

# HYDRUS SERIES WATER SOFTENERS

SIMPLEX • DUPLEX • TRIPLEX • MULTIPLEX

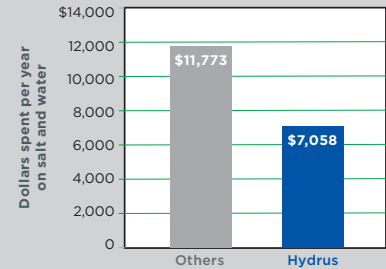
Kinetico's Hydrus Series water softeners are the most advanced, efficient systems which are designed to be environmentally responsible. These systems are completely configurable based on demanding, large volume application requirements, and can be combined with Hydrus Filtration Systems.

## How are the Hydrus Series Water Softeners different?

- **Non-Electric Valve.** Hydraulic operation eliminates the need for motors which maximizes longevity.
- **40% Reduction in Salt Usage.** Proven method of soft water regeneration and countercurrent regeneration guarantees efficiency.
- **30% Reduction in Waste Waters.** Hydrus softeners are environmentally responsible due to reduced waste.
- **Metered Regeneration.** Eliminates guesswork and regenerates based on actual water usage resulting in maximum salt and water efficiency.
- **Single or Multi-Tank System.** Configurable design options: Single Tank system is most economical and space efficient, and Multi-Tank system offers flexibility for demanding commercial applications.
- **Countercurrent Regeneration.** Recognized as the most efficient regeneration method. Conserves water and salt, while eliminating hardness breakthrough.
- **Efficient Hardness Removal.** Assures consistent and continuous clean, soft water. Protects plumbing and appliances.
- **Corrosion-Resistant Valve and Tanks.** Long lasting and can endure even the harshest environments.
- **Advanced Operator Interface.** A single controller operates the entire system, making it easy to set up and understand. It minimizes system cost while maintaining complete operating versatility.



## Typical Cost of Operations\* Softener Systems



\*Based on 30 gpm, 16 hours per day on 20 gpg raw water hardness, multi-tank installation—savings may be greater or less than indicated.



Over 40 Years  
Experience



Non-Electric Valve



40% Reduction in  
Salt Usage



30% Reduction in  
Waste Waters



Metered  
Regeneration



Single or Multi-Tank  
System



Countercurrent  
Regeneration



Efficient Hardness  
Removal



Corrosion-Resistant  
Valve and Tanks



Advanced Operator  
Interface



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	Flow @ 15 psi / 1.03 bar Loss (USgpm / L/s)	Flow @ 30 psi / 2.06 bar Loss (USgpm / L/s)	Backwash Flow Rate Per Tank (USgpm / L/s)	Resin Volume Per Tank (cu.ft / Liters)	Regeneration Volume Per Tank (USgal / Liters)	Regeneration Efficiency (gr CaCO <sub>3</sub> / lb NaCl.)	Regeneration Time Per Tank (min)	By-pass Tanks	Tanks
<b>SIMPLEX</b>									
H118s	45 / 2.84	64 / 4.04	8 / 0.50	5 / 142	391 / 1480	3,333	120	HW	(1) 18 x 65
H121s	55 / 3.47	78 / 4.92	10 / 0.63	6 / 170	441 / 1669	3,333	120	HW	(1) 21 x 62
H124s	65 / 4.10	92 / 5.80	15 / 0.95	8 / 227	563 / 2131	3,333	120	HW	(1) 24 x 65
H130s	72 / 4.54	101 / 6.37	20 / 1.26	12 / 340	853 / 3229	3,333	150	HW	(1) 30 x 72
H136s	78 / 4.92	110 / 6.94	30 / 1.89	18 / 510	1,264 / 4785	3,333	150	HW	(1) 36 x 72
H142s	81 / 5.11	115 / 7.26	40 / 2.52	26 / 736	1,587 / 6007	3,333	150	HW	(1) 42 x 72
<b>DUPLEX</b>									
H218sOD	90 / 5.68	128 / 8.08	8 / 0.50	5 / 142	304 / 1151	>4000	120	None	(2) 18 x 65
H221sOD	110 / 6.94	156 / 9.84	10 / 0.63	6 / 170	347 / 1314	>4000	120	None	(2) 21 x 62
H224sOD	130 / 8.20	184 / 11.61	15 / 0.95	8 / 227	453 / 1715	>4000	120	None	(2) 24 x 65
H230sOD	144 / 9.08	202 / 12.74	20 / 1.26	12 / 340	807 / 3055	>4000	150	None	(2) 30 x 72
H236sOD	156 / 9.84	220 / 13.88	30 / 1.89	18 / 510	1,187 / 4493	>4000	150	None	(2) 36 x 72
H242sOD	162 / 10.22	230 / 14.51	40 / 2.52	26 / 736	1,640 / 6208	>4000	150	None	(2) 42 x 72
<b>TRIPLEX</b>									
H318sOD	135 / 8.52	192 / 12.11	8 / 0.50	5 / 142	304 / 1151	>4000	120	None	(3) 18 x 65
H321sOD	165 / 10.41	234 / 14.76	10 / 0.63	6 / 170	347 / 1314	>4000	120	None	(3) 21 x 62
H324sOD	195 / 12.30	276 / 17.41	15 / 0.95	8 / 227	453 / 1715	>4000	120	None	(3) 24 x 65
H330sOD	216 / 13.63	303 / 19.12	20 / 1.26	12 / 340	807 / 3055	>4000	150	None	(3) 30 x 72
H336sOD	234 / 14.76	330 / 20.82	30 / 1.89	18 / 510	1,187 / 4493	>4000	150	None	(3) 36 x 72
H342sOD	243 / 15.33	345 / 21.77	40 / 2.52	26 / 736	1,640 / 6208	>4000	150	None	(3) 42 x 72

System Type	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	G in / mm
HS X18s	18 / 457	67 / 1702	79 / 2007	4 / 102	40 / 1016	62 / 1575	28 / 711
HS X21s	21 / 533	67 / 1702	79 / 2007	4 / 102	46 / 1168	71 / 1803	31 / 787
HS X24s	24 / 610	67 / 1702	78 / 1981	4 / 102	52 / 1321	80 / 2032	34 / 864
HS X30s	30 / 762	86 / 2184	98 / 2489	4 / 102	64 / 1626	98 / 2489	40 / 1016
HS X36s	36 / 914	86 / 2184	98 / 2489	4 / 102	76 / 1930	116 / 2946	46 / 1168
HS X42s	42 / 1067	98 / 2489	109 / 2769	4 / 102	88 / 2235	134 / 3404	52 / 1321

Brine Tank Size	X in / mm	Y in / mm
24 x 50	24 / 610	50 / 1270
30 x 48	30 / 762	48 / 1219
50 x 60	50 / 1270	60 / 1524
39 x 60	39 / 991	60 / 1524

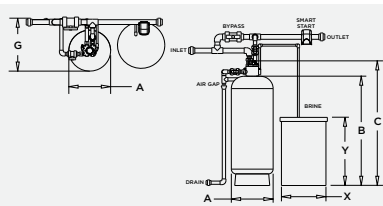
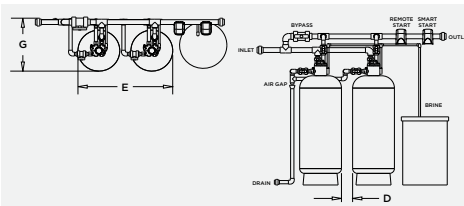
  

Pipe Schedule	Pipe Size (in.)
Inlet	2
Outlet	2
Drain	2
Brine	1/2 tubing

**Note A:** The "X" in the system size description refers to the number of tanks: Simplex = 1, Duplex = 2, Triplex = 3



Hydrus valves are tested and certified by WQA against NSF/ANSI 61 drinking water system components - health effects.

**SIMPLEX**

**DUPLEX**

**TRIPLEX**
