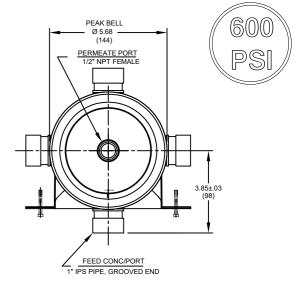
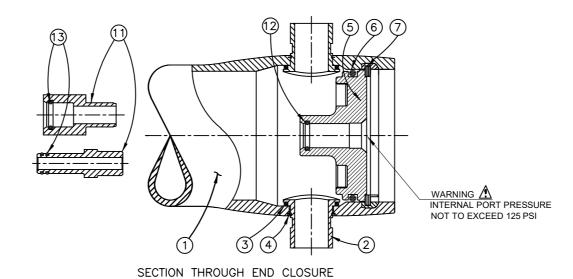


FOR LENGTHS -4 AND OVER



<del></del>				
DWG REF	QTY	PART NUMBER	DESCRIPTION	MATERIAL
			SHELL	
1	1	99280	SHELL	Filament Wound Epoxy/Glass composites - Head locking grooves integrally wound in place.
2	A/R	REF. PAGE 2	F/C Port	SA-351 CF3M
3	A/R	47135	F/C Port Seal	Ethylene Propylene - Square Cut
4	A/R	45251	F/C Port Retainer	18-8 Stainless Steel
			HEAD	
5	2	96827	End Plug	Engineering Thermoplastic.
6	2	45317	Head Seal	Ethylene Propylene - O - Ring
			HEAD INTERL	оск
7	2	45260	Retainer Ring	SA-479 SS316
			VESSEL SUPP	PORT
8	2+	45058	Saddle	Engineering Thermoplastic.
9	2+	47459	Strap Assy.	304 Stainless Steel-PVC Cushion.
10	4**	97821	Strap Screw	5/16-18 UNC X 1.5" L, 18-8 Stainless Steel
			ELEMENT INTE	RFACE
11	2	A/R	Adapter	Engineering Thermoplastic.
12	2	45296	Adapter seal	Ethylene Propylene - O - Ring
13	A/R	A/R	PWT seal	Ethylene Propylene - O - Ring
<sup>+</sup> 3 each & <sup>++</sup> 6 nos. furnished with length code 4,5 & 6.				

CAUTION: INCORRECT MANIFOLDING
WILL CAUSE SEVERE LOCAL STRESS
AROUND PORT AND MAY RESULT IN
LEAKS AND PREMATURE FAILURE;
TAKE EVERY PRECAUTION LISTED
ON PAGE 02, SEE INSTALLATION
INSTRUCTIONS FOR FURTHER DETAILS



(ENDS ARE IDENTICAL)

NO. OF PORTS PORT LOCATION VESSEL QTY. **Approx** S Dash Weight IN(MM Length IN(MM) IN(MM) LB(KG) 21 48.50 42 25X1 (1232)(1067)(635)(10)31 56X1 88.50 82 -2 (2248)(2083)(1422)(14)41 128.50 122 80X1 -3 (3264)(3099)(2032)(19)168.50 162 64X2 51 (4280)(1626)(4115)(23)61 208.50 202 78X2 -5 (5131) (5296)(1981)(28)72 248.50 242 92X2 -6 (2337)(6312)(6147)(33)

# **GENERAL NOTES:**

- 1. DIMENSIONS IN INCHES (MM APPROX).
- 2. NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED.
- 3. SHELL EXTERIOR COATED WITH WHITE RAL 9003, HIGH GLOSS POLYURETHANE PAINT.

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PENTAIR CODELINE
CODELINE

VERNA, GOA INDIA

RAWN BY:	RA	DRAWING DESCRIPTION:			DRAWING NO	0.:	REV.:
ATE:	15/09/21	MODEL-40S60 NC	MEMBRANE	HOUSING	9931	4	R
HECKED BY:	KPS	CUSTOMER NAME:			VESSEL MOD		
ATE:	15/09/21		-		40560	(NC	)
PPROVED BY	: FF	PROJECT NAME:				TOTAL	QTY:
ATE:	15/09/21		-			-	-
CN NO. :	5881	CUSTOMER P.O.#:		SIZE:	SCALE:	PAGE	NO.:
ATE:	16/12/21	_		A3	NONE	01 0	F 02

## **RATING:**

DESIGN PRESSURE	600 PSI
	(4.14 Mpa)
MAX. OPERATING TEMP	
ACDI ODED ATDIO TEMP	(49°C)
MIN. OPERATING TEMP	(-7°C)
FACTORY TEST PRESSURE	
	(6.21 MPa)
BURST PRESSURE	3600 PSI
	(24.82 MPa)

## INTENDED USE:

The Model 40S60 Fiberglass RO/UF Pressure Vessel is designed for continuous, long term use as housing for reverse osmosis and ultrafiltration elements in typical industrial water treatment systems at pressures up to 600 psi. Any make of four-inch nominal diameter spiralwound element is easily accommodated. The appropriate interfacing hardware for the element specified is furnished with the vessel.

The Model 40S60 is designed in accordance with the engineering standards of the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers (ASME Code) Section X Edition 2021 and all metallic parts are designed as per Section VIII Division I Edition

The Model 40S60 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. 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 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. Alternate materials with enhanced corrosion resistance are available on special order.

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...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 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 resists growth of fiberglass shell under pressure;  $\Delta DIA = 0.01$  in. (0.25 mm) and  $\Delta L = 0.140$  in. (3.5 mm) 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... 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... operate outside the pH range 3-11

EYE PROTECTION SHOULD BE WORN WHEN REMOVING OR INSTALLING RETAINING RING, KEEP FINGERS CLEAR FROM RETAINING RING WHILE INSTALLING LAST OF TWO TURNS. RING MAY SNAP INTO POSITION POSIBLY PINCHING FINGERS

#### ORDERING:

Using the chart below, please check the features Please note that we require your membrane you require and fax them with your purchase brand and model number when ordering. If order to our customer service department for this information is not initially available, expedited processing.

For optional materials and/or features not listed below, please consult factory for pricing and availability.

you may provide it at a later date by checking the appropriate box below.

# VESSEL LENGTH CODE - please check one

CODELINE MODEL 40S60 Non Coded  $\square$  -1  $\square$  -2  $\square$  -3  $\square$  -4  $\square$  -5  $\square$  -6

### MEMBRANE BRAND AND MODEL - please check one and fill in information

	☐ Please supply adapters for the following membrane br	and and specific model
	Brand Model	
П	☐ Membrane brand and model information is not availa	hle but will be supplied to Pentair on a
_	before the following date / /	ore, but will be supplied to I chair on t

# CERTIFICATION - please check required

- □ CE Marked.
- ☐ Standard, Certified by Pentair, not code stamped.

### EXTERIOR FINISH

☐ Standard – White high-gloss RAL 9003 polyurethane coating over sanded surface.

# FEED PORT CONFIGURATION

☐ Standard – 1" IPS Grooved End ☐ Optional – Multi-Ports, Port clocking

r		
Serial number	Opposite	
End	End	PEF
_	_	~

RMEATE PORT CONFIGURATION Standard – ½" NPT Female (Standard per drawing) Optional - 1/2" BSPT/JISPT Female

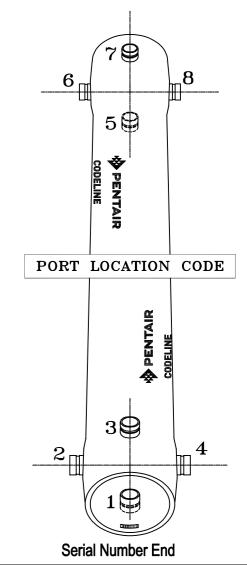
Please fill out your feed port configuration in the space below. List port location first followed by port size for each choice.

Serial number end	0000000
Opposite end	

	PORT SIZE CODE	PART NO.		
Α	3/4" NPT FEMALE	97778		
В	3/4" BSPT/JISPT FEMALE			
С	1" GROOVED END	96057		

For complete information on proper use of the vessel Please refer to 40S series USER'S GUIDE - 96897

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



CODELINE BODY LABELS ARE PLACED AT 90° ON SERIAL NUMBER END AND AT 270° ON THE OPPOSITE SIDE END

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		CODELIN		VERNA, GO INDIA	DA	
DRAWN BY:	RA	DRAWING DESCRIPTION:		DRAWING N0.:		REV
DATE:	15/09/21	MODEL - 40S60 NC MEMBRANE	HOUSING	99314	4	R
CHECKED BY:	KPS	CUSTOMER NAME:		VESSEL MOD	EL:	
DATE:	15/09/21	-		40\$60	0 (NC)	
APPROVED BY:	FF	PROJECT NAME:			TOTAL	QTY:
DATE:	15/09/21	-			-	
ECN NO.:	5881	CUSTOMER P.O.#:	SIZE:	SCALE:	PAGE	NO.:
DATE:	16/12/21	-	A3	NONE	02 O	F 02