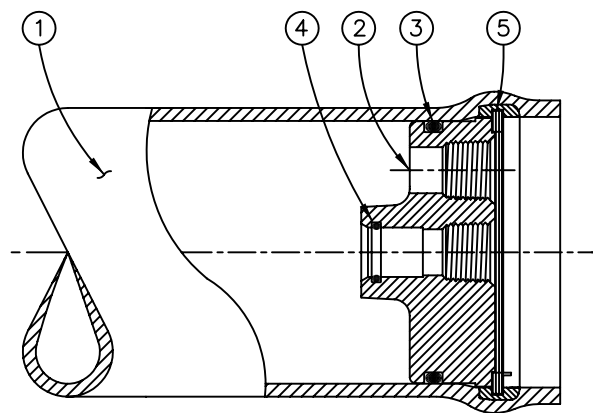


300  
PSI

RECOMMENDED SPAN BETWEEN SUPPORTS  
CENTER VESSELS ON 2 SUPPORTS AT SPAN "S"



SECTION THROUGH END CLOSURE

NOTES

- DIMENSIONS IN INCHES (MM APPROX)
- NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED
- PATENT APPLIED FOR

Dwg. Ref.	Qty. Per	Item Number	Description	Materials/Remarks
<b>SHELL</b>				
①	1		Shell	Filament wound epoxy/glass composite. Head locking grooves integrally wound in place. Shell exterior coated with blue high gloss polyurethane paint.
<b>HEAD</b>				
②	2	51675	End Plug	Engineering Thermoplastic
③	2	45317	Plug Seal	Ethylene Propylene - O-Ring
④	2	45296	Adapter Seal	Ethylene Propylene - O-Ring
<b>HEAD INTERLOCK</b>				
⑤	2	45260	Retaining Ring	316 SST
<b>VESSEL SUPPORT - OPTIONAL</b>				
⑥	2	45058	Saddle	Engineering Thermoplastic
⑦	2	47459	Strap Assembly	304 SST - PVC cushion
⑧	4	47458	Strap Screw	5/16-18 UNC, 18-8 Stainless Steel

Shell Length Code	L L.O.A. IN (MM)	S Span IN (MM)	APPROX. ASSEMBLY Weight LB (KG)
1	44 (1118)	28 X 1 (711)	9.00 (4.1)
2	84 (2134)	56 X 1 (1422)	16.0 (7.3)
3	124 (3150)	80 X 1 (2032)	23.0 (10.5)



**CodeLine™**  
Pentair Water

**MODEL 40E30N**  
LOW PRESSURE MEMBRANE HOUSING

DRW. AXA	ECN 730	SHEET 1 OF 2	SIZE B	NUMBER 518016	REV D
APPR. RM	DATE 11JUL05				

## RATING:

DESIGN PRESSURE.....300 PSI at 120°F  
(2.1 MPa at 49°C)

MIN. OPERATING TEMP.....20°F  
(-7°C)

FACTORY TEST PRESSURE.....450 PSI  
(3.1 MPa)

BURST PRESSURE.....1800 PSI  
(12.2 MPa)

## INTENDED USE

The Model 40E30N 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-inch nominal diameter spiral-wound element with a 3/4" diameter male product water tube is easily accommodated.

The Model 40E30N 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.

Pentair Water will assist the purchaser in determining the suitability of this standard vessel for their specific operating conditions. The final determination however, including evaluation of the standard materials of construction for compatibility with the specific corrosive environment, shall be the responsibility of the purchaser.

Specifications subject to change without notice.

## PRECAUTIONS

- DO... read, understand and follow all instructions; failure to take every precaution will void warranty and may result in vessel failure
- DO... mount shell on horizontal or vertical members at central span "S" using compliant vessel supports; tighten hold down straps just snug.
- DO... provide overpressure protection for vessel set at not more than 105% of design pressure
- DO... inspect end closures regularly; replace components that have deteriorated and correct causes of corrosion
- DO NOT... make rigid piping connections to ports or clamp vessel in any way that restricts growth of fiberglass shell under pressure; ▲DIA = 0.01 in. (0.25mm) and ▲L = .03 in. (.8mm) for a length code -1 vessel
- DO NOT... hang piping manifolds from ports or use vessel in any way to support other components
- DO NOT... operate vessel at pressures and temperatures in excess of its rating
- DO NOT... operate vessel without element installed.
- DO NOT... tolerate leaks or allow end closures to be routinely wetted in any way
- 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

For complete information on proper use of this vessel please refer to the 40E Series USER'S GUIDE, Bulletin 518014

### 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.

## ORDERING

Using the chart below, please check the features you require and fax them with your purchase order to our customer service department for expedited processing.

For optional materials and or feature not listed below, please consult the factory for pricing and availability.

Please note that we require your membrane brand and model number when ordering. If this information is not initially available, you may provide it at a later date by checking the appropriate box below

### VESSEL LENGTH CODE – please check one

MODEL 40E30N ☐-1 ☐-2 ☐-3

### EXTERIOR FINISH – please check one

☐ Standard – blue high-gloss polyurethane coating over sanded surface.

### CERTIFICATION – please check one

☐ Standard – certified by Pentair Water, not code stamped.

☐ Option – CE marked.

### MEMBRANE BRAND AND MODEL – please check one and fill in information

☐ Please supply adapters for the following membrane brand and specific model.

Brand \_\_\_\_\_ Model \_\_\_\_\_

☐ Membrane brand and model information is not currently available, but will be supplied to CodeLine on or before the following date. \_\_\_\_/\_\_\_\_/\_\_\_\_

### MATERIAL AND PORT CONFIGURATIONS– please check

Serial number end

Opposite end

☐

☐

#### END PLUG MATERIALS

Standard – Polyvinyl Chloride

☐

☐

#### PERMEATE PORT CONFIGURATION

Standard – 1/2" NPT Female

☐

☐

#### FEED PORT CONFIGURATION

Standard – 1/2" NPT Female

Serial number end

☐ ☐ ☐ ☐ ☐ ☐

Opposite end

☐ ☐ ☐ ☐ ☐ ☐