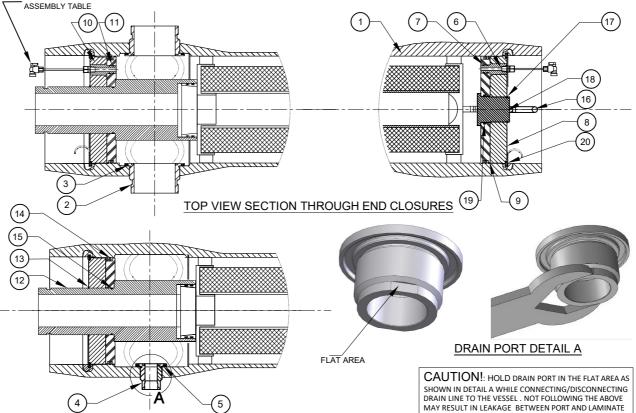


DWG REF	QTY	PART	DESCRIPTION	MATERIAL		
REF NUMBER SHELL						
1*	1	17219	SHELL	Filament Wound Epoxy/Glass composites - Head locking grooves integrally wound in place.		
2*	A/R	96327	3" Feed Port	SA-995 CD3MWCuN (UNS J93380)		
3	A/R	196141	3" Port Seal	Ethylene Propylene - O - Ring		
4*	1	17180	1" FNPT Drain Port	SA-995 CD3MWCuN (UNS J93380)		
5	1	45340	1" Drain Port Seal	Sq. Seal - EPDM		
HEAD COMPONENTS FOR 140'F APPLICATION						
6	2	17174	1/4" FNPT Air Vent Port	Engineering Thermoplastic-PVC <sup>+</sup>		
7	4	196208	1/4" Air Vent Port Seal	O - Ring - EPDM		
8*	1	17179	Bearing Plate Handle end	SB-221 A96061-T6		
9	1	117007	Sealing Plate Handle end	Engineering Thermoplastic-Noryl		
10*	1	17176	Bearing Plate Product end	SB-221 A96061-T6		
11	1	117006	Sealing Plate Product end	Engineering Thermoplastic-Noryl		
12	1	17187	3" Product Port	Engineering Thermoplastic-PVC		
13	1	17127	3" Port Retainer Ring	SA-479 316		
14	2	196223	Head Seal	O - Ring - EPDM		
15	1	17128	Product Port Seal	O - Ring - EPDM		
16	1	17104	Handle Assembly	SA-479 316		
17	1	45247	Plug Retainer Ring	Stainless Steel		
18	1	17132	Plug	Engineering Thermoplastic-PVC <sup>+</sup>		
19	1	196215	Plug seal	O - Ring - EPDM		
HEAD INTERLOCK						
20*	2	47336	Quick Release Retaining Ring	SA-479 316		
VESSEL SUPPORT						
21	2	52169	Saddle	Engineering Thermoplastic		
22	2	45042	Strap Assy.	304 Stainless Steel-PVC Cushion.		
23	4	46265	Strap screw.	5/16-18 UNC X 2.5"- Long, 304 Stainless Steel.		



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FRONT VIEW SECTION THROUGH END CLOSURES

HE

VERNA, GOA INDIA

Approx Weight With

Filter LB(KG)

64(30)

73(33)

				CODELINE A	QUALIN	NE	INDIA		
DRAW	N BY:	AND	DRAWII	NG DESCRIPTION:			DRAWING NO	: _	REV.:
DATE:		20MAY09	MODE	L: 80CF15 SINGLE C	ARTRIDG	E HOUSING	17028		U
CHECK	ŒD BY:	KR	CUSTO	MER NAME:			VESSEL MOD		
DATE:		20MAY09		-			80CF15	NC	
APPRO	VED BY:	FF	PROJEC	CT NAME:				TOTAL	QTY:
DATE:		20MAY09			-			-	-
ECN NO	D. :	6799	CUSTO	MER P.O.#:		SIZE:	SCALE:	PAGE	NO.:
REV. D	ATE:	28MAY24		-		A3	NONE	01 0	F 02

PEAK BELL DIA

Ø10.39

(264)

6.38± .03

(162)

AIR VENT PORT

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

G

Tube 1/4"

Blind Plug 1/4

Approx Weight

LB(KG)

51(23)

60(27)

**AIR VENT ASSEMBLY :- 17185** 

RRS-01039 Ball Valve 1/4"

RRS-01027 Tubing Blue

PORT LOCATION

Male Connector, Pipe 1/4"

Compression nut 1/4"

NO. OF PORTS

6" Long

IN(MM)

53.94

(1370)

74.62

(1896)

2

3

4

5

Element

40

60

ITEM QUANTITY PART NO. DESCRIPTION

RRS-010013

RRS-01047

17194

IN(MM)

21X1

(533)

42X1

(1067)

**PENTAIR** 

PORT SIZE CODE

1" FNPT END

3" GROOVED END

VESSEL QTY.

# **GENERAL NOTES:**

1. DIMENSION IN INCHES (MM APPROX.).

2. SHELL EXTERIOR COATED WITH WHITE RAL 9003, HIGH GLOSS POLYURETHANE PAINT.

- 3. NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED BY PENTAIR.
- +OPTIONAL MATERIAL SELECTION AVAILABLE FOR 180°F APPLICATION ON SECOND PAGE.
- \* ASME PARTS.

## RATING:

KATING.	
	PVC / PET
DESIGN PRESSURE/MAWP	150 PSIG
	(1.03 MPa)
MAX. ALLOWABLE TEMP	140°F / 180°F
	(60°C / 82°C)
MIN. ALLOWABLE TEMP	20°F
	(-7°C)
FACTORY TEST PRESSURE	165 PSIG
	(1.14 MPa)
QUALIFICATION PRESSURE	900 PSI
	(6.21 MPa)

## **INTENDED USE:**

The AquaLine 80CF15 Non Coded Fiberglass Pressure Vessel is designed for continuous, long term use as housing for AquaLine range of micro filtration elements.

The Shell of AquaLine 80CF15 Non Coded vessel is designed in accordance with the engineering standards of the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers (ASME) as per Section X Edition 2023 and all metallic parts are designed as per ASME Section VIII Division I Edition 2023.

The AquaLine 80CF15 Non Coded vessel 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 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.

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/vertical members at span "S" using compliant vessel supports furnished; for mounting vessels vertically provide proper bottom support; 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, or equal, 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... Lubricate seals sparingly, using nonpetroleum Based lubricants, i.e. Parker Super O-lube®, Glycerin or suitable silicone based lubricants.
- 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;
- DO NOT...pressurize vessel until double-checking to verify that the Locking Ring is in place and fully seated
- DO NOT...operate vessel at pressure and temperature in excess of its rating.
- DO NOT...tolerate leaks or allow end closures to be routinely wetted in any way
- DO NOT...operate outside the pH range of 3-11.
- DO NOT...operate outside the pH range 2-12 for cleaning.
- DO NOT...exceed 43.5 hours in a year for cleaning with above mentioned pH range.

#### ORDERING

Using the chart below, please check the features you require and fax them with your purchase order to our customer service department for further processing.

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

# VESSEL LENGTH CODE

**MODEL:** AquaLine 80CF15 Non Coded □ -40 □ -60

## CERTIFICATION REQUIRED

- ☐ Hydro testing at 1.1 times the design pressure.
- ☐ CE Marked Standard MODULE-D1, CATEGORY-2
- ☐ Certified by Pentair.

## HEAD ASSEMBLY MATERIAL SELECTION

- ☐ Standard: For 140°F application, Engineering Thermoplastic components in PVC as per drawing on First page.
- ☐ Option: For 180°F application, Engineering Thermoplastic components in PET as given below. (Please consult factory as these options will affect pricing and vessel lead time)

HEAD COMPONENTS FOR 180°F APPLICATION					
DWG REF	QTY	PART NUMBER	DESCRIPTION	MATERIAL	
6	2	17403	1/4" FNPT Air Vent Port	Engineering Thermoplastic-PET	
7	4	196208	1/4" Air Vent Port Seal	O - Ring - EPDM	
8*	1	17179	Bearing Plate Handle end	SB-221 A96061-T6	
9	1	117007	Sealing Plate Handle end	Engineering Thermoplastic-Noryl	
10*	1	17176	Bearing Plate Product end	SB-221 A96061-T6	
11	1	117006	Sealing Plate Product end	Engineering Thermoplastic-Noryl	
12	1	17406	3" Product Port	Engineering Thermoplastic-PET	
13	1	17127	3" Port Retainer Ring	SA-479 316	
14	2	196223	Head Seal	O - Ring - EPDM	
15	1	17128	Product Port Seal	O - Ring - EPDM	
16	1	17104	Handle Assembly	SA-479 316	
17	1	45247	Plug Retainer Ring	Stainless Steel	
18	1	17407	Plug	Engineering Thermoplastic-PET	
19	1	196215	Plug seal	O - Ring - EPDM	

# FEED PORT CONFIGURATION

Please fill out quantity for each configuration

- □ 1 A 4 G (Standard)
- ☐ 1 A 2 G (Optional)
- ☐ 1A2G4G (Optional)

For complete information on proper use of the vessel

Please refer to the AquaLine User Guide No 96893.

\* ASME PARTS.

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