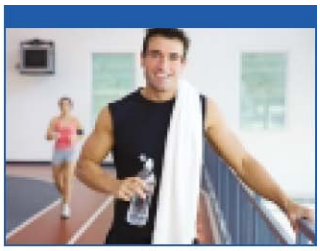
WSH Laboratories Ltd.

Reverse Osmosis Drinking Water Systems

With the quality of our drinking water increasingly coming under question, people are now looking for alternative sources of quality water. Reverse Osmosis Drinking Water Systems provide the most convenient and economical solution. Neatly stored under the counter, the Reverse Osmosis Drinking Water System provides you with clean and delicious water right from its own dedicated tap.



Bottled water quality at a fraction of the cost!

All models include: 3/8"outlet tubing for higher flows, thin film composite (TFC) membranes, quick connect fittings for easy installation and servicing, heavy duty powder coated bracket, stainless steel product water check valve, automatic shut-off valve, 14.4 liter (3.8 US gallon) storage tank and under-counter installation kit.

Reverse Osmosis Model Components

- **Reverse Osmosis Membrane** - allows water molecules to pass while dissolved impurities are flushed to the drain.
- **Five Micron Pre-Filter** - removes tiny particles of suspended dirt and sediment.
- **Activated Carbon Pre-Filter** - protects TFC membrane from chlorine and removes organics.
- **Activated Carbon Post Filter** - removes tastes and odors to give water a final "polish" prior to delivery.
- **Pressurized Storage Tank** - holds purified drinking and cooking water ready for use.
- **Chrome Plated Faucet** - mounts attractively on sink or counter to deliver pure water at the touch of a lever.

Reverse Osmosis Booster Pump Model Specific Components

- **Booster Pump** - raises and maintains the water pressure at the optimum level to ensure the highest TDS rejection rate with maximum production.
- **Product Water Pressure Switch** - shuts off system when pressure tank has been filled.
- **Feed Water Pressure Switch** - protects pump against run dry situations.

The performance of a reverse osmosis membrane is highly dependent upon pressure, temperature and TDS. The actual volume of product water and rejection percentage will vary with differences from the test conditions that membrane ratings are based upon. These drinking water systems are not intended to be used for the treatment of water that is microbiologically unsafe or of unknown quality.

Model: Pro 50

- Reverse osmosis membrane nominally rated at 50 US gallons per day[1]
- Pre-filters: 10" five micron sediment cartridge and 10" activated carbon cartridge
- Post-filter: 10" activated carbon cartridge
- Non-air gap faucet
- Plastic storage tank

Model: Pro 75 BP

- Reverse osmosis membrane nominally rated at 75 US gallons per day[1]
- Booster Pump: Mounted on RO to maintain constant water pressure
- Pre-filters: 10" five micron sediment cartridge and 10" activated carbon cartridge
- Post-filter: 10" activated carbon cartridge
- Non-air gap faucet
- Plastic storage tank

Specifications

Model	Stages	Sediment Filter	Pre-filter	Membrane	Post-filter	Output GPD[1]	Rejection[2]	Storage Tank US Gallons[3]	Booster Pump
Pro 50	4	Spun Polypropylene	Activated Carbon	TFC	Activated Carbon	50	Up to 99%	3.8	No
Pro 75 BP	4	Spun Polypropylene	Activated Carbon	TFC	Activated Carbon	75		3.8	Yes

(1) Nominal product water ratings are based on the following conditions: Supply TDS of 250 ppm softened tap water, 50 psi (0.36 Mpa), 77°F (25°C), pH 8 and 15% recovery with outlet to atmosphere.
(2) TDS rejection percentages are dependent on the supply conditions and the substance being measured.
(3) Storage tank capacity is dependent upon pressure. For example, with a 7 psi pre-charge, the drawdown volume is 2.16 gallons at 60 psi; 1.76 gallons at 40 psi.

Conditions for Use

Source Water Supply Profile	
Community/Private	Chlorinated/Non-chlorinated
Feed Water Pressure*	242 – 690 kPa (35 – 100 psig)
Temperature	4° - 38°C (40° - 100°F)
pH Range	3.0 – 11.0
Maximum TDS	2000 mg/L
Turbidity**	<1.0 NTU
Maximum SDI***	<4.0

Chemical Parameters	Maximum mg/L
Hardness ($CaCO_3$)	<10 gpg/NSF:<350 (<20 gpg)
Iron (Fe)	<0.1
Manganese (Mn)	<0.05
Hydrogen Sulfide (H_2S)	0.00
Residual Chlorine (Cl_2)	<2.0

* Pressure regulator is recommended for feed water pressures exceeding 552 kpa (80 psig)
** Nephelometric Turbidity Unit
*** Silt Density Index: Value stated in SDI units

Model 07-92325 Kemflo RO Booster with Pressure Switch and Transformer for 25 to 75 Gallon per day Systems

- Raises the water pressure and maintains it at the ideal level for the system to operate at maximum efficiency.
- Recommended for use on rural supplies with low pressure or high concentrations of total dissolved solids (TDS).
- Pump is self priming and is whisper quiet. It runs on a 24VAC transformer (included) from a standard 120VAC electrical outlet.
- System includes: Flexible mounting plate, quick connect fittings and a pressure shut-off switch.

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