

HYDRUS SERIES WATER SOFTENERS

SIMPLEX • DUPLEX • TRIPLEX • MULTIPLEX

The Importance of Water Softening

Hard water is the result of high levels of calcium and magnesium carbonates, bicarbonates and sulfates in the water. These minerals cause aesthetic concerns as well as potential cost and energy-related issues with equipment across your operations. Water hardness can result in scale build-up on point-of-use applications, pipes and even fixtures, decreasing the overall efficiency and production of your equipment.

Hydrus Series POE Water Softeners

KineticoPRO's Hydrus point-of-entry water softening systems are engineered to efficiently remove hardness. They are completely configurable to accommodate demanding, large water volume requirements. These advanced water softening systems can be combined with our Hydrus water filtration systems.



Equipment Protection

- Non-electric hydraulic valve operation eliminates the need for motors and maximizes longevity.
- Provides a consistent and continuous supply of clean, soft water to protect your plumbing and equipment.
- Incorporates countercurrent regeneration, recognized as the most efficient regeneration method. Conserves water and salt and eliminates hardness breakthrough.
- Engineered with corrosion-resistant valve and tanks to endure even the harshest environments and prolong equipment life.



Operational Efficiency

- Single or Multi-Tank system configurations available. Single-Tank system is most economical and space efficient, and Multi-Tank system offers flexibility for demanding commercial applications.
- Metered regeneration, based on actual water usage, eliminates guesswork and maximizes salt and water efficiency.
- Equipped with an advanced operator interface to help minimize cost and simplify the set-up process while maintaining operating versatility.



Environmentally Friendly

- Up to 30% reduction in waste waters.
- Up to 40% reduction in salt usage due to soft water, countercurrent regeneration.



Hydrus Point-of-Entry Water Softener Systems

Common Market Segments



Grocery/Retail Stores









Also Used for:
Food & Beverage Processing
Facilities, Car Washes,
Laundromats, Agriculture
and Breweries

SPECIFICATIONS

SIMPLEX	Flow @ 15 psi (1.03 bar) Pressure Drop US gpm (L/s)	Flow @ 30 psi (2.06 bar) Pressure Drop US gpm (L/s)	Backwash Flow Rate Per Tank US gpm (L/s)	Resin Volume Per Tank ft³ (L)	Regeneration Volume Per Tank US gal (L)	Regeneration Efficiency (gr CaCO ₃ / lb NaCl)	Regeneration Time Per Tank (min)	By-Pass	Tanks
HS 116s	35 / 2.21*	N/A	8 / 0.50	4 / 113	340 / 1287	3,333	120	HW	(1) 16 x 65
HS 118s	45 / 2.84	64 / 4.04	8 / 0.50	5 / 142	391 / 1480	3,333	120	HW	(1) 18 x 65
HS 121s	55 / 3.47	78 / 4.92	10 / 0.63	6 / 170	441 / 1669	3,333	120	HW	(1) 24 x 65
HS 124s	65 / 4.10	92 / 5.80	15 / 0.95	8 / 227	563 / 2131	3,333	120	HW	(1) 24 x 65
HS 130s	72 / 4.54	101 / 6.37	20 / 1.26	12 / 340	853 / 3229	3,333	150	HW	(1) 30 x 72
HS 136s	78 / 4.92	110 / 6.94	30 / 1.89	18 / 510	1,264 / 4785	3,333	150	HW	(1) 36 x 72
DUPLEX									
HS 216s OD	70 / 4.42*	N/A	8 / 0.50	4 / 113	304 / 1150	>4,000	120	NONE	(2) 16 x 65
HS 218s OD	90 / 5.68	128 / 8.08	8 / 0.50	5 / 142	304 / 1151	>4,000	120	NONE	(2) 18 x 65
HS 221s OD	110 / 6.94	156 / 9.84	10 / 0.63	6 / 170	347 / 1314	>4,000	120	NONE	(2) 21 x 62
HS 224s OD	130 / 8.20	184 / 11.61	15 / 0.95	8 / 227	453 / 1715	>4,000	120	NONE	(2) 24 x 65
HS 230s OD	144 / 9.08	202 / 12.74	20 / 1.26	12 / 340	807 / 3055	>4,000	150	NONE	(2) 30 x 72
HS 236s OD	156 / 9.84	220 / 13.88	30 / 1.89	18 / 510	1,187 / 4493	>4,000	150	NONE	(2) 36 x 72
HS 242s OD	162 / 10.22	230 / 14.51	40 / 2.52	26 / 736	1,640 / 6208	>4,000	150	NONE	(2) 42 x 72
TRIPLEX									
HS 316s OD	105 / 6.62*	N/A	8 / 0.50	4 / 113	304 / 1150	>4,000	120	NONE	(2) 16 x 65
HS 318s OD	135 / 8.52	192 / 12.11	8 / 0.50	5 / 142	304 / 1151	>4,000	120	NONE	(2) 18 x 65
HS 321s OD	165 / 10.41	234 / 14.76	10 / 0.63	6 / 170	347 / 1314	>4,000	120	NONE	(2) 21 x 62
HS 324s OD	195 / 12.30	276 / 17.41	15 / 0.95	8 / 227	453 / 1715	>4,000	120	NONE	(2) 24 x 65
HS 330s OD	216 / 13.63	303 / 19.12	20 / 1.26	12 / 340	807 / 3055	>4,000	150	NONE	(2) 30 x 72
HS 336s OD	234 / 14.76	330 / 20.82	30 / 1.89	18 / 510	1,187 / 4493	>4,000	150	NONE	(2) 36 x 72
HS 342s OD	243 / 15.33	345 / 21.77	40 / 2.52	26 / 736	1,640 / 6208	>4,000	150	NONE	(2) 42 x 72

^{*} Recommended Service Flow Rate

System Type	A in / mm	B in / mm	C in / mm	D in / mm	E in/mm	F in / mm	G in / mm
HS X16s	16 / 406	67 / 1702	79 / 2007	4 / 102	36 / 914	56 / 1422	26 / 660
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	

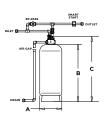
Pipe Schedule	Pipe Size (in)			
Inlet	2			
Outlet	2			
Drain	2			
Brine	1/2 tubing			

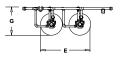
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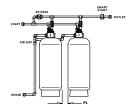
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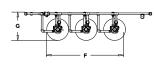
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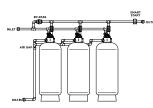
















Hydrus valves are tested and certified by WQA against NSF/ANSI 61 drinking water system

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