RE2012-150

High flow RO element for residential use

CSM®

SPECIFICATIONS

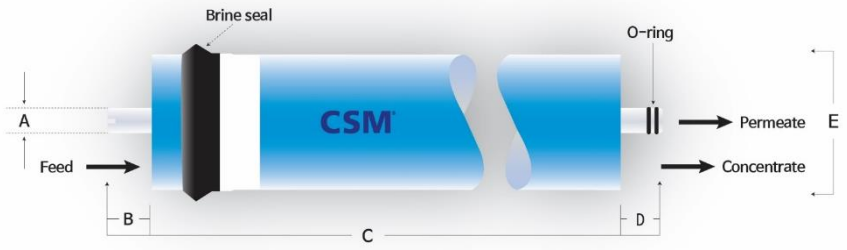
General Features

Permeate Flow Rate GPD (L/Day)	150 GPD (568L/day)
NaCl Rejection %	98% (Minimum 95%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 95.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2012-150	0.67 inch (17 mm)	0.47 inch (12 mm)	11.73 inch (298 mm)	0.91 inch (23 mm)	1.89 inch (48 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58

RE2012-400

Ultra High Flow RO element for residential use

SPECIFICATIONS

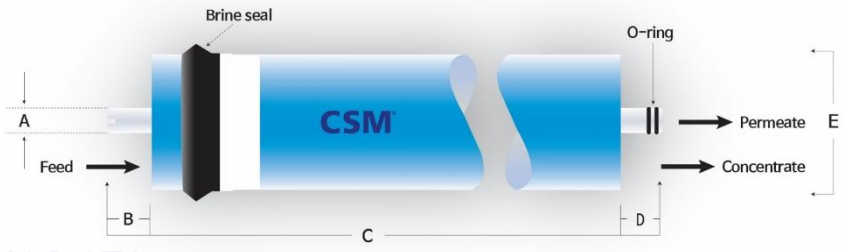
General Features

Permeate Flow Rate GPD (L/Day)	400 GPD (1514L/day)
NaCl Rejection %	96% (Minimum 93%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 80 psig (0.55 MPa) applied pressure; 30% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 93.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2012-400	0.67 inch (17 mm)	0.47 inch (12 mm)	11.73 inch (298 mm)	0.91 inch (23mm)	1.89 inch (48 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF
Certified to NSF/ANSI 58

RE2012-LP

Low pressure grade RO elements for residential use

SPECIFICATIONS

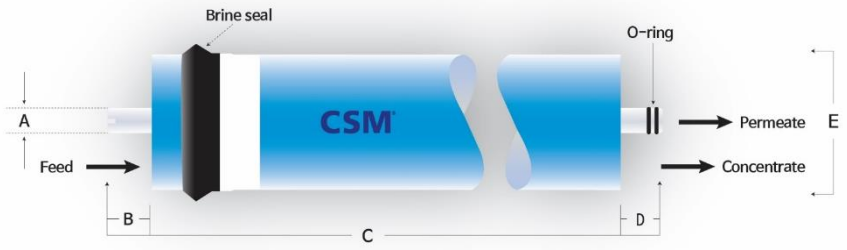
General Features

Permeate Flow Rate GPD (L/Day)	50 GPD (189L/day)
NaCl Rejection %	93% (Minimum 90%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 100 mg/L NaCl solution at 20 psig (0.14 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 90.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2012-LP	0.67 inch (17 mm)	0.47 inch (12 mm)	11.73 inch (298 mm)	0.91 inch (23mm)	1.89 inch (48 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF
Certified to NSF/ANSI 58

RE2012-LPF

Low pressure grade RO elements for residential use

SPECIFICATIONS

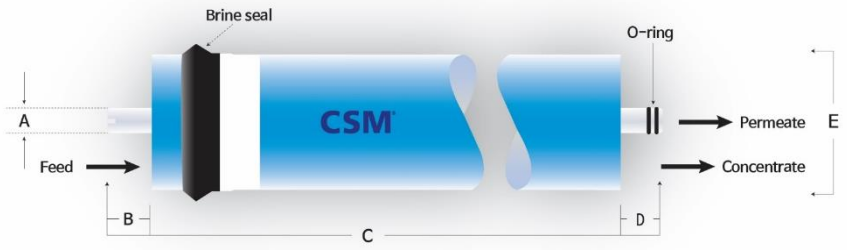
General Features

Permeate Flow Rate GPD (L/Day)	60 GPD (227L/day)
NaCl Rejection %	93% (Minimum 90%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 100 mg/L NaCl solution at 20 psig (0.14 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 90.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2012-LPF	0.67 inch (17 mm)	0.47 inch (12 mm)	11.73 inch (298 mm)	0.91 inch (23mm)	1.89 inch (48 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF
Certified to NSF/ANSI 58

RE2812-300

RO element for residential use

CSM®

SPECIFICATIONS

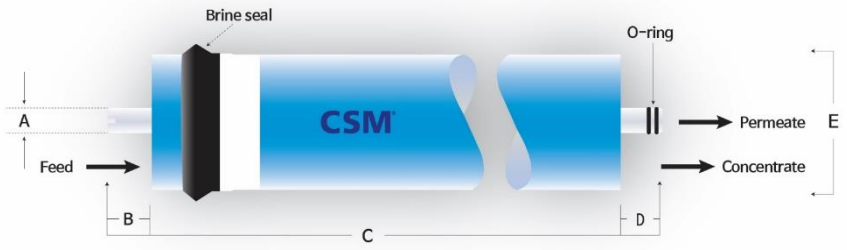
General Features

Permeate Flow Rate GPD (L/Day)	350 GPD (1,325L/day)
NaCl Rejection %	97% (Minimum 95%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%; Minimum salt rejection is 95.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2812-300	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22 mm)	2.93 inch (74.5 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58

RE2812-450

Ultra High Flow RO element for residential use

SPECIFICATIONS

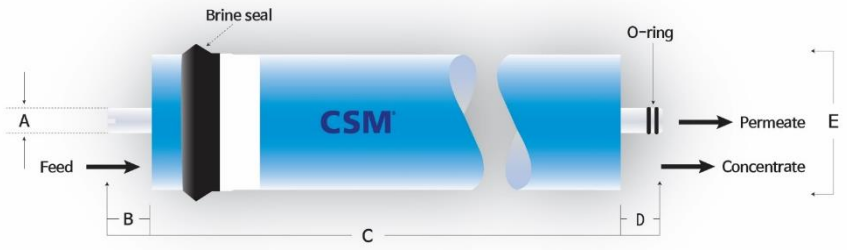
General Features

Permeate Flow Rate GPD (L/Day)	450 GPD (1,703L/day)
NaCl Rejection %	96% (Minimum 94%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 94.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2812-450	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22mm)	2.93 inch (74.5 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

RE2812-CE

Innovative chlorine resistant RO element for residential use

SPECIFICATIONS

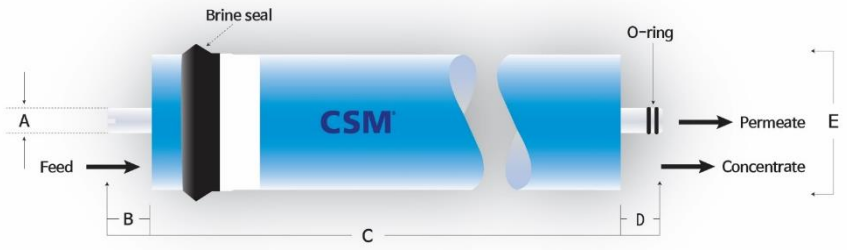
General Features

Permeate Flow Rate GPD (L/Day)	220 GPD (833L/day)
NaCl Rejection %	97% (Minimum 90%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 90.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2812-CE	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22 mm)	2.93 inch (74.5 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

RE3012-500

High flow RO element for residential use

CSM®

SPECIFICATIONS

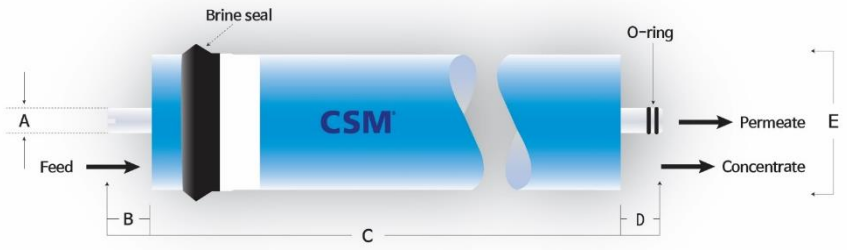
General Features

Permeate Flow Rate GPD (L/Day)	500 GPD (1,893L/day)
NaCl Rejection %	97% (Minimum 95%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 80 psig (0.55 MPa) applied pressure; 40% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -15%; Minimum salt rejection is 95.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE3012-500	0.67 inch (17 mm)	0.39 inch (10 mm)	11.73 inch (298 mm)	0.79 inch (20 mm)	2.95 inch (75 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

RE3012-800

Ultra High flow RO element for residential use

SPECIFICATIONS

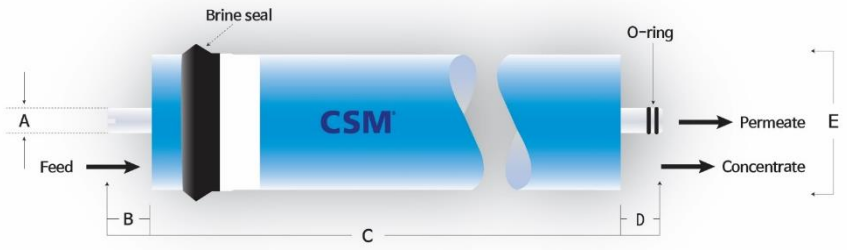
General Features

Permeate Flow Rate GPD (L/Day)	800 GPD (3,028/day)
NaCl Rejection %	96% (Minimum 94%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 80 psig (0.55 MPa) applied pressure; 40% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 94.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE3012-800	0.67 inch (17 mm)	0.39 inch (10 mm)	11.73 inch (298 mm)	0.79 inch (20 mm)	2.95 inch (75 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

RE3512-900

Ultra High flow RO element for residential use

SPECIFICATIONS

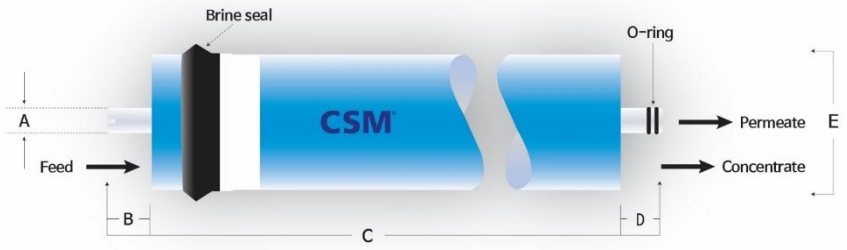
General Features

Permeate Flow Rate GPD (L/Day)	900 GPD (3,407L/day)
NaCl Rejection %	95% (Minimum 93%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 80 psig (0.55 MPa) applied pressure; 40% recovery; 77℉ (25℃); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 93.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE3512-900	0.67 inch (17 mm)	0.31 inch (8 mm)	11.73 inch (298 mm)	0.63 inch (16 mm)	3.35 inch (85 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

RE3512-TK

High flow RO element for residential use

CSM®

SPECIFICATIONS

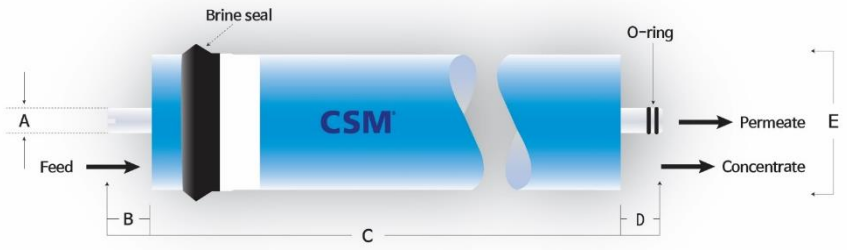
General Features

Permeate Flow Rate GPD (L/Day)	600 GPD (2,271/day)
NaCl Rejection %	95% (Minimum 93%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 30% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 93.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE3512-TK	0.67 inch (17 mm)	0.31 inch (8 mm)	11.73 inch (298 mm)	0.63 inch (16 mm)	3.35 inch (85 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58

NE1812-70

Nanofiltration element for residential use

CSM®

SPECIFICATIONS

General Features

Permeate Flow Rate GPD (L/Day)	90 GPD (341L/day)
$MgSO_4$ Rejection %	95% (Minimum 93%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 250 mg/L $MgSO_4$ solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77℉ (25℃); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum $MgSO_4$ rejection is 93.0%; When tested with the following conditiions: 250mg/L NaCl, 60psig(0.41 MPa), 15% recovery, and 77℉ (25℃), the typical stabilized salt rejection is 40~70%. However, this rejection is not aguaranteed value; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
NE1812-70	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22 mm)	1.77 inch (45 mm)

APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

RE1810-80

RO elements for residential use

CSM®

SPECIFICATIONS

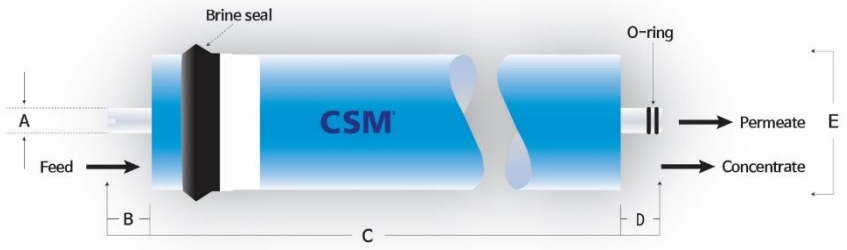
General Features

Permeate Flow Rate GPD (L/Day)	80 GPD (303L/day)
NaCl Rejection %	98% (Minimum 96%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 96.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE1810-80	0.67 inch (17 mm)	0.55 inch (14 mm)	10.08 inch (256 mm)	0.98 inch (25mm)	1.77 inch (45 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58

RE1812-50

RO elements for residential use

CSM®

SPECIFICATIONS

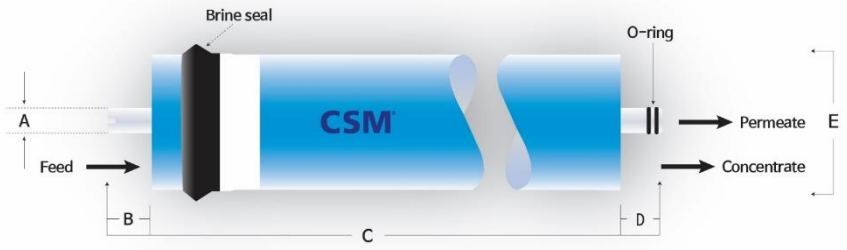
General Features

Permeate Flow Rate GPD (L/Day)	70 GPD (265L/day)
NaCl Rejection %	98% (Minimum 96%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 96.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE1812-50	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22mm)	1.77 inch (45 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58

RE1812-60

RO elements for residential use

CSM®

SPECIFICATIONS

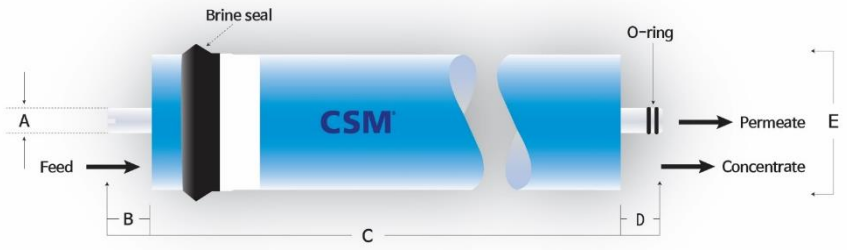
General Features

Permeate Flow Rate GPD (L/Day)	80 GPD (303L/day)
NaCl Rejection %	98% (Minimum 96%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 96.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE1812-60	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22mm)	1.77 inch (45 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58

RE1812-80

RO elements for residential use

CSM®

SPECIFICATIONS

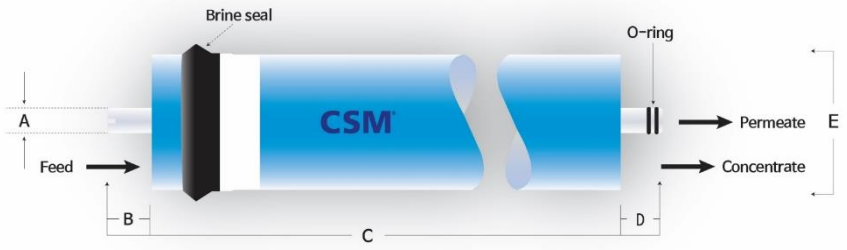
General Features

Permeate Flow Rate GPD (L/Day)	100 GPD (379L/day)
NaCl Rejection %	98% (Minimum 96%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 96.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE1812-80	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22mm)	1.77 inch (45 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58

RE1812-LP

Low pressure grade RO elements for residential use

SPECIFICATIONS

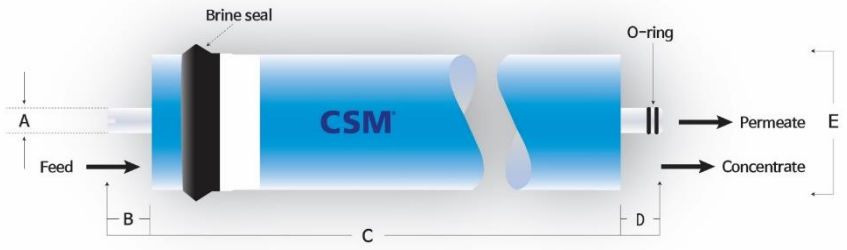
General Features

Permeate Flow Rate GPD (L/Day)	30 GPD (114L/day)
NaCl Rejection %	93% (Minimum 90%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 100 mg/L NaCl solution at 20 psig (0.14 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 90.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE1812-LP	0.67 inch (17 mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22mm)	1.77 inch (45 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

RE2012-100

RO element for residential use

CSM®

SPECIFICATIONS

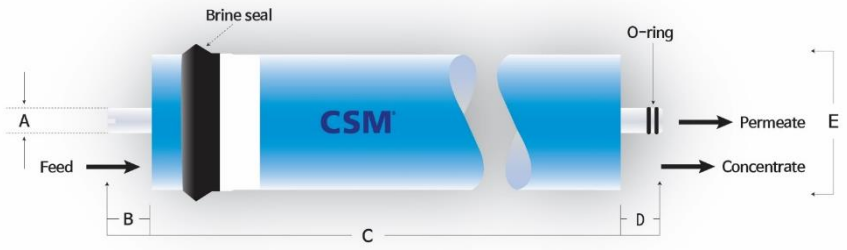
General Features

Permeate Flow Rate GPD (L/Day)	110 GPD (416L/day)
NaCl Rejection %	98% (Minimum 96%)
Membrane Type	Thin-Film Composite
Membrane Material	Polyamide (PA)
Element Configuration	Spiral-Wound, Tape Wrapping

The stated product performance is based on data taken after 30 minutes of operation at the following test Conditions: 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure; 15% recovery; 77°F (25°C); pH 6.5–7.0; Permeate flow rate for each element may vary +20 / -20%; Minimum salt rejection is 96.0%; All elements are vacuum leak tested using the CSM integrity test; Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Dimensions

Model Name	A	B	C	D	E
RE2012-100	0.67 inch (17 mm)	0.47 inch (12 mm)	11.73 inch (298 mm)	0.91 inch (23 mm)	1.89 inch (48 mm)



APPLICATION DATA

Operating Limits

Max. Operating Pressure	150 psi (1.03 MPa)
Max. Feed Flow Rate	2 gpm (0.45 m^3/hr)
Max. Operating Temperature	113°F (45°C)
Operating pH Range	2.0 – 11.0
Max. Turbidity	1.0 NTU
Max. SDI (15 min)	3.0
Max. Chlorine Concentration	< 0.1 mg/L

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Stabilized salt rejection is generally achieved within 1~48 hours of continuous use.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- To ensure compliance with NSF/ANSI 58 standards, it is advised to rinse systems containing these elements for 24 hours prior to their initial use.

NSF

Certified to NSF/ANSI 58