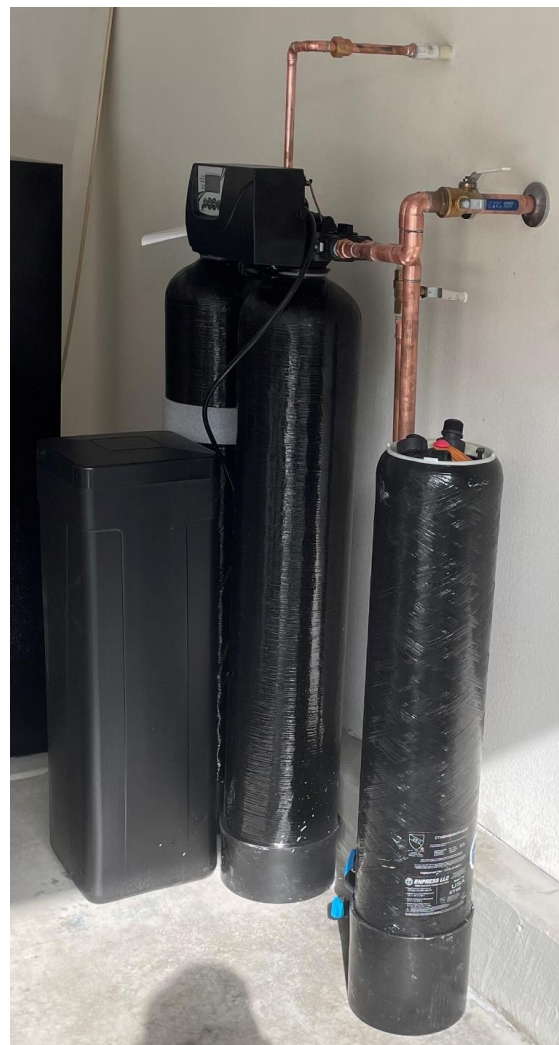


# 9100TS Twin Sensor High Efficiency Softener & Enpress Pioneer

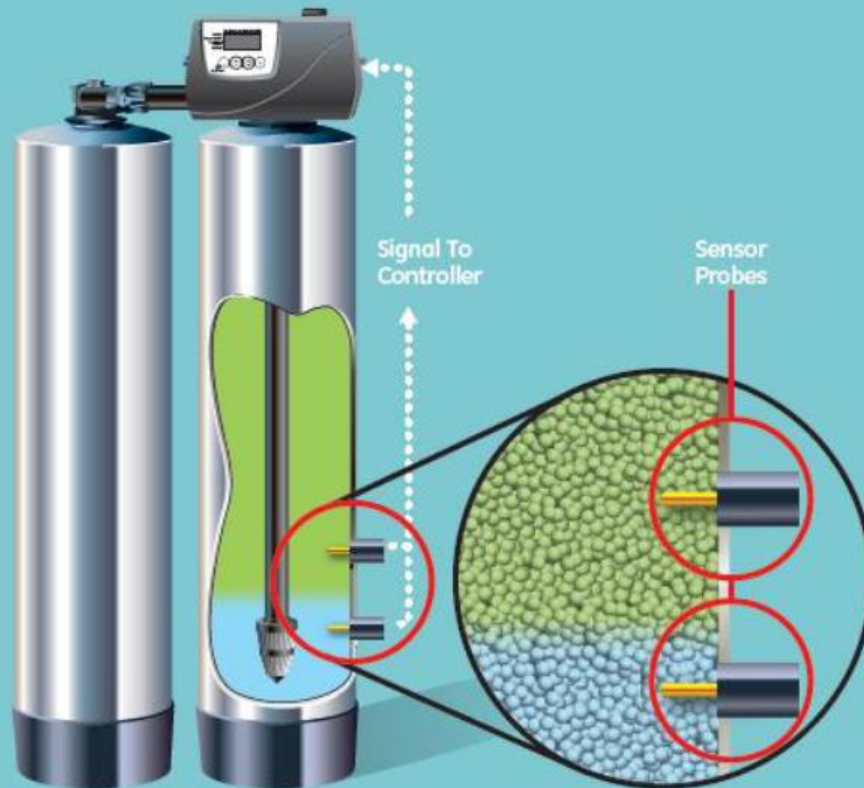




# How does the 9100TS work.



## ROUND-THE-CLOCK SENSOR MONITORING



### 24/7 MONITORING

- Automatically adjusts to changing water conditions
- A continuous supply of quality water is always available

### PATENTED SENSOR TECHNOLOGY\*

- Superior monitoring with non-corrosive 18-karat gold-plated sensor probes
- Replaces traditional metered and time clock controls

### ECO-FRIENDLY

- Fewer regeneration and rinse cycles conserve water and regenerant

\*Unites States Patent Number 7,329,338 B2



## A MICROCOMPUTER CONTROLLER

### THE "BRAIN" THAT KEEPS PERFORMANCE AT ITS PEAK

The control system of a 9100TS is a big step forward from traditional mechanical timers or metered flow controllers. Each 9100TS is governed by a dedicated microcomputer. The computer interprets data from the system's sensors to order regeneration only when needed. It switches between its twin tanks instantly, so there is never a moment when water isn't completely conditioned. As a result, regeneration requires significantly less water usage than a traditional system. Reliability is enhanced by linking the microcomputer controller with a heavy duty, industry proven valve that assures a long life of easy operation.

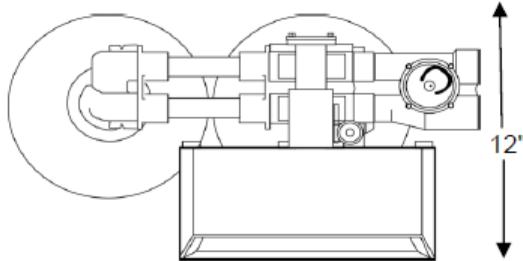
- Up to 65% water savings
- Up to 60-80% salt savings
- When the valve says it is doing 5200 GPG. That's what it is doing.



Self sensing  
Regeneration  
means 100% soft  
water 100% of  
the time. While  
having the most  
efficient platform  
available.

## 9100 TWIN SENSOR WATER SOFTENER SYSTEM

Logix Controls  
Sensor Technology  
Upflow Regeneration

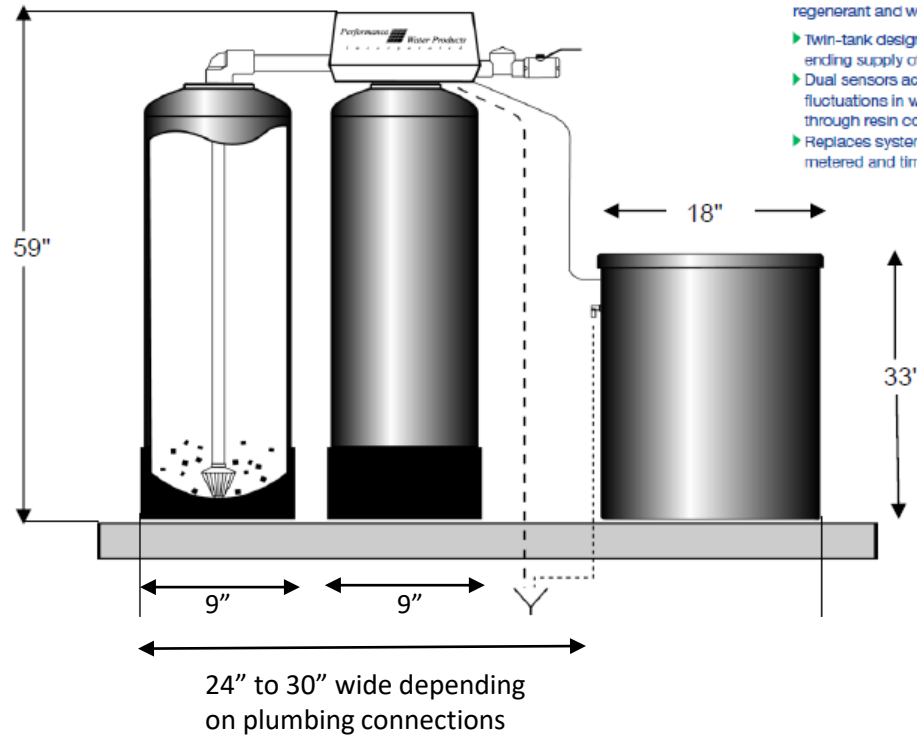


The NEW Pentair Water® 9100TS Water Conditioning System ensures softened water 24/7. Patented sensor technology maximizes conditioning capacity to 100% which can save up to 35% in regenerant and water

- ▶ Twin-tank design delivers a never-ending supply of conditioned water
- ▶ Dual sensors accurately measure fluctuations in water hardness through resin conductivity
- ▶ Replaces systems with traditional metered and time clock controls

### Water Softener Specification

<b>Model #:</b>	<b>9100TS-948</b>
<b>Capacity:</b>	<b>30,000 Grains ea.</b>
<b>Flow Rate:</b>	<b>12 GPM</b>
<b>Peak Flow:</b>	<b>21 GPM</b>
<b>BW Rate:</b>	<b>2 GPM</b>
<b>Tank Sizes:</b>	<b>9" X 48" Fiberglass</b>
<b>Brine Tank:</b>	<b>18" DIA. X 33" Poly</b>
<b>Media Vol.:</b>	<b>1.0 FT<sup>3</sup> ea.</b>
<b>Pipe Size:</b>	
<b>Inlet:</b>	<b>3/4" - 1.25" NPT</b>
<b>Outlet:</b>	<b>3/4" - 1.25" NPT</b>
<b>Drain:</b>	<b>1/2" NPT</b>
<b>Weight:</b>	
<b>Shipping:</b>	<b>185 lbs</b>
<b>Operating:</b>	<b>(400lbs salt) 735 lbs</b>



#### Note:

Supply sufficient pipe support to insure that no pipe weight is supported by the softener control.

Specify inlet and outlet pipe size to match the inlet NPT to the Hot water heater. All Dashed pipe, valves and fittings provided by others.

Make all plumbing connections in accordance with all state and local plumbing codes.

*Performance*  *Water Products*  
I n c o r p o r a t e d

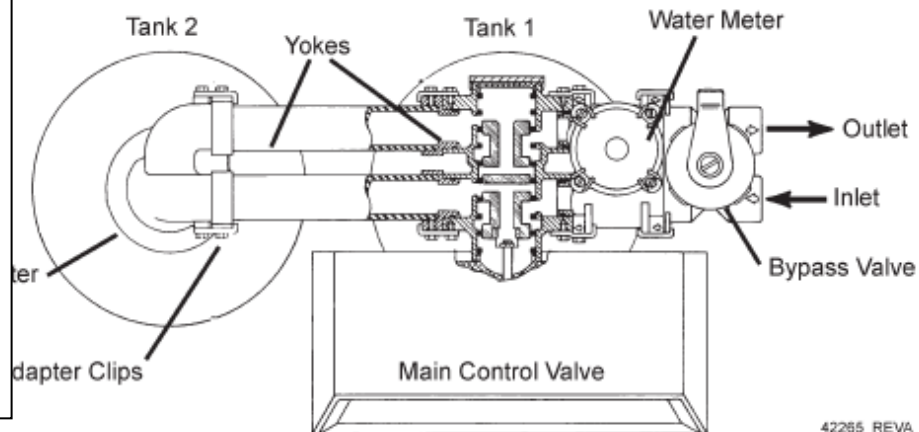
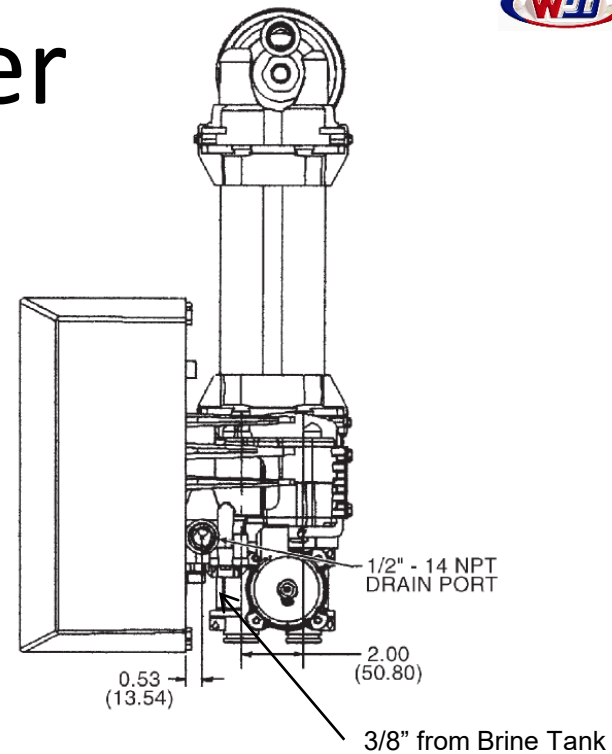
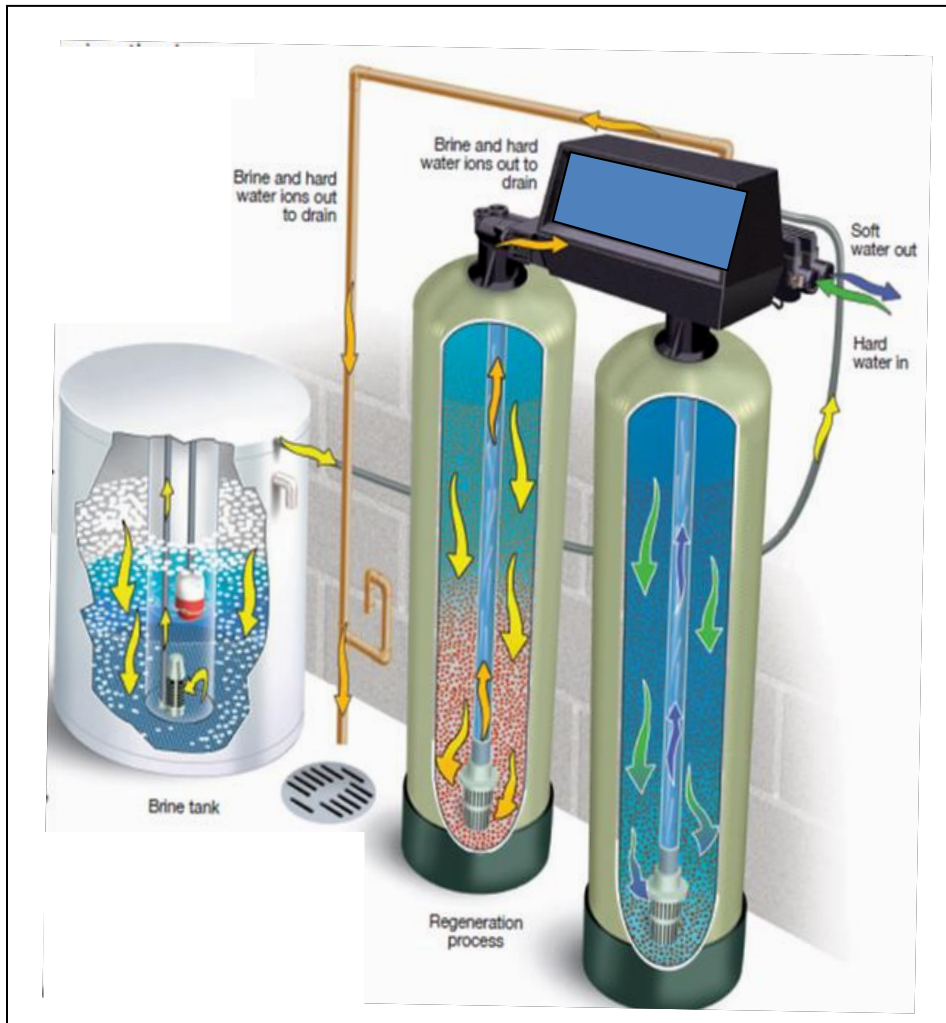
Distributed  
& Sold by:



510-732-0100  
mike@teamwpc.com

Install sample valve on softener outlet for ease of sampling water hardness.

# 9100TS-948 Softener





# PIONEER™

## WHY REMOVE LEAD

**The History of Lead Usage:** Until it was banned in new home construction in 1986, more than 70% of cities in the US were using lead-based products for conveying water, because it was less expensive and more durable than iron. Lead pipe could be easily bent, allowing pipes to be shaped to conform to the contours of existing buildings or other structures.



**NUMBER OF CITIES USING LEAD UNTIL 1986**



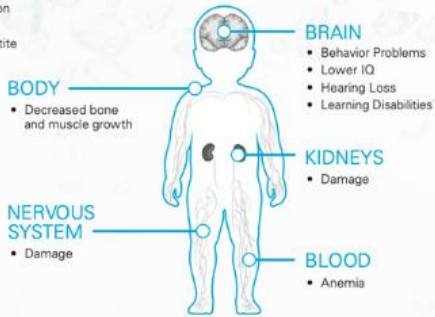
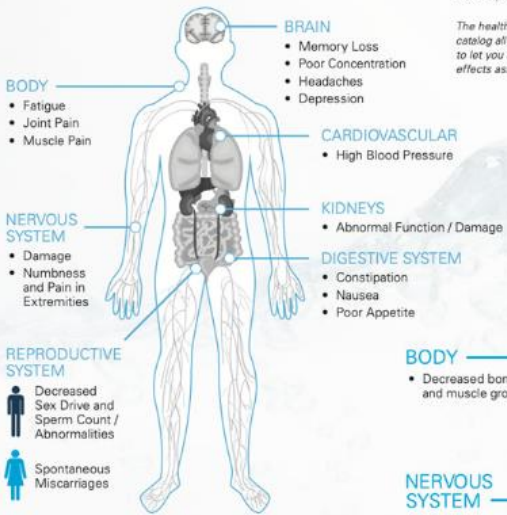
**How Lead Gets into Drinking Water:** Lead can enter drinking water when service lines that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. This most often happens in the pipes that carry water from the water treatment plant to water mains under the street supplying homes. Lead release is heavily influenced by the chemistry of the water delivered by the water system and by physical disturbances, such as road construction or water main replacements.

## HEALTH EFFECTS OF LEAD

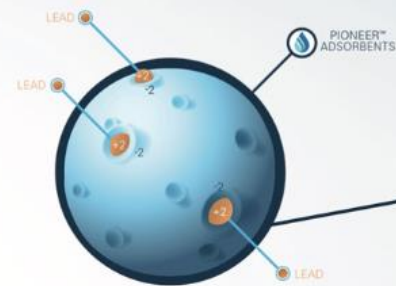
**How Lead Affects Adults:** Keep in mind that there is no safe level of lead for the human body and unlike other metals, it has no useful biological function. Even low concentrations of lead in water can cause a significant increase in blood lead levels and any damage is irreversible.

**The Affects on Children:** Lead is a potent neurotoxin which has significant effects on childhood health and development. According to the Centers for Disease Control and Prevention, lead exposure can affect nearly every system in a child's body, inhibiting the development of both physical and mental abilities.

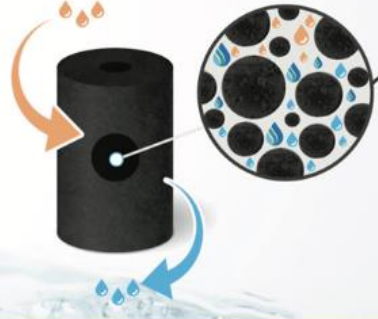
*The health effects information on this page is not intended to catalog all possible health effects for lead. Rather, it is intended to let you know about the most significant and probable health effects associated with lead in drinking water.*



## HOW PIONEER™ Pb REMOVES LEAD



LEAD WATER > ACTIVATED CARBON + PIONEER™ ADSORBENTS = CLEAN WATER



### FILTRATION EVERYWHERE TECHNOLOGY®

PIONEER Pb provides the best filtration solutions, starting at the source and giving peace-of-mind throughout the entire home.

### OTHER HARMFUL ELEMENTS PIONEER Pb REMOVES FROM YOUR WATER

PIONEER Pb removes lead, which is a colorless, odorless and tasteless metal. In addition to lead, the patented E3-M filtration system removes >99.95% of Giardia and Crypto, as well as chlorine and chloramine\*.

**Giardia and Crypto:** Waterborne parasite that causes diarrheal disease, very resistant to chlorine-based disinfectants and is common in drinking and recreational waters.

**Chlorine and chloramine:** Water disinfectants added to municipal water that have negative health effects. The most harmful exposure is through inhalation and skin adsorption of steam in a shower.



\*PIONEER Pb POE filters have been tested for use at standard and peak flow rates for both forms of lead. The Water Quality Platinum Seal and UPC shield demonstrate the certification by IAPMO R&T.

# PIONEER™

## Protecting Water for Future Generations

PIONEER is the First of its Kind  
Whole-House Lead, Cyst & PFOA/PFOS Removal System

### WHAT ARE THESE HARMFUL CHEMICALS

The chemicals Perfluorooctanoic acid (PFOA), also known as C8, and Perfluorooctane sulfonic acid (PFOS) are bio-permanent, are resistant to direct oxidation, and do not break down naturally in the environment or the human body. Studies suggest that exposure to the chemicals may lead to cancer.

### HOW DOES THE PIONEER SYSTEM PROTECT ME

PIONEER™ successfully removes these chemicals and is installed where the water line enters your home, business or restaurant. This system has been tested and third-party certified as required in the NSF/ANSI P473 standard for PFOA/PFOS, along with NSF/ANSI 53 standard for the reduction of lead and cyst.

PIONEER  
NAME AND  
PART NUMBER

**PIONEER™  
System**

CTA0840BBBKP5-04C00



SIZE & MICRON RATING	RATED CAPACITY & FLOW RATE	PEAK FLOW & % REDUCTION OF LEAD
8" x 40"	Lead Reduction and PFOA/PFOS 100,000 gallons @ 4.51 GPM (378,541 Liters @ 17.1 lpm)	8 GPM (30.2lpm) @ 99.62% reduction  (* ) >88,000 gallons at 8 GPM (333,116 Liters @ 30.2lpm)
0.5	@ 99.62% lead reduction @ 97.9% PFOA/PFOS reduction	
CHLORINE/CHLORAMINE TASTE AND ODOR REDUCTION CAPACITY (*)		PRESSURE DROP SPEC
>300,000 gallons @ 15 GPM (1,135,533 Liters @ 56.8 lpm) with greater than 90% reduction, estimated capacity using 2ppm of free chlorine.		9 psid @ 4.51 GPM
>150,000 gallons @ 8 GPM (567,812 Liters @ 30.3 lpm) with greater than 85% reduction, estimated using 3ppm of chloramine.		

## LED REPLACEMENT NOTIFICATIONS

### EASY TO UNDERSTAND LED REPLACEMENT NOTIFICATIONS

The Real-time Dynamic LED System monitors water and flow rate and provides a visual color-coded notification to the homeowner, letting them know when to replace their filter.

**GREEN:  
FILTER  
GOOD**



**YELLOW:  
CHANGE  
SOON**

(10% OF  
FILTER LIFE  
REMAINING)



**RED:  
CHANGE  
NOW**



SUBSTANCE	INFLUENT CHALLENGE CONCENTRATION (MG/L)	MAXIMUM PERMISSIBLE PRODUCT WATER CONCENTRATION (MG/L)	NSF/ANSI STANDARD
Lead	0.15 +/- 10%	0.01	53
Cyst	minimum 50,000/L	99.95%	53
PFOA/PFOS	1.5 +/- 10%	0.07	P473

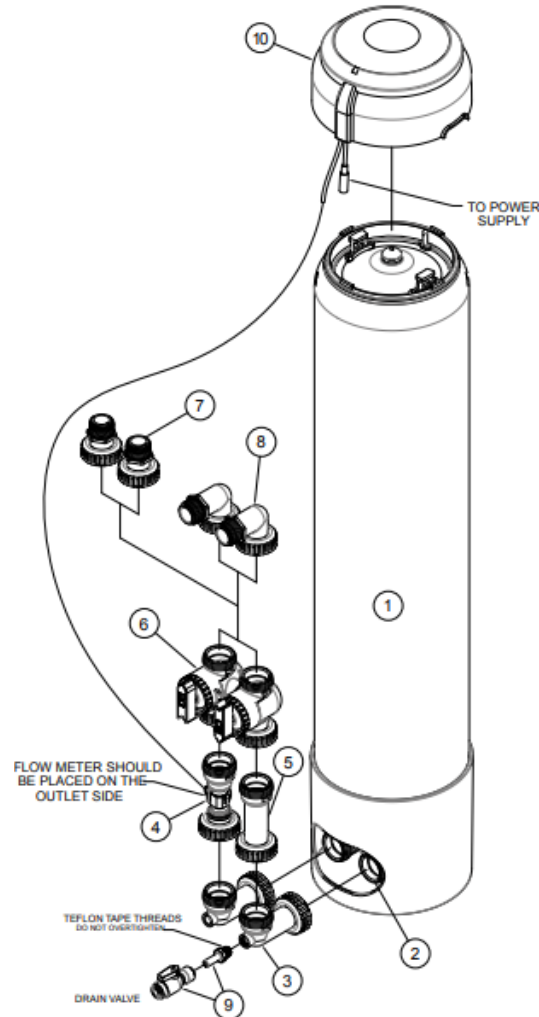
**Minimum Operating Temperature:** 34 F / 1 C  
**Maximum Operating Temperature:** 120 F / 50 C  
**Minimum Operating Pressure:** 20 psig / 1.38 bar  
**Maximum Operating Pressure:** 125 psig / 8.6 bar  
**Electrical Requirements:** Grounded & Unswitched 115 V outlet and 3-AAA Batteries  
**Filter Replacement Operating Instructions:** New cartridges must be flushed for a minimum of 10 minutes prior to use. System and installation to comply with state and local laws and regulations.  
**Do not** use with water that is microbiologically unsafe or unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.  
 Manufactured from NSF/ANSI standard 61 and California Prop 65 Compliant certified coconut shell carbon and raw materials.



# Enpress Pioneer System

**EASY REPLACEMENT**  
No Tools Means No Tools!

## TECHNICAL SCHEMATICS



### PART IDENTIFICATION

1. ONE-E3-M Filtration System / Housing
2. In/Out Head for 1.050" Riser Pipe
3. 90 Degree Vertical Elbow With/without Machined Drain Port
4. Flow Meter Assembly With Cord
5. Meter Spacer Assembly
6. Bypass Manifold
7. 1" MNPT Straight Connector
8. 1" MNPT 90 Degree Elbow Connector
9. 3/8" PEX Drain Valve Kit Assembly With Shut-off
10. PCB Umbrella With Electronics Non-WIFI, Version 1

