

HYDRO ION®

Demineralisation station

Type: HAS 25 VE Comfort

Application

Our HYDRO **ION**[®] HAS 25 VE Comfort is designed as mobile unit and is used for filling of heating systems with fully demineralised 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.

Since full desalination/demineralisation also eliminates water hardness there will not be any pipe blockages caused by scaling. The heating water system gets better protected from corrosion by a significantly reduced conductivity.

Scale deposits in the heating system and pipelines always cause higher energy consumption. The filling with demineralised 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 special resin filling is limited.

The pressure vessel can be quick and easy exchanged in case of exhaustion by replacement filter cartridges with quick-release fastener. The pressure vessel with the resin filling is to be sent to Hydrotec GmbH premises for regeneration.

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

L'ACTICLE DE L'ACT

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

Scope of supply

HYDRO ION® heating water station consisting of:

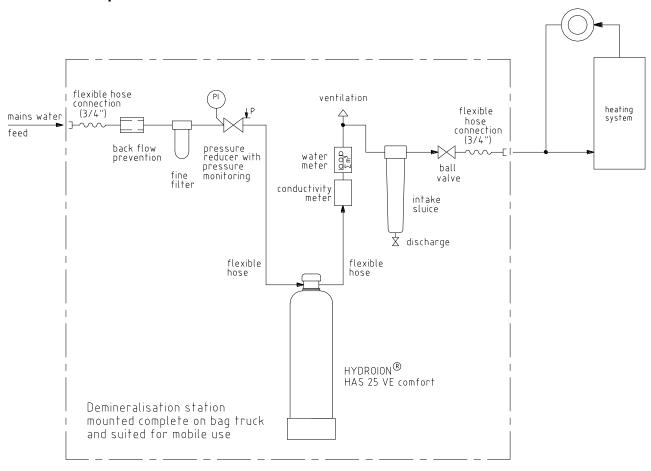
- 1 x trolley with pneumatic tyres
- 1 x pressure vessel with nozzle system and connection fitting
- 1 x non-return valve
- 1 x fine filter
- 1 x pressure reducer with pressure monitoring
- 1 x water meter
- 1 x conductance meter for checking the capacity
- 1 x dosing unit
- 1 x ball valve
- 2 x hose connection
- 1 x operation manual

Notes / Installation conditions

- Technical data and general technical standards as well as local installation conditions must be observed.
- Installation of the heating water filling station according to DIN EN 1717.
- 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-specifically requirements.



Installation example



| Technical data | | |
|---------------------------|------------------------------|---------|
| lon exchange resin volume | litres | 25 |
| Capacity (new resin) | m³x total salinity** | 35 |
| Nominal volume flow rate* | m³/h | 1.0 |
| Minimum flow pressure | bar | 2.0 |
| Operating pressure (max.) | bar | 8.0 |
| Operating temperature | °C | 5 – 40 |
| Connections | mains water input | R ¾ " |
| | soft water output | R 3/4 " |
| | rinse water | R ½ " |
| Total height | mm | 1,330 |
| Total width | mm | 630 |
| Total depth | mm | 600 |
| Weight (empty) | kg | 34 |
| ArtNo. | | 599.118 |
| ArtNo. | replacement filter cartridge | 590.153 |

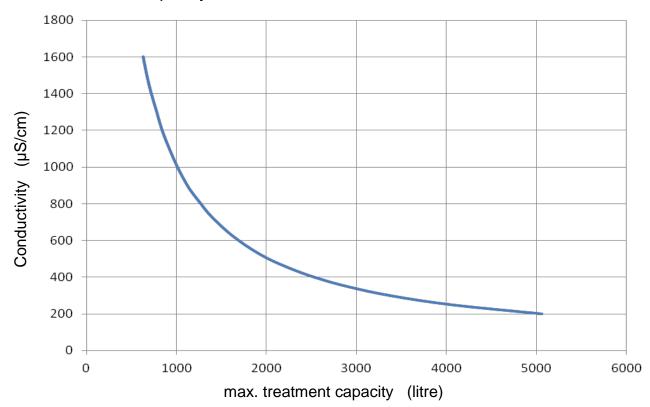
^{*}The values depend on the mains water quality and the operating mode of the system.

^{** 1}off total salinity = 30 µS/cm



Efficiency curve HYDRO ION® HAS 25 VE Comfort

Capacity of demineralisation station HAS 25 VE



| Conductivity μS/cm | Treatment capacity litres | Conductivity μS/cm | Treatment capacity litres |
|-----------------------|---------------------------|-----------------------|---------------------------|
| | | | |
| 1,600 | 630 | 850 | 1,190 |
| 1,550 | 650 | 800 | 1,270 |
| 1,500 | 675 | 750 | 1,350 |
| 1,450 | 700 | 700 | 1,450 |
| 1,400 | 720 | 650 | 1,560 |
| 1,350 | 750 | 600 | 1,690 |
| 1,300 | 780 | 550 | 1,840 |
| 1,250 | 810 | 500 | 2,025 |
| 1,200 | 840 | 450 | 2,250 |
| 1,150 | 880 | 400 | 2,530 |
| 1,100 | 920 | 350 | 2,890 |
| 1,050 | 960 | 300 | 3,375 |
| 1,000 | 1,010 | 250 | 4,050 |
| 950 | 1,070 | 200 | 5,060 |
| 900 | 1,125 | | |