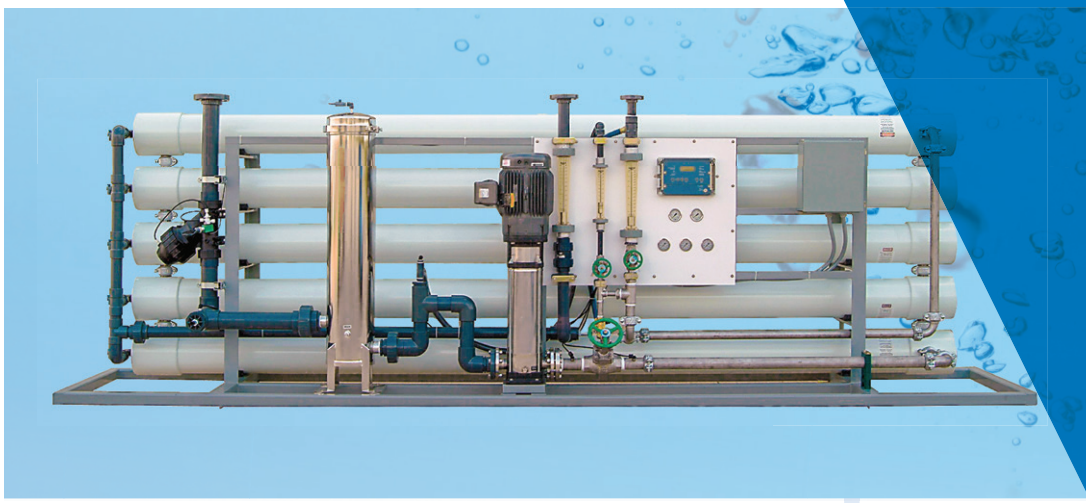
Product Catalog

Watts Pure Water Commercial Filtration and Treatment Products



pure water

Watts.com/PureWater

WATTS®

WANT TO LEARN MORE?

Contact your local Watts representative to learn more about our product line and support services for Plumbing Wholesale.

WATTS®

Your Single Source for Custom Water Treatment Solutions

If you're looking for one partner to provide integrated, turnkey water treatment solutions for your industrial and commercial customers you've come to the right place.

Standard or custom projects—Watts can deliver. Our expertise and capabilities cover the entire process for assembling a water treatment solution, from design, engineering, and specification to manufacturing, skid mounting, preplumbing, and delivery.

The Result: One source for efficiently engineering high-quality systems, and assistance with installation and start up.

Experts in Water Treatment Technology

- Depth and breadth of water treatment expertise
- Water filtration, softening, conditioning, and purification technology
- Reverse osmosis, UV disinfection, cartridge filtration, and more
- Dedicated design and sourcing support
- Knowledge of industry codes and standards
- Dedicated engineering staff for custom designs
- State-of-the-art 2D and 3D software

Spanning Multiple Industries

We can design, manufacture, and assemble water treatment solutions for large-scale industrial and/or commercial projects across a wide range of industries:

- Agricultural & irrigation
- Chemical & industrial processing
- Commercial laundries
- Food, beverage & ice production
- General potable water
- Government & institutional
- Hospitals, medical & laboratory facilities
- Hotels & resorts
- Metal plating & surface finishing
- Municipalities & utilities
- Paper & pulp manufacturing
- Petroleum, gas & mining
- Pharmaceuticals & cosmetics
- Power & steam generation
- Textiles, ink & dye manufacturing
- Universities & educational facilities

Custom skid mounted pre-plumbed cartridge filter system.

Pre-plumbed and Skid Mounted Twin Progressive Flow Water Softener.

Twin 60"x60" Progressive Flow Water Softeners with 4" service valves and Fleck 3150 regeneration valves.

Custom system for distillery. Quad Micro-Z and Quad Carbon systems. Dual RO with a production of 110 gpm each operating at 380 volts, 3-phase, 50 Hz. with Antiscalant chemical feed.

System shown with optional ProPress plumbing.

Parallel 48" x 72" Quad Carbon filter system with sequential backwash.

Quad 72"x72" Progressive Flow Water Softeners with Watts diaphragm valves.

Table of Contents

Watts® Pure Water Visual Test Kits

provide a quick, portable, and convenient way to measure some of the most common water quality test parameters anywhere at any time. Accurate chemistry, simple to read comparator cards with instruction, and expandable carrying case allows for testing on site without having to take water samples back to a chemistry laboratory.

Master Visual Test Kit

ORDER NUMBER	DESCRIPTION
7100710	PWVTCOMPLETEKIT

Master Visual Test Kit contains (x1) each of the individual tests kits, including carrying case and comparator**. Master Visual Test Kit does not include TDS Meter, it must be ordered separately.**

Individual Visual Test Kits

ORDERING CODE	MODEL NUMBER	PARAMETER	TEST TYPE	RANGE (PPM)	#TEST
7100700	PWVITOTALIRON	Total Iron (Fe+3) Kit	Visual Comparator, Colorimetric	0-9	≥ 100
7100701	PWTFERROUSIRON	Ferrous Iron (Fe+2) Kit	Visual Comparator, Colorimetric	0-9	≥ 100
7100702	PWVTMANAGANESE	Manganese Kit	Visual Comparator, Colorimetric	0-10	≥ 100
7100703	PWVTTOTALALK	Total Alkalinity Kit	Visual Comparator, Colorimetric	0-500	≥ 100
7100704	PWVTpH	pH Kit	Visual Comparator, Colorimetric	6-8	≥ 100
7100705	PWVTCHLORINE	Chlorine (Free & Total) Kit	Visual Comparator, Colorimetric	0-6	≥ 100
7100706	PWVTHARDNESS	Total Hardness Kit	Visual Comparator, Colorimetric	0-500/0-30gpg	≥ 100
7100707	PWVTFILOXRP	Filox ORP Simple Test Kit	Visual	NA	≥ 100
7300782	Meter TDS	TDS Meter 0-9990 ppm	Digital	0-9990	NA

Individual Kits contain all necessary reagents, comparator card, cuvettes, and instructions to perform measurements

*Comparator and carrying case sold separately.

7300782
TDS

7100708*
Comparator

7100709*
Carrying Case

Accessories

ORDER CODE	DESCRIPTION
7100708	Comparator
7100709	Carrying Case

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

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

OneFlow®
Scale Control Systems

Calcium scale in pipes and plumbing equipment often increases energy costs and can lead to expensive repairs to appliances such as hot water heaters, ice machines, coffee makers, and dishwashers. On the other hand, calcium is important to human health, and supplements are often recommended if this important mineral is totally reduced or absent from a person's diet.

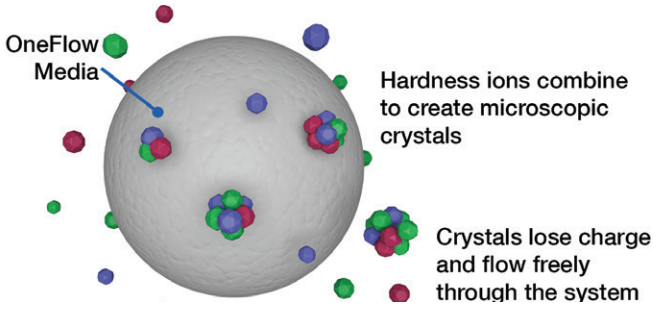
Water quality professionals now have a revolutionary product for fighting scale and retaining the benefits of calcium in water: OneFlow®. With OneFlow there's no salt, no backwash, and no scale to worry about. This environmentally-friendly solution eliminates sodium discharge by using ***Media-Assisted Crystallization (MAC)*** technology.

Media-Assisted Crystallization (MAC) Technology

How does OneFlow® MAC work?

OneFlow media attract dissolved calcium and magnesium ions near the surface of the media where they become supersaturated and converted into harmless microscopic crystals. Once formed, these crystals lose charge and flow freely through the plumbing system without causing damaging scale build-up in plumbing fixtures, water heating equipment, and appliances.

"Hard" water contains a high mineral content (primarily calcium and magnesium that naturally occur in groundwater). Over time, hard water can cause scale to build up in pipes and plumbing, increasing your energy costs and shortening the life of your appliances.



NOTICE

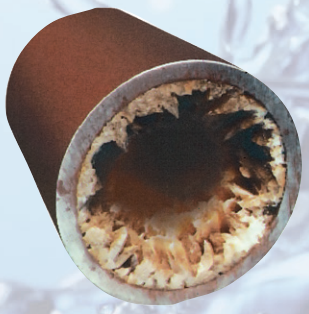
Independent scientific testing has confirmed that MAC technology provides scale reduction of 95+%. Testing was conducted under protocol based on DVGW W512 test to assess control of scale formation. Results may vary and performance is based on water hardness levels, flow rate, and other factors.

DID YOU KNOW?

Independent scientific testing has confirmed that MAC technology provides scale reduction of over 95%.

The Problem!

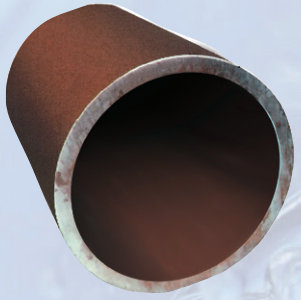
Calcium creates scale in pipes, on appliances and other plumbing surfaces which can lead to higher heating and energy costs and expensive repairs.



Untreated Pipe

The Solution!!

Watts OneFlow® Anti-Scale Systems transform dissolved hardness minerals into harmless, inactive microscopic crystal particles which are so small they are easily rinsed away by the water flow.



OneFlow Treated Pipe

⚠ WARNING **Do not use with water that is microbiologically unsafe or of 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.**

Features

- No salt or chemicals required
- Economical and efficient
- Upflow design for better flow rates
- No backwashing and zero discharge
- Virtually maintenance free
- Consistent scale control performance
- Wide range of commercial applications
- Uses environmentally friendly technology
- Long-lasting media needs no regeneration

Benefits

- Eliminates the need for scale prevention chemicals or salt
- Eliminates de-scaling chemical costs
- Reduces labor costs and downtime
- Increases operating efficiencies
- Extends life of capital equipment
- Reverses existing scale problems
- Provides immediate ROI through energy savings

TANK TYPE OneFlow® SYSTEMS

- COLD OPERATING WATER 40 to 100°F (5 - 38°C)
- Service flow for 10 to 1,000 gpm plus

CARTRIDGE TYPE OneFlow SYSTEMS

- COLD OPERATING WATER 40 to 100°F (5 - 38°C)
- Service flow for 1 to 4 gpm
- OneFlow Tankless Water Heater offers service flow for 6 to 10 gpm

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

Models OF1465-50TM and OF1665-75TM

OneFlow® Anti-Scale System

Connection Sizes: 2" (50mm)
Flow Rates: From 30 gpm to 75 gpm (114 lpm to 284 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal plumbing surfaces. The OneFlow® system may be installed at the point-of-entry to a building to treat both hot and cold water, or it can be located directly before a water heater, boiler, or other hot water-using device that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles, as water travels through the media filled tank. These precipitated micro-crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively like dissolved hardness minerals do. The system requires very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and on fixtures, are significantly reduced.

OneFlow® is not a water softener or a chemical additive (like anti-scalants or sequestrants). It is a scale prevention solution with proven third party laboratory test data and years of successful residential and commercial applications. OneFlow® is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

OF1665-75TM

WQA Certified against NSF/ANSI Standard 61 and 372 for Lead Free.

Features

- Chemical-free scale prevention and protection – converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective salt-free alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free – No salt bags or other chemicals to constantly add
- No control valve, no electricity and no wastewater
- Uses environmentally friendly technology
- Improves efficiency of all water using appliances – both hot and cold
- Simple sizing & installation – all you need to know is pipe size and the peak flow rate
- Excellent system for towns or communities where water softeners are banned or restricted
- Multi-Tank systems plumbed in parallel can meet high flow applications from 100 gpm to and above 1000 gpm.
- OneFlow® does not remove minerals or add sodium to the water supply
- OneFlow® can be installed as pre-treatment to reverse osmosis (OneFlow® should be the last stage in treatment unless a point-of-use system is being used downstream.)

Connections

Head Inlet Connection	2" (50mm) FNPT
Head Outlet Connection	2" (50mm) FNPT
2" Flex Connectors	2" (50mm) MNPT

NOTICE

2 inch Flex Connectors are required and included with each OF1465-50TM & OF1665-75TM system for installation

Models

MODEL NO.	ORDERING CODE	MAXIMUM FLOW RATE
OF1354-30TM	0002221	30 gpm (114 lpm)
OF1465-50TM	7100661	50 gpm (189.3 lpm)
OF1665-75TM	7100662	75 gpm (283.9 lpm)

Replacement Media

MODEL NO.	ORDERING CODE	FREQUENCY
OF1354RM	0002158	Media should be replaced every 3 years
OF1465RM	0002159	Media should be replaced every 3 years
OF1665RM	0002160	Media should be replaced every 3 years

For additional information, access online literature ES-OF1465TM_1665TM

Series OFCOM-EK

OneFlow® Anti-Scale System

Connection Sizes: Size 1" (25 mm) Plastic MPT 90 Elbow
Flow Rates: 10 gpm to 20 gpm (38 lpm to 76 lpm)

Features

- Smart and connected elapsed time monitor – Sends automatic alerts via email and text when media replacement is due
- Monitors and displays water usage and remaining media life
- Chemical-free scale prevention and protection – converts hard-ness minerals to harmless, inactive microscopic crystals making OneFlow an effective alternative technology to a water softner for the prevention of scale due to water hardness
- Virtually maintenance free – no control valve
- Uses environmentally friendly technology by using no salt or other chemicals to constantly add, and generates no waste water
- Improves efficiency of all water using appliances – both hot** and cold
- Simple sizing & installation – all you need to know is pipe size and the peak flow rate
- Perfect system for towns or communities where water soft-ens are banned or restricted
- OneFlow does not remove minerals or add sodium to the water supply
- OneFlow can be installed as pre-treatment to commercial reverse osmosis systems (contact your Watts® Representa-tive for further details)

WQA Certified against NSF/ANSI Standard 61 and 372 for Lead Free.

Models

MODEL NO.	ORDERING CODE	MAXIMUM FLOW RATE
OF744-10-EK	0002420	10 GPM (38 lpm)
OF844-12-EK	0002421	12 GPM (45 lpm)
OF948-16-EK	0002422	16 GPM (61 lpm)
OF1054-20-EK	0002423	20 GPM (76 lpm)

Replacement Media

MODEL NO.	ORDERING CODE	FREQUENCY
OF744RM	0002154	Media should be replaced every 3 years
OF844RM	0002155	Media should be replaced every 3 years
OF948RM	0002156	Media should be replaced every 3 years
OF1054RM	0002157	Media should be replaced every 3 years
OF1252RM	0002158	Media should be replaced every 3 years

For additional information, access online literature ES-OFCOM-EK

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

Model OFTWH

OneFlow® Anti-Scale System

Connection Sizes: ¾" (20mm)
Flow Rates: From 0.5 gpm to 10 gpm (1.9 lpm to 38 lpm)

OFTWH

The OneFlow® Anti-Scale System provides protection from scale formation on internal plumbing surfaces. The OneFlow® system is a single cartridge-based system that must be installed on a cold water line prior to a water-heating device (water heater or tankless water heater) for single tankless heaters.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain. The system requires very little maintenance, no backwashing, no salt and no electricity. Typical hardness problems, especially build-up of scale in heating elements, pipes, water heaters, boilers and on fixtures, are significantly reduced.

OneFlow® is not a water softener. It does not add chemicals. It is a scale prevention device with proven third party laboratory test data and years of successful commercial, residential and food service applications. OneFlow® is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

Features

- Chemical-free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free - No salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
- Improves efficiency of all water heating devices and downstream plumbing components.
- Simple sizing & installation – standard ¾" connections
- Perfect system for restaurants, cafeterias, coffee shops and homes where multiple or single equipment protection is desired for longer equipment life and reduced energy consumption
- Inlet ball valve for easy isolation shutoff and filter changes
- OneFlow® cartridge-based systems are easily maintained; change the cartridge once every two years
- Easily installed mounting bracket included w/filter wrench to allow cartridge change-outs when necessary

Models

MODEL NO.	ORDERING CODE	PEAK FLOW RATE	CONNECTION SIZE
OFTWH	0002182	10 gpm (38 lpm)	¾" (20mm) FNPT

Replacement Cartridge

MODEL NO.	ORDERING CODE	FREQUENCY
OFTWHRM	0002183	Cartridge should be replaced every 2 YEARS.

For additional information, access online literature ES-OFTWH

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

Models OF110-1, OF120-2 and OF140-4

OneFlow® Anti-Scale System

Connection Sizes: ½" and ¾" (15 and 20mm)
Flow Rates: From 0.5 gpm to 4 gpm (1.9 lpm to 15.2 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal plumbing surfaces. The OneFlow® system is a single cartridge-based system that may be installed on a cold water line prior to a water-using device (water heater, hot-beverage system, appliance, steamer etc.) that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively with plumbing surfaces, as opposed to dissolved hardness minerals. The system requires very little maintenance, no backwashing, no salt and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and on fixtures, are significantly reduced.

OneFlow® is not a water softener. It does not add chemicals. It is a scale prevention device with proven third party laboratory test data and years of successful Food Service and Commercial applications. OneFlow® is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

OF110-1

OF120-2

OF140-4

Features

- Chemical free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free - No salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
- Improves efficiency of all water appliances whether heating the water or not
- Simple sizing & installation – all you need to know is pipe size and flow rate
- Perfect system for restaurants, cafeterias and coffee shops where multiple or single equipment protection is desired for longer equipment life and reduced energy consumption
- Inlet ball valve for easy isolation shutoff and filter changes
- OneFlow® does not remove the essential minerals in water
- OneFlow® cartridge-based systems are easily maintained; change the cartridge once per year

Models

MODEL NO.	ORDERING CODE	MAXIMUM FLOW RATE	CONNECTION SIZES
OF110–1	0002148	1 gpm (4 lpm)	½" (15mm) FNPT
OF120–2	0002149	2 gpm (8 lpm)	½" (15mm) FNPT
OF140–4	0002150	4 gpm (15 lpm)	¾" (20mm) FNPT

Replacement Filters

MODEL NO.	ORDERING CODE	FREQUENCY
OF110RM	0002161	Cartridge should be replaced every 12 months
OF120RM	0002162	Cartridge should be replaced every 12 months
OF140RM	0002163	Cartridge should be replaced every 12 months

For additional information, access online literature ES-OF110_120_140

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

Models OF210-1, OF220-2 and OF240-4

OneFlow® Anti-Scale System

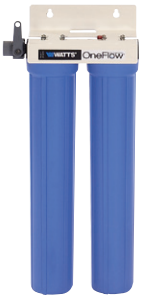
Connection Sizes: ½" and ¾" (15 and 20mm)
Flow Rates: From 0.5 gpm to 4 gpm (1.9 lpm to 15.2 lpm)

The OneFlow® Anti-Scale System with two filter housings provides protection from scale formation and reduces chlorine and other off tastes to improve overall water quality in Food Service applications. The OneFlow® system is a dual cartridge-based system that may be installed on a cold water line prior to a water-using device (coffee maker, espresso machine, post-mix system or other appliance) that requires protection from the ill effects of hard water. OneFlow® works exceptionally well where the water is being heated or brought to steam.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively with plumbing surfaces, as opposed to dissolved hardness minerals. The system requires very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in heating elements, boilers, and steamers, are significantly reduced.

OneFlow® is not a water softener. It does not add chemicals or remove any minerals. It is a scale prevention device with proven third party laboratory test data and years of successful Food Service and Commercial applications. OneFlow® is the intelligent scale solution with chlorine reduction as a great alternative to water softening (ion exchange) or scale sequestering devices.

OF210-1



OF220-2

OF240-4

Features

- Chemical free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® effective alternative technology to a water softener for the prevention of scale due to water hardness and for the reduction of chlorine for better taste and odor
- Virtually maintenance free - No salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
- Improves efficiency of all water appliances whether heating the water or not
- Simple sizing & installation – all you need to know is pipe size and flow rate
- Perfect system for restaurants, cafeterias and coffee shops where multiple or single equipment protection is desired for longer equipment life and reduced energy consumption
- Inlet ball valve for easy isolation shutoff and filter changes
- OneFlow® does not remove the essential minerals in water
- OneFlow® cartridge-based systems are easily maintained; change the carbon cartridge every 6 months and the OneFlow® media cartridge once per year.

Models

MODEL NO.	ORDERING CODE	MAXIMUM FLOW RATE	CONNECTION SIZES
OF210–1	0002151	1 gpm (4 lpm)	½" (15mm) FNPT
OF220–2	0002152	2 gpm (8 lpm)	½" (15mm) FNPT
OF240–4	0002153	4 gpm (15 lpm)	¾" (20mm) FNPT

Replacement Filters

MODEL NO.	ORDERING CODE	FREQUENCY
OF110RM	0002161	Cartridge should be replaced every 12 months
OF120RM	0002162	Cartridge should be replaced every 12 months
OF140RM	0002163	Cartridge should be replaced every 12 months
OF210RC	0002164	Cartridge should be replaced every 6 months
OF220RC	0002165	Cartridge should be replaced every 6 months
OF240RC	0002166	Cartridge should be replaced every 6 months

For additional information, access online literature ES-OF210_220_240

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

Series PWS20 and PWS20-2

Commercial Water Softening Systems

Connection Size: 2" (50mm)
Flow Rates: Up to 105 gpm (397 lpm)

Watts Pure Water Series PWS20 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 90,000 to 600,000 grains of hardness removal per tank and flow rates up to 105 gallons per minute. Where continuous softened water is required PWS20-2 duplex alternating systems can be specified for uninterrupted service. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS20 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications.

Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS20 water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

PWS20

PWS20-2

Features

- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- Certified to NSF/ANSI Std. 61

Ion Exchange Resin- Certified to NSF/ANSI Std. 61

Mineral Tank- Certified to ANSI Std. 44 or 61

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

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED W X D X H	WEIGHT
PWS20131D11	7100031	3 Cubic Foot 2" Simplex Softener with Flow Meter	18" x 37" x 87"	265 lbs.
PWS20131E11	7100032	4 Cubic Foot 2" Simplex Softener with Flow Meter	18" x 39" x 87"	350 lbs.
PWS20131F11	7100033	5 Cubic Foot 2" Simplex Softener with Flow Meter	24" x 48" x 89"	400 lbs.
PWS20131G11	7100034	7 Cubic Foot 2" Simplex Softener with Flow Meter	24" x 52" x 89"	600 lbs.
PWS20131H11	7100035	10 Cubic Foot 2" Simplex Softener with Flow Meter	30" x 60" x 96"	710 lbs.
PWS20131I11	7100036	15 Cubic Foot 2" Simplex Softener with Flow Meter	39" x 75" x 106"	1160 lbs.
PWS20131J11	7100037	20 Cubic Foot 2" Simplex Softener with Flow Meter	39" x 81" x 107"	1560 lbs.
PWS20131D21	7100038	3 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	18" x 60" x 87"	450 lbs.
PWS20131E21	7100039	4 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	18" x 64" x 87"	500 lbs.
PWS20131F21	7100040	5 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	24" x 72" x 89"	800 lbs.
PWS20131G21	7100041	7 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	24" x 80" x 89"	1200 lbs.
PWS20131H21	7100042	10 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	30" x 90" x 96"	1400 lbs.
PWS20131I21	7100043	15 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	39" x 111" x 106"	2200 lbs.
PWS20131J21	7100044	20 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	39" x 123" x 107"	3000 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT^3	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS20131D11	14" x 65"	3	60 lbs.	18" x 40"	400	90 K	60 K	45	18	25/40	15/25	5
PWS20131E11	16" x 65"	4	80 lbs.	18" x 40"	400	120 K	80 K	60	24	35/55	15/25	7
PWS20131F11	18" x 65"	5	100 lbs.	24" x 41"	600	150 K	100 K	75	30	57/65	15/25	10
PWS20131G11	21" x 62"	7	100 lbs.	24" x 50"	600	210 K	140 K	105	42	60/77	15/25	12
PWS20131H11	24" x 72"	10	200 lbs.	30" x 50"	1200	300 K	200 K	150	60	74/97	15/25	15
PWS20131I11	30" x 72"	15	400 lbs.	39" x 48"	2200	450 K	300 K	225	90	80/100	15/25	25
PWS20131J11	36" x 72"	20	500 lbs.	39" x 48"	2200	600 K	400 K	300	120	84/105	15/25	35

For additional information, access online literature ES-WQ-PWS20_PWS20-2_PWS20-P

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

Series PWS20P

Progressive Commercial Water Softening Systems

Connection Size: 2" (50mm)
Flow Rates: Up to 420 gpm (1590 lpm)

Ideal for commercial and industrial applications where high flow and high capacities are required.

Watts' Progressive systems include flow demand staging to accommodate wide variances in flow rates. All systems come standard with no hard water bypass pistons, each mineral tank has its own control valve, brine tank and flow meter.

Features

- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

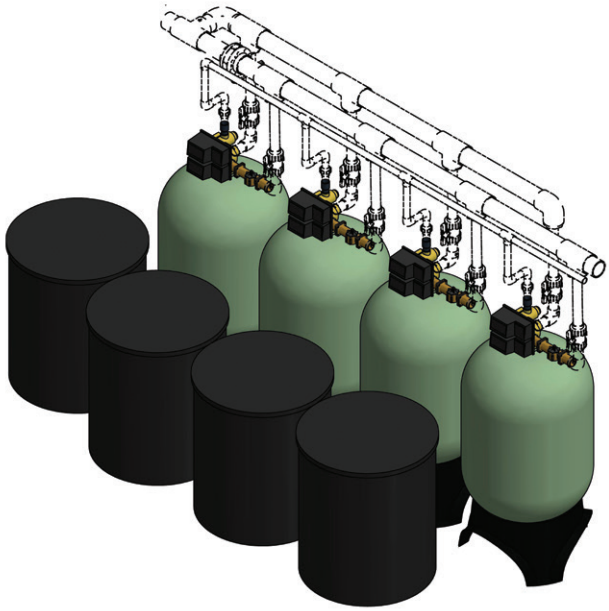
Standards

Control Valve- Certified to NSF/ANSI Std. 61

Ion Exchange Resin- Certified to NSF/ANSI Std. 61

Mineral Tank- Certified to ANSI Std. 44 or 61

Duplex Progressive



Quadplex Progressive

NOTICE

Custom Pre-Plumbed & Skid Mounted Systems available. Contact your local Watts representative for details.

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

NOTICE

Specification table data is for single mineral tank performance: PWS20 System. For Progressive type systems softening capacity and Service GPM flow rates data shall be x2 for Duplex, x3 for Triplex and x4 for Quadplex systems.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS20131D11	14" x 65"	3	60 lbs.	18" x 40"	400	90 K	60 K	45	18	25/40	15/25	5
PWS20131E11	16" x 65"	4	80 lbs.	18" x 40"	400	120 K	80 K	60	24	35/55	15/25	7
PWS20131F11	18" x 65"	5	100 lbs.	24" x 41"	600	150 K	100 K	75	30	57/65	15/25	10
PWS20131G11	21" x 62"	7	100 lbs.	24" x 50"	600	210 K	140 K	105	42	60/77	15/25	12
PWS20131H11	24" x 72"	10	200 lbs.	30" x 50"	1200	300 K	200 K	150	60	74/97	15/25	15
PWS20131I11	30" x 72"	15	400 lbs.	39" x 48"	2200	450 K	300 K	225	90	80/100	15/25	25
PWS20131J11	36" x 72"	20	500 lbs.	39" x 48"	2200	600 K	400 K	300	120	84/105	15/25	35

Ordering Information for 2" Duplex Progressive Softeners

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED D X W X H	WEIGHT
PWS20131D22	7100726	3 Cubic Foot 2" Progressive Duplex Softener with Flow Meters	38" x 55" x 87"	530
PWS20131E22	7100727	4 Cubic Foot 2" Progressive Duplex Softener with Flow Meters	39" x 57" x 87"	700
PWS20131F22	7100728	5 Cubic Foot 2" Progressive Duplex Softener with Flow Meters	46" x 59" x 89"	800
PWS20131G22	7100729	7 Cubic Foot 2" Progressive Duplex Softener with Flow Meters	49" x 62" x 91"	1200
PWS20131H22	7100645	10 Cubic Foot 2" Progressive Duplex Softener with Flow Meters	59" x 65" x 98"	1420
PWS20131I22	7100646	15 Cubic Foot 2" Progressive Duplex Softener with Flow Meters	74" x 73" x 104"	2320
PWS20131J22	7100647	20 Cubic Foot 2" Progressive Duplex Softener with Flow Meters	80" x 85" x 108"	3120

Ordering Information for 2" Triplex Progressive Softeners

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED D X W X H	WEIGHT
PWS20131D33	7100730	3 Cubic Foot 2" Progressive Triplex Softener with Flow Meters	38" x 82" x 87"	795
PWS20131E33	7100731	4 Cubic Foot 2" Progressive Triplex Softener with Flow Meters	39" x 85" x 87"	1050
PWS20131F33	7100732	5 Cubic Foot 2" Progressive Triplex Softener with Flow Meters	46" x 88" x 89"	1200
PWS20131G33	7100733	7 Cubic Foot 2" Progressive Triplex Softener with Flow Meters	49" x 92" x 91"	1800
PWS20131H33	7100648	10 Cubic Foot 2" Progressive Triplex Softener with Flow Meters	59" x 97" x 98"	2130
PWS20131I33	7100649	15 Cubic Foot 2" Progressive Triplex Softener with Flow Meters	74" x 109" x 104"	3480
PWS20131J33	7100650	20 Cubic Foot 2" Progressive Triplex Softener with Flow Meters	80" x 127" x 108"	4680

Ordering Information for 2" Quadplex Progressive Softeners

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED D X W X H	WEIGHT
PWS20131D44	7100734	3 Cubic Foot 2" Progressive Quadplex Softener with Flow Meters	38" x 109" x 87"	1060
PWS20131E44	7100735	4 Cubic Foot 2" Progressive Quadplex Softener with Flow Meters	39" x 113" x 87"	1400
PWS20131F44	7100736	5 Cubic Foot 2" Progressive Quadplex Softener with Flow Meters	46" x 117" x 89"	1600
PWS20131G44	7100737	7 Cubic Foot 2" Progressive Quadplex Softener with Flow Meters	46" x 123" x 91"	2400
PWS20131H44	7100738	10 Cubic Foot 2" Progressive Quadplex Softener with Flow Meters	59" x 129" x 98"	2840
PWS20131I44	7100739	15 Cubic Foot 2" Progressive Quadplex Softener with Flow Meters	74" x 145" x 104"	4640
PWS20131J44	7100740	20 Cubic Foot 2" Progressive Quadplex Softener with Flow Meters	80" x 169" x 108"	6240

For additional information, access online literature ES-WQ-PWS20_PWS20-2_PWS20-P

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

Series PWS30 and PWS30-2

Commercial Water Softening Systems

Connection Size: 3" (80 mm)
Flow Rates: Up to 280 gpm (1059 lpm)

Watts Pure Water Series PWS30 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 300,000 to 1,050,000 grains of hardness removal per tank and flow rates up to 280 gallons per minute. Where continuous softened water is required PWS30-2 duplex alternating systems can be specified for uninterrupted service. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS30 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS30 water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

PWS30

PWS30-2

Features

- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- Certified to NSF/ANSI Std. 61

Ion Exchange Resin- Certified to NSF/ANSI Std. 61

Mineral Tank- Certified to ANSI Std. 44 or 61

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

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED W X D X H	WEIGHT
PWS30151H11	7100045	10 Cubic Foot 3" Simplex Softener with Flow Meter	39" x 69" x 103"	1070 lbs.
PWS30151I11	7100046	15 Cubic Foot 3" Simplex Softener with Flow Meter	39" x 75" x 107"	1600 lbs.
PWS30151J11	7100047	20 Cubic Foot 3" Simplex Softener with Flow Meter	39" x 81" x 109"	2015 lbs.
PWS30151K11	7100048	30 Cubic Foot 3" Simplex Softener with Flow Meter	42" x 90" x 117"	3245 lbs.
PWS30151L11	7100049	35 Cubic Foot 3" Simplex Softener with Flow Meter	50" x 104" x 117"	4295 lbs.
PWS30151H21	7100050	10 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39" x 100" x 103"	2070 lbs.
PWS30151I21	7100051	15 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39" x 117" x 107"	3000 lbs.
PWS30151J21	7100052	20 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39" x 129" x 109"	4015 lbs.
PWS30151K21	7100053	30 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	42" x 144" x 117"	6245 lbs.
PWS30151L21	7100054	35 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	50" x 164" x 117"	8295 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT^3	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS30151H11	24" x 72"	10	200 lbs.	30" x 50"	1400	300 K	200 K	150	60	120/170	15/25	15
PWS30151I11	30" x 72"	15	400 lbs.	39" x 48"	2200	450 K	300 K	225	90	158/212	15/25	25
PWS30151J11	36" x 72"	20	500 lbs.	39" x 60"	2700	600 K	400 K	300	120	185/250	15/25	35
PWS30151K11	42" x 72"	30	700 lbs.	42" x 60"	3100	900 K	600 K	450	180	200/268	15/25	45
PWS30151L11	48" x 72"	35	900 lbs.	50" x 60"	4500	1050K	700 K	525	210	213/280	15/25	60

For additional information, access online literature ES-WQ-PWS30_S30-2

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

Series PWS30P

Progressive Commercial Water Softening Systems

Connection Size: 3" (80mm)
Flow Rates: Up to 1,120 gpm (4240 lpm)

Ideal for commercial and industrial applications where high flow and high capacities are required.

Watts' Progressive systems include flow demand staging to accommodate wide variances in flow rates. All systems come standard with no hard water bypass pistons, each mineral tank has its own control valve, brine tank and flow meter.

Features

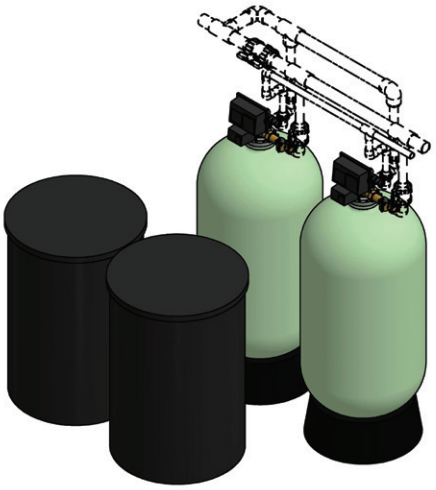
- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

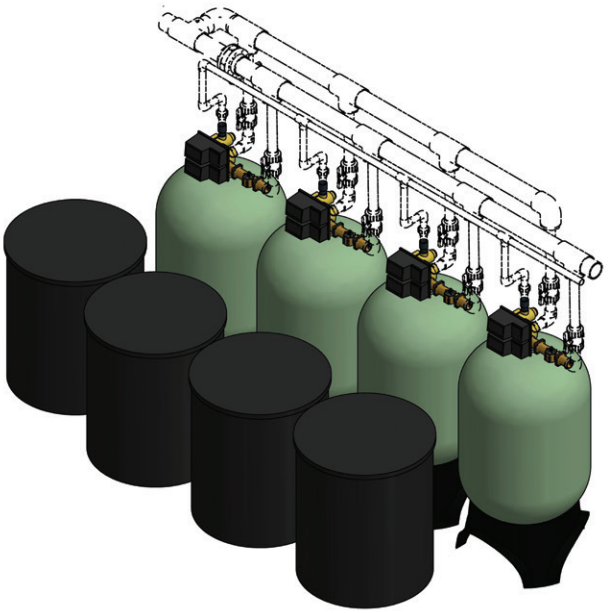
Control Valve- Certified to NSF/ANSI Std. 61

Ion Exchange Resin- Certified to NSF/ANSI Std. 61

Mineral Tank- Certified to ANSI Std. 44 or 61



Duplex Progressive



Quadplex Progressive

NOTICE

Custom Pre-Plumbed & Skid Mounted Systems available. Contact your local Watts representative for details.

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

NOTICE

Specification table data is for single mineral tank performance: PWS30 System. For Progressive type systems softening capacity and Service GPM flow rates data shall be x2 for Duplex, x3 for Triplex and x4 for Quadplex systems.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS30151H11	24" x 72"	10	200 lbs.	30" x 50"	1400	300 K	200 K	150	60	120/170	15/25	15
PWS30151I11	30" x 72"	15	400 lbs.	39" x 48"	2200	450 K	300 K	225	90	158/212	15/25	25
PWS30151J11	36" x 72"	20	500 lbs.	39" x 60"	2700	600 K	400 K	300	120	185/250	15/25	35
PWS30151K11	42" x 72"	30	700 lbs.	42" x 60"	3100	900 K	600 K	450	180	200/268	15/25	45
PWS30151L11	48" x 72"	35	900 lbs.	50" x 60"	4500	1050K	700 K	525	210	213/280	15/25	60

Ordering Information for 3" Duplex Progressive Softeners

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED D X W X H	WEIGHT
PWS30151H22	7100651	10 Cubic Foot 3" Progressive Duplex Softener with Flow Meters	59" x 72" x 106"	2140
PWS30151I22	7100652	15 Cubic Foot 3" Progressive Duplex Softener with Flow Meters	74" x 90" x 107"	3200
PWS30151J22	7100653	20 Cubic Foot 3" Progressive Duplex Softener with Flow Meters	80" x 90" x 111"	4030
PWS30151K22	7100654	30 Cubic Foot 3" Progressive Duplex Softener with Flow Meters	90" x 100" x 118"	6490
PWS30151L22	7100655	35 Cubic Foot 3" Progressive Duplex Softener with Flow Meters	106" x 114" x 123"	8590

Ordering Information for 3" Triplex Progressive Softeners

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED D X W X H	WEIGHT
PWS30151H33	7100656	10 Cubic Foot 3" Progressive Triplex Softener with Flow Meters	59" x 108" x 106"	3210
PWS30151I33	7100657	15 Cubic Foot 3" Progressive Triplex Softener with Flow Meters	74" x 135" x 107"	4800
PWS30151J33	7100658	20 Cubic Foot 3" Progressive Triplex Softener with Flow Meters	80" x 135" x 111"	6045
PWS30151K33	7100659	30 Cubic Foot 3" Progressive Triplex Softener with Flow Meters	90" x 150" x 118"	9735
PWS30151L33	7100660	35 Cubic Foot 3" Progressive Triplex Softener with Flow Meters	106" x 171" x 123"	12885

Ordering Information for 3" Quadplex Progressive Softeners

MODEL NO.	ORDERING CODE	DESCRIPTION	SPACE REQUIRED D X W X H	WEIGHT
PWS30151H44	7100757	10 Cubic Foot 3" Progressive Quadplex Softener with Flow Meters	59" x 144" x 106"	4280
PWS30151I44	7100758	15 Cubic Foot 3" Progressive Quadplex Softener with Flow Meters	74" x 180" x 107"	6400
PWS30151J44	7100759	20 Cubic Foot 3" Progressive Quadplex Softener with Flow Meters	80" x 180" x 111"	8060
PWS30151K44	7100760	30 Cubic Foot 3" Progressive Quadplex Softener with Flow Meters	90" x 200" x 118"	12980
PWS30151L44	7100761	35 Cubic Foot 3" Progressive Quadplex Softener with Flow Meters	106" x 228" x 123"	17180

For additional information, access online literature ES-WQ-PW30_PWS30-2_PWS30-P

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

Series PWS10

Commercial Water Softening Systems

Connection Size: 1" (25 mm)
Flow Rates: Up to 25 gpm (94 lpm)

PWS10

Watts Pure Water Series PWS10 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 30,000 to 120,000 grains of hardness removal and flow rates up to 25 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS10 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS10 Water Softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

Features

- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve - Certified to NSF/ANSI Std. 61

Ion Exchange Resin - Certified to NSF/ANSI Std. 61

Mineral Tank - Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWS10111A11	7100020	1 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 32" x 59"	116 lbs.
PWS10111B11	7100021	1.5 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 33" x 65"	136 lbs.
PWS10111C11	7100022	2 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 35" x 63"	196 lbs.
PWS10111E11	7100024	4 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 40" x 76"	320 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS10111A11	9" x 48"	1.0	10 lbs.	18" x 40"	400	30 K	20 K	15	6	9/15	15/25	2.0
PWS10111B11	10" x 54"	1.5	10 lbs.	18" x 40"	400	45 K	30 K	22.5	9	10/15	15/25	2.4
PWS10111C11	12" x 52"	2.0	30 lbs.	18" x 40"	400	60 K	40 K	30	12	15/20	15/25	3.5
PWS10111E11	16" x 65"	4.0	80 lbs.	18" x 40"	400	120 K	80 K	60	24	19/25	15/25	7.0

For additional information, access online literature ES-WQ-PWS10

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

Series PWS15

Commercial Water Softening Systems

Connection Size: 1½" (40 mm)
Flow Rates: Up to 55 gpm (208 lpm)

PWS15

Watts Pure Water Series PWS15 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 60,000 to 300,000 grains of hardness removal and flow rates up to 55 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS15 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non scale-forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS15 water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build-up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

Features

- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve - Certified to NSF/ANSI Std. 61

Ion Exchange Resin- Certified to NSF/ANSI Std. 61

Mineral Tank - Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWS15121C11	7100025	2 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 42" x 75"	210 lbs.
PWS15121D11	7100026	3 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 44" x 87"	240 lbs.
PWS15121E11	7100027	4 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 46" x 87"	320 lbs.
PWS15121F11	7100028	5 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 50" x 87"	380 lbs.
PWS15121H11	7100030	10 Cubic Foot Simplex Softener with Flow Meter	1½"	39" x 69" x 96"	710 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS15121C11	12" x 52"	2.0	30 lbs.	18" x 40"	400	60 K	40 K	30	12	15/20	15/25	4.0
PWS15121D11	14" x 65"	3.0	60 lbs.	18" x 40"	400	90 K	60 K	45	18	17/22	15/25	5.0
PWS15121E11	16" x 65"	4.0	80 lbs.	18" x 40"	400	120 K	80 K	60	24	25/40	15/25	7.0
PWS15121F11	18" x 65"	5.0	100 lbs.	24" x 41"	600	150 K	100 K	75	30	30/50	15/25	11.0
PWS15121H11	24" x 72"	10.0	200 lbs.	30" x 50"	1400	300 K	200 K	150	60	40/55	15/25	15.0

For additional information, access online literature ES-WQ-PWS15

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

Series PWS10T

Commercial Water Softening Systems

Connection Size: 1" (25mm)
Flow Rates: Up to 25 gpm (94 lpm)

Watts Pure Water Series PWS10T Water Softening Systems are highly efficient, twin alternating, conventional cation exchange type water softeners. They are designed to supply continuous softened water without interruption.

Series PWS10T water softeners are suitable for commercial applications ranging from 30,000 to 120,000 grains of hardness removal per tank and flow rates up to 25 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS10T water softeners are designed for point-of-use or point-of-entry applications where the benefits of softened water are required and water demand is round the clock. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pre-treatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS10T water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

PWS10T

Features

- Twin alternating design for continuous softened water
- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable corrosion-free fiber-reinforced polymer valve body
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- Certified to NSF/ANSI Std. 61

Ion Exchange Resin- Certified to NSF/ANSI Std. 61

Mineral Tank- Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	PIPE SIZE	SPACE REQUIRED D X W X H	WEIGHT
PWS10T181A21	7101101	1 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 42" x 70"	230 lbs.
PWS10T181B21	7101102	1.5 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 44" x 76"	290 lbs.
PWS10T181C21	7101103	2 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 48" x 74"	350 lbs.
PWS10T181D21	7101104	3 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 58" x 87"	500 lbs.
PWS10T181E21	7101105	4 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 62" x 87"	650 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	Tank Size	*Resin Ft³*	*Gravel #20*	*Tank Size*	*Salt Fill*	*Max*	*Min*	*Max*	*Min*	*Serv GPM*	*Drop PSI*	*BKW GPM*
PWS10T181A21	9" x 48"	1.0	10 lbs.	18" x 40"	400	30 K	20 K	15	6	9/15	15/25	2.0
PWS10T181B21	10" x 54"	1.5	10 lbs.	18" x 40"	400	45 K	30 K	22.5	9	10/15	15/25	2.4
PWS10T181C21	12" x 52"	2.0	30 lbs.	18" x 40"	400	60 K	40 K	30	12	15/20	15/25	3.5
PWS10T181D21	14" x 65"	3.0	60 lbs.	18" x 40"	400	90 K	60 K	45	18	18/23	15/25	5.0
PWS10T181E21	16" x 65"	4.0	80 lbs.	18" x 40"	400	120 K	80 K	60	24	19/25	15/25	7.0

For additional information, access online literature ES-WQ-PWS10T

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

Series PWS15T

Commercial Water Softening Systems

Connection Size: 1½" (40 mm)
Flow Rates: Up to 55 gpm (208 lpm)

Watts Pure Water Series PWS15T Water Softening Systems are highly efficient, twin alternating, conventional cation exchange type water softeners. They are designed to supply continuous softened water without interruption.

Series PWS15T water softeners are suitable for commercial applications ranging from 60,000 to 300,000 grains of hardness removal per tank and flow rates up to 55 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS15T water softeners are designed for point of use or point of entry applications where the benefits of softened water are required and water demand is round the clock. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications.

Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS15T water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

PWS15T

Features

- Twin alternating design for continuous softened water
- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- Certified to NSF/ANSI Std. 61

Ion Exchange Resin- Certified to NSF/ANSI Std. 61

Mineral Tank- Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWS15T171C21	7100060	2 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 42" x 75"	370 lbs.
PWS15T171D21	7100061	3 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 44" x 87"	550 lbs.
PWS15T171E21	7100062	4 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 46" x 87"	720 lbs.
PWS15T171F21	7100063	5 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 50" x 89"	900 lbs.
PWS15T171G21	7100064	7 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 52" x 89"	1215 lbs.
PWS15T171H21	7100065	10 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	39" x 69" x 96"	1750 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS15T171C21	12" x 52"	2.0	30 lbs.	24" x 41"	600	60 K	40 K	30	12	15/20	15/25	5.0
PWS15T171D21	14" x 65"	3.0	60 lbs.	24" x 41"	600	90 K	60 K	45	18	17/22	15/25	7.0
PWS15T171E21	16" x 65"	4.0	80 lbs.	24" x 41"	600	120 K	80 K	60	24	25/40	15/25	9.0
PWS15T171F21	18" x 65"	5.0	100 lbs.	24" x 41"	600	150 K	100 K	75	30	30/50	15/25	12.0
PWS15T171G21	21" x 62"	7.0	100 lbs.	24" x 50"	800	210 K	140 K	105	42	35/53	15/25	15.0
PWS15T171H21	24" x 72"	10.0	200 lbs.	30" x 50"	1200	300 K	200 K	150	60	40/55	15/25	15.0

For additional information, access online literature ES-WQ-PWS15T

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

Series PWC

Commercial Carbon Filter Systems

Connection Sizes: 1" to 3" (25 - 80mm)
Flow Rates: Up to 129 gpm (488 lpm)

Watts Pure Water Series PWC Activated Carbon Filters are highly effective backwashing media filtration systems for the removal of chlorine as well as taste, odor, and color caused by organics, from water.

They are suitable for commercial applications with dechlorination flow rates up to 129 gallons per minute with media bed sizes ranging from 1 to 35 cubic feet in size. If higher flow rates are required multiple units can be installed in parallel. The media bed is cleaned of captured sediment by periodic backwashing and flushing. This cleaning cycle is time clock demand initiated and can be programmed to occur at any time that is convenient for the user. All steps of the cleaning cycle as well as returning to service are fully automatic and do not require manual actuation.

Watts Pure Water Series PWC activated carbon filters are designed for point of use or point of entry applications where dechlorinated water is required. Chlorine, an oxidizing agent, is added to municipal water to destroy micro-organisms. Chlorine causes the destruction of reverse osmosis membranes and polymer based ion exchange resins. Chlorine also causes objectionable tastes and odors in certain applications. Activated carbon in general is used for dechlorination, removal of taste, color, and odor caused by organics, as well as trace hydrocarbon removal from water. For applications involving trace hydrocarbon removal or taste, color, and odor removal due to organics, consult your Watts representative for proper sizing and carbon selection. Watts Series PWC activated carbon filters utilize 12x40 mesh coconut shell carbon granules which are tailored for chlorine removal. Coconut shell carbon media has a high micro-porosity which makes it ideally suited for the removal of low molecular weight contaminants such as chlorine. Another advantage of this carbon is its superior hardness, which combined with a de-dusting process in its production, creates an exceptionally clean product with low fines.

These systems are ideal for food and bottled water processing, restaurant drink station water treatment, commercial ice production, soft drink water processing, reverse osmosis pretreatment, ion exchange resin pretreatment, and general dechlorination of municipal water.


PWC10


PWC15


PWC20


PWC30

Features

- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable backwash and flush cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- High surface area with a minimum of 1,050 m^2/g, low carbon fines, coconut shell carbon
- Highly corrosion resistant NSF/ANSI Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- Certified to NSF/ANSI Std. 61

Mineral Tank- Certified to ANSI Std. 44 or 61

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

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWC10111B10	7100010	1.5 Cubic Foot Carbon Filter with Auto Backwash	1"	11" x 12" x 65"	105 lbs.
PWC10111C10	7100011	2 Cubic Foot Carbon Filter with Auto Backwash	1"	13" x 14" x 65"	117 lbs.
PWC10111D10	7100012	3 Cubic Foot Carbon Filter with Auto Backwash	1"	15" x 16" x 75"	194 lbs.
PWC15121E10	7100013	4 Cubic Foot Carbon Filter with Auto Backwash	1½"	17" x 18" x 75"	254 lbs.
PWC15121G10	7100014	7 Cubic Foot Carbon Filter with Auto Backwash	1½"	23" x 24" x 84"	471 lbs.
PWC20141H10	7100015	10 Cubic Foot Carbon Filter with Auto Backwash	2"	27" x 27" x 95"	735 lbs.
PWC20141I10	7100016	15 Cubic Foot Carbon Filter with Auto Backwash	2"	33" x 33" x 95"	1432 lbs.
PWC30151J10	7100017	20 Cubic Foot Carbon Filter with Auto Backwash	3"	40" x 48" x 114"	1965 lbs.
PWC30151K10	7100018	30 Cubic Foot Carbon Filter with Auto Backwash	3"	46" x 54" x 114"	3038 lbs.
PWC30151L10	7100019	35 Cubic Foot Carbon Filter with Auto Backwash	3"	52" x 60" x 114"	3645 lbs.

Specifications

MODEL NO.	MINERAL TANK			FLOW RATES FOR SERVICE AND BACKWASH	
	TANK SIZE	CARBON FT^3	UNDERBED 1/2 X 1/4 - 1/4 X 1/8 - #20	SERVICE GPM CHLORINE REDUCTION	BACKWASH GPM
PWC10111B10	10" x 54"	1.5	- / - / 10 lbs.	5.5 GPM	5.0 GPM
PWC10111C10	12" x 52"	2.0	- / - / 30 lbs.	7.4 GPM	7.0 GPM
PWC10111D10	14" x 65"	3.0	- / - / 60 lbs.	11.1 GPM	10 GPM
PWC15121E10	16" x 65"	4.0	- / - / 80 lbs.	14.8 GPM	12 GPM
PWC15121G10	21" x 62"	7.0	- / - / 100 lbs.	25.9 GPM	26 GPM
PWC20141H10	24" x 72"	10	- / 100 lbs. / 100 lbs.	37 GPM	30 GPM
PWC20141I10	30" x 72"	15	- / 200 lbs. / 200 lbs.	55.5 GPM	50 GPM
PWC30151J10	36" x 72"	20	- / 300 lbs. / 200 lbs.	74 GPM	70 GPM
PWC30151K10	42" x 72"	30	- / 400 lbs. / 200 lbs.	111 GPM	90 GPM
PWC30151L10	48" x 72"	35	500 lbs. / 500 lbs. / 500 lbs.	129.5 GPM	100 GPM

For additional information, access online literature ES-WQ-PWC

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

Series PWM

Commercial Micro Z™ Filter Systems

Connection Sizes: 1" to 3" (25 - 80 mm)
Flow Rates: Up to 251 gpm (950 lpm)

Watts Pure Water Series PWM Micro Z™ Filters are highly effective backwashing media filtration systems for the removal of sediment and suspended solids from water.

They are suitable for commercial applications with flow rates up to 251 gallons per minute with media bed sizes ranging from 1 to 40 cubic feet in size. If higher flow rates are required multiple units can be installed in parallel. The media bed is cleaned of captured sediment by periodic backwashing and flushing. This cleaning cycle is time clock demand initiated and can be programmed to occur at any time that is convenient for the user. All steps of the cleaning cycle as well as returning to service are fully automatic and do not require manual actuation.

Watts Pure Water Series PWM Sediment Filters are designed for point of use or point of entry applications where filtered water is required. Micro Z™ is a naturally occurring form of Zeolite that offers superior filtration characteristics over and above sand, anthracite, and garnet products currently in use today. The key to Micro Z™'s performance is its hydrophilic properties combined with a jagged external surface texture. This gives Micro Z™ a sediment holding capacity of 2.8 times that of sand, which reduces backwash waste water volumes, and higher service flow rates which reduces over all system size and cost. Micro Z™ has a 3-5 micron nominal particle size removal rating versus 15-30 micron with other conventional back-washable medias.

Reverse osmosis pretreatment, micro and ultra filtration system pretreatment, cartridge filtration pretreatment, sediment reduction in city and rural water, municipal water filtration, as well as general turbidity reduction are all common applications for the Watts Pure Water Series PWM Micro Z™ filter systems.

Filtered water is a cleaner supply water for boilers, solenoid valves, pumps, faucets, aerator screens, reverse osmosis systems, micro and ultra filtration systems, pools, aquariums, washing, and rinsing processes that reduces down time and costly repairs.


PWM10


PWM15


PWM20


PWM30

Features

- Fully automatic metered demand control valve certified to NSF/ANSI standards
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable backwash and flush cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- IAPMO Certified high capacity MicroZ filter media
- Highly corrosion resistant Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- Certified to NSF/ANSI Std. 61

Micro Z Filter Media - IAPMO Certified to NSF/ANSI Std. 61 and 372

Mineral Tank- Certified to ANSI Std. 44 or 61

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

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT LBS	WEIGHT KGS
PWM10111A10	7100000	1 Cubic Foot Micro Z™ filter with Auto Backwash	1"	13" x 12" x 60"	118	54
PWM10111B10	7100001	1.5 Cubic Foot Micro Z™ filter with Auto Backwash	1"	13" x 12" x 65"	147	67
PWM10111C10	7100002	2 Cubic Foot Micro Z™ filter with Auto Backwash	1"	13" x 14" x 65"	173	79
PWM15121D10	7100003	3 Cubic Foot Micro Z™ filter with Auto Backwash	1½""	15" x 16" x 75"	278	126
PWM15121E10	7100004	4 Cubic Foot Micro Z™ filter with Auto Backwash	1½"	17" x 18" x 75"	366	166
PWM20141H10	7100006	10 Cubic Foot Micro Z™ filter with Auto Backwash	2"	27" x 27" x 95"	1015	461
PWM20141I10	7100007	15 Cubic Foot Micro Z™ filter with Auto Backwash	2"	33" x 33" x 95"	1852	842
PWM30151J10	7100008	20 Cubic Foot Micro Z™ filter with Auto Backwash	3"	40" x 48" x 114"	2525	1148
PWM30101K10*	7100781	30 Cubic Foot Micro Z™ filter with Auto Backwash	3"	48" x 58" x 102"	2895	1316
PWM30101M10*	7100782	40 Cubic Foot Micro Z™ filter with Auto Backwash	3"	54" x 60" x 102"	3882	1765

*Uses a 3 inch plastic diaphragm valve nest

Notes: Flow rates, dimensions, and capacities are per tank. Pipe size, tank size, and space requirements are in inches. 20 gpm per square foot flow rates are for intermittent peak flows only and should not be used as continuous flows.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Specifications

MODEL NO.	MINERAL TANK			FLOW RATES FOR SERVICE AND BACKWASH			
	TANK SIZE	TANK SIZE FT^2	TANK SIZE FT^3	10 GPM FT^2	SERVICE GPM 15 GPM FT^2	20 GPM FT^2	BACKWASH GPM
PWM10111A10	9" x 48"	.44	1.0	4.4	6.6	8.8	7.0 GPM
PWM10111B10	10" x 54"	.54	1.5	5.4	8.1	10.8	7.0 GPM
PWM10111C10	12" x 52"	.78	2.0	7.8	11.7	15.6	10 GPM
PWM15121D10	14" x 65"	1.07	3.0	10.7	16.0	21.4	20 GPM
PWM15121E10	16" x 65"	1.39	4.0	13.9	20.8	27.8	30 GPM
PWM20141H10	24" x 72"	3.14	10	31.4	47.1	62.8	50 GPM
PWM20141I10	30" x 72"	4.91	15	49.1	73.6	98.2	85 GPM
PWM30151J10	36" x 72"	7.07	20	70.7	106.1	141.4	100 GPM
PWM30101K10*	42" x 72"	9.62	30	96.2	144.3	192.4	155 GPM
PWM30101M10*	48" x 72"	12.56	40	125.6	188.4	251.2	200 GPM

Note: *Uses a 3 inch plastic diaphragm valve nest

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

Micro Z™

Superior Filtration Media

Micro Z™ granular filter media outperforms conventional multimedia materials due to its unique structure, allowing particulate to penetrate deeply into the filter bed to provide superior filtration at increased flow rates.

Features & Benefits

- Higher solids loading capability
- Superior filtration performance
- Reduced backwash frequency
- Removes finer particles
- Reduces pressure drop
- Provides higher flow rates
- Light weight
- Reduces shipping costs
- Easy to handle

Physical Properties

Color	Light green
Bulk density	55 lbs. per cu. ft.
Specific gravity	2.2 gm/cc
Mesh size	14x40
Uniform coefficient	1.9
Hardness (Mohs scale)	4

Conditions of Operation

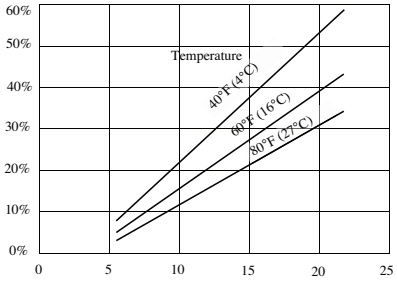
Recommended bed depth	36" - 48"
Recommended freeboard	50% of bed depth
Service flow rate	12-20 GPM/sq. ft.
Backwash flow rate	12-18 GPM/sq. ft.
Backwash bed expansion	30-40 percent

NOTICE Allow bed to soak overnight before initial backwash.

MICRO Z vs. Conventional Filter Media

MEDIA	NOMINAL MICRON RATING	SOLIDS LOADING CAPACITY
Sand	20	1.0 X
Sand & Anthracite	15	1.4 X
Multimedia	12	1.6 X
Micro-Z	< 5	2.8 X

Micro Z
Backwash Bed Expansion



Flow Rate
(Gallons per Minute per Square Foot of Bed Area)

MICRO Z Loading Information

VESSEL DIAMETER (INCHES)	MICROZ QUANTITY (CUBIC FT.)	GRAVEL UNDER BED (LBS.)	SERVICE FLOW RATE	BACKWASH FLOW RATE (GPM)
9	1	12	5-9	5-8
10	1.5	15	7-10	7-10
12	2	25	9-15	10-14
14	3	40	13-21	13-19
16	4	55	17-28	17-25
21	7	100	30-50	29-43
24	10	200	38-62	38-56
30	15	300	59-98	60-88
36	20	500	85-140	85-127
42	30	700	115-190	115-175
48	35	900	150-250	150-225

Ordering Information

MODEL NO.	ORDERING CODE	DESCRIPTION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PACKAGE	PER PALLET
PWRMMICROZ	7300105	Micro-Z	1	55	Bag	40

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

Activated Carbon

Granular Activated Carbon (GAC)

Granular Activated Carbon (GAC) is a natural material derived from bituminous coal, lignite, wood, coconut shell, etc., activated by steam and other means. Carbon is very popular due to its ability to address many water quality problems.

Benefits

- Improve taste and remove odors
- Dechlorination of water
- Removes color from water
- Removal of organic substances
- Removal of synthetic organic substances
- Clear water for drinking, bathing and cooking!

NSF

Certified to NSF/ANSI 42 and 61. (Watts Brands Only).

Adsorption Influencing Factors

Temperature Most effective 60°F - 80°F.

pH Most organics in water are more soluble at pH lower than 7.0.

Contact time Very important to achieve proper flow rates for any adsorption system to function properly.

Carbon Media Types

Bituminous Basic coal based granular media

Coconut shell Superior level of hardness; high activity level; trihalomethane removal; longer life expectancy;

Acid washed Increases adsorptive capacity of carbon base and lowers the level of impurities.

Catalytic Specialized carbon media to remove hydrogen sulfide gas, iron, and chloramines.

Standard Operating Conditions

Service flow rate	2 - 6 gpm/cu.ft.
Backwash flow rate	10 gpm/sq. ft.
Freeboard	50% of bed depth
pH	6.5 – 7.5

Contaminates Adsorbed

- Chlorine
- Organic Chemicals
- Fertilizers
- TCE (Trichloroethylene)
- EDB (Ethylene dibromide)
- THM (Trihalomethanes)
- Sediment
- Chemical odor
- Pesticides
- Detergents
- Chloramines
- Color

NOTICE

Service flow rates are calculated at 2-6 gpm/cu.ft. for standard taste, odor and chlorine removal application using bituminous carbon. Chloramines and TOC/VOC applications will require lower service flow rates and longer empty bed contact time or specialized carbon formulations.

NOTICE

Allow carbon bed to soak overnight before initial backwash.

Ordering Information

MODEL NUMBER	ORDERING CODE	DESCRIPTION	TYPE	MESH	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PER PALLET
PWRMGAC	7300111	Granular Activated Carbon	Coconut Shell	12 x 40	Chlorine taste and odor reduction	1	27.5	40

⚠ WARNING

Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate procedures for potentially low-oxygen environment should be followed.

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

Catalytic® Granular Activated Carbon

Hydrogen sulfide, iron and chloramines removal

Catalytic carbon is a liquid phase virgin activated carbon that has been manufactured to develop catalytic functionality. The product is unique in that it concentrates reactants via adsorption and then promotes their reaction on the surface of the pores.

Features & Benefits

- Catalytic activity allows for smaller more compact system sizing and lower capital requirements.
- No safety concerns with exotherms or toxicity like some impregnated medias.
- Improved trace organic capacity per unit volume.
- High hardness reduces fines and losses due to handling.
- Works with low oxidant levels and limits the need for chemicals.
- Simple and reliable equipment design that will handle spikes in concentration without metering of chemicals.
- Reduced carbon requirements, reduced operating costs.
- Enhanced carbon media performance for a greater degree of contaminant removal at reduced costs.
- Thermal reactivation is an option for recycle and reuse to minimize operating costs and eliminates disposal concerns.

NSF

Certified to NSF/ANSI 42 and 61. (Watts Brands Only).

Specification

Iodine number	Min. 1000 mg/g
Moisture content (as packaged)	Max. 5%
Total ash content	Max. 4%
Ball-pan hardness	Min. 98%
CTC activity	Min. 50%
Catalytic activity	Min. 20° C

Typical Properties

Surface area (BET)	1060 m^2/g
Apparent density	490 kg/m^3
Bed density, backwashed and drained	420 kg/m^3

Applications

- Chloramines
- Hydrogen sulfide
- Taste and odor
- VOC removal
- Iron removal
- Residential water filters
- Commercial water filters
- Bottling and soft drink industries
- Aquarium water treatment

NOTICE

Allow carbon bed to soak overnight before initial backwash.

Design Considerations

Catalytic carbon is produced from coconut shell using a patented process for the use in liquid phase systems to promote catalytic reactions. The reactant concentration determines the effective contact time. Although it is not impregnated with metals or alkali, it displays the catalytic functionality of these materials.

Ordering Information

MODEL NUMBER	ORDERING CODE	DESCRIPTION	TYPE	MESH	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PER PALLET
PWRMCGAC	7300110	Catalytic Granular Activated Carbon	Coconut Shell	12x40	Chloramine taste and odor reduction	1	27.5	40

⚠ WARNING

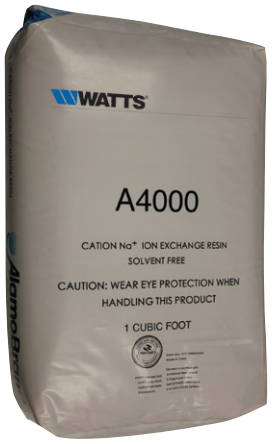
Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate sampling and work procedures for potentially low oxygen spaces should be followed, including all applicable federal and state requirements.

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

Resin

Watts Brand Resin

Watts brand resin is a high purity, premium grade, prewashed, strong acid gel-type cation exchange resin specially designed for water softening applications. Resin is a bead type, cross-linked, polystyrene divinylbenzene resin that offers excellent bead integrity and very low extractables.



Resin Properties

TYPE	8% CROSSLINK POLYSTYRENE
Form	Gel- type, light amber bead
Ionic form	Na+ (as shipped)
Functional group	Sulphonic acid
Bead size	16 x 50 mesh
Effective size	0.45 ± 0.07 mm
Bulk density	~ 51 lb/ft^3
Bead count	min. 90%
Water retention	45-48%
Total capacity	>2.0meq/l
Volume change	Na+ - H+ <5%
Stability, temp.	<300°F
Stability pH	0 – 14

A4000 is tested and certified by WQA against NSF/ANSI Standard 61.

Design Conditions

BED DEPTH	>30 IN
Flow rate	2-5 gpm/ft^3
Freeboard	50% of bed depth
Backwash expansion	50% of bed depth
NaCl concentration for regeneration	5-25%
NaCl flow rate for regeneration	0.25-0.5 gpm/ft^3
Turbidity	<5.0 NTU
Free chlorine	<1 ppm

Ordering Information

RESIN

ORDERING CODE	DESCRIPTION	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PER PALLET
7300100	Cation Resin 16 x 40 mesh 8 % Crosslink	Water Softener Resin	1	52	40

GRAVEL

ORDERING CODE	DESCRIPTION	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PER PALLET
7300101	Gravel 1/8" x 1/16" (#20) red marking	Sediment, bed support	0.5	50	56
7300102	Gravel 1/4" x 1/8" orange marking	Sediment, bed support	0.5	50	56
7300103	Gravel 1/2" x 1/4" black marking	Sediment, bed support	0.5	50	56
7300104	Gravel 3/4" x 1/2" purple marking	Sediment, bed support	0.5	50	56

NEUTRALIZER

ORDERING CODE	DESCRIPTION	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PER PALLET
7300106	Flomag PWT Magnesium Oxide (similar to Corset)	Neutralizer	0.5	55	60
7300107	Calcite	Neutralizer	0.5	55	60

GREENSAND

ORDERING CODE	DESCRIPTION	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PER PALLET
7300109	Greensand Plus	Iron, HS reduction	0.5	42	50

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

Iron, Hydrogen Sulfide, and Manganese Reduction

Filox™ Media

Filox™ media is an economical Iron and Hydrogen Sulfide filtration media that outperforms traditional Greensand and Birm.

Features & Benefits

- Superior high efficiency media for filtration and removal capabilities
- No oxidizing chemicals typically needed for regeneration (See Testing For ORP below)
- High efficiency with 80% manganese dioxide for enhanced performance and capacity.
- Effective, from 6.5 pH to 9.0 pH
- Highest flow rate of any standard iron removal media.

Certified to ANSI/NSF Std. 61

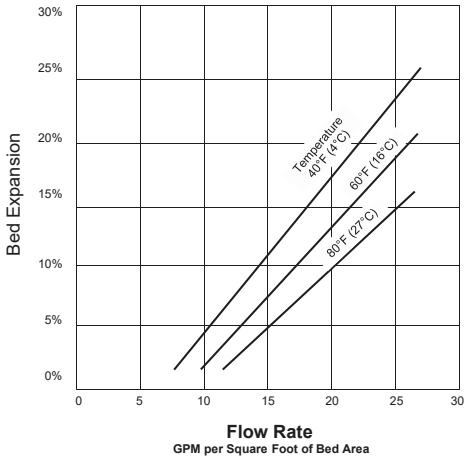
Operating Conditions

Active Ingredient	75-85% Manganese Dioxide
Max Service Flow	6 gpm/cu.ft.
Freeboard	30-50% of bed depth
Backwash rate	Backwash rate 16-30 GPM/sq.ft, depending on application specific variables, minimum recommended bed expansion is 15%
Bed depth	20 inch Minimum
pH Range	6.5 – 9.0
Screen size	12 x 40
Bulk density	110 lbs/cu.ft.

Removal Capacity

Iron	10 ppm
Hydrogen Sulfide	3 ppm
Manganese	5 ppm

Filox Backwash Bed Expansion



Comparative Information

PRODUCT NAME	ACTIVE INGREDIENT
Greensand	0.5% Manganese Dioxide
Filox™	75% - 85% Manganese Dioxide

Ordering Information

MODEL NUMBER	ORDERING CODE	DESCRIPTION	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS.)	PER PALLET
PWRMFILOX	7300108	Filox™ Media	Iron, HS reduction & Manganese reduction	0.5	55	38

The use of additional oxidizing agents (oxygen, chlorine, ozone, hydrogen peroxide, potassium permanganate, etc.) is recommended. Oxidizers will enhance the performance of Filox™. They oxidize the media, which enables Filox™ to perform quicker and keep cleaner. It is always a safe practice to install an oxidation method upstream (in front) of the Filox™ bed. Do not exceed 4 ppm free chlorine in the feed water stream or bed damage may occur.

Simple Filox ORP Test Kit EDP#7300707

Water with a high Oxidation Reduction Potential (ORP) may cause premature exhaustion or destruction of a Filox bed. This portable test kit can be used to determine if the system requires additional oxidizers.

Note: If treating excess or multiple contaminants, additional oxidants may be required even if the water passes the ORP test.

ORP Meter Test

NOTICE

Must use a calibrated ORP meter. Any reading that is above a negative 170 millivolts indicates that Filox™ can be used effectively, possibly without additional oxidants. Any reading falling below a negative 170 millivolts indicates that additional oxidants will be required. See disclaimer on inside front cover

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

Series PWR2511

Commercial Reverse Osmosis Systems

Flow Rates: Up to 1,200 gallons per day (4,542 lpd)

Watts Pure Water Series PWR2511 Reverse Osmosis (RO) Systems are commercial grade high-pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 150 to 1,200 gallons per day. The standard units are designed for wall mounting. Where floor mounting is preferred the optional floor mounting kit Model No. PWR2864 can be specified. Reverse osmosis is a process where high-pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high-rejection membranes to achieve a minimum average NaCl ionic rejection of 95 percent.

Series PWR2511 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features for monitoring and operation. Corrosion resistant 300 psi FRP high pressure membrane housings, inlet and outlet pre-filter pressure gauges, low pressure switch with delayed auto restart, permeate pressure switch, adjustable reject recycle, permeate and reject water flow meters, permeate water check valve, inlet solenoid valve, membrane feed water pressure gauge, adjustable reject valve, and membrane auto flush are all standard features. The standard systems are designed to feed an atmospheric storage tank or a pressurized bladder tank. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

PWR2511

Features

- 304 stainless steel wall mounted support frame
- Corrosion resistant 300 psi FRP high pressure membrane housing(s)
- Pressure gauges for pre-filter inlet/outlet and membrane feed pressure
- Microprocessor based controller with delayed auto restart after low pressure shut down
- High-pressure/high-rejection membranes with 95% minimum average salt rejection
- Permeate and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate pressure switch and check valve
- Automatic inlet solenoid valve
- Membrane Auto Flush
- Sediment pre-filter housing and cartridge, 5 micron 10"
- Tank level input (dry contact)
- Pretreatment interlock input (dry contact)
- Pump start delay
- Low-pressure protection with microprocessor auto reset

NOTICE

Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

RO system requires separate RO storage tank/delivery pump - see page #42 or call Pure Water Technical Support at 1.800.224.1299 for details

Specifications

Product water & reject water connection (tubing)	3/8"
Feed water requirement (maximum)	2.4 GPM
Feed water pressure requirement (minimum)	10 PSIG
Drain requirement (maximum)	2.4 GPM
Electrical requirement	120v/60hz
Amps	8
Pump	1/2 HP

Models

MODEL NO.	ORDERING CODE	GPD	RECOVERY (ADJUSTABLE)	MEMBRANE SIZE	NUMBER OF MEMBRANES	FEED WATER CONNECTION	TYPICAL REJECTION	DIMENSIONS L X H X D	SHIP WT. (LBS.)
PWR25111011	7100066	150	15%-75%	2-1/2" x 14"	1	1/2" NPT	98%	22"x32"x12"	50
PWR25112011	7100067	250	15%-75%	2-1/2" x 21"	1	1/2" NPT	98%	22"x32"x12"	60
PWR25113011	7100068	600	15%-75%	2-1/2" x 40"	1	1/2" NPT	98%	22"x52"x12"	70
PWR25113021	7100069	1200	15%-75%	2-1/2" x 40"	2	1/2" NPT	98%	22"x52"x12"	
PWR2864	7100088	Optional Stainless Steel Leg Kit for All Models							

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-Filter is model PWMB10M5 melt blown cartridge. Systems are designed for use with municipal and well water.

For additional information, access online literature ES-WQ-PWR2511

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

Series PWR4011

Commercial Reverse Osmosis Systems

Flow Rates: Up to 5,400 gallons per day (20,439 lpd)

Watts Pure Water Series PWR4011 Reverse Osmosis (RO) Systems are commercial grade low-energy RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 1,800 to 5,400 gallons per day. These units are designed for wall mount installations. Reverse osmosis is a process where high-pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to a drain. These RO systems use low-energy membranes to achieve a minimum average NaCl ionic rejection of 95 percent.

The Series PWR4011 RO systems are a well designed rugged line of purifiers with high-pressure piping constructed of stainless steel. This series comes with a pre-selected assortment of features for monitoring and operation. Corrosion resistant 300 psi FRP high pressure membrane housings, inlet and outlet pre-filter pressure gauges, low-pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, adjustable reject recycle, permeate and reject water flow meters, permeate water check valve, inlet solenoid valve, membrane feed water pressure gauge, and adjustable reject valve are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

PWR4011

Specifications

Feed water connection 1"	FNPT
Product water connection (1800 & 3600 GPD)	1/2" tube
Product water connection (5400 GPD)	5/8" tube
Reject water connection (all R14 Wall Mount models)	1/2" tube
Feed water pressure requirement (minimum)	10 PSIG
Drain requirement (maximum)	10 GPM
Electrical requirement	230v/60hz
Phase	1
Amps (1800 & 3600 GPD)	6
Amps (5400 GPD)	9

Features

- Stainless steel high-pressure piping
- 304 stainless steel wall mounted support frame
- Corrosion resistant 300 psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet and membrane feed pressure
- Low feed water pressure safety switch
- Tank level and pretreatment interlock inputs
- Low-energy membranes with 95% minimum average salt rejection
- Permeate and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet solenoid valve
- 10" full-flow pre-filter
- Microprocessor based controller with delayed auto restart after low-pressure shut down

NOTICE

Feed Water must be pre-treated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

RO system requires separate RO storage tank/delivery pump - see page #42 or call Pure Water Technical Support at 1.800.224.1299 for details

Models

MODEL NO.	ORDERING CODE	GPD	PUMP (H.P)	RECOVERY (ADJUSTABLE)	MEMBRANE SIZE	NUMBER OF MEMBRANES	FEED WATER REQUIRED* (GPM)	TYPICAL REJECTION	DIMENSIONS L X H X D	SHIP WT. (LBS.)
PWR40113012	7100070	1800	1	15%-75%	4" x 40"	1	2.5	98%	49"X53"X15"	200
PWR40113022	7100071	3600	1	15%-75%	4" x 40"	2	5	98%	49"X53"X15"	250
PWR40113032	7100072	5400	1.5	15%-75%	4" x 40"	3	7.5	98%	49"X53"X15"	300

* At 50 % recovery.

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-Filter is model PWMB10M5 melt blown cartridge. Systems are designed for use with municipal and well water.

For additional information, access online literature ES-WQ-PWR4011

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

Series PWRO440

Light Commercial Reverse Osmosis Systems Floor Mount

Connection Size: ¾" (20mm)
Max. Productivity: 2200, 4400 and 6600 gallons per day

Watts Pure Water Light Commercial Floor Mount Reverse Osmosis System with adjustable recovery. The Series PWRO440 uses advanced design with state-of-the art technologies and high-quality components to assure years of trouble-free performance. Includes many standard features that are only available as options on other reverse osmosis systems.

PWRO440

Features

- Powder coated steel frame
- Inlet solenoid valve
- 20" prefilter
- Prefilter pressure gauge
- Multistage centrifugal pump
- Low-pressure protection with microprocessor auto reset
- Tank level input (dry contact)
- Pretreatment interlock input (dry contact)
- 2 1⁄2" liquid filled pump pressure gauge
- FRP pressure vessels
- Product flow meter
- Reject flow meter
- Concentrate needle valve
- Non metallic recycle needle valve
- Feed water and product water TDS monitor
- Pump start delay
- Inlet valve close delay

Added Capabilities

- Input for auto shutoff when storage tank is full
- Input for auto shutoff when pre-treatment is in regeneration

Applications

- Boiler feed water
- Humidifiers
- Greenhouses
- Process water
- Electronics
- Car wash spot-free

Specifications

	R4X40	
Membrane Size	4" x 40"	
Average membrane rejection	98%	
Feed Water Connection	3/4" NPTF	
Prefilter	2.5" x 20"	
Product Water Connection	5/8" tubing OD	
Reject Water Connection	5/8" tubing OD	
Feed Water Pressure (minimum)	10 psi	
Electrical Requirement *	120 VAC 60 Hz	230 VAC 60 Hz, 1 PH

Models

MODEL NO.	ORDERING CODE	GPD	RECOVERY (ADJUSTABLE)	MOTOR HORSE POWER	NUMBER OF MEMBRANES	ELECTRICAL AMP REQUIREMENT	DIMENSIONS L X H X D	SHIP WT. (LBS.)
PWRO4401	7100152	2200	15%-75%	3/4	1	15 - 8	20"x20"x50"	120
PWRO4402	7100153	4400	25%-75%	1	2	20 - 10	20"x20"x50"	150
PWRO4403	7100154	6600	32%-75%	1.5	3	13* - 13	20"x20"x50"	180

PWRO4403 is only available in 230-volt, single phase

NOTICE

Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

RO system requires separate RO storage tank/delivery pump - see page 42 or call Pure Water Technical Support at 1.800.224.1299 for details

For indoor installation only.

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-Filter is model PWMB10M5 melt blown cartridge. Systems are designed for use with municipal and well water.

For additional information, access online literature ES-WQ-PWRO440.

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

Series PWR4021

Commercial Reverse Osmosis Systems

Flow Rates: Up to 10,800 gallons per day (40,878 lpd)

Watts Pure Water Series PWR4021 Reverse Osmosis (RO) Systems are commercial grade high-pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 3,600 to 10,800 gallons per day. These units are designed for floor mount installations. Reverse osmosis is a process where high-pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high-pressure/high-rejection membranes to achieve a minimum average NaCl ionic rejection of 95 percent.

The Series PWR4021 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Corrosion resistant 300 psi FRP high pressure membrane housings, inlet and outlet pre-filter pressure gauges, low-pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet solenoid valve, membrane feed and reject water pressure gauges, auto flush, and adjustable reject valve are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

PWR4021

Specifications

Feed water connection	1" FNPT
Product water connection	3/4" FNPT
Reject water connection	3/4" FNPT
Feed water pressure requirement (min.)	10 PSIG
Drain requirement (maximum)	15 GPM
Electrical requirement	230VAC/60hz
Phase	3
Amps	15

Other voltages available, please contact us for details.

Features

- Membrane Auto Flush
- Powder coated carbon steel support frame
- Corrosion resistant 300 psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low-pressure shut down
- Permeate water conductivity meter
- Tank level and pretreatment interlock inputs
- High-pressure/high-rejection membranes with 95% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet solenoid valve
- 20" full-flow pre-filter

NOTICE

Feed Water must be pre-treated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

RO system requires separate RO storage tank/delivery pump - see page #42 or call Pure Water Technical Support at 1.800.224.1299 for details

Models

MODEL NO.	ORDERING CODE	GPD	PUMP (H.P)	RECOVERY (ADJUSTABLE)	MEMBRANE SIZE	NUMBER OF MEMBRANES	FEED WATER REQUIRED* (GPM)	TYPICAL REJECTION	DIMENSIONS L X H X D	SHIP WT. (LBS.)
PWR40213023	7100073	3600	5/TEFC	25%-75%	4" x 40"	2	5	98%	60"x18"x56"	400
PWR40213033	7100074	5400	5/TEFC	36%-75%	4" x 40"	3	7.5	98%	60"x18"x56"	500
PWR40213043	7100075	7200	5/TEFC	42%-75%	4" x 40"	4	10	98%	60"x18"x56"	600
PWR402153	7100076	9000	5/TEFC	46%-75%	4" x 40"	5	12.5	98%	60"x18"x56"	700
PWR402163	7100077	10,800	5/TEFC	50%-75%	4" x 40"	6	15	98%	60"x18"x56"	800

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-Filter is model PWMB10M5 melt blown cartridge. Systems are designed for use with municipal and well water.

For additional information, access online literature ES-WQ-PWR4021

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

Series PWR4022

Commercial Reverse Osmosis Systems

Flow Rate: Up to 15 gpm (56 lpm)

Watts Pure Water Series PWR4022 Reverse Osmosis (RO) Systems are commercial grade high pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 10 to 15 gallons per minute. These units are designed for floor mount installations. Reverse osmosis is a process where high pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high pressure/high rejection membranes to achieve a minimum average NaCl ionic rejection of 97 percent.

The Series PWR4022 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Corrosion resistant fiberglass reinforced plastic (FRP) membrane housings, inlet and outlet pre-filter pressure gauges, low pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet solenoid valve, membrane feed and reject water pressure gauges, auto flush, and adjustable reject valve are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

PWR4022

Features

- Membrane Auto Flush
- Powder coated carbon steel support frame
- Corrosion resistant 300psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low pressure shut down
- Permeate water conductivity meter
- Tank level and pretreatment interlock inputs
- High pressure/high rejection membranes with 97% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet solenoid valve
- 20" full-flow pre-filter

NOTICE

Feed Water must be pre-treated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

RO system requires separate RO storage tank/delivery pump - see page #42 or call Pure Water Technical Support at 1.800.224.1299 for details

Specifications

Feed water connection	1" FNPT
Product water connection	1" FNPT
Reject water connection	3/4" FNPT
Feed water pressure requirement (min.)	10 PSIG
Drain requirement (maximum)	17, 21, 25 GPM
Electrical requirement	230VAC/60hz
Phase	3
Amps	20

Models

MODEL NO.	ORDERING CODE	GALLONS PER MINUTE	PUMP (H.P)	RECOVERY (ADJUSTABLE)	MEMBRANE SIZE	MEMBRANE ARRAY	FEED WATER REQUIRED* (GPM)	TYPICAL REJECTION	DIMENSIONS L X H X D	SHIP WT. (LBS.)
PWR40223083	7100078	10	7.5/TEFC	60%-75%	4" x 40"	2:1:1	17	98%	96"x24"x72"	800
PWR40223103	7100079	12.5	7.5/TEFC	60%-75%	4" x 40"	2:2:1	21	98%	96"x24"x72"	900
PWR40223123	7100080	15	7.5/TEFC	60%-75%	4" x 40"	3:2:1	25	98%	96"x24"x72"	1000

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-Filter is model PWMB10M5 melt blown cartridge. Systems are designed for use with municipal and well water.

For additional information, access online literature ES-WQ-PWR4022

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

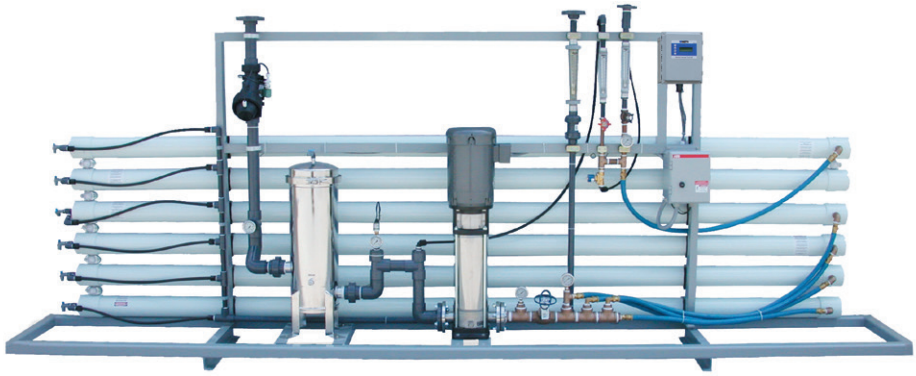
Series PWR4024

Commercial Reverse Osmosis Systems

Flow Rates: Up to 30 gpm (113 lpm)

Watts Pure Water Series PWR4024 Reverse Osmosis (RO) Systems are commercial grade high pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 20 to 30 gallons per minute. These units are designed for floor mount installations. Reverse osmosis is a process where high pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high pressure/high rejection membranes to achieve a minimum average NaCl ionic rejection of 97 percent.

The Series PWR4024 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Corrosion resistant fiberglass reinforced plastic (FRP) membrane housings, inlet and outlet pre-filter pressure gauges, low pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet diaphragm valve, membrane feed and reject water pressure gauges, auto flush, and adjustable reject valve, are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.



PWR4024

Features

- Powder coated carbon steel support frame
- Corrosion resistant 300psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low pressure shut down
- Permeate water conductivity meter
- Tank level and pretreatment interlock inputs
- High pressure/high rejection membranes with 97% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet diaphragm valve
- 90 gallon per minute full-flow 316 stainless steel pre-filter

NOTICE

Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

RO system requires separate RO storage tank/delivery pump - see page #42 or call Pure Water Technical Support at 1.800.224.1299 for details

Specifications

Feed water connection	2" Flange
Product water connection	1.5" Flange
Reject water connection	1" Flange
Feed water pressure requirement (min.)	10 PSIG
Drain requirement (maximum)	31, 39, 46 GPM
Electrical requirement	230VAC/60hz
Phase	3
Amps	30

Models

MODEL NO.	ORDERING CODE	GALLONS PER MINUTE	PUMP (H.P)	RECOVERY (ADJUSTABLE)	MEMBRANE SIZE	MEMBRANE ARRAY	FEED WATER REQUIRED* (GPM)	TYPICAL REJECTION	DIMENSIONS L X H X D	SHIP WT. (LBS.)
PWR40243163	7100081	20	10/TEFC	65%-75%	4" x 40"	2:2	31	98%	196"x26"x72"	1400
PWR40243203	7100082	25	10/TEFC	65%-75%	4" x 40"	3:2	39	98%	196"x26"x72"	1600
PWR40243243	7100083	30	10/TEFC	65%-75%	4" x 40"	4:2	46	98%	196"x26"x72"	1800

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-Filter is model PWMB10M5 melt blown cartridge. Systems are designed for use with municipal and well water.

For additional information, access online literature ES-WQ-PWR4024

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

Series PWR8024

Commercial Reverse Osmosis Systems

Flow Rates: Up to 100 gpm (378 lpm)

Watts Pure Water Series PWR8024 Reverse Osmosis (RO) Systems are commercial grade high pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 40 to 100 gallons per minute. These units are designed for floor mount installations. Reverse osmosis is a process where high pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high-pressure/high-rejection membranes to achieve a minimum average NaCl ionic rejection of 99 percent.

The Series PWR8024 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Corrosion resistant fiberglass reinforced plastic (FRP) membrane housings, inlet and outlet pre-filter pressure gauges, 316 stainless steel membrane feed water piping, low pressure switch with programmable delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter with percent ionic rejection displayed, high conductivity alarm output, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet diaphragm valve, membrane feed and reject water pressure gauges, programmable auto flush, and adjustable reject valve are all standard features.

These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

PWR8024

Features

- Membrane auto flush
- Powder coated carbon steel support frame
- Corrosion resistant 300psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, pump discharge, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low pressure shut down
- Permeate Water Conductivity meter with high conductivity alarm output and percent ionic rejection displayed
- Tank level and pretreatment interlock inputs
- High pressure/high rejection membranes with 99% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet diaphragm valve

NOTICE

Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

RO system requires separate RO storage tank/delivery pump - see page #42 or call Pure Water Technical Support at 1.800.224.1299 for details

Models

MODEL NO.	ORDERING CODE	GALLONS PER MINUTE	FEED WATER CONNECTION	PUMP (H.P)	RECOVERY (ADJUSTABLE)	MEMBRANE SIZE	MEMBRANE ARRAY	FEED WATER REQUIRED* (GPM)	TYPICAL REJECTION	DIMENSIONS L X W X H	SHIP WT. (LBS.)
PWR80243085	7100084	40	2" Flange	10/TEFC	65%-75%	8" x 40"	1:1	62	98%	186"X26"X72"	2500
PWR80243125	7100085	60	2.5" Flange	20/TEFC	65%-75%	8" x 40"	2:1	93	98%	186"X26"X72"	2800
PWR80243165	7100086	80	3" Flange	25/TEFC	65%-75%	8" x 40"	2:2	123	98%	186"X26"X72"	3200
PWR80243205	7100087	100	3" Flange	30/TEFC	65%-75%	8" x 40"	3:2	154	98%	186"X26"X72"	3500
PWR80243245	7100091	120	3" Flange	30/TEFC	65%-75%	8" x 40"	3:2:1	185	98%	198"X42"X72"	3800

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-Filter is model PWMB10M5 melt blown cartridge. Systems are designed for use with municipal and well water.

For additional information, access online literature ES-WQ-PWR8024

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

Series PWTNKPKG

Atmospheric Tank and Pump Packages

Sizes: 165, 300, 500 gallons (625, 1135, 1893 liters)

Ideal for light commercial applications. Reduce installation labor with these complete tank and pump packages with components pre-installed to save time and money.

Watts MQ3-45 Delivery Pump

This unique pump is included in the package for re-pressurization. It is a stand alone component, operating independently. Simply plug it in directly to a 110 VAC outlet and the pump turns itself on and off and adjusts speed based on flow.

PWTNKPKG

Pre Installed Float Switch

Features

- Pre-installed float switch
- Polyethylene atmospheric storage tanks with float switch
- Atmospheric storage tank with bulkhead fittings installed
- Junction box connects to the float switch RO system
- UV inhibitors added to storage tank
- Storage tank manufactured from sturdy polyethylene
- Tank walls are translucent for level viewing
- Gallon indicators on side wall
- Basic installation fittings included from storage tank to pump (additional fittings and pipe may be required depending upon application).

MODEL NO.	ORDERING CODE	TANK SIZE GALLONS	FLOAT SWITCH AND JUNCTION BOX	BULKHEAD FITTINGS	OVERFLOW	PUMP
PWTNK165PKG	7100459	165	Installed	Installed	Installed	Grundfos® MQ3
PWTNK300PKG	7100460	300	Installed	Installed	Installed	Grundfos® MQ3
PWTNK500PKG	7100461	500	Installed	Installed	Installed	Grundfos® MQ3

For additional information, access online literature ES-WQ-PWTNKPKG

Pressurized Steel Storage Tanks

These tanks are used for storing reverse osmosis water and have been NSF tested and certified against ANSI/ NSF Standard 58 for material and structural integrity requirements. The inside of the tank has a polypropylene liner and utilizes a butyl diaphragm for the water storage area.

Pressurized RO Storage Tanks

MODEL NO.	ORDERING CODE	VOLUME (GALLONS)	DESCRIPTION	DIAMETER (INCHES)	HEIGHT (INCHES)	COLOR	PIPE FITTINGS (INCHES)
PWROTNK3	7100174	3	3 Gallon - Metal Tank	11"	16"	White	¼"
PWROTNK14	7100175	14	14 Gallon - Metal Tank	15"	23"	Blue	¼"
PWROTNK32	7100176	32	32 Gallon - Metal Tank	16"	29"	Blue	1¼"
PWROTNK44	7100177	44	44 Gallon - Metal Tank	21"	36"	Blue	1¼"
PWROTNK86	7100178	86	86 Gallon - Metal Tank	26"	45"	Blue	1¼"
PWROTNK119	7100179	119	119 Gallon - Metal Tank	26"	60"	Blue	1¼"

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

Model PWICE1

Light Commercial Ice Maker Filtration Systems

Maximum Flow Rate: 2 gpm (7.6 lpm)

Watts Pure Water Model PWICE1 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines.

PWICE1
Ordering Code: 7100263

Applications

- Ice Machines

Features

- Reduces lime scale build-up in ice machines
- Reduces maintenance—lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included

System Specifications

Maximum Pressure: 125psi/8.6 bar

Maximum Temperature: 100°F/38°C

Inlet/Outlet Connections: ½" FNPT

Maximum Flow Rate: 2 gpm

Filter Cartridge Life Span

Filter cartridges should be changed at 6,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.

NOTICE

Cartridge capacities are estimates and may be less depending on incoming water quality. Cartridges should be changed at least every 6 months.

Replacement Filter Pack- includes all filters

MODEL NO.	ORDERING CODE	FREQUENCY	DESCRIPTION
PWFPKICE1	7100474	6 Months	10" Sediment filter 10" Carbon Block filter 10" Polyphosphate filter

NOTICE Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE1

Model PWICE2

Light Commercial Ice Maker Filtration Systems

Maximum Flow Rate: 3 gpm (11 lpm)

Watts Pure Water Model PWICE2 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines.

PWICE2
Ordering Code: 7100264

Applications

- Ice Machines

Features

- Reduces lime scale build-up in ice machines
- Reduces maintenance – lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included

System Specifications

Maximum Pressure: 125psi/8.6 bar

Maximum Temperature: 100°F/38°C

Inlet/Outlet Connections: ½" FNPT

Maximum Flow Rate: 3 GPM

Filter Cartridge Life Span

Filter cartridges should be changed at 10,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.

NOTICE

Cartridge capacities are estimates and may be less depending on incoming water quality. Cartridges should be changed at least every 6 months.

Replacement Filter Pack- includes all filters

MODEL NO.	ORDERING CODE	FREQUENCY	DESCRIPTION
PWFPKICE2	7100475	6 Months	10" Sediment filter 20" Carbon Block filter 10" Polyphosphate filter

NOTICE Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE2.

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

Model PWICE3

Light Commercial Ice Maker Filtration Systems

Maximum Flow Rate: 4 gpm (15 lpm)

Watts Pure Water Model PWICE3 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines and drink stations. Water for tea, coffee, and soft drinks is filtered by the triple filter. This filtered water then feeds the remote ice filter for dedicated treatment of the ice machine.

PWICE3
Ordering Code: 7100265

NOTICE

Cartridge capacities are estimates and may be less depending on incoming water quality. Cartridges should be changed at least every 6 months.

Applications
- Ice Machines

Features
- Reduces lime scale build-up in ice machines and soda machines
- Reduces maintenance—lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included
- Improves the taste of coffee, tea and soft drinks

System Specifications
Maximum Pressure:
125psi/8.6 bar

Maximum Temperature:
100°F/38°C

Inlet/Outlet Connections:
½" FNPT

Maximum Flow Rate: 4 gpm

Filter Cartridge Life Span
Filter cartridges should be changed at 10,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.

Replacement Filter Pack- includes all filters

MODEL NO.	ORDERING CODE	FREQUENCY	DESCRIPTION
PWFPKICE3	7100476	6 Months	10" Sediment filter 20" Carbon Block filter (2 required) 10" Polyphosphate filter

NOTICE Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE3.

Model PWICE4

Light Commercial Ice Maker Filtration Systems

Flow Rate: Maximum 4 gpm (15 lpm)

Watts Pure Water Model PWICE4 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines and drink stations. Water for tea, coffee, and soft drinks is filtered by the triple filter. This filtered water then feeds the remote ice filters for dedicated treatment of the ice machine.

PWICE4
Ordering Code: 7100266

NOTICE

Cartridge capacities are estimates and may be less depending on incoming water quality. Cartridges should be changed at least every 6 months.

Applications
- Ice Machines
- Soda Machines
- Tea Machines
- Espresso Machines

Features
- Reduces lime scale build-up in ice machines
- Reduces maintenance—lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included
- Improves the taste of coffee, tea and soft drinks

System Specifications
Maximum Pressure:
125psi/8.6 bar

Maximum Temperature:
100°F/38°C

Inlet/Outlet Connections:
¾" FNPT with ½" FNPT

Maximum Flow Rate: 4 gpm

Filter Cartridge Life Span
Filter cartridges should be changed at 20,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.

Replacement Filter Pack- includes all filters

MODEL NO.	ORDERING CODE	FREQUENCY	DESCRIPTION
PWFPKICE4	7100477	6 Months	10" Sediment filter 20" Carbon Block filter (2 required) 10" Polyphosphate filter (2 required)

NOTICE Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE4.

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

Big Bubba Housing & Cartridges

With optional activated carbon cartridge to remove Chlorine, bad tastes, foul odors and sediment.

Rugged Construction

Filter housings are made of rugged, glass-reinforced polypropylene so they will not chip, rust or dent. And because all wetted surfaces are non-metallic, they are ideal when chemical compatibility is an issue and for sea water applications.

Low Cost

Filters are an economical replacement for stainless steel filtration equipment because of their non-metallic construction and today's high cost of stainless steel!

Applications

Big Bubba® Cartridge Filters are ideal for a wide range of applications, including:

- Commercial filtration
- Industrial filtration
- Pre-filtration for reverse osmosis equipment
- Community water systems
- Sea water applications due to their non-corrosive construction
- Replacement for bag filters more filter area
- Replacement for multiple cartridge filters for greater convenience
- Water for livestock and poultry

Proprietary Cartridges

The replacement cartridge for the Watts Big Bubba Housing is totally proprietary, so you may enjoy the replacement cartridge business over the life of the equipment

Conserves Water!

Watts filters with our proprietary pleated activated carbon cartridge conserves water because backwashing is not required, making them 100% efficient.

Easy Change Out!

Simply remove the swing bolts and lid, then rotate the cartridge 1/4 turn and lift it up.

Double O-Rings for Superior Sealing

PWWJCHSG

MODEL NO.	ORDERING CODE	DESCRIPTION
PWWJCHSG	7100301	Big Bubba Housing

Parallel installation

Parallel installations are recommended to achieve high flow rates, by installing filters on a common manifold, feeding all filters installed in a row.

Series installation

Series installations are recommended for applications such as surface water filtration, where cartridges having different micron ratings are used.

Note: We build filtration systems, or they may be installed on site. For more information please inquire!

For additional information, access online literature ES-WQ-PWWJC.

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

Big Bubba Housing & Cartridges

Big Bubba® Cartridge Housing

SPECIFICATIONS	DATA
Body (all wetted surfaces)	Glass reinforced PP
Cartridge end caps	Glass reinforced PP
Swing bolts	304 stainless steel
O-rings (cartridges)	EPDM (Viton optional)
O-ring (lid)	EPDM (Viton optional)
Pipe fittings	2" slip
Overall height	40"
Width (vessel OD)	12"

Big Bubba® Cartridges

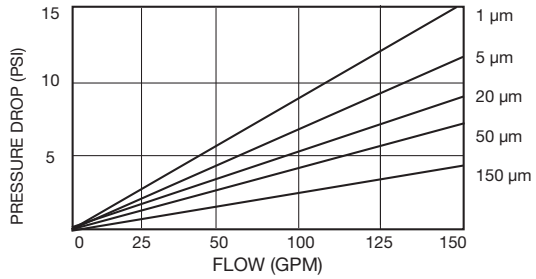
SPECIFICATIONS	DATA
Maximum flow rate	150 GPM* (36 M3/hr.)
Maximum flow (carbon)	15 GPM
Maximum flow (1 Micron)	50 GPM
Maximum temperature	125˚F (52˚C) @ 80 psi
Maximum working pressure	125 psi (8.75 bar)
Burst test	300 psi
Cycle test	100,000

* Highly dependent on micron rating, solids content and other factors. Please see pressure drop chart below.

Housing number BBH-150 has a wetted brass gauge port for the inlet pressure gauge.

Low Pressure Drop

Big Bubba® Cartridge Filters housings are designed to minimize pressure drop, by using 2" pipe fittings and large diameter center tubes. (See chart at right for pressure drop data using pleated cartridges.)



Big Bubba® Cartridge Filter Specifications

	PLEATED	DEPTH	ACTIVATED CARBON
Media	PP	PP	Activated carbon
End caps	PP + FG	PP + FG	PP
Center tubes	PP	PP	PP
Maximum flow rate (GPM)	150	100	15
Maximum temperature	125˚F (52˚C)	125˚F (52˚C)	125˚F (52˚C)
Maximum ΔP (psi)	30	40	30
Chemical resistance	Excellent	Excellent	Not a factor (for water)
Length (media)	26-1/4"	26-1/4"	26-1/4"
O-rings (dual)	EPDM	EPDM	EPDM
Shipping weight (lbs.)	5	5	7
Carton dimensions	7" x 7" x 31"	7" x 7" x 31"	7" x 7" x 31"
Micron ratings	1, 5, 20, 50, 150	1, 5, 20, 50	5

Flow rates are based on each specific application, micron rating, solids content and a number of other factors. End user should consider these factors when selecting the filter housing (or number of filter housings) needed for their particular requirement.

Pleated Cartridges

Ideal for more critical applications, offering greater efficiency, more surface area for greater throughput and reduced cost.

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	PER CASE
PWWJCP1	7100303	PP	1	1
PWWJCP5	7100304	PP	5	1
PWWJCP20	7100305	PP	20	1
PWWJCP50	7100306	PP	50	1
PWWJCP150	7100307	MESH	150	1

5, 20, 50 and 150 micron cartridges are cleanable and reusable to reduce costs.

Depth Cartridges

Melt blown Polypropylene cartridges are recommended when depth filtration is necessary for gelatinous substances and when chemical resistance may be a requirement.

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	PER CASE
PWWJCDM1	7100308	PP	1	1
PWWJCDM5	7100309	PP	5	1
PWWJCDM20	7100310	PP	20	1
PWWJCDM50	7100311	PP	50	1

Activated Carbon

Ideal for whole house filtration to reduce chlorine, taste, odors and sediment.

MODEL NO.	ORDERING CODE	MAX. FLOW	CHLORINE REDUCTION
PWWJCAC5	7100312	15 gpm	1

For additional information, access online literature ES-WQ-PWWJC.

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

Series PWHS

Commercial Quality Filter Housings

Connection Size: 1" NPT (25mm) – 4" Flange
Flow Rates: Up to 600 gpm (2271 lpm)

Top quality stainless steel filter housings with easy, safe and secure band-clamp lid closures. Watts Pure Water Series PWHS are compatible with a full range of double open end cartridges for liquid filtration applications.

Premium Housings

Features

- 100% stainless steel for durability
- Constructed of 316 stainless steel
- Convenient band clamp lid closure is standard for easy cartridge replacement
- Pipe fittings are readily accessible for easy installation
- Adjustable top plate accepts variable length cartridges for more options
- Two drains provided for clean and dirty fluids
- Legs and mounting tabs are available
- Knife edge seals are provided at both ends of all DOE cartridges for superior performance
- Rated for temperatures to 212°F (100°C). (No plastic holding rods)
- Pressure rating to 150psi (10.3 bar)
- Protective polycoat over stainless steel standard finish

Specifications

Material:	316 stainless steel
Pressure rating:	Housings are rated for pressures to 150psi (10.3 bar)
Temperature:	Housings are rated for temperatures to 212°F (100°C)
Gaskets & seals:	Buna-N is standard.
Finish:	Protective polycoat over stainless is standard finish
Cartridge types:	Housings are designed to accept DOE cartridges.

Commercial Quality Multi-Cartridge Stainless Steel Filter Housings (316SS)

MODEL NO.	ORDERING CODE	ROUND	MAX. FLOW RATE PLEATED		MAX. FLOW RATE DEPTH		PIPE SIZE	DRAIN SIZE (NPT)	NO. OF STANDARD CARTRIDGES	CARTRIDGE OPTIONS (LENGTHS)	
			GPM	*LPM*	*GPM*	*LPM*				*in.*	*mm*
PWHS4X1	7100313	4	25	95	25	95	1" NPT	½"	4	9¾" - 10"	248 - 254
PWHS5X1	7100314	5	30	113	25	95	2" NPT	½"	5	9¾" - 10"	248 - 254
PWHS4X2	7100315	4	60	227	40	151	2" NPT	½"	4	20"	508
PWHS4X3	7100316	4	90	341	60	227	2" NPT	½"	4	29¼" or 30	743 or 761
PWHS4X4	7100317	4	120	454	80	363	2" NPT	½"	4	40"	1016
PWHS5X4	7100318	5	150	568	100	379	2" NPT	½"	5	40"	1016
PWHS12X3	7100319	12	250	946	180	681	3" flange	½"	12	29¼" or 30	743 or 761
PWHS12X4	7100320	12	300	1135	240	908	3" flange	½"	12	40"	1016
PWHS22X3	7100321	22	500	1893	330	1249	4" flange	½"	22	29¼" or 30	743 or 761
PWHS22X4	7100322	22	600	2271	440	1665	4" flange	½"	22	40"	1016

Premium Series Housings with Mounting Legs and Pressure Gauges (316SS)

MODEL NO.	ORDERING CODE	ROUND	MAX. FLOW RATE PLEATED		MAX. FLOW RATE DEPTH		PIPE SIZE	DRAIN SIZE (NPT)	NO. OF STANDARD CARTRIDGES	CARTRIDGE OPTIONS (LENGTHS)	
			GPM	*LPM*	*GPM*	*LPM*				*in.*	*mm*
PWHSPS4X2	7100323	4	60	227	40	151	2" NPT	½"	4	20"	508
PWHSPS5X3	7100324	5	120	454	75	284	2" NPT	½"	5	29¼" or 30	743 or 761
PWHSPS5X4	7100325	5	150	568	100	388	2" NPT	½"	5	40"	1016
PWHSPS7X4	7100326	7	200	946	140	530	2" NPT	½"	7	40"	1016

Note: Flow rates shown above are for guidelines only. Actual flow rates are based on cartridge type, micron rating, solids content and a number of other factors.

For additional information, access online literature ES-WQ-PWHS

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

Series PWHSJUMBO

JUMBO-SS Cartridge Housings
Stainless Steel Single Cartridge Models

Connection Size: 2" MNPT (50mm)
Flow Rates: Up to 150gpm (567 lpm)

The ideal filter housings for optimum convenience and savings. Series PWHSJUMBO housing filters are designed to accept Series "JUMBO-SS" cartridges for easy installation and replacement. Filter housings are constructed using 304 stainless steel and are rated for pressures to 150psi. Pipe fittings on single cartridge models are 2" MNPT with pressure gauges installed on inlet and outlet fittings. Convenient, band clamp lid closures are easy to use, safe and secure. Protective poly coat over stainless steel is standard finish.

Model
PWHSJUM40-304

Features

- Adjustable compression cap provides superior sealing for both ends of the jumbo cartridge
- User friendly jumbo cartridges are easy to install, easy to service and easy to replace
- Housings accept "Jumbo SS" series cartridges
- Heavy-duty 304 stainless steel construction for durability
- Band clamp lid closure are convenient, easy to use and secure
- Pipe fittings are readily accessible for easy installation
- Pressure gauges are installed on pipe fittings
- Heavy-duty mounting legs are standard
- 3 models available for a wide range of flow rates

Model
PWHSJUM90-304

Model
PWHSJUM170-304

Specifications

Material:	304 Stainless steel
Pressure rating:	Housings are rated for pressures to 150 psi (10 bar)
Temperature:	Housings are rated for temperatures to 140° F.

Adjustable compression cap provides superior sealing for both ends of the jumbo cartridges.

Commercial Quality Jumbo Cartridge Filter Housings in 304SS

MODEL NO.	ORDERING CODE	MATERIAL	MAX FLOW (GPM)	CARTRIDGE STYLE	NUMBER OF CARTRIDGES	PIPE SIZE	LID CLOSURE
PWHSJUM40-304	7101084	304SS	50	"40"	1	2" NPT	V-Band
PWHSJUM90-304	7101085	304SS	100	"90"	1	2" NPT	V-Band
PWHSJUM170-304	7101086	304SS	150	"170"	1	2" NPT	V-Band

For additional information, access online literature ES-WQ-PWHSJUMBO

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


PWJPL40

PWJPL40

FILTER HOUSING MODEL NO.	MODEL NO. WITH SYNTHETIC MEDIA	ORDERING CODE	MICRON RATING	NUMBER PER CASE
40	PWJPL40M.35	7100420	0.35	1
	PWJPL40M1	7100421	1	1
	PWJPL40M5	7100422	5	1
	PWJPL40M20	7100423	20	1
	PWJPL40M50	7100424	50	1
	PWJPL40M100	7100425	100	1


PWJPL90

PWJPL90

FILTER HOUSING MODEL NO.	MODEL NO. WITH SYNTHETIC MEDIA	ORDERING CODE	MICRON RATING	NUMBER PER CASE
90	PWJPL90M.35	7100427	0.35	1
	PWJPL90M1	7100428	1	1
	PWJPL90M5	7100429	5	1
	PWJPL90M20	7100430	20	1
	PWJPL90M50	7100431	50	1
	PWJPLM90M100	7100432	100	1


PWJPL170

PWJPL170

FILTER HOUSING MODEL NO.	MODEL NO. WITH SYNTHETIC MEDIA	ORDERING CODE	MICRON RATING	NUMBER PER CASE
170	PWJPL170M.35	7100434	0.35	1
	PWJPL170M1	7100435	1	1
	PWJPL170M5	7100436	5	1
	PWJPL170M20	7100437	20	1
	PWJPL170M50	7100438	50	1
	PWJPLM170M100	7100439	100	1

Stainless Steel In-Line Housings

Single Cartridge, Metal Filter Housings for In-line Installations.

Applications

- High temperatures
- High pressures
- Aggressive chemicals
- Water
- Oils
- Coolants
- Plating solutions
- Solvents
- Lubricants
- Hydraulic fluids

Models

- Nickel plated brass heads with 304 stainless sumps and T-Handles for easy sump removal
- 304 stainless steel for DOE cartridges

Specifications

- Rated for pressures to 250 PSI (17.5 bar)
- Rated for temperatures to 250°F (121°C)
- Buna-N seals are standard. Optional seals available

Models With Nickel Plated Brass Heads, 304 Stainless Steel Sumps and T-Handles

MODEL NO.	ORDERING CODE	CARTRIDGE LENGTH	PIPE SIZE (IN.)	NO. OF CARTRIDGES	SUMP	HEAD	SHIPPING WEIGHT (LBS.)
FM10-BN-304-34T	7100491	10" *	3/4	1	304 SS	Nickel / Brass	7
FM20-BN-304-34T	7100492	20"	3/4	1	304 SS	Nickel / Brass	10

With 304 Stainless Steel Heads And 304 Sumps

MODEL NO.	ORDERING CODE	CARTRIDGE LENGTH	PIPE SIZE (IN.)	NO. OF CARTRIDGES	SUMP	HEAD	SHIPPING WEIGHT (LBS.)
FM10-304-34	7100493	10" *	3/4	1	304 SS	304 SS	7
FM20-304-34	7100494	20"	3/4	1	304 SS	304 SS	10

NOTICE

Filter housings listed directly above are rated for pressures to 250 psi and temperatures to 250˚F.

*Accepts 10" and 9-7/8" wound or 9-3/4" cartridges with rigid end caps (pleated). Rated for pressures to 250 psi and temperatures to 250˚F

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

Plastic Filter Housings

Top Quality and Economical Plastic Filter Housings

Single Cartridge Filter Housings

Sizes: ¼" – 1½" (6 – 40mm)

Our poly filter housings are manufactured from the highest quality, 100% polypropylene and acrylic styrene (for clear housings). Leak-proof sealing is accomplished by compression against a top seated EPDM O-ring located in the housing's sump. Thick wall and added ribs make the housings ideal for a wide range of applications. Polypropylene construction provides excellent chemical resistance with most acids, alcohol, ammonia, oils, plating solutions and many aggressive chemicals. Housings supplied with pressure relief valves.

PWHP Housings

Full product line

We offer a complete line of poly filter housings for virtually every application where single cartridge housings are typically used. Select from standard, full-flow and valve-in-head models.

FEATURES

- Full product line for more types, models, pipe fittings and options
- Heavy-duty construction, made using high-quality polypropylene
- Superior chemical resistance from many aggressive chemicals
- Buttress thread design for superior security
- Thick side walls with heavy-duty ribs to provide greater strength
- Temperature rated to 100° F/37.8° C
- Cap, sump and top-seated O-rings compress to provide leak proof sealing

PWHIB Series

Individually Boxed Plastic Housings Kits EC END CAP

Watts Pure Water PWHIB Housing Kits come complete with housing, mounting bracket & screws and wrench

PWHIB10FF

MODEL NO.	ORDERING CODE	SIZE	PIPE	TYPE	SUMP	CAP	CASE QTY.
PWHIB34WVIH EC	7100550	10"	3/4"	Valve-In-Head	White	White	4
PWHIB10FF* EC	7100268	10"	1"	Full Flow (FF)	Blue	Black	4
PWHIB20FF* EC	7100269	20"	1"	Full Flow (FF)	Blue	Black	4

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

Plastic Filter Housings

Poly Filter Housing

MODEL NO.	ORDERING CODE	SIZE	PIPE	SUMP	CAP	# CASE
White Housings						
PWHP512W	7100589	5"	½"	White	White	12
Clear Housings						
PWHP1034CPR	7100644	10"	¾"	Clear	White PR	4
10" Residential Housings						
PWHP1014BPR	7100277	10"	¼"	Blue	Black PR	4
PWHP1012BPR	7100279	10"	½"	Blue	Black PR	4
PWHP1034BPR	7100281	10"	¾"	Blue	Black PR	4
20" Residential Housings						
PWHP2012BPR	7100283	20"	½"	Blue	Black PR	6
10" Commercial Housings						
PWHP10COM34CPR	7100668	10"	¾"	Clear	6	6
PWHP10COM34BPR	7100669	10"	¾"	Blue	6	6
20" Commercial Housings						
PWHP20COM34BPR	7100670	20"	¾"	Blue	6	6
10" Full Flow Housings						
PWHP10FF34BPR	7100286	10"	¾"	Blue	Black PR	4
PWHP10FF1BPR	7100288	10"	1"	Blue	Black PR	4
PWHP10FF15BPR	7100290	10"	1 ½"	Blue	Black PR	4
20" Full Flow Housings						
PWHP20FF34BPR	7100291	20"	¾"	Blue	Black PR	4
PWHP20FF1BPR	7100293	20"	1"	Blue	Black PR	4
PWHP20FF15BPR	7100295	20"	1 ½"	Blue	Black PR	4
High Temp Housings (200°F / 93°C)						
PWHPHT1034	7100296	10"	¾"	Red	Red	4
PWHPHT2034	7100297	20"	¾"	Red	Red	4

Blue/Black

Mounting Brackets - includes housing mounting screws

PWMBVIH	7300605	Brkt, VIH Housing	1
PWMBSTD1	7100463	Single, 10" & 20" Residential Housings	1
PWMBSTD2	7100464	Double, 10" & 20" Residential Housings	1
PWMBSTD3	7100465	Triple, 10" & 20" Residential Housings	1
PWMBCOM1	7300808	Single 10" & 20" Commercial Hsg	1
PWMBFF1	7100466	Single, 10" & 20" Full Flow Housing	1
PWMBFF2	7100467	Double, 10" & 20" Full Flow Housing	1
PWMBFF3	7100468	Triple, 10" & 20" Full Flow Housing	1

Wrenches

PWWRSTDHSG	7100298	Wrench for Residential Housings	1
PWWRFFHSG	7100299	Wrench for Full Flow Housing	1
PWWRHTHSG	7300618	Hi Temp Housing Wrench	1
PWWRCOM	7300806	Wrench for Commercial Housing	1
PWWRDUAL	7100300	Dual Wrench for Membrane and Residential Filter Housings	1

Mounting Screws

PWMSSTDHSG	7300393	Mounting Screws for standard Housings	1
PWMSFFHSG	7300395	Mounting Screws for Full Flow Housings	1
PWMSCOMHSG	7300809	Mounting Screws for Commercial Housings	1

O-Rings

PWORSTDHSG	7300397	O-Ring for standard housings	1
PWORFFHSG	7300954	O-Ring for Full Flow housings	1
PWORHTHSG	7300399	O-Ring for high temp housings	1
PWORCOMHSG	7300807	O-Ring for Commercial Housings	1

High Temp

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

Melt Blown Filter Cartridges

Flow Rates: Up to 20 gpm (75 lpm) on 4½" x 20" cartridges

Watts Pure Water series of Melt Blown Cartridges reduce sediment, dirt, rust and particles. Food grade for use with beverages, food, and potable water. A wide range of lengths and micron ratings are available.

Features

- Low cost
- Excellent chemical resistance
- Food grade for food and beverages
- No media migration
- High dirt holding capacity
- Wide range of lengths
- Five different micron ratings

- Beverages
- Pre-filtration for RO
- Fine chemicals
- Electronics
- Metal finishing
- Plating solutions

NSF/ANSI STD 372 & 42

Melt Blown Filter Cartridges

Applications

- Potable water

Standard Diameter (21/2")

MODEL NO.	ORDERING CODE	LENGTH	OD	MICRON	NO. / CASE	WEIGHTS	
						lbs.	*kgs.*
9⅞"							
PWMB10M1	7100330	9⅞"	2½"	1	12	3.6	1.6
PWMB10M5	7100331	9⅞"	2½"	5	12	3.6	1.6
PWMB10M10	7100332	9⅞"	2½"	10	12	3.6	1.6
PWMB10M20	7100333	9⅞"	2½"	20	12	3.6	1.6
PWMB10M50	7100335	9⅞"	2½"	50	12	3.6	1.6
20"							
PWMB20M1	7100336	20"	2½"	1	6	3.6	1.6
PWMB20M5	7100337	20"	2½"	5	6	3.6	1.6
PWMB20M20	7100338	20"	2½"	20	6	3.6	1.6
PWMB20M50	7100339	20"	2½"	50	6	3.6	1.6
30"							
PWMB30M1	7100340	30"	2½"	1	24	24	11.0
PWMB30M5	7100341	30"	2½"	5	24	24	11.0
PWMB30M20	7100342	30"	2½"	20	24	24	11.0
PWMB30M50	7100343	30"	2½"	50	24	24	11.0
40"							
PWMB40M1	7100344	40"	2½"	1	24	29	13.0
PWMB40M5	7100345	40"	2½"	5	24	29	13.0
PWMB40M20	7100346	40"	2½"	20	24	29	13.0
PWMB40M50	7100347	40"	2½"	50	24	29	13.0

Full Flow (FF) 4½" x 9¾"

9¾"							
PWMB10FFM1	7100348	9¾"	4½"	1	4	4.4	2.0
PWMB10FFM5	7100349	9¾"	4½"	5	4	4.4	2.0
PWMB10FFM20	7100350	9¾"	4½"	20	4	4.4	2.0
PWMB10FFM50	7100351	9¾"	4½"	50	4	4.4	2.0

Full Flow (FF) 4½" x 20"

20"							
PWMB20FFM1	7100352	20"	4½"	1	4	8	3.6
PWMB20FFM5	7100353	20"	4½"	5	4	8	3.6
PWMB20FFM20	7100354	20"	4½"	20	4	8	3.6
PWMB20FFM50	7100355	20"	4½"	50	4	8	3.6

For additional information, access online literature ES-WQ-PWMB

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

Series PWSW

Wound Polypropylene Filter Cartridges

Exceptional value when depth filtration is required.

Watts Pure Water series of String Wound Cartridges reduce sediment, dirt, rust and particles. Food grade for use with beverages, food, and potable water. A wide range of lengths and micron ratings are available.

Specifications

Material – Polypropylene
Maximum Operating Temperature (Plastic Core) – 140°F (60°C)
Maximum Operating Temperature (Metal Core) – 180°F (82°C)
Flow Rate (2.5" x 10" Cartridge)
1 micron - 3 gpm @ 4psi drop
5 micron - 6 gpm @ 3psi drop
20 micron - 9 gpm @ 2psi drop
50 micron - 9 gpm @ 1psi drop
Maximum Differential Pressure – 60 psid @ 73°F

String Wound Cartridges

MODEL NO.	ORDERING CODE	LENGTH	OD	MICRON	NO. / CASE	WEIGHTS	
						lbs.	*kgs.*
PWSW10M1	7100356	9⅞"	2½"	1	12	12.0	5.4
PWSW10M5	7100357	9⅞"	2½"	5	12	12.0	5.4
PWSW10M20	7100358	9⅞"	2½"	20	12	12.0	5.4
PWSW10M50	7100359	9⅞"	2½"	50	12	12.0	5.4
PWSW20M1	7100360	20"	2½"	1	6	13.5	6.1
PWSW20M5	7100361	20"	2½"	5	6	13.5	6.1
PWSW20M20	7100362	20"	2½"	20	6	13.5	6.1
PWSW20M50	7100363	20"	2½"	50	6	13.5	6.1
PWSW30M1	7100364	30"	2½"	1	15	19.5	8.9
PWSW30M5	7100365	30"	2½"	5	15	19.5	8.9
PWSW30M20	7100366	30"	2½"	20	15	19.5	8.9
PWSW40M1	7100367	40"	2½"	1	10	13.0	5.9
PWSW40M5	7100368	40"	2½"	5	10	13.0	5.9
PWSW40M20	7100369	40"	2½"	20	10	13.0	5.9
Full Flow (FF) 4½" OD Cartridges							
PWSW10FFM1	7100370	9¾"	4½"	1	4	9.6	4.4
PWSW10FFM5	7100371	9¾"	4½"	5	4	9.6	4.4
PWSW10FFM20	7100372	9¾"	4½"	20	4	9.6	4.4
PWSW10FFM50	7100373	9¾"	4½"	50	4	9.6	4.4
PWSW20FFM1	7100374	20"	4½"	1	4	9.6	4.4
PWSW20FFM5	7100375	20"	4½"	5	4	9.6	4.4
PWSW20FFM20	7100376	20"	4½"	20	4	9.6	4.4
PWSW20FFM50	7100377	20"	4½"	50	4	9.6	4.4
Cartridges with 304 Stainless Steel Center Tubes for Temperatures to 180°F (82°C)							
PWSWHT10M5	7100378	9⅞"	2½"	5	12	12.0	5.5
PWSWHT10M20	7100379	9⅞"	2½"	20	12	12.0	5.5
PWSWHT10M50	7100380	9⅞"	2½"	50	12	12.0	5.5
PWSWHT20M5	7100381	20"	2½"	5	6	12.0	5.5
PWSWHT20M20	7100382	20"	2½"	20	6	12.0	5.5
PWSWHT30M5	7100383	30"	2½"	5	15	21.0	9.6
PWSWHT30M20	7100384	30"	2½"	20	15	21.0	9.6
PWSWHT40M5	7100385	40"	2½"	5	10	20.0	9.1
PWSWHT40M20	7100386	40"	2½"	20	10	20.0	9.1

PWSW10

PWSW10FF

PWSWHT10

Features

- Low cost
- Polypropylene media for chemical resistance
- Food grade ingredients for potable water
- No leachables to contaminate downstream
- Wide range of lengths and micron ratings
- Cartridges with stainless steel center tubes for higher temperature applications

For additional information, access online literature ES-WQ-PWSW

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

Series PWPL

Pleated Filter Cartridges

Greater surface area for longer life and reduced filtration costs.

Watts Pure Water Pleated filter cartridges reduce sediment, dirt, rust, and particles. Outperform wound, spun, melt blown, resin bonded, and other “depth” type filter elements because of our high surface area.

Lower pressure drop is another significant advantage. Using pleated cartridges allows for increased flow rates and the use of smaller filter housings to reduce capital equipment costs.

Further savings are provided because our 100% synthetic filter media is cleanable, 5 micron and up, to lower cartridge replacement costs. Pleated filter cartridges outperform other pleated elements because our high-performance filter media is systematically produced using 100% synthetic fibers, with no binders or additives to leave a residue, foam or contaminate.

Our filter media is dramatically thicker than other products. For this reason, Pleated cartridges provide “depth” filtration for greater sediment removal, along with more surface area.

Pleated Filter Cartridges

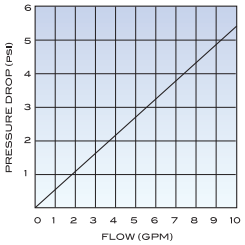
Features

- Filter media is pleated for greater surface area
- Synthetic filter media is cellulose-free
- “Thicker” filter media has a greater capacity to capture and retain particles, compared to thin, more rigid media types, which have less void space for particle retention
- 0.35 media use a multiply laminate for superior performance
- Long lengths have netting to hold pleats in place
- All cartridge types and lengths are wrapped
- Full product line (Large selection of types, lengths & micron ratings)
- Low pressure drop, long life, and reduced filtration costs, compared to wound and spun cartridges
- No additives or binders, which may cause foaming.
- Increased dirt holding capacity, longer life, fewer cartridge replacements needed, and reduced filtration costs, compared to other pleated cartridge suppliers
- Increased particle removal efficiency
- Superior performance and appearance

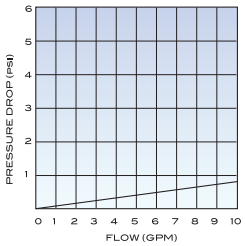
⚠ WARNING **Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.**

Lower pressure drop for higher flow rates

These cartridges are pleated, so initial pressure drop is significantly less compared to depth cartridges, such as wound, spun, melt blown and resin bonded. As a result, higher flow rates are possible, reducing filter housing size requirements to lower capital equipment costs.

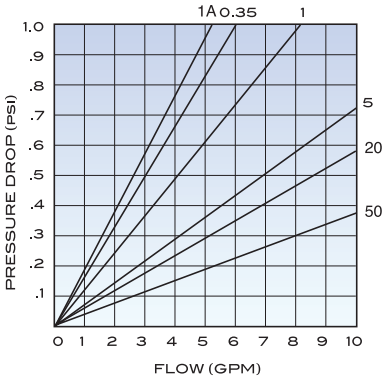


Depth Cartridge
(5 micron)

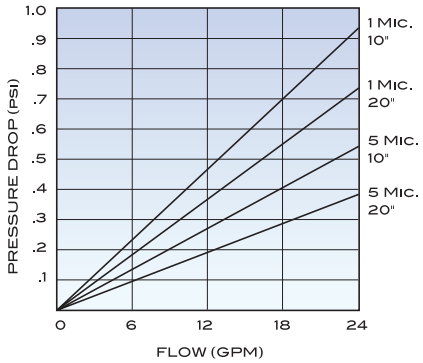


Pleated® Cartridge
(5 micron)

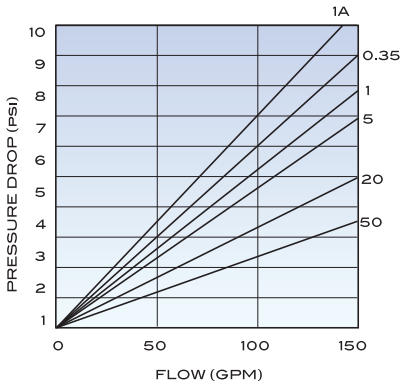
Use the pressure drop charts shown below to help determine the ideal flow rate for your particular application:



Standard Cartridges (9¾")



Full Flow (FF) Cartridges



Jumbo Cartridges

Note: Pressure drop data shown above include filter housing and cartridge.

Flow rates

Maximum flow rate guidelines for our cartridges are shown below:

MAXIMUM FLOW RATES PER CARTRIDGE (GPM)								
Micron Rating	Standard Cartridge			10" Full Flow	20" Full Flow	Jumbo Cartridge		
	9¾"	20"	29¼"			40	90	170
0.35 micron	4	8	12	9	13	25	50	100
1 micron	4	8	12	10	15	30	60	120
5 micron	7	14	21	15	25	50	100	150
20 micron	8	16	24	15	25	50	100	150
50 micron	10	20	30	15	25	50	100	150

NOTICE Filter housing selection should also be considered when flow rate per cartridge is determined.

NOTICE Jumbo Cartridges are listed on page #52.

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


PWPL20


PWPL40


PWPL10FF

Standard 2¾" x 9¾" Length

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL10M.35	7100388	Synthetic	0.35	12
PWPL10M1	7100389	Synthetic	1	12
PWPL10M5	7100390	Synthetic	5	12
PWPL10M20	7100391	Synthetic	20	12
PWPL10M50	7100392	Synthetic	50	12

Standard 2¾" x 20" Length

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL20M.35	7100398	Synthetic	0.35	6
PWPL20M1	7100399	Synthetic	1	6
PWPL20M5	7100400	Synthetic	5	6
PWPL20M20	7100401	Synthetic	20	6
PWPL20M50	7100402	Synthetic	50	6

Standard 2¾" x 29¼" Length

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL2925M.35	7100628	Synthetic	0.35	24
PWPL2925M1	7100629	Synthetic	1	24
PWPL2925M5	7100630	Synthetic	5	24
PWPL2925M20	7100631	Synthetic	20	24
PWPL2925M50	7100632	Synthetic	50	24

Standard 2¾" x 40" Length

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL40M1	7100403	Synthetic	1	24
PWPL40M5	7100404	Synthetic	5	24
PWPL40M20	7100405	Synthetic	20	24
PWPL40M50	7100406	Synthetic	50	24

Full Flow (FF) 4½" x 10" Length

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL10FFM.35	7100408	Synthetic	0.35	4
PWPL10FFM1	7100409	Synthetic	1	4
PWPL10FFM5	7100410	Synthetic	5	4
PWPL10FFM20	7100411	Synthetic	20	4
PWPL10FFM50	7100412	Synthetic	50	4

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.

Full Flow (FF) 4½" x 20" Length

MODEL NO.	ORDERING CODE	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL20FFM.35	7100414	Synthetic	0.35	4
PWPL20FFM1	7100415	Synthetic	1	4
PWPL20FFM5	7100416	Synthetic	5	4
PWPL20FFM20	7100417	Synthetic	20	4
PWPL20FFM50	7100418	Synthetic	50	4

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.

For additional information, access online literature ES-WQ-PWPL.

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

Premium Carbon Block

Filter Cartridges

Flow Rates: Up to 4 gpm (15 lpm)

Thick wall carbon construction for superior performance

Top-of-the-line coconut shell Carbon Block filter cartridge for chlorine taste, odor and sediment reduction.

Features

- Superior chlorine reduction
- Low-pressure drop
- Will not channel
- Cost savings
- 100% coconut shell carbon
- FDA grade components and materials
- Solid Block Activated Carbon for long life

Temperature

Operating temperature: 40°F to 165°F (4.4°C to 73.8°C)

* Not performance tested or certified by NSF.

PWCB

PWCFFB

Dimensions

MODEL NO.	ORDERING CODE	TYPE	OD		LENGTH		MICRON RATING	CHLORINE REDUCTION*	NO. / CASE
			in.	*mm*	*in.*	*mm*			
PWCB10P	7100446	Thick Wall	2⅞"	73	9¾"	248	5 nominal	>6,000 Gal @ 1 gpm	12
PWCB20P	7100447	Thick Wall	2⅞"	73	20"	508	5 nominal	>12,000 Gal @ 2 gpm	6
PWCB10FFP	7100448	Thick Wall	4⅝"	117	9¾"	248	5 nominal	>20,000 Gal @ 2 gpm	4
PWCB20FFP	7100449	Thick Wall	4⅝"	117	20"	508	5 nominal	>40,000 Gal @ 4 gpm	4

* Estimated capacity using 2ppm free chlorine with greater than 90% reduction.

For additional information, access online literature ES-WQ-PWCB.

GAC Filter Replacement Cartridges

Granular Activated Carbon (GAC) Cartridges

Sizes: 2¾" x 10", 2¾" x 20", 4½" x 10", and 4½" x 20"

GAC filters are an effective way of removing volatile compounds from drinking water for better tasting water. They are used to remove chlorine, odor and taste from water. Polishing RO water with a Watts GAC cartridge improves its taste.

GAC Filters

Specifications

Media	Water washed coconut shell activated carbon
Minimum / Maximum Working Pressure	20psi / 125psi
Minimum / Maximum Temperature	40°F / 100°F (4°C / 38°C)
Maximum Flow Rate	1 GPM (9¾"), 3 GPM (4.5" x 9¾"), 5 GPM (4.5" x 20")

Water Washed Coconut Shell Granular Activated Carbon Cartridges (GAC)

MODEL NO.	ORDERING CODE	TYPE	O.D.	LENGTH	CAPACITY (GALS.)	NO. / CASE
PWGAC10	7100442	GAC	2¾"	9¾"	2,500	12
PWGAC20	7100443	GAC	2¾"	20"	5,000	6
PWGAC10FF	7100444	GAC	4½"	9¾"	7,500	4
PWGAC20FF	7100445	GAC	4½"	20"	15,000	4

For additional information, access online literature ES-WQ-PWGAC.

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

Notes

Notes

USA

For Technical and Ordering Assistance, please call us at (800) 224-1299.

To locate your nearest Watts representative, please click on our *find a sales rep* locator on Watts.com/PureWater.

CANADA

For Technical and Ordering Assistance, please call us at 1-905-332-4090.

To locate your nearest Watts representative, please click on our *find a sales rep* locator on Watts.ca/PureWater.

Represented by:

USA: Tel: (800) 224-1299 • Watts.com/PureWater
Canada: Tel: (905) 332-4090 • Watts.ca/PureWater
Latin America: Tel: (52) 55-4122-0138 • Watts.com/PureWater