PALL Life Sciences

RO WATER

Cascada™ RO-Water Purification System

Applications for Cascada RO-Water System

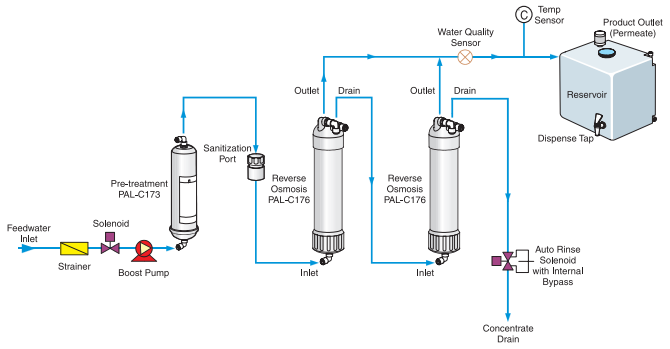
- Type III primary-grade water from a potable tap feed
- Water pre-treatment prior to ultrapure water purification
- Routine glassware washing
- Hydroponics
- Feed water for humidifiers and autoclaves
- Environmental cabinets and stills
- Steam generators

Simple reverse osmosis (RO) for laboratory-grade water

- **98% effective removal of inorganics** – RO also efficiently removes organics, microorganisms, and particles.
- **Simple operation** – User-friendly controls, large back-lit alphanumeric LCD, informative status displays, and simple maintenance routines guarantee convenience.
- **Continuous quality monitoring** – Microprocessor-controlled system with water quality display and audiovisual alarms ensures consistent and reliable operation.
- **Maximized system efficiency** – The very latest in RO technology features high flux, thin-film composite, non-cellulosic membranes for optimal performance.
- **Fits anywhere** – Compact design accomodates benchtop, under bench, or wall mounting.
- **Space-saving storage tank** – An available 35 L docking vessel reservoir cradles the Cascada unit eliminating space requirements for a second reservoir tank. Can be wall mounted.
- **Simple sanitization.**
- **Permanent record of data** – RS232 port allows for data collection and permanent record of water quality and system parameters – essential for compliance with Good Laboratory Practice (GLP) guidelines.

*Filtration. Separation. Solution.*SM

Purification System Flow



Potable water enters through a strainer and passes through the pre-treatment cartridge. The pre-treatment cartridge has been designed to protect the reverse osmosis cartridges from particulate/colloidal matter and excessive free chlorine that may be present in the incoming feed water.

The water passes the sanitization port and moves through two reverse osmosis cartridges, set up in series, which split the flow into permeate and concentrate streams. The concentrate stream is passed to drain.

The permeate water is passed through the:

1. Water quality sensor, which measures the conductivity of the water; and
2. Temperature sensor, which provides accurate temperature measurement.

Finally, the purified water is delivered to a treated water reservoir.

To ensure water quality is maintained at the highest levels, the unit has a built-in, automated rinse cycle. This cycle is performed each time the process is initiated and consists of a 1-minute high flow rinse across the RO cartridges to the drain.

Specifications

Water Purity	RO-water
Inorganics – minimum	> 90% rejection
Inorganics – typical	Up to 98% rejection
Organics (MW > 100 Dalton)	> 99% rejection
Total organic carbon (TOC) – typical (dependent on feed water)	< 0.1 ppm
Bacteria	< 5 CFU/mL
Particles	> 99% rejection

Flow Rates	15 L/hr.

Safety Features	RO-water
Power fail-safe	Yes
Automatic level controls	Yes
Audiovisual alarm warnings	Yes - selectable
Auto-restart	Yes

System Monitoring	RO-water
RO permeate purity	Yes - in µS/cm
RO permeate temperature	Yes - in °C
Reservoir level	Yes - in % full
Consumable remaining life indicator	Yes

Dimensions	Weight	Electrical Requirements
41 W x 52 H x 26 D cm (16.2 W x 20.5 H x 10.5 D in.)	13.0 Kg (28.5 lbs.)	Electrical input 100-240V AC, 50-60Hz, system voltage 24V DC

Please call Pall Technical Service for weights and dimensions.

Ordering Information

Part Number	Description	Pkg
PAL-CAXXXROM2	Cascada RO-water system	1/pkg
PAL-A653*	Docking vessel - 35 L	1/pkg
PAL-A644	25 L reservoir	1/pkg
PAL-A645	40 L reservoir	1/pkg
PAL-A646	75 L reservoir	1/pkg
PAL-A624**	Wall mounting kit for 25 and 40 L reservoir and 35 L docking vessel tank	1/pkg
PAL-A625**	Wall mounting kit for 75 L reservoir	1/pkg
PAL-A655**	Wall mounting kit for Cascada units sold in the USA and Canada	1/pkg
PAL-A643**	Wall mounting kit for Cascada units sold outside the USA and Canada	1/pkg
PAL-A500	Pressure regulator valve (required)	1/pkg
LA615	Flow upgrade kit	1/pkg

**Docking vessel or reservoir is required for proper operation of Cascada RO unit.*
***Optional*

Accessories to complement the Cascada RO-water system include printer kit, boost pump, and other water storage reservoirs. Contact your local Pall office or distributor for more information.

PALL Life Sciences

Pall Life Sciences
600 South Wagner Road
Ann Arbor, MI 48103-9019 USA

1.800.521.1520 USA and Canada
(+)800.PALL.LIFE Outside USA and Canada
1.734.665.0651 phone
1.734.913.6114 fax

Filtration. Separation. Solution.SM

Visit us on the Web at www.pall.com/lab
E-mail us at LabCustomerSupport@pall.com

International Offices
Pall Corporation has offices and plants throughout the world in locations such as: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, France, Germany, India, Indonesia, Ireland, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Poland, Puerto Rico, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, the United Kingdom, the United States and Venezuela. Distributors in all major industrial areas of the world.

The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

9/10, .5k, GN10.4004 PN33373