

IONSOF™ Mini (Berkesoft)

Compact range of softeners

The IONSOF Mini is a compact softener range based on ion Exchange resins technology that can be used for domestic or industrial applications. It is designed with upflow counter-current regeneration to optimize OPEX.

- 3 sizes
- Up to 4 units in parallel
- Production flow rate from 0.3 m³/h to 18.7 m³/h (up to 31.2 m³/h with blending 40% of raw water with 60% of softened water).



FEATURES & BENEFITS

- User-friendly controller with LCD display integrated in the Control valve.
- Regeneration can be triggered manually or automatically.
- Automatic regeneration is based on Volume and time.
- Optimized usage of regeneration salt: upflow counter-current regeneration and proportional regeneration when resins are only partially exhausted.
- Compact designs with integrated brine tanks: space saving and easy installation.
- Up to 4 units running in parallel: continuous production.
- Integrated blending device: can be used when target is not to remove completely hardness.
- Materials in contact with water suitable for drinking water (pending approval with W270 German legislation).



APPLICATIONS

- Drinking water softening
- Glass washing
- Cleaning and rinse water
- Laundry
- Reverse Osmosis feed water pre-treatment (eg. before Sirion)
- Laboratory
- Cooling towers

HYDREX® CHEMICALS

Hydrex™ 7110 water treatment chemicals from Veolia Water Technologies and salt pellets should be used for optimized operation.

RELATED SERVICES

Local after-sales service and support teams offer preventative and corrective maintenance programs to ensure the long-term, efficient operation of installed plant.





System operating parameters and dimensions

Model single vessel	Unit	Mini 35	Mini 15	Mini 5
Min production flowrate	m ³ /h	0.8	0.3	0.3
Max production flowrate	m ³ /h	4.7	2.0	0.7
Max production flowrate with blending*	m ³ /h	7.8	3.3	1.2
Length	m	0.74	0.74	0.61
Width	m	0.37	0.37	0.34
Height	m	1.09	1.09	0.73
Connections	-	R1" BSPT	R1" BSPT	R1" BSPT
Model 2 vessels in parallel	Unit	Mini 2-35	Mini 2-15	
Min production flowrate	m ³ /h	0.8	0.3	
Max production flowrate	m ³ /h	9.4	4.0	
Max production flowrate with blending*	m ³ /h	15.6	6.6	
Length	m	0.85	0.85	
Width	m	1.1	1.06	
Height	m	1.09	1.09	
Connections	-	Rp2" BSPT	Rp1 ¼" BSPT	
Model 3 vessels in parallel	Unit	Mini 3-35	Mini 3-15	
Min production flowrate	m ³ /h	0.8	0.3	
Max production flowrate	m ³ /h	14.0	5.9	
Max production flowrate with blending*	m ³ /h	23.4	9.9	
Length	m	0.85	0.85	
Width	m	1.55	1.52	
Height	m	1.09	1.09	
Connections	-	Rp2" BSPT	Rp1 ½" BSPT	
Model 4 vessels in parallel	Unit	Mini 4-35	Mini 4-15	
Min production flowrate	m ³ /h	0.8	0.3	
Max production flowrate	m ³ /h	18.7	7.9	
Max production flowrate with blending*	m ³ /h	31.2	13.2	
Length	m	0.85	0.85	
Width	m	1.95	2.00	
Height	m	1.09	1.09	
Connections	-	Flange DN65	Rp2" BSPT	
Performance (per vessel) Capacity	kgCaCO ₃	1.75	0.71	0.23
Water consumption per regeneration	L	172	86	49
Salt consumption per regeneration	kg	4.2	1.8	0.6

* Considering blending of 60% of inlet flow that is softened with 40% of inlet flow that is not softened.

Feed Water requirements

Parameter	Unit	Value
Min water temperature	°C	5
Max water temperature	°C	25
Min inlet pressure	bar	2.5
Max inlet pressure	bar	6

Feed water must have a quality equivalent to potable water, colorless, free from organic contamination, chlorine, iron, manganese and suspended solids. Raw water shall not contain hardness stabilizing agents and must not be over-saturated with gas.

Environmental conditions

Parameter	Unit	Value
Min ambient temperature	°C	5
Max ambient temperature	°C	35

Indoor installation in a non-corrosive atmosphere.

Power requirements

Voltage	AC 100-240V
Frequency	50/60 Hz
Phase	1