersolutions.com/ilec](http://www.dowwatersolutions.com/ilec) or your local Dow Water Solutions representative or OEM.

### Features of Construction and Reliability

Construction and reliability features included in each FILMTEC<sup>™</sup> element:

- Durable FT30 membrane
- pH 1-13 cleaning range
- Automated construction
- Guaranteed active area



FILMTEC™ Elements Available with *iLEC*™ Technology

	Performance Attributes					Construction Features		
	Feed Pressure (psi)	Flow Rate (gpd)	Stabilized Salt Rejection (%)	Stabilized Boron Rejection (%)	Maximum Pressure (psi)	34-mil Feed Spacer	28-mil Feed Spacer	Active Area (ft <sup>2</sup> )
BW30-440 <i>i</i>	225	11,500	99.50	not tested	600		✓	440
BW30-400/34 <i>i</i>	225	10,500	99.50	not tested	600	✓		400
BW30-400/34 <i>i</i> FR	225	10,500	99.50	not tested	600	✓		400
LE-440 <i>i</i>	150	12,650	99.30	not tested	600		✓	440
SG30LE-440 <i>i</i>	107	10,000	99.50	not tested	600			440
SG30-400/34 <i>i</i>	225	10,200	99.50	not tested	600		✓	
SW30XHR-400 <i>i</i>	800	6,000	99.80	93-94 <sup>1</sup>	1,200	✓		400
SW30HR-370/34 <i>i</i>	800	6,300	99.75	91	1,200			370
SW30HRLE-400 <i>i</i>	800	7,500	99.75	90	1,200		✓	400
SW30XLE-400 <i>i</i>	800	9,000	99.70	89	1,200		✓	400
SW30ULE-400 <i>i</i>	800	11,000	99.70	87	1,200		✓	400

<sup>1</sup>Tentative specification based on in-house testing and first 1,000 elements – decision on high/low number to be made after field demonstration.

BW30 – Test conditions: 2,000 ppm NaCl, 225 psi (15.5 bar), 77°F (25°C), pH 8 and 15% recovery.

LE – Test conditions: 2,000 ppm NaCl, 150 psi (10.3 bar), 77°F (25°C), pH 8 and 15% recovery.

SG – Test conditions: 2,000 ppm NaCl, 150 psi (10.3 bar) for SG30 LE-440*i* and 225 psi (15.5 bar) for SG30-400/34*i*, 77°F (25°C), pH 8 and 15% recovery.

SW – Test conditions: 32,000 ppm NaCl, 800 psi (5.5 M Pa) 77°F (25°C), pH 8 and 8% recovery.

## For More Information

For more information about *iLEC*™, call Dow Water Solutions:

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Latin America: 55-11-5188 9222

Europe: +800-3-694-6367

Asia/Pacific: +800 7776 7776

[www.dowwatersolutions.com](http://www.dowwatersolutions.com)

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