

SECTION 4

Multi-Chamber Softeners & Filters



WATER QUALITY PRODUCTS
Catalog 10

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. Watts reserves the right to change or modify product design, construction, specifications or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

Watts® Smart 'n Soft Softeners

High efficiency water softeners, designed to use less salt and water to conserve resources and reduce costs.

Smart 'n Soft™

Advantages

- Metered control valve and “smart brining” conserves salt and water.
- Resin tanks use the patented Vortech™ distribution system to conserve water by reducing backwash duration.
- Systems come with safety float valves to prevent brine water overflow.
- Full product line for a wide range of flow rates and requirements.

Two Step Water Treatment

◀ Step #1 Removes

- Chlorine
- Tastes
- Odors
- Organics

◀ Step #2 Removes

- Calcium
- Magnesium
- Iron*

* Some pre-treatment may be required.



Featuring Watts 1000 Control Valves With “Smart Brining”



Watts® 1000 Control Valves

Softeners with Watts proprietary valves are now available, offering unsurpassed performance and greater efficiency.

- Regenerates based on water usage.
- Smart brining
- Less salt!
- Less water!
- Continuous flow rates to 21 GPM.
- Peak flow rates to 27 GPM.
- LED status lights.
- Advanced diagnostics.
- Ideal for tanks up to 16”.

Single Chamber Softeners

Model Number	Valve Type	Capacity	Resin (Cu. Ft.)	Carbon (Cu. Ft.)	Tank (Vortech)	Tank Color	By Pass	Brine Tank	Safety Float Valve
WWS100	Metered	30,000	1	None	9x48	Black	Yes	18x36	Yes
WWS150	Metered	45,000	1.5	None	10x54	Black	Yes	18x36	Yes
WWS200	Metered	60,000	2	None	12x52	Black	Yes	18x36	Yes

Dual Chamber Softeners & Filters (Resin and GAC)

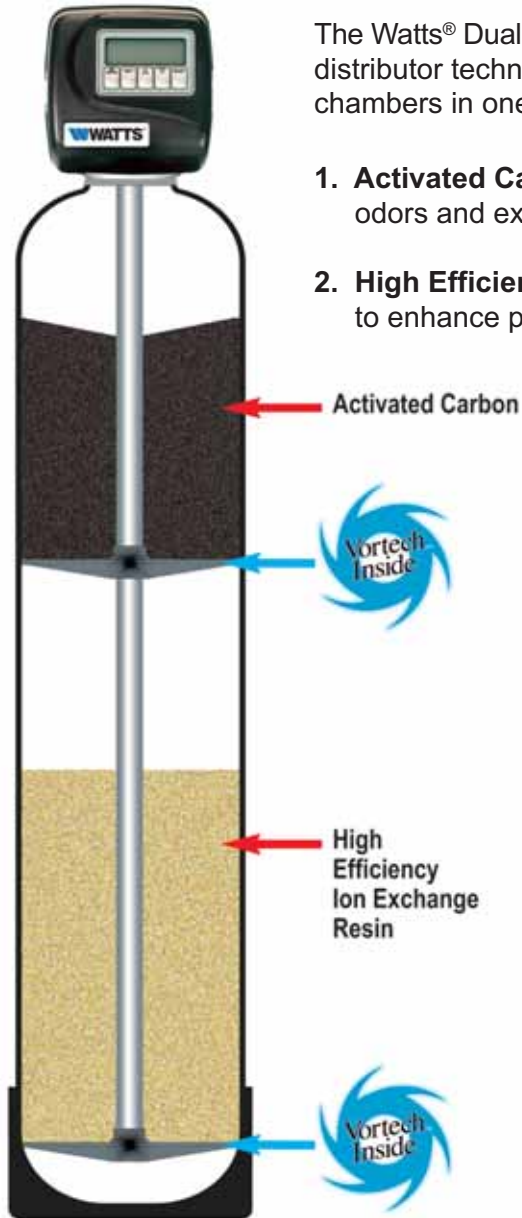
Model Number	Valve Type	Capacity	Resin (Cu. Ft.)	Carbon (Cu. Ft.)	Tank (Vortech)	Tank Color	By Pass	Brine Tank	Safety Float Valve
WWSDC100-50	Metered	30,000	1	0.5	10x54	Black	Yes	18x36	Yes
WWSDC150-100	Metered	45,000	1.5	1	13x54	Black	Yes	18x36	Yes
WWSDC150-150	Metered	45,000	1.5	1.5	13x65	Black	Yes	18x36	Yes

Dual Chamber Softeners & Filters (Resin and Catalytic Carbon for Chloramines)

Model Number	Valve Type	Capacity	Resin (Cu. Ft.)	Carbon (Cu. Ft.)	Tank (Vortech)	Tank Color	By Pass	Brine Tank	Safety Float Valve
WWSDC100-50C	Metered	30,000	1	0.5	10x54	Black	Yes	18x36	Yes
WWSDC150-100C	Metered	45,000	1.5	1	13x54	Black	Yes	18x36	Yes

Watts® Dual-Media Water Softener & Filter

Water softener and carbon filter in one compact design for whole house water treatment!



The Watts® Dual Media Water Softener and Filter utilizes Vortech™ patented distributor technology to maximize media efficiency with two separate media chambers in one tank.

- 1. Activated Carbon** for pre-treatment removes chloramines*, chlorine, taste, odors and extends ion exchange resin life.
- 2. High Efficiency Ion Exchange Resin** for increased efficiency and to enhance performance with high iron content water.

Features & Benefits

- Combines two technologies in one single tank.
- One control valve and mineral tank to reduce costs.
- Carbon and resin are in separate chambers.
- Proper contact time is provided by using two chambers.
- No media migration with carbon and resin separated.
- Carbon can be replaced without replacing the resin.
- Lower pressure drop, compared to twin tank systems.
- Vortech™ tank technology for higher backwash rates.
- No gravel under bedding to reduce costs and weight.
- Space saving, single tank design.
- Vortech™ tanks are NSF standard certified.
- Made in U.S.A.

Reduces

- ✓ Hardness
- ✓ Chloramines*
- ✓ Chlorine
- ✓ Taste
- ✓ Odors
- ✓ Iron**



Dual Water Softener And Filter

Part Number	Softening Capacity (Grains)	Tank Size	Tank Color	Dome Hole	Resin (cu.ft.)	Carbon (cu. Ft.)
M3011-W100SM-CR	30,000	10x54	Black	NO	1	0.5
M3011GW100SM-CR	30,000	10x54	Gray	NO	1	0.5
M3011-W100SMFX	30,000	10X54	Black	NO	1	0.5***
M3013CK10SMCR10	45,000	13x54	Black	NO	1.5	1
M3013CKDHSMCR10	45,000	13x54	Black	YES	1.5	1
M3013CK10SMCR15	45,000	13x65	Black	NO	1.5	1.5
M3013CKDHSMCR15	45,000	13x65	Black	YES	1.5	1.5
M3015CK10SMCR10	60,000	13x65	Black	NO	2	1
M3015CKDHSMCR10	60,000	13x65	Black	YES	2	1

Note: All units come with CK10 valve, by-pass, 1" PVC elbow tails & coconut shell carbon. Brine tanks come with safety float valve.

*When catalytic carbon is used.

**Pre-treatment may be required.

***Filoc (not carbon).

Watts® Dual-Media Water Softener & Filter

Water softener and carbon filter in one compact design for whole house water treatment!

Get Two Water Treatment Methods In One Compact Design

The Watts® Dual Media Water Softener and Filter comes with metered control valves, which regenerate based on water usage for greater efficiency.

Specifications

Valve	CK-10 metered valve
Pipe fittings	3/4" / 1" sockets and 1" MNPT elbows provided
Resin	1, 1.5 or 2 cu. ft. ion exchange resin
Media	0.5, 1.0 or 1.5 cu. ft. granular activated carbon
Mineral tank	Vortech, corrosion resistant FRP
Distributor	1.05" O.D.
Electrical	120 volt, 60 Hz, standard

These models come with Vortech™ tanks, designed to improve backwash rates and conserve water.

Vortech™ Dual-Tank Features And Benefits

- Separate chambers in a single tank.
- Mid-plate eliminates media migration.
- No gravel under bedding to reduce costs and weight.
- Higher backwash rate.
- Reduced backwash duration to conserve water.
- Riser tubes are permanently attached.
- NSF certified and made in U.S.A.



Standard Mineral Tank

Standard tanks use gravel under bedding, which adds weight and cost. Also, re-bedding is more difficult, should riser tubes pull out of the gravel bed.



Vortech™ Mineral Tank

No gravel under bedding is required, reducing weight and cost. Also, riser tubes are permanently attached, so they cannot pull out during re-bedding.

Watts® Tri-Plex Water Softeners

Multi-Stage water treatment systems for consumers who demand the “best”.

Multi-Stage Water Treatment System In a Single Tank To Save Space and Money!

Our metered control valve regenerates in an *up-flow* pattern based on water usage to conserve water and reduce salt requirements.

Pre-Filter

Our Micro-Z® filter media is used for pre-filtration to remove particles, five micron and up. Micro-Z outperforms sand and multimedia to increased particulate removal.

KDF®

This important step enhances the performance of activated carbon (below) and aids in the removal of iron and hydrogen sulfide.

Activated Carbon

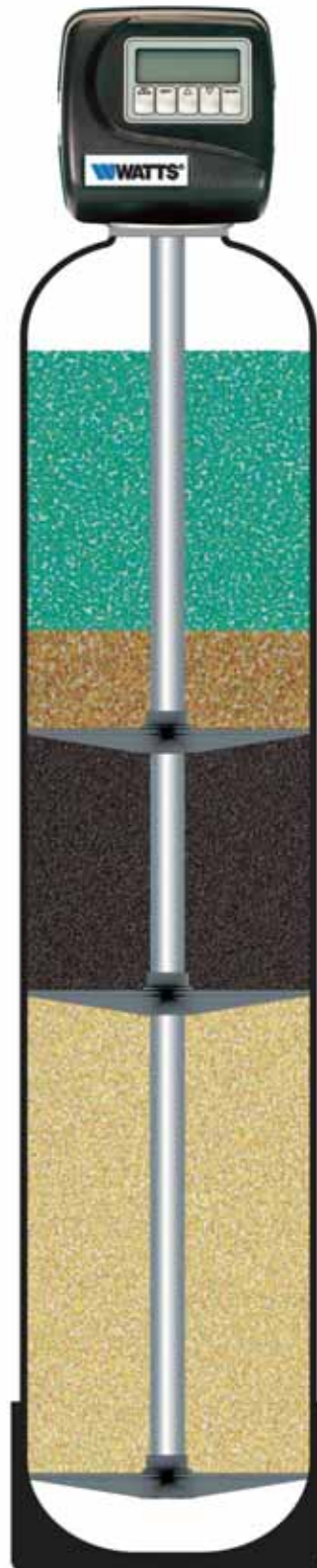
Activated carbon is used for pre-treatment to improve water quality by reducing bad tastes, foul odors, chlorine and organic substances through adsorption.

High Efficiency Ion Exchange Resin

Fine mesh resin is used for increased efficiency to remove water hardness, Calcium, Magnesium and improve performance in high Iron content water.

Two Models

We offer two models based on water type, including models for municipal water and well water.



Innovative Design

If you want the most from your investment, Tri-Plex water conditioners are for you! There's nothing else like them anywhere!

Multi-Stage Water Treatment Process

With Tri-Plex water softeners you get several water treatment media in a single tank, using a single control valve, to reduce space and save money!

Reduces:

- Water hardness
- Calcium
- Magnesium
- Sediment
- Chlorine
- Bad tastes
- Foul odors
- Heavy metals (KDF)
- Scale
- Damage to appliances due to scale build-up.
- Spots on dishes & glassware.
- Soap build-up on shower walls and bath tubs.

Other Benefits:

- Soap savings 50% or more because soap and detergents work better in soft water.
- Softer, brighter laundry.
- Refreshing shower water and no chlorine damage to hair.
- Smoother shave with softened water.
- Reduced energy costs by scale elimination.

Tri-Plex Water Conditioning Systems by Watts®



Components

Tri-Plex water conditioning systems come with the W100SM metered valve, which features up-flow regeneration to conserve water and increase salt efficiency. Tri-Plex conditioners also use three chamber 10" x 60" Vortech® mineral tanks, (with safety float valves) and come with a 1" by-pass valve.

Media Replacement

Media replacement may be completed using the extraction tool, designed for Tri-Plex water conditioning systems (see bottom photo). Micro-Z® is typically not replaced because the media is refreshed during backwash. We recommend replacement of the activated carbon and KDF every 1-2 years, depending on chlorine levels. For more information please see our owners manual.

Resin Replacement

Resin life is dramatically extended due to pre-treatment by activated carbon and KDF. With Tri-Plex conditioners, resin life may be extended indefinitely with adequate carbon pre-treatment.

Warranty

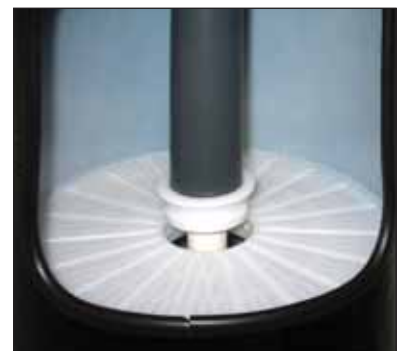
Tri-Plex conditioners come with a five year limited warranty on control valves, mineral tanks and brine tanks. For more details please refer to our owners manual.

Hardness

Tri-Plex systems are recommended for hardness levels up to 25 grains per gallon.



Extraction Tool
(P/N: D91EXT)



Adapter Removal Tool
(P/N: D91INS)

Models

Model Number	Valve	Water	Resin Cu. Ft.	Carbon Cu. Ft.	Service Flow (GPM)	Backwash (GPM)	Brine Tank	Ship Wt. (Lbs.)
M3011-W100SM5CZ	W100SM	City	1.0	0.5	8 to 11	7.5	18x36	150
M3011-W100SM8CZ	W100SM	Well	1.0	0.5	8 to 11	7.5	18x36	150

Note: Pipe connections are 1".

Watts® Twin Tank-Dual Chamber Alternating Water Softener and Conditioner

Reduces water hardness, chlorine, tastes and odors 24/7!



Nothing Like It Anywhere!

Unlike conventional water softeners, Watts® Twin Tank, Dual Chamber systems provide soft, conditioned water continuously. And because each tank has two chambers for two different treatment methods, water hardness, chlorine, tastes and odors are removed, 24/7

Features & Benefits

- Designed for applications when continuous water conditioning is required or desired.
- Innovative twin alternating dual chamber system works continuously, 24/7!
- Systems regenerate immediately, so soft water is available upon demand!
- Soft water is provided when the second tank is being regenerated.
- Carbon pre-treatment dramatically extends resin life to reduce costs.
- Vortech® tanks, used for superior performance.
- Metered valve for greater efficiency and reduced water consumption.

Removes

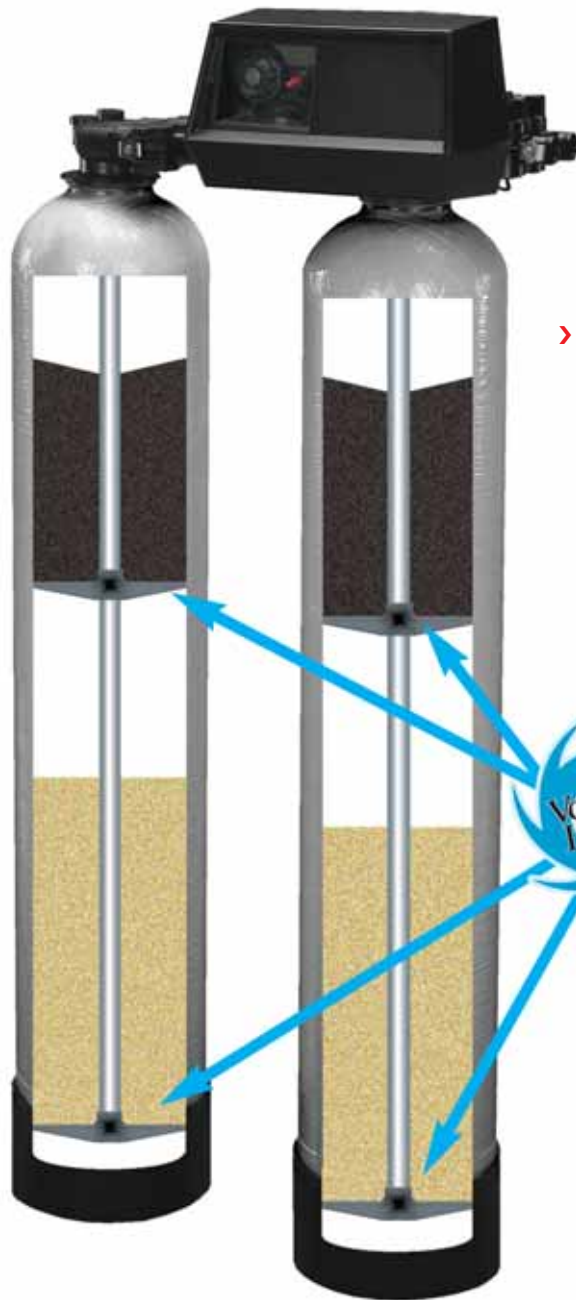
- ✓ Calcium
- ✓ Magnesium
- ✓ Iron*
- ✓ Water hardness
- ✓ Chlorine
- ✓ Chloramines
- ✓ Organic matter

*Additional treatment may be required.

Specifications

Model Number	Capacity (Grains)	Valve Type	Connection	Mineral Tank Color	Mineral Tank Size	Brine Tank Color	Brine Tank Size	Safety Float Valve
M3011-9100SM-CR	30,000 Per Tank	Metered	1"	Gray	10" x 54"	Black	18" x 40"	Yes

Watts® Twin Tank-Dual Chamber Water Conditioners With "9100" Metered Valve For Greater Efficiency!



Metered Valve For Greater Efficiency

Our "9100" control valve is metered for greater efficiency and reduced salt usage, because regeneration of the softener resin is based on 100% water consumption before switching to your second tank!

- Corrosion-free fiber-reinforced polymer valve body.
- Innovative second tank quick connection.



Benefits

- Provides continuous, soft water, 24/7.
- Chlorine, taste & odors are reduced!
- Refreshing shower water without hardness.
- Softer, brighter laundry.
- Reduced soap usage and costs.
- No mineral deposits on dishes and glassware.
- No chemical damage to hair.
- Smoother shave with soft water!

Vortech® Tanks

- Large surface area for lower pressure drop.
- Low pressure drop for higher flow.
- Angled slots for greater lift during backwash.
- No gravel under bedding is required.
- Distributor plates are "self cleaning".
- Backwash duration is reduced.
- Less water for backwash is required.
- Riser tubes are permanently attached.
- Made in the U.S.A.
- NSF certified.

Media

CARBON	TYPE	Coconut Shell
	SIZE	12 x 40 Mesh
	CUBIC FEET	0.5
RESIN	TYPE	High Capacity Cation
	SIZE	16 x 40 Mesh
	CUBIC FEET	1.0