

For Commercial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series CWS300H

Commercial Water Softening Systems

Connection Size: 3" (80 mm)

Flow Rates: Up to 251 gpm (950 lpm)

Watts CWS300H 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 251 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts CWS300H 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 CWS300H 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 CWS300H

Specifications

A Watts CWS300H 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

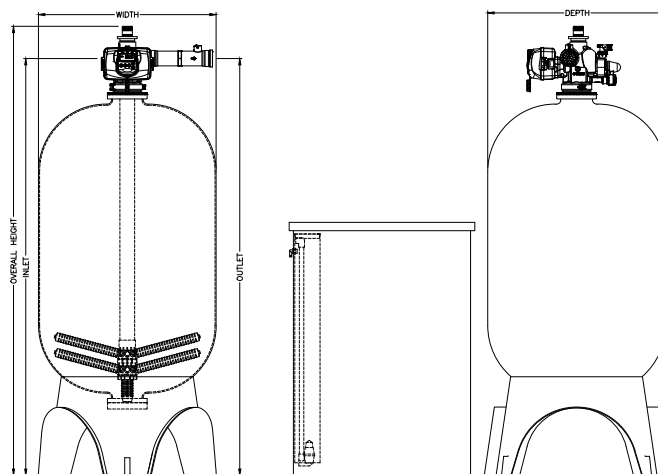
pH	6 to 10
Hardness (maximum)	Depends on customers acceptable hardness leakage level.
Water Pressure	25psi to 125psi (171 kPa to 8.5 bar)
Temperature	34 - 110°F (1 - 43°C)
Free Chlorine (maximum)	1mg/L
Iron (maximum)	1mg/L
Oil and H2S	None Allowed
Turbidity	Less than 5.0 NTU

For all other guideline information please contact your Watts representative.

⚠ WARNING

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Dimensions - Weight



CWS300H SERIES

MODEL	TANK	IN	OUT	OVERALL HEIGHT	OVERALL DEPTH	OVERALL WIDTH	BRINE TANK
M4610WH	24"X72"	85.3"	85.3"	93.0"	24.1"	32.3"	30"X50"
M4612WH	30"X72"	86.8"	86.8"	94.2"	30.1"	35.3"	39"X48"
M4614WH	36"X72"	91.0"	91.0"	98.5"	36.1"	38.3"	39"X48"
M4616WH	42"X72"	99.0"	99.0"	106.5"	44.0"	44.0"	42"X60"
M4618WH	48"X72"	99.8"	99.8"	107.2"	50.3"	50.3"	50"X60"

Specifications

MODEL	TANK SIZE	MINERAL TANK		BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
		RESIN FT³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
M4610WH	24x72	10	200 lbs.	30x50	1400	300 K	200 K	150	60	98/126	15/25	15
M4612WH	30x72	15	400 lbs.	39x48	2200	450 K	300 K	225	90	144/186	15/25	25
M4614WH	36x72	20	500 lbs.	39x60	2700	600 K	400 K	300	120	172/222	15/25	35
M4616WH	42x72	30	700 lbs.	42x60	3100	900 K	600 K	450	180	190/244	15/25	45
M4618WH	48x72	35	900 lbs.	50x60	4500	1050K	700 K	525	210	194/251	15/25	60

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
M4610WH	A0300FM300WH with turbine meter	39 x 69 x 103	1070	486
M4612WH	A0450FM300WH with turbine meter	39 x 75 x 107	1600	727
M4614WH	A0600FM300WH with turbine meter	39 x 81 x 109	2015	916
M4616WH	A0900FM300WH with turbine meter	42 x 90 x 117	3245	1425
M4618WH	A1050FM300WH with turbine meter	50 x 104 x 117	4295	1946



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