



PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM2-TSAN	9,700 (36.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM2-UWAN	10,700 (40.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	400 ft ² (37.2m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	4.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM3-TSAN	11,000 (41.0)	99.20	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM3-UWAN	12,000 (45.0)	99.20	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	400 ft ² (37.2 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	4.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" ACM-LP Low Pressure RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM4-TSAN	14,600 (55.0)	99.00	98.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM-LP Fully Aromatic Polyamide Low Pressure Advanced Composite
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	50 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" ACM-LP Low Pressure RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM4-UWAN	16,000 (60.0)	99.00	98.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM-LP Fully Aromatic Polyamide Low Pressure Advanced Composite
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	400 ft ² (37.2 m ²)
Recommended Applied Pressure.....	50 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	4.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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PRODUCT SPECIFICATION

8" ACM-LP Low Pressure RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM5-TSAN	11,900 (45.0)	98.50	97.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 150.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM-LP Fully Aromatic Polyamide Low Pressure Advanced Composite
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	50 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-TS80-TSAN	9,000 (34.0)	99.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

8" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-TS80-UWAN	10,000 (37.0)	99.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	400 ft ² (37.2 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	4.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-TS83-TSAN	10,000 (37.0)	98.50	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-TS83-UWAN	11,000 (41.0)	98.50	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	400 ft ² (37.2 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	4.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

8" X-20 Low Fouling RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-X201-TSAN	9,700 (36.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	X20 Fully Aromatic Polyamide-Urea Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap with FoulGuard Technology
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	2 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" X-20 Low Fouling RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-X201-UWAN	10,400 (39.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	X20 Fully Aromatic Polyamide-Urea Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap with FoulGuard Technology
Active Membrane Area.....	400 ft ² (37.2 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	2 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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Competitive Element Replacement Guide

Replacing elements from one competitor to the next can be a difficult and frustrating task. Inboard adapters, the piece that adapts the first and last element within a pressure tube to the pressure tube end cap, must be designed and manufactured for both the proper element and pressure tube. This makes for a large matrix of possible combinations. Although TriSep stocks a large variety of inboard adapters, in many cases customers want an exact mechanical retrofit to their existing elements.

Most variations in elements center around different permeate tube diameters and/or configurations (male versus female). There are also special element diameters (8.3" and 8.5") that some manufacturers have produced to try and minimize competition.

To address different permeate tube diameters, TriSep makes a variety of elements to exactly retrofit many of our competitors elements. In the 4" diameter, we offer both the TriSep style permeate tube (0.75" I.D. female permeate tube) as well as the more common Dow/Filmtec style permeate tube (0.75" O.D. male permeate tube). In the 8" diameter element, TriSep makes a standard TriSep style (1.5" I.D. female permeate tube which is also being adopted by Dow/Filmtec on their LE and XLE elements), a Dow/Filmtec style (1.12" I.D. female permeate tube), and GE/Osmonics style (1.19" I.D. female permeate tube), and a Desal/DuPont style (1.18" I.D. female permeate tube).

In 1991, TriSep purchased the Spiral Wound Assets from E.I. DuPont de Nemours and Company. DuPont had a line of spiral wound elements that had permeate tube dimensions that are the same as the Desal permeate tubes.

To address different element diameters, TriSep makes an 8.3" diameter element to retrofit Osmonics elements, as well as 8.5" diameter elements to retrofit Hydranautics style elements.

Attached in this section is a copy of our competitive element replacement guide to help you in selecting the proper TriSep element for your element replacement needs. Most of these elements are non-standard and are made to order. The only exceptions are the 4040-XXXX-TSF which are normally stocked by TriSep.



Competitive Element Replacement Guide

Desal/DuPont Replacement Elements

TriSep Model Number	Desal Model Number	DuPont Model Number	Comments
4040-ACM2-TSDA	AG4040F/SG4040F	2440	Same diameter and permeate tube
4040-TS80-TSDA	HL4040F		Same diameter and permeate tube
4040-X201-TSDA			
8040-ACM1-TSDA	SG8040F	2840	Same diameter and permeate tube
8040-ACM2-TSDA	AG8040F	2840	Same diameter and permeate tube
8040-TS80-TSDA	HL8040F		Same diameter and permeate tube

Dow/Filmtec Replacement Elements

TriSep Model Number	Dow/Filmtec	Comments
4040-ACM1-TSF		Same diameter and permeate tube
4040-ACM2-TSF	BW30-4040	Same diameter and permeate tube
4040-ACM3-TSF	BW30HP-4040	Same diameter and permeate tube
4040-ACM4-TSF	BW30-LE4040	Same diameter and permeate tube
4040-ACM5-TSF	XLE-4040	Same diameter and permeate tube
4040-ACM5-TWF	XLE-4040	Same diameter and permeate tube
4040-TS80-TSF	NF90-4040/NF70-4040	Same diameter and permeate tube
4040-TS83-TSF		
4040-X201-TSF		
8040-ACM2-TSFA	BW30-8040/BW30-365	Same diameter and permeate tube
8040-ACM2-UWFA	BW30-400/BW30-440	Same diameter and permeate tube
8040-ACM4-TSFA	BW30-LE 400	Same diameter and permeate tube
8040-ACM5-UWFA	XLE-400/LE 400/LE 440	Same diameter and permeate tube
8040-TS80-UWFA	NF90-400/NF70-400	Same diameter and permeate tube
8040-X201-TSFA	BW30-365FR	Same diameter and permeate tube

GE/Osmonics Replacement Elements

TriSep Model Number	GE/Osmonics Model	Comments
4040-ACM2-TSOA	411-HR(PA)/411-HF(PA)	Same diameter and permeate tube
8340-ACM2-TSOA	811-HR(PA)/811-HF(PA)	Same diameter and permeate tube
8340-SB20-TSOA	811-HR	Same diameter and permeate tube

Hydranautics Replacement Elements

TriSep Model Number	Hydranautics Model	Comments
8540-ACM2-TSFA	8540-LSY-CPA2	Same diameter, different permeate tube
8540-ACM4-TSFA	8540-UHY-ESPA	Same diameter, different permeate tube
8540-SB20-TSA	8540-MSY-CAB2	Same diameter, different permeate tube
8540-SB50-TSA	8540-MSY-CAB1	Same diameter, different permeate tube
8540-TS80-TSFA		Same diameter, different permeate tube



Competitive Element Replacement Guide Desal/DuPont Style Elements

TriSep Model Number	Desal Model Number	DuPont Model Number	Comments
4040-ACM2-TSDA	AG4040F/SG4040F	2440	Same diameter and permeate tube
4040-TS80-TSDA	HL4040F		Same diameter and permeate tube
4040-X201-TSDA			
8040-ACM1-TSDA	SG8040F	2840	Same diameter and permeate tube
8040-ACM2-TSDA	AG8040F	2840	Same diameter and permeate tube
8040-TS80-TSDA	HL8040F		Same diameter and permeate tube



PRODUCT SPECIFICATION

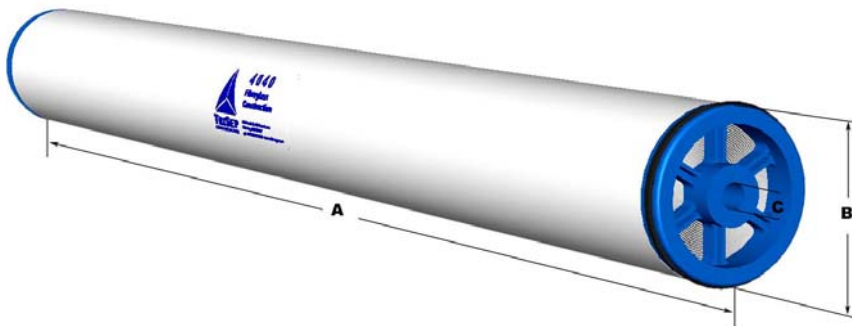
4" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-ACM2-TSDA	2,450 (9.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	88 ft ² (8.1 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.62 (15.9)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Desal/DuPont Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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PRODUCT SPECIFICATION

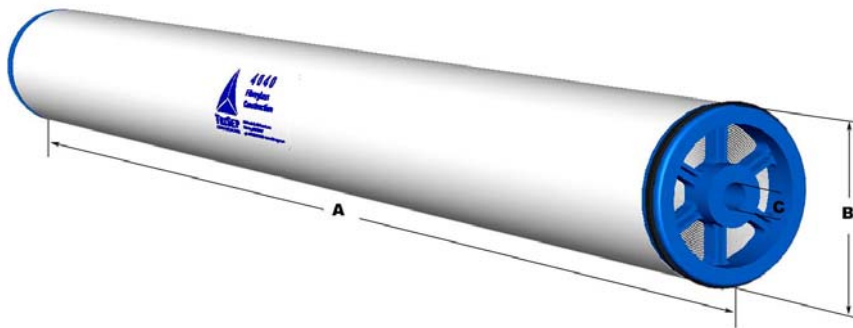
4" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-TS80-TSDA	2,000 (7.0)	99.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	88 ft ² (8.2 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.62 (15.9)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Desal/DuPont Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

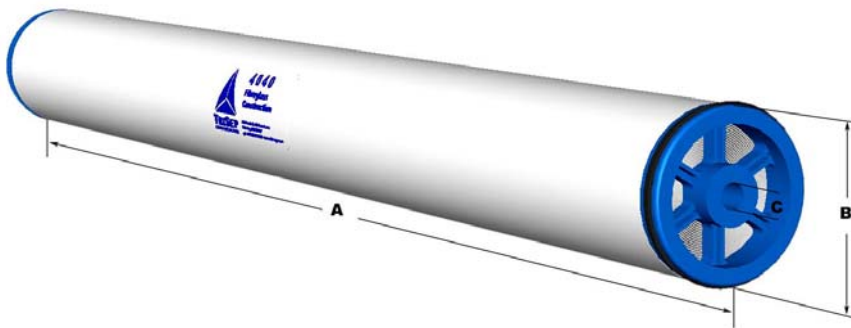
4" X-20 Low Fouling RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-X201-TSDA	2,450 (9.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	X20 Fully Aromatic Polyamide-Urea Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap with FoulGuard Technology
Active Membrane Area.....	88 ft ² (8.2 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	2 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.62 (15.9)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Desal/DuPont Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM1-TSDA	8,000 (30.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.19 (30.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Desal/DuPont Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM2-TSDA	9,700 (36.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.19 (30.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Desal/DuPont Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

8" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-TS80-TSDA	9,000 (34.0)	99.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.19 (30.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



Competitive Element Replacement Guide Dow/Filmtec Style Elements

Dow/Filmtec Replacement Elements

TriSep Model Number	Dow/Filmtec	Comments
4040-ACM1-TSF		Same diameter and permeate tube
4040-ACM2-TSF	BW30-4040	Same diameter and permeate tube
4040-ACM3-TSF	BW30HP-4040	Same diameter and permeate tube
4040-ACM4-TSF	BW30-LE4040	Same diameter and permeate tube
4040-ACM5-TSF	XLE-4040	Same diameter and permeate tube
4040-ACM5-TWF	XLE-4040	Same diameter and permeate tube
4040-TS80-TSF	NF90-4040/NF70-4040	Same diameter and permeate tube
4040-TS83-TSF		
4040-X201-TSF		
8040-ACM2-TSFA	BW30-8040/BW30-365	Same diameter and permeate tube
8040-ACM2-UWFA	BW30-400/BW30-440	Same diameter and permeate tube
8040-ACM4-TSFA	BW30-LE 400	Same diameter and permeate tube
8040-ACM5-UWFA	XLE-400/LE 400/LE 440	Same diameter and permeate tube
8040-TS80-UWFA	NF90-400/NF70-400	Same diameter and permeate tube
8040-X201-TSFA	BW30-365FR	Same diameter and permeate tube



PRODUCT SPECIFICATION

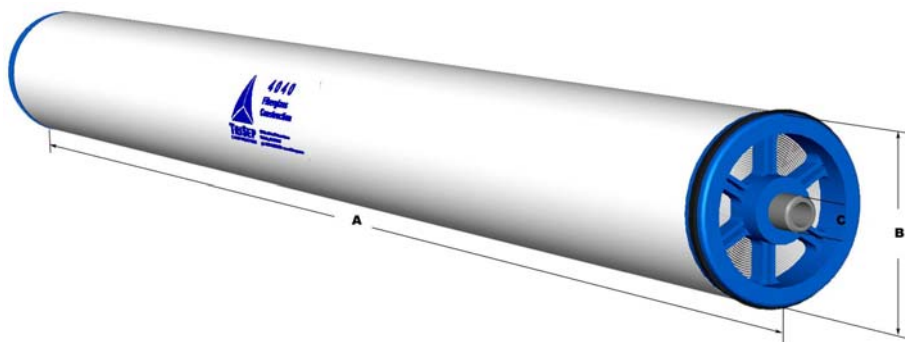
4" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-ACM1-TSF	1,900 (7.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	85 ft ² (7.9 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

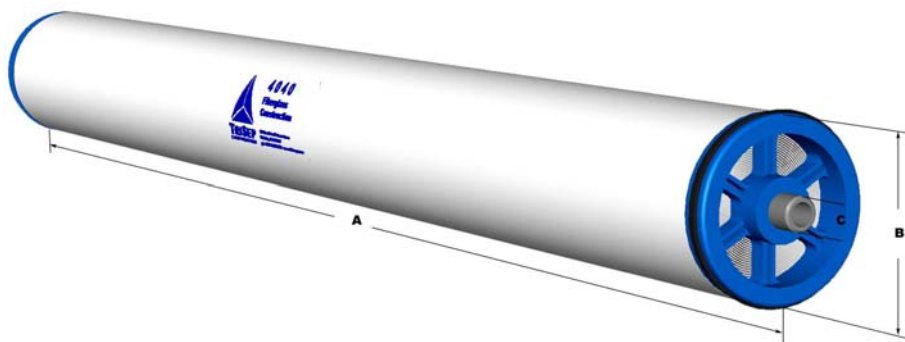
4" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-ACM2-TSF	2,400 (9.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	85 ft ² (7.9 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

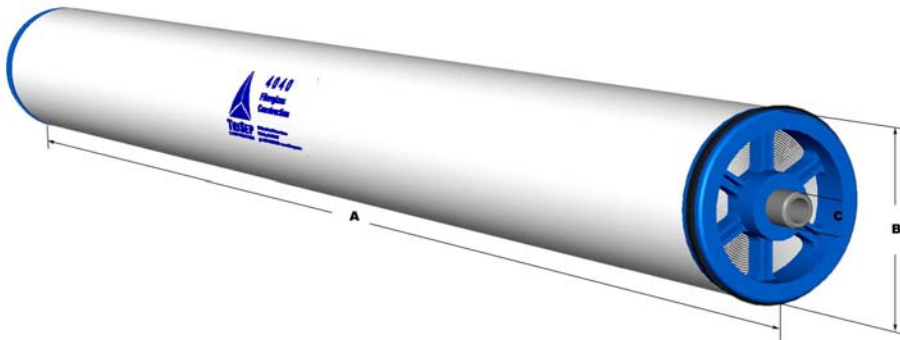
4" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-ACM3-TSF	2,700 (10.0)	99.20	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	85 ft ² (7.9 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

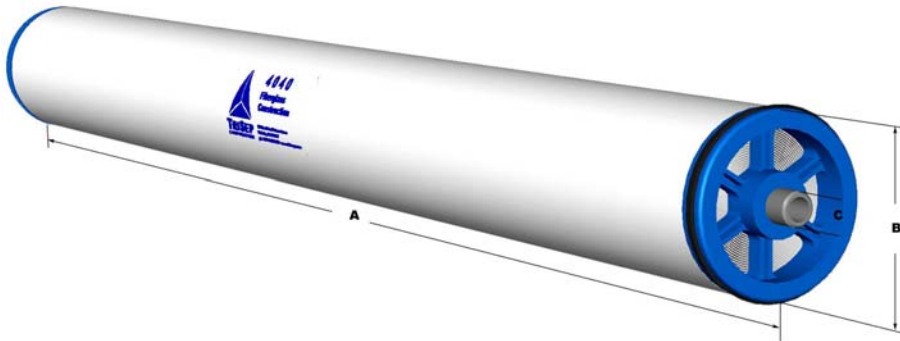
4" ACM-LP Low Pressure RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-ACM4-TSF	3,350 (12.0)	99.00	98.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM-LP Fully Aromatic Polyamide Low Pressure Advanced Composite
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	85 ft ² (7.9 m ²)
Recommended Applied Pressure.....	40 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

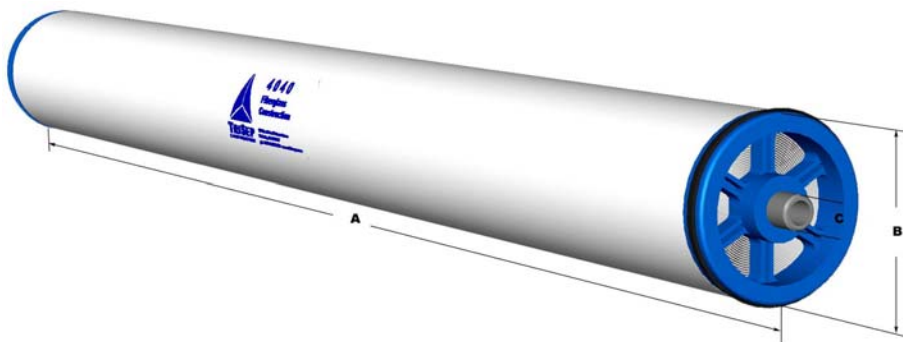
4" ACM-LP Low Pressure RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-ACM5-TWF	2,500 (9.0)	98.50	97.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 150.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM-LP Fully Aromatic Polyamide Low Pressure Advanced Composite
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	88 ft ² (8.2 m ²)
Recommended Applied Pressure.....	40 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

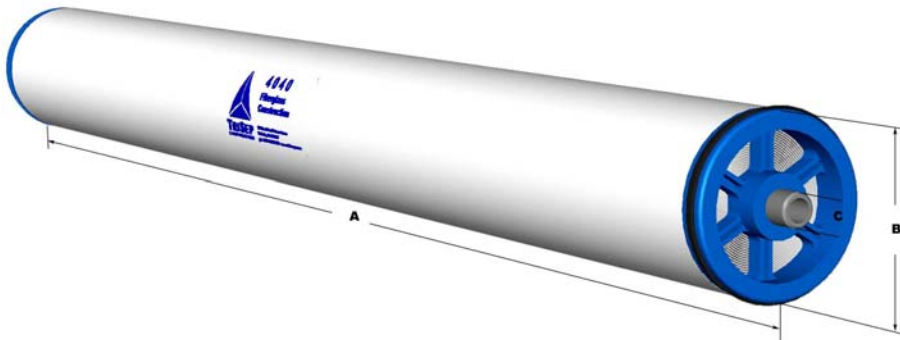
4" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-TS80-TSF	2,000 (7.0)	99.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	85 ft ² (7.9 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

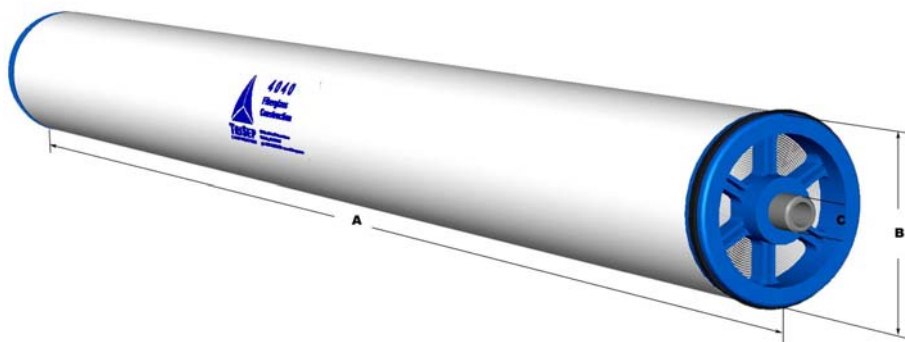
4" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-TS83-TSF	2,300 (8.0)	98.00	96.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	85 ft ² (7.9 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m ³ /hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

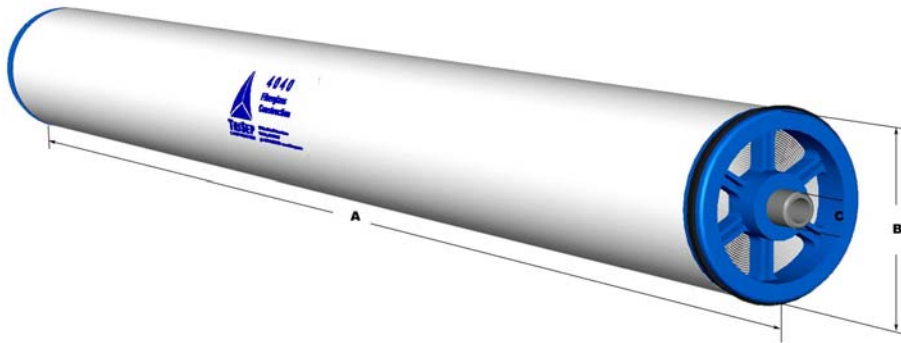
4" X-20 Low Fouling RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-X201-TSF	2,400 (9.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	X20 Fully Aromatic Polyamide-Urea Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap with FoulGuard Technology
Active Membrane Area.....	85 ft ² (7.9 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	2 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.75 (19.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM2-TSFA	9,700 (36.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.12 (28.6)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



PRODUCT SPECIFICATION

8" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM2-UWFA	10,700 (40.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	400 ft ² (37.2m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	4.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.12 (28.6)
 Units in pounds and inches, units in parenthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" ACM-LP Low Pressure RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-ACM4-TSFA	14,600 (55.0)	99.00	98.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM-LP Fully Aromatic Polyamide Low Pressure Advanced Composite
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	50 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.12 (28.6)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8" TS80 Nanofiltration Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-TS80-UWFA	10,000 (37.0)	99.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm MgSO₄, 110.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ANM Aromatic Polyamide Advanced Nanofiltration Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	400 ft ² (37.2 m ²)
Recommended Applied Pressure.....	40 - 200 psi (3 - 14 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	4.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.12 (28.6)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.028" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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PRODUCT SPECIFICATION

8" X-20 Low Fouling RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8040-X201-TSFA	9,700 (36.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	X20 Fully Aromatic Polyamide-Urea Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap with FoulGuard Technology
Active Membrane Area.....	365 ft ² (33.5 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	2 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 7.9 (200) Permeate Tube (C) : 1.12 (28.6)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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Competitive Element Replacement Guide GE/Osmonics Style Elements

GE/Osmonics Replacement Elements

TriSep Model Number	GE/Osmonics Model	Comments
4040-ACM2-TSOA	411-HR(PA)/411-HF(PA)	Same diameter and permeate tube
8340-ACM2-TSOA	811-HR(PA)/811-HF(PA)	Same diameter and permeate tube
8340-SB20-TSOA	811-HR	Same diameter and permeate tube



PRODUCT SPECIFICATION

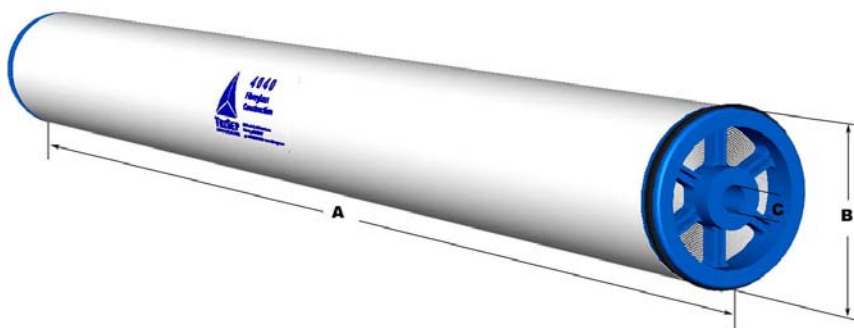
4" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
4040-ACM2-TSOA	2,450 (9.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	88 ft ² (8.1 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	20 GPM (4.5 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 15 (7)
 Length (A) : 40.0 (1,016) Diameter (B) : 4.0 (101) Permeate Tube (C) : 0.78 (19.8)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Osmo Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8.3" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8340-ACM2-TSOA	11,000 (41.0)	99.00	98.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	415 ft ² (38.1 m ²)
Recommended Applied Pressure.....	100 - 300 psi (7 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 8.3 (210) Permeate Tube (C) : 1.14 (29.0)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Osmo Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8.3" CA RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8340-SB20-TSOA	8,000 (30.0)	98.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 420.0 psi, 25°C, 15% recovery, pH 5.5, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	SB Cellulose Acetate Blend
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	415 ft ² (38.1 m ²)
Recommended Applied Pressure.....	200 - 500 psi (14 - 34 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	50 - 90°F (10 - 32°C)
Feedwater pH Range.....	5.5 nominal, 4 - 7
Chlorine Tolerance.....	0.5 ppm nominal, 1.0 ppm max
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 8.3 (210) Permeate Tube (C) : 1.14 (29.0)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Osmo Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
SOLUTIONS



Competitive Element Replacement Guide Hydranautics Style Elements

Hydranautics Replacement Elements

TriSep Model Number	Hydranautics Model	Comments
8540-ACM2-TSFA	8540-LSY-CPA2	Same diameter, different permeate tube
8540-ACM4-TSFA	8540-UHY-ESPA	Same diameter, different permeate tube
8540-SB20-TSA	8540-MSY-CAB2	Same diameter, different permeate tube
8540-SB50-TSA	8540-MSY-CAB1	Same diameter, different permeate tube
8540-TS80-TSFA		Same diameter, different permeate tube



PRODUCT SPECIFICATION

8.5" ACM RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8540-ACM2-TSFA	11,500 (43.0)	99.50	98.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM Fully Aromatic Polyamide Advanced Composite Membrane
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	440 ft ² (40.4 m ²)
Recommended Applied Pressure.....	50 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 8.5 (215) Permeate Tube (C) : 1.12 (28.6)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8.5" ACM-LP Low Pressure RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8540-ACM4-TSFA	17,500 (66.0)	99.00	98.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 225.0 psi, 25°C, 15% recovery, pH 8.0, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	ACM-LP Fully Aromatic Polyamide Low Pressure Advanced Composite
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	440 ft ² (40.4 m ²)
Recommended Applied Pressure.....	50 - 300 psi (3 - 21 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	35 - 113°F (2 - 45°C)
Feedwater pH Range.....	2 - 11 continuous
Chlorine Tolerance.....	<0.1 ppm
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 45 (20)
 Length (A) : 40.0 (1,016) Diameter (B) : 8.5 (215) Permeate Tube (C) : 1.12 (28.6)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: Filmtec Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8.5" CA RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8540-SB20-TSA	8,400 (31.0)	98.00	97.00

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 420.0 psi, 25°C, 15% recovery, pH 5.5, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	SB Cellulose Acetate Blend
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	440 ft ² (40.4 m ²)
Recommended Applied Pressure.....	200 - 500 psi (14 - 34 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	50 - 90°F (10 - 32°C)
Feedwater pH Range.....	5.5 nominal, 4 - 7
Chlorine Tolerance.....	0.5 ppm nominal, 1.0 ppm max
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 8.5 (215) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



Engineered Membrane
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PRODUCT SPECIFICATION

8.5" CA RO Element Series

Model	Permeate flow GPD (m3/day)*	Average Salt Rejection (%)	Minimum Salt Rejection (%)
8540-SB50-TSA	10,000 (37.0)	95.00	92.50

Performance is based on the following test conditions: 2,000.0 ppm NaCl, 420.0 psi, 25°C, 15% recovery, pH 5.5, 30 minutes operation.

OPERATIONAL AND DESIGN DATA

Membrane Type.....	SB Cellulose Acetate Blend
Configuration.....	Spiral Wound, Fiberglass Outer Wrap
Active Membrane Area.....	440 ft ² (40.4 m ²)
Recommended Applied Pressure.....	200 - 500 psi (14 - 34 bar)
Maximum Applied Pressure.....	600 psi (41 bar)
Recommended Operating Temperature.....	50 - 90°F (10 - 32°C)
Feedwater pH Range.....	5.5 nominal, 4 - 7
Chlorine Tolerance.....	0.5 ppm nominal, 1.0 ppm max
Maximum Feed Flow.....	80 GPM (18 m3/hr)
Minimum Brine Flow/Permeate Flow Ratio....	5:1
Maximum SDI (15 minutes)	5.0
Maximum Turbidity.....	1 NTU



Element Weight : 50 (23)
 Length (A) : 40.0 (1,016) Diameter (B) : 8.5 (215) Permeate Tube (C) : 1.50 (38.1)
 Units in pounds and inches, units in paranthesis in kilograms and millimetres.
 Mechanical Configuration: TriSep Style Core Tube
 Feed Spacer: 0.031" thick diamond spacer

* Permeate flow is clean water flux at standard conditions above. Not applicable for all feedwater conditions. Individual element's permeate flow may vary +/- 15%.



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