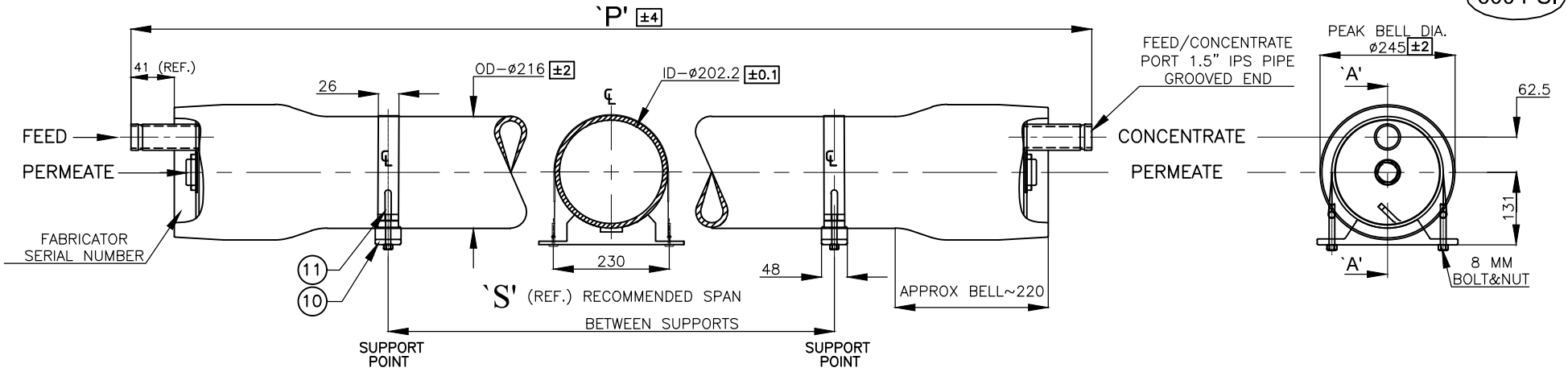
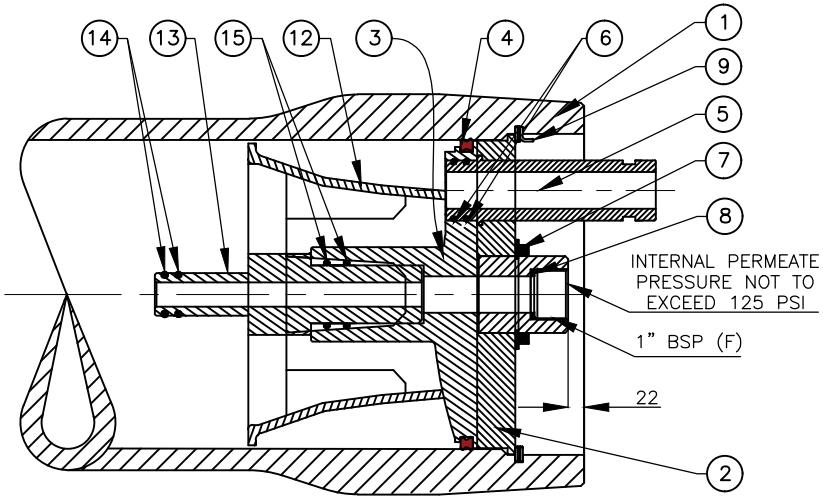
600 PSI





SECTION–'A'–'A'

SHELL LENGTH CODE	MODEL (*)	`S' SPAN MM	APPROX. ASSEMBLY WEIGHT KG	`P' PORT-PORT MM
1	80-40-EP	676	22	1570
2	80-80-EP	1656	31	2588
3	80-120-EP	2674	40	3604
4	80-160-EP	1845X2	49	4620
5	80-200-EP	2355X2	58	5636
6	80-240-EP	2865X2	67	6652
7	80-280-EP	3300X2	76	7670

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

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	8002	BEARING PLATE	HARD ANODIZED ALUMINUM ALLOY
3	2	8025	SEALING PLATE	ENGINEERING THERMOPLASTIC
4	2	8010	HEAD SEAL	EPDM
5	2	8024	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

TITLE: G.A. DRG. OF MEMBRANE HOUSING

CLIENT: M/S.

MODEL : 80–600–END PORT

APPD.	YKU		DRAWN
CHD.	DKR		NOT TO SCALE
DRN.	KART	30.08.18	ALL DIMENSION ARE IN mm

DRG. No. 80–17–600PSI–EP

EQ. MARK | SH. 1 OF 1 | REV 0 | DT. 31.08.

FILE

FILTRA CONSULTANTS AND ENGINEERS LTD.
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	600 PSI (41.38 Bar)
Max operating temperature	65°C (149° F)
Min operating temperature	−07°C (19.40° F)
Hydro− Test Pressure	660 PSI (45.83 Bar)

USE

UKL fiberglass membrane housing are designed for continuous, long term use as housing for membrane filtration to treat tap & low brackish waters up to 600 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 80−600−EP has been designed to meet the standards 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 damage.
- Permeate port are designed to operate at 125 psi,for operating at pressure in excess of 125 psi must approved by factory.
- Membrane housing are not designed for vacuums conditions operate 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

80−40−600−EP

80	SIZE/INTERNAL DIAM (8")
*40	NO OF 40" ELEMENTS(ONE ELEMENT)
600	OPERATING PRESSURE (600 PSI)
EP	TYPE OF ENTRY (END ENTRY)

Spare Material options:

- Please check the table given in drawing no. 80−17−600PSI−EP

FILTRA CONSULTANTS AND ENGINEERS LTD.
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