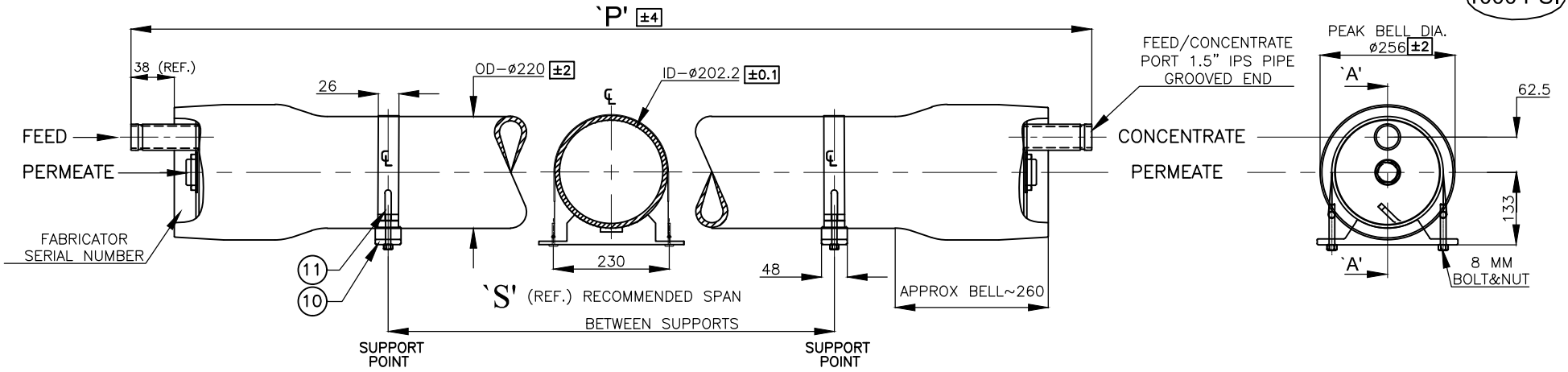
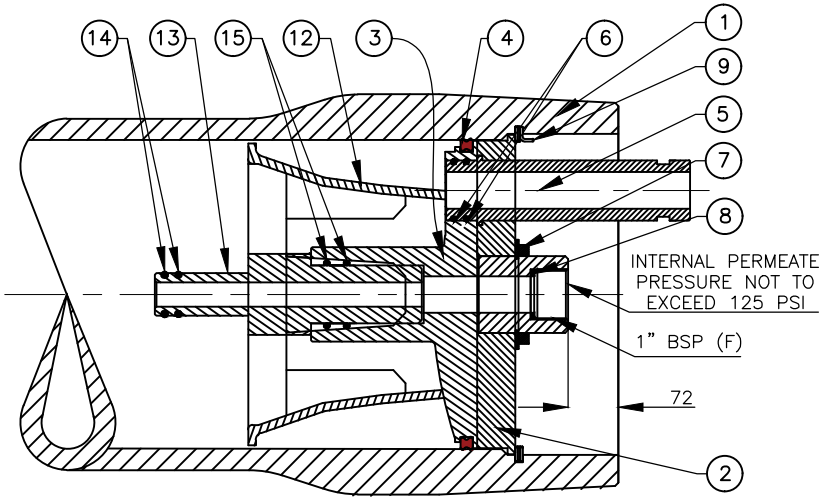
1000 PSI




SECTION–'A'–'A'

| SHELL LENGTH CODE | MODEL (*) | `S' SPAN MM | APPROX. ASSEMBLY WEIGHT KG | `P' PORT-PORT MM |
|---|---|---|---|---|
| 1 | 80-40-EP | 676 | 32 | 1658 |
| 2 | 80-80-EP | 1656 | 44 | 2676 |
| 3 | 80-120-EP | 2674 | 56 | 3692 |
| 4 | 80-160-EP | 1845X2 | 68 | 4708 |
| 5 | 80-200-EP | 2355X2 | 80 | 5724 |
| 6 | 80-240-EP | 2865X2 | 92 | 6740 |
| 7 | 80-280-EP | 3300X2 | 104 | 7758 |

| DWG.REF | QTY. | PART NO. | DESCRIPTION | MATERIALS |
|---|---|---|---|---|
| **SHELL** | | | | |
| 1 | 1 | --- | PRESSURE VESSEL | FILAMENT WOUND EPOXY/GLASS COMPOSITE (HEAD LOCKING GROOVES INTEGRALLY WOUND) |
| **HEAD ASSEMBLY** | | | | |
| 2 | 2 | 8042 | BEARING PLATE | HARD ANODIZED ALUMINUM ALLOY |
| 3 | 2 | 8025 | SEALING PLATE | ENGINEERING THERMOPLASTIC |
| 4 | 2 | 8010 | HEAD SEAL | EPDM |
| 5 | 2 | 8048 | F/C PORT | SS 316 |
| 6 | 2 | 8093 | F/C PORT SEAL | EPDM |
| 7 | 2 | 8014 | PORT NUT | ENGINEERING THERMOPLASTIC |
| 8 | 2 | 8096 | FLAT WASHER | EPDM |
| **END CAP LOCKING** | | | | |
| 9 | 2 | 8012 | RETAINING RING | SS 316 |
| **PRESSURE VESSEL SUPPORT** | | | | |
| 10 | 2 | **8016 | SADDLE | ENGINEERING THERMOPLASTIC |
| 11 | 2 | **8017 | STRAP ASSEMBLY | SS 304 WITH CUSHION |
| **MEMBRANE INTERFACE** | | | | |
| 12 | 1 | 8008 | THRUST RING | ENGINEERING THERMOPLASTIC |
| 13 | 2 | 8007 | ADAPTER | ENGINEERING THERMOPLASTIC |
| 14 | 4 | 8094 | ADAPTER SEAL - M | EPDM |
| 15 | 4 | 8093 | ADAPTER SEAL - P | EPDM |

WARNING :-
* INCORRECT / IMPROPERLY SUPPORTED PIPING CAN CAUSE SEVERE STRESS AROUND PORT AND MAY RESULT IN LEAKS AND PREMATURE FAILURE
* TAKE EVERY PRECAUTION MENTIONED IN USER MANUAL
* SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE

NOTES:
* NUMBER 12 TO BE USED ONLY AT DOWN STREAM.
* ADAPTER SPACERS TO BE USED ONLY AT UP STREAM.
* THIS DRAWING IS FOR REFERENCE PURPOSE, NOT TO BE USED FOR FABRICATION PURPOSE
* SHELL EXTERIOR COATED WITH WHITE RAL 9003, HIGH GLOSS POLYURETHANE PAINT.
** 3 SUPPORTS REQUIRED FOR LENGTH -4 ABOVE.

| REV. | DATE | REVISED BY | DETAILS OF REVISION |
|---|---|---|---|
| | | | |

TITLE G.A. DRG. OF MEMBRANE HOUSING

CLIENT M/S.

MODEL : 80–1000–END PORT

| | | | |
|---|---|---|---|
| APPD. | YKU | | DRAWN |
| CHD. | DKR | | NOT TO SCALE |
| DRN. | KART | 30.08.18 | ALL DIMENSION ARE IN mm |
| DRG. No. | 80–17–1000PSI–EP | | |

EQ. MARK
SH. 1 OF 8.
REV 0
DT. 31.0

FILE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Gala No. 2 & 3, Ground Floor, Neminath Industrial Estate No. 2, Navghar, Vasai (East), Dist.: Palghar - 401 219
Tel.: +91 8691009127/26 Email: filtraw@gmail.com Website: www.ewatertreatmentindia.com

## TECHNICAL SPECIFICATION

| | |
|---|---|
| Design operating pressure | 1000 PSI (68.97 Bar) |
| Max operating temperature | 65°C (149° F ) |
| Min operating temperature | −07°C ( 19.40° F ) |
| Hydro− Test Pressure | 1100 PSI (76.38 Bar) |

## USE

UKL fiberglass membrane housing are designed for continuous, long term use as housing for membrane filtration to treat tap, low brackish & Sea waters up to 1000 PSI. Any standard 8 inch nominal diameter spiral wound or hollow fiber membrane will easily accommodate in UKL membrane housing.The element & head assembly interface hardware for the specified membrane is supplied with the vessel.

Model 80−1000−EP has been designed to meet the standers of the American Society of Mechanical Engineer (ASME).

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

## Quick Checks

- Polyurethane or rubber saddles should be use 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 expansions.
- Vessel must not be subjected to excessive stress caused by bending moments.
- Vessel port & components should not be use to support piping manifold or any other components.

UKL is engaged in continuous development of the product & reserves the right to amend the information given herein without notice & 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 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 & correct causes of deterioration.

**Servicing:−**

- Relive 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 & 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 dsmage.
- Permeate port are designed to oprate at 125 psi,for operating at pressure in excess of 125 psi must approved by factory.
- Membrane housing are not designed for vaccum conditions oprate only in positive pressure applications.

**pH Operation:−**

- Membrane housing 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.

Exterior portion:

- Standard− White high glass polyurethane coat.
- As per customer requirement after getting discussion with factory people.

## MODEL IDENTIFICATION

80−40−1000−EP

| | |
|---|---|
| 80 | SIZE/INTERNAL DIA. (8") |
| *40 | NO OF 40" ELEMENTS(ONE ELEMENT) |
| 1000 | OPERATING PRESSURE (1000 PSI) |
| EP | TYPE OF ENTRY (END ENTRY) |

Spare Material options:

- Please check the table given in drawing no. 80−17−1000PSI−EP

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