

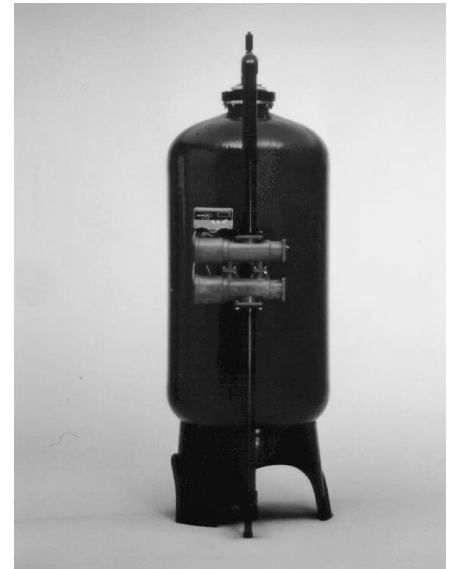
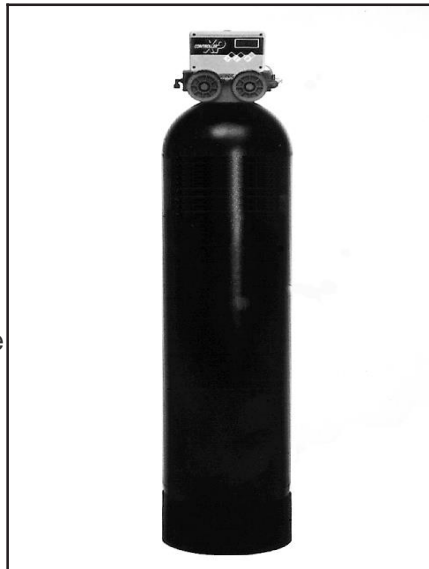
Standard single softening device SEM

Quantity and time controlled

Description

Standard single-softening system consists of:

- ion exchange container made of polyester reinforced with glass fibers
- brine tank with cover made of PE and with plastic floating valves
- vertical pipe and safety valve made of PVC
- central distribution valve on the top of the device
- high capacity ion mass which is situated on the granular surface



The standard version of the system produces softened water between the two regenerations and smaller quantity of hard water in the process of regeneration (reverse rinsing, pulling the brine, slow rinsing), however it does not produce water in the process of quick rinsing. Should the water (soft or hard) be constantly available, a by-pass valve must be installed. Industrial softening device is fully automatic. It is controlled on the base of produced quantity of softened

water and time. In a special case, the control can be designed - based on measurement of hardness breakthrough.

For this purpose we offer a sensor for photometrical measurement of water hardness.

Specified solution is especially suitable for medium and big devices when the quality of entering water is not constant.

Advantages

- Simple installation and very low level of hardness remained in water
- Low consumption of salt per regeneration. In the economical mode, capacities greater than 22.4 m³x °dH/kg NaCl can be achieved 0,05 °dH.

Additional equipment

- Electromagnetic shut-off valve,
- by - pass connection,
- mixing vessel.

Standard single softening device

Model	Unit	SEM 25-25	SEM 25-50	SEM 25-75	SEM 25-100	SEM 32-125	SEM 32-150	SEM 40-200	SEM 40-250	SEM 50-300	SEM 50-400	SEM 50-500
Capacity	°dH x m ³	100	200	300	400	500	600	800	1.000	1.200	1.600	2.000
Minimum flow rate	m ³ /h	0,2	0,3	0,4	0,5	0,6	0,8	1,0	1,3	1,5	2,0	2,5
Maximum long term flow rate	m ³ /h	1,0	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	16,0	20,0
Maximum short term flow rate	m ³ /h	1,2	2,5	3,7	5,0	6,2	7,5	10,0	12,5	15,0	20,0	25,0
Working pressure min./max.	bar	3/6	3/6	3/6	3/6	3/6	3/6	3/6	3/6	3/6	3/6	3/6
Salt consumption/regeneration	kg	5	10	15	20	25	30	40	50	60	80	100
ion exchange resin quantity	l	25	50	75	100	125	150	200	250	300	400	500
Maximum flow rate at regeneration	m ³ /h	1,0	1,5	3,0	3,0	4,0	5,0	8,0	10,0	10,0	10,0	10,0
Connections												
Raw water	DN	25	25	25	25	32	32	40	40	50	50	65
Softened water	DN	25	25	25	25	32	32	40	40	50	50	50
Electric connection												
Voltage/frequency	V/Hz	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50
ion exchange resin tank												
Height	mm	1.224	1.344	1.387	1.641	1.641	1.704	1.699	1.882	1.882	2.040	2.040
Diameter	mm	210	233	330	360	410	460	535	610	610	765	765
Salt tank												
Diameter	mm	530	620	620	760	930	930	930	1.170	1.240	1.240	1.400
Height	mm	645	830	830	815	1.030	1.030	1.030	910	1.015	1.015	1.560
Volume	l	100	100	200	300	500	500	500	800	1.000	1.000	1.600
Installation dimensions												
Height	mm	2.000	2.000	2.000	2.000	2.100	2.100	2.100	2.100	2.300	2.300	2.300
Depth	mm	600	700	700	800	1.000	1.000	1.000	1.200	1.300	1.300	1.600
Width	mm	1.100	1.300	1.300	1.400	1.500	1.600	1.600	1.800	2.000	2.100	2.200
Raw water pressure at maximum flow rate is minimum 3 bars.		At 0 m ³ /h flow rate is static pressure maximum 3 bars				Working temperature 5 -30°C						