

HYDRO ION®

Soft water filling station for the heating

- Type: HAS** - combi I - Art.-Nr. 600.143
 - combi I - A - Art.-Nr. 556.271
 - combi I - M - Art.-Nr. 556.270

Application

Our HYDRO ION® HAS combi and HAS combi VE are designed as compact filling stations and used for water softening or demineralisation of makeup water for heating circuits according to DIN EN 12828.

Design

The system is connected to the cold water feed pipe directly after a system separator according to DIN EN 1717 (with except in case of alternatives A and M).

The system shall only be fed with water which 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 exchange resin 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. The installation of a water softening system always leads to a higher energy efficiency of the heating system.

A **demineralisation** is required for special heating materials (e. g. aluminium) to prevent chemical reactions with the water which could lead to damage to the system.

Carefully keep in mind that the capacity of the special resin filling is limited. The resin cartridge can be easily exchanged if exhausted.

All systems of type HAS are only suitable for a horizontal installation into piping system.

Scope of supply

HYDRO ION® heating water station consisting of:

- 1 x filter cup made of plastic
- 1 x filter head (made of plastic) including screw fitting
- 1 x resin cartridge:
 - HAS I cation exchange resin
 - HAS VE I mixed bed exchange resin
- 1 x water meter
- 2 x ball valves
- 1 x filling unit (only for alternatives HAS I-A / HAS VE I-A)
- 1 x system separator (only for alternatives HAS I-M / HAS VE I-M)
- 1 x operation manual

Demineralisation system for the heating

- combi VE I - Art.-Nr. 556.266
- combi VE I – A - Art.-Nr. 556.281
- combi VE I – M - Art.-Nr. 556.280

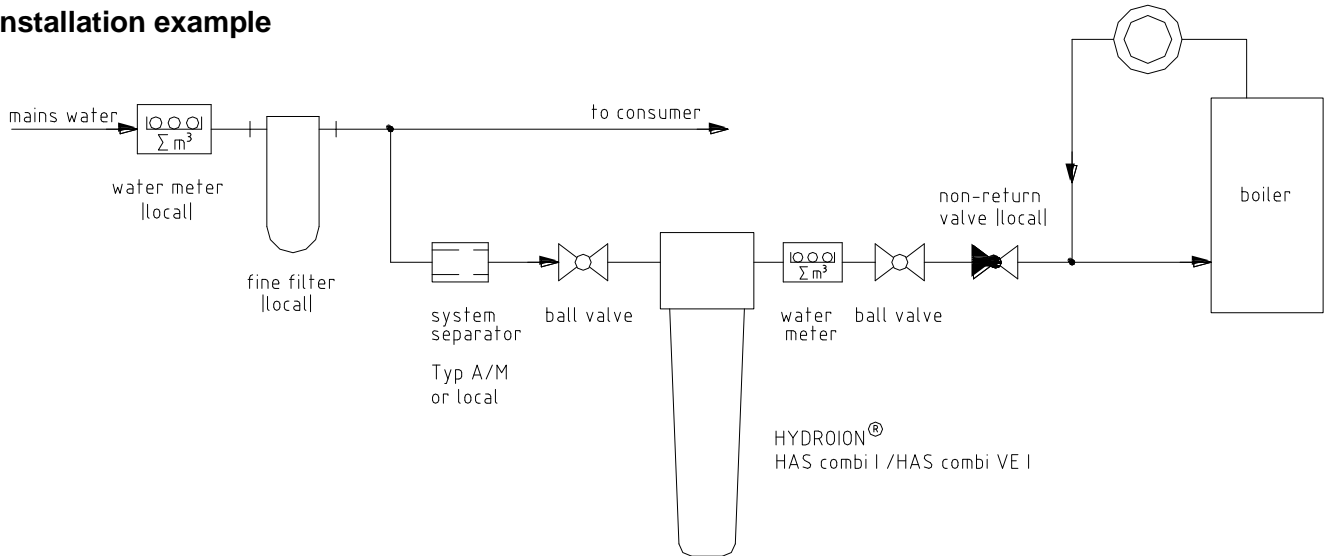


This picture shows an example of the system HYDRO ION® HAS combi I – A

Notes / Installation conditions

- Technical data and general technical standards as well as the local installation conditions must be observed.
- Installation of heating water station according to DIN EN 1717 (exceptional types A and M).
- The ambient temperature and possibly occurring radiation heat shall not exceed 40° C.
- The installation site must be frost-resistant.
- The installation site must be free from solvent, colorant, varnish and chemical vapours.
- Preset pressure according to the system-specific demands.
- Sufficient space for resin cartridge replacement must be observed and provided.

Installation example



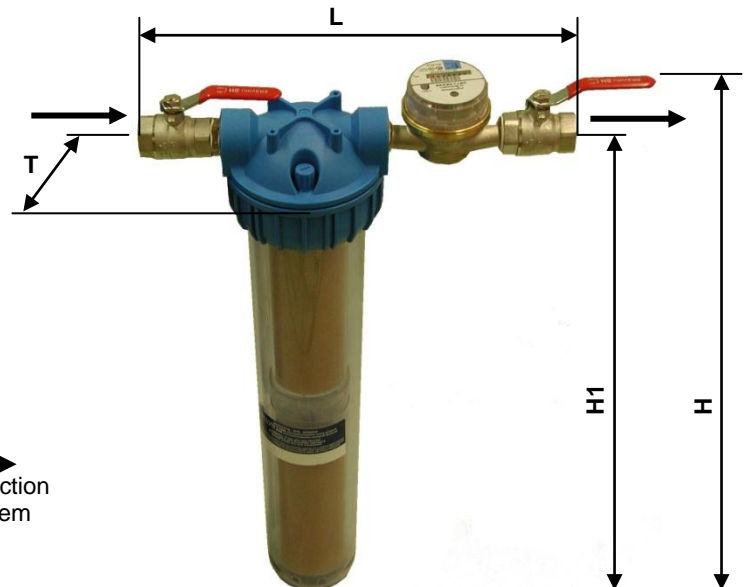
Technical data	HAS combi I (A, M)	HAS combi VE - I (A, M)
Ion exchanger	High quality cation exchange resin	High quality mixed bed exchange resin
Operating pressure	max. 8 bar	max. 8 bar
Operating temperature	+5 to +40 °C	+5 to +40 °C
Volume flow (max. permitted) *	200 l/h	120 l/h
Connections	Input DN 20, Output DN 20	Input DN 20, Output DN 20
Capacity	6 m ³ × °dH	1,8 m ³ × total salinity (1off total salinity = 30 µS/cm)

* Limitation of the volume flow through an orifice on the outlet of the system between water meter and ball valve

HAS combi I – A
HAS combi VE-I – A
Filling unit with system separator on input of the system

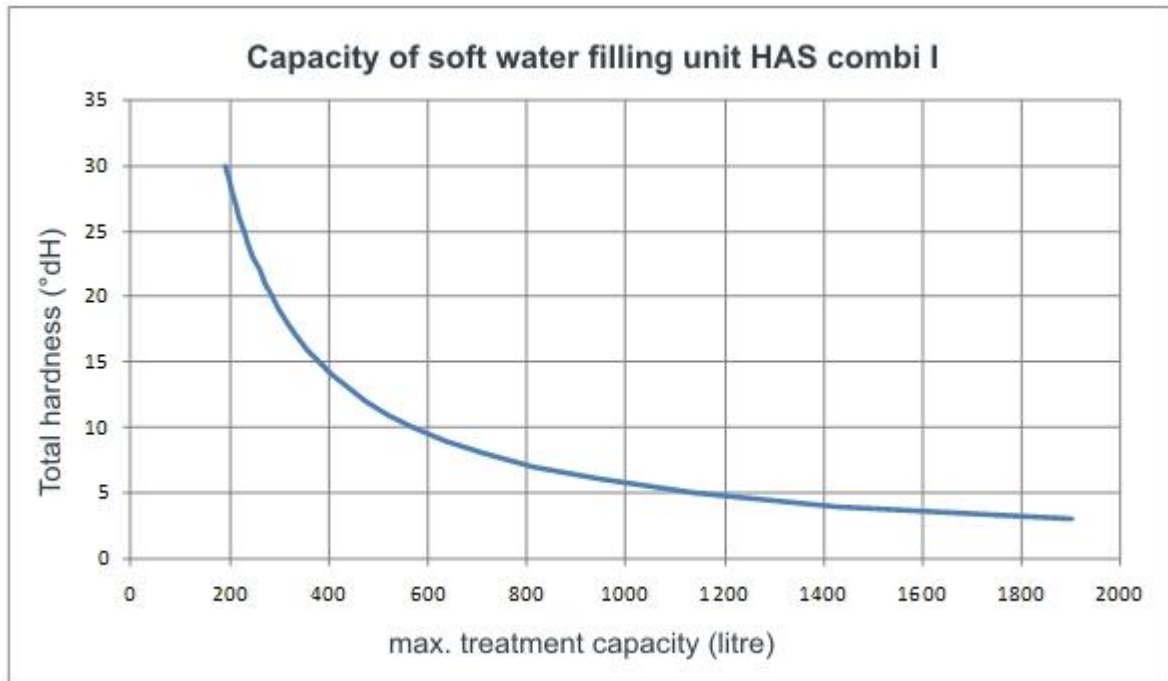


HAS combi I – M
HAS combi VE-I – M
System separator on input of the system



Dimensions HYDRO ION®		HAS combi I / HAS combi VE I	HAS combi I – A / HAS combi VE-I – A	HAS combi I – M/ HAS combi VE-I – M
Installation length (L)	mm	350 ± 20	530 ± 20	540 ± 20
Total height (H)	mm	ca. 600	ca. 700	ca. 670
Height from pipe centre (H1)	mm	546	546	546
Total depth	mm	130	130	130
Depth from pipe centre (T)	mm	65	65	65
Weight	kg	4	5	5

Efficiency curve of HYDRO **ION**[®] HAS combi I



Efficiency curve of HYDRO **ION**[®] HAS combi VE I

