

For Commercial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series PWS30 and Series PWS30-2 Commercial Water Softening Systems

Connection Size: 3" (80 mm)

Flow Rates: Up to 280 gpm (1059 lpm)

Watts Pure Water Series PWS30 and PWS30-2 water softening systems are high 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 (1059 lpm). 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 and PWS30-2 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.

Features

- Durable brass bodied control valve for years of service
- WQA Certified 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
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant WQA or NSF Certified fiberglass tanks
- Durable polypropylene lower distribution 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.

PURE WATER



Series PWS30

Series PWS30-2

Standards

Control Valve- WQA Certified to NSF/ANSI Std. 61 and 372
Ion Exchange Resin- WQA Certified to NSF/ANSI Std. 61
Mineral Tank- WQA or NSF Certified to NSF/ANSI Std. 44 or 61

Specifications

A Watts Pure Water Series PWS30/PWS30-2 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.

NOTICE

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°C - 43°C).

The system shall provide softened water measuring less than one grain per gallon of hardness as Calcium Carbonate when operated within the manufacturers operational specifications.



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.

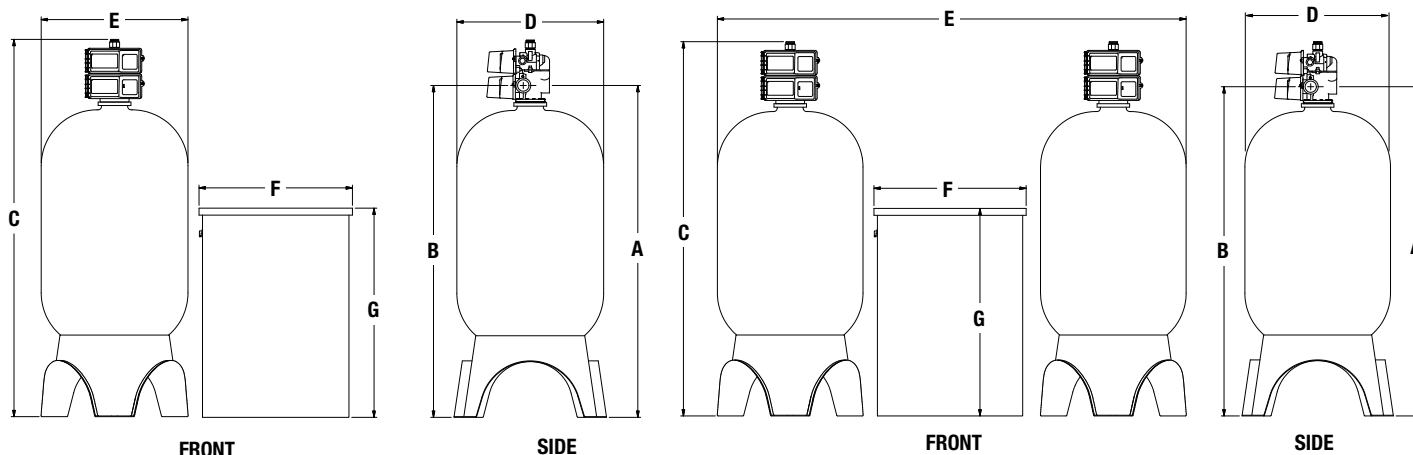
⚠ WARNING

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

Dimensions - Weight

PWS30 Series

PWS30-2 Series



Series PWS30

MODEL NO.	DIMENSIONS												WEIGHTS			
	A		B		C		D		E		F		G		lbs	kgs
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
PWS30151H11	79 ⁷ / ₁₆	2017	79 ⁷ / ₁₆	2017	95 ¹ / ₄	2419	24 ¹ / ₂	622	24 ¹ / ₈	613	30	762	50	1270	1070	486
PWS30151I11	81 ⁷ / ₁₆	2068	81 ⁷ / ₁₆	2068	96 ³ / ₄	2457	30 ¹ / ₈	765	30 ¹ / ₈	765	39	991	48	1219	1600	727
PWS30151J11	87 ¹ / ₄	2216	87 ¹ / ₄	2216	101	2565	36 ¹ / ₈	917	36 ¹ / ₈	917	39	991	60	1524	2015	916
PWS30151K11	95 ¹ / ₄	2419	95 ¹ / ₄	2419	108	2743	44	1118	44	1118	42	1067	60	1524	3245	1475
PWS30151L11	99 ⁵ / ₈	2530	99 ⁵ / ₈	2530	112 ³ / ₈	2854	50 ³ / ₈	1280	50 ³ / ₈	1280	50	1270	60	1524	4295	941

Series PWS30-2

MODEL NO.	DIMENSIONS												WEIGHTS			
	A		B		C		D		E		F		G		lbs	kgs
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
PWS30151H21	79 ⁷ / ₁₆	2017	79 ⁷ / ₁₆	2017	95 ¹ / ₄	2419	24 ¹ / ₂	622	85	2159	30	762	50	1270	2070	941
PWS30151I21	81 ⁷ / ₁₆	2068	81 ⁷ / ₁₆	2068	96 ³ / ₄	2457	30 ¹ / ₈	765	100	2540	39	991	48	1219	3000	1364
PWS30151J21	87 ¹ / ₄	2216	87 ¹ / ₄	2216	101	2565	36 ¹ / ₈	917	111	2819	39	991	60	1524	4015	1325
PWS30151K21	95 ¹ / ₄	2419	95 ¹ / ₄	2419	108	2743	44	1118	126	3200	42	1067	60	1524	6245	2839
PWS30151L21	99 ⁵ / ₈	2530	99 ⁵ / ₈	2530	112 ³ / ₈	2854	50 ³ / ₈	1280	150	3810	50	1270	60	1524	8295	3770

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

Ordering Information

MODEL NO.	DESCRIPTION	SPACE REQUIRED DXWXH		WEIGHT	
		LBS	KGS	LBS	KGS
PWS30151H11	10 Cubic Foot 3" Simplex Softener with Flow Meter	39"	69"	1070	486
PWS30151I11	15 Cubic Foot 3" Simplex Softener with Flow Meter	39"	75"	1600	727
PWS30151J11	20 Cubic Foot 3" Simplex Softener with Flow Meter	39"	81"	2015	916
PWS30151K11	30 Cubic Foot 3" Simplex Softener with Flow Meter	42"	90"	3245	1475
PWS30151L11	35 Cubic Foot 3" Simplex Softener with Flow Meter	50"	104"	4295	941
PWS30151H21	10 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39"	100"	2070	941
PWS30151I21	15 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39"	117"	3000	1364
PWS30151J21	20 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39"	129"	4015	1325
PWS30151K21	30 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	42"	144"	6245	2839
PWS30151L21	35 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	50"	164"	8295	3770

Notes: 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

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.



A Watts Water Technologies Company

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