

Hellenbrand[®]

Water Softening

H151 Series

SOFT WATER YOU CAN DEPEND ON



H-151 SERIES[™]
WATER CONDITIONING SYSTEM



System for Automatic Discharge Management - U.S. Patent No. 9,862,619
Method of Water Discharge Management - U.S. Patent No. 9,346,689 B2

Brine Reclaim – The H151 standard electronic package is capable of reclaiming up to 30% of the salt used in regeneration for the next regeneration. Salt savings will vary depending on the lbs. of salt per cubic foot of resin used to regenerate. A brine reclaim kit is required for this option.

Water Reclaim – The H151 standard electronic package is capable of reclaiming much of the water used to regenerate the water softener and re-use that water to flush toilets. This water is typically soft and is free of the salt/brine discharge which is diverted to your standard drain/waste system. A water reclaim kit is required for this option.

System Applications

- Agriculture and dairies
- Apartment buildings
- Boiler water treatment
- Car washes
- Commercial buildings
- Condominiums
- Factories and hospitals
- Homes and laundries
- Mobile home parks
- Motels and hotels
- Nursing and rest homes
- Office buildings
- Restaurants and schools

User Friendly and Reliable

- Modular design with non-corrosive internals
- Lead free brass valve
- Piston operated
- One piece stack assembly
- Disassemble and reassemble in minutes

Specifications

DEMAND MODEL NAME	MINERAL CU. FT.	CAPACITY			FLOW RATE @ 15 PSI	PEAK FLOW RATE @ 25 PSI	BACKWASH RATE GPM	MINERAL TANK (INCHES)	BRINE TANK ¹	
		LOW SALT GRAINS/LBS.	MED. SALT GRAINS/LBS.	HIGH SALT GRAINS/LBS.					TANK SIZE (INCHES)	SALT STORAGE (POUNDS)
H151-60	2	38,000/12	56,000/20	64,000/30	35	45	4.2	1354	18x40	330
H151-90	3	57,000/18	84,000/30	96,000/45	35	46	4.2	1465	18x40	300
H151-120	4	76,000/24	112,000/40	128,000/60	40	52	5.3	1665	24x50	800
H151-150	5	95,000/30	140,000/50	160,000/75	44	57	7.5	1865	24x50	800
H151-150-21	5	95,000/30	140,000/50	160,000/75	52	67	9.0	2162	24x50	800
H151-180	6	114,000/36	168,000/60	192,000/90	43	56	7.5	1865	24x50	800
H151-180-21	6	114,000/36	168,000/60	192,000/90	51	65	9.0	2162	24x50	800
H151-210	7	160,482/42	196,000/70	224,000/105	50	64	9.0	2162	24x50	750
H151-240	8	183,408/48	224,000/80	256,000/120	55	71	13.0	2472	24x50	700
H151-300	10	229,260/60	280,000/100	320,000/150	53	68	13.0	2472	24x50	640
H151-300-30	10	229,260/60	280,000/100	320,000/150	60	78	20.0	3072	24x50	640
H151-450	15	343,890/90	420,000/150	480,000/225	58	75	20.0	3072	30x50	1100

¹Suggested brine tank size with grid plate option. Product improvement designs are subject to change without notice. Refer to Hellenbrand Bulletin 2050 "Flow Rates and Soft Water Quality (Hardness Leakage) if your application requires that levels of hardness leakage do not exceed "x".

Features and Benefits

- 15-Volt DC operation
- Electronic meter demand with calendar day override
- Scrolling user screen shows capacity remaining, time of day and flow rate
- 12-Volt DC relay driver allows multiple dry contact signals
- Service interval screen reminds you to call for preventative maintenance service
- Fully programmable cycle position and times
- Nine cycle control with quiet operation
- Soft water brine tank re-fill
- Multiple backwash and rinse capabilities
- Variable reserve automatically adjusts to water usage
- Diagnostics for current & historical data
- Permanent memory backup of all programming
- 2-1/2 years time of day backup
- Uses less than \$2 of electricity per year

System Design Options

- Single
- Twin parallel
- Twin alternating
- Demand recall-up to 6 units
- Salt recycling
- No raw water bypass



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H151 Specifications (Post Fill)

Model			H151-60	H151-90	H151-120	H151-150	H151-150-21	H151-180
Factory Regeneration Settings								
Cycle 1	Backwash	Minutes	10	10	10	10	10	10
		Gallons	42	42	53	75	90	75
Cycle 2	Brine Draw DN	Minutes	60	60	68	68	68	68
		Gallons	45	78	95.2	132.6	132.6	170
Cycle 3	Rinse	Minutes	6	6	6	6	6	6
		Gallons	25	25	32	45	54	45
Cycle 4	Fill	Minutes	13.5	20	6.1	7.6	7.6	9.1
		Gallons	6.75	10	13.42	16.72	16.72	20.02
Cycle 5	Optional	Minutes						
		Gallons						
Cycle 6	Optional	Minutes						
		Gallons						
Total Regen Gallons			118.75	155	193.62	269.32	293.32	310.02

*Calculations are based on factory medium salt setting @ 50 psi

Refill Lbs / Minutes	Lbs. Min.	Lbs. Min.	Lbs. Min.	Lbs. Min.	Lbs. Min.	Lbs. Min.
Efficient salt @ 5 LBS	10/6.7	15/10.0	20/3.1	25/3.8	25/3.8	30/4.6
Low Salt @ 7.5 LBS	15/10.0	22.5/15.0	30/4.6	37.5/5.7	37.5/5.7	45/6.8
Medium Salt @ 10 LBS	20/13.5	30/20.0	40/6.1	50/7.6	50/7.6	60/9.1
High salt @ 15 LBS	30/20.0	45/30.0	60/9.1	75/11.5	75/11.5	90/14.0

Capacity - Efficiency						
Efficient - 4100 grains/lb	41,000	61,500	82,000	102,500	102,500	123,000
Low Salt - 3300 grains/lb	49,500	74,250	99,000	123,750	123,750	148,500
Medium Salt - 2800 grains/lb	56,000	84,000	112,000	140,000	140,000	168,000
High Salt - 2100 grains/lb	63,000	94,500	126,000	157,500	157,500	189,000

Service Flow Rates						
Continuous @ 15 psi loss	35	35	40	44	52	43
Peak @ 25 psi loss	45	46	51	57	67	56

Flint Underbed (Lbs)	30	35	50	60	75	60
High Capacity Resin (Cu. Ft.)	2	3	4	5	5	6
Resin Tank Size	13x54	14x65	16x65	18x65	21x62	18x65
Recommended Brine Tank Size	18X40	18X40	24X50	24X50	24X50	24X50
Min/Max salt setting in Lbs	12/29	22/32	29/69	29/69	29/69	29/69
Grid Height	5"	8"	6"	6"	6"	6"
Salt Storage Capacity lbs	294	265	731	731	731	731
BLFC on Valve	YES	YES	NO	NO	NO	NO
Safety Brine Valve	474	474	474	474	474	474
BLFC Locaton	VALVE	VALVE	BT ELBOW	BT ELBOW	BT ELBOW	BT ELBOW
Brine Line Size	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"
DLFC (gpm)	4.2	4.2	5.3	7.5	9	7.5
BLFC (gpm)	0.5	0.5	2.2	2.2	2.2	2.2
Injector Size	C-RED	D-WHITE	E-BLUE	F-YELLOW	F-YELLOW	G-GREEN
Injector Draw Rate @ 50 psi (gpm)	0.55	0.65	1	1.3	1.3	1.8
Injector Slow Rinse Rate @ 50 psi (gpm)	0.75	1.3	1.4	1.95	1.95	2.5
Factory Meter Setting (for single unit)	2,700	4,050	5,400	6,700	6,700	8,100
Inlet / Outlet connection size	1.5"	1.5"	1.5"	1.5"	1.5"	1.5"
Drain Line - minimum pipe size	3/4"	3/4"	3/4"	3/4"	1"	3/4"
Shipping Weight (includes pallet)	234	301	379	478	539	538
Stock Code Number	107597	107598	107599	107600	108103	107601

- High Salting may require different grid height and/or larger brine tank
- Factory default setting are shown in bold
- Service Flows are with Hub and Lateral distributors and may be lower with a Stack distributor
- Recommended minimum pipes sizes are copper pipe equivalent, when using PEX increase one nominal size
- Demand Recall set points are factory set at 85% of service Flow Rate @ 15 PSI Loss

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12/1/18



H151 Specifications (Post Fill)

Model			H151-180-21	H151-210	H151-240	H151-300	H151-300-30	H151-450
Factory Regeneration Settings								
Cycle 1	Backwash	Minutes	10	10	10	10	10	10
		Gallons	90	90	130	130	200	200
Cycle 2	Brine Draw DN	Minutes	68	68	68	68	72	72
		Gallons	170	170	224.4	224.4	237.6	324
Cycle 3	Rinse	Minutes	6	6	6	6	6	6
		Gallons	54	54	78	78	120	120
Cycle 4	Fill	Minutes	9.1	11	13.5	17	17	25
		Gallons	20.02	24.2	27	34	34	50
Cycle 5	Optional	Minutes						
		Gallons						
Cycle 6	Optional	Minutes						
		Gallons						
Total Regen Gallons			334.02	338.2	459.4	466.4	591.6	694
*Calculations are based on factory medium salt setting @ 50 psi								
Refill Lbs / Minutes			Lbs. Min.	Lbs. Min.	Lbs. Min.	Lbs. Min.	Lbs. Min.	Lbs. Min.
Efficient salt @ 5 LBS			30/4.6	35/5.4	40/6.7	50/8.4	50/8.4	75/12.5
Low Salt @ 7.5 LBS			45/6.8	52.5/8.0	60/10.0	75/12.5	75/12.5	112.5/19.0
Medium Salt @ 10 LBS			60/9.1	70/11.0	80/13.5	100/17.0	100/17.0	150/25.0
High salt @ 15 LBS			90/14.0	105/16.0	120/20.0	150/25.0	150/25.0	225/37.5
Capacity - Efficiency								
Efficient - 4100 grains/lb			123,000	143,500	164,000	205,000	205,000	307,500
Low Salt - 3300 grains/lb			148,500	173,250	198,000	247,500	247,500	371,250
Medium Salt - 2800 grains/lb			168,000	196,000	224,000	280,000	280,000	420,000
High Salt - 2100 grains/lb			189,000	220,500	252,000	315,000	315,000	472,500
Service Flow Rates								
3	Continuous @ 15 psi loss		51	50	55	53	60	58
5	Peak @ 25 psi loss		65	64	71	68	78	75
Flint Underbed (Lbs)								
High Capacity Resin (Cu. Ft.)			75	75	100	100	200	200
Resin Tank Size			21x62	21x62	24x72	24x72	30x72	30x72
Recommended Brine Tank Size			24X50	24X50	24X50	24X50	24X50	30X50
1	Min/Max salt setting in Lbs		29/69	46/81	53/88	77/104	77/104	116/158
Optional Grid Height			6"	9"	11"	15"	15"	15"
Salt Storage Capacity lbs			731	677	630	560	560	889
BLFC on Valve			NO	NO	NO	NO	NO	NO
Safety Brine Valve			474	474	494	494	494	494
BLFC Location			BT ELBOW	BT ELBOW	BT EXTERNAL	BT EXTERNAL	BT EXTERNAL	BT EXTERNAL
Brine Line Size			1/2"	1/2"	1/2"	1/2"	1" Pipe	1" Pipe
DLFC (gpm)			9	9	13	13	20	20
BLFC (gpm)			2.2	2.2	2.0 FLECK	2.0 FLECK	2.0 FLECK	2.0 FLECK
Injector Size			G-GREEN	G-GREEN	H-ORANGE	H-ORANGE	H-ORANGE	I-GREY
Injector Draw Rate @ 50 psi (gpm)			1.8	1.8	2.2	2.2	2.2	3.1
Injector Slow Rinse Rate @ 50 psi (gpm)			2.5	2.5	3.3	3.3	3.3	4.5
Factory Meter Setting (for single unit)			8,100	9,400	10,750	13,500	13,500	20,250
Inlet / Outlet connection size			1.5"	1.5"	1.5"	1.5"	1.5"	1.5"
4	Drain Line minimum pipe size		1"	1"	1"	1"	1.5"	1.5"
Shipping Weight (includes pallet)			590	641	757	859	1062	1348
Stock Code Number			108104	107602	107603	107605	109744	109745

- High Salting may require different grid height and/or larger brine tank
- Factory default setting are shown in bold
- Service Flows are with hub and lateral distributors and may be lower with a stack distributor
- Recommended minimum pipes sizes are copper pipe equivalent, when using PEX increase one nominal size
- Demand Recall set points are factory set at 85% of service flow rate @ 15 psi loss
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COMMERCIAL WATER SOFTENER & FILTER LIMITED WARRANTY

INCLUDES – H125, H125 HE, H151, H151 HE, H200, H200HE, H200M, H300, NF, TS, TN2 & TNT SYSTEMS

Hellenbrand, Inc., (“Hellenbrand”) warrants to the original purchaser that the system and the parts listed below will be free from defects in material and/or workmanship from the date of the original installation for the following time periods:

For a Period of FIVE YEARS: The filter control valve electrical parts including the motor and board, control valve body, and internal parts.

For a Period of FIVE YEARS: SystemMate Controller.

For a Period of TEN YEARS: Mineral tanks, 6” Diameter - 13” Diameter.

For a Period of FIVE YEARS: Mineral tanks, 14” Diameter - Up.

For a Period of FIVE YEARS: The salt storage/cabinet tank.

For a Period of ONE YEAR: The entire water conditioner system (“System”).

Any parts used for replacement are warranted for the remainder of the original warranty period for the applicable part.

THIS WARRANTY IS EFFECTIVE TO THE ORIGINAL PURCHASER ONLY, AND ONLY FOR AS LONG AS THE SYSTEM REMAINS AT THE ORIGINAL INSTALLATION SITE. COVERAGE TERMINATES IF YOU SELL OR OTHERWISE TRANSFER THE SYSTEM OR IF THE SYSTEM IS MOVED FROM THE ORIGINAL INSTALLATION SITE.

No sales representative, distributor, agent, dealer, reseller, authorized seller or any other person or entity is authorized to make any other warranty, or modify or expand the warranty provided herein on behalf of Hellenbrand. Upon expiration of the applicable warranty period, Hellenbrand shall have no further liability related to the System/parts to which the warranty period applies, except with respect to valid warranty claims asserted during the appropriate warranty period.

If the System or any part described above becomes defective within the specified warranty period, you should notify your local authorized seller of Hellenbrand products, and arrange a time during normal business hours for the inspection of the System at the original installation site. You may also contact Hellenbrand and we will provide you with the contact information for your local authorized seller of Hellenbrand products. Hellenbrand, at its option, will repair or replace the System or any part found defective within the terms of this warranty. You are responsible for freight from our factory and any service fees charged by the local authorized seller of Hellenbrand products for installation, repair, removal, replacement, service, etc., of any System or parts. This warranty does not include any labor charges. This paragraph sets forth the exclusive remedy for any valid warranty claims against Hellenbrand.

THIS WARRANTY DOES NOT COVER defects caused by sand, sediment or bacteria fouling, accident, fire, flood, Act of God, misuse, misapplication, neglect, alteration, installation or operation contrary to Hellenbrand’s printed instructions, or installation, repair or service by anyone other than Hellenbrand or an authorized seller of Hellenbrand products.

IN ADDITION, THIS WARRANTY DOES NOT COVER UNPROTECTED OUTDOOR INSTALLATIONS. This System, including all of the electrical components, must be protected against windblown dust, falling and windblown rain, freezing temperatures and the formation of ice, with an appropriate enclosure consisting of a floor, roof, walls, ventilation and heat.

As a manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing this system. You should be aware that the quality of water supplies may vary seasonally or over a period of time, and that your water usage rate may vary as well. Water characteristics may change considerably if this System is moved to a new location. For these reasons, Hellenbrand assumes no liability for the determination of the proper equipment necessary to meet your needs; and Hellenbrand does not authorize others to assume such obligations for Hellenbrand.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, REMEDIES FOR DEFECTS OR FAILURES ARE LIMITED TO THE REMEDIES PROVIDED IN THIS WARRANTY. THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. TO THE EXTENT PERMITTED BY APPLICABLE LAW, HELLENBRAND HEREBY DISCLAIMS ALL OTHER WARRANTIES, WHETHER STATUTORY, EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, NON-INFRINGEMENT, OR ANY WARRANTIES ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING, OR FROM USAGES OF TRADE.

UNDER NO CIRCUMSTANCES SHALL HELLENBRAND BE LIABLE TO THE ORIGINAL PURCHASER OR TO ANY OTHER PERSON FOR ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OR FOR ANY OTHER LOSS, DAMAGE, OR EXPENSE OF ANY KIND, INCLUDING LOSS OF PROFITS, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, IN TORT OR OTHERWISE, AND REGARDLESS OF WHETHER HELLENBRAND WAS AWARE OF THE POSSIBILITY OF SUCH LOSS. THESE LIMITATIONS WILL APPLY REGARDLESS OF ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Similarly, some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Hellenbrand products are not for sale or distribution into the State of California effective 8/31/18.