

***CodeLine***™ ***OCTA***



Defining the Shape of Things to Come

# Pentair

## The Global Leader in Water Purification

Pentair Water is one of the largest suppliers of water purification components in the world with annual sales of approximately \$3 billion. Headquartered in Minnesota, Pentair operates from more than fifty locations globally with a portfolio of strong brands like CodeLine™, Everpure, Fleck, Myers, NOCCHI, Onga, Park International, Pentek, SHURflo, SIATA, STA-RITE, Structural, WellMate, and many more.



# CodeLine™

## The Most Advanced Membrane Housings in the World

---

**Over  
400,000  
vessels in  
Service  
Worldwide**

---

With state-of-the-art manufacturing facilities and world-class sales and service team, CodeLine™ has been setting the standards in the industry for several decades. Continuous innovation and uncompromising reliability makes CodeLine™ the most trusted name in membrane housings worldwide. CodeLine™ vessels are used in municipal water treatment, desalination, industrial water treatment, the pharmaceutical industry, the food & beverage industry, etc.



# Why CodeLine™ OCTA ?

CodeLine™ OCTA is a product of pioneering research in membrane housing. Some key features that make CodeLine™ OCTA the most advanced high-pressure vessel:

- Octogonal Shape provides flat surfaces for superior and reliable sealing of side ports
- Easy to mount Threaded Side Port for better field service and maintenance
- Advance Quick Lock System™ improves head retention and provides quick access to membranes
- Aluminium backed High Grade Glass-filled Engineering Plastic Head: Available with ASME Coded option (for complete pressure range).
- Single piece High Grade Glass-filled Engineering Plastic Head: which is a 3-in-1 assembly of bearing plate, sealing plate and permeate port (up to 600 psi for non-coded ASME) cuts down the number of spares
- Multi Port Option allows vessels to be linked together, cutting down the investment on expensive manifolds
- Mirror ID Finish up to 4 Ra plus a precision bore delivers better membrane sealing and ease of membrane loading and unloading
- Fail-safe Shell enables vessels to weep at four times the design pressure preventing catastrophic failure and the qualification pressure exceeds six times the design pressure, providing better safety.
- ASME Code Stamped Vessels available on request



## What is Unique about the OCTA?

*How do you fit flat surfaces into a circular membrane housing and provide multiple side ports? This was the challenge we set out to solve when we began working on the OCTA.*

*Research showed that an Octagon, besides providing the best fit, would also allow for 4 flat sealing surfaces, each 90 degrees apart for side port mounting. Thus was born the OCTA.*

**CodeLine OCTA housings are manufactured using a unique 'Octogonal Groove Forming Technique'\***

*\*Patent applied for*





## 1 MINIMIZED LEAKAGE

The octagonal shape which is integrally formed without cutting any glass fibers, provides a flat sealing surface for superior and reliable sealing of side ports.



## 3 EASY SERVICEABILITY

The easy to mount Threaded Side Port allows quick and easy onsite maintenance and replacements, reducing system downtime.

## 2 ADVANCED END CLOSURE

The most advanced head, using components made of NSF listed, High Grade Glass-filled Engineering Plastic:

- Helps reduce potential leakage points by eliminating permeate port sealing joint (available up to 600 psi for Non-ASME Coded)
- Provides superior chemical resistance
- Enables high operating temperature capacity of up to 190°F for vessels with design pressure up to 600 psi and 150°F for vessels with design pressure of 1000 psi and 1200 psi.



## 4 QUICK LOCKING MECHANISM

The user-friendly, Quick Lock System™ eliminates the requirement of special tools for removal and lets you access the membranes in seconds.

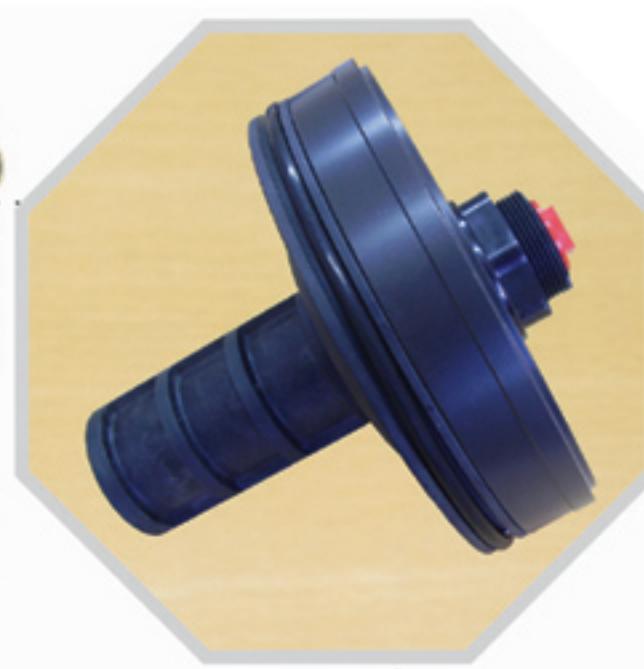


# The Unique Benefits of

5

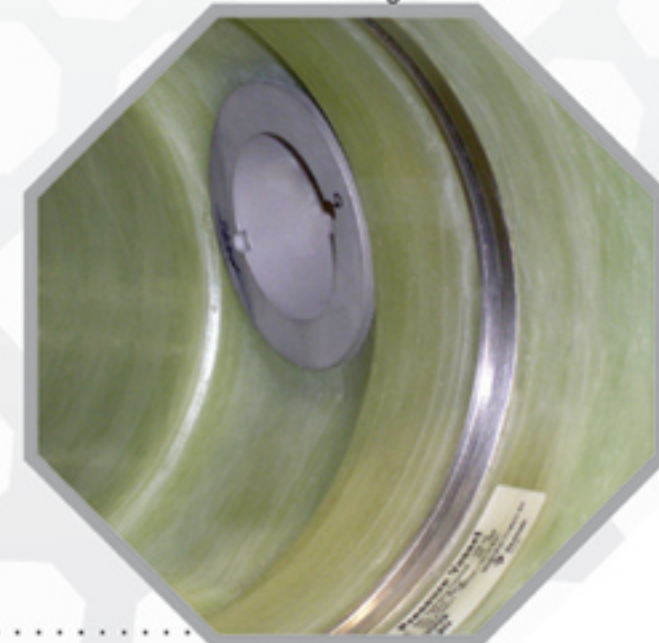
### IMPROVED HEAD SEALING

Head seal, which is captured in the head/sealing plate, gives better sealing and avoids head seal roll. It also eliminates head leak defect.



### 7 INTEGRALLY WOUND LOCKING GROOVE

Integral locking groove gives enhanced end-margin strength & sealing area formed by the mandrel, thus providing better head sealing.

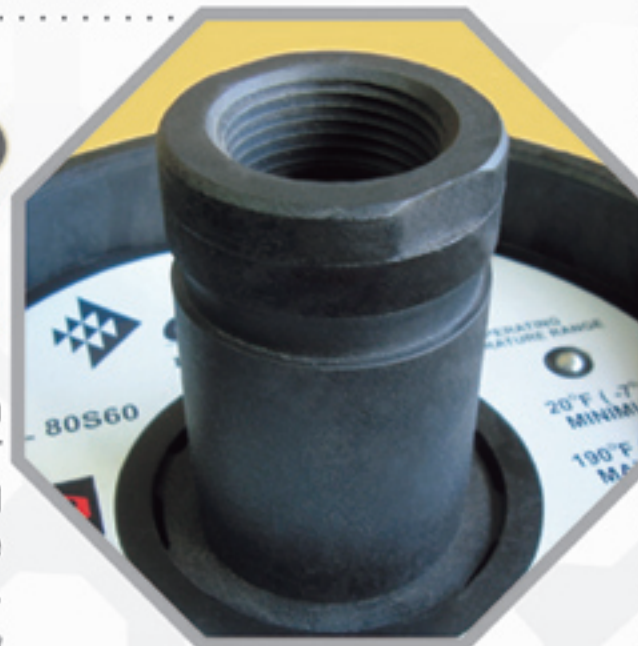


6

### FLEXIBILITY IN PERMEATE PIPING\*

The flexible design allows use of a 1" FNPT threaded or 1.5" grooved pipe connection in the same head.

*\* The above option is available as a standard feature in Non-Coded models & available as an option in ASME-Coded model.*



8

### REDUCED SYSTEM COST

Side port and multiporting options available up to 3" for high flow rate. Thus, cutting down the investments on expensive manifolds.



## CodeLine™ OCTA

CodeLine™ OCTA aims at maximizing the performance of your water purification system in critical and demanding applications like Reverse Osmosis, Nanofiltration, Ultrafiltration and Microfiltration.

# CodeLine™ OCTA Specifications

Model Number	Drawing Number	Design/Operating Pressure	Maximum Operating Temperature	Qualification Pressure	Element length
80S15	99159	150 psi / 10 Bar	190°F / 88°C	900 psi / 62 Bar	1 - 8
80S30	99160	300 psi / 20 Bar	190°F / 88°C	1800 psi / 124 Bar	1 - 8
80S45	99161	450 psi / 31 Bar	190°F / 88°C	2700 psi / 186 Bar	1 - 8
80S60	99162	600 psi / 41 Bar	190°F / 88°C	3600 psi / 248 Bar	1 - 8
80S100	99163	1000 psi / 68 Bar	150°F / 66°C	6000 psi / 413 Bar	1 - 8
80S120	99164	1200 psi / 82 Bar	150°F / 66 C	7200 psi / 496 Bar	1 - 8

Side port options available in 80S Model: 1.5", 2.0" & 2.5". Please refer to sales drawings for multiport specifications.

Model Number	Drawing Number	Design/Operating Pressure	Maximum Operating Temperature	Qualification Pressure	Element length
80H15	99165	150 psi / 10 Bar	190°F / 88°C	900 psi / 62 Bar	1 - 8
80H30	99166	300 psi / 20 Bar	190°F / 88°C	1800 psi / 124 Bar	1 - 8
80H45	99167	450 psi / 31 Bar	190°F / 88°C	2700 psi / 186 Bar	1 - 8
80H60	99168	600 psi / 41 Bar	190°F / 88°C	3600 psi / 248 Bar	1 - 8
80H100	99169	1000 psi / 68 Bar	150°F / 66°C	6000 psi / 413 Bar	1 - 8
80H120	99170	1200 psi / 82 Bar	150°F / 66 C	7200 psi / 496 Bar	1 - 8

CONSULT CodeLine™ REPRESENTATIVE FOR THE FOLLOWING OPTIONS

- Intermediate element length vessel
- Ultrapure and sanitary packages

Side port options available in 80H Model: 3.0"  
Please refer to sales drawings for multiport specifications

## CodeLine™: Setting the Standard for Quality

Each CodeLine™ vessel is subject to rigorous quality inspection and hydro-testing before shipping. Pentair's quality certifications follow from independent and separate accreditations for materials, standards, and practices at its manufacturing facility.



AUTHORIZED USER OF  
ASME CODE SYMBOL

ASME: CodeLine™ membrane housings conform to the highest ASME standard with respect to production, processing, fabrication, inspection and testing methods.



NSF 61: US recognised standard for components which contact drinking water to ensure that they do not contribute contaminants that could cause adverse health effects. Select CodeLine™ models are certified with them.



NSF 61: US



ISO: The ISO 9001:2000 standard is recognized internationally for promoting consistent quality practices in manufacturing. CodeLine™ manufacturing adheres to these standards.



CE: European Conformity Marking (CE Mark) indicates conformity with the essential health and safety requirements set out in European Directives. CodeLine™ is available with CE certification on request.



# Other CodeLine™ Vessels

## 8-inch Membrane Housings: End Entry Specifications for 80E series

Model Number	Drawing Number	Design/Operating Pressure	Maximum Operating Temperature	Qualification Pressure	Element Length
80E30	99111	300 psi / 20 Bar	120°F / 49°C	1800 psi / 124 Bar	1 - 7
80E45	99112	450 psi / 31 Bar	120°F / 49°C	2700 psi / 186 Bar	1 - 7
80E60	99109	600 psi / 41 Bar	120°F / 49°C	3600 psi / 248 Bar	1 - 7
80E100	99108	1000 psi / 68 Bar	120°F / 49°C	6000 psi / 413 Bar	1 - 7
80E120	99110	1200 psi / 82 Bar	120°F / 49°C	7200 psi / 496 Bar	1 - 7

## 4-inch Membrane Housings: End Entry Specifications for 40E series

Model Number	Drawing Number	Design/Operating Pressure	Maximum Operating Temperature	Qualification Pressure	Element Length
40E30N	518016	300 psi / 20 Bar	120°F / 49°C	1800 psi / 124 Bar	1 - 3
40E60	518017	600 psi / 41 Bar	120°F / 49°C	3600 psi / 248 Bar	1 - 6
40E100	518015	1000 psi / 68 Bar	120°F / 49°C	6000 psi / 413 Bar	1 - 6



## 4-inch Membrane Housings: Side Port & Multi Port Specifications for 40 A series

Model Number	Drawing Number	Design/Operating Pressure	Maximum Operating Temperature	Qualification Pressure	Element Length
40A30	518001	300 psi / 20 Bar	176°F / 80°C	1800 psi / 124 Bar	1 - 6
40A45	99127	450 psi / 31 Bar	176°F / 80°C	2700 psi / 186 Bar	1 - 6
40A60	99128	600 psi / 41 Bar	176°F / 80°C	3600 psi / 248 Bar	1 - 6

Please refer to sales drawings for sideport/multiport specifications



\*ASME stamped vessels available on request  
 \*All the specifications mentioned are subject to change without prior notice.



#### GLOBAL CONTACTS

Australia	+61-3-9574-4000
China	+86-215-8777-088
India	+91-832-288-3300
Middle East	+97-16-572-0552
Singapore	+61-40-2251-777
UK	+44-77-6879-3901
USA	+1-440-286-4116

For more information, log on to [www.codeline.com](http://www.codeline.com)  
or write to [info@codeline.com](mailto:info@codeline.com)