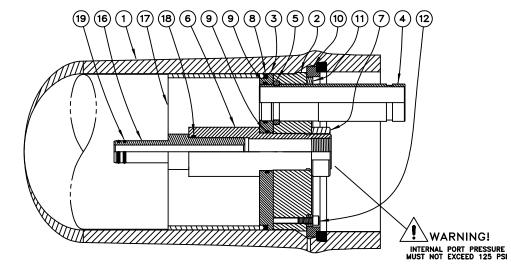


Dwg. Ref.	Qty. Per	Part Number	Part Name	Materials/Remarks
			SHELL	
1	1		Shell	Filament wound epoxy/glass composite— Head locking grooves integrally wound in-place
			HEAD	
2	2	50548	Bearing Plate	6061-T6 aluminum alloy-hard anodized
3	2	50550	Sealing Plate	PVC Thermoplastic
④	2	50556	Feed/Conc Port	Superaustenitic Stainless Steel - 6% Mo
3	2	45090	Port Retainer Set	304 Stainless Steel, Two-piece set
6	2	50558	Permeate Port	PVC Thermoplastic
23456789	2	45066	Port Nut	PVC Thermoplastic-left hand thread
(8)	2	45320	Head Seal	Ethylene Propylene, Quad Ring
<u> </u>	4	45312	Port Seal	Ethylene Propylene, O-Ring
			HEAD INTER	LOCK
10	6	45098	Locking Ring	316 Stainless Steel
(1) (1) (12)	2	50562	Securing Ring	Reinforced Plastic - Yellow Color
<u>(2</u>	6	45228	Securing Screws	316 Stainless Steel
			VESSEL SUF	PPORT
13	*2	52169	Saddle	Engineering Thermoplastic
14	*2	45042	Strap Assy	304 Stainless Steel - PVC cushion
13	4	46265	Strap Screw	5/16-18 UNC, 18-8 Stainless Steel
			ELEMENT INTI	ERFACE
16	2	As Required	Adapter	Engineering Thermoplastic
16 17 18 19	1	45069	Thrust Ring	Thermoplastic, White
18	2	45308	Adapter Seal	Ethylene Propylene - 0-Ring
19	4	As Required	PWT Seal	Ethylene Propylene - 0-Ring
	*3 e	ach furnishe	ed with length code	6, 7, 7.5 & 8.





Shell	L	S	Empty	
Length	L.O.A.	Span	Weight	
Code	IN (MM)	IN (MM)	LB (KG)	
1	65.0	34	115	
	(1651)	(864)	(52)	
2	105.0	56	155	
	(2667)	(1422)	(70)	
3	145.0	80	200	
	(3683)	(2032)	(91)	
4	185.0	104	240	
	(4699)	(2642)	(109)	
5	225.0	128	285	
	(5715)	(3251)	(129)	
6	265.0 (6731)	* 3 PTS.	325 (147)	
7	305.0 (7747)	* 3 PTS.	365 (166)	
7.5	325.0 (8255)	* 3 PTS.	385 (175)	
8	345.0 (8763)	* 3 PTS.	405 (184)	





SECTION THROUGH END CLOSURE

ITEM (17) DOWNSTREAM ONLY

NOTES:

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

			Penta	air Water		
ENGR AP 18NOV98		МО	DE	L E8S		
QLTY JK 19NOV98	MEMBRANE HOUSING					
MRKT DWE 19NOV98	ECN 1179	SHEET 1 OF 1	SIZE B	NUMBER 507001	REV R	

RATING:

DESIGN PRESSURE1000 PSI at 120°F (6.9 MPa at 49°C)
MIN. OPERATING TEMP20°F (-7°C)
FACTORY TEST PRESSURE1500 PSI (10.3 MPa)
BURST PRESSURE6000 PSI (41.4 MPa)

INTENDED USE

The Model E8S Fiberglass R0 Pressure Vessel is designed for continuous, long—term use as a housing for reverse osmosis membrane elements to desalt typical seawater at pressures up to 1000 psi. Any make of eight—inch nominal diameter spiral—wound element is easily accommodated; the appropriate interfacing hardware for the element specified is furnished with the vessel.

The model E8S is designed in accordance with the engineering standards of the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers (ASME Code). At small additional cost, vessels can be inspected during construction by an ASME Authorized Inspector and ASME Code stamped.

The Model E8S must be installed, operated and maintained in accordance with the precautions listed 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.

CodeLine Division, Structural North America 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 responsibilty of the purchaser. Alternate materials with enhanced corrosion resistance are available on special order.

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 with drain holes down on horizontal members at central span "S" using compliant vessel supports furnished; 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... keep Port Nut tight; turn counterclockwise to tighten left hand thread
- DO NOT... make rigid piping connections to ports or clamp vessel in any way that restricts growth of fiberglass shell under pressure; ▲DIA = 0.02 in. (0.5mm) and ▲L = 0.3 in. (8mm) for a length code -6 vessel
- DO NOT... hang piping manifolds from ports or use vessel in any way to support other components; branch connection piping may be simply supported between the header and port; maximum weight of branch piping; feed/concentrate 16 lbs (7 kg); permeate 8 lbs (4 kg)
- DO NOT... operate vessel at pressures and temperatures in excess of its rating
- DO NOT... operate vessel without permeate ports internally connected with a complete set of elements and and interconnecting hardware
- DO NOT... operate vessel with permeate pressure in excess of 125 psi at 120°F (0.9 MPa at 49°C)
- DO NOT... overtighten the connection to the permeate port (hand-tighten plus one-quarter turn, check for leaks.)
- 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 all three segments of Locking Ring Set are in place, and that the Securing Ring is fully seated and secured by all three Securing Screws
- 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 E8 Series USER'S GUIDE, Bulletin 507011B

ORDERING

Please specify the following:

- VESSEL MODEL NUMBER built from table of options below
- MEMBRANE FLEMENT MODEL NUMBER
- SPECIFIC CONCERNS regarding INTENDED USE and requests for SPECIAL MATERIALS of CONSTRUCTION

A vessel model number specifies a complete assembly less element interface components. The required interface components are furnished with the vessel but are specified separately.

Membrane elements and between-element connectors (interconnectors) are furnished by membrane element manufacturer.

