

# Aquaporin Inside<sup>®</sup> Membranes

Tap Water Reverse Osmosis Element



- ✓ Revolutionary high water flow for most efficient water treatment
- ✓ Enables water treatment with low energy consumption
- ✓ High rejection of harmful pollutants ensures safe and healthy drinking water
- ✓ Manufactured using Nature's water channels

## Product type

The Aquaporin Inside<sup>®</sup> Tap Water Reverse Osmosis (TWRO) membrane element is produced with aquaporin proteins, Nature's own water filter. It is the aquaporin protein that provides Aquaporin Inside<sup>®</sup> membranes with its unique properties.

All Aquaporin Inside<sup>®</sup> TWRO membranes are available in standard configurations and can easily fit into any point-of-use residential or commercial RO system.



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

**COMPONENT**

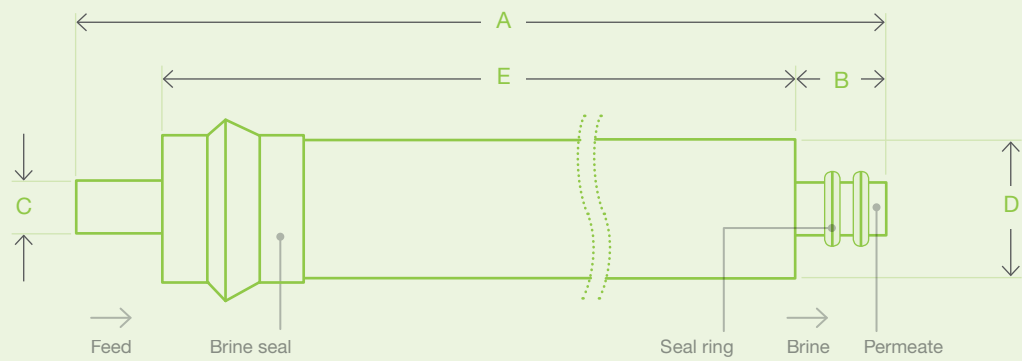
## Product specifications

Product name	Permeate flow rate		Minimum salt rejection (%)	Stabilized salt rejection (%)	Applied pressure (psi)	Recovery (%)
	GPD	L/h				
TWRO1812-175	175	28	92	96	60	15

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

## TWRO1812-175

### Element dimensions



Product name	Dimensions (inches / millimeters)				
	A	B	C	D	E
TWRO1812-175	11.73 / 298.0	0.87 / 22.0	0.67 / 17.0	1.87 / 47.5	10.07 / 256.0

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.

### Operating specifications

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

### Additional information

- ✓ Permeate from the first hour of operation should be discarded.
- ✓ 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.
- ✓ 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.
- ✓ 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 imply any warranty as to the merchantability or fitness of the products.

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