



Q-SEP® MEMBRANE MODULE SPECIFICATIONS

Technical Information

Operational Instructions	
Filtrate Flux Range	50 to 150 l/m ² h (30 to 90 gfd)
Maximum feed pressure	4.8 bar (70 psi)
Membrane Burst pressure	8.5 to 9.5 bar
Trans-membrane pressure	0.3 to 1.4 bar (5 to 20 psi)
pH range	2 to 12
Maximum instantaneous chlorine tolerance	100 to 200 ppm
Maximum operating temperature	45°C (113°F)
Maximum feed turbidity	0.8 mm ID: 25 NTU 1.2 mm ID: 50 NTU
Backwash flux range	150 to 300 l/m ² h (90 to 180 gfd)
Backwash feed pressure	0.7 to 2.1 bar (10 to 30 psi)
Backwash frequency & duration	Every 15 - 45 minutes for 30 - 60 seconds
Chemically Enhanced Backwash (CEB)	
Estimated Frequency	Every 1 to 10 days of operation (depending upon feed water conditions)
Duration	10 to 20 minutes
CEB chemicals	NaOCl (100-200 ppm), NaOH (pH: 11- 12), Acid (pH: 2-3), H ₂ O ₂ , Citric acid.
Module Characteristics	
Membrane material	Hydrophilic PES
Housing material	UPVC
End cap material	GRP
Nozzles material	2" Victaulic

Module Specification

Parameter	Description / Information
Configuration	Self-encapsulated hollow fiber ultrafiltration membrane module (inside-out)
Operating Mode	Dead-end or Cross flow, Backwashable
Module mounting	Vertical
Membrane pore size	0.02 micron



Module Specification

Q-SEP[®] Modules - 0.8 mm

Product Data		Q-SEP [®] 2008	Q-SEP [®] 4508	Q-SEP [®] 6008
Membrane area	m ² / ft ²	20 / 215	45 / 484	60 / 645
Filtrate flow rate minimum	m ³ /hr/gpm	1 / 4.4	2.25 / 9.9	3.0 / 13.2
Filtrate flow rate maximum	m ³ /hr/gpm	3 / 13.2	6.75 / 29.7	9.00 / 39.6
Inside diameter	mm / inch	0.8 / 0.03	0.8 / 0.03	0.8 / 0.03
Outside diameter	mm / inch	1.2 / 0.05	1.2 / 0.05	1.2 / 0.05
Module Dimensions				
Diameter (A)	mm / inch	225 / 8.85	225 / 8.85	225 / 8.85
Length – with end cap (B)	mm / inch	1015 / 39.95	1780.7 / 70.10	2233.1/87.91
Length – feed connections (C)	mm / inch	900 / 35.4	1666 / 65.59	2116.2/83.31
Distance – width (D)	mm / inch	346 / 13.62	316 / 12.44	346/13.62
Distance – feed to center (E)	mm / inch	140 / 5.51	140 / 5.51	140/5.51
Module weight	mm / inch	28 / 61.39	47.2 / 103.5	53/116.2

Q-SEP[®] Modules - 1.2 mm

Product Data		Q-SEP [®] 3412	Q-SEP [®] 4512
Membrane area	m ² / ft ²	34 / 365	45 / 484
Filtrate flow rate minimum	m ³ /hr/gpm	1.7 / 7.48	2.25 / 9.9
Filtrate flow rate maximum	m ³ /hr/gpm	5.1 / 22.45	6.75 / 29.7
Inside diameter	mm / inch	1.2 / 0.047	1.2 / 0.047
Outside diameter	mm / inch	1.9 / 0.08	1.9 / 0.08
Module Dimensions			
Diameter (A)	mm / inch	225 / 8.85	225 / 8.85
Length – with end cap (B)	mm / inch	1780.7 / 70.10	2233.1/87.91
Length – feed connections (C)	mm / inch	1666 / 65.59	2116.2/83.31
Distance – width (D)	mm / inch	316 / 12.44	346/13.62
Distance – feed to center (E)	mm / inch	140 / 5.51	140/5.51
Module weight	kg/lbs.	52/ 114	58.4/128

