

Short instruction for use



Field of application

The SYR mobile filling station 3200 is designed as a basis for refillable cartridges.

It provides either softened or demineralized water or demineralized water with integrated pHvalue stabilization for heating systems (VDI Directive 2035 sheet 1) and prevents lime deposits.

To provide a correct function of the mobile filling station please read the following instructions carefully!

Preparation of filling connections

Note: The use of the integrated backflow preventer BA in direction of flow according to EN 1717 is recommended.

Note for adjustment: the setting of the blending valve is required for each filling and has to be adapted to the local water conditions (raw and mixed water hardness) and to the type of water treatment (softening or demineralization).

Determination of the raw water hardness

Use a titration test to determine the raw water hardness.

To do this, take raw water from the drain valve on the inlet side of the fitting and measure the hardness of the water.

Note: The correct determination of the raw water hardness is urgently required for the further adjustment of the valve.

Adjustment of the desired initial hardness

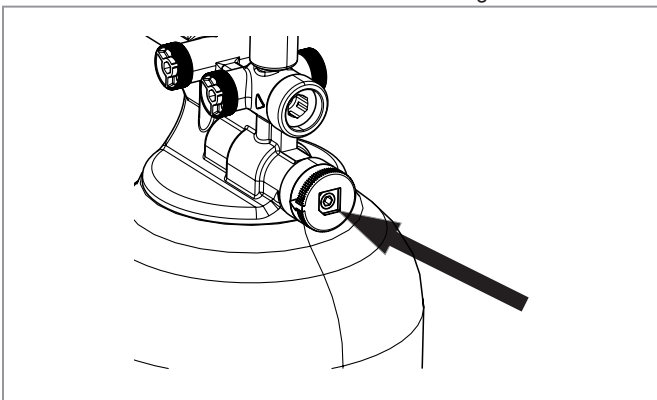
Note: Depending on the prescribed procedure (see manufacturer's instructions), the filling case can be used for softening or complete desalination.

Only the appropriate resin may be used for filling!

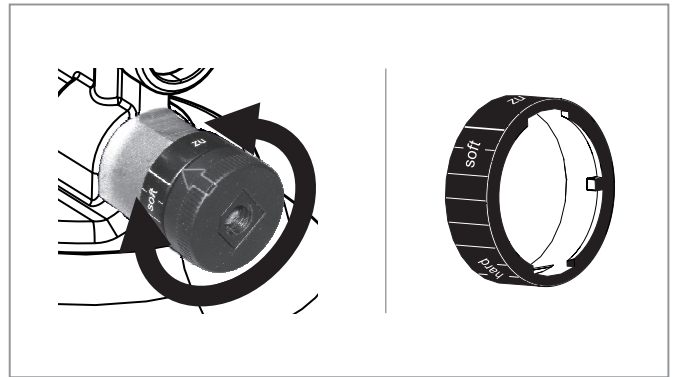
Setting instructions for softening

Note: In the „softening“ process, raw water is added to the previously completely softened water by blending. This results in the desired mixed water hardness!

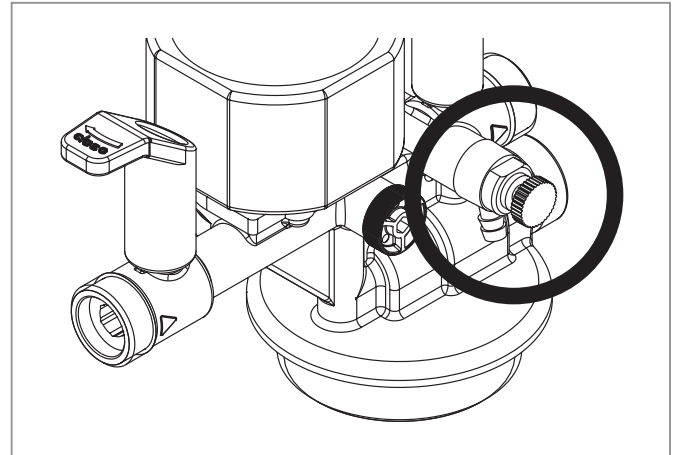
Set the desired mixed water hardness at the mixing valve.



For soft water set in direction „Soft“, for harder water set in direction „Hard“.



Then check the soft water hardness by drawing it from the discharge valve on the outlet side and, if necessary, readjust the mixing valve.



Setting instructions for complete desalination

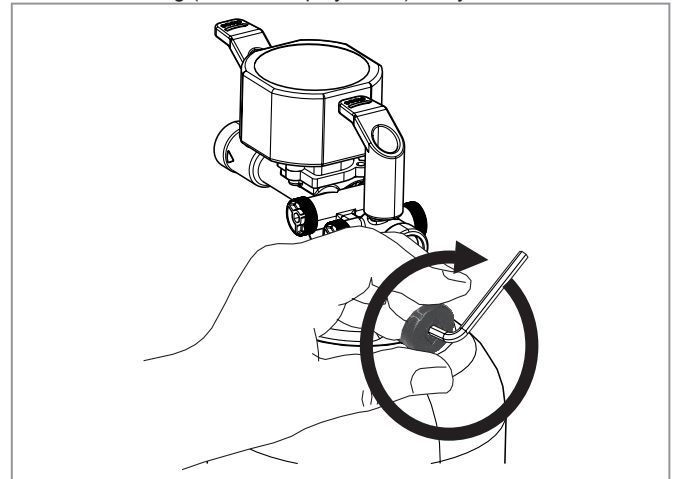
Note: In the „complete demineralization“ process, all salts are removed from the water. This results in water with very low conductivity ($< 100 \mu\text{S}$).

The treated water must only be checked with a conductivity measuring instrument (no hardness test set).

Order no. Conductivity meter: 3200.15.905

Deactivate the blending valve by turning the spindle clockwise fully inwards using a hexagon socket.

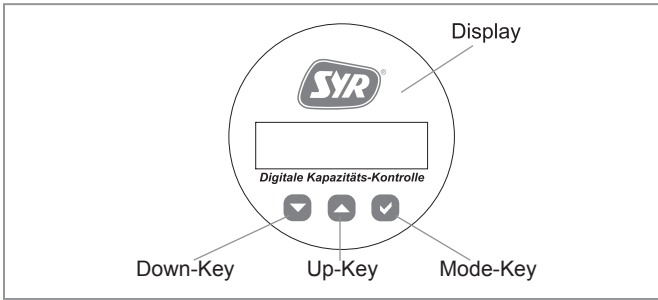
Hold the outer ring (with the display arrow) firmly.



Note: If the valve is subsequently used again as a softener, the spindle must be opened again!

Operation of the Digital capacity control

The digital capacity control includes the following elements:



The display is switched off when the cartridge is delivered.

Press any key to activate the display (the version number is displayed and the remaining quantity of the cartridge is displayed). Default setting: 1166 litres).



To change the values, press the -key for at least 3 seconds.

Adjust raw water hardness

You will be prompted to enter the raw water hardness:



Press the - or -key to change the value.
Press the - key to save the change.

Determine cartridge / procedure

Next, you must specify the cartridge used in two steps.

First select the type of water treatment (HWE, HVE, HVE plus) with the - or - key.



Press the - key to save the change.

Use the - or - key to select the size of the cartridge. (4 litres is preset) and save with the - key.



Press the - key to save the change.

Adjust soft water hardness

The desired soft water hardness is then requested.

Attention: This query is not necessary if you are using a HVE or HWV plus cartridge!



Press the - or - key to change the value.

Press the - key to save the change.

Cartridge change

Finally, you must indicate whether the cartridge has been changed or refilled.



Press the - or - key to confirm (Yes) or reject (No) the cartridge change.

If you have selected „Yes“, press the - key for 3 seconds to confirm the cartridge change and save the change.

The following confirmation appears:



After all settings have been completed, the display shows the newly calculated remaining quantity in litres.

Sample calculations for filling capacities

Sample calculation HWE:

$$\begin{array}{r} \text{Basic cartridge capacity} \\ \text{Hardness difference (20 °dH - Initial hardness)} \\ \hline 14.560 \\ (20 - 8 = 12) \\ \hline = 1213 \text{ Liter} \end{array}$$

Sample calculation HVE:

$$\begin{array}{r} \text{Basic cartridge capacity} \\ \text{Total hardness (20 °dH)} \\ \hline 5.000 \\ 20 \\ \hline = 250 \text{ Liter} \end{array}$$

Sample calculation HVE plus:

$$\begin{array}{r} \text{Basic cartridge capacity} \\ \text{Total hardness (20 °dH)} \\ \hline 3.500 \\ 20 \\ \hline = 175 \text{ Liter} \end{array}$$