

## Water softener softliQ:XLA/XLA-2/XLA-3

### Intended use

The water softeners softliQ:XLA must only and exclusively be used for the softening and partial softening of cold drinking water.

### Function

The water softeners work according to the ion exchange process.

During the regeneration, the single system softliQ:XLA delivers raw water via a bypass line available as an option.

The twin system softliQ:XLA-2 is suitable for continuous soft water supply.

The triple system softliQ:XLA-3 consists of three exchangers, two of which are operated simultaneously while the third exchanger is regenerating or in standby. With the triple system the flow capacity is increased, and the system height reduced.

The systems regenerate when the specified water volume has been softened.

### Design

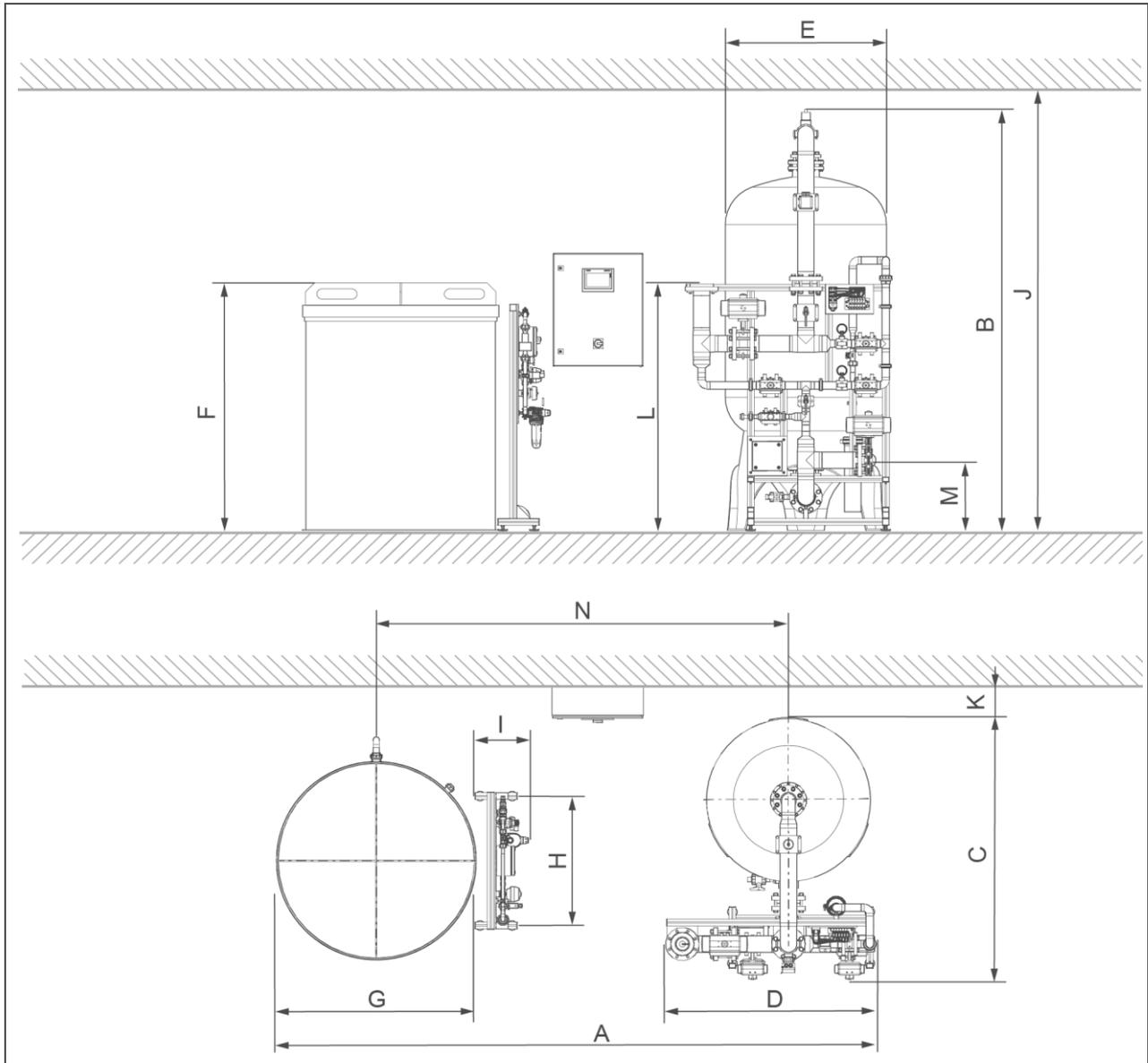
- 1/2/3 exchanger tanks with plastic double coating, fixtures and distribution system
- Ion exchanger resin for drinking water and gravel support layer
- 1 Individual control valve per exchanger consisting of the following components:

- 6 Pneumatically controlled shut-off valves with pilot valves mounted on anodised aluminium rack and electrically wired
- PP pipe system, including pipe fittings and connecting pieces to the exchanger tanks
- Pre-assembled raw and soft water piping
- 2 Sampling valves per exchanger tank
- 2 Pressure gauges for raw and soft water
- Connecting PP pipe between the system racks
- Exchanger tank with magneto-inductive flow sensor
- Brine tank with lid, overflow and sieve bottom
- Level control to regulate the make-up water volume
- Safety float for emergency switch-off in make-up feed mode
- Regeneration unit consisting of the components below:
  - Fine filter with pressure reducer and pressure gauge
  - Precision injector for drawing brine
  - Electrical diaphragm valve for switch-off after drawing brine
  - 2 Non-contact flow sensors to measure the brine volume and total salting volume
- Switch box with Siemens controller to show the operating state and set the system-relevant parameters via a 7" LCD touch screen
- Monitoring of the system and operating values below:
  - Current operating state
  - Time
  - Remaining capacity
  - Current flow rate
  - Time since last regeneration
  - Fault signals
  - Release of regeneration and system switch-over via water meter with pulse generator or manual release
  - Switch and control unit, internally wired and workshop-tested
  - Pre-alarm salt supply to monitor the salt supply, voltage-free signal via control unit
- Water test kit "Total hardness"

### Scope of supply

- Water softener, complete.
- Water test kit "Total hardness"
- Operation manual

**Technical specifications I: softliQ:XLA**



Dimensions and weights		softliQ:XLA					
		20000	30000	40000	50000	70000	
A	Total width	mm	3700	3900	3900	4450	4700
B	Total height	mm	2670	2750	2830	2850	3200
C	Total depth	mm	1500	1650	1750	1950	2300
D	Width of exchanger tank including rack	mm	1200	1330	1380	1490	1700
E	∅ Exchanger tank	mm	770	927	1074	1226	1429
F	Height of brine tank (with/without lid)	mm	1690/1500				
G	∅ Brine tank	mm	1340			1790	
H	Width of brine tank rack	mm	900	900	900	1000	1000
I	Depth of brine tank rack	mm	370	370	370	370	370
J	Required room height	mm	3000	3050	3150	3150	3500
K	Distance to wall (recommended)	mm	500	500	500	600	600

• **Product Data Sheet**

Water softener softliQ:XLA/XLA-2/XLA-3

Dimensions and weights		softliQ:XLA					
		20000	30000	40000	50000	70000	
L	Connection height of raw water	mm	1650				1890
M	Connection height of soft water	mm	470				530
N	Distance brine tank – exchanger tank	mm	2550	2650	2700	2950	3050
Operating weight, approx.		kg	3200	3900	4250	6200	7300

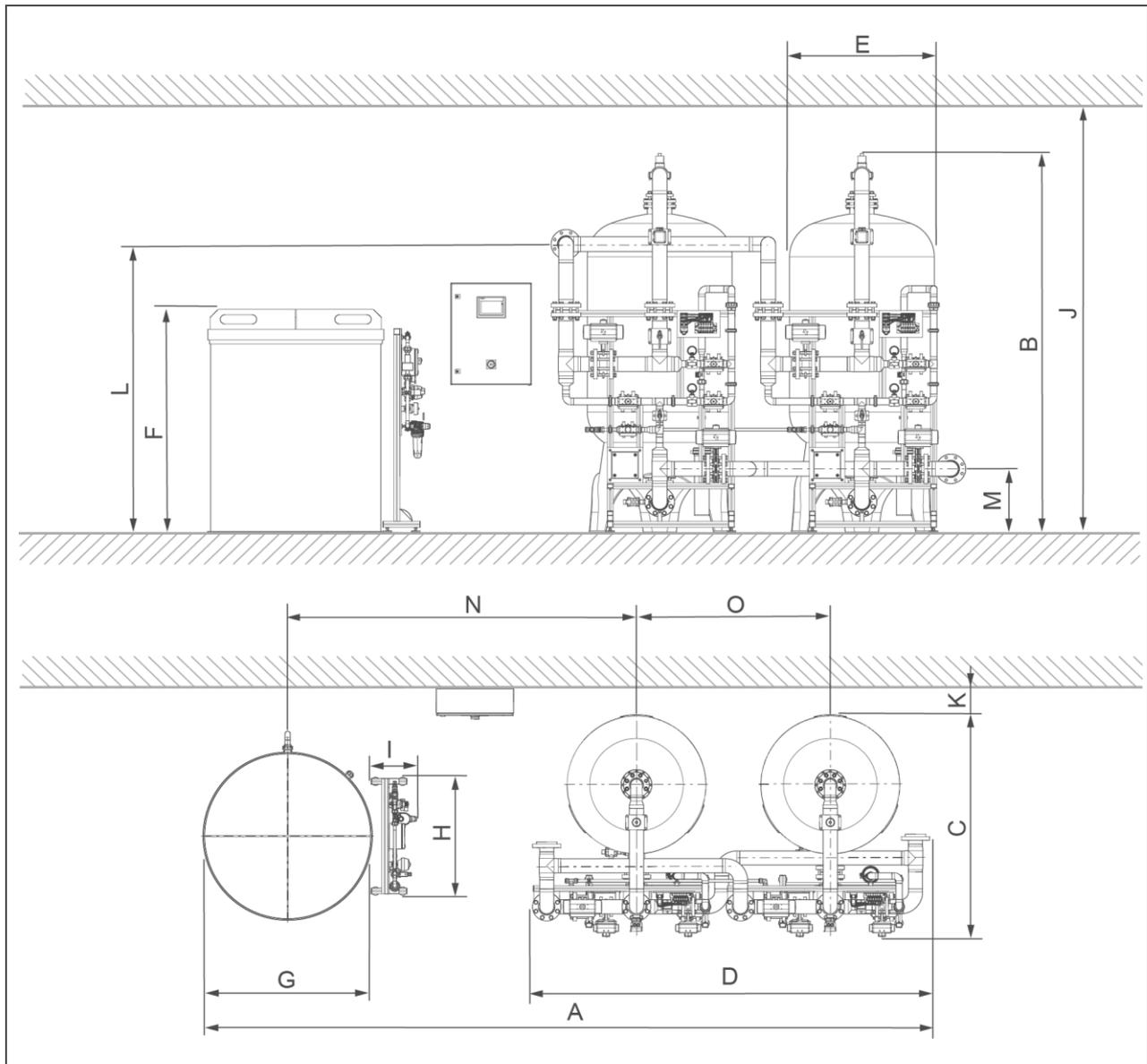
Connection data		softliQ:XLA				
		20000	30000	40000	50000	70000
Nominal connection diameter	DN	65	80	100	100	125
Drain connection	DN	≥ 100				
Power supply	V/Hz	230/50				
Power input	VA	500 (without compressor)				
Protection/protection class		IP54/⊕				

Performance data		softliQ:XLA				
		20000	30000	40000	50000	70000
Nominal pressure	PN	10				
Operating pressure	bar	2.5 – 8.0				
Nominal flow at a residual hardness < 0.1 °dH	m³/h	20	30	40	50	70
Pressure loss at nominal flow < 0.1 °dH	bar	1.0	1.0	0.8	0.8	1.0
Nominal capacity	m³x°dH	1800	2400	3225	4350	5850
	mol	321	429	576	777	1045
Capacity per kg of regeneration salt	mol/kg	5.4				

Filling volumes and consumption data		softliQ:XLA				
		20000	30000	40000	50000	70000
Resin volume per exchanger	l	600	800	1075	1450	1950
Gravel quantity per exchanger	kg	50	100	225	300	500
Salt supply	kg	≤ 1650	≤ 1650	≤ 1650	≤ 3100	≤ 3100
Salt consumption per regeneration, approx.	kg	60	80	108	145	195
Total waste water volume per regeneration, approx.	m³	2.6	3.5	4.6	6.2	8.4

General data		softliQ:XLA				
		20000	30000	40000	50000	70000
Water temperature	°C	5 – 30				
Ambient temperature (technical application)	°C	5 – 40				
Ambient temperature (drinking water)	°C	5 – 25				
Humidity (non-condensing)	%	≤ 90				
Order no.		506010 000000	506011 000000	506012 000000	506013 000000	506014 000000

**Technical specifications II: softliQ:XLA-2**



Dimensions and weights		softliQ:XLA-2					
		20000	30000	40000	50000	70000	
A	Total width	mm	5150	5400	5600	6300	6800
B	Total height	mm	2670	2750	2830	2850	3200
C	Total depth	mm	1500	1650	1750	1950	2300
D	Width of exchanger tank including piping	mm	2650	2870	3100	3350	3800
E	∅ Exchanger tank	mm	770	927	1074	1226	1429
F	Height of brine tank (with/without lid)	mm	1690/1500				
G	∅ Brine tank	mm	1340			1790	
H	Width of brine tank rack	mm	900			1000	
I	Depth of brine tank rack	mm	370				
J	Required room height	mm	3000	3050	3150	3150	3500
K	Distance to wall (recommended)	mm	500			600	

• **Product Data Sheet**

Water softener softliQ:XLA/XLA-2/XLA-3

Dimensions and weights		softliQ:XLA-2					
		20000	30000	40000	50000	70000	
L	Connection height of raw water	mm	2150				2500
M	Connection height of soft water	mm	470				530
N	Distance brine tank – exchanger tank	mm	2550	2650	2700	2950	3050
O	Distance between exchanger tanks	mm	1300	1400	1500	1700	1900
Operating weight, approx.		kg	4500	5500	6200	8900	11100

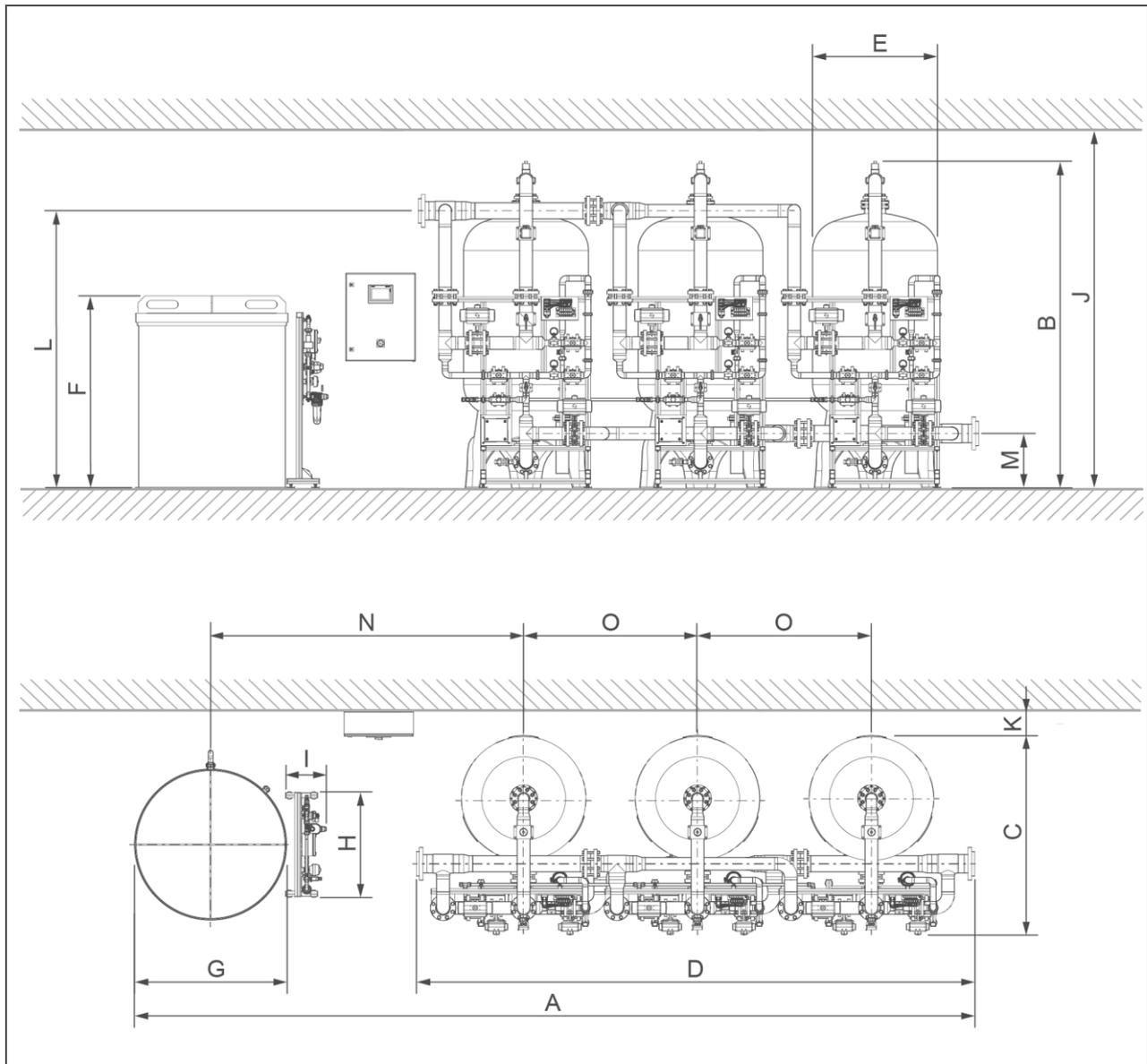
Connection data		softliQ:XLA-2				
		20000	30000	40000	50000	70000
Nominal connection diameter	DN	65	80	100	100	125
Drain connection	DN	≥ 100				
Power supply	V/Hz	230/50				
Power input	VA	500 (without compressor)				
Protection/protection class		IP54/Ⓢ				

Performance data		softliQ:XLA-2				
		20000	30000	40000	50000	70000
Nominal pressure	PN	10				
Operating pressure	bar	2.5 – 8.0				
Nominal flow at a residual hardness < 0.1 °dH	m³/h	20	30	40	50	70
Pressure loss at nominal flow < 0.1 °dH	bar	1.1		0.9		1.1
Nominal capacity	m³x°dH	1800	2400	3225	4350	5850
	mol	321	429	576	777	1045
Capacity per kg of regeneration salt	mol/kg	5.4				

Filling volumes and Consumption data		softliQ:XLA-2				
		20000	30000	40000	50000	70000
Resin volume per exchanger	l	600	800	1075	1450	1950
Gravel quantity per exchanger	kg	50	100	225	300	500
Salt supply	kg	≤ 1650	≤ 1650	≤ 1650	≤ 3100	≤ 3100
Salt consumption per regeneration, approx.	kg	60	80	108	145	195
Total waste water volume per regeneration, approx.	m³	2.6	3.5	4.6	6.2	8.4

General data		softliQ:XLA-2				
		20000	30000	40000	50000	70000
Water temperature	°C	5 – 30				
Ambient temperature (technical application)	°C	5 – 40				
Ambient temperature (drinking water)	°C	5 – 25				
Humidity (non-condensing)	%	≤ 90				
Order no.		506020 000000	506021 000000	506022 000000	506023 000000	506024 000000

### Technical specifications III: softliQ:XLA-3



Dimensions and weights		softliQ:XLA-3					
		40000	60000	80000	100000	140000	
A	Total width	mm	6550	7000	7250	8150	8800
B	Total height	mm	2670	2750	2830	2850	3200
C	Total depth	mm	1500	1650	1750	1950	2300
D	Width of exchanger tank including piping	mm	4100	4600	4850	5300	6000
E	∅ Exchanger tank	mm	770	927	1074	1226	1429
F	Height of brine tank (with/without lid)	mm	1690/1500				
G	∅ Brine tank	mm	1340		1790		
H	Width of brine tank rack	mm	900		1000	1000	
I	Depth of brine tank rack	mm	370	370	370	370	370
J	Required room height	mm	3000	3050	3150	3150	3500
K	Distance to wall (recommended)	mm	500	500	500	600	600

• **Product Data Sheet**  
Water softener softliQ:XLA/XLA-2/XLA-3

Dimensions and weights		softliQ:XLA-3					
		40000	60000	80000	100000	140000	
L	Connection height of raw water	mm	2150		2400		2600
M	Connection height of soft water	mm	470				530
N	Distance brine tank – exchanger tank	mm	2550	2650	2700	2950	3050
O	Distance between exchanger tanks	mm	1300	1400	1500	1700	1900
Operating weight, approx.		kg	5800	7700	8150	11600	14900
Connection data		softliQ:XLA-3					
		40000	60000	80000	100000	140000	
Nominal connection diameter		DN	100	125	150	150	150
Drain connection		DN	≥ 100				
Power supply		V/Hz	230/50				
Power input		VA	500 (without compressor)				
Protection/protection class			IP54/Ⓢ				
Performance data		softliQ:XLA-3					
		40000	60000	80000	100000	140000	
Nominal pressure		PN	10				
Operating pressure		bar	2.5 – 8.0				
Nominal flow at a residual hardness < 0.1 °dH		m³/h	40	60	80	100	140
Pressure loss at nominal flow < 0.1 °dH		bar	1.2	1.2	1.0	1.0	1.2
Nominal capacity		m³x°dH	1800	2400	3225	4350	5850
		mol	321	429	576	777	1045
Capacity per kg of regeneration salt		mol/kg	5.4				
Filling volumes and consumption data		softliQ:XLA-3					
		40000	60000	80000	100000	140000	
Resin volume per exchanger		l	600	800	1075	1450	1950
Gravel quantity per exchanger		kg	50	100	225	300	500
Salt supply		kg	≤ 1650	≤ 1650	≤ 1650	≤ 3100	≤ 3100
Salt consumption per regeneration, approx.		kg	60	80	108	145	195
Total waste water volume per regeneration, approx.		m³	2.6	3.5	4.6	6.2	8.4
General data		softliQ:XLA-3					
		40000	60000	80000	100000	140000	
Water temperature		°C	5 – 30				
Ambient temperature (technical application)		°C	5 – 40				
Ambient temperature (drinking water)		°C	5 – 25				
Humidity (non-condensing)		%	≤ 90				
Order no.			506030 000000	506031 000000	506032 000000	506033 000000	506034 000000

## Installation requirements

Obey local installation directives, general guidelines and technical specifications.

The installation site must be frost-proof and ensure the system's protection from chemicals, dyes, solvents and their vapours.

The installation site must have a floor drain. If no floor drain is available, an appropriate safety device must be installed. If the softened water is intended for human consumption as defined by the German Drinking Water Ordinance, the ambient temperature must not exceed 25°C. In case of applications that are purely technical, the ambient temperature must not exceed 40°C.

Always install a drinking water filter and, if required, a pressure reducer upstream of the systems.

The systems must be secured according to DIN EN 1717.

A Schuko socket is required within a distance of approx. 1.2 m of the system.

A drain connection for the discharge of the regeneration water must be available (> DN 100) .

In case the flushing water is directed to a lifting system, make sure that said device is salt water proof.

## Accessories

### Blending valve Order no. 126 020

To adjust the residual hardness by adding raw water.

### Circulation device for water softener softliQ:XLA Order no.: 506252000000

For installation into the raw water and soft water pipe – one circulation device required per exchanger tank

### Surcharge for 3100 kg brine tank for softliQ:XLA Order no. 506253000000

Brine tank to increase the salt supply in case of high salt consumption. For central generation of brine for system in continuous operation.

### Control air compressor for filtraliQ, softliQ:XLA Order no. 246 503

To control the pneumatically operated shut-off valves

### Disinfection unit for GVA, softliQ:XLA Order no. 505 275

Dosing pump system to add disinfectants to the brine suction line during the regeneration step Salting.

### S7-Communication module for softliQ:XLA

For transfer of system information to a Bus-Master on site

### S7- Communication module Profibus Order no. 506000010000

### S7- Communication module BACnet IP Order no. 506000020000

### S7- Communication module Profinet Order no. 506000030000

### S7- Communication module Modbus TCP/IP Order no. 506000040000

## Consumables

### Regeneration salt (25 kg) as per EN 973 type A Order no. 127 001

### Water test kit „Total hardness“ Order no. 170 187

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## Contact

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