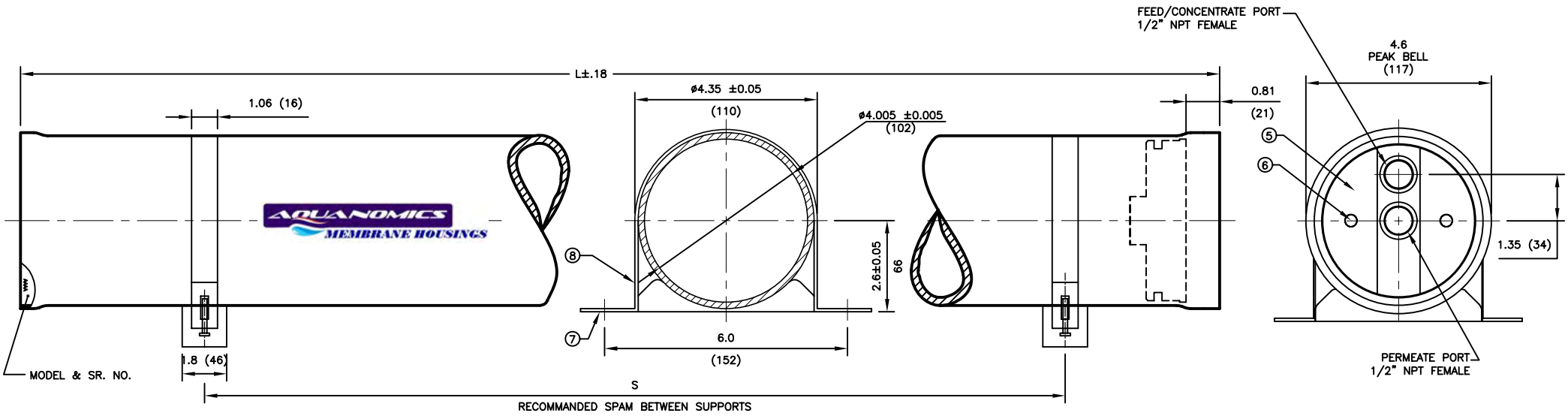
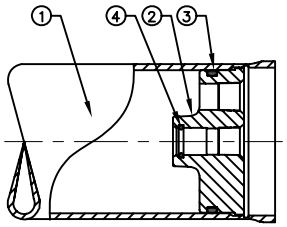
250 PSI / 17 BAR
END PORT



SECTION – END CLOSURE

| Shell Length Code | L L.O.A. INCH (MM) | P Span INCH (MM) | Approx. Empty Weight LB (KG) |
|---|---|---|---|
| 1. | 44.62 (1133 | 28 (711) | 8.8 (4.0) |
| 2. | 84.62 (2149) | 56 (1422) | 14.3 (6.5) |
| 3. | 124.62 (3165) | 80 (2032) | 23.0 (10.5) |

| DWG. REF | QTY. | PART NUMBER | DESCRIPTION | MATERIALS |
|---|---|---|---|---|
| 1 | 1 | – | SHELL | Filament wound epoxy/glass composite. Head locking grooves integrally wound in place. Shell exterior coated with high gloss ployurethane paint |
| 2 | 2 | U2EP–42501 | END PLUG | ENGINEERING THERMOPLASTIC |
| 3 | 2 | U2SL–44002 | PLUG SEAL | EPDM |
| 4 | 2 | U2SL–44004 | PWT SEAL | EPDM |
| 5 | 4 | U2HM–42505 | HALF MOON LOCKING SEGMENT | SS 304 |
| 6 | 4 | U2SC–42506 | SCREW | SS 304 |
| VESSEL SUPPORT - OPTIONAL | | | | |
| 7 | 2 | U2–41501 | SADDLE | ELASTOMER |
| 8 | 2 | U2–41502 | STRAP | SS 304 WITH CUSION |

**NOTES :**

- DIMENSIONS IN INCHES (MM APPROX)
- FOR REFERENCE ONLY NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED
- CENTER VESSEL ON 2 SUPPORTS AT SPAN "S"

**⚠ WARNING :**

INCORRECT MANFOLDING WILL CAUSE SEVERE LOCAL STRESS AROUND PORT AND MAY RESULT IN LEAKS AND PREMATURE FAILURE. TAKE EVERY PRECAUTION MENTIONED IN USER MANUAL

- SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

AQUANOMICS MEMBRANE HOUSINGS

| | |
|---|---|
| ENGR | RP–2007 |
| QLTY | GM–2007 |
| MRKT | DP–2007 |

# MODEL – A4E250
## MEMBRANE HOUSING

| SCALE : NTS | ECN | SHEET | SIZE | NUMBER | REV |
|---|---|---|---|---|---|
| | 0000 | 1 OF 2 | A3 | 664250 | 0 |

## TECHNICAL SPECIFICATIONS

Design Operating Pressure …… **250 PSI (17.2 Bar)**
Max Operating Temperature ……..…… **49$^0$C ( 120$^0$F )**
Min Operating Temperature ……..…… **-07$^0$C ( 20$^0$F )**

Hydro - Test Pressure ……..… **375 PSI (25.8 Bar)**
Qualification Burst Pressure …… **1500 PSI (103.4 Bar)**

## USE

AQUANIMICS fiberglass membrane housings are designed for continuous, long term use as housings for membrane filtration. AQUANOMICS 250 PSI membrane housings are designed to treat tap & low brackish waters. Any standard 4 Inch nominal diameter & 40 Inch long spiral wound membrane with ¾" dia male product water tube will easily accommodate in AQUANOMICS membrane housing.

For safer & better service life of membrane housing, follow all the given precautionary instructions. Failure to do so will void the warranty.

## Quick Checks

- Polyurethane or rubber saddles should be used as an interface between the membrane housing shell & skids / frame.
- Under pressure, membrane housing must be free to expand. Ensure that flexible fittings & couplings are used to allow expansion.
- Vessel must not be subjected to excessive stress caused by bending moments.
- Vessel ports & components should not be used to support piping manifolds or any other components.

**AQUANOMICS is engaged in continuous development of the products and reserves the right to amend the information given herein without notice and without incurring any obligations.**



## PRECAUTIONS

**Mounting:-**

- Mount the membrane housing centered on horizontal members spaced at recommended span (s) using compliant mounting hardware furnished.
- Tighten the straps – maximum one ft-lb.

**Piping:-**

- Use flexible piping / victaulic couplings for permeate & feed / concentrate connections.
- Hanging piping manifolds or supporting other components with the membrane housing may result in damaging of membrane housing.
- Permeate port is made of Engineering Plastic & Tightening the permeate port more than one turn past hand tight will damage the port.

**Overpressure Protection:-**
Provide overpressure protection for membrane housing set at not more than 105% design operating pressure.

**Inspection:-**
Inspect end closures regularly, replace deteriorated components and correct causes of deterioration.

**Servicing:-**
Relieve system pressure before working on the membrane housing. Working on system under pressure may result in severe bodily harm or property damage.

**Before Start – Up:-**
Ensure that the retaining ring is in place and fully seated in the groove.

**Pressures:-**

- Operating the vessel in excess of the ratings, will shorten the life & may result in severe bodily harm or property damage.
- Engineering permeate port are designed to operate at 125psi, operating at pressure in excess of 125psi must be approved by factory.
- Membrane Housings are not designed for VACUUM conditions; operate only in positive pressure applications.

**pH Operation:-**
Membrane Housings are designed for continuous operation at a pH of 3 – 11 & for intermittent cleaning pH 2 – 12 for less than 30 minutes.

**STOPPAGE:-**
Some feed waters may cause corrosion under static condition, in order to prevent the system from corrosion, it is recommended to flush the system with permeate water.

## ORDERING

While ordering please specific:

- Model
- Element length
- Make & Model of Membrane Element to be used.
- If any special requirement.

## MODEL IDENTIFICATION

**A4E250-1**

| | |
|---|---|
| A | **BRAND AQUANOMICS** |
| 4 | **SIZE / INTERNAL DIAMETER (4")** |
| E | **TYPE OF ENTRY (END ENTRY)** |
| 250 | **OPERATING PRESSURE (250 PSI)** |
| -1 | **NO OF 40" ELEMENTS (ONE ELEMENT)** |