



## **Submerged Ultrafiltration Membrane Module**

	HYDRAsub <sup>®</sup> MAX- MBR	HSMM2400-ES
Module Specifications	Configuration: Fiber Orientation: Filtrate Flow : Membrane Polymer: Pore Size (nominal): Number of Elements in Module: Nominal Membrane Area per Module: Permeate Connections: Air Connections: Guide Pipe Connections: Typical Module Dry Weight: Typical Module Wet Weight:	Submerged Membrane Vertical Bi-directional Polyvinylidene Flouride (PVDF) 0.05 µm 60 (40 m <sup>2</sup> each) 25824 ft <sup>2</sup> (2400 m <sup>2</sup> ) (4)- 3" MNPT (4)- 2" MNPT (2)- To fit 3" pipe 3636 lbs (1652 kg) 5634 lbs (2555 kg)
Operating Specifications	Maximum Transmembrane Pressure (Vacuum): Maximum Backwash Pressure : Maximum Instantaneous Chlorine Concentration: Maximum Chlorine Tolerance: MLSS Range: Operating Temperature Range: Feed Water pH Range: Cleaning pH Range: Operating Mode:	-6 psig (-0.41 bar) 2 psig (0.14 bar) 5,000 ppm <sup>a</sup> 742,000 ppm-hrs <sup>b</sup> 8,000 - 12,000 mg/L <sup>c</sup> 41 - 104 <sup>o</sup> F (5 - 40 <sup>o</sup> C) 6.0 - 8.0 1.0 - 11.0 Outside to Inside
Typical Process Conditions	Operating Filtrate Flux <sup>†</sup> : Peak Operating Flux <sup>†</sup> : Chemically Enhanced Backwash (CEB) Flux: CEB Chemicals: Clean In Place (CIP) Flux: CIP Chemicals:	4-20 gfd (7-34 lmh) 30 gfd (51 lmh) 2.4 gfd (4 lmh) NaOCl <sup>d</sup> 2.4 gfd (4 lmh) NaOCl or Citric Acid <sup>d</sup>

 $\dagger$  -Depends on temperature and application a -For a maximum of 2 hours

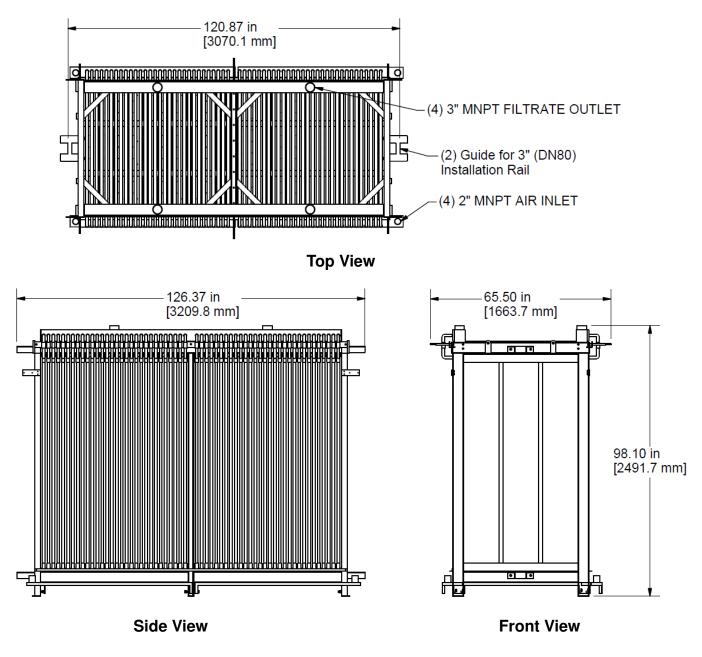
b. Maximum chemical tolerance for estimated life span of membrane
c. In membrane tank at steady state for municipal wastewater
d. Refer to operating manual for chemical concentrations and cleaning frequencies

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## HSMM2400-ES



Note: Cage is made of stainless steel 304. Connections are in English units. For more detailed drawings, contact Hydranautics.

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