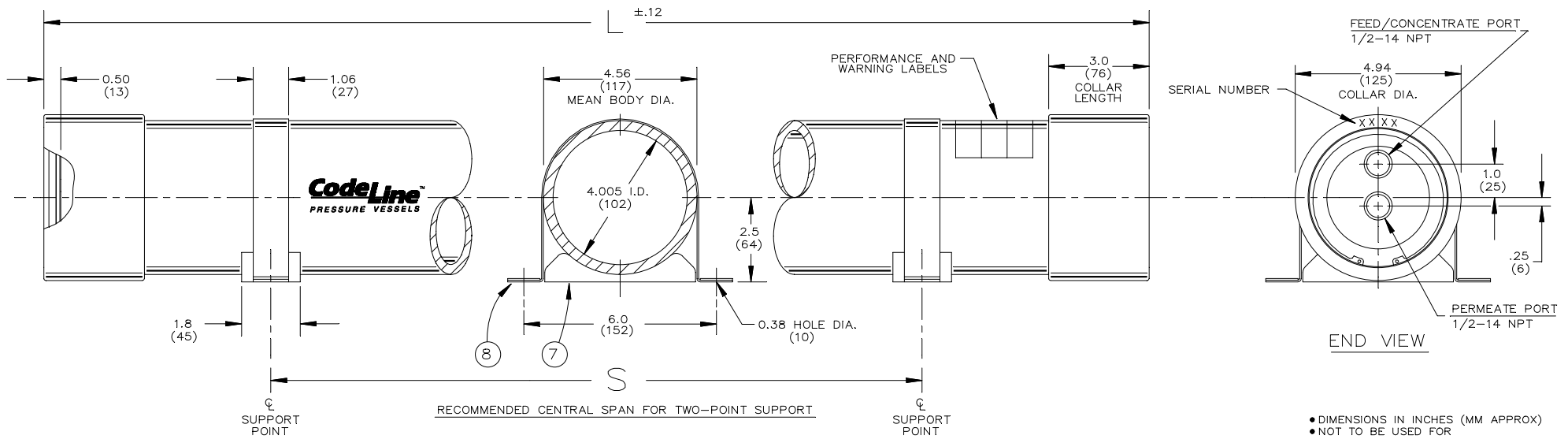


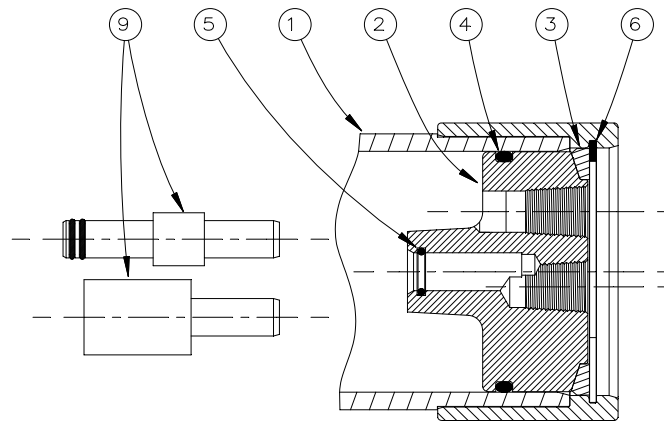
600
PSI



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

Shell Length Code	L L.O.A. IN (MM)	S Span IN (MM)	Empty Weight LB (KG)
1	49.0 (1245)	Any	22 (10)
2	89.0 (2261)	Any	34 (15)
3	129.0 (3277)	76 (1930)	46 (21)
4	169.0 (4293)	99 (2515)	58 (26)
5	209.0 (5309)	123 (3124)	70 (32)
6	249.0 (6325)	146 (3708)	82 (37)

**STRUCTURAL
GROUP**



SECTION THROUGH END CLOSURE

Dwg. Ref.	Qty. Per	Item Number	Description	Materials/Remarks
SHELL				
①	1		Shell	Filament wound epoxy/glass composite—with retainer groove formed by adhesive-bonded 6061-T6 hd. anod. Al. alloy collar
END PLUG				
②	2	50416	Plug	Engineering Thermoplastic
③	2	50439	Bearing Ring	Nickel-plated alloy steel
④	2	45317	Plug Seal	Ethylene Propylene O-Ring
⑤	2	45294	Adapter Seal	Ethylene Propylene O-Ring
END PLUG INTERLOCK				
⑥	2	45246	Retaining Ring	PH15-7Mo SST
VESSEL SUPPORT				
⑦	2	45058	Saddle	Cast urethane elastomer
⑧	2	50326	Strap	Type 304 SST - PVC cushion
ELEMENT INTERFACE				
⑨	2	AS REQ.	Adapter	Engineering Thermoplastic
FOR REFERENCE ONLY				

ENGR TEG 14JUN99	CODELINE MODEL 4B				
QLTY RAP 21JUN99	BRACKISH RO PRESSURE VESSEL				
MRKT DWE 17JUN99	ECO 89767	SHEET 1 OF 1	SIZE B	NUMBER 501003	REV H

RATING:

DESIGN PRESSURE..... 600 PSI at 120°F
 (4.1 MPa at 49°C)
 MIN. OPERATING TEMP..... 20°F
 (-7°C)
 FACTORY TEST PRESSURE..... 900 PSI
 (6.2 MPa)
 BURST PRESSURE..... 3600 PSI
 (24.8 MPa)

INTENDED USE

The CodeLine Model 4B Brackish RO Pressure Vessel is designed for continuous, long-term use as a housing for reverse osmosis membrane elements to desalt typical brackish waters at pressures up to 600 psi. Any make of 4-inch nominal diameter spiral-wound element is easily accommodated; the appropriate interfacing hardware for the element specified is furnished with the vessel.

The CodeLine Model 4B 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 end plug.

Structural Group 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. 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 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 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 = 0.2 in. (5mm) for a length code -6 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 permeate ports internally connected with a complete set of elements and interconnecting hardware
- 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

NOTE

Retaining ring pliers (IMM001-3) required to open and close vessel.

CAUTION:
 EYE PROTECTION SHOULD BE WORN WHEN REMOVING OR INSTALLING RETAINING RINGS

ORDERING

Please specify the following:

- VESSEL MODEL NUMBER built from table of options below
- MEMBRANE ELEMENT MAKE AND 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.

