

HYDRO ION® Water softening station

Type: HAS 25 Comfort

Application

Our HYDRO ION® HAS 25 Comfort is designed as a mobile water softener and is used for filling of heating systems with fully softened water. It is not suited for the use in drinking water application.

Design

The system is connected to the cold water feed pipe directly after a system separator according to DIN EN 1717.

The water softener can be fed with water of any degree of hardness if the feed water corresponds in all other analytical parameters to the drinking water regulation.

It is to be observed that any feeding with non-drinking water may lead to damage of the high-quality cation exchanger caused by unwanted substances.

Blockages and damages caused by scale deposits are prevented by softening the heating water. Scale deposits in the heating system and pipelines always cause higher energy consumption. Filling with softened water increases the energy efficiency of a heating system.

The system complies with the recommendations of VDI 2035.

Carefully keep in mind that the capacity of the softener resin filling is limited.

Regeneration with brine is required if the resin is exhausted. In compliance with DIN EN 973 (DIN 19604) only common salt tablets shall be used as regeneration agent. A brine tank is part of the scope of supply.

Dosing of the required correction chemicals is by means of an integrated dosing unit.

Scope of supply

HYDRO ION® heating water system consisting of:

- 1 x trolley with pneumatic tyres
- 1 x pressure vessel
- 1 x control unit
- 1 x non-return valve
- 1 x fine filter
- 1 x pressure reducer with pressure monitoring
- 1 x water meter
- 1 x dosing unit
- 1 x ball valve
- 1 x brine tank for regeneration
- 2 x connection hose
- 1 x brine hose
- 1 x operation manual

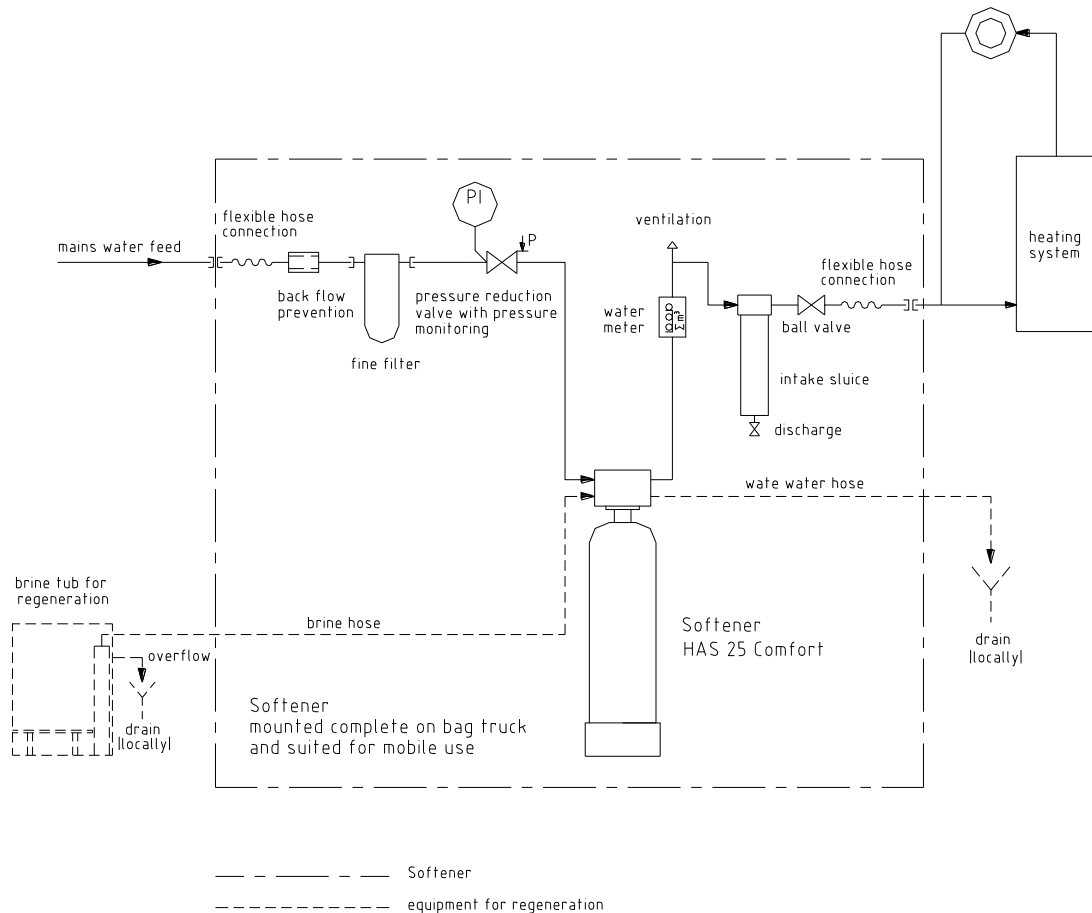


This picture shows an example of a system
HYDRO ION® HAS 25 Comfort

Notes / Installation conditions

- Technical data and general technical standards as well as the local installation conditions must be observed.
- Installation of heating water filling system according to DIN EN 1717.
- The ambient temperature and possibly occurring radiation heat may not exceed 40° C
- The installation site has to be frost-resistant.
- The installation site has to be free from solvent, colorant, varnish and chemical vapours.
- Setting pressure in compliance with the system-specific requirements.

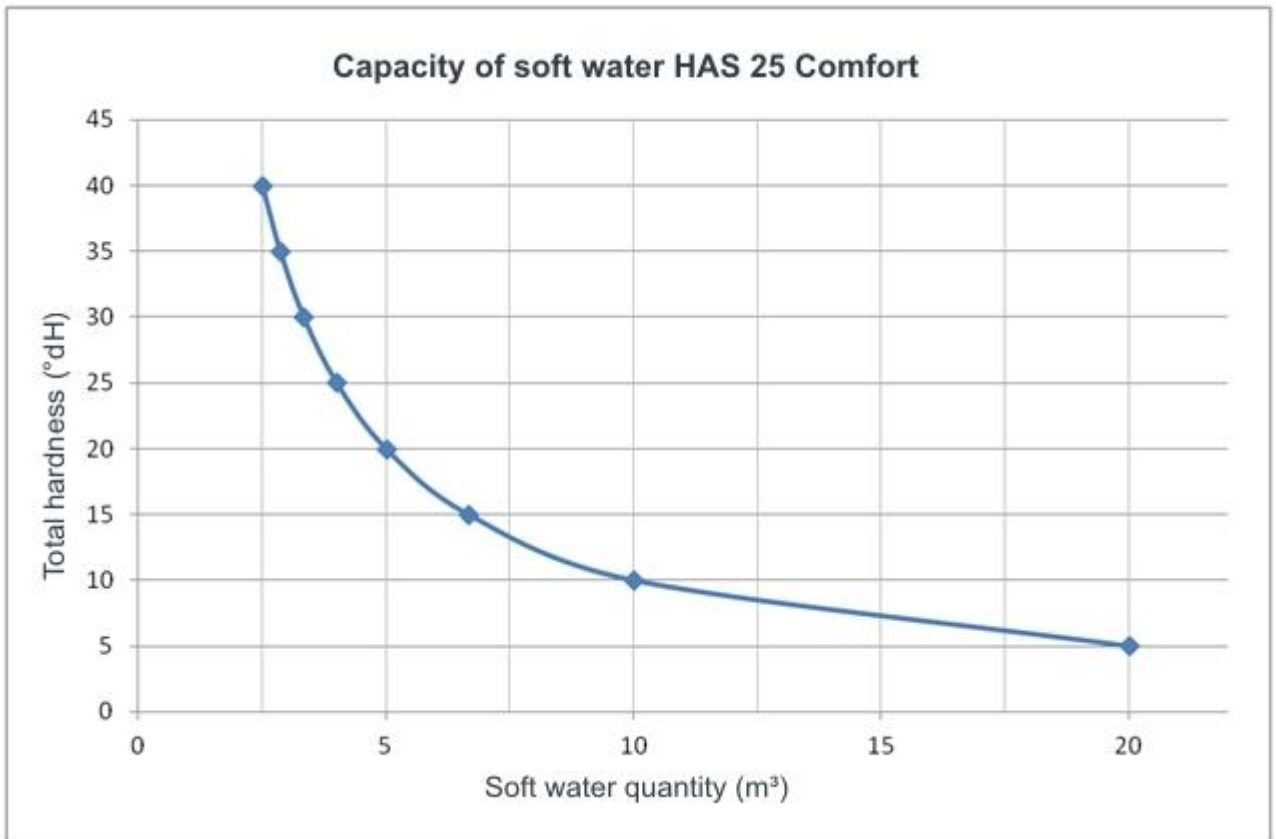
Installation example



Technical data		
Resin volume	litres	25
Capacity for full salt rate*	m ³ x°dH	100
Salt consumption for each regeneration*	kg	6,0
Salt storage in brine tank	kg	ca. 70
Nominal volume flow*	m ³ /h	1.25
Minimum flow pressure	bar	1.5
Operating pressure min./max.	bar	2,0 / 8,0
Operating temperature	°C	5 – 40
Connections	mains water input	R ¾ “
	soft water output	R ¾ ”
	rinse water	R ½ ”
Total height	mm	1.330
Total width	mm	630
Total depth	mm	600
Height of brine tank	mm	760
Width of brine tank	mm	380
Depth of brine tank	mm	380
Weight (empty)	kg	34
Art.-No.		599.115

*The values depend on the mains water quality and the operation mode of the system.

Efficiency curve of HYDRO ION[®] HAS 25 Comfort



Total hardness in °dH	7.5	10.0	12.5	15.0	17.5	20.0	22.5
Soft water quantity in m³	13.3	10.0	8.0	6.7	5.7	5.0	4.4

Total hardness in °dH	25.0	27.5	30.0	32.5	35.0	37.5	40.0
Soft water quantity in m³	4.0	3.6	3.3	3.1	2.8	2.7	2.5