

For Commercial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series CWS200

Commercial Water Softening Systems

Connection Size: 2" (50 mm)

Flow Rates: Up to 119 gpm (450 lpm)

Watts CWS200 water softening systems are highly efficient cation exchange type water softeners. They are suitable for commercial applications ranging from 60,000 to 600,000 grains of hardness removal and flow rates up to 119 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts CWS200 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 CWS200 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

- Third party tested fully automatic metered demand control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable lead free brass bodied control valve for years of service
- Input for remote signal regeneration initiation
- WQA Certified high capacity resin
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- Third party tested to NSF/ANSI Std. 61

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

Mineral Tank- Certified to NSF/ANSI Std. 44 or 61



Series CWS200

Specifications

A Watts CWS200 water softening system shall be installed on the building's main water line just after it enters the building. The installation point shall be after any backflow prevention or pressure regulating valves. Other installation options are to install a system just before the water heater or other types of equipment needing the protection of softened water. In installations where dedicated cold water make up to a water heater is the installation point, a backflow preventer and a thermal expansion tank must be installed as well. The system shall be installed with a bypass valve to allow for the shut down and removal of the unit without interrupting the water supply to the building. The water softener shall be a down flow regenerated, metered demand, sodium cycle cation exchange type system with all components necessary for proper operation. Electrical requirements are 120 volt 60 hertz. A local drain is required to accept drain water from the system. The feed water pressure must not fall below 25psi or exceed 125psi. Water temperature must not fall below 34°F or exceed 110°F (1 - 43°C). The system shall provide softened water measuring less than one grain per gallon of hardness as Calcium Carbonate when operated within the resin manufacturer's operational specifications.

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.

⚠ WARNING

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

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

WATTS®

Feed Water Guidelines

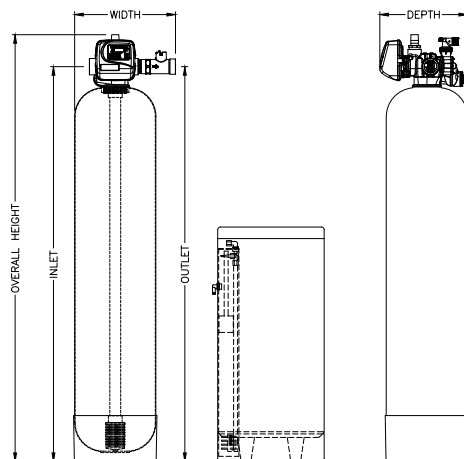
pH	6 to 10
Hardness (maximum)	Depends on customers acceptable hardness leakage level.
Water Pressure	25psi to 125psi (171 kPa to 8.5 bar)
Temperature	34 - 110°F (1 - 43°C)
Free Chlorine (maximum)	1mg/L
Iron (maximum)	1mg/L
Oil and H2S	None Allowed
Turbidity	Less than 5.0 NTU

For all other guideline information please contact your Watts representative.

⚠ WARNING

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

Dimensions - Weight



CWS200 SERIES							
MODEL	TANK	IN	OUT	OVERALL HEIGHT	OVERALL DEPTH	OVERALL WIDTH	BRINE TANK
M4543W	14"X65"	68.3"	68.3"	74.2"	15.2"	17.7"	18"X40"
M4547W	16"X65"	68.0"	68.0"	73.6"	16.2"	18.5"	18"X40"
M4548W	18"X65"	70.5"	70.5"	76.1"	20.1"	20.5"	24"X41"
M4552W	21"X62"	70.4"	70.4"	76.0"	21.1"	21.1"	24"X50"
M4558W	24"X72"	77.5"	77.5"	83.1"	24.1"	24.1"	30"X50"
M4559W	30"X72"	77.5"	77.5"	83.1"	30.1"	30.1"	39"X48"
M4560W	36"X72"	87.3"	87.3"	92.8"	36.1"	36.1"	39"X48"

Specifications

MODEL	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
M4543W	14x65	3	60 lbs.	18x40	400	90 K	60 K	45	18	39/50	15/25	5
M4547W	16x65	4	80 lbs.	18x40	400	120 K	80 K	60	24	47/60	15/25	7
M4548W	18x65	5	100 lbs.	24x41	600	150 K	100 K	75	30	53/69	15/25	10
M4552W	21x62	7	100 lbs.	24x50	600	210 K	140 K	105	42	66/85	15/25	13
M4558W	24x72	10	200 lbs.	30x50	1200	300 K	200 K	150	60	73/94	15/25	15
M4559W	30x72	15	400 lbs.	39x48	2200	450 K	300 K	225	90	84/109	15/25	25
M4560W	36x72	20	500 lbs.	39x48	2200	600 K	400 K	300	120	93/119	15/25	35

NOTICE

Capacities are based on resin manufacturer's data and are dependent upon influent water TDS, temperature, bed depth, and flow rates. Feed water must be free of oil and color. Pipe size, tank size, and space requirements are in inches. Capacities and flow rates expressed above are per tank. Flow rates listed at 25psi drops are for intermittent peak flow rates and are not to be used as continuous flows.

NOTICE

Flow rates listed above are based on pressure drop only. Selecting a system based on pressure drop alone does not guarantee that the system will provide adequately softened water. System selection should be based on resin quantity, capacity required, feed water analysis, and application requirements.

Ordering Information

MODEL	DESCRIPTION	SPACE REQUIRED		WEIGHT	
		LBS	KGS	LBS	KGS
M4543W	A0090FM200WE with turbine meter	24 x 44 x 87	265	120	
M4547W	A0120FM200WE with turbine meter	24 x 46 x 87	350	159	
M4548W	A0150FM200WE with turbine meter	24 x 48 x 89	400	181	
M4552W	A0210FM200WE with turbine meter	24 x 52 x 89	600	272	
M4558W	A0300FM200WE with turbine meter	30 x 60 x 96	710	322	
M4559W	A0450FM200WE with turbine meter	39 x 75 x 106	1160	526	
M4560W	A0600FM200WE with turbine meter	39 x 81 x 107	1560	707	



USA: T: (800) 659-8400 • F: (800) 659-8402 • Watts.com

Canada: T: (905) 332-4090 • F: (905) 332-7068 • Watts.ca

Latin America: T: (52) 81-1001-8600 • F: (52) 81-8000-7091 • Watts.com