

Operating instructions
SorbOx® LI
SorbOx® SI*

Installation
Function
Operation
Service



*SorbOx® SI will no longer be produced from 2025.
Replacement device H₂O GUARD lift.



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1. Safety instructions



Not drinking water



Maximum 90 °C



Maximum 6 bar
pressure



100 % recyclable



Maximum 60 °C with demineralisation cartridge

2. Function

The devices from the SorbOx® series protect your heating system from corrosion damage.

The SorbOx® combines the following functions:

- pH regulation by means of a sacrificial anode
- Micro gas bubble separator (degassing)
- Magnetic flow filter (neodymium magnet)
- Demineralisation (with SorbOx® LI)
- 2 fully integrated ball valves

3. Standard delivery

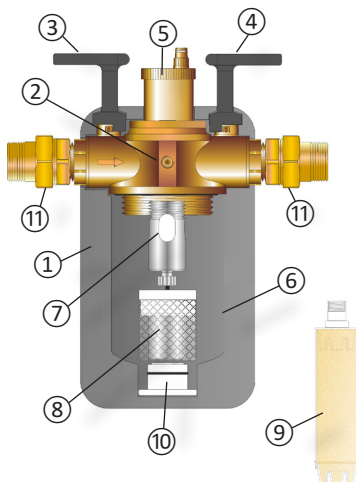
1 × complete SorbOx® consisting of:

- Head
- Canister
- Anode
- Demineralisation cartridge (SorbOx® LI)
- Insulation
- 2 x pipe couplings
- Operating instructions

4. Specification

4.1. Device description

1. Insulation
2. Head
3. Shut-off valve, supply line
4. Shut-off valve, output line
5. Air vent
6. Canister
7. Anode retainer
8. Anode plug
9. Demineralisation cartridge (SorbOx® LI only)
10. Magnet
11. Pipe coupling 1" fem./1" male



4.2. Dimensions

Canister: 1.4301 / AISI 304 / SS 2333

Head: Brass

Insulation: EPP

		SorbOx® SI*	SorbOx® LI
A	Overall height	310 mm	470 mm
B	Top edge centre connection	100 mm	100 mm
C	Wall centre connection	100 mm	100 mm
D	Overall width	282 mm	282 mm
E	Insulation width	150 mm	150 mm
F	Insulation height	260 mm	420 mm
G	Insulation depth	150 mm	150 mm
H	Minimum clearance to the ground	100 mm	220 mm
	Connection thread	1" male	1" male
	Weight	5 kg	7 kg



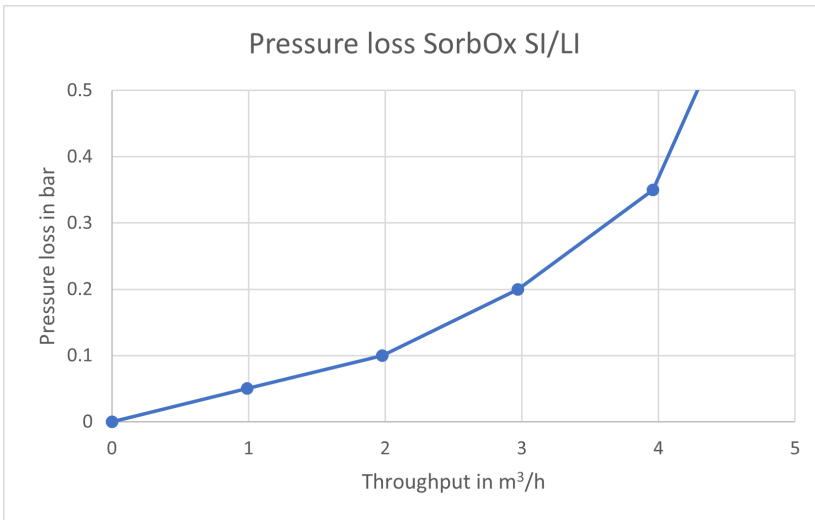
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4.3. Performance data

	SorbOx® SI*	SorbOx® LI
System volume	< 400 l	< 800 l
Demineralisation performance	none	2 m³/1° fH
Max. throughput	3 m³/h	
Pmax	6 bar	
Tmax	90° C (60° C with demineralisation cartridge)	

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4.4. Pressure loss



5. Installation

5.1. Determining the installation position

Please bear in mind the following points when selecting the installation position for a SorbOx®:

- The entire system water should regularly flow through the SorbOx®.

- To ensure that the oxygen can be separated out efficiently, an installation position close to the diffusion point (e.g. underfloor heating) should be selected.
- Installation orientation: Horizontal

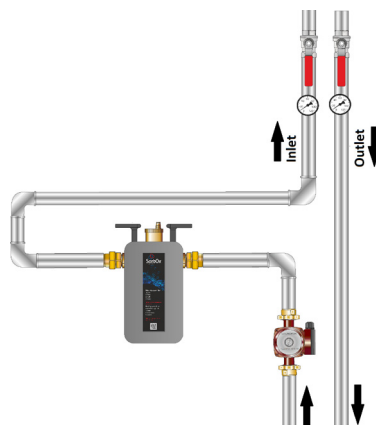


IMPORTANT NOTE!

Selecting the correct installation position for a SorbOx® is the responsibility of the heating contractor. We are happy to provide the contractor with assistance.

5.2. Connection

The appliances in the SorbOx® range are designed for installation in the main circuit. Optimum degassing is achieved in the flow line. Install in the return line if your priority is magnetite separation. The flow direction is depicted by an arrow on the brass head. If this does not suit, the device can be turned through 180° and the insulation refitted.



6. Commissioning

6.1. Filling/venting (see image under 4.1.)

The SorbOx® is filled by the pressure in the expansion vessel.

1. Open shut-off valve (3) in the supply line
2. Wait until no more air escapes from air vent (5)
3. Open the shut-off valve in output line (4)

The device can also be filled together with the entire system by expelling air.

7. Operation

7.1. System water

The quality of the heating water must comply with the general guidelines (VDI 2035, SWKI BT 102-01, ÖNORM 5195-1) unless the system manufacturer requests other values. The SorbOx® may also be operated with water that has been enriched with chemical substances. Chemical additives must continue to be dosed and monitored in accordance with the manufacturer's instructions. The sacrificial anode system, however, works more reliably with water without chemical additives.

7.2. Checking the condition of the anode

Periodic inspection of the magnesium anodes is mandatory (e.g. in conjunction with sludge removal, see 8.2.). An inspection should be carried out at least once a year.

8. Maintenance

8.1. Replacing the anode with a demineralisation cartridge

On the SorbOx® LI, the anode can be replaced with a demineralisation cartridge. This allows the system water to be demineralised as it circulates. The demineralisation cartridge is removed after use and recycled or disposed of in household waste.

1. Remove insulation (1)
2. Close shut-off valve (3) in the supply line
3. Close shut-off valve (4) in the output line
4. Remove magnet (10) from canister (6)
5. Unscrew canister (6)
6. Unscrew anode plug (8) together with anode retainer (7)/demineralisation cartridge (9) from head (2)
7. Screw demineralisation cartridge (9)/anode plug (8) together with anode

retainer (7) into head (2)

8. Wash out canister (6) (scrub with wire brush if necessary)
9. Screw canister (6) back on
10. Insert magnet (10)
11. Attach insulation (1)
12. Open the shut-off valve in supply line (3) again
13. Wait until no more air escapes from air vent (5)
14. Open the shut-off valve in output line (4) again

8.2. Sludge removal and checking or changing the anode

De-sludge the SorbOx® regularly. Exactly how often this is required depends on the amount of sludge. However, we recommend removing sludge at least once a year. The condition of the anodes should be checked at the same time.

1. Remove insulation (1)
2. Close shut-off valve (3) in the supply line
3. Close shut-off valve (4) in the output line
4. Remove magnet (10) from canister (6)
5. Unscrew canister (6)
6. Check anode (8) in the anode plug

The magnesium anode can be inspected visually. It is located inside the strainer.

- Anode has a diameter of < 10 mm or only a thin steel wire can be seen -> The anode must be replaced.
- Anode still has a diameter of > 10 mm but is covered with a layer of dirt -> Replace the anode.
- Anode still has a diameter of > 10 mm -> Anode can continue to be used.

7. If necessary: Unscrew used anode plug (8) from anode retainer (7)
8. If necessary: Screw the new anode into anode retainer (7)
9. Wash out canister (6) (scrub with wire brush if necessary)
10. Screw canister (6) back on
11. Insert magnet (10)

12. Attach insulation (1)
13. Open the shut-off valve in supply line (3) again
14. Wait until no more air escapes from air vent (5)
15. Open the shut-off valve in output line (4) again

9. Spare parts

Designation	Item no. SorbOx® SI*	Item no. SorbOx® LI
SorbOx® anode fittings	101 035	100 987
SorbOx® HF5 highpower demineralisation cartridge	xxx xxx	100 619
O-ring	100 255	100 255

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10. Accessories

Designation	Item no. SorbOx® SI*	Item no. SorbOx® LI
EEAG pipe coupling 1" female/1" female	101 973	101 973
EEAG gasket for coupling 1" female/1" female	102 309	102 309
EEAG pipe coupling 1" female/1" male	100 301	100 301
EEAG gasket for coupling 1" female/1" male	100 242	100 242
Wall bracket kit	102 607	102 607

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