

# Barnstead Pacific RO water purification systems

The Barnstead Pacific RO system is a modularly designed laboratory reverse osmosis system specifically developed for functional and economical production of high-purity water.

## Product Features

- Five system options with permeate flows of 7, 12, or 20 L/h
- Space-saving design allows system to sit on the laboratory bench or be mounted on the wall
- RO membrane removes organic and inorganic contaminants, microorganisms, particles and colloids



## Routine Laboratory Work

- Rinsing lab glassware
- Supplying autoclaves, water baths and incubators
- Preparing and diluting buffers and reagents
- General biotechnology

## Reliable operation

- Microprocessor control offers automatic operation with continual monitoring of all important parameters

## Easy-to-operate clear display

- Resistivity/conductivity clearly displayed on large back-lit control panel that tilts for optimum viewing
- Status of current operating mode clearly indicates “production”, “stand-by”, or “rinsing” modes
- Reservoir fill-level shown as %

## Integrated feed water monitoring

- Good quality feed water is a prerequisite for high purity water and extends cartridge service life

## GLP-compliant documentation

- Real-time clock records system errors and faults
- Ongoing data storage collects four weeks information displayed in clear text
- Operating system is code-protected to prevent unauthorized changes to system settings
- RS-232 interface with adjustable sender interval allows for customized timing of data transmission of measured values and faults to a PC or data printer
- Cell constant of 0.16 cm<sup>-1</sup> ensures precise conductivity measurements

## Pacific RO pretreatment

- Two 10 inch (25.4 cm) cartridge filter housings with a 5 µm prefilter + activated carbon to prevent entry of particles >5 µm and high concentrations of free chlorine. Also includes hardness stabilizer cartridge which binds calcium and prevents its precipitation.

## Worry-free pure water storage

- Reservoir are constructed of pigment-free polyethylene
- Conical bottom allows for easy cleaning, disinfecting and complete emptying

# Flexible configurations for your RO water needs

Quick Look Comparison			
	Pacific RO 7 L/hr systems	Pacific RO 12 L/hr systems	Pacific RO 20 L/hr systems
Pure water production at 15 °C, L/h	7	12	20
Salt retention, %	98	98	98
Retention, bacteria and particles, %	99	99	99

Feed Water Requirements*	
Source	Potable tap water that has been softened or hardness stabilized
Silt density index (SDI)	<5, With higher values, a pretreatment (model no. 09.4000 must be installed upstream of the system)
Conductivity, $\mu\text{S}/\text{cm}$	<1500
Prefiltration	5 $\mu\text{m}$ + activated carbon
Free chlorine, mg/L	<0.1
pH-range	4-11
Temperature, C°	2-35

\* Complete list of feed water specifications can be found in the operational manual.



# Barnstead Pacific RO water purification systems (continued)

Storage Reservoir		
Volume	Material	Dimensions
30 L	Polyethylene, opaque to light	23.5 x 14.9 in (598 x 380 mm)
60 L		35.9 x 14.9 in (912 x 380 mm)
100 L		49.2 x 14.9 in (1249 x 380 mm)

Pacific RO Product Specifications					
Operating pressure, psi (bar)	Electrical requirements	Power consumption	Feed water connector	Dimensions W x D x H	Temperature
29-87 (2-6)	90-240 V, 50/60 Hz	0.1 kW	3/4" NPT	14.6 x 13 x 23.7 in (372 x 330 x 603 mm)	2-35 °C

Ordering Table	Pacific RO 7	Pacific RO 12	Pacific RO 20
<b>Pacific RO Systems*</b> All systems have an integrated wall bracket and include an RO membrane	50132386	50132387	50132388
<b>Required Accessories</b>			
<b>Pacific RO Pretreatment</b> Includes two 10 inch (25.4 cm) cartridge housings, a 5 µm prefilter + activated carbon cartridge and hardness stabilizer cartridge	09.4000	09.4000	09.4000
<b>Pacific RO Reservoir</b> Choose a reservoir that fits your needs	See "Storage Reservoir Options" the next page		
<b>Optional Accessories</b>			
<b>Water watcher</b> Alerts the user to leaks. Available as 230 V, 50 Hz only.	16.0129	16.0129	16.0129
<b>Replacement Consumables</b>			
<b>Reverse Osmosis membrane</b> Pacific RO 7, 12 only require a single RO membrane. Pacific RO 20 requires two membranes as indicated.	22.0046	22.0046	22.0046 (order 2)
<b>5 µm prefilter + activated carbon 10 inch cartridge</b>	06.5201	06.5201	06.5201
<b>Hardness stabilizing 10 inch cartridge</b>	06.5452	06.5452	06.5452



Storage Reservoir Options for Pacific RO		30 L	60 L	100 L
Reservoir	with level display	50155495	50155500	50155503
<b>Required Accessories</b>				
Sterile overflow for reservoir		06.5001	06.5001	06.5001
Vent filter	Sterile filter, 0.2 µm	50135142	50135142	50135142
<b>Optional Accessories</b>				
Wall mounting bracket		06.5015	06.5016	na