

**HYDRO ION®**  
**Type: HAS 6 VE**

**Application**

Our HYDRO ION® HAS 6 VE is a mobile system for filling of smaller air-conditioning and closed heating circuits with demineralised water according to DIN EN 12828.

**Design**

For filling of air conditioning or heating circuits the system is connected to the cold water feed pipe directly after a system separator according to DIN EN 1717.

The system should only be fed with water which corresponds to the drinking water regulation.

A desalination/demineralisation of the cooling or heating water is required for special materials (e. g. aluminium) to prevent chemical reactions with the water which could lead to damage to the system. Since a full desalination also eliminates water hardness there will not be any pipe blockages caused by scaling.

As a result, a higher energy consumption caused by lime deposits on the pipe walls is prevented. This means that the filling of cooling and heating systems with fully desalinated water increases the energy efficiency of the heating or cooling system. Corrosion-enhancing ions like chloride, sulphate etc. are eliminated due to the water treatment.

Carefully keep in mind that the capacity of the softener resin filling is limited. The resin filling has to be exchanged after exhaustion.



**Scope of supply**

HYDRO ION® HAS 6 VE consisting of:

- 1 x resin cartridge made of glass fibre reinforced plastic
- 1 x connection fitting set consisting of:
  - 1 x water meter
  - 2 x ball valves (input/output)
  - 1 x conductance meter
  - 1 x carrying handle made of plastic

- 1 x cation exchange resin (mixed bed exchange resin)
- 1 x operation manual

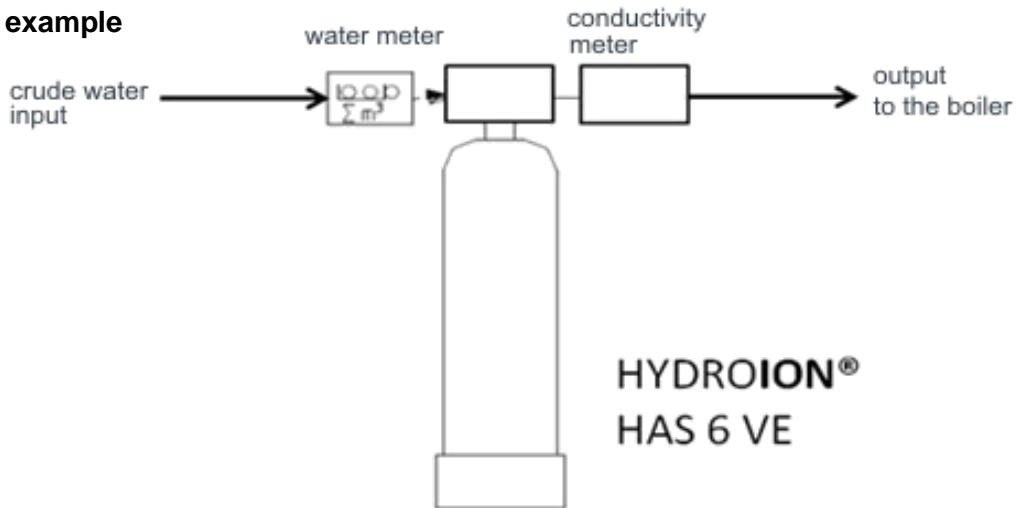
**Accessories**

Replacement resin filling (6 litres), **Art.-No. 599.161**

**Notes / Installation conditions**

- Technical data and general technical standards as well as the local installation conditions must be observed.
- Connection of HYDRO ION® HAS 6-VE 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.

**Installation example**



Technical data HYDRO ION <sup>®</sup> - HAS 6 VE	
Ion exchanger	High performance mixed bed exchange resin
Resin volume	6 litres
Capacity	at 300 µS/cm      810 litres at 600 µS/cm      400 litres
Operating pressure	min. 2 bar max. 8 bar
Operating temperature	+5 to +40 °C
Volume flow rate	280 l/h at 3.5 bar (pressure-dependent)
Connection input/output	input DN20 output DN20
Capacity	8 m <sup>3</sup> × total salinity at a residual conductivity of 10 µS/cm (1 off total salinity = 30 µS/cm)
<b>Art.-No.</b>	<b>599.160</b>
<b>Art.-No. replacement resin – 6 litres</b>	<b>599.161</b>



Dimensions HYDRO ION <sup>®</sup> - HAS 6 VE		
Length (L)	mm	520
Total height (H)	mm	ca. 600
Depth (from pipe centre)	mm	90
Total depth (T)	mm	180
Operating weight	kg	13

**Quick table:**

Conductivity in $\mu\text{S/cm}$	Treatment in litres	Conductivity in $\mu\text{S/cm}$	Treatment in litres
1,600	150	850	290
1,550	155	800	300
1,500	160	750	320
1,450	165	700	350
1,400	170	650	370
1,350	180	600	400
1,300	190	550	440
1,250	190	500	490
1,200	200	450	540
1,150	210	400	610
1,100	220	350	690
1,050	230	300	810
1,000	240	250	970
950	260	200	1,210
900	270		

Treatment capacity curve of HYDRO ION<sup>®</sup> HAS 6 VE

