

Fleck® Fiberglass Softeners



**Shown with factory SKID & Interconnecting Plumbing*

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Fiberglass Softener Specifications and Design Data

Single Units – FRP Tanks

Model Number	Grains Capacity ⁽²⁾			Recommended Flow Rates				Mineral Tank Size in. ⁽⁴⁾	Pipe Size in.	Resin Qty Cu.Ft.	Max Drain Flow GPM	Brine Tank Capacity Lbs.	Space ⁽⁵⁾ Reqmt LxDxH in.
				Continuous		Peak ⁽³⁾							
	15lb/CF	10lb/CF	5lb/CF	GPM Flow	PSI Drop	GPM Flow	PSI Drop						
S-31A	30,000	25,000	20,000	7	5	12	10	9x48	1	1	2	400	32x18x62
S-61A	60,000	50,000	40,000	16	10	24	20	12x52	1	2	3	400	35x18x60
S-91A	90,000	75,000	60,000	21	15	29	25	14x65	1	3	5	400	36x18x71
S-91B	90,000	75,000	60,000	24	9	36	16	14x65	1½	3	5	400	36x18x71
S-121B	120,000	100,000	80,000	32	12	48	22	16x65	1½	4	7	700	45x24x72
S-151B	150,000	125,000	100,000	40	13	52	25	18x65	1½	5	7	700	46x24x72
S-301B	300,000	250,000	200,000	45	15	58	25	24x72	1½	10	15	1000	52x24x82
S-121C	120,000	100,000	80,000	32	7	48	12	16x65	2	4	7	700	45x24x72
S-151C	150,000	125,000	100,000	40	9	60	16	18x65	2	5	7	700	46x24x72
S-301C	300,000	250,000	200,000	77	15	107	25	24x72	2	10	15	1000	52x24x87
S-451C	450,000	375,000	300,000	87	15	118	25	30x72	2	15	20	1500	65x30x100
S-601C	600,000	500,000	400,000	94	15	125	25	36x72	2	20	30	2500	80x24x100
S-451E	450,000	375,000	300,000	140	15	200	25	30x72	3	15	20	1500	65x32x104
S-601E	600,000	500,000	400,000	160	15	240	25	36x72	3	20	30	2500	80x42x104
S-901E	900,000	750,000	600,000	200	15	270	25	42x72	3	30	40	2500	85x42x112
S-1201E	1,200,000	1,000,000	800,000	210	15	280	25	48x72	3	40	50	4500	104x52x112

NOTES:

- (1) Weight and pressure drop data are estimates.
- (2) Exchange capacity is based upon treating water with 10 gpg total hardness. As CaCO₃ at the service rates specified and free of color, odor and turbidity. Capacity is for both tanks.
- (3) Peak flow rates are not recommended for extended periods of time.
- (4) Dimension refers to nominal vessel size only.
- (5) Not including operating and maintenance areas.

Quantity of Resin and Gravel required per above specifications										
Tank Size	9x48	12x52	14x65	16x65	18x65	24x72	30x72	36x72	42x72	48x72
Resin Qty.	1 ft3	2 ft3	3 ft3	4 ft3	5 ft3	10 ft3	15 ft3	20 ft3	30 ft3	40 ft3
Gravel Qty.	12 lbs	25 lbs	50 lbs	100 lbs	100 lbs	150 lbs	250 lbs	300 lbs	400 lbs	600 lbs

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

Fiberglass Softener Specifications and Design Data (cont'd)

Duplex Parallel Units – FRP Tanks

Model Number	Grains Capacity ⁽²⁾			Recommended Flow Rates				(2) Mineral Tank Size in. ⁽⁴⁾	Pipe Size in.	Resin Qty Cu.Ft.	Max Drain Flow GPM	Brine Tank Capacity Lbs.	Space ⁽⁵⁾ Reqmt LxDxH in.
				Duplex Continuous		Duplex Peak ⁽³⁾							
	15lb/cf	10lb/cf	5lb/cf	GPM Flow	PSI Drop	GPM Flow	PSI Drop						
S-31A	60,000	50,000	40,000	14	5	24	10	9x48	1	2	2	400	46x18x62
S-61A	120,000	100,000	80,000	32	10	48	20	12x52	1	4	3	400	52x18x60
S-91A	180,000	150,000	120,000	42	15	58	25	14x65	1	6	5	400	54x18x71
S-91B	180,000	150,000	120,000	48	9	72	16	14x65	1½	6	5	400	54x18x71
S-121B	240,000	200,000	160,000	64	12	96	22	16x65	1½	8	7	700	67x24x72
S-151B	300,000	250,000	200,000	76	13	104	25	18x65	1½	10	7	700	68x24x72
S-301B	600,000	500,000	400,000	90	15	116	25	24x72	1½	20	15	1000	80x24x82
S-121C	240,000	200,000	160,000	64	7	96	12	16x65	2	8	7	700	67x24x72
S-151C	300,000	250,000	200,000	80	9	120	16	18x65	2	10	7	700	68x24x72
S-301C	600,000	500,000	400,000	154	15	214	25	24x72	2	20	15	1000	80x24x87
S-451C	900,000	750,000	600,000	174	15	236	25	30x72	2	30	20	1500	100x32x100
S-601C	1,200,000	1,000,000	800,000	188	15	250	25	36x72	2	40	30	2500	122x42x100
S-451E	900,000	750,000	600,000	280	15	400	25	30x72	3	30	20	1500	100x32x104
S-601E	1,200,000	1,000,000	800,000	320	15	480	25	36x72	3	40	30	2500	122x42x104
S-901E	1,800,000	1,500,000	1,200,000	400	15	540	25	42x72	3	60	40	2500	133x42x112
S-1201E	2,400,000	2,000,000	1,600,000	420	15	560	25	48x72	3	80	50	4500	158x52x112

NOTES:

- (1) Weight and pressure drop data are estimates.
- (2) Exchange capacity is based upon treating water with 10 gpg total hardness. As CaCO₃ at the service rates specified and free of color, odor and turbidity. Capacity is for both tanks.
- (3) Peak flow rates are not recommended for extended periods of time.
- (4) Dimension refers to nominal vessel size only.
- (5) Not including operating and maintenance areas.

Quantity of Resin and Gravel required per above specifications										
Tank Size	(2)9x48	(2)12x52	(2)14x65	(2)16x65	(2)18x65	(2)24x72	(2)30x72	(2)36x72	(2)42x72	(2)48x72
Resin Qty.	2 ft3	4 ft3	6 ft3	8 ft3	10 ft3	20 ft3	30 ft3	40 ft3	60 ft3	80 ft3
Gravel Qty.	24 lbs	50 lbs	100 lbs	200 lbs	200 lbs	300 lbs	500 lbs	600 lbs	800 lbs	1200 lbs

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VIP-1E Control – Single Demand Softener Fiberglass Tank – SNGL

Features:

- Single tank operation. Hard water bypass during regeneration.
- VIP-1E Electronic Metered or Time Clock feature & UL listed. Solid State single metered demand initiated regeneration including rate of flow, re-settable totalizing meter, & self-diagnostic status monitoring. NEMA enclosed controller; Delayed or immediate regeneration.
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices).
- Standard safety float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks
- 120V/60Hz/1pH transformer included/ twist lock style electrical connections/ 24V control voltage.
- **Optional: VIP-1E “DCS” – Remote monitoring, programming & data reporting capability.**
- **Optional: Alternate Water Source (Regeneration source) and/or Brine reclaim.**



S-301C-SNGL

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-SNGL	11000418	30,000	9"x48"	400	18"x40"	175
1"		S-61A-SNGL	902301	60,000	12"x52"	400	18"x40"	245
1"		S-91A-SNGL	902305	90,000	14"x65"	400	18"x40"	340
1.5"	2850	S-91B-SNGL	902309	90,000	14"x65"	400	18"x40"	350
1.5"		S-121B-SNGL	11000002	120,000	16"x65"	700	24"x41"	485
1.5"		S-151B-SNGL	11000006	150,000	18"x65"	700	24"x41"	565
1.5"		S-301B-SNGL	902337	300,000	24"x72"	1000	24"x50"	920
2"	2900	S-121C-SNGL	11000019	120,000	16"x65"	700	24"x41"	530
2"		S-151C-SNGL	11000022	150,000	18"x65"	700	24"x41"	580
2"		S-301C-SNGL	902359	300,000	24"x72"	1,000	24"x50"	1,000
2"		S-451C-SNGL	902362	450,000	30"x72"	1,500	30"x50"	1,490
2"		S-601C-SNGL	902365	600,000	36"x72"	2,500	39"x48"	1,880
3"	3900	S-451E-SNGL	11000923	450,000	30"x72"	1,500	30"x50"	1,515
3"		S-601E-SNGL	902368	600,000	36"x72"	2,500	39"x48"	1,910
3"		S-901E-SNGL	11000924	900,000	42"x72"	2,500	39"x48"	2,835
3"		S-1201E-SNGL	11000925	1,200,000	48"x72"	4,500	52"x60"	3,670

Note: 1", 1-1/2" and 2" Flow Meters supplied with above products are Plastic. 3" and 4" are insertion type paddle wheel flow meters utilizing copper tees. Other materials are available on special order.

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

VIP-1E Control – Twin Alternating Softener Fiberglass Tank – Alt 1

Features:

- Twin Alternating Operation; No hard water bypass during regeneration.
- VIP-1E Electronic Metered or Time Clock feature & UL listed. Solid State single metered demand initiated regeneration including rate of flow, re-settable totalizing meter, & self-diagnostic status monitoring. NEMA enclosed controller; Delayed or immediate regeneration.
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety-float valve shutoff on 400/700lb brine tanks; Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks.
- 120V/60Hz/1pH transformer included/ twist lock style electrical connections/ 24V control voltage.
- **Optional: VIP-1E “DCS” – Remote monitoring, programming & data reporting capability.**
- **Optional: Alternate Water Source (Regeneration source) and/or Brine reclaim.**



S-61A-Alt1

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	9000	S-31A-ALT1	11000513	30,000	9"x48"	400	18"x40"	350
1"		S-61A-ALT1	902302	60,000	12"x52"	400	18"x40"	465
1"		S-91A-ALT1	902306	90,000	14"x65"	400	18"x40"	655
1.5"	9500	S-91B-ALT1	902310	90,000	14"x65"	400	18"x40"	675
1.5"		S-121B-ALT1	11000003	120,000	16"x65"	700	24"x41"	945
1.5"		S-151B-ALT1	11000007	150,000	18"x65"	700	24"x41"	1105
1.5"		S-301B-ALT1	902338	300,000	24"x72"	1,000	24"x50"	2245

Note: 1", 1-1/2" and 2" Flow Meters supplied with above products are Plastic. 3" and 4" are insertion type paddle wheel flow meters utilizing copper tees. Other materials are available on special order.

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

VIP-1E Control – Duplex Alternating Softener Fiberglass Tank – Alt 2

Features:

- Duplex Alternating Operation; No hard water bypass during regeneration.
- VIP-1E Electronic Metered or Time Clock feature & UL listed. Solid State single metered demand initiated regeneration including rate of flow, re-settable totalizing meter, & self-diagnostic status monitoring. NEMA enclosed controller; Delayed or immediate regeneration.
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety-float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks
- 120V/60Hz/1pH transformer included/ twist lock style electrical connections/ 24V control voltage.
- **Optional: VIP-1E “DCS” – Remote monitoring, programming & data reporting capability.**
- **Optional: Alternate Water Source (Regeneration source) and/or Brine reclaim.**



S-301C-Alt2

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-ALT2	11000419	30,000	9"x48"	400	18"x40"	350
1"		S-61A-ALT2	902303	60,000	12"x52"	400	18"x40"	490
1"		S-91A-ALT2	902307	90,000	14"x65"	400	18"x40"	680
1.5"	2850	S-91B-ALT2	902311	90,000	14"x65"	400	18"x40"	700
1.5"		S-121B-ALT2	11000004	120,000	16"x65"	700	24"x41"	970
1.5"		S-151B-ALT2	11000008	150,000	18"x65"	700	24"x41"	1,130
1.5"		S-301B-ALT2	902339	300,000	24"x72"	1,000	24"x50"	2,270
2"	2900	S-121C-ALT2	11000020	120,000	16"x65"	700	24"x41"	1,060
2"		S-151C-ALT2	11000023	150,000	18"x65"	700	24"x41"	1,160
2"		S-301C-ALT2	902360	300,000	24"x72"	1,000	24"x50"	2,000
2"		S-451C-ALT2	902363	450,000	30"x72"	1,500	30"x50"	2,980
2"		S-601C-ALT2	902366	600,000	36"x72"	2,500	39"x48"	3,760
3"	3900	S-451E-ALT2	11000926	450,000	30"x72"	1,500	30"x50"	3,030
3"		S-601E-ALT2	902369	600,000	36"x72"	2,500	39"x48"	3,880
3"		S-901E-ALT2	11000927	900,000	42"x72"	2,500	39"x48"	5,670
3"		S-1201E-ALT2	11000928	1,200,000	48"x72"	4,500	52"x60"	7,340

Note: 1", 1-1/2" and 2" Flow Meters supplied with above products are Plastic. 3" and 4" are insertion type paddle wheel flow meters utilizing copper tees. Other materials are available on special order.

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

VIP-1E Control – Duplex Parallel Softener Fiberglass Tank – PAR2

Features:

- Duplex Parallel Operation; No hard water bypass during regeneration.
- VIP-1E Electronic Metered or Time Clock feature & UL listed. Solid State single metered demand initiated regeneration including rate of flow, re-settable totalizing meter, & self-diagnostic status monitoring. NEMA enclosed controller; Delayed or immediate regeneration.
- **Par 2 –Systems utilize one pipe size larger flow meter!**
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety-float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks
- 120V/60Hz/1pH transformer included/ twist lock style electrical connections/ 24V control voltage.
- **Optional: VIP-1E “DCS” – Remote monitoring, programming & data reporting capability.**
- **Optional: Alternate Water Source (Regeneration source) and/or Brine reclaim.**



S-301C-PAR2

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-PAR2	11000420	30,000	9"x48"	400	18"x40"	350
1"		S-61A-PAR2	902304	60,000	12"x52"	400	18"x40"	490
1"		S-91A-PAR2	902308	90,000	14"x65"	400	18"x40"	680
1.5"	2850	S-91B-PAR2	902312	90,000	14"x65"	400	18"x40"	700
1.5"		S-121B-PAR2	11000005	120,000	16"x65"	700	24"x41"	970
1.5"		S-151B-PAR2	11000009	150,000	18"x65"	700	24"x41"	1,130
1.5"		S-301B-PAR2	902340	300,000	24"x72"	1,000	24"x50"	2,270
2"	2900	S-121C-PAR2	11000021	120,000	16"x65"	700	24"x41"	1,060
2"		S-151C-PAR2	11000024	150,000	18"x65"	700	24"x41"	1,160
2"		S-301C-PAR2	902361	300,000	24"x72"	1,000	24"x50"	2,000
2"		S-451C-PAR2	902364	450,000	30"x72"	1,500	30"x50"	2,980
2"		S-601C-PAR2	902367	600,000	36"x72"	2,500	39"x48"	3,760
3"	3900	S-451E-PAR2	11000929	450,000	30"x72"	1,500	30"x50"	3,030
3"		S-601E-PAR2	902370	600,000	36"x72"	2,500	39"x48"	3,880
3"		S-901E-PAR2	11000930	400,000	42"x72"	2,500	39"x48"	5,670
3"		S-1201E-PAR2	11000931	1,200,000	48"x72"	4,500	52"x60"	7,340

Note: 1", 1-1/2" and 2" Flow Meters supplied with above products are Plastic. 3" and 4" are insertion type paddle wheel flow meters utilizing copper tees. Other materials are available on special order.

Note: Duplex Parallel Systems have next size larger flow meter to handle double the flowrate. If not required, order Duplex Alternating system on previous page and program for Parallel Mode.

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

VIP-2/3E Control – Duplex Softener Fiberglass Tank – Alternating or Parallel

Features:

- Twin Alternating or Parallel Operation; No hard water bypass during regeneration.
- VIP-II-E Electronic Metered or Time Clock feature & UL listed. Solid State multiple metered demand initiated regeneration including rate of flow, re-settable totalizing meter, & self-diagnostic status monitoring. NEMA enclosed controller; Delayed or immediate regeneration.
- VIP-II-E - Systems utilize individual tank flow meters, allowing expansion up to four future tanks.
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety-float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks
- 120V/60Hz/1pH transformer included/ twist lock style electrical connections/ 24V control voltage.
- **Optional: VIP-II-E “DCS” – Remote monitoring, programming & data reporting capability.**
- **Optional: Alternate Water Source (Regeneration source) and/or Brine reclaim.**



S-301C-VIPII-D

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-VIP II-D	11000586	30,000	9"x48"	400	18"x40"	350
1"		S-61A-VIP II-D	11000280	60,000	12"x52"	400	18"x40"	490
1"		S-91A-VIP II-D	11000281	90,000	14"x65"	400	18"x40"	680
1.5"	2850	S-91B-VIP II-D	11000282	90,000	14"x65"	400	18"x40"	700
1.5"		S-121B-VIP II-D	11000283	120,000	16"x65"	700	24"x41"	970
1.5"		S-151B-VIP II-D	11000284	150,000	18"x65"	700	24"x41"	1,130
1.5"		S-301B-VIP II-D	11000289	300,000	24"x72"	1,000	24"x50"	2,270
2"	2900	S-121C-VIP II-D	11000290	120,000	16"x65"	700	24"x41"	1,060
2"		S-151C-VIP II-D	11000291	150,000	18"x65"	700	24"x41"	1,160
2"		S-301C-VIP II-D	11000296	300,000	24"x72"	1,000	24"x50"	2,000
2"		S-451C-VIP II-D	11000297	450,000	30"x72"	1,500	30"x50"	2,980
2"		S-601C-VIP II-D	11000298	600,000	36"x72"	2,500	39"x48"	3,760
3"	3900	S-451E-VIP II-D	11000995	450,000	30"x72"	1,500	30"x50"	3,030
3"		S-601E-VIP II-D	11000299	600,000	36"x72"	2,500	39"x48"	3,880
3"		S-901E-VIP II-D	11000996	900,000	42"x72"	2,500	39"x48"	5,260
3"		S-1201E-VIP II-D	11000997	1,200,000	48"x72"	4,500	52"x60"	6,870

Note: 1", 1-1/2" and 2" Flow Meters supplied with above products are Plastic. 3" and 4" are insertion type paddle wheel flow meters utilizing copper tees. Other materials are available on special order.

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VIP-2/3E Control – Triplex Softener Fiberglass Tank – Alternating or Parallel

Features:

- Triplex Alternating or Parallel Operation. No hard water bypass during regeneration.
- VIP-II-E Electronic Metered or Time Clock feature & UL listed. Solid State multiple metered demand initiated regeneration including rate of flow, re-settable totalizing meter, & self-diagnostic status monitoring. NEMA enclosed controller.
- VIP-II-E - Systems utilize individual tank flow meters, allowing expansion up to four future tanks.
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks
- 120V/60Hz/1pH transformer included/ twist lock style electrical connections/ 24V control voltage.
- **Optional: VIP-II-E “DCS” – Remote monitoring, programming & data reporting capability.**
- **Optional: Alternate Water Source (Regeneration source) and/or Brine reclaim.**



Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-VIP II-T	11000587	30,000	9"x48"	400	18"x40"	575
1"		S-61A-VIP II-T	11000300	60,000	12"x52"	400	18"x40"	735
1"		S-91A-VIP II-T	11000301	90,000	14"x65"	400	18"x40"	1,020
1.5"	2850	S-91B-VIP II-T	11000302	90,000	14"x65"	400	18"x40"	1,050
1.5"		S-121B-VIP II-T	11000303	120,000	16"x65"	700	24"x41"	1,455
1.5"		S-151B-VIP II-T	11000304	150,000	18"x65"	700	24"x41"	1,695
1.5"		S-301B-VIP II-T	11000309	300,000	24"x72"	1,000	24"x50"	3,405
2"	2900	S-121C-VIP II-T	11000310	120,000	16"x65"	700	24"x41"	1,590
2"		S-151C-VIP II-T	11000311	150,000	18"x65"	700	24"x41"	1,740
2"		S-301C-VIP II-T	11000316	300,000	24"x72"	1,000	24"x50"	3,000
2"		S-451C-VIP II-T	11000317	450,000	30"x72"	1,500	30"x50"	4,470
2"		S-601C-VIP II-T	11000318	600,000	36"x72"	2,500	39"x48"	5,640
3"	3900	S-451E-VIP II-T	11000932	450,000	30"x72"	1,500	30"x50"	4,520
3"		S-601E-VIP II-T	11000319	600,000	36"x72"	2,500	39"x48"	5,730
3"		S-901E-VIP II-T	11000933	900,000	42"x72"	2,500	39"x48"	8,496
3"		S-1201E-VIP II-T	11000934	1,200,000	48"x72"	4,500	52"x60"	11,010

Note: 1", 1-1/2" and 2" Flow Meters supplied with above products are Plastic. 3" and 4" are insertion type paddle wheel flow meters utilizing copper tees. Other materials are available on special order.

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

VIP-2/3E Control – Quadraplex Softener Fiberglass Tank – Alternating or Parallel

Features:

- Quadraplex Alternating or Parallel Operation. No hard water bypass during regeneration.
- VIP-II-E Electronic Metered or Time Clock feature & UL listed. Solid State multiple metered demand initiated regeneration including rate of flow, re-settable totalizing meter, & self-diagnostic status monitoring. NEMA enclosed controller.
- VIP-II-E - Systems offer individual tank flow meters.
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety-float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks
- 120V/60Hz/1pH transformer included/ twist lock style electrical connections/ 24V control voltage.
- **Optional: VIP-II-E “DCS” – Remote monitoring, programming & data reporting capability.**
- **Optional: Alternate Water Source (Regeneration source) and/or Brine reclaim.**



S-301C-VIPII-Q

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-VIP II-Q	11000588	30,000	9"x48"	400	18"x40"	700
1"		S-61A-VIP II-Q	11000320	60,000	12"x52"	400	18"x40"	980
1"		S-91A-VIP II-Q	11000321	90,000	14"x65"	400	18"x40"	1,360
1.5"	2850	S-91B-VIP II-Q	11000322	90,000	14"x65"	400	18"x40"	1,400
1.5"		S-121B-VIP II-Q	11000323	120,000	16"x65"	700	24"x41"	1,940
1.5"		S-151B-VIP II-Q	11000324	150,000	18"x65"	700	24"x41"	2,260
1.5"		S-301B-VIP II-Q	11000329	300,000	24"x72"	1,000	24"x50"	4,540
2"	2900	S-121C-VIP II-Q	11000330	120,000	16"x65"	700	24"x41"	2,120
2"		S-151C-VIP II-Q	11000331	150,000	18"x65"	700	24"x41"	2,320
2"		S-301C-VIP II-Q	11000336	300,000	24"x72"	1,000	24"x50"	4,000
2"		S-451C-VIP II-Q	11000337	450,000	30"x72"	1,500	30"x50"	5,960
2"		S-601C-VIP II-Q	11000338	600,000	36"x72"	2,500	39"x48"	7,520
3"	3900	S-451E-VIP II-Q	11000935	450,000	30"x72"	1,500	30"x50"	6,080
3"		S-601E-VIP II-Q	11000339	600,000	36"x72"	2,500	39"x48"	7,640
3"		S-901E-VIP II-Q	11000936	900,000	42"x72"	2,500	39"x48"	11,340
3"		S-1201E-VIP II-Q	11000937	1,200,000	48"x72"	4,500	52"x60"	14,680

Note: 1", 1-1/2" and 2" Flow Meters supplied with above products are Plastic. 3" and 4" are insertion type paddle wheel flow meters utilizing copper tees. Other materials are available on special order.

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Time Clock Control – Single Softener Fiberglass Tank - Single

Features:

- Automatic mechanical Time Clock initiated regeneration. Hard Water bypass during regeneration
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety-float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance. ANSI/NSF listed tanks
- 120V/60Hz/1pH operation



7 Day Mech.
Time Clock

S-301C-TC

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-TC	11000416	30,000	9"x48"	400	18"x40"	175
1"		S-61A-TC	11000028	60,000	12"x52"	400	18"x40"	245
1"		S-91A-TC	11000029	90,000	14"x65"	400	18"x40"	340
1.5"	2850	S-91B-TC	11000030	90,000	14"x65"	400	18"x40"	350
1.5"		S-121B-TC	11000031	120,000	16"x65"	700	24"x41"	485
1.5"		S-151B-TC	11000032	150,000	18"x65"	700	24"x41"	505
1.5"		S-301B-TC	11000037	300,000	24"x72"	1,000	24"x50"	920
2"	2900	S-121C-TC	11000038	120,000	16"x65"	700	24"x41"	530
2"		S-151C-TC	11000039	150,000	18"x65"	700	24"x41"	580
2"		S-301C-TC	11000044	300,000	24"x72"	1,000	24"x50"	1,000
2"		S-451C-TC	11000045	450,000	30"x72"	1,500	30"x50"	1,490
2"		S-601C-TC	11000046	600,000	36"x72"	2,500	39"x48"	1,880
3"	3900	S-451E-TC	11000938	450,000	30"x72"	1,500	30"x50"	1,515
3"		S-601E-TC	11000047	600,000	36"x72"	2,500	39"x48"	1,910
3"		S-901E-TC	11000939	900,000	42"x72"	2,500	39"x48"	2,835
3"		S-1201E-TC	11000940	1,200,000	48"x72"	4,500	52"x60"	3,670

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

Time Clock Control – Dual Softener Fiberglass Tank – Duplex Parallel

Features:

- Automatic mechanical Time Clock initiated regeneration.
No Hard Water bypass during regeneration
- Lead-free brass multiport control valves with self-cleaning, hydraulically balanced positive acting piston.
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- Standard safety-float valve shutoff on 400/700lb brine tanks. Optional on 1000lb and larger sizes.
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance.
ANSI/NSF listed tanks
- 120V/60Hz/1pH operation



S-301C-TC-D

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-31A-TC-D	11000417	30,000	9"x48"	400	18"x40"	350
1"		S-61A-TC-D	11000048	60,000	12"x52"	400	18"x40"	490
1"		S-91A-TC-D	11000049	90,000	14"x65"	400	18"x40"	680
1.5"	2850	S-91B-TC-D	11000050	90,000	14"x65"	400	18"x40"	700
1.5"		S-121B-TC-D	11000051	120,000	16"x65"	700	24"x41"	970
1.5"		S-151B-TC-D	11000052	150,000	18"x65"	700	24"x41"	1,130
1.5"		S-301B-TC-D	11000057	300,000	24"x72"	1,000	24"x50"	2,270
2"	2900	S-121C-TC-D	11000058	120,000	16"x65"	700	24"x41"	1,060
2"		S-151C-TC-D	11000059	150,000	18"x65"	700	24"x41"	1,160
2"		S-301C-TC-D	11000064	300,000	24"x72"	1,000	24"x50"	2,000
2"		S-451C-TC-D	11000065	450,000	30"x72"	1,500	30"x50"	2,980
2"		S-601C-TC-D	11000066	600,000	36"x72"	2,500	39"x48"	3,760
3"	3900	S-451E-TC-D	11000941	450,000	30"x72"	1,500	30"x50"	3,030
3"		S-601E-TC-D	11000067	600,000	36"x72"	2,500	39"x48"	3,880
3"		S-901E-TC-D	11000942	900,000	42"x72"	2,500	39"x48"	5,670
3"		S-1201E-TC-D	11000943	1,200,000	48"x72"	4,500	52"x60"	7,340

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NXT Control – Single Demand Softener Fiberglass Tank – Standard Plastic Fleck® Meter

Features:

- Standard Plastic Fleck® Meter with Brass End Connectors
- NXT Demand Initiated Control
- Hard Water bypass during regeneration
- Lead-free brass valves
- Self cleaning, hydraulically balanced positive acting piston control valves
- Timed brine refills (eliminates constant line pressure on shut off float devices)
- High strength polyethylene tank liners for longer service life, FRP wrapped for strength and corrosion resistance
- ANSI/NSF listed tanks
- 24V/60Hz/1pH operation
- 120 Volt Power Reduction Transformer Included



S-301C-MTR

Pipe Size	Fleck® Valve Type	Model Number	Part Number	Capacity (grains)	Mineral Tank Size (inches)	Brine Tank Capacity Lbs.	Brine Tank Size	Ship Wt. Lbs.
1"	2750	S-61A-NXT-SNGL	11000068	60,000	12"x52"	400	18"x40"	245
1"		S-91A-NXT-SNGL	11000069	90,000	14"x65"	400	18"x40"	340
1.5"	2850	S-91B-NXT-SNGL	11000070	90,000	14"x65"	400	18"x40"	350
1.5"		S-121B-NXT-SNGL	11000071	120,000	16"x65"	700	24"x41"	485
1.5"		S-151B-NXT-SNGL	11000072	150,000	18"x65"	700	24"x41"	505
1.5"		S-301B-NXT-SNGL	11000077	300,000	24"x72"	1000	24"x50"	920
2"	2900	S-121C-NXT-SNGL	11000078	120,000	16"x65"	700	24"x41"	530
2"		S-151C-NXT-SNGL	11000079	150,000	18"x65"	700	24"x41"	580
2"		S-301C-NXT-SNGL	11000084	300,000	24"x72"	1,000	24"x50"	1,000
2"		S-451C-NXT-SNGL	11000085	450,000	30"x72"	1,500	30"x50"	1,490
2"		S-601C-NXT-SNGL	11000086	600,000	36"x72"	2,500	39"x48"	1,880
3"	3900	S-451E-NXT-SNGL	11000944	450,000	30"x72"	1,500	30"x50"	1,515
3"		S-601E-NXT-SNGL	11000087	600,000	36"x72"	2,500	39"x48"	1,910
3"		S-901E-NXT-SNGL	11000945	900,000	42"x72"	2,500	39"x48"	2,835
3"		S-1201E-NXT-SNGL	11000946	1,200,000	48"x72"	4,500	52"x60"	3,670

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Softener Components and Accessories

Skid Mounting:

Factory assembled skid mounting for FRP Duplex Softener with mounting hardware & FRP tank supports.

Tank Diameters	Valve Pipe Size	Skid Size LxWxH	Part No.
9" thru 12"	1"	24"x30"x4"	501141
14" thru 18"	1-1/2" & 2"	42"x30"x4"	501142
24" thru 30"	1-1/2" & 2"	72"x42"x4"	501143
36"	1-1/2" & 2"	84"x48"x4"	501144
42"	3"	96"x54"x4"	501145
48"	3"	108"x60"x4"	501146



Interconnecting Piping Assembly (ICP):

The interconnecting plumbing headers are sized based on the flow rate and designed for a maximum velocity of 10 feet per second.

Factory assembled **Sch80 PVC Duplex** Interconnecting piping / plumbing assembly:



Description	Part Number
1" Common I/O headers & bypass line with isolation valve. Includes: 1" tank I/O piping, manual tank I/O isolation valves.	906098
1.5" Common I/O headers & bypass line with isolation valve. Includes: 1.5" tank I/O piping, manual tank I/O isolation valves.	906099
2" Common I/O headers & bypass line with isolation valve. Includes: 2" tank I/O piping, manual tank I/O isolation valves.	906100
3" Common I/O headers & bypass line with isolation valve. Includes: 2" tank I/O piping, manual tank I/O isolation valves.	906584
3" Common I/O headers & bypass line with isolation valve. Includes: 3" tank I/O piping, manual tank I/O isolation valves.	906127
4" Common I/O headers & bypass line with isolation valve. Includes: 3" tank I/O piping, manual tank I/O isolation valves.	906585

Kit: Sample Valve & Pressure Gauge

Description	Part Number
Kit: 2-1/2" Pressure Gauge 0-100psi with 1/4" Tee & 1/4" Sample Valve Test Cock	908007
<i>Used on above factory assembled inlet/outlet headers for ICP.</i>	



Note: Skid number, ICP number and gauge/sample valve kit/s number – consummate a complete assembly.

Controls

VIP 1E & VIP IIE demand initiated controllers have been updated with the following standard features. They directly replace older style VIP controllers.

- Electronic time clock capability
- Delay regeneration on alternating systems
- UL listing

VIP 3E controllers allow for progressive flow capabilities as the flow rate increases or decreases the controller will move units into and out of service. This eliminates the possibility of channeling through the resin during low flow conditions and lessens the pressure drop through the system during high flow conditions. Ideal for applications with varying flow rate demands such as hotels, condominiums or apartment buildings.

VIPE“DCS” controllers provide remote 2 wire RS-485 MODBUS communication for monitoring or programming the controller using plant management system. ALL PROGRAMMING SOFTWARE BETWEEN THE VIPE“DCS” AND THE PLANT MANAGEMENT SYSTEM ARE CONSIDERED BY OTHERS.

Description	Part Number
VIP-1E Programmable Control – Single or Duplex	920182
VIP-2E Programmable Control – 2, 3, or 4 Tanks	920183
VIP-3E Variable-Demand Programmable Control	920184
VIP-1E with 2-Wire 485 Modbus “DCS”	920182-DCS
VIP-2E with 2-Wire 485 Modbus “DCS”	920183-DCS
VIP-3E with 2-Wire 485 Modbus “DCS”	920184-DCS
Time Clock – Valve Nest System – w/solenoids for filters	920122
Stager Control – Valve Nest System	920120
Micro-TR Time Clock with RO Lockout Board (Tank Mount)	920066
Pumped Brine Control	920166
Brine Reclaim Control	920169
Brine Day Tank Control	920167
VIP Mounting Kit	502099

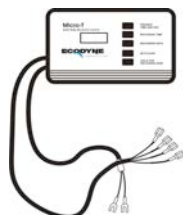
VIP 1E CONTROL



VIP II/III CONTROL



MICRO-T CONTROL



STAGER CONTROL



Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

VIP Control Extension Cables

Length (ft.)	Description	Part Number
10	Extends harness from valve to control	119068-10



Transformers

Description	Part Number
50 VA – 120v x 24vac – Plug In	7308792
50 VA – 120v x 24vac – (NEMA BOX)	980019-24
100 VA – 220v x 24vac (NEMA BOX)	980059-24
108 VA – 120V x 24vac – (Encapsulated)	FLK41034



Water Meters and Flow Sensors – Turbo Flow Meters

All VIP water softener and filter systems come with flow sensors. The standard 1", 1.5" and 2" flow meter in a plastic housing can be replaced with a brass housing. The standard 3" & 4" flow sensor in a copper tee assembly can be replaced with a PVC saddle fitting or an iron saddle fitting.

Description	Flow Rate (gpm)		Part Number
	Normal Range	Peak	
1" NPT Flow Meter PVC	1 - 30	40	930047
1-1/2" NPT Flow Meter PVC	1-1/2 - 60	125	930046
1" NPT Brass turbine assy	1 - 30	40	930015
1-1/2" or 2" NPT Brass turbine assy	1-1/2 - 60	125	930016
2" NPT Water meter Plastic	4 - 90	125	7161679
2" NPT Flow Meter PVC	4 - 90	125	930062
3" Flow Meter w/Copper fitting	7 - 200	230	930049
3" Sensor w/PVC saddle	7 - 200	230	930027
4" Sensor w/Copper fitting	12 - 350	395	930050
4" Sensor w/PVC saddle	12 - 350	395	930028
Replacement Turbine for 1", 1 1/2" & 2"			930017
Replacement Sensor for 3" & 4"			930022



930046



930016



930022

Replacement Sensor does not include installation Fitting:

- Copper Tee
- PVC Saddle
- Iron Saddle

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

Flow Sensor Extension Cables

Length (ft.)	Description	Part Number
10	Extends harness from flow sensor to control	119075-10

Complete Brine Tank Assemblies

Polyethylene Brine Systems (includes brinewell and 1 air-check assembly). 400/700lb brine tanks come standard with brinewell, air/check and safety float valve style shutoff. Optionally, safety float valve style shutoff on 1000lbs and above systems, are offered at an additional cost only.

Description	Dimensions (Dia. x Height)	Standard Air-check
		Part No.
400 lb capacity	18"x30"	940052
700 lb capacity	24"x40"	940053
1,000 lb capacity	24"x50"	7202027
1,500 lb capacity	30"x50"	7202035
2,500 lb capacity	39"x48"	940027
4,500 lb capacity	52"x60"	940007
7,000 lb capacity	60"x60"	940035
10,000 lb capacity	72"x60"	940036

Brinewell / Air-check Part Assemblies

Description		Part Number
Standard	400 lb & 700 lb Brinewell / Air-check assy	980100
	1000 lb Brine Brinewell / Air-check assy	7222085
	1500 lb Brine Brinewell / Air-check assy	7222085
	2500 lb, 4500 lb, 7000 lb or 10,000 Brinewell / Air-check assy	980008

Prices subject to change without notice. Specifications subject to change without notice. Orders subject to acceptance by EcoWater Systems, LLC.

2750 & 2850 - Stop Valve Part Assemblies

Description	Part Number
1" Valve assy, STEEL 24v NO BYP (complete)	910003
1-1/2" Valve assy, STEEL 24v NO BYP (complete)	910004
Solenoid Valve, 24v (replc part)	206004
Diaph/Seal Kit, 1" vlv 421 (replc part)	702021
Diaph/Seal Kit, 1-1/2" vlv 424 (replc part)	702022
AQM Internal Parts Kit 421 f/1" (replc part)	702047
AQM Internal Parts Kit 424 f/1-1/2" (replc part)	702048



Fleck® Replacement Power Heads (VIP/24V) with Cables

Power Head Description	Part Number
2750 / 2850 Power Head, (VIP config)	312311
2900 Power Head, (VIP config)	312313
3150 Power Head, (VIP config)	312314
3900 Power Head, (VIP config)	312315
9000/9500 Power Head, (VIP config)	312317
Covers sold separately	



Fleck® Valve Covers

Description	Part Number
Black Environmental Cover w/ Clear Window 2750, 2850, "Upper 2900"	FLK60219-02
Black Environmental Cover Lower 2900 Drive Motor Cover	FLK60217-02
Black Environmental Cover w/ Clear Window 3150 & "Upper 3900"	FLK60240-02
Black Environmental Cover w/ Black Window 3150 & "Lower 3900"	FLK-60240-22



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