

Industrial single softening device IEM

Quantity and time controlled

Description

Industrial single softening device contains from:

- A vessel from PES with glass fibers filled with ion exchange resin
- A vessel for brine with lid from PE and suction lines
- Central distribution valve from brass with control unit.
- High capacity ion exchange resin on granulate base
- Turbine water meter



Industrial softening device produces softened water between two regenerations and smaller amount of hard water during the regeneration (backwashing, brine suction and slow backwashing). Water will not be produced at quick backwashing, In the case that water (softened or hard) need to be available all the time a by-pass valve need to be installed.

Industrial softening device is fully automatic. It is controlled on the base of produced quantity of softened water and time.

In special case controlling could be performed with a sensor based on measurement of actual hardness

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.

Additional equipment

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

Industrial single softening device

Model	Unit	IEM 25-25	IEM 25-50	IEM 25-75	IEM 25-100	IEM 40-125	IEM 40-150	IEM 40-200	IEM 40-250	IEM 50-300	IEM 50-400	IEM 50-500
Flow rate	m ³ /h	1	2	3	4	5	6	8	10	12	16	18
Capacity	°dH×m ³	100	200	300	400	500	600	800	1.000	1.200	1.600	2.000
ion exchange resin/tank	l	25	50	75	100	125	150	200	250	300	400	500
Salt consumption	kg	5	10	15	20	25	30	40	50	60	80	100
Water consumption	m ³	0,25	0,5	0,75	1	1,25	1,5	2	2,5	3	4	5
Connections												
Raw water		R 1"	R 1"	R 1"	R 1"	R 1 ½"	R 1 ½"	R 1 ½"	R 1 ½"	R 2"	R 2"	R 2"
Softened water		R 1"	R 1"	R 1"	R 1"	R 1 ½"	R 1 ½"	R 1 ½"	R 1 ½"	R 2"	R 2"	R 2"
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												
Diameter	mm	210	304	330	360	410	460	535	610	610	765	765
Height	mm	1.224	1.344	1.387	1.641	1.641	1.704	1.699	1.626	1.882	2.040	2.040
Salt tank												
Volume	l	100	200	200	300	300	500	500	800	1.000	1.000	1.600
Diameter	mm	530	620	620	760	760	930	930	910	1.240	1.240	1.440
Height	mm	645	830	830	815	815	1.030	1.030	1.170	1.260	1.260	1.310
Installation dimensions												
Width	mm	1.200	1.200	1.300	1.300	1.500	1.600	1.600	1.800	2.000	2.300	2.400
Depth	mm	600	700	700	800	1.000	1.000	1.000	1.200	1.300	1.300	1.600
Height	mm	2.000	2.000	2.000	2.000	2.100	2.100	2.100	2.100	2.300	2.300	2.300