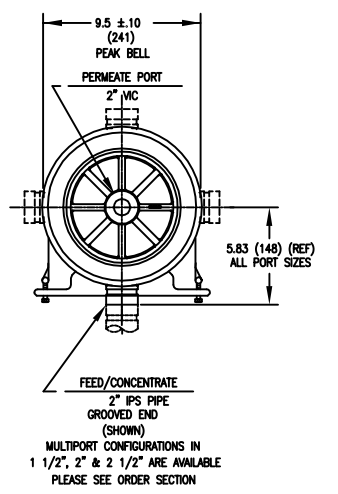
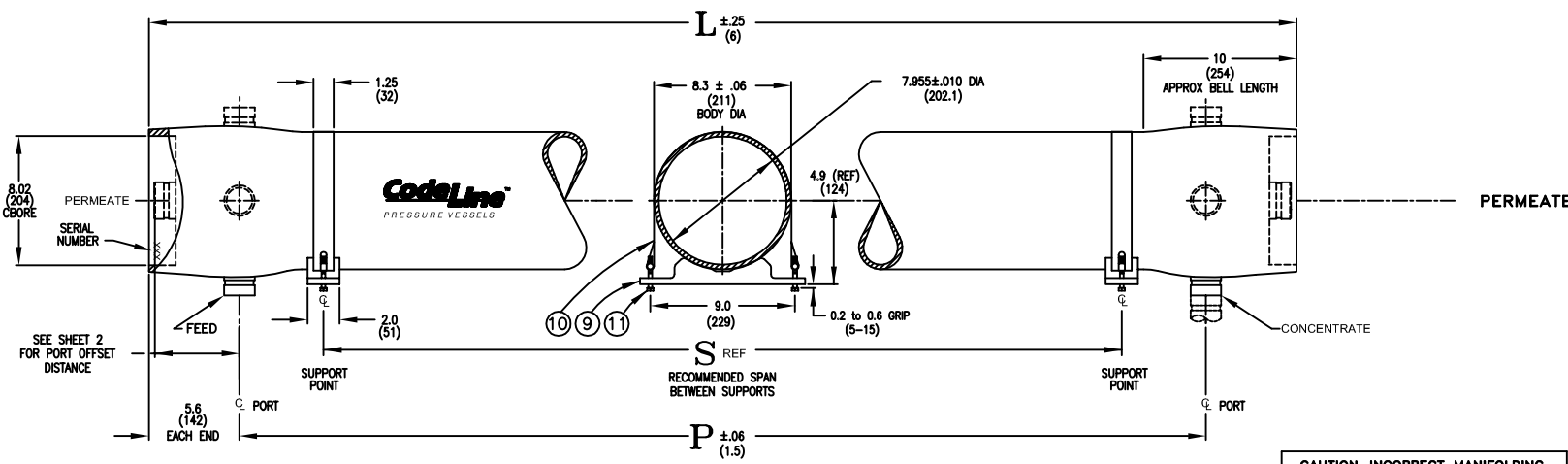


75
PSI

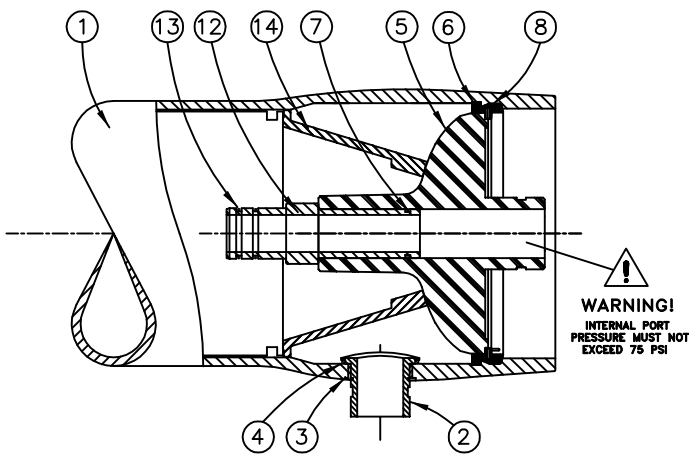


CAUTION—INCORRECT MANIFOLDING WILL CAUSE SEVERE LOCAL STRESS AROUND PORT AND MAY RESULT IN LEAKS AND PREMATURE FAILURE; TAKE EVERY PRECAUTION LISTED ON REVERSE, SEE INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS

VIEW AT CENTER SUPPORT
CENTER VESSEL ON 2 OR 3 SUPPORTS
AT SPAN(S) "S" : 3 SUPPORTS REQUIRED FOR LENGTHS -4 AND OVER

Dash Length	L IN(MM)	P IN(MM)	S IN(MM)	Approx Weight LB(KG)
-1	58.2 (1478)	47 (1194)	28X1 (711)	40 (18.1)
-1.5	78.2 (1986)	67 (1702)	42X1 (1067)	45 (20.4)
-2	98.2 (2494)	87 (2210)	56X1 (1422)	51 (23.1)
-3	138.2 (3510)	127 (3226)	80X1 (2032)	63 (28.6)
-4	178.2 (4526)	167 (4242)	64X2 (1626)	74 (33.6)
-4.5	198 (5029)	187 (4750)	71X2 (1803)	80 (36.3)
-5	218.2 (5542)	207 (5258)	78X2 (1981)	86 (39)
-6	258.2 (6558)	247 (6274)	92X2 (2337)	97 (44)
-7	298.2 (7574)	287 (7290)	106X2 (2692)	109 (49.4)
-7.5	318.2 (8082)	307 (7798)	113X2 (2870)	113 (51.3)

Dwg. Ref.	Qty. Per	Part Number	Description	Materials/Remarks
SHELL				
①	1		Shell	Filament wound epoxy/glass composite—Head locking grooves integrally wound in-place, with Engineering Thermoplastic F/C side-ports.
②	A/R		F/C Port	CF3M
③	A/R		Retaining Ring	302 Series SST
④	A/R		F/C Port Seal	Ethylene Propylene
HEAD				
⑤	2	52301	Dished Head	Engineering Thermoplastic
⑥	2	45321	Head Seal	Ethylene Propylene - Quad Seal (445)
⑦	6	52448	Adapter Seal	Ethylene Propylene - O-ring (232)
HEAD INTERLOCK				
⑧	2	47336	Retaining Ring	316 SST
VESSEL SUPPORT				
⑨	* 3	52169	Universal Saddle	Engineering Thermoplastic
⑩	* 3	45042	Strap Assy	304 Stainless Steel - PVC cushion
⑪	4	46265	Strap Screw	5/16-18 UNC, 18-8 Stainless Steel
ELEMENT INTERFACE				
⑫	2	A/R	Adapter	Engineering Thermoplastic
⑬	A/R	A/R	PWT SEAL	Ethylene Propylene
⑭	1	97014	Thrust Cone	Engineering Thermoplastic.
* 2 Each furnished with length code 1, 2 & 3.				



SECTION THROUGH END CLOSURE
ITEM ⑭ DOWNSTREAM ONLY.

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



CODELINE MODEL 80A05
MEMBRANE HOUSING

APPROVALS	DATE
DRAWN K.KOTHERA	2/03/03
CHECKED	
APPROVED	

SIZE: A3	DWG. NO. 526013	REV. D
SCALE: NONE	ECN :- 1778	SHEET 10F2

RATING:

DESIGN PRESSURE.....75 PSIG at 120°F
 (.52 MPa at 49°C)
 MIN. OPERATING TEMP.....20°F
 (-7°C)
 FACTORY TEST PRESSURE.....112.5 PSIG
 (.78 MPa)
 BURST PRESSURE.....450 PSIG
 (3.10 MPa)

INTENDED USE

The CodeLine Model 80A05 Fiberglass 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 75 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 CodeLine Model 80A05 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. This side-ported vessel requires special precautions in mounting and connection to piping so that the vessel will not be subjected to excessive stress due to bending moments acting at the side openings in the fiberglass shell.

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

Pentair Water Treatment 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 centered on horizontal members spaced at recommended span(s) "S" using compliant mounting hardware furnished; tighten hold down straps just snug
- DO... align and center side ports with the manifold header; correct causes of misalignment in a row of vessels connected to the same header
- DO... use flexible type grooved-end pipe couplings, at side ports; allow full .125 inch gap between port and piping, and position piping to maximize flexibility of connection
- DO... provide flexibility in, and support for piping manifold so that vessel can grow in length under pressure without undue restraint; provide additional flexible joints in large pipes leading to manifold header
- DO... provide over pressure 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... work on any component until first verifying that pressure is relieved from vessel
- DO NOT... make rigid piping connections to ports or clamp vessel in any way that restricts growth of fiberglass shell under pressure; ▲DIA = 0.015 in. (0.4mm) and ▲L = 0.2 in. (6mm) for a length code -8 vessel
- DO NOT... hang piping manifolds from ports or use vessel in any way to support other components
- DO NOT... tighten Permeate Port connection more than one turn past hand tight
- DO NOT... operate vessel without connecting both Permeate Ports internally to a complete set of elements or otherwise plug ports internally so that external piping connection is not subjected to feed pressure
- DO NOT... install Spacer on downstream end of vessel
- DO NOT... operate vessel without Thrust Cone installed downstream
- DO NOT... pressurize vessel until double checking to verify that the Retaining Ring is in place and fully seated.
- DO NOT... operate vessel at pressures and temperatures in excess of its rating
- DO NOT... operate vessel with permeate pressure in excess of 75 psi at 120°F (0.52 MPa at 49°C)
- DO NOT... tolerate leaks or allow end closures to be routinely wetted in any way
- DO NOT... operate at pH levels below 3 or above 10

NOTE

Spiral Retaining Ring Removal Tool (50303) recommended to open and close vessel.

For complete information on proper use of this vessel please refer to the 80A Series USER'S GUIDE, Bulletin 519014

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 80A05 -1 -2 -3 -4 -5 -6 -7

EXTERIOR FINISH – please check one

- Standard – white high-gloss polyurethane coating over sanded surface.
- Option – optional colors are available for 50 or more vessels per order. Call factory for pricing details.

CERTIFICATION REQUIRED.

- Standard – certified by codeline.
- 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 OPTIONS – please check one

- Standard – all materials and port configurations per drawing 526013 on the opposite page.
 NOTE: The options listed below will increase the vessel price. Call factory for pricing details.

- Option Customer specified port configuration. Using the chart below, please indicate the custom options you require for each end of the pressure vessel (many options are required only at one end). Please consult the factory as these options will affect pricing and vessel lead time.

Serial number end
 Opposite end

PERMEATE PORT MATERIAL

Standard – Engineering Thermoplastic (for applications up to 120° F)

PERMEATE PORT CONFIGURATION

Standard – 2" IPS PIPE GROOVED END; 5.4" Port Offset

FEED PORT CONFIGURATION

Standard – 2" IPS pipe, grooved ends, (3E4E7E8E).

Optional – Multi-Ports™
 Using the instructions in CodeLine Bulletin #507054 please fill out your feed port configuration in the space below.
 2 1/2" Ports not available in 90° configurations.
 List port location first followed by port size for each choice.

Serial number end
 Opposite end

PORT SIZE CODE	
D	1 1/2" GROOVED END
E	2" GROOVED END
F	2 1/2" GROOVED END

