

Series 30 Duplex Desalinators

Capacities: 2 x 9,000 to 2 x 15,000 litres/day

The HEM 30 Duplex system is designed to combine two complete RO systems including the sand filters, rehardening filters and membrane cleaning system in one single frame.

Capacities range from 2 x 9 m³/day, 2 x 13 m³/day and 2 x 15 m³/day, according to whether the unit has two, three or four membranes.

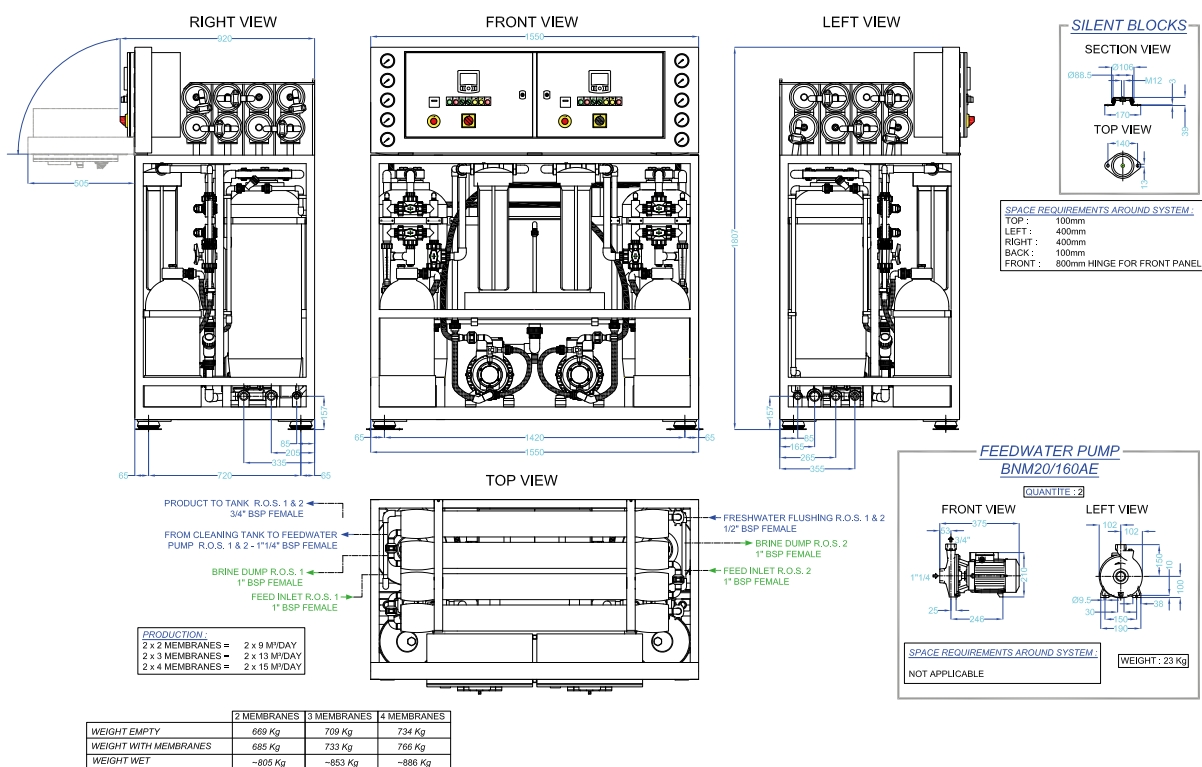
The compact system is ideal for newbuilds where it will considerably lower the installation cost as the yard will only have to connect the pipes and power supply.



Feedwater pump



Dimensions



Series 30 Duplex Desalinators

Standard Equipment

FEEDWATER PUMP

Bronze centrifugal close coupled horizontal pump.

HIGH PRESSURE ASSEMBLY

Compact, low vibration, super duplex stainless steel HP pump directly (without belts) coupled, with a 5.5 kW, 2950 rpm, TEFC IP 55 aluminium main drive motor.

PREFILTRATION

Multi-media filtration followed by dual high capacity pre-filter assembly, 05 micron.

POST FILTRATION

Permeate pH neutralisation through limestone filter.

PIPES AND FITTINGS

All pipes in PE, and PVC.

LP fittings in PP and PVC.

HP pressure fittings in marine grade 904L stainless steel with vitaulic type couplings.

MEMBRANE PRESSURE VESSEL ASSEMBLY

TFC spiral wound membranes enclosed in FRP pressure vessels with stainless steel end-plug locking device.

FRAMES AND MOUNTING HARDWARE

Main frame in powder epoxy coated stainless steel.

Colour white, RAL 9016. (standard)

Panels in aluminium, powder epoxy coated.

Cleaning tank 60 litres.

INSTRUMENTATION AND CONTROLS

- Feedwater flowmeter
- Digital product flowmeter
- SST glycerine filled feedwater gauges
- SST glycerine filled HP gauge
- SST glycerine filled Product gauge
- Manual SST pressure regulating valve
- Automatic shutdown by system overpressure
- Automatic shutdown by too low feedpressure
- Automatic shutdown by over-production
- Automatic shutdown by remote stop
- Electric control box including hour meter; start and stop buttons; thermal protection for LP/HP pumps; remote alarm connections; alarm mute switch; digital permeate quality indicator
- Automatic bad quality water diversion system
- Brine over-pressure relief valve
- Permeate line vacuum breaker

OPTIONAL EQUIPMENT

- 4-20 mA outputs to remote monitoring
- Semi-automatic flushing system

Technical Specifications

Model	Dry Weight	LPD *	LPH*
H30 DUPLEX 2400	685 Kg	2x 9000	2x 375
H30 DUPLEX 3400	733 Kg	2x 13000	2x 542
H30 DUPLEX 4000	766 Kg	2x 15000	2x 625

- Feedwater flow 10 gpm - 38 lpm.
- Feedwater pressure 30 psi / 2 bar.
- Salt rejection Min 98.6%.
- Normal pressure with seawater 850psi / 58 bars.
- Power requirement 6.6 kW.
- Power supply 400V-3PH-50Hz

* Capacities based on feedwater 35000 ppm, 25°C, pH 8, operating pressure 850 psi.
Contact HEM for more complete specifications.

