

ZeeWeed* 500EV-R cassette

Cassette Properties

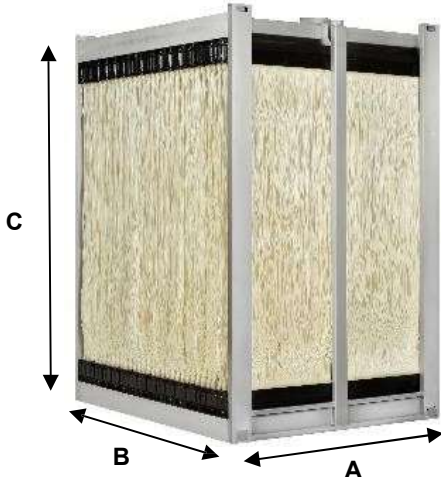


Table 1: Cassette Dimensions

Product	Width (A) mm (in)	Length (B) mm (in)	Height (C) mm (in)
500EV R-56M	1,744 (68.7)	2,136 (84.1)	2,561 (100.8)
500EV R-16M	1,744 (68.7)	738 (29.1)	2,512 (98.9)

Table 2: Cassette Tie Points and Weights

Aeration Technology	Product	Max. # of Modules	Min. # of Modules	Permeate Connection	Air Connection	Max. Shipping Weight ¹ kg (lb)	Wet Weight ² kg (lb)	Lifting Design Weight ³ kg (lb)	Cassette Material ⁴
LEAPmbr Pulsed Aeration	500EV R-56M	56	28	1 x 6" vert. pipe	1 x 3" FNPT half coupling	2,091 (4,610)	2,190 (4,828)	4,536 (10,000)	316L SS frame with engineered plastics
LEAPmbr Pulsed Aeration	500EV R-16M	16	8	1 x 4" FNPT	1 x 3" FNPT half coupling	759 (1,673)	797 (1,757)	2,268 (5,000)	316L SS frame with engineered plastics

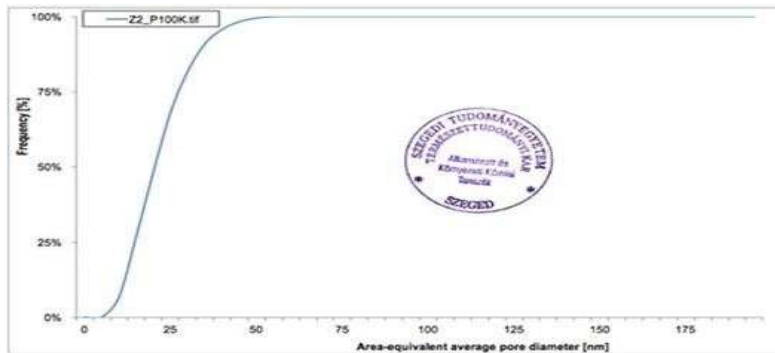
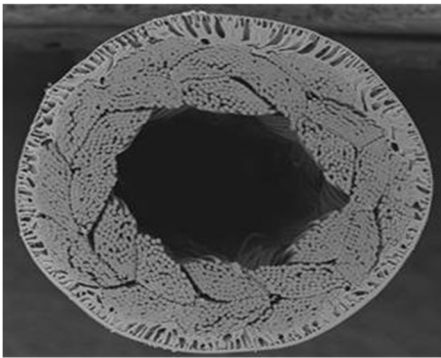
¹ Crated with maximum number of modules

² Wet weight of a clean, fully populated cassette. Lower module population will reduce this value. Cassette support method and lifting module can also vary this weight, depending on design. An estimate is used based on several standard designs

³ Product lifting design weight assumes a fully populated cassette with solids accumulation, standard lifting module and hanging arms. Alternative support and lifting methods could vary this value

⁴ Alternative grades of stainless steel offered for cassettes are 2205 and SMO254 as required

Membrane Properties



Membrane Cross-section and 3rd party certified UF pore size

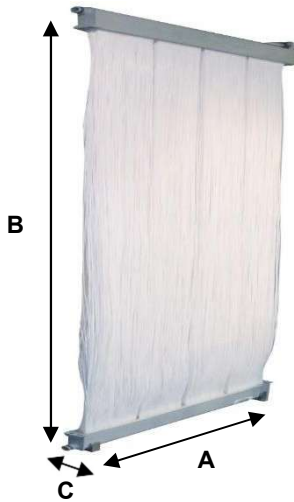


Table 3: Module Dimensions

Application	Product	Width (A) mm (in)	Length (B) mm (in) Header- to-Header	Depth (C) mm (in)
LEAPmbr	RX12	861 (33.9)	1888 (74.3)	51 (2.0)

Table 4: Module Properties

Aeration Technology	Membrane Surface Area m ² (ft ²)	Lifting Weight ¹ kg (lb)	Material	Nominal Pore Size ² (µm)	Fiber Diameter ³ (mm)	Surface Properties	Fiber Tensile Strength ⁴ (N)	Flow Path
LEAPmbr Pulsed Aeration	RX12 42.7 (460)	25.5 (56)	PVDF	0.04	2.2	Non-ionic & Hydrophilic	>600	Submerged, Outside-In

¹ Clean wet weight excluding any solids accumulation

² Nominal pore size is often rounded to 40nm (0.04 micron) for simplicity

³ Fiber dimensions have been rounded to the nearest decimal place for simplicity

⁴ Tensile strength measured using a modification of ASTM protocol (D 3822)

Table 5: Operating & Cleaning Specifications ¹

Aeration Technology	TMP Range kPa (psig)	Typ. Aeration Nm ³ /h/cassette (scfm/cassette) ²	Max. Operating Temp. °C (°F)	Operating pH Range	Backpulse Type	Max. Cleaning Temp. °C (°F)	Cleaning pH Range	Max. lifetime exposure Cl ₂ (ppm)
LEAPmbr Pulsed Aeration	-55 to 55 (-8 to +8)	500EV RX12 195-391 (117-233)	40 (104)	5.0-9.5	Relax Aeration (Standard) Backpulse-capable (as required)	40 (104)	2.0 – 10.5 (<30°C) 2.0-10.0 (30-40°C)	1,000,000

¹ Normalized ADF flow for fully populated cassette at 150m ASL, 20°C wastewater temperature. Delivered value at modules will differ based on site conditions. Lower cassette populations will have a lower aeration rate

² Aeration rates reflect the variation in LEAP-LOW to LEAP-HIGH aeration