

Water softener softliQ:MD

Intended use

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

The water softener softliQ protects water pipes and connected water-carrying systems from scaling as well as from malfunctions and damage caused by scaling.

The water softener softliQ:MD32 is designed for the continuous supply homes of 1 to 8 families (max. 20 people) with soft water.

The water softener softliQ:MD38 is designed for the continuous supply homes of 1 to 12 families (max. 30 people) with soft water.

The softliQ water softener protects water pipes and connected water-carrying systems from scaling but cannot prevent corrosion.

Observe the country-specific stipulations for soft water hardness in the drinking water sector.

Function

The water softener softliQ:MD works according to the well-proven ion exchange principle.

Based on the consumption of the past four weeks, the system capacity is automatically and continuously adapted to the individual water consumption of the owner/operator/operating company for every day of the week.

The water softener softliQ:MD can be operated in five different modes.

- Eco
Minimum use of resources.
- Comfort (factory setting)
Optimum use of resources and system capacity.
- Power
Maximum performance for highest demands.
- Individual
To enter your individual user profile.
- Fix
To enter a permanently fixed capacity figure without consideration of the past and without adaptation of the capacity figure.

A regeneration automatically takes place up to three times a day in times of low withdrawal.

Depending on the remaining capacity of the exchangers (< 50 %), a partial or a complete regeneration takes place.

Alternatively, the time of regeneration can also be set by the owner/operator/operating company. A manual regeneration can be released at any time.

Thanks to this mode of operation, soft water is available to the system owner/operator/operating company at all times.

The system automatically controls the desired soft water hardness subject to the system's flow rate.

For hygienic reasons, the system releases a complete regeneration after four days at the latest.

The intelligence of the softliQ:MD allows for an efficient operation at the lowest salt and power consumption possible.

Grünbeck myProduct app

You can register and control your product conveniently using the myGrünbeck app.

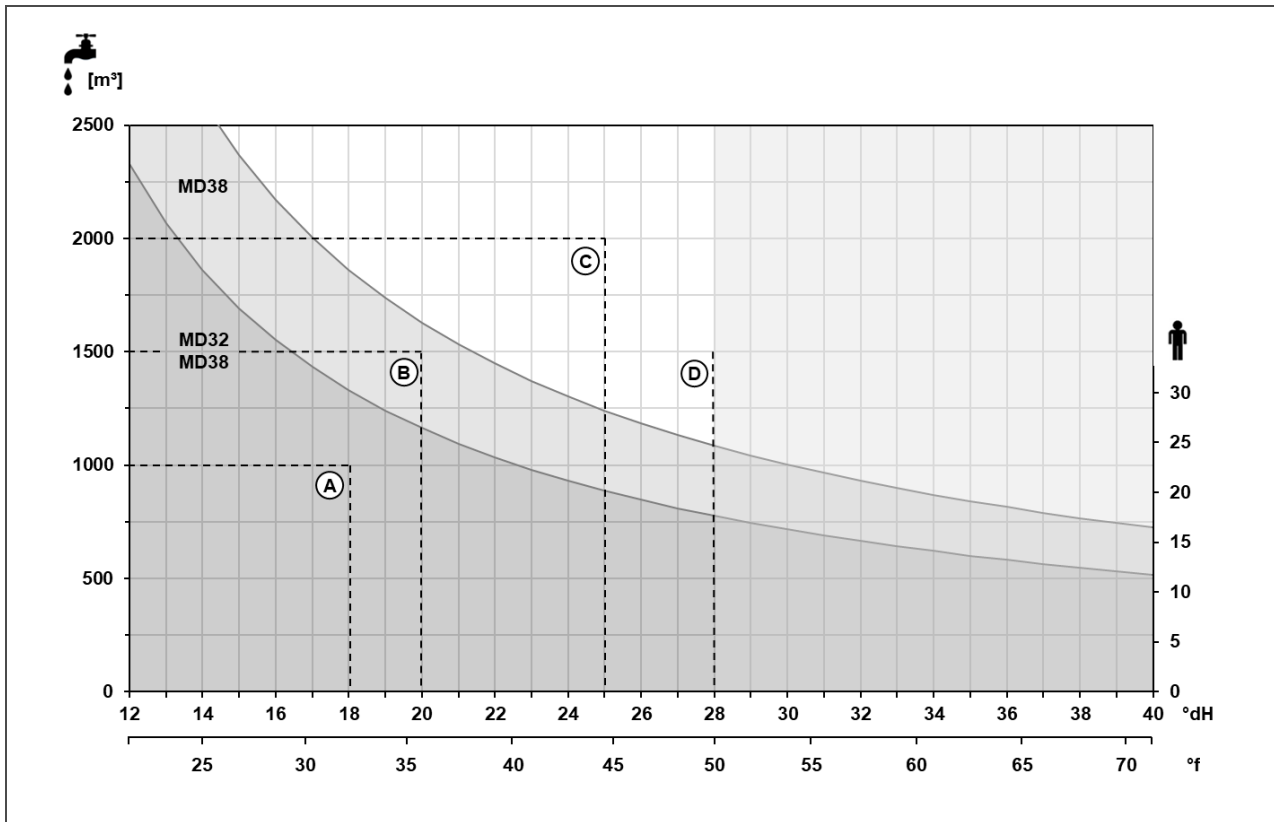
Design

- Compact design requiring little floor space and making optimum use of the space available
- Ergonomic system design for operation and maintenance
- Removable brine tank for hygienic and easy cleaning
- Integrated support tray to safely fill the brine tank
- Removable maintenance lid for quick and convenient access to the control valve
- Compact and easily accessibly brine valve for easy maintenance
- Integrated safety float for increased protection in case of power failures
- Exchanger with special distribution system for efficient salt utilisation
- Electronically controlled blending unit to regulate the soft water hardness
- Special ion exchanger resin to meet highest demands on drinking water
- Glass beads for uniform distribution of the water

Scope of supply

- Water softener incl.
 - Connection equipment
 - Water sensor
 - LAN & Wi-Fi interface for internet connection via Cloud
 - Drain connection DN 50 acc. to DIN EN 1717
 - Illuminated LED ring
 - Salt supply indicator
- Water test kit "Total hardness"
- Operation manual

Range of application of water softener softliQ:MD



The chart indicates the operating ranges of the water softeners softliQ:MD and applies to softening to a recommended soft water hardness of 4 °dH.

The vertical axes indicate the annual water consumption in m³ and the number of people in the household at an average water consumption of 121 litres per person per day.

The horizontal axes indicate the raw water hardness in °dH or °F. For the raw water hardness of your drinking water, please contact your water supply company.

Reading examples:

- A Water consumption 1000 m³, raw water hardness 18 °dH → The softliQ:MD32 and softliQ:MD38 systems can be applied.
- B Water consumption 1500 m³, raw water hardness 20 °dH → The softliQ:MD38 system can be applied.
- C Water consumption 2000 m³, raw water hardness 25 °dH → The softliQ:MD systems cannot be applied. We recommend using the water softener Delta-p.
- D Starting from a raw water hardness of 28 °dH, the maximum limit value for sodium (200 mg/l) stipulated in the German Drinking Water

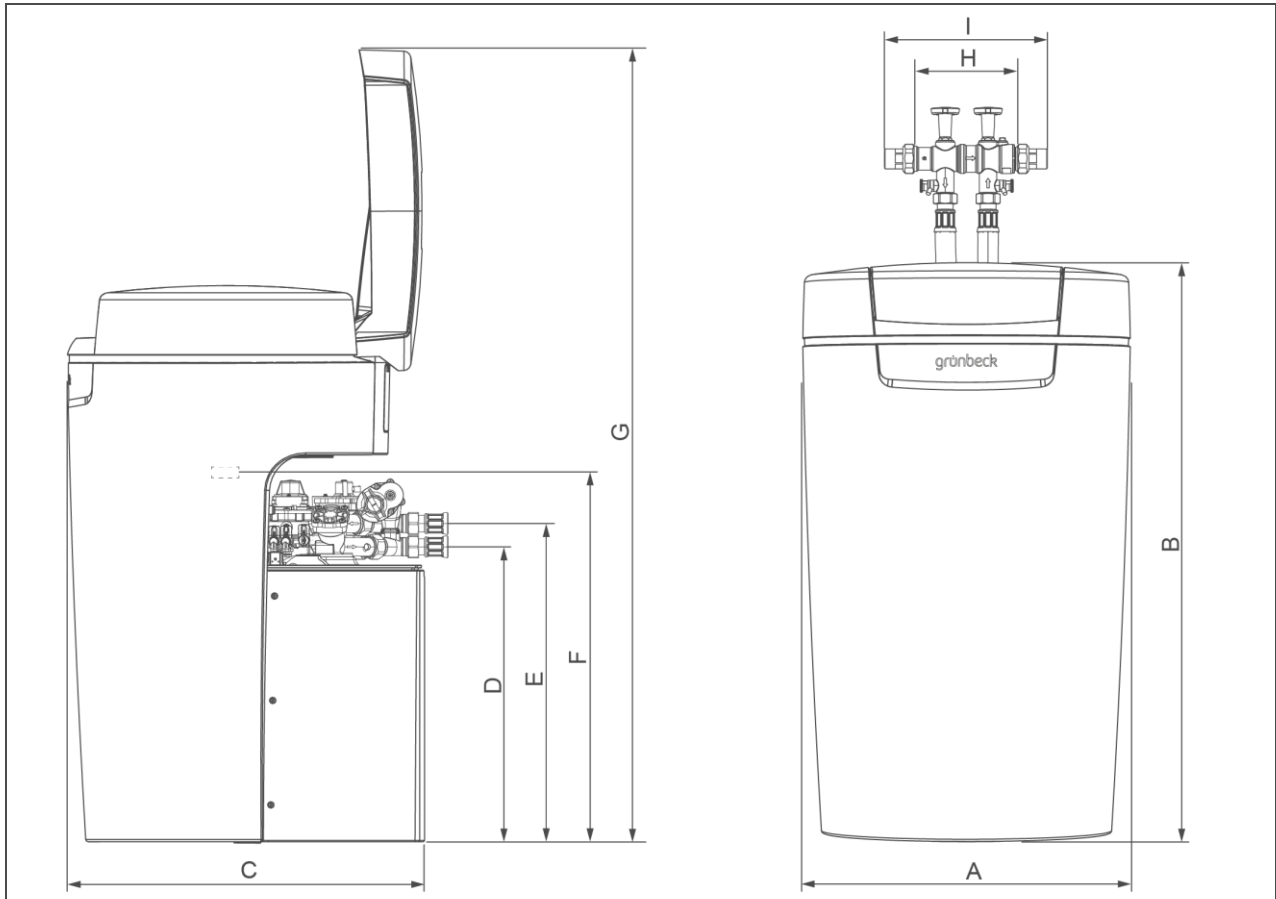
Ordinance has to be taken into consideration when softening to a soft water hardness of 4 °dH.

Should your raw water hardness exceed 28 °dH, please contact your local Grünbeck partner who will assist you in finding a solution. To find your local Grünbeck partner go to www.gruenbeck.com

For assistance in selecting the appropriate system, go to: www.gruenbeck.de/produktfinder



Technical specifications I



Dimensions and weights		softliQ:MD32	softliQ:MD38
A	System width	mm	525
B	System height	mm	912
C	System depth	mm	580
D	Connection height of control valve (soft water)	mm	480
E	Connection height of control valve (raw water)	mm	518
F	Height of safety overflow of brine tank	mm	540
G	Height with open lid	mm	1290
H	Installation length without screw connection	mm	190
I	Installation length with screw connection	mm	271
Operating weight, approx.		kg	130
Shipping weight, approx.		kg	46

Technical specifications II

Connection data		softliQ:MD32	softliQ:MD38
Nominal connection diameter		DN 25 (1" male thread)	DN 32 (1 1/4" male thread)
Drain connection		DN 50	
Rated voltage range	V	100 – 250	
Rated frequency	Hz	50 – 60	
Power input (during regeneration, temporarily)	W	14	
Power input during softening, with display, Wi-Fi and illuminated LED ring being switched off	W	< 3.5	
Protection/protection class		IP 54/□	
Wi-Fi frequency band	GHz	2.4	

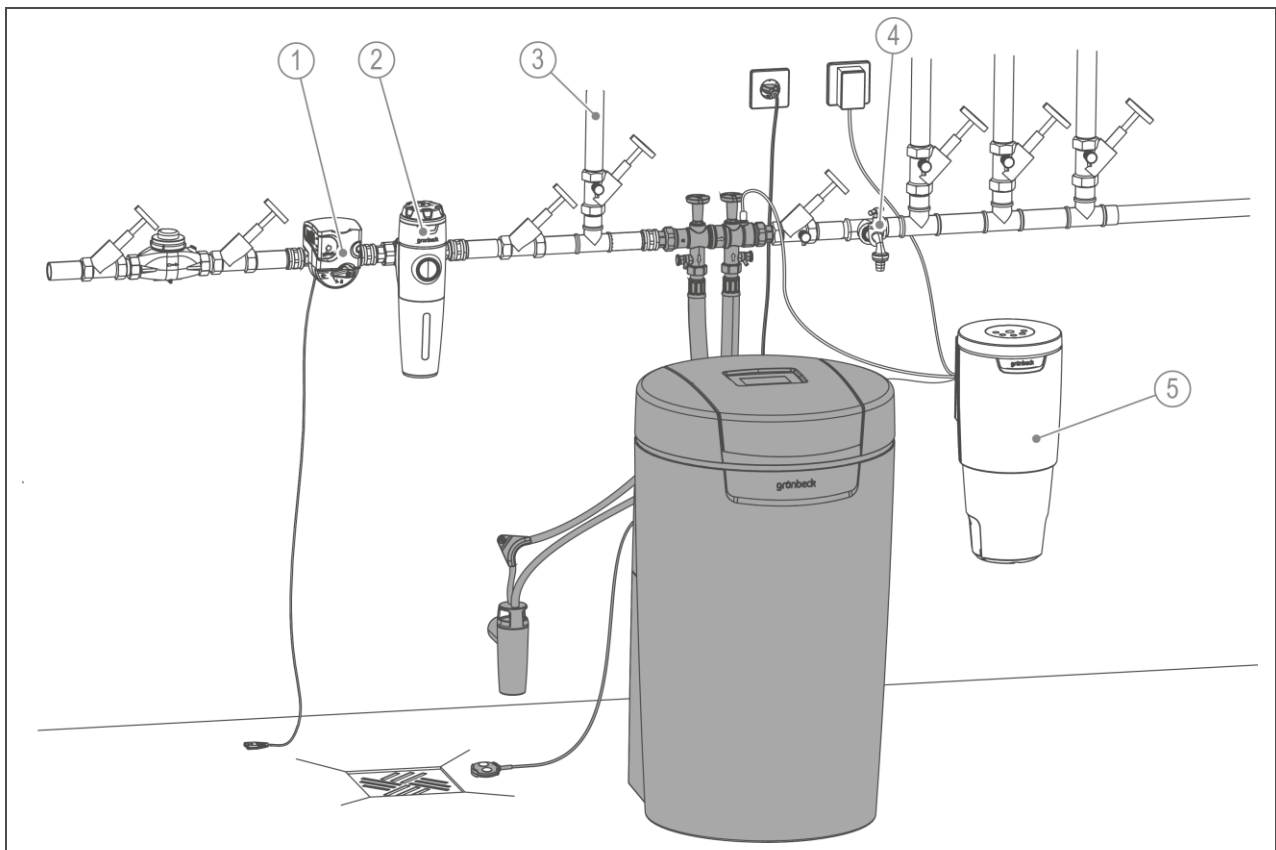
Performance data		softliQ:MD32	softliQ:MD38
Nominal pressure		PN 10	
Rated pressure	MPa/bar	1.0 10	
Min./max. operating pressure (recommended)	bar	2.0/8.0 (4.0)	
Nominal flow (0 °dH, 0 °f, 0 mol/m ³) acc. to DIN EN 14743 at a pressure loss of 1.0 bar (theoretical value)	m ³ /h	3.2	3.8
Nominal flow at a pressure loss of 1.0 bar, following DIN EN 19636 (raw water hardness 20 °dH (35.6 °f, 3.56 mol/m ³), soft water hardness 8 °dH (14.2 °f, 1.42 mol/m ³))	m ³ /h	4.3	5.6
Nominal capacity variable	m ³ x°dH m ³ x °f mol	2 x 6 – 2 x 14 2 x 11 – 2 x 25 2 x 1.1 – 2 x 2.5	2 x 8 – 2 x 20 2 x 14 – 2 x 36 2 x 1.4 – 2 x 3.6
Capacity per kg of regeneration salt	mol/kg	7.3 - 4.4	
Regeneration time for a complete regeneration	min	40 - 80	
Regeneration in the event of a reduction in capacity	%	> 50	

Filling volumes and consumption data		softliQ:MD32	softliQ:MD38
Resin volume	l	2 x 5	2 x 7.5
Salt consumption* (both exchangers)	kg	0.3 - 1.1	0.4 - 1.6
Regeneration salt supply	kg	≤ 95	
Salt consumption per m ³ and °dH	kg/(m ³ x °dH)	0.025 - 0.039	
per m ³ and °f	kg/(m ³ x °f)	0.014 - 0.022	
per mol	kg/mol	0.140 - 0.221	
Flushing water flow	m ³ /h	≤ 0.3	≤ 0.4
Total waste water volume* (both exchangers)	l	42 - 62	56 - 86
Waste water volume per m ³ and °dH	l/(m ³ x °dH)	3.5 - 2.2	
per m ³ and °f	l/(m ³ x °f)	1.9 - 1.2	
per mol	l/mol	19 - 12	

*For a complete regeneration

General data		softliQ:MD32	softliQ:MD38
Range of application: house size (up to ... people)		1 - 8 (20)	1 - 12 (30)
Water temperature	°C	5 - 30	
Ambient temperature (drinking water)	°C	5 - 25	
Ambient temperature (technical applications)	°C	5 - 40	
Humidity (non-condensing)	%	≤ 90	
DVGW registration number		DW-91S1CT0491	
SVGW certificate number		1902-6824	
ÜA registration number The Office of the Vienna Provincial Government – City of Vienna		R-15.2.3-21-17496	
Order no.		187 400	187 450

Installation example



Item	Designation	Item	Designation
1	Safety device protectliQ	2	Drinking water filter pureliQ
3	Garden water pipe	4	Water withdrawal point
5	Dosing system exaliQ		

Installation requirements

The softliQ water softeners are DVGW-certified, and thus intrinsically safe. Therefore, no additional safety devices (system separators) are necessary upstream of the product.

Obey the local installation directives, general guidelines and technical specifications. The installation site must be frost-proof and ensure the product's protection from chemicals, dyes, solvents and vapours.

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. For 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 (e.g. fine filter pureliQ:KD) upstream of the product.

For electrical connection, a Schuko socket is required within a distance of approx. 1.2 m. The socket outlet requires permanent power supply and must not be coupled with light switches, emergency heating switches or the like.

A drain connection (DN 50) must be available to discharge the regeneration water.

Make sure that there is a floor drain at the installation site. In case there is none, install the protectliQ safety device or a protection device with water stop of equal quality. This prevents water damage in case of leaks.

Make sure that lifting systems are resistant to salt water or use our delivery pump for regeneration water.

A water withdrawal point must be available near the product.

According to DIN EN 806-5, ion exchanger systems routinely require a functional check to be performed by the owner/operator/operating company and maintenance to be performed by an authorised technical service company.

Accessories

Dosing system
exaliQ:KC6-e
Order no. 117 460

Dosing system
exaliQ:SC6-e
Order no. 117 465

Electronically controlled dosing equipment including communication interface iQ Comfort for corrosion protection in case of a negative saturation index or to stabilise the total hardness.

Safety device
protectliQ:A20
Order no. 126 400

Product to protect against water damage in one and two-family homes.

For other sizes, please inquire.

Delivery pump for regeneration water
Order no. 188 800

To discharge the regeneration water into drain pipes located at a higher level.

Extension kit for connection hoses DN25
(softliQ:MD32 only)
Order no. 187 660e

To extend the hose to 1.6 m.

Extension kit for connection hoses DN32
(softliQ:MD38 only)
Order no. 187 680e

To extend the hose to 1.6 m.

90° connection angle – 1" (2 pcs)
Order no. 187 865
(softliQ:MD32 only)

To direct the connection hoses closer along the softliQ in case of confined installation conditions.

Installation kit softliQ
Order no. 188 865
(softliQ:MD32 only)

Space-saving combined connection of water softener and filter.

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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