CR Series Commercial Softeners





Pictured above is Model CR-270-2"

- Packaged water softeners with top mounted control valves
- Flow rates between 4 to 190 gpm continuous
- Capacities per tank of 30,000 to 1,200,000 grains

Applications

Car Washes
Farms
Office Buildings
Restaurants
Boiler Feed Water
R.O. Pretreatment
Factories

Laundries Motels/Hotels Apts/Condos Dairies Hospitals Schools Nursing Homes



Hydraulically balanced piston, seal, and spacers concept to effectively pilot service flow and regeneration.



CR 1" 2750 Series Control



CR 11/2" 2850 Series Control



CR 2" 2900 Series Control



CR 3" 3900 Series Control

System Standard Features

Total System

- The CR series water softener is pre-engineered and packaged to meet most commercial and light industrial applications
- Mineral tanks have a polyethylene inner shell that is externally wound with continuous fiber-glass filament for seamless, corrosion proof construction. These tanks are 1/3 the weight of a comparable size steel tank for ease of installation and handling and carry a 5 year limited warranty.
- Easy to install and service with one connection to inlet, outlet and drain.
- High capacity virgin polystyrene softening resin.
- High flow ABS plastic underdrain allows minimum pressure loss and even distribution of service and regeneration water.
- Mineral and brine tanks carry a 5 year limited warranty. Valve and

- controls carry a 3 year limited warranty.
- Available as twin systems.

Brine System

- Brine Tanks are constructed from FDA approved high density polyethylene which are corrosion resistant, easy to handle and include a dust tight cover.
- Brine tank refill is controlled by time and a pressure compensating flow control that is easily adjustable at the main control. This eliminates the need for hard to set floats in the brine tank and allows the addition of salt at anytime without overflow.
- Large salt storage capacity allows for a minimum of 4 regenerations between salt refills.
- Quick brine makeup without the use of salt platforms.

Valve & Controls

- Top mounted solid brass valve with motor driven piston to control regeneration cycles assures durability and long life.
- Hard water bypass during regeneration.
- 5-cycle control delivers controlled upflow backwash, downflow brining, slow rinse, rapid rinse, timed brine refill, and downflow service.
- Backwash is controlled by a pressure compensating flexible orifice which is self adjusting regardless of water pressure. No field adjustment is required.

- Teflon coated piston is hydraulically balanced allowing for smooth and quiet shifting regardless of water pressure.
- Brine tank refill is a separate cycle that is controlled by time and flow which is accurate and easy to adjust at the control valve.
- Regeneration is controlled by a 7 day calendar clock or a 12 day equal interval clock. Manual initiation is possible with the turn of a dial.

Diamond Water, Inc.

CR Series Specifications

Model Number	Grains Cap. and Salt Dosage Grains/Pounds		Pipe	Service Flow Rate		Resin	Backwast			Salt	Drain
	Maximum	Minimum	Size in.	(1) Cont.		A11 64	Flow Rate	Softener in.	Brine in.	Storage lbs.	Size
CR-30-1	30,000/15	20,000/6	1"	15	20	1	2.0	9x48	18x33	300	3/4"
CR-60-1	00.000/00		1"	18	25	2	3.5	12x52	18x40	400	3/4"
CR-60-11/2	60,000/30	40,000/12	11/2"	27	39						1"
CR-90-1	100000000000000000000000000000000000000	60,000/18	1"	19	26	3	5.0	14x65	24x50	900	3/4"
CR-90-11/2	90,000/45		11/2"	30	43						1"
CR-90-2			2"	39	57						3/4"
CR-120-1			1"	20	27						3/4"
CR-120-11/2	120,000/60	80,000/24	11/2"	33	48	4	7.0	16x65	24x50	900	1"
CR-120-2	1		2"	46	65						3/4"
CR-150-1			1"	22	29		14335			1111111	3/4"
CR-150-11/e	150,000/75	100,000/30	11//*	38	53	5	9.0	18x65	24x50	900	1"
CR-150-2			2"	58	80						3/4"
CR-180-1			1"	21	29						3/4"
CR-180-11/e	180,000/90	120,000/60	11/-"	40	54	6	12.0	21x62	24x50	900	1"
CR-180-2	1		2"	64	88						3/4"
CR-210-1		140,000/42	1"	21	29	7	12.0	21x62	24x50	900	3/4"
CR-210-1%	210,000/105		11/-"	38	52						1"
CR-210-2			2"	64	88						3/4"
CR-240-1			1" 22 30			3/4"					
CR-240-11/r	240,000/120	160,000/48	11/2"	42	55	8	15.0	24x71	24x50	900	1"
CR-240-2	1		2"	75	105						3/4"
CR-270-1			1"	22	30		197			State of the last	3/4"
CR-270-11/2	270,000/135	180,000/54	11/2"	40	55	9	15.0	24x71	24x50	900	1"
CR-270-2			2"	72	101						3/4"
CR-300-1			1"	21	29						3/4"
CR-300-11/2	300,000/150	200,000/60	11/2"	39	54	10	15.0	24x71	30x50	1400	1"
CR-300-2	1		2"	69	97						3/4"
CR-450-1	7/19/18		11/-"	44	57	15	25.0	30x72	39x48	2200	1
CR-450-2	450,000/225	300,000/90	2"	83	105						3/4"
CR-450-3	1		3"	150	205						2"
CR-600-3	600,000/300	400,000/120	3"	172	235	20	35	36x72	39x48	2200	2"
CR-750-3	750,000/375	500,000/150	3"	187	253	25	45	42x72	39x48	2200	2"
CR-900-3	900,000/450	600,000/180	3°	175	245	30	45	42x72	50x60	4500	2"
CR-1200-3	1,200,000/600	800,000/240	3"	190	260	40	60	48x72		4500	2"

(1) At 15 PSI pressure loss. (2) At 25 PSI pressure loss

Available Options

Electrical - 24V/50Hz, 24V/60Hz, 110V/50Hz, 220V/50Hz, 220V/60Hz High Temperature Operation - for service water over 110°F but not exceeding 150°F

Meter Initiation - regeneration is initiated by gallon through put by means of an auto reset water meter. This is available on single and multi-tank systems as immediate or delayed regeneration.

Alternating Controls - to operate the system with one tank on line and the other tank in regeneration or on standby for continuous soft water. This can be initiated by time clock or water meter.

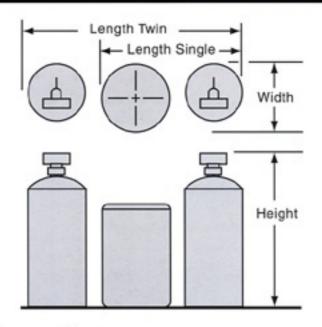
No Hard Water Bypass - eliminates hard water bypass during regeneration.

Auxiliary Cam & Switch - dry contact for signal to or control of auxiliary equipment. Electronic Timer Provides unit status, gallons remaining, flow rate and totalization.

Standard Operating Specifications

Electrical Requirements - 120V, 60H₂ 10 watts Temperature Range - 40' to 110'F

CR Series Softeners



Floor Space Requirements

MODEL NUMBER	LENGTH IN.		WIDTH	HEIGHT	SHIPPING WEIGHT LBS.		
	SINGLE	TWIN	IN.	IN.	SINGLE	TWIN	
CR-30	33	48	20	55	165	316	
CR-60	36	54	20	59	230	385	
CR-90	44	64	26	77	416	705	
CR-120	46	68	26	77	488	850	
CR-150	48	72	26	79	584	1040	
CR-180	51	78	26	75	669	1209	
CR-210	51	78	26	75	722	1315	
CR-240	54	84	26	85	861	1596	
CR-270	54	84	26	85	914	1702	
CR-300	54	84	32	85	1027	1868	
CR-450	66	102	41	96	1831	3167	
CR-600	72	114	41	97	2241	3987	
CR-750	87	135	41	100	2969	5568	
CR-900	98	146	52	100	3427	6291	
CR-1200	104	158	52	104	4163	7763	

Manufactured By:

Distributed By:

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