PRESSURE VESSELS RO CODELINE 8"-1000 PSI PV 80E100 END PORT

PV 80E100 CODELINE

MATERIALE DI COMPOSIZIONE:
- Vessel: _____Vetroresina
- Tappi: _____Lega di alluminio 6061-T6
- Anello di chiusura tappo:_____ 316 SST
- Basamento tappo: _____ Lega di alluminio 6061-T6
- Selle (incluse): _____ materiale termoplastico (nr. 2 per vessel fino al 3 elementi, dal 4 elementi fino al 6 elementi nr. 3 per vessel).
- Tiranti (inclusi):_____in AISI 304 e cuscini in PVC (nr. 2 per vessel fino al 3 elementi, dal 4 elementi fino al 6 elementi nr. 3 per vessel).

DATI TECNICI
- Pressione di progetto: _____ 69 bar a 49°C (1000 psi a 120°F)
- Temperatura minima di esercizio: _____ -7°C (20°F)
- Pressione di collaudo:
• ASME 90 bar (1300 psi)
• CE 103 bar (1500 psi)
- Pressione di scoppio: _____ 414 bar (6000 psi)
- Uscita permeato: _____ 1" NPT femmina
- Uscita concentrato: _____ 1 1/2" in AISI 316 connessione per giunto victaulic (giunto victaulic non incluso)
- Colore Standard: _____Bianco
- Connettori per membrana (non inclusi):___ Tramite adapter (2 x vessel, vedi documentazione tecnica)
- Nr. di elementi disponibili: _____1-2-3-4-5-6-7

CERTIFICATI:
- Ispezione e marcatura ASME CODE (quotazione su richiesta)
- Marcatura CE (quotazione su richiesta)
- Direttiva 97/23/CE (PED)
- NSF/ANSI 61
- ISO 9001:2000

APPLICAZIONI:
- Osmosi inversa;
- Ultrafiltrazione.

ACCESSORI DA ORDINARE A PARTE:
- Adapter: nr. 2 x vessel (vedi documentazione tecnica).
- Giunti Victaulic 1 1/2" VIC0001

TRATTAMENTO DELLE ACQUE:
- Domestiche
- Industriali
- Municipali
- Reflue (conntattare l' Ufficio tecnico Hytek)
- di mare
- Farmaceutiche
- Alimentari

CODELINE PV 80E100

MATERIALS COMPOSITION:
- Shell material: _____Fiberglass
- Plugs: _____ 6061-T6 Hard anodized Alum. alloy
- Retaining ring _____ 316 SST
- Bearing ring _____ 6061-T6 Hard anodized Alum. alloyl
- Saddles (included): _____Engineering thermoplastic ((nr. 2 supports required up to 3 elements, 3 supports required for length 4 and over)
- Straps (included): _____AISI 304 and cushion in PVC (nr. 2 straps required up to 3 elements, 3 supports required for length 4 and over)

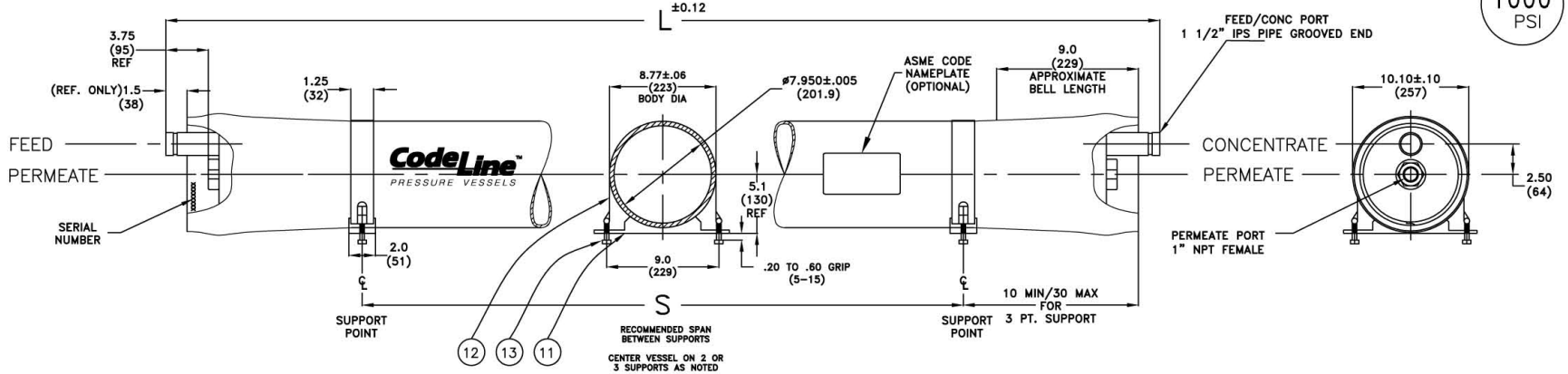
TECHNICAL SHEET:
- Design Pressure: _____ 69 bar a 49°C (1000 psi at 120°F)
- Min. Operating temperature: _____ -7°C (20°F)
- Factory Test Pressure:
• ASME 90 bar (1300 psi)
• CE 103 bar (1500 psi)
- Burst Pressure: _____ 414 bar (6000 psi)
-Permeate Port: _____ 1" NPT female
- Concentrate Port: _____1 1/2" in AISI 316 connection for victaulic joint (victaulic joint not included)
- Standard color: _____ White
- Connection for membrane (not included): _____ By Adapter (2 x vessel, see technical documentation)
- Nr. elements available: _____1-2-3-4-5-6-7

CERTIFICATIONS:
- Inspection and ASME CODE stamped (quotation on request)
- CE mark stamped (quotation on request)
- 97/23/CE Directive (PED)
- NSF/ANSI 61
- ISO 9001:2000

APPLICATIONS:
- Reverse Osmose
- Ultrafiltration.

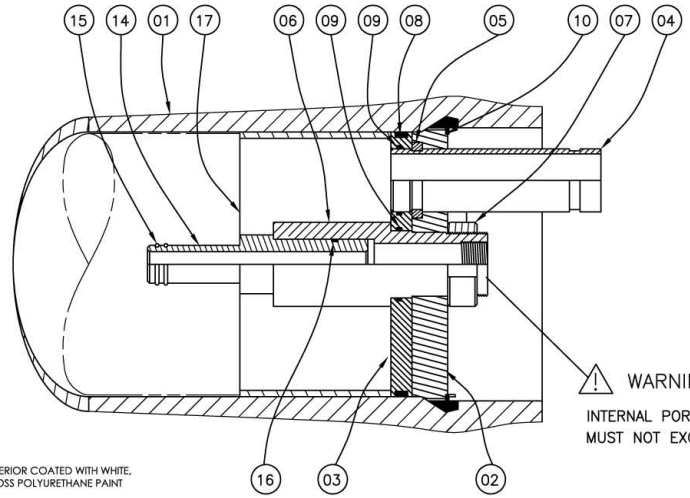
ACCESSORIES TO BE ORDERED SEPARATELY:
- Adapter: 2 x vessel, see technical documentation
- Victaulic Joints 1 1/2" VIC0001

WATER TREATMENTS
- Domestics
- Industrials
- Municipals
- Drains (contact Hytek Technical Office)
- Sea
- Farmaceutics
- Alimentary



DWG REF	QTY	PART NUMBER	DESCRIPTION	MATERIAL
			SHELL	
01	1	ORDER SECTION	SHELL	Filament Wound Epoxy/Glass composites - SS Head locking grooves integrally wound in place.
			HEAD	
02	2	47317	Bearing Plate	6061-T6 Aluminium Alloy-Hard Anodized.
03	2	96003	Sealing Plate	Engineering Thermoplastic.
04	2	50556	Feed/Conc Port	Superaustenitic Stainless Steel, 6% Mo.
05	2	45090	Port Retainer Set	CF8M Cast SS, Two-piece set.
06	2	50558	Permeate Port	Engineering Thermoplastic.
07	2	45066	Port Nut	Engineering Thermoplastic.
08	2	96000	Head Seal	Ethylene Propylene - O Ring.(442)
09	4	45312	Port Seal	Ethylene Propylene - O Ring.(225)
			HEAD INTERLOCK	
10	2	47336	Retaining Ring	316 Stainless Steel.
			VESSEL SUPPORT	
11	*2	52169	Saddle	Engineering Thermoplastic.
12	*2	45042	Strap Assy.	304 Stainless Steel - PVC cushion
13	4	46265	Strap screw.	5/16-18 UNC, 18-8 Stainless Steel.
			ELEMENT INTERFACE	
14	2	A/R	Adapter	Engineering Thermoplastic.
15	4	A/R	PWT Seal	Ethylene Propylene - O - Ring
16	2	52245	Adapter seal	Ethylene Propylene - O - Ring (124)
17	1	45069	Thrust Ring	Engineering Thermoplastic.

* 3 Each Furnished With Length Code 4, 5, 6 & 7.



SECTION THROUGH END CLOSURE

ITEM (17) DOWNSTREAM ONLY

⚠ WARNING !

INTERNAL PORT PRESSURE MUST NOT EXCEED 125 PSI

NOTES
*SHELL EXTERIOR COATED WITH WHITE, HIGH GLOSS POLYURETHANE PAINT
*DIMENSIONS ARE IN INCHES (MM APPROX.)
*NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED
*GENERAL TOLERANCES APPLY, FOR DETAILS CONTACT FACTORY
*L.O.A REFERS TO OVERALL LENGTH OF THE VESSEL.
*EMPTY WEIGHT REFERS TO SHELL WEIGHT INCLUDING HEAD ASSEMBLIES WITHOUT MEMBRANES.

Shell Length Code	L L.O.A. IN (MM)	S Span IN (MM)	Empty Weight LB (KG)
1	65.125 (1654)	40 X 1 (1016)	75 (34)
2	105.125 (2670)	80 X 1 (2032)	105 (48)
3	145.125 (3686)	120 X 1 (3048)	135 (61)
4	185.125 (4702)	80 X 2 (2032)	165 (75)
5	225.125 (5718)	100 X 2 (2540)	195 (89)
6	265.125 (6734)	120 X 2 (3048)	226 (103)
7	305.125 (7750)	140 X 2 (3556)	256 (116)

CodeLine™ Pentair Water

ENGR IS	MODEL 80E100 MEMBRANE HOUSING				
QLTY HP					
DATE 10MAY02	SCALE	SHEET	SIZE	NUMBER	REV
ECN 697,646	NONE	1 OF 2	B	99108	D

RATING:

DESIGN PRESSURE……..1000 PSI at 120°F (6.89 Mpa @ 49°C)
MIN. OPERATING TEMP……..……20°F (-7°C)
FACTORY TEST PRESSURE…...CE / ASME 1500 / 1300 PSI (10.3 Mpa) / (8.96 MPa)
BURST PRESSURE……..……6000 PSI (41.4 MPa)

INTENDED USE:

The CodeLine Model 80E100 Fiberglass RO Pressure Vessel is designed for continuous, long term use as a housing for reverse osmosis membrane elements to desalt typical sea waters 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 CodeLine Model 80E100 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 CodeLine Model 80E100 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.

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 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 material of construction for compatibility with the specific corrosive environment, shall be the responsibility of the purchaser.

Specifications are 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 the shell on horizontal members at span “S” using complaint 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 resists growth of fiberglass shell under pressure; ΔDIA = 0.015 in. (0.4mm) and ΔL = 0.2 in. (5mm) for a length code –7 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 (7.3 kg); permeate – 8 lbs (3.6 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 interconnecting hardware
DO NOT… operate vessel with permeate pressure in excess of 125 psi at 120°F (0.86 MPa @ 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 the retaining ring is completely inside the groove
DO NOT… work on any component until first verifying that pressure is relieved from vessel
DO NOT… operate at pH levels below 3 or above 10

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 features not listed below, please consult 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 80E100 ☐ -1 ☐ -2 ☐ -3 ☐ -4 ☐ -5 ☐ -6 ☐ -7

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

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

CERTIFICATION REQUIRED

❑ ASME Stamped and National Board Registered (please consult factory for pricing)
❑ CE Marked
❑ Standard, Certified by Pentair water.

EXTERIOR FINISH – please check one

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

MATERIAL OPTIONS

❑ Standard – All materials as per drawing 99108 on the first page.
❑ Customer specified materials: -
(Please consult the factory, as these options will affect pricing and vessel lead-time.)

For complete information on proper use of this vessel please refer to the 80E series USER’S GUIDE Bulletin 523004.