

Nelsen Water Treatment Solutions

# Quick Change, Twist & Loc

## 4-Stage Reverse Osmosis Drinking Water System



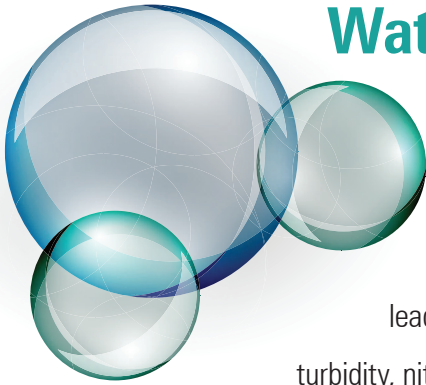
*Easy Cartridge  
Removal & Replacement  
Without Turning Off Water*

Designed to solve a wide variety of water quality issues, Nelsen reverse-osmosis drinking water systems provide you with compact, affordable and effective solutions for achieving the best possible quality drinking water for your home.

An innovative leader in water treatment since 1954, Nelsen assures you the highest quality and reliability in the industry. Nelsen Water Treatment Systems are sold, installed and serviced by independently owned and operated Nelsen Dealers nationwide.

**NelsenWater**<sup>™</sup>  
Treatment Solutions

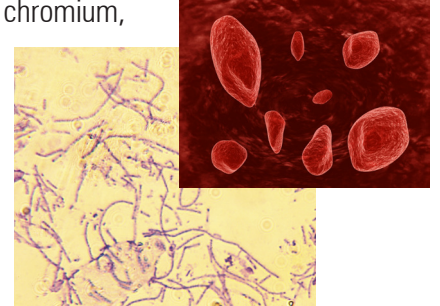




## Water in its

# Purest Sense

Nelsen reverse-osmosis drinking water systems significantly reduce unwanted substances bigger than 0.0001" such as carcinogens, heavy metal ions such as cadmium, chromium, lead and mercury; chlorine, cryptosporidium, salts, turbidity, nitrate, VOC's, organic compounds, dissolved solids, tastes and odors leaving only clean, great tasting water.



## How does the

# Process Work

Reverse osmosis is the same process used by most major bottled water suppliers. With a Nelsen Reverse Osmosis Drinking Water System, you can have the same highest-quality water available from your own faucet for a fraction of the cost of bottled water.

Just how does the reverse osmosis process work? During the process, water is forced through a semi-permeable membrane that traps contaminants. These contaminants are then flushed out of the system and down the drain, leaving your drinking water clean and fresh.

### PRE-FILTER (Sediment)

Removes sediment, rust, dirt and other solid debris.

### PRE-FILTER (Carbon Block)

(Activated Carbon) Final polish to remove any objectional tastes and odors from storage tank prior to water consumption or use.

### RO MEMBRANE

Thin Film Composite design. Rejects 98% of the dissolved metals and salts, plus other harmful contaminants.

### POST-FILTER (Carbon Block)

Removes any remaining objectional tastes and odors picked up in the storage tank.





# How the *Quick Change, Twist & Loc* Works



## Easy Cartridge Removal & Replacement **WITHOUT** Turning Off Water

### Manifold

Filter Head

1/4" Feed Line

3/8" Faucet Line

3/8" Tank Line

### Cartridges

Sediment Filter 13"

Carbon Block Filter 13"

RO 75GPD Membrane

Flow Regulator to Drain



### Installation

Tank Ball Valve

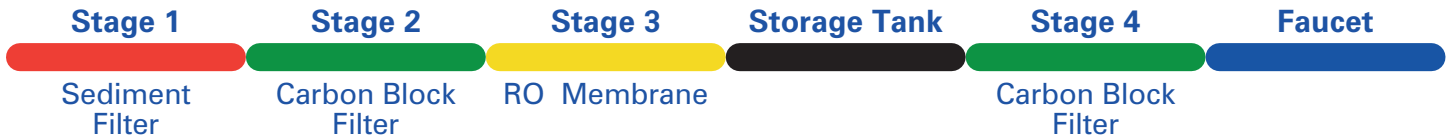
3.2 Gallon Storage Tank

Faucet & Installation Hardware

Installation Kit includes tubing, drain clamp, faucet, feed water angle stop adapter and storage tank shut-off valve.



# Specifications



- Gallons per day (L/day)\*** ..... 30.65 GPD (116.02 L/DAY)
- Typical System Flow Sequence** ..... ➔ Sediment Filter ➔ Carbon Block Pre-filter  
 ➔ Reverse Osmosis Membrane ➔ Storage Tank  
 ➔ Carbon Block Post-filter ➔ Dispensing Faucet
- Sediment Filter (Stage 1)** ..... 5 Micron
- Carbon Block Pre-filter & Post-filter (Stage 2&4)** ..... Carbon Block 5 Micron
- Reverse Osmosis Membrane (Stage 3)** ..... Thin Film Composite
- Storage Capacity** ..... Plastic Coated Metal – Capacity 3.2 Gallon (12 Liters)

	PURPOSE	MICRON RATING	CAPACITY	FLOW RATE	RATED LIFE	STAGE
Sediment Filter <b>PART# TWIST-SEDIMENT</b>	Sediment Reduction	5	2500 Gallons (9463 Liters)	0.5 gal/min 1.9 liters/min	6 Months	1
Carbon Filter <b>PART# TWIST-CARBON</b>	Chlorine, Taste & Odor	5				2 & 4

	PURPOSE	RECOVERY (PRODUCT WATER)	EFFICIENCY RATING	TDS REDUCTION	RATED LIFE	STAGE
RO Membrane <b>PART# TWIST-MEMBRANE-75</b>	TDS Reduction	30.57%	18.73%	91.1%	24 Months	3

RECOMMENDED FEED WATER CHARACTERISTICS		STAGE
Working Pressure	30 - 125 psi (207 - 862 kPa)	1. The reverse osmosis membrane used in these systems may be damaged by chlorine. These systems include activated carbon filters which protect the membranes by reducing chlorine. Influent chlorine should not exceed 3 mg/L
Temperature	39 - 100 °F (4 - 38 °C)	
pH range	5 - 10	
Turbidity	< 1.0 Net Turbidity (NTU)	
Hardness (CaCO3)	< 300 ppm	2. Additional information on factors that affect RO performance can be found in the "Performance & Technical Information" section.
Iron (Fe)	0 - 1 ppm	
Chlorine (Cl2)	0 - 3 ppm (0-3 mg/l)	

\* The stated product performance is based on data taken after 30 minutes of operation at the following test conditions: 2,000 mg/L NaCl solution at 225 psig ( 1.5 MPa) applied pressure, 15% recovery, 77° F (25° C), pH 6.5–7.0

\*\* Rated Life and Capacity are dependent on local water conditions and level of pre-filtration.

The disposable filter cartridges must be replaced every 6 months and 24 months for the system membrane, at the rated capacity or if a noticeable reduction in flow rate occurs.

Performance of the reverse osmosis membrane is affected by several factors which must be considered when judging the condition of the system. The main factors which affect system performance are pressure, temperature, total dissolved solids level, recovery and pH.