

# Reverse Osmosis (RO) Systems

## 10 to 150 Liters/Hour Capacity



### Features & Benefits

- ◆ Fully automatic operation.
- ◆ Bench, shelf or wall-mount the system cabinet at no extra cost.
- ◆ System automatically shuts off when RO storage tank is full, or if incoming water pressure is lost.
- ◆ Automatic water saver closes water inlet valve when system shuts off.
- ◆ Flow totalizer monitors water usage for activated carbon prefilter cartridge replacement.
- ◆ Digital conductivity meter continuously monitors RO water quality.
- ◆ Product and reject flowmeters monitor and control system's flow rates.
- ◆ Pressurized storage tank eliminates level controls and transfer pump.
- ◆ TFC (thin film composite) RO cartridges offer high performance and long life.
- ◆ 2 year warranty (US & Canada only).
- ◆ Made in the USA.

### Product Availability

AQUA SOLUTIONS Reverse Osmosis Systems are available in 10, 20, 30, 60, 100 and 150 LPH (Liters per hour) configurations. They are uniquely designed for ease of installation, operation and maintenance. The compact design saves space, and can be bench, shelf or wall-mounted.



10 Liter/hour RO systems are also available as built-in RO pretreatment on **AQUA SOLUTIONS Compact, Combination Type I RO+DI Systems**. Request Brochure No: RODI-C

### Applications

Reverse Osmosis can be used to pretreat tap water prior to final purification by a Type I or Type II DI system. RO removes up to 99% of the contaminants in tap water, which can reduce the operating cost of the DI system by more than 90%. RO pretreatment system should be considered under the following circumstances:

- ◆ Incoming tap water contains more than 170 parts per million of total dissolved solids, or
- ◆ Usage exceeds 20 Liters per day on a Type I DI system, or
- ◆ Usage exceeds 40 Liters per day on a Type II DI system.

There are two criteria to consider when determining if an RO pretreatment system is either required, or can be justified, based on cost savings:

1. Can the DI system alone, running on tap water, produce the desired quality and quantity of purified water for the applications at hand? If not, an RO pretreatment system is required.
2. Would it cost more overall (including capital and operating costs over 2-3 years), to process the tap water via DI alone, or with a combination of RO plus DI? If DI alone costs more, an RO system is justified.

Selecting the right RO system is a matter of determining the total RO water usage requirements during the actual work day, and choosing the system that produces that amount of RO purified water over a 24 hour period. The RO system is designed to run 24 hours/day if necessary, and includes a pressurized tank to store water for later usage. Thus, if the total daily usage occurs over less than a 24 hour period, enough storage capacity should be included to cover the difference between water usage over this period, and the system's actual output over this period.

See Page 2 for system specifications & ordering information.

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# Reverse Osmosis (RO) Systems Specifications and Ordering Information



MODEL NUMBER	RO2001	RO2002	RO2003	RO2006	*RO2100	*RO2150
Rated capacity (Liters/hour at 25° C):	10	20	30	60	100	150
Maximum allowable TDS in feed water (PPM):	1,500	1,500	1,500	1,500	1,500	1,500
Number of RO cartridges installed:	1	2	3	2	2	3
Nominal operating pressure (PSIG):	80-100	80-100	80-100	80-100	100-125	100-125
Cabinet width (inches - excluding storage tank):	20	20	20	20	20	20
Cabinet height (inches - excluding storage tank):	20	20	20	20	20	20
Cabinet depth (inches - excluding storage tank):	12	12	12	12	12	12
Calculated storage tank capacity (Liters)**:	42	130	130	130	130	130
Storage tank diameter (inches):	15	22	22	22	22	22
Standard storage tank height (inches):	25	40	40	40	40	40
Bench, shelf or wall mounted cabinet:	Included	Included	Included	Included	Included	Included
1/4" & 3/8" NPT male water inlet fitting:	Included	Included	Included	Included	Included	Included
1/4" or 1/2" storage tank outlet valve:	Included	Included	Included	Included	Included	Included
Activated carbon prefilter:	Included	Included	Included	Included	Included	Included
Reverse osmosis cartridges:	Included	Included	Included	Included	Included	Included
Additional outlet valves:	Optional	Optional	Optional	Optional	Optional	Optional
Storage tank location:	Bench/Floor	Floor	Floor	Floor	Floor	Floor

## REPLACEMENT CARTRIDGES:

CC1050 - 10" activated carbon prefilter cartridge:	1	1	1	n/a	n/a	n/a
* CC2050 - 20" activated carbon prefilter cartridge:	n/a	n/a	n/a	1	1	1
CR1812H1 - reverse osmosis cartridge:	1	2	3	n/a	n/a	n/a
* CR2514 - reverse osmosis cartridge:	n/a	n/a	n/a	2	n/a	n/a
* CR4014 - reverse osmosis cartridge:	n/a	n/a	n/a	n/a	2	3

## OPTIONS:

- \* 2618S1-RO - Type II DI polishing module - 3,000 grains of ion exchange capacity
- \* 2635S1-RO - Type II DI polishing module - 6,000 grains of ion exchange capacity
- ROT-042 - 42 Liter (11 gal) storage tank\*
- ROT-130 - 130 Liter (34 gal) storage tank\*
- \* ROT-200 - 200 Liter (53 gal) storage tank\*
- V-4-ASSY - 1/4" outlet valve assembly
- V-8-ASSY - 1/2" outlet valve assembly

**Notes:** Upgrade from the standard storage tank on any system to a larger tank, by paying the difference in price.

\* Part Numbers preceded by a star (\*) are available only in the USA, and are not available for export.

\*\* Actual usable storage tank capacity will be ~20% less than the calculated capacity.