

FRP-SERIES MEMBRANE HOUSINGS

AXEON® FRP-Series Membrane Housings are for continuous long-term use for reverse osmosis, nanofiltration and ultrafiltration elements, which are used on typical commercial water treatment systems at pressures up to 300 psi. They feature end and side entry connections and the True-Lock™ Integrated Locking System, and demonstrate a higher resistance to various climate conditions, feedwater conditions and chemicals.

AXEON 2.5" diameter membrane housings are available in 14", 21" and 40" lengths, and 4.0" diameter membrane housings are offered in 14", 21", 40", and 80" lengths. AXEON 8.0" diameter membrane housings are offered in 40", 80" and 120" lengths.



FEATURES

- Fiberglass Construction
- End (E) and Side (S) Entry Connections
- Single Piece ABS End Plugs
- True-Lock™ Integrated Locking System
- High Resistance to Chemicals, such as High Levels of Chlorides and Climate Conditions
- Easy Removable End Plug for Ease of Installation and Maintenance
- Accommodates All Standard Size Membrane Elements
- Adapters, Interconnectors and Mounting Clamps Available

OPERATING LIMITS

- Maximum Operating Pressure (psi / bar): 300 / 21
- Minimum Operating Temperature (°F / °C): 35 / 2
- Maximum Operating Temperature (°F / °C): 150 / 66

INTENDED USE

- Membrane housings must be installed, operated and maintained in accordance with the listed precautions and good industrial practice to assure safe operation over a long service life.
- The end closure, which incorporates close-fitting, interlocking metal components, must be kept dry and free of corrosion; deterioration can lead to catastrophic mechanical failure of the head assembly.

CAUTION

- Eye protection should be worn when removing or installing retaining rings. Keep fingers clear from retaining ring while installing last of two turns. Ring may snap into position, possibly pinching fingers.
- Incorrect installation, operation and maintenance of these vessels may cause loss of life, severe bodily injury, and/or property damage.

2.5" Series								
Part Number	Model Number	Maximum Pressure (psi)	Number of Membranes	Membrane Diameter (in / mm)	Membrane Length (in / mm)	Feed FNPT (in)	Permeate FNPT (in)	Concentrate FNPT (in)
208421	FRP-2514-300E	300	1	2.50 / 63.50	14.00 / 355.6	.25	.25	.25
208417	FRP-2521-300E	300	1	2.50 / 63.50	21.00 / 533.4	.25	.25	.25
208418	FRP-2540-300E	300	1	2.50 / 63.50	40.00 / 1016	.25	.25	.25

4" Series								
Part Number	Model Number	Maximum Pressure (psi)	Number of Membranes	Membrane Diameter (in / mm)	Membrane Length (in / mm)	Feed FNPT (in)	Permeate FNPT (in)	Concentrate FNPT (in)
208416	FRP-4021-300E	300	1	4.00 / 101.60	21.00 / 533.4	.50	.50	.50
208419	FRP-4040-300E	300	1	4.00 / 101.60	40.00 / 1016	.75	.50	.75
208420	FRP-4080-300E	300	2	4.00 / 101.60	40.00 / 1016	.75	.50	.75

8" Series								
Part Number	Model Number	Maximum Pressure (psi)	Number of Membranes	Membrane Diameter (in / mm)	Membrane Length (in / mm)	Feed FNPT (in)	Permeate FNPT (in)	Concentrate FNPT (in)
211546	FRP-8040-300S	300	1	8.00 / 203.2	40.00 / 1016	1.5	1.00	1.5
210615	FRP-8080-300S	300	2	8.00 / 203.2	40.00 / 1016	1.5	1.25	1.5
210616	FRP-80120-300S	300	4	8.00 / 203.2	40.00 / 1016	1.5	1.25	1.5

Note: Available up to 6 elements - please inquire.

PRECAUTIONS

DO:

- + Read, understand and follow all instructions; failure to take every precaution will void warranty and may result in vessel failure, serious injury or death.
- + Inspect end closures regularly; replace components that have deteriorated and correct causes of corrosion.
- + Provide overpressure protection for vessel set at no more than 105% of design pressure.
- + Mount shell on horizontal or vertical members at central span "S" using compliant vessel supports; tighten hold-down straps until snug.

DO NOT:

- Pressurize vessel until double checking to verify that the retaining rings and locking plates are in place.
- Work on any component until first verifying that pressure is relieved from vessel.
- Tolerate leaks or allow end closures to be routinely wetted in any way
- Operate vessel with permeate pressure in excess of 125 psi at 120 °F (0.86 MPa at 49 °C).
- Make rigid piping connections to parts or clamp vessel in any way that restricts growth of fiberglass shell under pressure; DIA = 0.01 in. (0.25 mm) and L = 0.3 in. (.8 mm) for a length code -1 vessel.
- Hang piping manifolds from parts or use vessel in any way to support other components.
- Operate at pH levels below 3 or above 11.
- Operate vessel at pressures and temperatures in excess of its rating.