



WARNING ⚠
INTERNAL PORT PRESSURE
NOT TO EXCEED 125 PSI

SECTION THROUGH END CLOSURE

Dwg. Ref.	Qty. Per	Item Number	Description	Materials/Remarks
SHELL				
①	1		Shell	Filament wound epoxy/glass composite. Head locking grooves integrally wound in place. Shell exterior coated with blue high gloss polyurethane paint.
HEAD				
②	2	95927	End Plug Sub assembly	Engineering Thermoplastic
③	2	45317	Plug Seal	Ethylene Propylene - O-Ring
④	2	45296	Adapter Seal	Ethylene Propylene - O-Ring
HEAD INTERLOCK				
⑤	2	45260	Retaining Ring	316L Stainless Steel
VESSEL SUPPORT - OPTIONAL				
⑥	2	45058	Saddle	Engineering Thermoplastic
⑦	2	47459	Strap Assembly	304 Stainless Steel - PVC cushion
⑧	4	97821	Strap Screw	5/16-18 UNC, 18-8 Stainless Steel
FOR REFERENCE ONLY				

- NOTES**
- DIMENSIONS IN INCHES (MM APPROX)
 - NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED
 - SHELL EXTERIOR COATED WITH BLUE, HIGH GLOSS POLYURETHANE PAINT

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)

PENTAIR
CODELINE®

DRAWN DATE	AXA 11JUL05	MODEL - 40E30N			
CHECKED DATE	MD 11JUL05	LOW	PRESSURE	MEMBRANE	HOUSING
APPROVED DATE	RM 11JUL05	ECN 3614	DWG. NO. 518016	REV. K	
		DATE 22MAY15	SCALE NONE	SIZE B	SHEET 1 OF 2

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; Δ DIA = 0.01 in. (0.25mm) and Δ 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
- DO NOT... operate vessel with permeate pressure in excess of 125 psi at 120°F (0.86 MPa at 49°C)
- DO NOT... operate at pH levels below 3 or above 11

For complete information on proper use of this vessel please refer to the 40E Series USER'S GUIDE, Bulletin 526003

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.
- ☐ Optional – white high-gloss polyurethane coating.

CERTIFICATION – please check one

- ☐ Standard – certified by Pentair, not code stamped.
- ☐ CE Marked – (Not applicable for dash 1 vessel).

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. ____/____/____

Serial number end

☐

☐

☐

☐

☐

Opposite end

☐

☐

☐

☐

☐

END PLUG MATERIALS

Standard – Noryl

Optional – PVC

PERMEATE PORT CONFIGURATION

Standard – 1/2" NPT Female

FEED PORT CONFIGURATION

Standard – 3/4" NPT Female

Optional – 1/2" NPT Female (PVC)

Serial number end

☐ ☐ ☐ ☐ ☐ ☐

Opposite end

☐ ☐ ☐ ☐ ☐ ☐