



Automatic Softener

Hi-Flo 3e

with GBE CONTROLLER

Technical Sheet



M008-63 – Rev. 00 - 01/2014

GENERAL

The Culligan Hi-Flo 3e softeners were born as a response to diverse professionals and semi-industrial needs.

This series includes many models and a wide range of capacities, as well as a range of accessories, which are up to personalize the unit according to the customer's needs.

Hi-Flo 3e softeners are available in the DMV version, which features the auto-disinfection system for the waters intended for potable use.

The vertical cylindrical-shaped container is made of fiberglass reinforced corrosion-resistant material (FRP).

The regeneration can be started according to different criteria: the Culligan expert will help you in choosing the one fitting to your needs.

As default:

- **time-clock control:** an electronic card starts the regeneration at pre-set time intervals.

as option:

- **volume control:** a device (including a flow-meter) starts the regeneration after a pre-set volume of water treated;
- **alternate regeneration:** the volume control principle can be applied to two softeners operating in alternatively, to guarantee a continuous flow of softened water.

The electronic switch board facilitates the utilization of the unit, and allows to obtain important information about unit operation.



SAFETY WARNINGS

- **Equipment for the treatment of potable water, conforming with the requirements of Min. Decree 25/2012.**
- Refer to the technical manual supplied with the system for all information and instructions.
- **The water softener must be installed by qualified personnel, in compliance with Min. Decree 37/08, the best state of the art and in conformity with the instructions given in the technical manual.**
- Any handling, installation, maintenance and repair work on the systems must be carried out by qualified personnel in compliance with Min. Decree 37/08, the best state of the art and in conformity with the instructions given in the technical manual.
- The place where the systems, auxiliary material and consumables are located must comply with the storage, use and safety requirements of the current regulations.
- The water produced by every unit must only be used for its specifically intended purpose. Culligan declines any liability for the consequences of improper use of the water produced by its equipment.
- Any operation fault in the systems must be promptly reported to the Culligan Service Center. Culligan declines any liability for the consequences of prolonged use of a faulty system.
- When necessary, the choice, dosing and handling of chemicals must be done by professionally qualified personnel, complying with the instructions given by Culligan and in the Technical Safety sheets.
- Waste or consumable materials from the water treatment systems must be disposed of in accordance with the current regulations.
- Do not place the device on top of other electrical appliances.
- Position the device away from heat sources.
- In case of an anomaly (water leaks, etc.), disconnect the power supply and close the water inlet shutoff valve.
- Culligan also declines any liability in the following specific cases:
 - improper use of the device;
 - use contrary to the specific national regulations (power and water supplies, installation and maintenance);
 - installation without following the instructions supplied in this manual;
 - power and water supply faults (electrical discharges – voltage rushes – water supply overpressure – low water pressure);
 - unsuitable ambient operating temperature;
 - inadequate maintenance;
 - unauthorized work or modifications;
 - use of non-original replacement parts or not specific for the model;
 - total or partial non-compliance with the instructions;
- For anything not specified, the operator must rely on common sense when using the device.

TECHNICAL SPECIFICATIONS

Hi-Flo 3e GBE CONTROLLER		Model	HB 175	HB 200	HB 300	HB 480	HB 600
Dimensions and space for installation	Width ⁽¹⁾	mm	1350	1350	1570	1850	1990
	Depth	mm	770	770	770	1070	1070
	Total height ⁽²⁾	mm	2290	2515	2770	2770	2770
FRP Resins tank	Height ⁽⁶⁾	mm	1346	1575	1829	1829	1829
	Diametre	mm	533	533	610	762	914
Salt tank	Height	mm	1270	1270	1270	1219	1219
	Diametre	mm	762	762	762	1066	1066
	Capacity	kg	635	635	635	1225	1225
Cullex® Resins	litres	170	198	283	424	595	
Cullsan 2x3 Underbed	kg	32	32	50	125	175	
Freebord	mm	584	711	635	584	500	
In-out fittings dimensions			2"	2"	2"	2"	2"
Drain fitting dimensions			1"	1"	1"	1"	1"
Exchange Capacity ⁽³⁾ Salt dosage	Min.	m ³ x °f / kg -salt	778 / 16	907 / 19	1296 / 27	1944 / 41	2722 / 57
	Average	m ³ x °f / kg -salt	972 / 27	1134 / 32	1620 / 45	2430 / 68	3402 / 95
	Max	m ³ x °f / kg -salt	1164 / 41	1361 / 48	1944 / 68	2916 / 102	4074 / 143
Service flow rates	Peak flow rate ⁽⁴⁾	m ³ /h	17.7	18.3	19.3	22.7	22.7
	Average flow rate ⁽⁵⁾	m ³ /h	13.6	13.1	14.7	16.9	18
BW-fast rinse flow rates	l/min.	45	30	57	95	120	
Shipping weight	kg	252	308	424	644	894	
Operating weight	kg	452	508	704	1084	1494	

⁽¹⁾ For Duplex installation consider 550-mm width in addition

⁽²⁾ Consider 550 mm additional height for filling operations

⁽³⁾ Actual capacity varies according inlet water characteristics: temperature, flow rate, etc

⁽⁴⁾ Flow rate with a pressure loss of 1,5 bar. - not recommended for extended service time

⁽⁵⁾ Flow rate with a pressure loss of 0,5 bar.

* Margin ±3%

Note: - Electric Power : 230/24V--50/60Hz.
 - Operating Temperature : min 1 °C – max 40 °C.
 - Operating Pressure : max 8.5 bar