Stainless Steel Membrane Housings

FACT SHEET

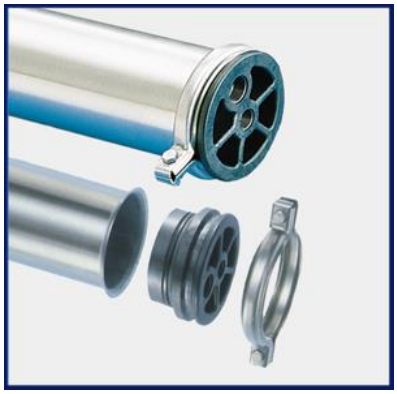

Figure 1: stainless steel membrane housings

Engineered for Performance

Veolia Water Technologies flared end housings offer durable stainless-steel construction at an affordable price. Engineered especially for light industrial and commercial applications, Veolia housings are designed to deliver trouble-free performance for the life of your membrane system.

Veolia End Entry housings have a single-piece end cap held securely in place with two external half clamps. Unlike bale and pin type closures that localize the internal stresses, the half-clamp closure system equally distributes them around the circumference of the housing. The half-clamp closure system seals with a single O-ring fitted tightly around each end cap. This design eliminates the need for grooves or holes in the housings wall that can lead to torn O-rings.

Why Stainless Steel

- Unlike fiberglass, doesn't warp or weep
- Is not affected by UV rays or sunlight
- Stainless steel is a preferred and universally accepted material for water systems
- During assembly, stainless housings are lighter and easier to handle than PVC and FRP housings with equivalent pressure ratings

General Properties

Specific information about materials of construction, housing lengths and specifications are show in Tables 1, 2, and 3.

Table 1: Materials of Construction

Item	Material
End Cap	GFN
O-ring	EPDM
Housing body	4-inch, 316SS; 2-inch & 2.5-inch, 304SS
Permeate plug	Polypropylene or PVC
Clamp hardware	Galvanized Steel
Adapters	PVC (4-inch Universal Style Only)

Single-Piece End Cap

The single-piece end cap extends slightly beyond the end of the housing making it easier to grip and remove. This design also provides accessible port locations to simplify machine assembly and membrane element change-outs.

Direct Connect (DC) Design

The DC design seals standard size male permeate tubes directly to the end cap without the need for adapters. A universal design is also available with a variety of adapter kits to seal any size permeate tube to the end cap.

Housing Features and Benefits

Competitively priced to fit your budget, and engineered to outperform plastic housings, Veolia housings deliver significant savings over the life your membrane system.

Dimensions

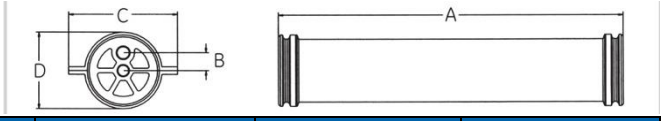

Table 2 Housing Lengths

Housing Length	A		B		C		D		Empty Weight with End Caps	
# of elements	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg
1 – 2 x 14	13.8	350	0.86	22	3.9	99	2.6	66	2	0.9
1 – 2 x 21	20.6	522	0.86	22	3.9	99	2.6	66	3	1.4
1 – 2 x 26	27.7	704	0.86	22	3.9	99	2.6	66	3	1.4
1 – 2 x 39	40.7	1034	0.86	22	3.9	99	2.6	66	4	1.8
1 – 2.5 x 14	15.7	399	0.91	23	4.2	107	3.0	76	2	0.9
1 – 2.5 x 21	22.7	577	0.91	23	4.2	107	3.0	76	3	1.4
1 – 2.5 x 26	25.6	649	0.91	23	4.2	107	3.0	76	4	1.8
1 – 2.5 x 40	41.7	1059	0.91	23	4.2	107	3.0	76	4	1.8
1 – 2.5 x 40	81.7	2075	0.91	23	4.2	107	3.0	76	8	3.6
1 – 4 x 14	14.4	367	1.40	36	7.2	183	5.1	130	10	4.5
1 – 4 x 21	23.8	605	1.40	36	7.2	183	5.1	130	10	4.5
1 – 4 x 26	26.4	671	1.40	36	7.2	183	5.1	130	10	4.5
1 – 4 x 40	43.0	1092	1.40	36	7.2	183	5.1	130	15	6.8
1 – 4 x 40	44.9	1140	1.40	36	7.2	183	5.1	130	16	7.3

Table 3: Specifications

Specification	2-inch		2.5-inch		4-inch	
	inch	mm	inch	mm	inch	mm
Housing ID	2.07	53	2.45	62	4.01	102
Housing OD	2.14	54	2.53	64	4.17	106
FNPT Feed Part	0.375	10	0.375	10	0.750	19
FNPT Permeate Part	0.25	6	0.25	6	0.50	13
Standard Male Permeate Tube Size for DC End Cap	0.675	17	0.750	19	0.750	19
Clamp Torque	25 lbs.-inch	2.8 N-m	45 lbs.-inch	5.1 N-m	140 lbs.-inch	15.8 N-m
OD Finish	Standard Finish		Standard Finish		Polished Finish	

ISO 9001 registered

Veolia Water Technologies
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