

AQUAMATIC® EASY NEST KIT

SIMPLIFYING VALVE NESTS



FEATURES/BENEFITS

No-hassle selection documentation for specifying, engineering and building the valve nest system

Easy nest kits include diaphragm valves, control, pilot tubing, tubing fittings for the valve, injector (for softener system), and suggested application drawings for assembly of the unit

Filter and softener configurations available

Service flow rates: 80-1300 gpm (18-295 m³/h)* per tank

Backwash flow rates: 35-392 gpm (8-89 m³/h) for a softener system*
35-1200 gpm (8-272 m³/h) for a filter system*

All components can be serviced while the valve is in-line

Unique Y-pattern design with large seat opening and high lift disc permits higher flow rates at lower pressure loss than other comparable valves

Larger diaphragm area compared to seat area permits drip-tight closing without any springs

Pre-formed, stress-relieved diaphragm minimizes fatigue, maximizes valve responsiveness and diaphragm lifetime

Diaphragm acts as an actuator, eliminating the need for electric or pneumatic actuators

OPTIONS

Available in either composite or metal valve configurations

Electronic 962 stager control

TYPICAL APPLICATIONS

Tank Sizes Coverage
36"-120" for softeners and filters

* Flow rates shown are valve only, not the completed system

OPERATING SPECIFICATIONS

Valve Body	Cast Iron or Glass-filled Noryl
Diaphragm	Buna N/Polyamide
Injector	PVC
Control Enclosures (Electronic)	NEMA 4X Fiberglass
Operating Pressure	20 to 120 psi (1.38 to 8.27 bar)
Operating Temperature	35° to 120°F (2° to 38°C)
Operating Voltages	115V, 50/60 Hz; 220V, 50/60 Hz

PERFORMANCE RANGE (SINGLE TANK SYSTEMS)

Service Flow Rates	80 to 1300 gpm (18 to 295 m ³ /h) per tank
Backwash Flow Rates (Softeners)	35 to 392 gpm (8 to 89 m ³ /h)
Backwash Flow Rates (Filters)	35 to 1200 gpm (18 to 272 m ³ /h)
System Sizes	36" to 120" diameter tanks

AVAILABLE STANDARD SOFTENER CONFIGURATIONS

MODEL #	PART #	TANK DIAMETER IN. (CM)	RESIN AMOUNT FT. ³ (LITERS)	PIPE SIZE	SERVICE FLOW RATE @ PRESSURE DROP		BACKWASH FLOW RATE @ PRESSURE DROP	
					GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS
CAST IRON VALVESW								
S425-36	1078826	36 (92)	20 (565)	2"	100 @ 6.4	22.7 @ .4	36 @ 2.3	8.1 @ 0.2
S425-42	1078783	42 (106)	30 (850)	2"	150 @ 14.3	34 @ 1.0	48 @ 4.4	10.9 @ 0.3
S426-48	1078784	48 (120)	40 (1130)	2"	180 @ 14.0	40.9 @ 1.0	63 @ 7.5	14.3 @ 0.5
S426-54	1078785	54 (135)	50 (1415)	2.5"	220 @ 13.7	50 @ .0.9	80 @ 12.2	18 @ 0.8
S427-60	1078786	60 (150)	60 (1700)	3"	300 @ 10.0	68 @ 0.7	98 @ 6.3	22.2 @ 0.4
S427-63	1078828	63 (160)	70 (1980)	3"	325 @ 11.6	73.8 @ 0.8	108 @ 7.5	24.5 @ 0.5
S428-72	1078787	72 (180)	85 (2400)	4"	425 @ 4.8	96.6 @ 0.3	140 @ 8.5	31.8 @ 0.6
S428-78	1078788	78 (200)	100 (2830)	4"	500 @ 6.6	113.6 @ 0.5	165 @ 11.8	37.5 @ 0.8
S428-84	1078789	84 (215)	125 (3540)	4"	625 @ 10.0	142 @ 0.7	192 @ 10.5	43.6 @ 0.7
S428-90	1078790	90 (230)	140 (3965)	4"	700 @ 13.0	159 @ 0.9	220 @ 13.8	50 @ 1.0
S429-96	1078791	96 (245)	165 (4670)	6"	825 @ 4.0	187.5 @ 0.3	255 @ 7.6	58 @ 0.5
S429-102	1078792	102 (260)	185 (5240)	6"	925 @ 4.2	210 @ 0.3	285 @ 9.2	64.7 @ 0.6
S429-108	1078793	108 (275)	210 (5945)	6"	1100 @ 6.0	250 @ 0.4	320 @ 11.5	72.7 @ 0.8
S429-114	1078794	114 (290)	235 (6655)	6"	1200 @ 7.0	272 @ 0.5	355 @ 3.5	80.6 @ 0.2
S429-120	1078795	120 (305)	260 (7360)	6"	1300 @ 8.3	295 @ 0.6	390 @ 5.0	88.6 @ 0.3

CONFIGURATIONS

System Configurations

Single Tank Softeners	4 Position
Multi-Tank Softeners	2, 3, and 4 Tank, Parallel; 2 Tank Alternating Softeners
Single Tank Filters	3 Position
Multi-Tank Filters	2, 3, and 4 Tank, Sequential

Control Configurations

Electronic	Demand and Time Clock (Battery Back-up)
Programmable Regeneration Range	0-255 Minutes Regeneration (Each Cycle)
Stager Valves	6, 8 and 16 Ports

Piping Configurations

Valves	Cast Iron	3/4" - 3" Female Thread, NPT, BSP, JIS; 3" - 6" Flanged
	Noryl (Plastic)	1" - 3" Union, Female Solvent Weld; 2" - 3" Female Solvent Weld or
	Flange	
	Injectors	1/2" - 2" Female NPT Thread, Solvent Weld
	Stager Tubing	1/4" Poly Tubing

MODEL #	PART #	TANK DIAMETER IN. (CM)	RESIN AMOUNT FT. ³ (LITERS)	PIPE SIZE	SERVICE FLOW RATE @ PRESSURE DROP		BACKWASH FLOW RATE @ PRESSURE DROP	
					GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS
COMPOSITE VALVES SERIES K52								
S524-36	1078796	36 (92)	20 (565)	1.5"	80 @ 9.0	18.1 @ 0.6	35 @ 11	7.9 @ 0.8
S526-42	1078797	42 (106)	30 (850)	2.5"	150 @ 4.5	34 @ 0.3	48 @ 4.0	10.9 @ 0.3
S526-48	1078798	48 (120)	40 (1130)	2.5"	180 @ 7.0	41 @ 0.5	63 @ 5.6	14.3 @ 0.4
S526-54	1078799	54 (135)	50 (1415)	2.5"	220 @ 10	50 @ 0.7	80 @ 10	18 @ 0.7

MODEL #	PART #	TANK DIAMETER IN. (CM)	PIPE SIZE	SERVICE AND BACKWASH FLOW RATE @ PRESSURE DROP				
				5 GPM/FT ²		10 GPM/FT ²		15 GPM/FT ²
			GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS
COMPOSITE VALVES SERIES K53								
S534-36	1078800	36 (92)	20 (565)	1.5"	100 @ 8.7	22.7 @ .60	35 @ 7.5	7.9 @ 0.5
S535-42	1078801	42 (106)	30 (850)	2"	150 @ 6.4	34 @ .44	48 @ 2.0	10.9 @ 0.1
S535-48	1078802	48 (120)	40 (1130)	2"	180 @ 9.2	41 @ .63	63 @ 4.0	14.3 @ 0.3
S537-54	1078803	54 (135)	50 (1415)	3"	220 @ 2.4	50 @ .16	80 @ 7.0	18 @ 0.5
S537-60	1078829	60 (150)	60 (1700)	3"	300 @ 4.5	68.1 @ .31	98 @ 8.4	22.2 @ 0.6
S537-63	1078804	63 (160)	65 (1840)	3"	325 @ 5.3	73.8 @ .36	110 @ 4.0	25 @ 0.3
S537-72	1078805	72 (182)	90 (2550)	3"	425 @ 9.0	96.6 @ .62	140 @ 7.0	31.8 @ 0.5

AVAILABLE STANDARD FILTER CONFIGURATIONS

MODEL #	PART #	TANK DIAMETER IN. (CM)	PIPE SIZE	SERVICE AND BACKWASH FLOW RATE @ PRESSURE DROP					
				5 GPM/FT ²		10 GPM/FT ²		15 GPM/FT ²	
			GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS	
CAST IRON VALVES									
F425-42	1078806	42 (106)	2"	48 @ 1.5	10.9 @ 0.1	96 @ 5.8	21.8 @ 0.4	145 @ 13.2	33 @ 0.9
F426-48	1078807	48 (120)	2"	62 @ 1.7	14 @ 0.1	125 @ 6.7	28 @ 0.5	190 @ 15	43.2 @ 1.0
F426-54	1078808	54 (135)	2.5"	80 @ 2.8	18.1 @ 0.2	160 @ 7.2	36.2 @ 0.5	240 @ 16	54.5 @ 1.1
F427-60	1078809	60 (150)	3"	97 @ 1.1	22.0 @ 0.1	195 @ 4.3	44 @ 0.3	295 @ 9.5	67 @ 0.6
F428-72	1078810	72 (180)	4"	140 @ 0.5	31.8 @ 0.03	280 @ 2.5	63.6 @ 0.2	425 @ 5.5	96.6 @ 0.4
F428-78	1078811	78 (200)	4"	165 @ 0.7	36.3 @ 0.05	330 @ 3.2	75 @ 0.2	500 @ 7.5	113 @ 0.5
F428-84	1078812	84 (215)	4"	190 @ 1.0	43 @ 0.07	380 @ 4.4	87.5 @ 0.3	580 @ 10.0	132 @ 0.7
F428-96	1078813	96 (245)	4"	250 @ 1.6	56.8 @ 0.1	500 @ 7.4	113.6 @ 0.5	750 @ 16.0	170 @ 1.1
F429-108	1078814	108 (275)	6"	315 @ 0.5	71 @ 0.03	635 @ 2.0	143.6 @ 0.1	960 @ 4.5	218 @ 0.3
F429-120	1078815	120 (305)	6"	390 @ 0.8	88.6 @ 0.06	780 @ 3.0	177 @ 0.2	1180 @ 7.4	268 @ 0.5

MODEL #	PART #	TANK DIAMETER IN. (CM)	PIPE SIZE	SERVICE AND BACKWASH FLOW RATE @ PRESSURE DROP					
				5 GPM/FT ²		10 GPM/FT ²		15 GPM/FT ²	
			GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS	
COMPOSITE VALVES SERIES K52									
F524-36	1078816	36 (90)	2"	35 @ 1.7	8.0 @ 0.1	70 @ 6.8	16 @ 0.5	105 @ 15	23.8 @ 1.0
F526-42	1078817	42 (105)	2.5"	48 @ 0.46	11 @ 0.03	96 @ 2.0	22 @ 0.1	145 @ 4.2	33 @ 0.3
F526-48	1078818	48 (120)	3"	62.5 @ 0.8	14.2 @ 0.06	125 @ 3.2	28.4 @ 0.2	190 @ 7.3	43.2 @ 0.5
F526-54	1078819	54 (135)	3"	80 @ 1.3	18.1 @ 0.1	160 @ 5.2	36.2 @ 0.4	240 @ 11.5	54.5 @ 0.8

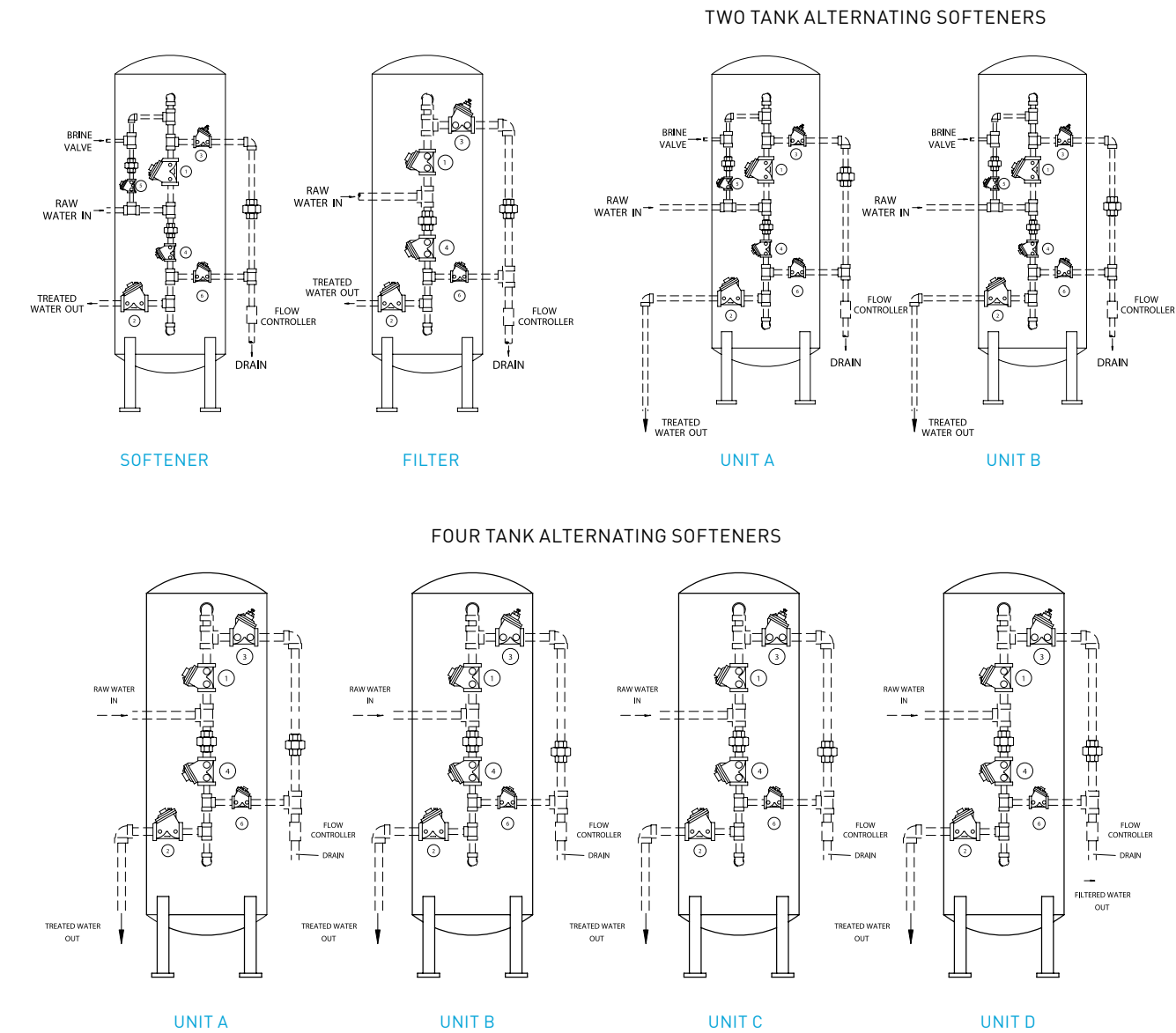
MODEL #	PART #	TANK DIAMETER IN. (CM)	PIPE SIZE	SERVICE AND BACKWASH FLOW RATE @ PRESSURE DROP					
				5 GPM/FT ²		10 GPM/FT ²		15 GPM/FT ²	
			GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS	GPM @ PSI	M ³ /HR @ BARS	
COMPOSITE VALVES SERIES K53									
F534-36	1078820	36 (90)	1.5"	35 @ 1.2	8 @ .08	70 @ 4.3	16 @ 0.3	105 @ 9.6	23.8 @ 0.7
F535-42	1078821	42 (105)	2"	48 @ 0.6	11 @ 0.04	96 @ 2.7	22 @ 0.2	145 @ 6.0	33 @ 0.4
F535-48	1078822	48 (120)	2"	62.5 @ 1.1	14.2 @ 0.08	125 @ 4.5	28.4 @ 0.3	190 @ 10.5	43.2 @ 0.7
F537-54	1078823	54 (135)	3"	80 @ 0.4	18.1 @ 0.03	160 @ 1.6	36.2 @ 0.1	240 @ 3.5	54.5 @ 0.2
F537-60	1078829	60 (150)	3"	98 @ 0.6	22.2 @ 0.04	195 @ 2.2	44.3 @ 0.2	295 @ 5.4	67 @ 0.4
F537-63	1078824	63 (160)	3"	107 @ 0.7	24 @ 0.05	215 @ 2.7	48 @ 0.2	325 @ 7.0	73.8 @ 0.5
SF37-72	1078825	72 (180)	3"	140 @ 1.2	31.8 @ 0.08	280 @ 5.0	63.6 @ 0.3	425 @ 11.4	96.6 @ 0.8

NOTE: Data supplied herein is provided as a guide only. Actual results may vary depending upon actual water conditions and system layout. Flow rates shown are valves only, not completed systems.

ELECTRONIC CONTROLLERS

PART NUMBER	DESCRIPTION
1078837	Single tank, 4 position softener
1078838	Single tank, 3 position filter
1078839	2 tank sequential filter
1078840	3 tank sequential filter
1078841	4 tank sequential filter
1078842	2 tank alternating softener
1078843	2 tank alternating softener w/rinse

STANDARD SYSTEM LAYOUTS



All systems are designed for guideline purposes only. Final authorship of engineering design and application is the responsibility of the assembling OEM. Pentair cannot be responsible for the performance and integrity of the installed system.