

Aquaporin Inside[®] Membranes

Tap Water Reverse Osmosis Elements



- ✓ Manufactured using nature's water channels
- ✓ Recommended for residential and commercial tap water treatment
- ✓ Shipped dry for long shelf lifetime
- ✓ Available in standard size configurations

Product type

Aquaporin Inside[®] TWRO membrane is produced with aquaporin proteins, Nature's own water filter. It is the aquaporin protein that provides Aquaporin Inside[®] membranes with its unique properties.

Polymer: Polyamide-TFC



This membrane element is Tested and Certified by NSF International against NSF/ANSI Standard 58 for material requirements only.

COMPONENT

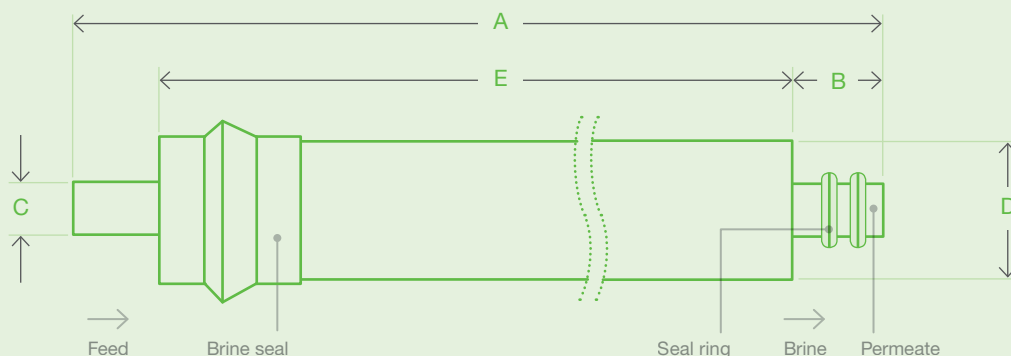
Product specifications

Product name	Permeate flow rate		NaCl rejection		Applied pressure (psi)	Recovery (%)
	GPD	L/h	Minimum (%)	Stabilized (%)		
TWRO1812-175	175	28	92	96	60	15
TWRO3012-600	600	95	90	96	80	40

The stated product performances are based on 250 ppm NaCl solution at 25°C / 77°F. Minimum salt rejection is measured after 30 min and stabilized salt rejection is measured after 24 hours. Individual element permeate flow rate may vary ±15%.

TWRO Residential/Commercial

Element dimensions



Dimensions (inches / millimeters)

Product name	A	B	C	D	E
TWRO1812-175	11.73 / 298.0	0.87 / 22.0	0.67 / 17.0	1.87 / 47.5	10.0 / 254.0
TWRO3012-600	11.73 / 298.0	0.87 / 22.0	0.67 / 17.0	2.91 / 74.0	10.0 / 254.0

Aquaporin A/S reserves the right to change specifications without prior notice.

TWRO1812-175 elements fit standard 1812 pressure vessels with nominal 52 mm (2.05 inches) inner diameter.

TWRO3012-600 elements fit standard 3012 pressure vessels with nominal 80 mm (3.15 inches) inner diameter.

Operating specifications

Product name	Maximum operating pressure	Maximum feed flow rate	Maximum operating temperature	Maximum pressure drop	Maximum feed water SDI	Maximum feed water turbidity	pH range	Free chlorine tolerance
TWRO1812-175	125 psi (8.6 bar)	1.6 gpm (6 lpm)	45°C (113°F)	10 psi (0.7 bar)	5	1 NTU	3-10	< 0.1 ppm
TWRO3012-600	145 psi (10 bar)	2.5 gpm (9.5 lpm)						

Additional information

- ✓ Permeate from the first hour of operation should be discarded.
- ✓ 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.
- ✓ Keep elements moist at all times after initial wetting.
- ✓ To prevent biological growth during prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution. Rinse out the preservative solution before use. See Aquaporin's storage recommendations for TWRO elements for more details.
- ✓ The presence of free chlorine and other oxidizing agents can cause premature membrane failure. Since oxidation damage is not covered under warranty, Aquaporin A/S recommends removing residual free chlorine by pretreatment prior to membrane exposure.
- ✓ The information provided in this document is for informative purposes only. It is the responsibility of the user to ensure appropriate usage of this product. Aquaporin A/S assumes no obligation, liability, or damages incurred for the misuse of the product or for the information provided in this document. This document does not express or implies any warranty as to the merchantability or fitness of the products.

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