

FRP MEMBRANE HOUSINGS

1 - 40E SERIES

2 - 80E SERIES

3 - 80S SERIES

Vili Composites 40E, 80E and 80S is membrane housing series of 8" & 4" diameter with side entry design. This is used for commercial and industrial RO applications.

Vessel models are available in operating pressure of 300 PSI, 450PSI, 600PSI and 1200PSI





ABOUT VILI:

Vili Composites is for the manufacturing of fiber reinforced plastic pressure vessels (Membrane Housing) and its all spare parts which applicable to international standard product as membrane filtration technology.

Vili Composites founded in since 2012 and rapidly increase activities in pressure vessel production (Membrane Housing) market.

Vili Composites group operates in morbi "The City Of Arts". Production facilities for the manufacturer of FRP products from filament winding technology in food and beverage, pharmaceutical, petrochemical, seawater, brackish water desalination and other business market.

With more than 13 years of experience in industrial RO, FRP products and all RO components and chemicals with all RO service and maintenance contract and with more than 13 years long provide experience of VM Group skilled managers.





1 - 40E SERIES

Vili Composites 40E is membrane housing series of 4" diameter with end entry design. This is used for commercial and industrial RO applications. Vessel models are available in operating pressure of 300 PSI, 450 PSI, 600 PSI and 1000 PSI. They are made up of epoxy / glass composite to meet the demands of long term and continuous use in RO processes. Vili Composites 40E vessels can accommodate any standard 4" membrane element.

FEATURES

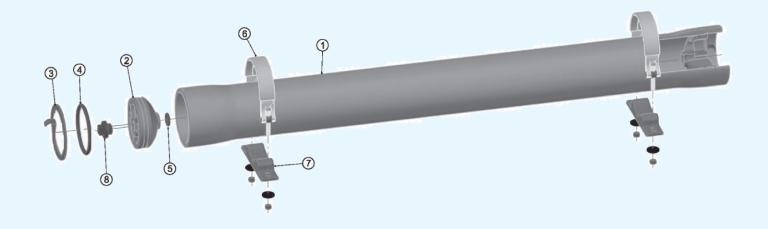
- Mirror finish ID for easy and quick loading and unloading of membranes.
- Quick lock head retention system for quick access to membranes.
- Exteriors coated with high gloss polyurethane paint for UV resistance.
- Compact design for use in compact and low energy water treatment unit.
- More accurate head seal area is formed by mandrel surface.
- Vili Composites 40E30N models are CE certified.
- Vili Composites 40E100 is ASME code compliant and CE certified.
- Operating Temp Range: -10°C ---49°C.
- Feed / Concentrate port 3/4" coupling, Permeate port 1/2" thread.
- Standard: 1.5x Design Pressure.
- Operating pH Range : 3 − 11
- Cleaning pH Range: 2 12 (less than 30 minutes)

MODEL	DESIGN PRESSURE	PORT	ELEMENT
EP4040E300 - (1-4)	300 PSI	END	1-4
EP4040E450 - (1-4)	450 PSI	END	1-4
EP4040E600 - (1-4)	600 PSI	END	1-4
EP4040E1000 - (1-4)	1000 PSI	END	1-4





40E END PORT HOUSING



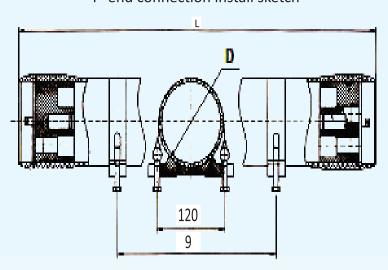
SR. NO.	PARTS NAME	QUANTITY
1	HOUSING	1
2	END CAP	2
3	RETAINING RING FOR LOCK	2
4	END CAP O RING	2
5	PERMEATE PORT RING	2
6	STRAPS	2
7	SADDLE FOR SUPPORT	2
8	PERMEATE CAP	2





DRAWING:

4" end connection install sketch



WORKING PRESSURE	QUANTITY OF MEMBRANE	D	L	S	Р
	1		1180	610	1050
300, 450 PSI	2	116	2180	1350	2070
300, 430 F31	3	110	3180	1960	3080
	4		4200	1580*2	4100
	1	120	1270	610	1050
600 PSI	2		2300	1350	2070
600 P31	3		3300	1960	3080
	4		4320	1580*2	4100
	1		1270	610	1050
1000 PSI	2	128	2300	1350	2070
	3	120	3300	1960	3080
	4		4320	1580*2	4100



2 - 80E SERIES

Vili Composites 80E is membrane housing series of 8" diameter with end entry design. This is used for commercial and industrial RO applications. Vessel models are available in operating pressure of 300 PSI, 450 PSI, 600 PSI and 1000 PSI. They are made up of epoxy / glass composite to meet the demands of long term and continuous use in RO processes. Vili Composites 80E vessels can accommodate any standard 8" membrane element.

FEATURES:

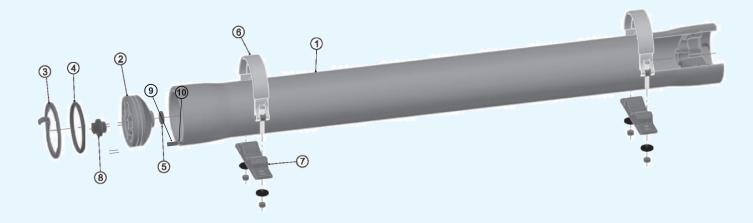
- Mirror finish ID for easy and quick loading and unloading of membranes.
- Quick lock head retention system for quick access to membranes.
- Exteriors coated with high gloss polyurethane paint for UV resistance.
- Compact design for use in compact and low energy water treatment unit.
- More accurate head seal area is formed by mandrel surface.
- Vili Composites 80E30N models are CE certified.
- Vili Composites 80E100 is ASME code compliant and CE certified.
- Operating Temp Range: -10°C ---49°C.
- Feed / Concentrate port 1-1/2" coupling, Permeate port 1" thread.
- Standard: 1.5x Design Pressure.
- Operating pH Range : 3 − 11
- Cleaning pH Range : 2 12 (less than 30 minutes)

MODEL	DESIGN PRESSURE	PORT	ELEMENT
EP8040E300 - (1-6)	300 PSI	END	1-6
EP8040E450 - (1-6)	450 PSI	END	1-6
EP8040E600 - (1-6)	600 PSI	END	1-6
EP8040E1000 - (1-6)	1000 PSI	END	1-6





80E END PORT HOUSING

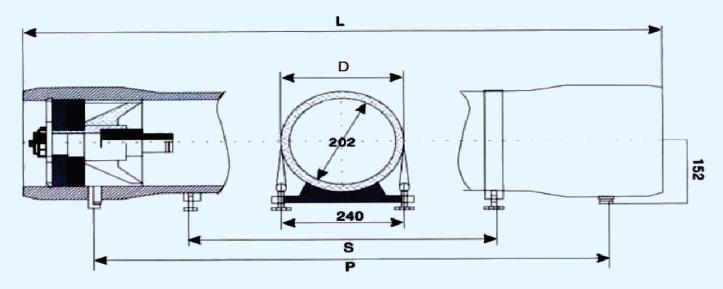


SR. NO.	PARTS NAME	QUANTITY
1	HOUSING	1
2	END CAP	2
3	RETAINING RING FOR LOCK	2
4	END CAP O RING	2
5	PERMEATE PORT RING	2
6	STRAPS	2
7	SADDLE FOR SUPPORT	2
8	PERMEATE CAP	2
9	ADAPTOR	2
10	ADAPTOR O RING	4





DRAWING:



8 Inch membrane housing drawing - End Port

WORKING PRESSURE	QUANTITY OF MEMBRANE	D	L	S	Р
	1		1580	750	1142
	2		2580	1350	2158
300, 450 PSI	3	214	3580	2250	3174
300, 430 (3)	4	Z 14	4580	1800*2	4190
	5		5580	2200*2	5206
	6		6580	2600*2	6222
	1	220	1580	750	1142
	2		2580	1350	2158
600 PSI	3		3580	2250	3174
000 P31	4		4580	1800*2	4190
	5		5580	2200*2	5206
	6		6580	2600*2	6222
	1		1600	750	1142
	2		2600	1350	2158
1000 PSI	3	234	3600	2250	3174
	4	234	4600	1800*2	4190
	5		5600	2200*2	5206
	6		6600	2600*2	6222



3 - 80S SERIES

Vili Composites 80E is membrane housing series of 8" diameter with end entry design. This is used for commercial and industrial RO applications. Vessel models are available in operating pressure of 300 PSI, 450 PSI, 600 PSI and 1200 PSI. They are made up of epoxy / glass composite to meet the demands of long term and continuous use in RO processes. Vili Composites 80S vessels can accommodate any standard 8" membrane element.

FEATURES

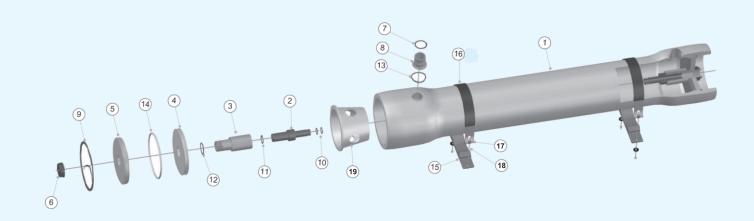
- Mirror finish ID for easy and quick loading and unloading of membranes.
- Quick lock head retention system for quick access to membranes.
- Exteriors coated with high gloss polyurethane paint for UV resistance.
- Compact design for use in compact and low energy water treatment unit.
- More accurate head seal area is formed by mandrel surface.
- Vili Composites 80E30N models are CE certified.
- Vili Composites 80E100 is ASME code compliant and CE certified.
- Operating Temp Range: -10°C ---49°C.
- Feed / Concentrate port 1-1/2" coupling, Permeate port 1" thread.
- Standard: 1.5x Design Pressure.
- Operating pH Range : 3 − 11
- Cleaning pH Range : 2 12 (less than 30 minutes)

MODEL	DESIGN PRESSURE	PORT	ELEMENT
SP8040E300 - (1-6)	300 PSI	SIDE	1-6
SP8040E450 - (1-6)	450 PSI	SIDE	1-6
SP8040E600 - (1-6)	600 PSI	SIDE	1-6
SP8040E1000 - (1-6)	1000 PSI	SIDE	1-6





80S SIDE PORT HOUSING



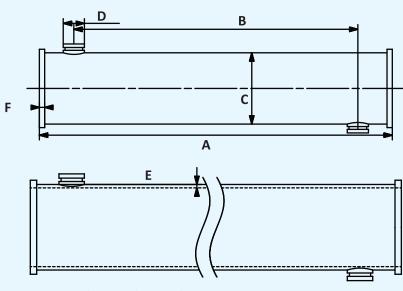
SR. NO.	PARTS NAME	QUANTITY
1	HOUSING	1
2	ADAPTOR	2
3	PERMEATE PORT	2
4	SEALING PLATE	2
5	BEARING PLATE	2
6	PORT NUT	2
7	FC PORT NUT	2
8	FC PORT	2
9	RETAINING RING	2
10	ADAPTOR O RING	4

SR. NO.	PARTS NAME	QUANTITY
11	PERMEATE PORT O RING	2
12	PERMEATE PORT SMALL O RING	2
13	FC PORT O RING	2
14	SEALING PLATE O RING	2
15	SADDLE	2
16	STRAP	2
17	COPPER NUT	4
18	SS BOLT	4
19	THIRDSCONE	1

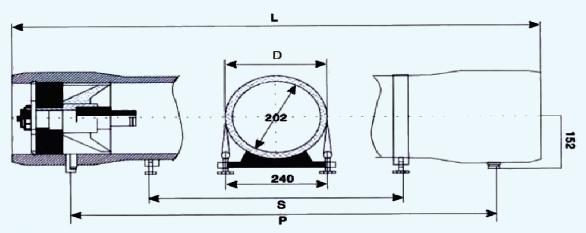




DRAWING:



8 Inch membrane housing 300 PSI & 450 PSI



8 Inch membrane housing drawing - Side Port

SR	8040 SP	8080 SP	80120 SP	80160 SP	80200 SP	80240 SP
Α	1520	2536	3556	4566	5586	6601
В	1200	2216	3236	4246	5266	6281
С	202	202	202	202	202	202
D	50.8	50.8	50.8	50.8	50.8	50.8
Е	4.5	4.5	4.5	4.5	4.5	4.5
F	19+	19+	19+	19+	19+	19+



Certificate of Registration

This is to certify that the technical documentation for the product:

Membrane Housing

Manufactured by:

VILI COMPOSITES

Survey No. 388 / 1, Jepur Road, Bagathala, Ta - Morbi, District Morbi - 363641 (Gujarat), India.

Complies with the applicable requirements of General Product Safety Directive 2001/95/EC

The technical documentation / inspection / test results comply with the requirements of **General Product Safety Directive (GPSD)** hence manufacturer's declaration of conformity according to above directive is accepted. **Vili Composites** Can place the CE marking as per laid down regulations on the Products listed in Annexure.

Datum Van Publicatie / Date of Issue : 22/09/2018 Vervaldatum / Date of Expiry : 21/09/2021 Ist Annual surveillance audit due on : 21/08/2019

IInd Annual surveillance audit due on : 21/08/2020

Paule.

Director (Certification)

Royal Stancert B.V.

Feitelijke Beoordelingen - Wereldwijde Beoordelingen Certificaat Nummer / Certificate No. : CE-BV-1809-562

Regd. Office - Joop Geesinkweg 501, 1114 AB Amsterdam. The Netherlands.. (KvK-Nummer 71431802 / RSIN 858713159 - Rechtsvorm - Besloten Vennootschap).

(AVA-Aummer /1431802/RGA 853/13139 - Reculsvorm - Decimen tennomostement This certificate remains the property of Royal Stancert B.V. and must be returned whenever demanded. The validity of this certificate can be verified at http://www.royalstancert.nl. Royal Stancert B.V. is an independent system, product and personal assessment body accredited by (Global Euro Accreditation Centre, Georgia, (GCIN - 654), Email: info@royalstancert.nl









COMPANY PROFILE:

Vili Composites industries was establish in the year 2012 to manufacture and world class product related to water treatment industries. FRP Tank (vessels) new launch for various water filtration, water softening, pharmaceutical, industrial boiler and filtering system. The vessels can be sufficiently equipped with mechanical control valves.

The state of the art manufacturing facility at morbi, Gujarat uses the latest technology on FRP pressure vessel backed up by committed and highly experienced working team.

FRP water treatment tank data sheet

Size	Opening (inch)		Dimension (cm)			Colume	D
(inch)	Тор	Bottom	A	В	C	(Liter)	Base
10 X 54	2.5	-	139.5	-	26.1	62.9	Standard
12 X 52	2.5	-	132	-	31.2	85.2	Standard
13 X 54	2.5	-	1380	-	33.5	100	Standard
14 X 65	2.5	-	166	-	33.6	149.6	Standard
16 X 65	4	-	164.3	-	41.5	193.4	Standard
18 X 65	4	4	171.5	23	46.3	228.4	Tripod
21 X 62	4	4	175	16	54.6	309	Tripod
24 X 72	4	4	191	21.5	61.1	428	Tripod
30 X 72	4	4	194	22	75	621	Tripod
36 X 72	4	4	215	35	90	1071	Tripod
42 X 72	6 (Flange)	6 (Flange)	227	31.5	105	1490	Tripod
48 X 72	6 (Flange)	6 (Flange)	220	40	120	1893	Tripod

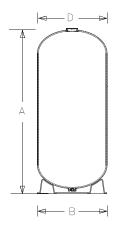


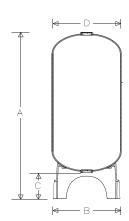
Operating Condition:

Max. Operating pressure 150 psi (10.5 bars)

Max. Operating temperature 120 F(49℃)

150 F (65°C) for flange opening tank





Vili's products have the following features:

- 1 year tank warranty.
- Patented top gripper structure.
- Food grade materials.
- Integrally molded thermoplastic HDPE liners with PE inner shell.
- Premium fiberglass embedded in epoxy resin outer shell.
- Injection molded glass reinforced thermal plastic inlet insert.

Operation Condition:

- 10 bar maximum operating pressure.
- 1-49 degree celsius operating temperature range.





Authorized Distributor for Eastern Region of India

Address

1, Khudiram Bose Sarani, Nagerbazar Jessore Road, ILS Hospital, DumDum, Kolkata - 700080

Contact No : M.:+91-9831042772,+91-9830626265

Email Address:

in fo@aqua filteration.com, sales@aqua filteration.com