

pozzani®

Water Treatment Products

PRO600 COMMERCIAL REVERSE OSMOSIS SYSTEM



PRO600 Commercial Reverse Osmosis System

LOW COST DE-IONISED WATER PRODUCTION

Reverse Osmosis is a very economical method of converting tap water into de-ionised water and has many advantages over distillation and ion exchange processes. Water is produced on demand at a low flow rate, the product water is usually stored in a pressure vessel or tank ready for use.

The recovery of de-ionised water is approximately 50% of the input volume on the PRO600 system, rejected water can be recycled for wash water, grey water, toilet flush etc.

THE PRO600 SYSTEM

Pozzani's PRO600 Reverse Osmosis (RO) system is a compact freestanding or wall mounted module capable of producing up to 2000 litres of de-ionised water a day (dependent on conditions). RO is an extremely efficient method of converting tap water into demineralised water, a combination of post filtration cartridges can further produce High Priority or Ultrapure water for laboratory and other uses.

Pozzani specialises in small Reverse Osmosis systems, the PRO600 module is a completely integrated system which is simple to set-up, very easy to use and does not require expensive pre-treatment essential for larger RO plant. The PRO 600 module includes:-

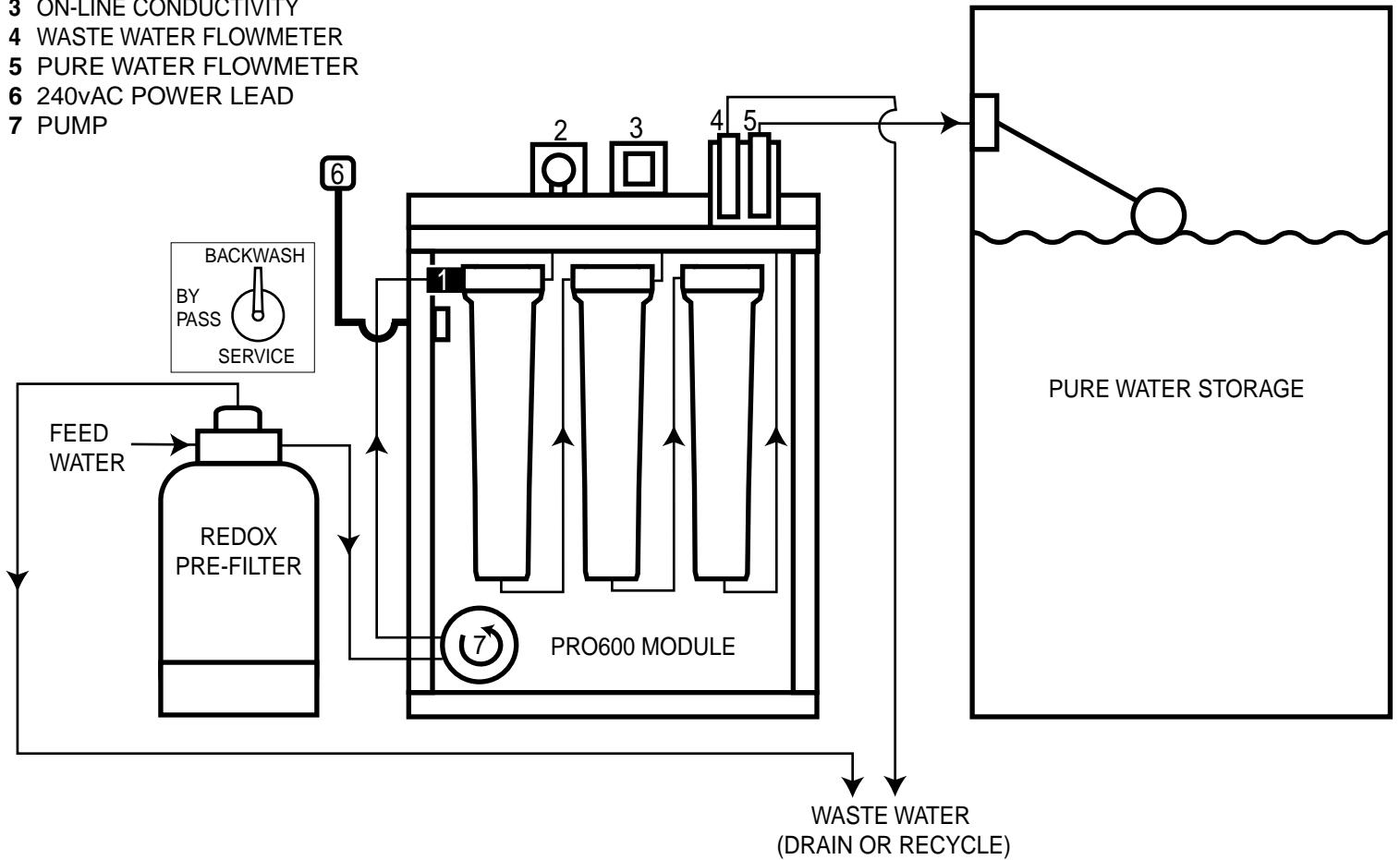
- Built in 240vAC - 0.37 kW pressure pump
- On-line conductivity monitor with alarm
- Choice of 0-20 μ S or 0-200 μ S conductivity meters with alarm and optional relay contact
- Automatic high and low pressure cut outs
- Automatic membrane flush
- Pressure gauge
- Built in pre-filtration with choice of add-ons
- Built in post filtration with choice of add-ons
- Manual overrides for emergency use

APPLICATIONS

- Laboratories
- Glass washing machines
- Paint workshops
- Garages and workshops
- Industrial applications (e.g. Laser cutter water reservoirs)
- Anywhere de-ionised water is used regularly

SCHEMATIC DIAGRAM OF TYPICAL INSTALLATION

- 1 SOLENOID SHUT-OFF
- 2 FEED PRESSURE GAUGE
- 3 ON-LINE CONDUCTIVITY
- 4 WASTE WATER FLOWMETER
- 5 PURE WATER FLOWMETER
- 6 240vAC POWER LEAD
- 7 PUMP



Reverse Osmosis membranes reject approximately 90-95% of the Total Dissolved Solids (TDS), mains water with a conductivity of say 600 μ S should therefore yield a product water of around 30 μ S to 60 μ S. Higher quality water is achieved by post filtration cartridges which can reduce conductivity to virtually zero and achieve a mechanical filtration of 0.2 micron absolute.

UV can also be added as a post filtration stage to ensure sterility - please call for details where a specific water quality is required.

Technical Specifications PRO600

Output per day*	2000 Lts
Recovery	Approx 50%
RO Membrane	3 x 3.4" x 20" TFC
Booster Pump	240v-0.37 kW Automatic Start-Stop
Membrane Flush	Automatic
Feed Pressure Gauge	0-160 psi
Conductivity Meter	Digital display with variable set-point alarm and relay contact
Conductivity Range	Choice of 0-20 μ S or 0-200 μ S Accuracy +/- 2% FS
Controls	Low pressure cut out High pressure or Float switch cut out on full tank
Electronics	240v - 50Hz & 24vDC - Transformers supplied
Module Dimension	Width 730mm x Height 950mm x Depth 460mm

Feed Water Requirements

Water Feed Temperature	4° C to 25° C
Water Feed Pressure	4 - 6.5 bar (60 - 95psi)
Chlorine	<0.1mg/1
Dissolved Iron	<0.2mg/1
Feed pH	3 to 11
Max Silt Density Index	5.0 (15 min)
Max Feed Turbidity	1.0 NTU
Max Feed Conductivity	500 ppm (approx. 1000 μ S/cm)
NB - mains water usually meets these requirements after pre-filter treatment.	



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* Based on a water temperature of 16° C at a feed pressure of 60 psi. Lower temperature and pressure will reduce the production rate.