

## RATING:

I VC/IEI
DESIGN PRESSURE150 PSIG at 140°F / 180°F
(1.0 MPa at 60°C / 82°C)
MIN. OPERATING TEMP20°F
(-7°C)
FACTORY TEST PRESSURE 225 PSIG
(1.55 MPa)
QUALIFICATION PRESSURE 900 PSI

DVC / DET

(6.2 MPa)

## INTENDED USE:

The AquaLine 80CF15 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 is designed in accordance with the engineering standards of the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers (ASME) Code.

The AquaLine 80CF15 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.

#### 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 80CF15-60

# CERTIFICATION REQUIRED

- ☐ Standard, Certified by Pentair.
- ☐ CE Marked Standard.

## HEAD ASSEMBLY MATERIAL SELECTION

- ☐ Standard: For 140'F application, Engineering Thermoplastic components in PVC as per drawing 17028 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		DESCRIPTION	MATERIAL	
6	2	17403	1/4" FNPT Air Vent Port	Engineering Thermoplastic-PET	
7	4	45286	1/4" Air Vent Port Seal	O-RING -EPDM	
8	1	17179	Bearing Plate Handle end	6061-T6 Aluminium alloy - Hard anodized	
9	1	17404	Sealing Plate Handle end	Engineering Thermoplastic-PET	
10	1	17176	Bearing Plate Product end	6061-T6 Aluminium alloy - Hard anodized	
11	1	17405	Sealing Plate Prodcut end	Engineering Thermoplastic-PET	
12	1	17406	3" Product Port	Engineering Thermoplastic-PET	
13	1	17127	3" Port Retainer Ring	316 Stainless Steel.	
14	2	96000	Head Seal	O-RING -EPDM	
15	1	17128	Product Port Seal	O-RING -EPDM	
16	1	17104	Handle Assembly	316 Stainless Steel.	
17	1	45247	Plug Retainer Ring	316L Stainless Steel	
18	1	17407	Plug	Engineering Thermoplastic-PET	
19	1	45312	Plug seal	O-RING -EPDM	

## FEED PORT CONFIGURATION

Please fill out quantity for each configuration

	PORT SIZE CODE		
Α	1" FNPT END		
G	3" GROOVED END		

1 A 4 G (Standard)

1 A 2G (Optional)

1A2G4G (Optional)

For complete information on proper use of the vessel Please refer to the AquaLine User Guide No 96893.

