

Commercial Water Softeners





Water Softeners

Water softeners are available in a variety of sizes and configurations and the final choice of model should take into consideration a number of factors including: *Water hardness, flow rate, daily water consumption, pressure and system design.*

A modern water softener is fully automatic and works by passing hard water through an ion exchange resin. This resin consists of tiny beads that attract and retain the calcium and magnesium ions that cause the scale normally associated with hard water.

Periodically these resin beads are cleaned and regenerated by rinsing with an accurately controlled brine solution. The brine and the accumulated hardness are then flushed to drain automatically.

The whole process is controlled using modern electronics and either a timer or volumetric valve control unit. Timer models can be preset to regenerate at regular intervals regardless of the quantity of water used, normally every two to three days. Whilst volumetric models constantly monitor water usage and only regenerate as necessary.

Softened water provides vital protection for equipment and plant, especially where water is heated to high temperatures. It also allows soaps and detergents to lather more freely and rinse away more easily saving time and money.

Unlike most other forms of water treatment softened water can be stored until required without reverting back to its untreated state.

TYPICAL APPLICATIONS

- Cooling Towers
- Steam generators
- Dishwashers
- Washing machines
- Heat exchangers
- Central heating systems
- Steam boilers
- Hot water heaters
- Steam ovens
- RO Pre-treatment
- Process water

MARKETS

- Hotels
- Offices
- Pharmaceutical industry
- Professional kitchens
- Restaurants
- Bakeries
- Laundries
- Manufacturing
- Water treatment
- Stock breeding
- Oil and Gas

AQAPEARL

Cabinet Series

Water Softener

A concise range of compact cabinet water softeners, available with either timer or volumetric valve control. The 1" valve and reliable electronic control unit make them ideal for light commercial operations.

- 5 Cycle control valve
- Integrated blending valve
- Proportional regeneration
- Digital display
- Electronic valve control unit



MODEL NUMBER	AQAPEARL-05SE	AQAPEARL-10SE	AQAPEARL-20SE	AQAPEARL-30SE
Resin volume in litres	10	16	20	28
Inlet/outlet pipework size	DN 25 / 1"			
Exchange capacity, m ³ @ 300ppm	1.4	2.5	3.4	4.7
Service flow rate m ³ /h	1	2	2.5	2.5
Peak flow rate m ³ /h	2.0	2.0	2.5	2.5
Max / min pressure (bar)	1.5/7			
Salt consumption per regeneration (kg)	1.25	2.0	2.5	3.75
Waste water volume per regeneration (lts)	78	103	123	163
Dimensions H x D x W (mm)	655 x 500 x 385	1110 x 500 x 385	1110 x 500 x 385	1110 x 500 x 405

6000 Series

Water Softener



The 6000 series water softener is an entry-level product for communal applications and is ideal to meet the softened water needs of small kitchens, or to fill low volume closed loop systems. The 6000 range is also widely used in the production of water for intermittent or continuous industrial processes.

- Glass fibre-reinforced polyester body
- Noryl control unit
- AX5 Control Box
- Alarm and information report
- Industrial option: turnkey installation on stainless steel chassis
- Counter current regeneration

MODEL NUMBER	6025	6050	6075
Resin volume in litres	25	50	75
Inlet/outlet pipework size	DN32 / 1 1/4"		
Exchange capacity, m ³ @ 300ppm	4.6	9.1	13.7
Service flow rate m ³ /h	2.4	2.6	3
Peak flow rate m ³ /h	3	3	3
Max / min pressure (bar)	1.5/7		
Salt consumption per regeneration (kg)	2.2-4.5	4.5-9	7.0-13.5
Waste water volume per regeneration (lts)	175	350	560
Resin tank dimensions, inc valve D x H (mm)	210 X 1580	260 X 1830	335 X 1830
Salt tank dimensions D x H (mm)	480 x 860	530 x 780	720 x 800

7000 Series Water Softener



The 7000 series of water softeners is designed to treat water flow rates up to 9.5 m³/h (@ 300mg/l). The range is suitable for the prevention of scaling of sanitary, heating / air conditioning and commercial and industrial installations.

- Glass fibre-reinforced polyester body
- Noryl control unit
- AX5 Control Box
- Rapid dissolution salt tray (to 150 litres)
- Alarm and information report
- Option of "duplex" operating mode, with parallel or alternating assembly
- Industrial option: turnkey installation on stainless steel chassis
- Counter current regeneration

MODEL NUMBER	7050	7075	7125	7150
Resin volume in litres	50	75	125	150
Inlet/outlet pipework size	DN42 (1 1/2")			
Exchange capacity, m ³ @ 300ppm	9.1	13.6	22.8	27.5
Service flow rate m ³ /h	7	7	7	9.5
Peak flow rate m ³ /h	10.5	10.5	10.5	10
Max / min pressure (bar)	1.5 / 7			
Salt consumption per regeneration (kg)	7	9	14	18
Waste water volume per regeneration (lts)	600-750	650-800	900-1110	1000-1300
Resin tank dimensions. inc value D x H (mm)	375 x 1245	375 x 1750	425 x 1790	460 x 1880
Salt tank dimensions D x H (mm)	720 x 800	720 x 800	720 x 800	715 x 1400

BWT Rondomat Duo

- Continuous soft water production
- Advanced control system for effective softening at high flows rates
- Low water and salt consumption for maximum efficiency
- Fitted with exclusive bacterial growth prevention system
- Compact unit with single brine tank for smaller footprint
- BMS reporting

MODEL NUMBER	1	2	3	6	10
Resin volume in litres	2 x 14	2 x 18	2 x 43	2 x 100	2 x 150
Inlet/Outlet pipework size DN/inch	32 (1 1/4")	32 (1 1/4")	32 (1 1/4")	50 (2")	50 (2")
Exchange capacity m ³ @300ppm	1.6	2.1	5.7	15	21.5
Service flow rate m ³ /hr	1.0	2.0	3.0	6.0	10.0
Peak flow rate m ³ /hr	1.9	3.0	4.5	9.0	15.0
max/min pressure (bar)	2.0-8.0				
Salt consumption per regeneration (kg)	1.2	1.44	3.4	8	12.5
Waste water volume per regeneration (lts)	54	75	140	350	440
Resin tank dimensions DxH (mm)	see data sheet	269x870	269x1380	400x1540	552x1550
Salt tank dimensions DxH (mm)	see data sheet	470x630	470x630	650x880	650x880



8000/9000 Series

Composite Water Softener



The 8000/9000 Composite range of softeners guarantee effective treatment against hardness, even at very high flow rates. Specially adapted for humid or corrosive conditions, or any environment that is incompatible with corrodible metals, this range meets the requirements of large communal applications or industrial processes.

- Glass fibre-reinforced polyester body
- Cast Iron control unit
- AX5 Control Box
- Option of "duplex" operating mode, with parallel or alternating assembly

MODEL NUMBER	9175 SC		9225 SC		9300 SC	
Resin volume in litres	175		225		300	
Inlet/outlet pipework size			DN50 (2")			
Exchange capacity, m3 @ 300ppm	32		41		13.7	
Service flow rate m3/h	13		13		3	
Peak flow rate m3/h	19.5		19.5		3	
Max / min pressure (bar)			2/7			
Salt consumption per regeneration (kg)	31.5		40.5		54	
Waste water volume per regeneration (lts)	1200		1750		2100	
Resin tank dimensions. inc value D x H (mm)	460 x 2110		550 x 1965		610 x 2205	

MODEL NUMBER	BWT 8150	BWT 8300	BWT 8400	BWT 8600	BWT 8800	BWT 81250
Resin volume in litres	150	300	400	600	800	1250
Inlet/outlet pipework size	DN65 (2 1/2")					
Exchange capacity, m3 @ 300ppm	27.5	55	73.3	110	146.6	229.1
Service flow rate m3/h	20	22	26	20	20	20
Peak flow rate m3/h	30	33	39	30	30	30
Max / min pressure (bar)	1.5 / 7					
Salt consumption per regeneration (kg)	19-27	38-45	38-45	75-108	100-144	156-225
Waste water volume per regeneration (lts)	1100	2100	2800	4200	6700	10,000
Resin tank dimensions. inc value D x H (mm)	550 x 2210	550 x 1965	770 x 2400	930 x 2430	1075 x 2395	1225 x 2455

Ronduo 1000

Duplex Series Water Softener

The Ronduo 1000 series is a range of value for money fully automatic water softeners capable of delivering softened water at flow rates up to 3.5 m3/h. These water softeners are comprised of two seamless glass fibre reinforced cylinders, linked to a single control valve mounted on the master cylinder. All units have volumetric control and can be supplied with an optional blending valve.

- Glass fibre-reinforced polyester body
- Single control valve
- Fully automatic operation
- Robust construction
- Continuous supply of softened water
- Compact design
- Simple to set up and operate



Please see page 6 for technical specifications

Ronduo 1000

Duplex Series Water Softener

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MODEL NUMBER	1015	1030	1050	1075	1100	1150	1200	1300
Resin volume in litres	15	30	50	75	100	150	200	300
Inlet/outlet pipework size (flange)	DN 20 / 3/4"	DN 20 / 3/4"	DN 20 / 3/4"	DN 25 / 1"	DN 25 / 1"	DN 40 / 1 1/2"	DN 40 / 1 1/2"	DN 40 / 1 1/2"
Exchange capacity, m ³ @ 300ppm	2.5	5	8.3	12.5	16.6	25	33.3	50
Service flow rate m ³ /h	0.8	1.3	2.3	3	3	5.6	6.8	6.8
Peak flow rate m ³ /h	0.9	1.5	2.5	4	4	8.3	8.4	8.4
Max / min pressure (bar)	1.7 / 6							
Salt consumption per regeneration (kg)	2.1	4.2	7	10.5	14	21	28	42
Waste water volume per regeneration (lts)	90	175	219	397	590	818	1703	2301
Resin tank dimensions. D x H (mm)	184 x 1057	257 x 1057	257 x 1550	333 x 1529	369 x 1830	406 x 1875	469 x 1997	610 x 2090
Salt tank dimensions. DIA	550 x 850	550 x 850	680 x 775	685 x 975	860 x 900	1110 x 875	1030 x 1110	1030 x 1110



BWT Rondomat HVD

The Rondomat HVD range of water softeners deliver quality controlled softened water for commercial use. An advanced control system ensures optimum performance and continuous softened water by using the full capacity of each resin vessel before an automatic regeneration is triggered and service flow is switched to the second vessel. They run counter current to ensure a low salt and water consumption and high efficiency. This range should be selected when reliability, safety and economical operation are high on the requirement.

Compared to conventional water softening system the HVD series is characterised by:

- Composite vessels
- Up to 80% lower water consumption
- Up to 60% lower salt consumption
- Up to five times better water quality

MODEL NUMBER	400	600	900	1200	1550
Resin volume in litres	400	600	900	1200	1550
Inlet/Outlet pipework size mm	50	50	50	100	100
Exchange capacity m ³ @300ppm	64	99	148	193	255
Service flow rate m ³ /hr	10.0	18.0	25.0	32.0	41.0
Peak flow rate m ³ /hr	15.0	21.0	30.0	39.0	50.0
max pressure (bar)	10				
Salt consumption per regeneration (kg)	31	48	72	94	124
Waste water volume per regeneration (lts)	550	750	1050	1480	2000
Resin tank dimensions HxWxD (mm)	2520 x 2800 x 1400	2600 x 3000 x 1500	2800 x 3120 x 1600	2750 x 3550 x 1800	2800 x 4000 x 1900
Salt tank dimensions DxH (mm)	1120x1350				

BWT Infinity

RF 3/4"-2"

MANUALLY OPERATED BACKWASH FILTER
FOR COLD WATER WITH WASTE WATER
CONNECTOR IN ACCORDANCE WITH DN 1988



- Flow rate from 3.0 to 11.0m³/h
- Filter effectiveness 90µm
- Backwashing manually operated
- Filter with capability of connecting on the HYDROMODUL system
- For horizontal and vertical installation
- For water temperature from 5 to 30 °C
- Operating pressure min./max. 2.0/16 bar
- Exchange indicator date ring
- HT or hose connector for flushing water

TYPE	3/4"	1"	1" 1/4	1" 1/2	2"
Connector	module	module	module	4 Hole	4 Hole
Nominal connectional width (DN)	20	25	32	40	50
Flow rate at Ap = 0.2/0.5 bar m ³ /h	3.0/6.0	3.5/3.5	40.0/8.5	9.0/15.0	11.0/15.5
Filter effectiveness	90				
Nominal pressure (PN)	16				
Operation pressure min./max. (bar)	2/16				
Water temperature min./max. (°C)	5/30				
Ambient temperature min./max. (°C)	5/40				
DIMENSIONS (mm)					
Total height/total height with crank	500/550				
Height with hose connector/height with HT connector	360/345				
Overall length with fitting	205	205	218	240	240
Minimum distance pipe centre to floor	670				
Hose connector/HT connector, diameter	14/50				
BWT Group Part Number (Filter)	10305	10305	10305	10306	10306
BWT Group Item Number (Coupling)	830012	830014	830020	50961	50962



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BWT 2020 in the interests of product development we reserve the right to alter specifications without prior notice.
All photographs and dimensions are given for guidance only.
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