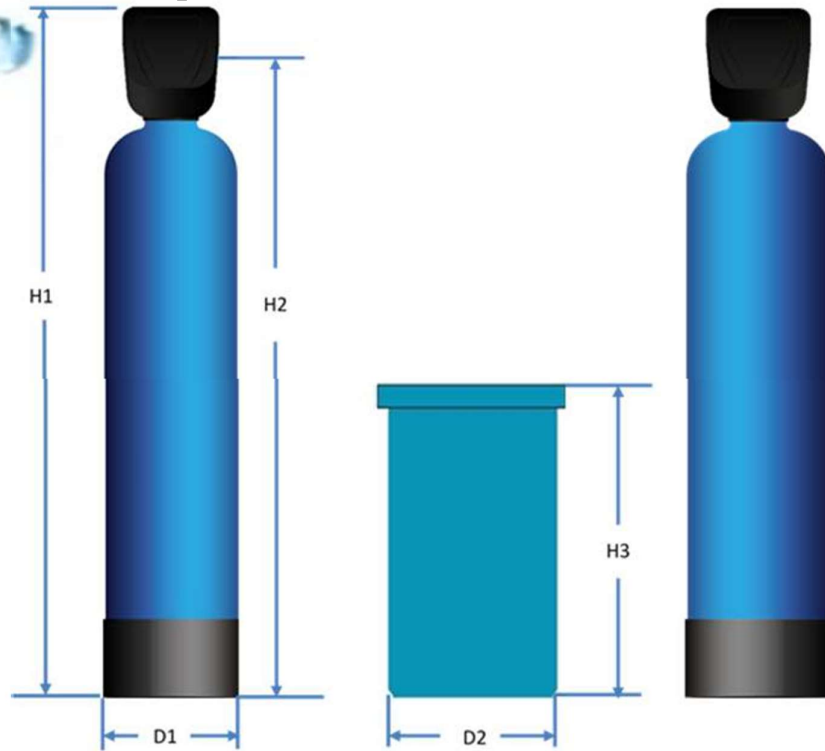


# Duplex Softeners



All measurements in mm.

Footprint

Vessel	Volume	H1*	H2**	H3	D1	D2	Kg	Width	Depth	Height*
817	10L	619	485	450	215	320sq	40	750	320	619
735	14L	1078	944	890	190	320sq	45	700	320	1078
835	20L	1078	944	840	215	320sq	65	750	320	1078
935	25L	1092	958	840	233	320sq	70	786	320	1092
1035	30L	1078	944	840	268	365x430	85	901	430	1078
1044	40L	1305	1171	840	268	365x430	110	901	430	1305
1054	50L	1565	1431	840	267	365x430	125	901	430	1565
1248	60L	1417	1283	830	315	370	155	1000	370	1417
1252	60L	1525	1391	830	315	370	155	1000	370	1525
1354	75L	1571	1437	980	349	760	190	1458	760	1571
1465	100L	1870	1736	920	370	880	270	1620	760	1870
1465	125L	1870	1736	920	370	880	320	1620	760	1870
1465 T&B	125L	2245	2111	920	497	880	332	1874	880	2245
1665	150L	1862	1713	1150	406	880	375	1187	880	1862
1665 T&B	150L	2249	2115	1150	497	880	400	1841	880	2249
1865	200L	1957	1823	1150	510	880	485	1900	880	1957
1865 T&B	200L	2105	1971	1150	539	880	518	1958	880	2105
2160	250L	1842	1708	1080	552	1000	600	2104	1000	1842
2160 T&B	250L	1994	1860	1080	552	1000	635	2104	1000	1994
2469	350L	2092	1958	1080	610	1000	800	2220	1000	2092
2469 T&B	350L	2214	2080	1080	610	1000	843	2220	1000	2214
3072 T&B	500L	2262	2128	1280	770	1080	1109	2620	1080	2262
3672 T&B	700L	2359	2225	1280	927	1080	1484	2934	1080	2359

Weight excludes water.

\* Based on WS1 valve see over for adjustments when other valves used

\*\* Based on WS1 valve see over for adjustments when other valves used

Width, Depth, Height if vessel and brine tank next to each other and touching.

**Measurement adjustments by valve:**

Valve	*	**
255	-4mm	-21mm
268/278	-4mm	-21mm
298	+73mm	-13mm
Clack 1"	Same	Same
Clack 1.25"	Same	Same
Clack 1.5" P	+87mm	+30mm
Clack 1.5"	+4mm	+30mm
Clack 2"	+29mm	+60mm

**General conditions for installation.**

Electrical Rating	Autotrol 230V 50Hz 12V Transformer Clack 230V 50Hz 15V Transformer
Power Rating	Autotrol 3 Watt / Clack 6 Watt
Minimum Pressure	200 kPa (2 Bar)
Maximum Pressure	700 kPa (7 Bar)
Vacuum	Not Permitted
Average Pressure Loss	100 kPa (1 Bar) under normal circumstances
Min – Max Temperature	5-35° C

It is always recommended to install a 25µ cartridge filter before a softener

**Resin**

Type:	Strong acid cation resin – softening, food grade quality
Life Span:	15 Years under normal operating conditions

**General conditions for installation.**

Valve	255	WS1, 268,278	WS1.25	WS1.5P	WS1.5	WS2	298
Connection Inlet / Outlet (standard)	¾" BSPM	1" BSPM	1-1/4" BSPM	1.5" BSPM	1.5" BSPF	2" BSPF	2" BSPM
Drain Connection	¾" BSP or ½" Barbed	¾" BSP or 19mm Barbed	¾" BSP or 19mm Barbed	1" BSPM or 19mm barbed	1.5" BSPF	1.5" BSPF	1.5" BSPM

**Ion exchange** (per vessel for average salt consumption of 150 g/L)

Litres of resin	10	14	20	25	30	40	50	60	75	100	125	150	200	250	350	500	700
Capacity Kg CaCO <sub>3</sub>	.5	.7	1	1.25	1.5	2	2.5	3	3.75	5	6.25	7.5	10	12.5	17.5	25	35
M <sup>3</sup> @ 300 ppm	1.6	2.3	3.3	4.1	5	6.6	8.3	10	12.5	16.6	20.8	25	33.3	41.6	50	83.3	116
Salt used Kg	1.5	2.1	3	3.75	4.5	6	7.5	9	11.25	15	18.75	22.5	30	37.5	52.5	75	105

**Regeneration** (Per vessel based on clack valves)

Litres of resin	10	14	20	25	30	40	50	60	75	100	125	150	200	250	350	500	700
Total time min	65	65	65	65	79	71	81	73	75	97	97	82	95	72	77	92	83

The interval between regenerations should be no more than 14 days to prevent bacterial growth

**Flow rate** (Through the resin bed @ 40 bed volumes)

Litres of resin	10	14	20	25	30	40	50	60	75	100	125	150	200	250	350	500	700
Nominal Flow M <sup>3</sup> /h	.4	.56	.8	1	1.2	1.6	2	2.4	3	4	5	6	8	10	14	20	28
Minimum Flow L/h	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60

**Flow rate** (Maximum flow through valve)

Valve	Maximum service flow m <sup>3</sup> /hr
Autotrol 255	3.52
Autotrol 268/278	5.7
Autotrol 298	17
Clack 1"	6.1
Clack 1.25"	7.7
Clack 1.5" Noryl	13.6
Clack 1.5"	13.6
Clack 2"	26

**Effluent per regeneration (Litres) (based on 60psi and Clack settings).**

Litres of resin	10	14	20	25	30	40	50	60	75	100	125	150	200	250	350	500	700
Total Effluent	143	143	138	201	238	216	224	316	397	472	455	573	814	1734	2316	2617	3093

**This information should be used as a guide only!**

We reserve the right to alter specifications without prior notice. E&OE