

Series 60 Duplex Desalinators

Capacities: 2 x 30m³/day

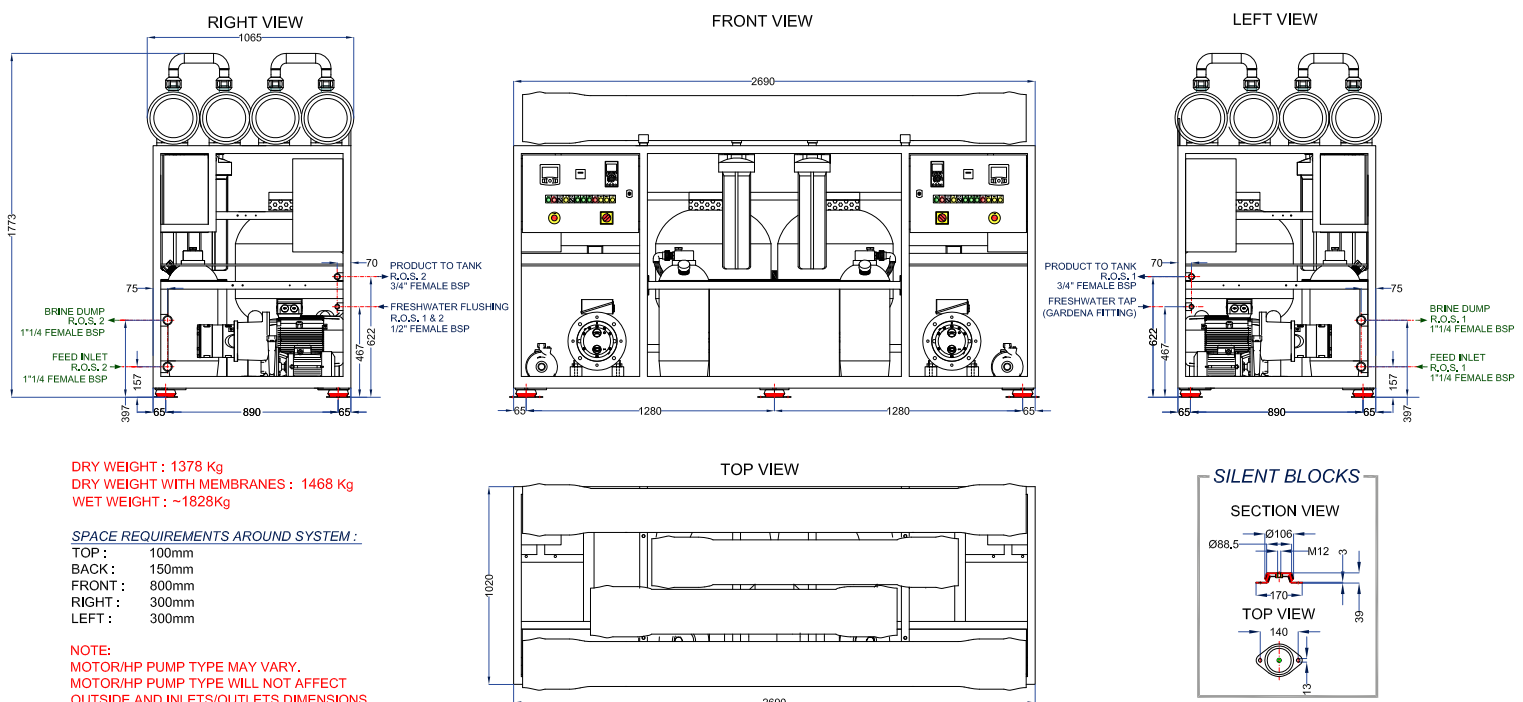
With a standard capacity of 2 x 30m³/day, the HEM Series 60 is suitable for large yachts and is available in frame/skid mounted versions. It is very compact, whilst providing good accessibility for all components, and is equipped with a frequency driven HP pump.

This is combined with excellent reliability and a degree of redundancy within the system as a safety measure. All the necessary pre-filtration and post treatment equipment is incorporated within the same frame.

Several variations of the design are available depending on the working conditions and intended purpose for the product water. Any standard system can be adapted for your exact requirements.



Dimensions



DRY WEIGHT : 1378 Kg
 DRY WEIGHT WITH MEMBRANES : 1468 Kg
 WET WEIGHT : ~1828Kg

SPACE REQUIREMENTS AROUND SYSTEM :
 TOP : 100mm
 BACK : 150mm
 FRONT : 800mm
 RIGHT : 300mm
 LEFT : 300mm

NOTE:
 MOTOR/HP PUMP TYPE MAY VARY.
 MOTOR/HP PUMP TYPE WILL NOT AFFECT
 OUTSIDE AND INLETS/OUTLETS DIMENSIONS.

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Standard Equipment

FEED WATER PUMP

Bronze centrifugal pump mounted in the frame, or remote, if system is mounted above the waterline.

HIGH PRESSURE ASSEMBLY

Compact, low vibration, super duplex stainless steel HP pump, with a 9 kW, 1500 rpm, TEFC IP 55 aluminium drive motor.

PREFILTRATION

A back-washable sand filter with three manual PVC ball valves is fitted to improve the feed water quality and to reduce filter cartridge consumption.

A dual cartridge filter follows the sand filter.

POST FILTRATION

Permeate neutralisation is achieved by slow flow over a limestone filter, included in the frame.

PIPES AND FITTINGS

LP pipes in PE, and PVC.

LP fittings in PP and PVC.

HP pipes and fittings in UB6/904L/1.4539 SST with victaulic fittings.

Flexible HP rated hoses with 904L endfittings.

MEMBRANE PRESSURE VESSEL ASSEMBLY

8" TFC spiral wound membranes enclosed in FRP pressure vessels with all stainless steel endplug locking devices.

FRAMES AND MOUNTING HARDWARE

Frames and supports are fabricated from stainless steel tubes and profiles.

Surface treatment includes sand blasting followed by Powder Epoxy coating.

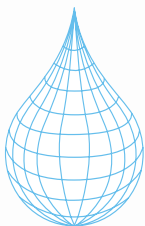
Standard colour is white, RAL 9016. Other colours on request.

INSTRUMENTATION AND CONTROLS

- 1x Digital conductivity/salinity meter with 4-20 mA output.
- 1x Digital feed flow meter with 4-20 mA output.
- 1x Digital product flow meter with 4-20 mA output.
- 1x low pressure security switch in the LP line to ensure sufficient pressure to the HP pump.
- 1x High security pressure switch to protect against operating at pressures that may damage the HP pump, the piping and/or the Ro membranes.
- 6x SST glycerine filled pressure gauges, monitoring all prefiltration stages, HP in/out of membranes, product pressure, etc.
- 1x Plant running hour meter.

ELECTRICAL CONTROL BOX

- System Start/Stop.
- Automatic product water diversion system.
- Automatic pressure build up and slow pressure drop during start and stop sequence via Variable Frequency Drive.
- Connections for automatic start/stop from remote location or from level switches in storage tank.
- Indication lights on control panel for system status, on/off for pumps, and fault indication, alarms, etc.
- Automatic system over-pressure shut-down and alarm.
- Fine control of HP pump speed to cater for small variations in sea water temperature and/or salinity via Variable Frequency Drive.
- Automatic pressure reduction in case of high product flow and shut-down if upper limit reached.
- Semi-automatic fresh water flushing system.



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