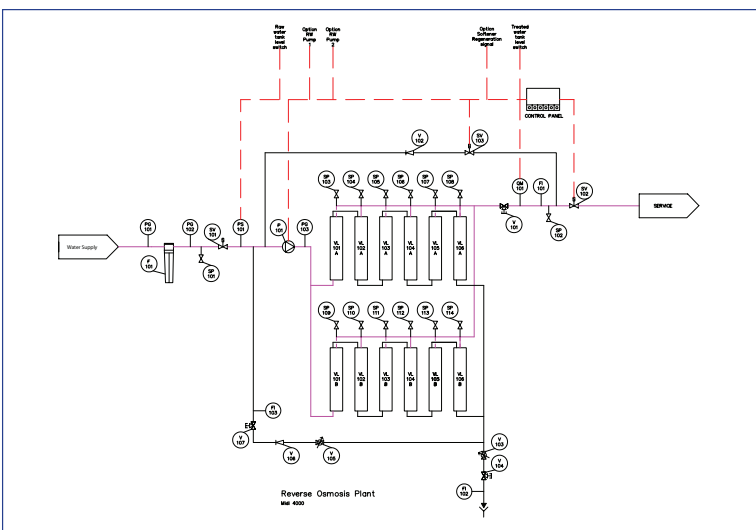


# REVERSE OSMOSIS PLANT - MIDI RANGE

## KEY FEATURES

The MIDI Reverse Osmosis range is designed with many advanced features as standard to reduce the need for additional controls and plumbing on site making the MIDI range competitive as a highly functional plug and play unit incorporating facilitation of future plant expansion. This flexibility is principally provided through the control system design. Some notable features include:-

- Colour touch screen interface for RO monitoring and control providing continuous display of permeate conductivity, plant status and hours run.
- High level of instrumentation with flow monitoring on permeate, concentrate and concentrate recycle.
- Permeate recycle as standard to reduce water wastage and extend membrane life.
- Alarm logging facility with storage available for 50+ alarms.
- Common alarm signal available as volt free contact.
- RO "in service" signal available as volt free contact for softener control.
- Automated Permeate quality monitoring and control
- Facility for sampling permeate from individual RO membrane vessels
- Full mechanical and electrical assembly on 304 stainless steel skid, complete with adjustable legs.
- Small footprint required for installation
- Clean in place preparation
- Low energy membranes
- Options available for control of raw water and treated water pumps.
- Full factory acceptance testing prior to delivery.



## FUNCTIONAL DESCRIPTION

The pre-treated water supply is fed through a pre filter (5  $\mu\text{m}$  filter element) and inlet solenoid before reaching the RO high pressure pump. High pressure water is then passed through semi-permeable membranes where water diffusion takes place, typically rejecting approx. 95% - 99% of contaminants. This purified water is referred to as permeate. The rejected water that does not pass through the membrane contains high concentrations of rejected ions and is known as concentrate. A portion of concentrate will be recycled through the RO with the remainder passed to drain.

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## OPTIONS

A number of expanded control options are available through the RO control panel depending upon initial specification, to allow integration of auxiliary water treatment plant items such as a feed water or treated water pump should water distribution needs arise.

## TECHNICAL DATA

RO Model	MIDI 2400	MIDI 3000	MIDI 3600
Capacity*	2400L/h	3000L/h	3600L/h
Stabilized salt rejection	>99%	>99%	>99%
Water recovery	max 75%	max 75%	max 75%
Typical Treated Water Quality*	<30 µs/cm	<30 µs/cm	<30 µs/cm
Concentrate recirculation (min)	1000L/h	1000L/h	1000L/h
Feed water intake	1 1/4"	1 1/4"	1 1/4"
Permeate outlet	1"	1"	1"
Drain outlet	3/4"	3/4"	3/4"
HP Pump rated power	3kW	3kW	4kW
Control panel current rating	40A	40A	40A
Power connection	3 x 400/50	3 x 400/50	3 x 400/50
Protection type	IP65	IP65	IP65
Feed water pressure (min/max)	2/6 bar	2/6 bar	2/6 bar
Feed water pressure fluctuation	± 0.5 bar	± 0.5 bar	± 0.5 bar
Permeate back pressure (max)	0.3 bar	0.3 bar	0.3 bar
Feed water temperature (min/max)	5/25 °C	5/25 °C	5/25 °C
Ambient temperature (max)	40 °C	40 °C	40 °C
Relative humidity	<95%	<95%	<95%
Dimensions (HxWxD)	1800mm x 900mm x 1400mm	1800mm x 900mm x 1400mm	1800mm x 900mm x 1400mm

\* Dependent upon feed water supply quality. Projections are made based upon a maximum feed TDS of 1,000 mg/L at 15 °C.

## Other products in this range

An extensive range of cost effective AWT Reverse Osmosis models including the MINI, MIDI & MAXI are available providing flow rates from 300 litres per hour to 25m<sup>3</sup> per hour with additional pre and post treatment equipment to suit all applications.

For more information or assistance in designing your system please contact us.



For further information regarding this product please contact us at:



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