

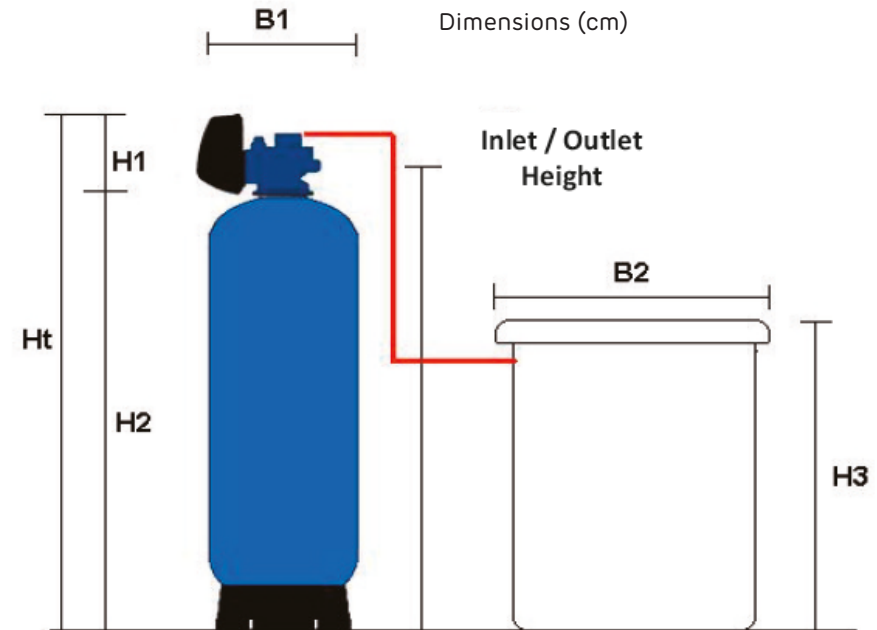


HIGH CAPACITY

Monarch EDC

Electronic Demand Control Softeners

High efficiency, high capacity water softeners.



model	valve H1	vessel H2	brine tank H3	softener Ht	Inlet / Outlet Ht	vessel B1	brine tank B2	weight (*) kg
EDC 20/44	19	89	44	108	74	22	32sq	27
EDC 30/44	19	89	89	108	94	27	32sq	40
EDC 40/44	19	112	84	131	117	27	44sq	50
EDC 50/44	19	139	84	158	144	27	44sq	65
EDC 60/44	19	123	84	142	128	32	44sq	75
EDC 75/44	19	140	83	159	145	34	67 ϕ	90
EDC 100/44	19	168	83	187	173	37	67 ϕ	118
EDC 125/44	19	168	83	187	173	37	67 ϕ	140

All measurements can vary due to the cooling process during manufacture of the vessels and brine tanks.

(*) Estimated weight of the system without water or salt.

General conditions for installation

Connection IN & OUT:	1" male (1.25" available on request)
Option side mount:	N/A
Drain connection(*):	3/4" or 1" for DLFC flows over 10 gpm
Electrical rating:	230V 50Hz 12V Transformer
max power rating:	6W
IP protection class:	Double isolated transformer
Minimum inlet pressure :	200 kPa (2 bar)
Maximum inlet pressure:	600 kPa (6 bar)
Vacuum:	no allowance
Average pressure loss (**):	100 kPa (1 bar)
Min-max water temperature:	5-35°C

Remarks

(*) Dependant on Drain line flow control.

(**) Under normal circumstances.

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 circumstances

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

litres of resin	20	30	40	50	60	75	100	125
Capacity kg CaCO ₃	1	1.5	2	2.5	3	3.8	5	6.3
M ³ @ 300ppm	3.3	5	6.6	8.3	10	13	17	21
Salt consumption Kg / Regen	3	4.5	6	7.5	9	11	15	19

Regeneration

Start : Default Time 2:00 am, set on the timer as (delayed regeneration)
Options : TIME - VOLUME - IMMEDIATE - DELAYED
- DAYS OVERRIDE and manual regeneration.

Total time min :

67	79	71	81	73	75	97	97
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Remarks When sizing an EDC softener, the interval between regenerations should not be more than 4 days, to prevent tracking of water through the vessel.

Flow rate

	litres of resin	20	30	40	50	60	75	100	125
Nominal	m ³ /h	0.8	1.2	1.6	2.0	2.4	3.0	4.0	5.0
Minimum	L/h	60							

Consumption of rinse water

	litres of resin	20	30	40	50	60	75	100	125
1.Backwash	litres	32	52	52	52	74	95	95	95
2.Brining + Slow	litres	67	124	102	110	153	188	263	246
4.Fast rinse	litres	39	62	62	62	89	114	114	114
Total (***)	litres	138	238	216	224	316	397	472	455

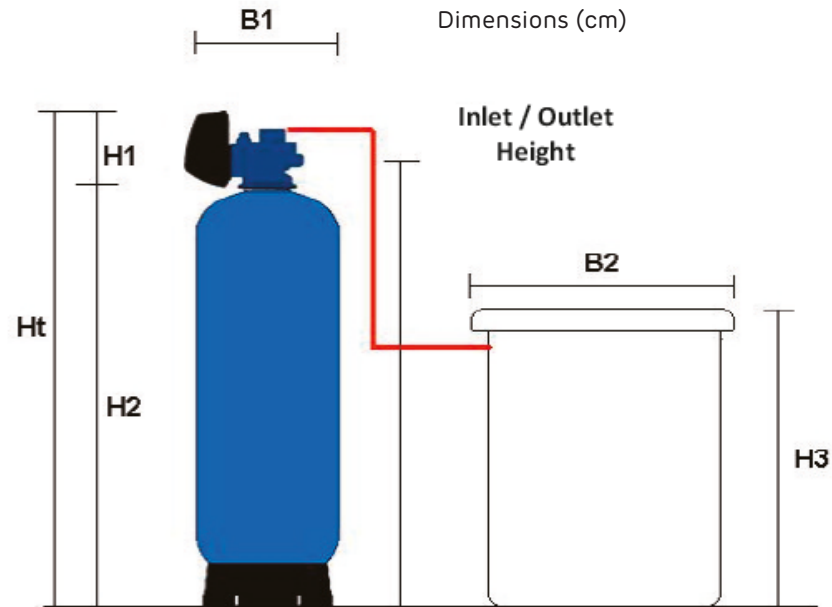
(***) Figures based on 60PSI pressure.

Peak flow rates: 1 litre of resin will give 1 litre of soft water per minute.
i.e. multiply litres of resin by 60 to get peak L/h

Monarch EDC 1.25"

Electronic Demand Control Softeners

High efficiency, high capacity water softeners.



model	valve H1	vessel H2	brine tank H3	softener Ht	Inlet / Outlet	vessel B1	brine tank B2	weight (*) kg
EDC 75/54	19	140	83	159	145	34	67 ϕ	90
EDC 100/54	19	168	83	187	173	37	67 ϕ	118
EDC 125/54	19	168	83	187	173	37	67 ϕ	140
EDC 150/54	19	167	101	186	172	41	76 ϕ	175
EDC 200/54	19	179	93	198	184	51	87 ϕ	230

(*) Estimated weight of the system without water or salt.

(**) Sizes may vary dependant on components used and should only be used as a guide.

General conditions for installation

Connection IN & OUT:	1.25" male
Option side mount:	N/A
Drain connection(*):	3/4" or 1" for DLFC flows over 10 gpm
Electrical rating:	230V 50Hz 12V Transformer
Max power rating:	6W
IP protection class:	Double isolated transformer
Minimum inlet pressure :	200 kPa (2 bar)
Maximum inlet pressure:	600 kPa (6 bar)
Vacuum:	no allowance
Average pressure loss (**):	100 kPa (1 bar)
Min-max water temperature:	5-35°C

Remarks

(*) Dependant on Drain line flow control.

(**) Under normal circumstances.

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 circumstances

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

litres of resin	75	100	125	150	200
Capacity kg CaCO ₃	3.8	5	6.3	7.5	10
M ³ @ 300ppm	13	17	21	25	33
Salt consumption kg / regen.	11	15	19	22.5	30

Regeneration

start : Default Time 2:00 am, set on the timer as (delayed regeneration)
Options : TIME - VOLUME - IMMEDIATE - DELAYED
- DAYS OVERRIDE and manual regeneration.

total time min :

75	97	97	82	95
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Remarks When sizing an EDC softener, the interval between regenerations should not be more than 4 days, to prevent tracking of water through the vessel.

Flow rate

litres of resin		75	100	125	150	200
nominal	M ³ /h	3.0	4.0	5.0	6.0	8.0
minimum	L/h	60				

Consumption of rinse water

	litres of resin	75	100	125	150	200
1.Backwash	litres	95	95	95	132	170
2.Brining + Slow	litres	188	263	246	282	440
4.Fast rinse	litres	114	114	114	159	204
Total ***	litres	397	472	455	573	814

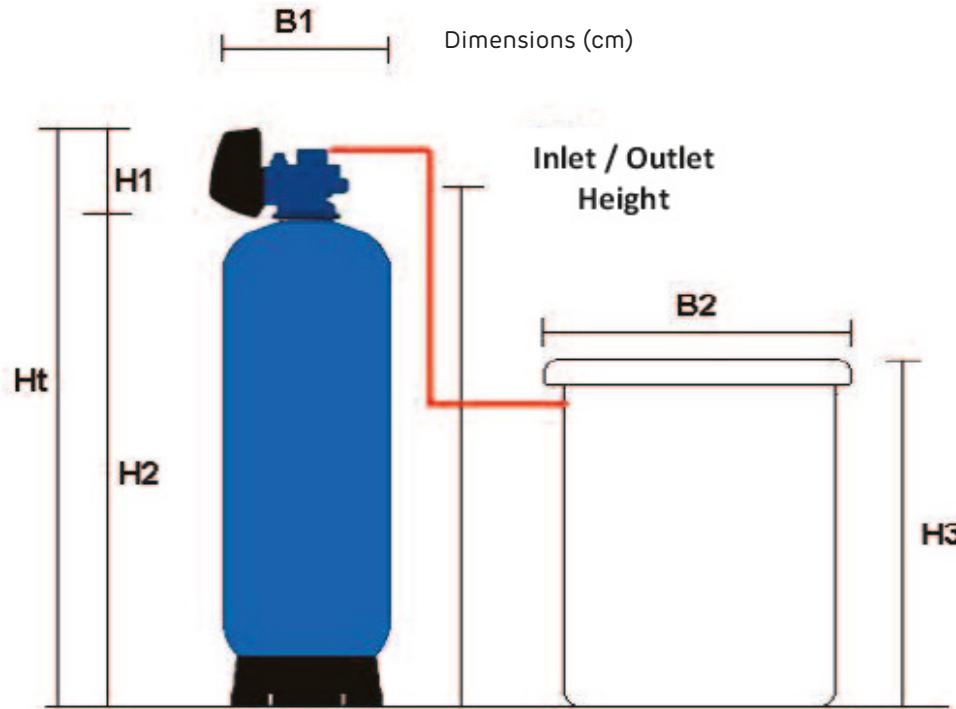
Peak flow rates: 1 litre of resin will give 1 litre of soft water per minute.
i.e. multiply litres of resin by 60 to get peak L/h



Monarch EDC 1.5"

Electronic Demand Control Softeners

High efficiency, high capacity water softeners.



model	valve H1	vessel H2	brine tank H3	softener Ht	Inlet / Outlet	vessel B1	brine tank B2	weight (*) kg
EDC 75/64	20	167	83	187	172	37	67 ϕ	190
EDC 100/64	20	167	83	187	172	37	67 ϕ	210
EDC 150/64	20	168	101	188	172	41	76 ϕ	230
EDC 200/64	20	179	101	199	187	51	76 ϕ	230
EDC 250/64	20	163	101	183	171	56	76 ϕ	275
EDC 350/64	20	188	111	208	196	61	100 ϕ	734
EDC 500/64	20	188	129	208	196	61	107 ϕ	734

(*) Estimated weight of the system without water or salt.

(**) Sizes may vary dependent on components used and should only be used as a guide.

General conditions for installation

Connection IN & OUT:	1.5" female
Option side mount:	N/A
Drain connection(*):	3/4", 1" or 1.25" Dependent on flow
Electrical rating:	230V 50Hz 12V Transformer
Max power rating:	6W
IP protection class:	Double isolated transformer
Minimum inlet pressure :	200 kPa (2 bar)
Maximum inlet pressure:	600 kPa (6 bar)
Vacuum:	no allowance
Average pressure loss (**):	100 kPa (1 bar)
Min-max water temperature:	5-35°C

Remarks

(*) Dependant on Drain line flow control.

(**) Under normal circumstances.

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 circumstances

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

litres of resin	75	100	150	200	250	350	500
Capacity kg CaCO ₃	3.8	5.0	7.5	10.0	12.5	17.5	25.0
M ³ @ 300ppm	12.5	16.7	25.0	33.0	41.6	58.3	83.3
salt consumption kg / regen.	11.3	15.0	22.5	30.0	37.5	52.5	75.0

Regeneration

Start : Default Time 2:00 am, set on the timer as (delayed regeneration)
Options : TIME - VOLUME - IMMEDIATE - DELAYED
- DAYS OVERRIDE and manual regeneration.

Total time min :	77	94	82	95	72	94	85
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Remarks When sizing an EDC softener, the interval between regenerations should not be more than 4 days, to prevent tracking of water through the vessel.

Flow rate

litres of resin		75	100	150	200	250	350	500
nominal	m ³ /h	3.0	4.0	6.0	8.0	10.0	14.0	20.0
minimum	L/h	120.00						

Consumption of rinse water

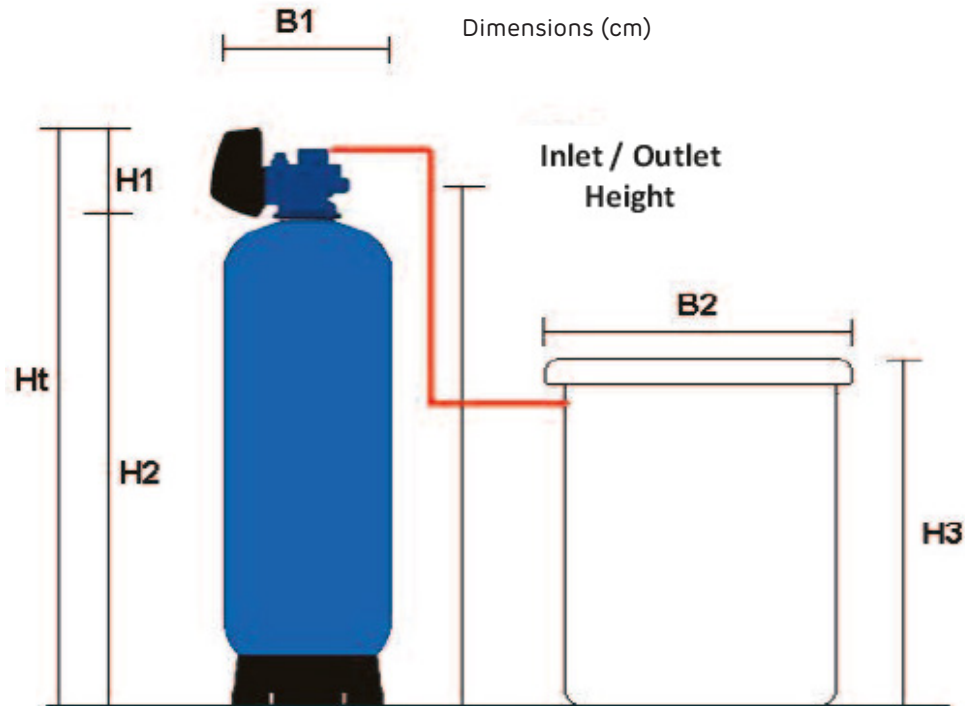
	litres of resin	75	100	150	200	250	350	500
1.Backwash	litres	80	95	132	170	246	310	470
2.Brining + Slow	litres	238	258	282	528	972	752	1197
4.Fast rinse	litres	60	80	159	204	295	450	950
total	litres	378	433	573	902	1513	1512	2617

Peak flow rates: 1 litre of resin will give 1 litre of soft water per minute.
i.e. multiply litres of resin by 60 to get peak L/h

Monarch EDC 2"

Electronic Demand Control Softeners

High efficiency, high capacity water softeners.



model	valve H1	vessel H2	brine tank H3	softener Ht	Inlet / Outlet	vessel B1	brine tank B2	weight (*) kg
EDC 200/84	22	179	101	201	187	51	76 ϕ	240
EDC 250/84	22	163	101	185	171	56	76 ϕ	285
EDC 350/84	22	188	124	210	200	61	87 ϕ	400
EDC 500/84	22	205	124	227	217	77	87 ϕ	555
EDC 700/84	22	215	111	237	227	93	100 ϕ	747

(*) Estimated weight of the system without water or salt.

(**) Sizes may vary dependent on the components used and should be only used as a guide.

General conditions for installation

Connection IN & OUT:	2" female
Option side mount:	N/A
Drain connection(*):	1" for DLFC 10 - 25gpm 1.25" Over 25gpm
Electrical rating:	230V 50Hz 12V Transformer
Max power rating:	6W
IP protection class:	Double isolated transformer
Minimum inlet pressure :	200 kPa (2 bar)
Maximum inlet pressure:	600 kPa (6 bar)
Vacuum:	no allowance
Average pressure loss (**):	100 kPa (1 bar)
Min-max water temperature:	5-35°C

Remarks

(*) Dependant on Drain line flow control.

(**) Under normal circumstances.

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 circumstances

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

	litres of resin	200	250	350	500	700
capacity	kg CaCO ₃	10.0	12.5	17.5	25	35
	m ³ @ 300ppm	33.0	41.6	58.3	83.3	117
salt consumption	kg / regen.	30.0	37.5	52.5	75	105

Regeneration

Start : Default Time 2:00 am, set on the timer as (delayed regeneration)
Options : TIME - VOLUME - IMMEDIATE - DELAYED
- DAYS OVERRIDE and manual regeneration.

Total time min :	82	95	77	92	83
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Remarks When sizing an EDC softener, the interval between regenerations should not be more than 4 days, to prevent tracking of water through the vessel.

Flow rate

	litres of resin	200	250	350	500	700
nominal	m ³ /h	8.0	10.0	14.0	20.0	28.0
minimum	L/h	342				

Consumption of rinse water

	litres of resin	200	250	350	500	700
1.Backwash	litres	170	246	247	378	660
2.Brining + Slow	litres	528	972	803	1488	1638
4.Fast rinse	litres	204	295	295	454	795
total	litres	902	1513	1345	2320	3093

Peak flow rates: 1 litre of resin will give 1 litre of soft water per minute.
i.e. multiply litres of resin by 60 to get peak L/h

Softeners
up to 3"
available