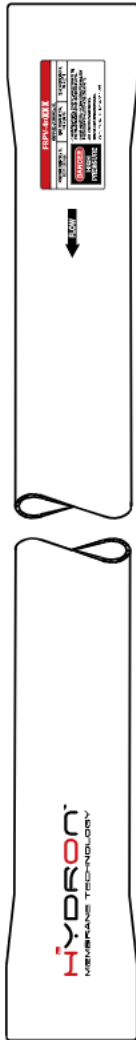




## FRPV-40 - DATA SHEET

### HYDRON 4" FRPV MEMBRANE HOUSING



FRPV-40  
OUTER DIAMETER

BODY:  $\varnothing 4.25" + 0.07"$   
(108 mm + 2 mm)

HEAD:  $\varnothing 4.80" + 0.07"$   
(122 mm + 2 mm)



**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.



**HYDRON 4" FRPV Series Membrane Housings** are durable composite reinforced membrane vessels designed for use in commercial and industrial Reverse Osmosis systems. FRPV vessels are coated with high gloss polyurethane paint to provide resistance to UV rays and other elements.

**HYDRON 4" FRPV Series Membrane Housings** can accommodate any standard 40" membrane element, have a compact design and offer a reliable head seal area. Hydron FRPV membrane housings are made to meet the demands of long term and continuous use.

- **High Gloss Polyurethane Exterior Coating for resistance to UV rays and other elements.**
- **Compact design for commercial and industrial reverse osmosis and ultrafiltration applications.**
- **Accommodates all standard 4"x40" membrane elements.**
- **Manufactured to meet the demands of long term and continuous use.**
- **Locking plate with allen head bolts for easy maintenance and safety.**

#### INTENDED USE

The model FRPV-4030E Fiberglass RO/UF Pressure Vessel is designed for continuous, long-term use as a housing for single reverse osmosis and ultrafiltration elements in typical commercial water treatment systems at pressures up to 300 psi.

Any make of 4"x40" nominal diameter spiral-wound element is easily accommodated.

The model FRPV-4030E 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 high performance reinforced plastic shell must be allowed to expand under pressure; undue restraint at support points or piping connections can cause leaks to develop in the shell.

The end closure, incorporating close-fitting, interlocking metal components, must be kept dry and free of corrosion; deterioration can lead to catastrophic mechanical failure of the head assembly.

*\*Specifications subject to change without notice.*

#### 4" FRPV Membrane Housing Specifications

Elements	Part Number	Maximum Operating Pressure	Maximum Operating Temperature	Minimum Operating Temperature	Inlet Port	Permeate Port
1	FRPV-4030E	300 psi (21 bar)	150° F (66° C)	14° F (-10° C)	3/4"	1/2"
2	FRPV-403080E	300 psi (21 bar)	150° F (66° C)	14° F (-10° C)	3/4"	1/2"
3	FRPV-4012030E	300 psi (21 bar)	150° F (66° C)	14° F (-10° C)	3/4"	1/2"

#### PRECAUTIONS

DO... read, understand and follow all instructions; failure to take every precaution will void warranty and may result in vessel failure. DO... inspect end closures regularly; replace components that have deteriorated and correct causes of corrosion. DO... provide overpressure protection for vessel set at not more than 105% of design pressure. DO... mount shell on horizontal or vertical members at central span \*5" using compliant, vessel supports; tighten hold down straps just snug. DO NOT... pressurize vessel until double checking to verify that the retaining rings are in place. DO NOT... work on any component until first verifying that pressure is relieved from vessel. DO NOT... tolerate leaks or allow end closures to be routinely wetted in any way. DO NOT... operate vessel with permeate pressure in excess of 125 psi at 120 °F (0.86 MPa at 49 °C). DO NOT... make rigid piping connections to parts or clamp vessel in any way that restricts growth of fiberglass shell under pressure;  $\Delta$ DIA = 0.01 in. (0.25mm) and  $\Delta$ L = 0.3 in. (.8mm) for a length code -1 vessel. DO NOT... hang piping manifolds from parts or use vessel in any way to support other components. DO NOT ... operate at pH levels below 3 or above 11. DO NOT... operate vessel at pressures and temperatures in excess of its rating.

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