

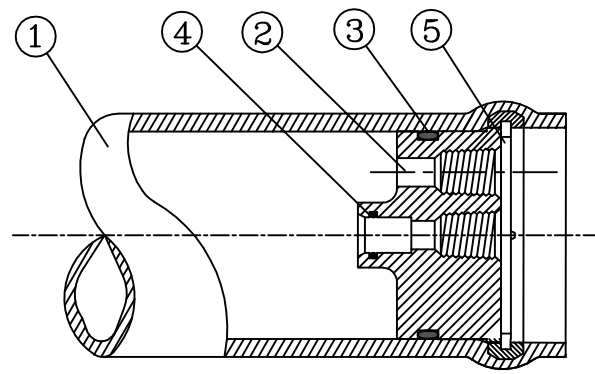
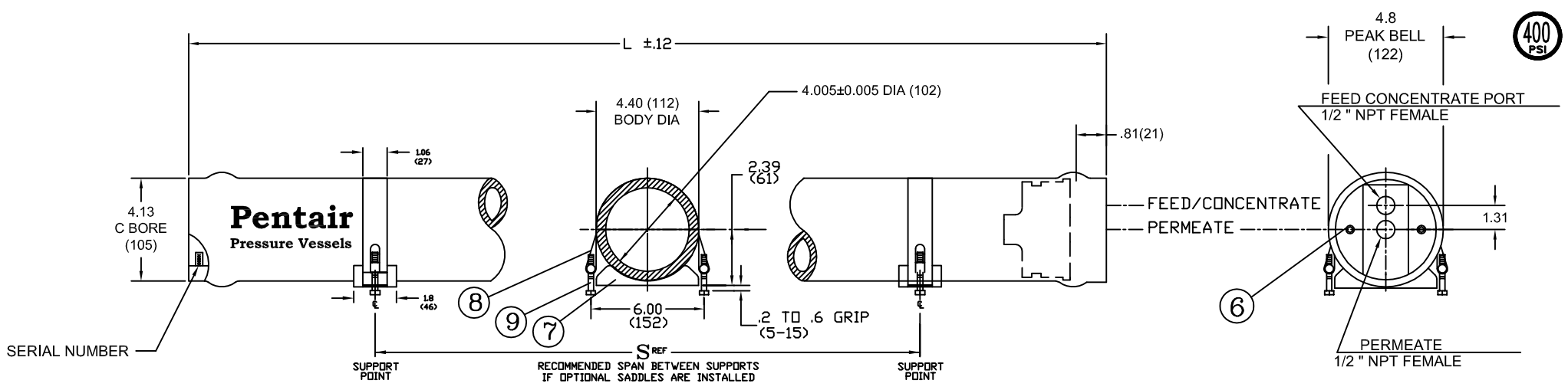
4

3

2

B

B



SECTION THROUGH END CLOSURE

NOTES:  
 \* DIMENSIONS IN INCHES (MM APPROX)  
 \* NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED

Dwg. Ref	Qty. Per	Part Number	Part Name	Materials/Remarks
<b>SHELL</b>				
①	1		Shell	Filament wound epoxy/glass composite. Head locking grooves integrally wound in place. Shell exterior coated with grey high gloss polyurethane paint.
<b>HEAD</b>				
②	2	96002	End Plug	Engineering Thermoplastic
③	2	45317	Plate Seal	EPDM - O-Ring
④	2	45296	PWT Seal	EPDM - O-Ring
<b>HEAD INTERLOCK</b>				
⑤	4	96001	Locking Segment	304 SST
⑥	4	94028	Screw	304 SST
<b>VESSEL SUPPORT</b>				
⑦	2	45058	Saddle - OPTIONAL	Engineering Thermoplastic
⑧	2	47459	Strap - OPTIONAL	Type 304 SST - PVC Cushion
⑨	4	47458	Screw - OPTIONAL	5/16-18 UNC, 18-8 Stainless Steel

Shell Length Code	L L.O.A. IN (MM)	S SPAN IN (mm)	APPROX. ASSEMBLY Weight LB (KG)
B1	18 (457)	ANY	4.50 (2.0)
C1	25 (635)	ANY	5.75 (2.6)
1	44 (1118)	28 X 1 (711)	9.00 (4.1)
2	84 (2134)	56 X 1 (1422)	16.0 (7.3)
3	124 (3150)	80 X 1 (2032)	23.0 (10.5)



DRAWN		KR		MODEL 40-400			
CHECKED		MD		LOW PRESSURE MEMBRANE HOUSING			
APPROVED		SS		DATE	DWG. NO.	REV.	
				22JAN08	99004	D	
				ECN	SCALE	SIZE	SHEET
				1176	NONE	A3	1 OF 2

4

3

2

1

A

A

**RATING:**

DESIGN PRESSURE..... 400 PSI AT 120°F  
(2.8 MPa AT 49°C)

MIN. OPERATING TEMP..... 20°F  
(-7°C)

FACTORY TEST PRESSURE..... 600 PSI  
(4.1 MPa)

BURST PRESSURE..... 1600 PSI  
(11.2 MPa)

**INTENDED USE**

THE MODEL 40-400 FIBREGLASS PRESSURE VESSEL IS DESIGNED FOR CONTINUOUS, LONG-TERM USE AS A HOUSING FOR SINGLE REVERSE OSMOSIS AND ULTRAFILTRATION ELEMENTS IN TYPICAL COMMERCIAL WATER TREATMENT SYSTEMS AT PRESSURES UP TO 400 PSI. ANY MAKE OF 4 INCH NOMINAL DIAMETER SPIRAL-WOUND ELEMENT WITH A 3/4" DIAMETER MALE PRODUCT WATER TUBE IS EASILY ACCOMMODATED.

THE MODEL 40-400 MUST BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE LISTED PRECAUTION, 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: UNDER RESTRAINT AT SUPPORT POINTS OR PIPING CONNECTIONS CAN CAUSE LEAKS TO DEVELOP IN THE 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 ASSEMBLY.

PENTAIR WATER 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 MATERIALS OF CONSTRUCTION FOR COMPATIBILITY WITH THE SPECIFIC CORROSIVE ENVIRONMENT SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

**PRECAUTIONS**

DO.... READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS;FAILURE TO TAKE EVERY PRECAUTION WILL AVOID WARRANTY AND MAY RESULT IN VESSEL FAILURE

DO.... PROVIDE OVER PRESSURE PROTECTION FOR VESSEL SET AT NOT MORE THAN 105% OF DESIGN PRESSURE

DO.... INSPECT END CLOSURES REGULARLY; REPLACE COMPONENTS THE HAVE DETERIORATED AND CORRECT CAUSES OF CORROSION

DO.... NOT... MAKE RIGID PIPING CONNECTIONS TO PARTS OR CLAMPS VESSELS IN ANY WAY THAT RESTRICTS GROWTH OF FIBREGLASS SHELL UNDER PRESSURE;▲DIA = 0.01 IN. (0.25mm) AND ▲L = 0.3 IN. (8mm) FOR A LENGTH CODE -1 VESSEL

DO.... NOT HANG PIPING MANIFOLDS FROM PARTS OR USE VESSEL IN ANY WAY TO SUPPORT OTHER COMPONENTS

DO.... NOT OPERATE VESSEL AT PRESSURE AND TEMPERATURES IN EXCESS OF ITS RATING

DO.... NOT OPERATE VESSEL WITHOUT ELEMENT INSTALLED

DO.... NOT OPERATE VESSEL WITH PERMEATE PORT PRESSURE IN EXCESS OF 125 PSI (0.9 MPa) AT 120°F (49°)

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 RINGS ARE IN PLACE

DO.... NOT WORK ON ANY COMPONENT UNTIL FIRST VERIFYING THAT PRESSURE IS RELIEVED FROM VESSEL.

**ORDERING**

PLEASE SPECIFY THE FOLLOWING

- \* VESSEL MODEL
- \* MEMBRANE ELEMENT MAKE AND MODEL NUMBER
- \* SPECIFIC CONCERNS REGARDING INTENDED USE AND REQUESTS FOR SPECIAL MATERIALS OF CONSTRUCTION.

40-400-

SHELL LENGTH/ELEMENT INTERFACE

CODE	ELEMENT CAPACITY
B1	ONE 14" DIRECT CONNECT
C1	ONE 21" DIRECT CONNECT
1	ONE 40" DIRECT CONNECT
2	TWO 40" DIRECT CONNECT
3	THREE 40" DIRECT CONNECT

SHELL FINISH

EXTERIOR SHELL FINISH
GREY

CERTIFICATION

CERTIFICATION GRADE	
<input type="checkbox"/>	CERTIFIED BY PENTAIR WATER
<input type="checkbox"/>	OPTIONAL - CE MARKED

**OPTIONS**

**END PLUG MATERIALS**

MATERIALS	
<input type="checkbox"/>	* POLYVINYL CHLORIDE

**PERMEATE PORT CONFIGURATIONS**

PORT SIZES	
<input type="checkbox"/>	* 1/2" NPT FEMALE
<input type="checkbox"/>	1/2" BSP/JIS FEMALE

**FEED CONC. PORT CONFIGURATIONS**

PORT SIZES	
<input type="checkbox"/>	* 1/2" NPT FEMALE
<input type="checkbox"/>	1/2" BSP/JIS FEMALE

\* STANDARD OPTIONS