

# Aquaporin Inside® DWRO® 1812

Drinking Water Reverse Osmosis Elements



**Best-in-class  
permeate flow rate**



**European compliance  
standards**



**Great rejection to  
harmful contaminants**



**Unique biomimetic  
product**

## 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.

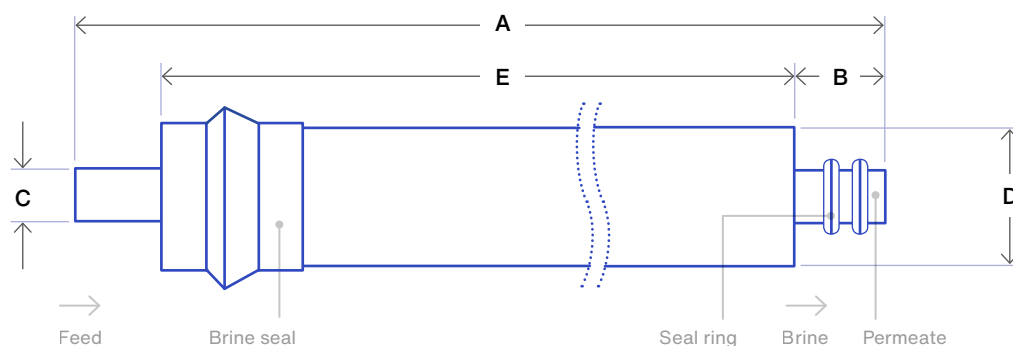
The Aquaporin Inside® DWRO® residential elements are available in standard configurations and can easily fit into any conventional point-of-use household or commercial RO systems.

## PRODUCT SPECIFICATIONS

Product name	Product performance			Test conditions	
	Permeate flow rate	Typical salt rejection	Minimum salt rejection	Applied pressure	Recovery
Aquaporin Inside® DWRO® HR 1812-75	75 GPD (11.8 L/h)	99.2%	98.0%	60 psi (4.1 bar)	15%
Aquaporin Inside® DWRO® HR 1812-100	100 GPD (15.8 L/h)	99.2%	98.0%	60 psi (4.1 bar)	15%
Aquaporin Inside® DWRO® 1812-150	150 GPD (23.7 L/h)	99.0%	97.5%	60 psi (4.1 bar)	15%
Aquaporin Inside® DWRO® 1812-175	175 GPD (27.6 L/h)	98.0%	96.5%	60 psi (4.1 bar)	15%
Aquaporin Inside® DWRO® 1812-200	200 GPD (31.5 L/h)	97.0%	95.0%	60 psi (4.1 bar)	15%
Aquaporin Inside® DWRO® 1812-225	225 GPD (35.5 L/h)	97.0%	95.0%	60 psi (4.1 bar)	15%

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% / +20%.

## ELEMENT DIMENSIONS



Product name	Dimensions (inches / millimeters)				
	A	B	C	D	E
Aquaporin Inside® DWRO® 1812-75	11.73 / 298	0.87 / 22	0.67 / 17	1.73 / 44.0	9.25 / 235
Aquaporin Inside® DWRO® 1812-225	11.73 / 298	0.87 / 22	0.67 / 17	1.87 / 47.5	10.24 / 260
All other Aquaporin Inside® DWRO® 1812	11.73 / 298	0.87 / 22	0.67 / 17	1.87 / 47.5	9.25 / 235

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

DWRO® 1812 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 turbidity	1 NTU
Maximum operating temperature	45°C (113°F)	Operating pH range	3–10
Maximum feed flow rate	2.0 gpm (450 L/h)	Cleaning pH range	2–11 (25°C / 77°F)
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 (5–35°C / 41–95°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.
- For more detailed information, please refer to Aquaporin's "Limited Warranty for Aquaporin Inside® Reverse Osmosis Membrane Elements (CLEAR and DWRO®)".

**REGULATORY NOTE:** This product may be subject to drinking water application restrictions in some countries; please check the application status before use and sale.

**DISCLAIMER:** As Aquaporin A/S cannot control or anticipate the conditions under which these products may be used, each user should review the information in specific context of the planned use. To the maximum extent permitted by law, Aquaporin A/S makes no warranty of any kind with regard to the material contained within this datasheet, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Aquaporin A/S shall not be liable nor responsible for direct, special, incidental, consequential, punitive or indirect losses or damages in connection with the furnishing, performance or use of this material. Aquaporin A/S cannot be held responsible for any technical or typographical errors or omissions and reserves the right to make changes to the products and datasheet without prior notice.

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**Aquaporin Inside®**