

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series PWDM

Residential Dual Media Softening and Filtration System

Connection Size: 1"

Flow Rate: Up to 20 gpm (75 lpm)

The Series PWDM Dual Media water softening and filtration system is designed for residential applications for 45,000 grains of hardness removal capacity and a peak flow rate up to 20 gpm. This system contains Granular Activated Carbon (GAC), which reduces the chlorine content of the water, preserving the life of the water softening resin.

Features

- Complete whole house water softening and filtration system
- Space saving design, combines two technologies into one tank which also reduces cost
- GAC and Resin are in separate chambers reducing media replacement cost
- Mineral Tank Dome Hole for easy access to replace GAC media
- Engineered and tested to perform, one of the most reliable valve platforms in the industry
- Control valve can predict daily water usage and regenerates only when necessary, saving salt and water
- Full flow bypass valve included

PWSR Series Control Valve

Manufactured from high-tech materials, the PWSR control valve has been engineered and tested to perform in the most demanding environments. It has built a reputation of being one of the most reliable valve platforms in the industry. All surfaces contacted by water are made from 100% polymer components so that corrosion from acidic water and brine is no longer a concern.

Electronic Control

The PWSR Series valve features an advanced electronic control for easy programming. Adjustable brining, adjustable reserve, high efficiency regeneration and simplified programming are now standard.

Softening Media

The softening media is a high-capacity cation polystyrene resin that combines high operating capacity with excellent chemical and physical stability for long, dependable life.

WATTS®
pure water



PWDM Series Dual Media Softening and Filtration System

GAC Media

We use Low Fine coconut shell activated carbon. This is a high-activity granular activated carbon manufactured by activation of select coconut shell raw material. Its high microporosity makes it particularly well suited for the adsorption of low molecular weight compounds at very low concentrations. It is also ideally suited for the removal of oxidizing agents such as chlorine from drinking water. Another important feature of this activated carbon is its superior mechanical hardness which helps ensure a clean, low dust product with an exceptionally long life span.

Resin Tank

Features a non-corrosive fiberglass tank with a thermoplastic inner liner. Combines two technologies in one single tank. GAC media and softening resin are in two separate chambers for proper contact time and extends life of softening resin. Mineral tank has Dome Hole for easy access to replace GAC media.

Brine Tank / Cabinet

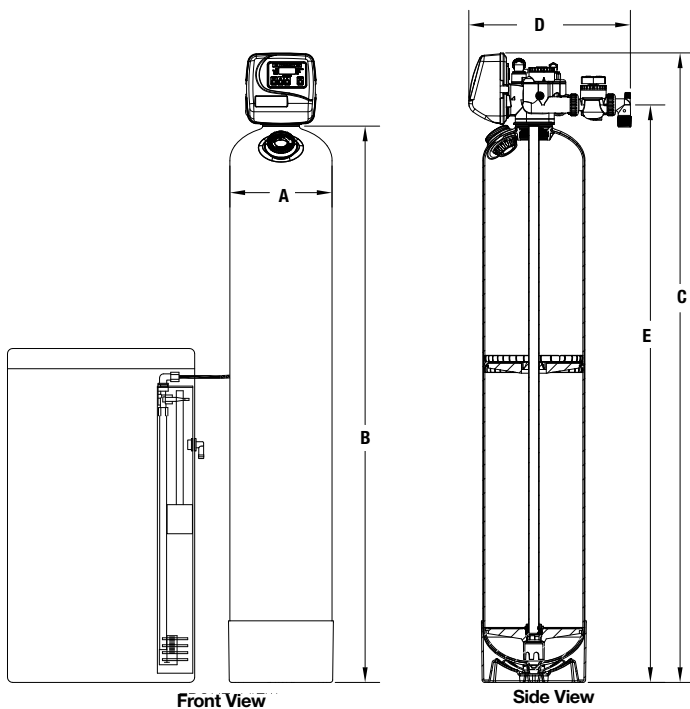
The brine tank is a combination brine maker and salt storage vessel and is made of tough, corrosion free high-density polyethylene. Brine refill is controlled by the advanced electronic controller, to provide the correct amount of brine for each regeneration.

⚠ WARNING

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

NOTICE

This Submittal is not intended to provide full installation instructions and safety information. In order to avoid property damage or injury, please refer to the complete installation manual and product safety information provided with the product.



PWDM Specifications

PWDM545	
Max/Min Ion Exchange Capacity	45,000/30,000
Cubic Foot of Carbon	0.5
Lbs of salt required for Max/Min capacity	22.5/9
Salt Storage Capacity	350
Flow Rate in GPM @ 15 PSI Drop	15 - 20
Backwash Flow Rate GPM	2.7
Drain Line Connection Size	3/4" NPT
Inlet/Outlet Pipe Size	1"
Electrical Requirements	120v60Hz
Mineral Tank Size D x H	12" x 52"
Brine Tank Size D x H	18" x 36"
Floor space required in inches W x D	32" x 19"
Approximate Shipping Weight Lbs	190

Feed Water Guidelines

pH	6 to 10
Hardness (maximum)	Depends on customer's acceptable hardness leakage level.
Water Pressure	25psi to 125psi (171 kPa to 8.5 bar)
Temperature	40 - 110°F (5 - 43°C)
Free Chlorine (maximum)	4 mg/L
Iron (maximum)	1 mg/L
Oil and H ₂ S	None Allowed
Turbidity	Less than 5.0 NTU
Total Dissolved Solids	Must be below 750mg/l for the softener to produce less than 1 grain per gallon soft water.

*For all other guideline information please contact your Watts Representative.

NOTES:

Input water conditions will influence the performance and flow rate of the system.

All units come standard with 1" bypass.

All units are shipped from factory set at minimum capacity and minimum salt usage to afford a 40% salt savings.

If Iron content is up to 1 PPM use resin cleaner regularly. Iron over 1 PPM should be pre-treated.

Dimensions

Call customer service if you need assistance with technical details.

MODEL NO.	MINERAL TANK		INLET		OUTLET		OVERALL HEIGHT		OVERALL DEPTH		BRINE TANK	
	(A & B)		E		E		C		D			
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
PWDM545	12 x 52	305 x 1321	55	1397	55	1397	60	1524	16	406	18 x 36	457 x 914

