

# AquaKinetic™ A200 Drinking Water System

## System Components

Prefilter (qty.)	
Chlorinated Feed Water .....	(1) Granular Activated Carbon
Non-chlorinated Feed Water .....	(1) 5 micron Sediment
Postfilter (qty.) .....	(1) Granular Activated Carbon
Membrane Housing (qty.) .....	(1) Quick Connect, Engineered Plastic
Primary Membrane (qty) .....	(1) Thin Film Composite
Primary Membrane Size .....	1.7" x 10.0" (8.0 ft <sup>2</sup> )
Array Configuration .....	Single
Drain Control .....	0.026" Capillary Tube
System Shutoff Control .....	Hydraulic Controller
Permeate Quality Monitor .....	Optional
System Controller .....	Hydraulic Controller
Frame .....	Anodized Aluminum

## Inlet Water Quality

Pressure .....	35 – 100 psi Dynamic Pressure
Temperature Range .....	35 – 100° F
pH Range .....	3 – 11 SU
Free Chlorine Cl <sub>2</sub> (Max.)	
with carbon prefilter .....	4.0 mg/L
with sediment prefilter .....	0.05 mg/L
Hardness as CaCO <sub>3</sub> (Max.) .....	<10 gpg (170 mg/L)
Silica (Max.) .....	10.0 mg/L
Iron (Max.) .....	<0.01 mg/L
Total Dissolved Solids, TDS (Max.) .....	<3,000 mg/L

## Operating Specs

Daily Production (77° F, 500 mg/L Feed Water) .....	10.9 gallons/day
Recovery .....	24.66%
Reject Rate (NaCl / CaCO <sub>3</sub> ) .....	95% / 98%
Normal Operating Pressure .....	60 psi
Dimensions (Width x Depth x Height) .....	13" x 5" x 16"
Weight (Operating / Shipping) .....	4 / 4 lbs.

## Connections

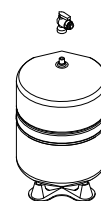
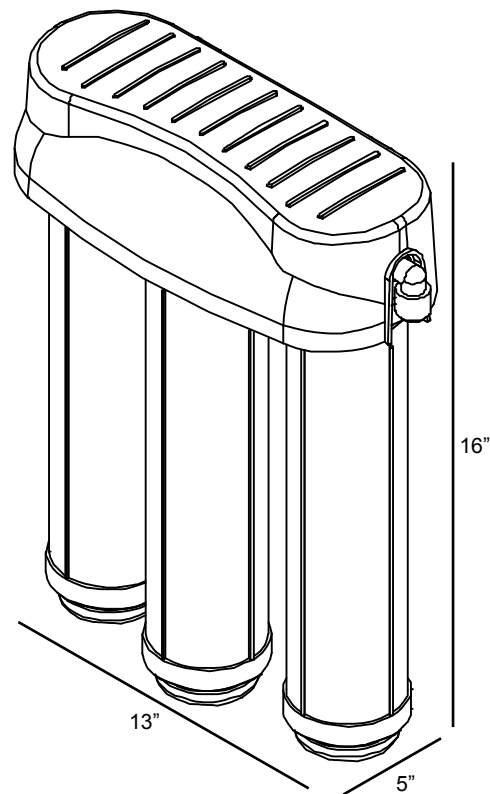
Inlet .....	0.375" Tube
Permeate .....	0.375" Tube
Drain Connection .....	0.250" Tube
Power .....	None

## Storage Tank Options

Tank Description .....	3 gallon
Tank Part Number .....	9344A
Tank Height .....	14 1/8"
Tank Footprint .....	9 1/16"
Material .....	Steel

## Part Numbers

AquaKinetic A200 .....	13554
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**Operating Profile**

The system shall use reverse osmosis technology to reduce the total dissolved solids (TDS) level in water by a minimum of 95.0%. The system shall use line pressure for energy required to separate TDS from water. Normal system operating pressure shall be 60 psi. The system uses an internal valve that closes and depressurizes the system when the unit goes into shutdown. System shutdown is achieved when permeate pressure increases to 2/3 inlet pressure.

**Membranes and Housings**

The system shall use thin film composite membranes in a spiral wound configuration with dimensions of 1.7" x 10.0". One membrane will be used to permeate 10.9 gpd of water, based on a 77° F operating temperature. Membrane construction will provide for low energy requirements by operating at a minimal working pressure. Housings shall be of engineered plastic rated to 100 psi. One housing shall be used, designed to contain one 1.7" x 10.0" membrane element.

**Plumbing Configuration**

The system shall be rated for a maximum working pressure of 100 psi. Primary plumbing components shall be of polypropylene and engineered plastic. A capillary tube shall control reject flow. Membrane shall be configured in a single stage orientation.

**System Controls**

System function is completely automatic. The operational sequence is controlled by hydraulic signals within the RO system. These signals control the pressurization and depressurization of the membrane.

**Frame**

System dimensions shall not exceed 13" x 5" x 16". Units shall use an anodized coated aluminum frame.