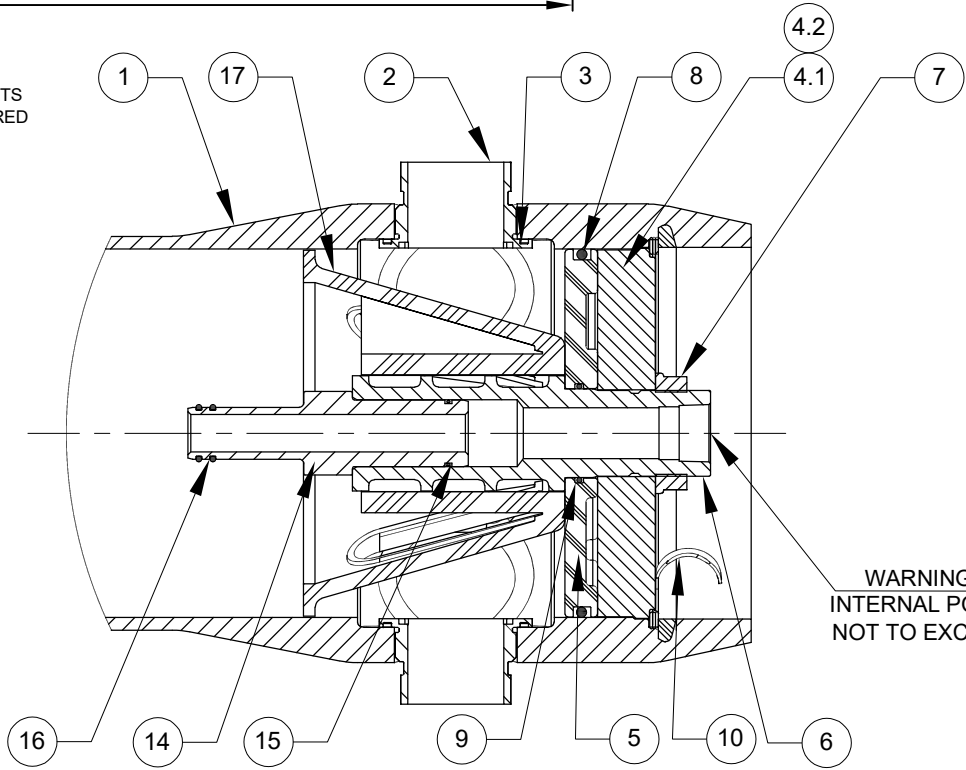


DWG REF	QTY	PART NUMBER	DESCRIPTION	MATERIAL
SHELL				
1*	1	99218	SHELL	Filament Wound Epoxy/Glass composite - Head locking grooves integrally wound in
2*	A/R	A/R	F/C Port	SA-351 CF3M
3	A/R	A/R	F/C Port Seal	Ethylene Propylene.
HEAD				
4	2	194448	Bearing Plate Assembly	-
4.1*	1	96156	Bearing Plate	SB-221 A96061-T6
4.2	1	97105	Danger Label	-
5	2	96160	Sealing Plate	Engineering Thermoplastic.
6	2	96162	Permeate Port	Engineering Thermoplastic.
7	2	45066	Port Nut	Engineering Thermoplastic.
8	2	196223	Head Seal	Ethylene Propylene - O - Ring
9	2	196215	Perm Port Seal	Ethylene Propylene - O - Ring
HEAD INTERLOCK				
10*	2	47336	Quick Release Spiral Ring	SA-479 316
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, 2.5"-L,304 Stainless Steel.
ELEMENT INTERFACE				
14	2	A/R	Adapter	Engineering Thermoplastic.
15	2	196222	Adapter seal	Ethylene Propylene - O - Ring
16	4	A/R	PWT Seal	Ethylene Propylene - O - Ring
17	1	96163	Thrust Cone	Engineering Thermoplastic.

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

PORT SIZE CODE	
D	1 ½" GROOVED END
E	2" GROOVED END
F	2 ½" GROOVED END

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



WARNING ⚠
INTERNAL PORT PRESSURE
NOT TO EXCEED 125 PSI #

SECTION THROUGH END CLOSURE

GENERAL NOTES:

1. MAX. ANGULAR VARIATION BETWEEN ANY PORT ±0.5°.
2. DIMENSION IN INCHES (MM APPROX.).
3. SHELL EXTERIOR COATED WITH WHITE RAL 9003, HIGH GLOSS POLYURETHANE PAINT.
4. ITEM 17 DOWNSTREAM ONLY.
5. NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED BY PENTAIR.

300 PSI FOR METALLIC PERMEATE PORT. FOR OPTIONAL PART NUMBERS, REFER PAGE 3.

* ASME PARTS.

** WEIGHTS GIVEN IN THE TABLE ARE FOR HIGHEST CONFIGURATION AND WILL VARY WITH CHANGE IN CONFIGURATION.

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PENTAIR
CODELINE

VERNA, GOA
INDIA

DRAWN BY: KR
DATE: 17JAN08
CHECKED BY: MD
DATE: 17JAN08
APPROVED BY: RM
DATE: 17JAN08
PCO NO.: 547854
REV. DATE: 25SEP25

DRAWING DESCRIPTION:
MODEL - 80S30 MEMBRANE HOUSING
CUSTOMER NAME:
PROJECT NAME:
CUSTOMER P.O.#:

DRAWING NO.: 99160
REV.: AG
VESSEL MODEL: 80S30
TOTAL QTY: -
PAGE NO.: 01 OF 03

DESIGN PRESSURE/MAWP.....	300 PSI (2.07 MPa)
MAX. ALLOWABLE TEMP.....	190°F (88°C)
MIN. ALLOWABLE TEMP.....	20°F (-7°C)
FACTORY TEST PRESSURE.....	330 PSI (2.28 MPa)
QUALIFICATION PRESSURE	1800 PSI (12.41 MPa)

The CodeLine 80530 Fiberglass RO Pressure Vessel is designed for continuous, long term use as housing for reverse osmosis membrane elements to desalt typical brackish waters at pressures up to 300 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.

At small additional cost vessels can be inspected during construction by an ASME Authorized Inspector and ASME Code stamped.

The high performance Filament wound FRP 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 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.


Specifications are subject to change without notice.

- 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 compliant vessel supports furnished; Shim saddles if required. 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 IPS grooved-end pipe couplings, at side ports; allow full, 0.125 inch gap between port and piping, and position piping to maximize flexibility of connection.
- DO...provide flexibility in, and support for piping manifolds 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 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... Lubricate seals sparingly, using nonpetroleum based lubricants, i.e. Glycerin or suitable lubricants.

For complete information on proper use of the vessel
Please refer to the 80S Series USER'S GUIDE 94182.

☐ – A96061 T6 Aluminium
☐ – Stainless Steel 316L

The diagram illustrates the correct placement of Codeline body labels on a Pentair pool body. The body is shown in a vertical orientation with a central longitudinal axis. Eight numbered ports are indicated: 1 (bottom center), 2 (bottom left), 3 (bottom center-left), 4 (bottom right), 5 (upper center), 6 (upper left), 7 (top center), and 8 (upper right). A rectangular label 'PORT LOCATION CODE' is positioned horizontally across the middle of the body. Two diamond-shaped labels with the text 'PENTAIR CODELINE' are shown: one oriented vertically along the central axis in the upper half, and another oriented horizontally in the lower half. The bottom of the body is labeled 'Serial Number End'.

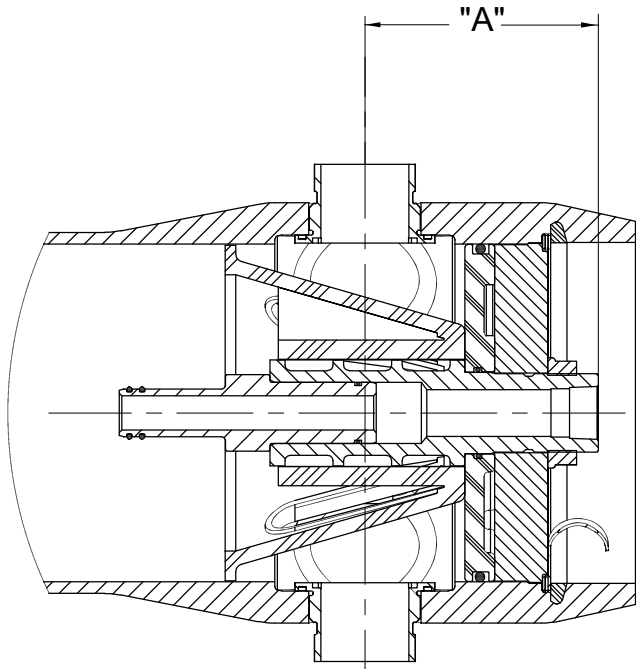
		<h1>PENTAIR</h1> <h1>CODELINE</h1>		VERNA, GOA INDIA		
DRAWN BY: KR		DRAWING DESCRIPTION: MODEL - 80S30 MEMBRANE HOUSING		DRAWING NO.: 99160		REV.: AG
DATE: 17JAN08				VESSEL MODEL: 80S30		
CHECKED BY: MD		CUSTOMER NAME: -		TOTAL QTY: -		
DATE: 17JAN08						
APPROVED BY: RM		PROJECT NAME: -		SCALE: NONE		
DATE: 17JAN08						
PCO NO.: 547854		CUSTOMER P.O.#: -		PAGE NO.: 02 OF 03		
REV. DATE: 25SEP25						

++ BEARING PLATE PART NUMBERS		
PERMEATE PORT SIZE	ALUMINIUM	SS F316L ###
1.0"/1.25"	194448	195197
1.5	194479	195198

STRAP ASSEMBLY PART NUMBERS		
SS304	SS-316	SS-316L
45042	46926 ⁺	94371 ⁺

PERM PORT RETAINER RING & PORT NUT PART NUMBERS			
1.0" / 1.25"	Standard Port nut	Engineering Thermoplastic	45066
1.5"	Port Retainer Ring	Stainless Steel	45247

F/C PORT ⁺⁺ & SEAL PART NUMBER				
SIZE	*CF3M	**CD3MN	***CD3MWCuN	SEAL
1.5"	98024	97353	96507	196224
2.0"	98025	97357	96643	196225
2.5"	98026	97364	96556	196226



SECTION THROUGH END CLOSURE

PERMEATE PORT PART NUMBERS & PERMPORT TO F/C PORT OFFSET DISTANCE															
SIZE	MATERIAL	FNPT		MNPT		BSPTF		BSPTM		IPS GROOVED		BSPPF		BSPPM	
		PART NUMBER	DIM "A"	PART NUMBER	DIM "A"	PART NUMBER	DIM "A"	PART NUMBER	DIM "A"	PART NUMBER	DIM "A"	PART NUMBER	DIM "A"	PART NUMBER	DIM "A"
1.0"	NORYL	96162	5.5	97659	6.5	96301	5.5	97660	6.5	97661	6.8	96379	5.5	NA	NA
	SS 316L # #	96752	5.5	97347	6.5	97351	5.5	97355	6.5	97322	6.8	NA	NA	NA	NA
	#ZERON 100	97349	5.5	97348	6.5	97352	5.5	97356	6.5	97293	6.8	NA	NA	NA	NA
1.25"	NORYL	NA	NA	97655	6.5	NA	NA	97360	6.5	97662	6.8	NA	NA	97710	6.5
	SS 316L # #	NA	NA	96487	6.5	NA	NA	97362	6.5	97311	6.8	NA	NA	NA	NA
	#ZERON 100	NA	NA	97359	6.5	NA	NA	97363	6.5	97365	6.8	NA	NA	NA	NA
1.5"	NORYL	NA	NA	97663	6.1	NA	NA	97369	6.1	97656	6.7	NA	NA	97326	6.0
	SS 316L # #	NA	NA	97368	6.1	NA	NA	97371	6.1	97449	6.7	NA	NA	NA	NA
	#ZERON 100	NA	NA	97292	6.1	NA	NA	97372	6.1	97374	6.7	NA	NA	NA	NA

GENERAL NOTES:

- DIMENSIONS IN INCHES (MM APPROX.).
- * GRADE SA-351 CF3M.
- ** GRADE SA-995 CD3MN (UNS J92205).
- *** GRADE SA-995 CD3MWCuN (UNS J93380)
- # GRADE SA-479 UNS S32760/S32750
- ## GRADE SA-479 316L
- ### GRADE SA-182 F316L
- + OPTIONAL STRAP ASSEMBLY WITH SS-316 & 316L SHALL BE SUPPLIED AS PER METRIC STANDARDS.
- ++ ASME PARTS.

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CODELINE

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DRAWN BY:	KR	DRAWING DESCRIPTION:	DRAWING NO.:	REV.:
DATE:	17JAN08	MODEL - 80S30 MEMBRANE HOUSING	99160	AG
CHECKED BY:	MD	CUSTOMER NAME:	VESSEL MODEL:	
DATE:	17JAN08	-	80S30	
APPROVED BY:	RM	PROJECT NAME:	TOTAL QTY:	
DATE:	17JAN08	-	-	
PCO NO.:	547854	CUSTOMER P.O.#:	SIZE:	SCALE:
REV. DATE:	25SEP25	-	A3	NONE
				PAGE NO.: 03 OF 03