

PURE WATER

Series PWS20 and PWS20-2 Water Softeners

Watts Pure Water Series PWS20 and PWS20-2 water softeners are suitable for commercial applications ranging from 90,000 to 600,000 grains of hardness removal capacity at flow rates up to 105 gpm (398 lpm). Series PWS20 systems are simplex style while PWS20-2 systems are duplex alternating.



Operation of the Softener

Hard water contains dissolved minerals in the form of Calcium (Ca), Magnesium (Mg), and Iron (Fe). An ion exchange process accomplishes removal of these minerals. As water flows through the mineral tank, the dissolved minerals become attached to the resin. Over a period of time, the resin will become exhausted, and the softener will regenerate using a brine solution.

Softening Media

The exchange media is a high quality strong acid softener (cation) resin, WQA certified NSF/ANSI Standard 61, with high whole bead count, no color throw, and is chlorine resistant. The media combines high operating capacity with excellent chemical and physical stability for a long dependable life.

Regeneration Controller

These softeners feature an electronic controller that combines simplicity with flexibility in a user-friendly package that is easy to setup and operate. Multiple controllers can be networked together, which allows a wide variety of multitank systems to be configured in the field. Important operational information is stored in the timer which can be accessed for trouble shooting purposes.

Control Valve

The 2" brass control valve operates on command from the electronic valve controller. Valve positioning is accomplished by two hydraulically balanced pistons which glide effortlessly along non-corrosive spacers and seals to precise locations. This precision motor driven valve performs in the toughest applications, is WQA certified to NSF/ANSI standards 61 and 372, and is made of high-quality brass for a long reliable life.

Resin Tanks

All models feature corrosion resistant fiberglass tanks with a thermoplastic inner liner. The tanks are certified by WQA or NSF to NSF/ANSI standards.

Brine System

The brine tank is made of tough, high-density polyethylene. Brine tanks 24" in diameter and smaller feature a grid plate for increased brine storage. A high-quality air check prevents air from entering the system.

⚠ WARNING

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

Specifications

MODEL NUMBER	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE (IN.)	RESIN FT ³	GRAVEL	TANK SIZE (IN.)	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS20131D11	14x65	3	60 lbs.	18x40	400	90 K	60 K	45	18	25/40	15/25	5
PWS20131E11	16x65	4	80 lbs.	18x40	400	120 K	80 K	60	24	35/55	15/25	7
PWS20131F11	18x65	5	100 lbs.	24x41	600	150 K	100 K	75	30	57/65	15/25	10
PWS20131G11	21x62	7	100 lbs.	24x50	600	210 K	140 K	105	42	60/77	15/25	12
PWS20131H11	24x72	10	200 lbs.	30x50	1200	300 K	200 K	150	60	74/97	15/25	15
PWS20131I11	30x72	15	400 lbs.	39x48	2200	450 K	300 K	225	90	80/100	15/25	25
PWS20131J11	36x72	20	500 lbs.	39x60	2200	600 K	400 K	300	120	84/105	15/25	35

Ordering Information

MODEL NUMBER	DESCRIPTION	SPACE REQUIRED		WEIGHT	
		D	X W X H	LBS	KGS
PWS20131D11	3 Cubic Foot 2" Simplex Softener with Flow Meter	18	x 39 x 87	265	120
PWS20131E11	4 Cubic Foot 2" Simplex Softener with Flow Meter	18	x 39 x 87	350	159
PWS20131F11	5 Cubic Foot 2" Simplex Softener with Flow Meter	24	x 48 x 89	400	181
PWS20131G11	7 Cubic Foot 2" Simplex Softener with Flow Meter	24	x 52 x 89	600	272
PWS20131H11	10 Cubic Foot 2" Simplex Softener with Flow Meter	30	x 60 x 96	710	322
PWS20131I11	15 Cubic Foot 2" Simplex Softener with Flow Meter	39	x 75 x 102	1160	526
PWS20131J11	20 Cubic Foot 2" Simplex Softener with Flow Meter	39	x 81 x 107	1560	707
PWS20131D21	3 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	18	x 60 x 87	450	204
PWS20131E21	4 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	18	x 64 x 87	500	227
PWS20131F21	5 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	24	x 72 x 89	800	363
PWS20131G21	7 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	24	x 80 x 89	1200	544
PWS20131H21	10 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	30	x 90 x 96	1400	635
PWS20131I21	15 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	39	x 111 x 102	2200	998
PWS20131J21	20 Cubic Foot 2" Duplex Alternating Softener with Flow Meter	39	x 123 x 107	3000	1361

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 25 psi drops are for intermittent peak flow rates and are not to be used as continuous flows.



A Watts Water Technologies Company

USA: Tel: (800) 224-1299 • Fax: (978) 794-1848 • Watts.com/PureWater

Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca/PureWater

Latin America: Tel: (52) 81-1001-8600 • Fax: (52) 81-8000-7091 • Watts.com/PureWater