

# KRISTAL<sup>®</sup> 600ET TECHNICAL SPECIFICATIONS

## MEMBRANE SPECIFICATIONS

Feature	UOM	Specifications
Structure	-	Asymmetric
Base Material	-	Modified Polyethersulfone
Nature	-	Hydrophilic
Molecular Weight Cut-Off (MWCO)	Dalton	120,000
Outer Diameter	mm/ inch	1.35/ 0.053
Inner Diameter	mm/ inch	0.7/ 0.027
Wall Thickness	mm/ inch	0.325/ 0.012
Tensile Strength	MPa	> 3
Bacteria Log Reduction Value (LRV)	-	> 6*

\* Verified by accredited third party laboratory

## MODULE SPECIFICATIONS

Feature	UOM	Specifications
Dimensions (Diameter x Length)	mm/ inch	216 x 2000/ 8 x 80 (Nominal)
Membrane Area	m <sup>2</sup> / ft <sup>2</sup>	60/ 645 (Nominal)
Pure Water Flux	LMH/ GFD	170/ 100
Component Material – Housing	-	PVC
Component Material – End Caps	-	PVC
Component Material – Sealant	-	Proprietary composite potting materials
Connection – Feed Inlet	inch	1.5 NPT
Connection – Permeate Outlet	inch	1.5 NPT
Connection – Reject Outlet	inch	1.5 NPT
Shipping Weight	kg/ lbs	60/ 132
Operating Weight	kg/ lbs	100/ 220

NSF-61 certified

## OPERATING PARAMETERS

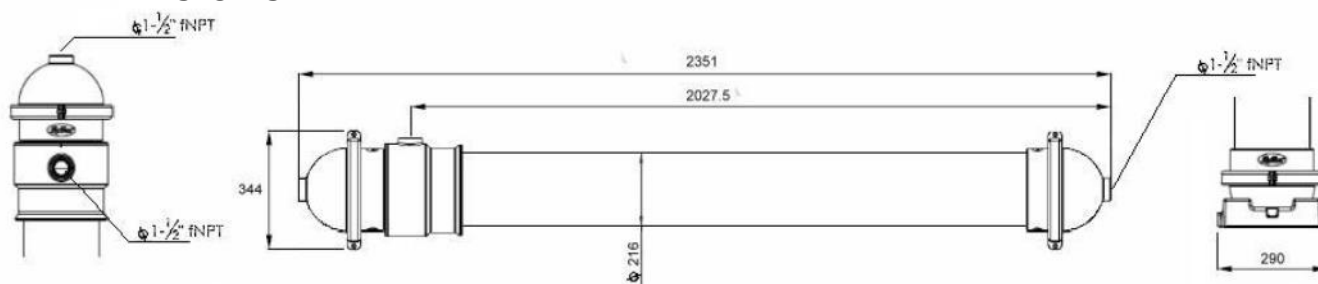
Flow Type..... Outside-In  
 Max Feed Pressure..... 2.5 bar  
 Max Backwash Pressure..... 2.0 bar  
 Max Transmembrane Pressure..... 2.0 bar  
 Service Transmembrane Pressure... 0.2 – 1.5 bar  
 Temperature Range..... 5 – 40°C  
 Operating pH ..... 2 – 10  
 Cleaning pH..... 2 – 11



## HANDLING AND STORAGE CONDITIONS

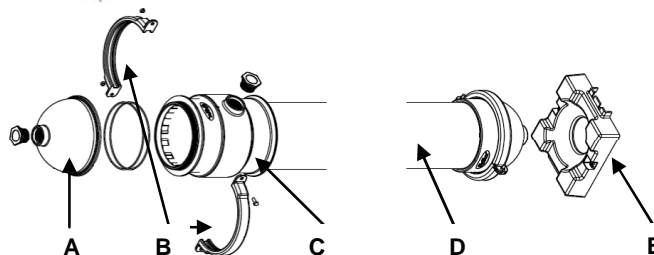
- Avoid direct sunlight and ultraviolet light
- Avoid the following solvents and chemicals:
  - Do not allow the Kristal module to come into contact with aromatic solvents or chlorinated aromatic substances.
  - Avoid contact with surfactants or disinfectants that contain chlorinated aromatic solvents.
- Protect from drying.  
The Kristal module's membranes must be kept wet at all times. If the membranes come into contact with air when the water or preservative solution is drained from the module, the membranes will dry out and lose their filtration capability.
- Protect from freezing, impact and shock.
- When installing Kristal modules:
  - Modules should be installed vertically with the feed inlet at the bottom and the permeate and reject outlets at the top.
  - Take care when securing the modules in place as excessive force may crack the module case.
  - Pay attention to piping, gravity and thermal stress on the modules.
- Storage
  - New Kristal modules should be kept in the original packaging before usage.
  - Store the modules at a temperature of between 5°C to 40°C (41°F to 113°F).
- Cleaning before first use  
New Kristal modules are protected by glycerin solution. Before first use, the modules must be flushed with a solution of sodium hypochlorite and sodium hydroxide to remove the glycerin. The recommended solution for flushing is NaClO (100 ppm) + NaOH (pH 10). Flush with the chemical cleaning solution for 15 to 20 minutes and then flush with clean water for 5 minutes.

## DIMENSIONS



### Module Parts:

- A) End Cap
- B) Clamp
- C) Reject Chamber
- D) Housing
- E) Locating Base



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