

Culligan®



ION EXCHANGE WATER SOFTENERS

FOR COMMERCIAL
AND INDUSTRIAL USE



HI-FLO 2 ULTRA LINE

QUALITY SYSTEM CERTIFIED ACCORDING TO UNI EN ISO 9001 NORM

ION EXCHANGE WATER SOFTENERS

FOR COMMERCIAL AND INDUSTRIAL USE

Water softening consists in removing the hardness, caused by Calcium and Magnesium salts and exchange them with Sodium salts, which do not deposit or scale.

To obtain the exchange the water flows through a bed of resin that has been previously charged with Sodium Chloride (table salt).

The Cullex Culligan exchange resin is suitable for contact with food, has high resistance to mechanical shock, long life, high exchange capacity and low consumption of salts. The closely controlled resin bead size minimises the pressure loss.

All Culligan softeners are completely automatic, and the different working phases (services, backwash and regeneration) are controlled by an electro-mechanical or electronic control board, that activates a valve or a group of valves, depending on the model, by means of a pilot valve.

The automatic phases may also be controlled by a metering device (optional) that activates the regeneration phase according to the quantity of water dispensed. In the “Duplex” version a twin softener is automatically connected to service when the first softener exhausts its exchange capacity, allowing it to regenerate and providing a continuous flow of softened water.

The “Extra Recharge” device makes it possible to manually activate the recharge without disturbing the automatic phases of the working cycle.

Each Culligan softener may be equipped on request with an automatic disinfection system.

MAIN APPLICATIONS

- | | |
|---------------------------|-------------------------|
| • cooling systems | • restaurants |
| • textile industry | • bakeries |
| • food industry | • professional cleaners |
| • ceramic industry | • low pressure boilers |
| • pharmaceutical industry | • car washes |
| • professional kitchens | • chicken breeding |
| • hotels | • animal breeding |



HI-FLO 2

This series is designed for professional and semi-industrial use and is realised with the "Triple-Hull TM" system: the tanks are made of steel, protected inside by a non-toxic PVC shield, and outside by a rigid plastic layer. The cycles are controlled by a motorised valve. Hi-Flo 2 softeners are available in tanks measuring 330 and 435 mm in diameter.



ULTRA LINE HA/HB

A softener suitable for industrial use. The tank is made of steel and it is protected internally by a food-grade layer of epoxy resins of controlled thickness and covered externally by a layer of enamel paint. The harness is in **PVC Noryl**, corrosion-proof. Ultra Line HA softeners are available in tanks ranging from 500 to 1200 mm in diameter. For tanks with diameter 950 and 1200 mm, it is available also the HB version, with potentiated harness, in order to have higher service flow rates.



ULTRA LINE HB

A softener suitable for industrial use. The tank is made of steel and it is protected internally by a food-grade layer of epoxy resins of controlled thickness and covered externally by a layer of enamel paint. The cycles are controlled by diaphragm valves, made of epoxy paint **cast-iron**. Ultra Line HB softeners are available in tanks ranging from 1500 to 2500 mm in diameter.



ACCESSORIES

The regeneration can be programmed either on a time-clock or on a volume basis. In volume regeneration a water meter measures the volume of treated water, and an electronic control board starts regeneration once the pre-set volume is reached. Two control boards are available: one for the control of a single softener (PLF 2K Model) and the other for the control of two alternating softeners (PLM 2K Model).

TECHNICAL SPECIFICATIONS

HI-FLO 2 ■ ULTRA LINE

MODEL	PIPE FITTINGS in-out diameter ins	OPERATING PRESSURE max bar	EXCHANGE CAPACITY max* m ³ • °f	SERVICE FLOW RATE max m ³ /h	OVERALL DIMENSIONS			SHIPPING WEIGHT kg
					Resin tank •		Salt tank diameter mm	
					diameter mm	height mm		
HI-FLO 2								
HA 45 PV	1	8.5	291	3	330	1135	620	115
HA 60 PV	1	8.5	389	3	435	1135	620	170
HA 90 PV	1	8.5	583	3	435	1450	620	210
HA 120 PV	1	8.5	778	3	435	1750	620	250
HB 45 PV	1½	8.5	291	9.6	330	1135	620	115
HB 60 PV	1½	8.5	389	10.8	435	1135	620	170
HB 90 PV	1½	8.5	583	10.2	435	1450	620	210
HB 120 PV	1½	8.5	778	9.6	435	1755	620	250
HB 150 PV	1½	8.5	875	9	435	1755	620	250
ULTRA LINE HA								
HA 200	1½	7	1188	18	500	1915	715	395
HA 230	1½	7	1359	18	500	1915	715	425
HA 290	2	7	1698	26	600	1930	850	570
HA 320	2	7	1869	26	600	1930	850	600
HA 430	2	7	2550	30	750	1980	1025	860
HA 510	2	7	3060	30	750	1980	1025	930
HA 770	2	7	4587	34	950	2056	1070	1470
HA 850	2	7	5097	34	950	2056	1070	1550
HA 1200	2	7	7136	34	1200	2172	1580	2240
HA 1400	2	7	8325	34	1200	2172	1580	2420
ULTRA LINE HB								
HB 770	2½	7	4587	50	950	2056	1070	1480
HB 850	2½	7	5097	50	950	2056	1070	1560
HB 1200	2½	7	7136	50	1200	2172	1580	2250
HB 1400	2½	7	8325	50	1200	2172	1580	2430
HB 1700	4	7	10430	114	1500	2620	1580	3355
HB 2100	4	7	11390	114	1500	2620	1580	3644
HB 2500	4	5	16050	114	1800	2660	BRINE MAKER ▲	4500
HB 3000	4	5	18480	114	1800	2660		4790
HB 4500	6	5	28500	227	2100	3030		7300
HB 6600	6	5	42900	227	2500	3100		10485


* The exchange capacity is measured on the treatment of water having 40 °f (400 ppm CaCO₃) total hardness and 500 ppm salinity, oil-free, transparent, without turbidity, and dispensed with the expected capacity for continuous service; it may vary depending on other parameters, such as Chloride content, the hydraulic pressure available, the discontinuous drawing of treated water, the purity and type of regenerant used.

• To calculate the volume tank, it is necessary to consider a diameter lower than about 30 mm.
Models with PVC Noryl harness.

▲ Brine Maker dimensions are indicated on the drawings.

Operating temperature: 2-40 °C.

All models are available in the 24 V / 50-60 Hz or 230 V / 50-60 Hz version; installed power 20 W.

 Designed and manufactured according to CE Directives in force

Culligan reserves the right to change any technical or design specifications for the models shown in this brochure.

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With three manufacturing plants and more than a hundred dealers, agents and representatives all over Europe, Culligan is next door wherever you are. Each and every user enjoys outstanding after-sales service. Culligan is present in every area thanks to its engineers and technicians who are ready to act for you quickly and efficiently. The Culligan organisation is represented worldwide in more than 90 countries. The logistic support it provides enables each licensee and dealer to guarantee exceptional services during and after the warranty period (one year, covering manufacturing faults and corrosion).