



TRISEP® ACM3

Low Energy

Brackish Water RO Elements

The TRISEP® ACM series of brackish water RO membranes are versatile enough to be used in a wide variety of water purification and process applications. ACM3 membrane elements offer high solute rejection at moderately lower pressure in a number of strong and durable spiral-wound element designs.

MEMBRANE CHARACTERISTICS

| | |
|--------------------------------------|-----------|
| Membrane | ACM3 |
| Membrane Type | Polyamide |
| Stabilized Salt Rejection (%) | 99.3 |
| Minimum Salt Rejection (%) | 98.8 |

DESIGN INFORMATION

| Model | Part Number | Permeate Flow m³/day (GPD)^a | Membrane Area m² (ft²) | Feed Spacer Thickness (mil)^b |
|------------------------------|--------------------|--|---|--|
| TRISEP® 8040-ACM3-TSA | 164030841 | 41.6 (11,000) | 33.9 (365) | 34 |

a Test conditions: 2,000 ppm NaCl, 15.5 bar (225 psi), 25°C (77°F), 15% recovery, pH 8.0, 30 minutes operation. Flow rates will be no more than 15% below the values shown. Product specifications may change without notice as design revisions occur.

b This model has a fiberglass outer wrap and diamond shaped feed spacers. This model includes anti-telescoping devices (ATDs) attached to the ends of the element, one brine seal, and one interconnector.

OPERATING PARAMETERS

| | |
|---------------------------------------|--|
| Maximum Operating Pressure | 41 bar (600 psi) |
| Maximum Operating Temperature | 45°C (113°F) |
| Cleaning pH Range¹ | 1.0 - 12.0 |
| Chlorine Tolerance² | < 0.1 ppm |
| Maximum Pressure Drop | 1 bar (15 psi) per element; 4 bar (60 psi) per housing |
| Maximum SDI₁₅ | 5.0 |
| Maximum Turbidity | 1 NTU |

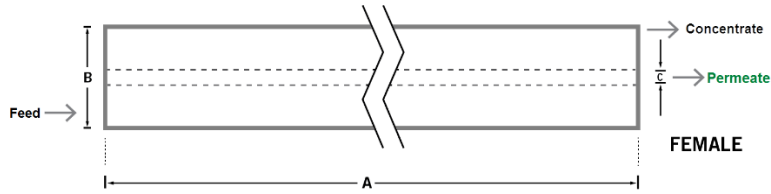
¹ Refer to temperature and pH limits in Membrane Cleaning Guide - Water Application Elements (TSG-C-001).

² Pretreatment is recommended for the removal of free chlorine and other oxidizing agents to prevent damage to membranes. Oxidizing agents, such as free chlorine, in contact with polyamide membranes may result in shortened operating life or membrane failure. Such oxidation damage is excluded from warranty. Refer to Membrane Operating Guide - Recommendations for Water Purification (TSG-O-012).

PHYSICAL DIMENSIONS

| Model | Element Weight kg (lb) ^c | Dim. A mm (inches) | Dim. B mm (inches) | Dim. C ^d mm (inches) | Permeate Tube |
|-----------------------|--|-----------------------|-----------------------|------------------------------------|---------------|
| TRISEP® 8040-ACM3-TSA | 16 (36) | 1,016 (40.0) | 201 (7.9) | 38.1 (1.50) | Female |

^c Shipping weight is dependent on packaging material and quantity shipped.
^d Dimension "C" is the Inner Diameter.



IMPORTANT INFORMATION

- Start-up:** MANN+HUMMEL Water & Fluid Solutions recommends flushing elements for 30 minutes at low pressure and discarding permeate during the flush prior to operation. For a more detailed start-up procedure, please see Element Start-Up Guide – System Start-Up (TSG-O-005).
- Cleaning:** TRISEP® membrane elements must be cleaned periodically to ensure proper operation and to prevent membrane damage. Please see Membrane Cleaning Guide – Water Application Elements (TSG-C-001).
- Storage:** TRISEP membrane elements must be stored appropriately to ensure proper operation and to prevent membrane damage. Please see Element Storage Guides (TSG-O-009 & TSG-O-010).

CUSTOMIZABLE SPECIALTY ELEMENTS

MANN+HUMMEL Water & Fluid Solutions offers a full range of membranes and element designs for challenging water and process applications. Technologies include low-fouling RO, submerged UF, continuous high temperature, ultra-high pressure, unique sanitary designs and more. Contact us to customize a product that satisfies your specific requirements.

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