

# Aquaporin Inside® DWRO™ 3012-500

Drinking Water Reverse Osmosis



**Revolutionary high water flow for efficient water treatment**



**High rejection of harmful pollutants ensures safe and healthy drinking water**



**Biomimetic product incorporating nature's water channels**

## PRODUCT TYPE

The Aquaporin Inside® Drinking Water Reverse Osmosis (DWRO™) membrane elements are biomimetic products that get their unique properties from their embedded aquaporin proteins, nature's water channels.

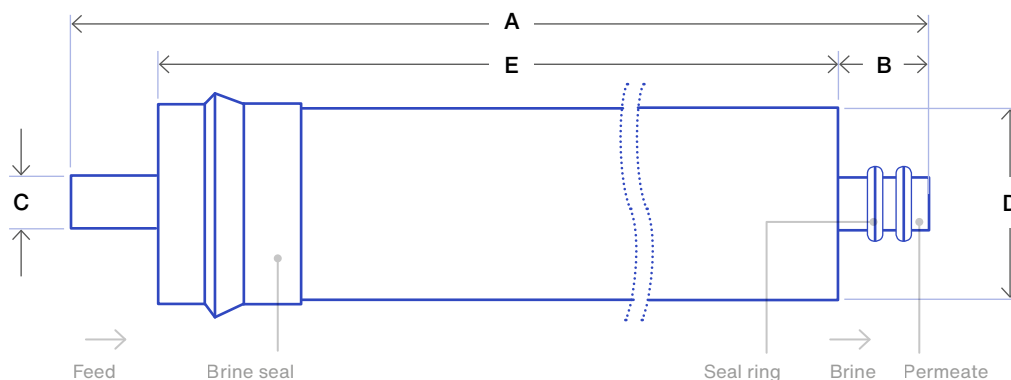
The Aquaporin Inside® DWRO™ membranes are available in standard configurations and can easily fit into any conventional point-of-use residential or commercial RO system.

## PRODUCT SPECIFICATIONS

Product name	Item no.	Permeate flow rate	Minimum NaCl rejection	Typical NaCl rejection	Applied pressure	Recovery
Aquaporin Inside® DWRO™ 3012-500	40056	500 GPD 79 L/h	95 %	97 %	80 psi	40 %

The stated product performances are based on 250 ppm NaCl solution at 25°C / 77°F. Permeate flow rate and typical rejection are stated after 24 hours of stabilization. Individual element permeate flow rate may vary ±15%.

**ELEMENT DIMENSIONS**



Dimensions (inches / millimeters)

Product name	A	B	C	D	E
Aquaporin Inside® DWRO™ 3012-500	11.73 / 298.0	0.87 / 22.0	0.67 / 17.0	2.91 / 74.0	9.25 / 235

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

DWRO™ 3012-500 elements fit standard 3012 pressure vessels with nominal 80 mm (3.15 inches) inner diameter.

**OPERATING SPECIFICATIONS**

Maximum operating pressure	145 psi (10 bar)	Maximum feed water turbidity	1 NTU
Maximum operating temperature	45°C (113°F)	Operating pH range	3-10
Maximum feed flow rate	2.5 gpm (570 L/h)	Cleaning pH range	2 - 11 (25°C)
Maximum feed water SDI	5 (15 min)	Free chlorine tolerance	< 0.1 ppm

**ADDITIONAL INFORMATION**

- ✓ Permeate from the first hour of operation should be discarded. Do not use this initial permeate for drinking or food preparation
- ✓ 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.
- ✓ 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.
- ✓ Surface and color variations may occur on the flat sheet membrane but will not affect the performance.
- ✓ 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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**Aquaporin Inside®**