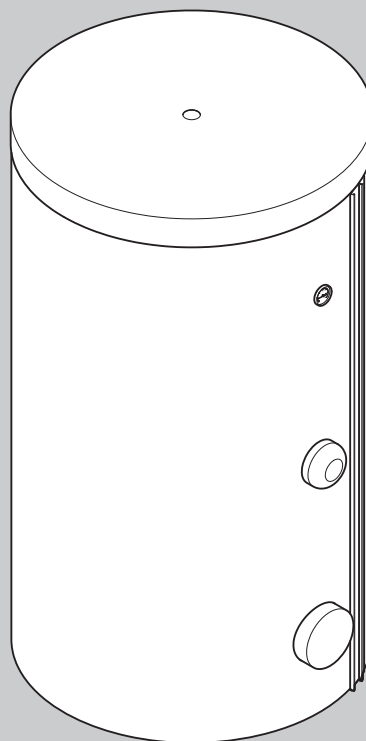


For the competent person

Installation and maintenance instructions



uniSTOR, auroSTOR

VIH R/S 750, VIH R/S 1000, VIH R/S 1500,
VIH R/S 2000

EXPen

Publisher/manufacture

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1 Safety

1.1 Action-related warnings

Classification of action-related warnings

The action-related warnings are classified in accordance with the severity of the possible danger using the following warning signs and signal words:

Warning symbols and signal words



Danger!

Imminent danger to life or risk of severe personal injury



Danger!

Risk of death from electric shock



Warning.

Risk of minor personal injury



Caution.

Risk of material or environmental damage

1.2 Intended use

There is a risk of injury or death to the user or others, or of damage to the product and other property in the event of improper use or use for which it is not intended.

The **VIH R** and **VIH S** solar cylinders are designed to keep drinking water that is heated to a maximum of 85 °C ready for use in households and businesses. The cylinders are designed to be used with the Vaillant solar system. The cylinders are designed to be used in systems with the following output data.

	Continuous power (kW/h)	Continuous power (l/h)
VIH R 750	65*/34**	1596*/835**
VIH R 1000	77*/40**	1891*/982**
VIH R 1500	97*/51**	2382*/1252**
VIH R 2000	118*/62**	2898*/1523**
VIH S 750	60*/31**	1474*/761**
VIH S 1000	60*/32**	1474*/786**
VIH S 1500	77*/40**	1891*/982**
VIH S 2000	87*/48**	2138*/1179**

	Continuous power (kW/h)	Continuous power (l/h)
* Flow temperature 80 °C, hot water outlet temperature 45 °C, cold water inlet temperature 10 °C		
* Heating flow temperature 60 °C, hot water outlet temperature 45 °C, cold water inlet temperature 10 °C		

To control the hot water generation, weather compensators and control systems from suitable boilers can be used. These are boilers that provide cylinder charging and make use of the compatibility for a temperature sensor.

Intended use includes the following:

- observing the included operating, installation and servicing instructions for the Vaillant product and any other system components
- compliance with all inspection and maintenance conditions listed in the instructions.

This product can be used by children over eight years old and also by persons with limited physical, sensory or mental capabilities or insufficient experience and/or knowledge if they are supervised or have been provided with instructions on how to safely use the product, and they understand the risks resulting from using the product. Children must not play with the product. Cleaning and user maintenance work must not be carried out by children unless they are supervised.

The use of the product in vehicles, such as mobile homes and caravans, is not classed as intended use. Units that are not classed as vehicles are those that are installed in a fixed and permanent location (known as "fixed installation").

Any other use that is not specified in these instructions, or use beyond that specified in this document shall be considered improper use. Any direct commercial or industrial use is also deemed to be improper.

Caution.

Improper use of any kind is prohibited.

1.3 General safety information

1.3.1 Preventing frost damage

If the product is placed out of operation for a relatively long period of time (e.g. during a winter holiday) in an unheated room, the water in the product and pipelines may freeze.

- ▶ Ensure that the entire installation room is always frost-free.

1.3.2 Material damage due to improper use and/or unsuitable tools

Improper use and/or the use of unsuitable tools may result in damage (e.g. gas or water leaks).

- ▶ To tighten or loosen threaded connections, only use a suitable open-ended spanner (combination wrench) – do not use pipe wrenches, extensions, etc.

1.3.3 Material damage due to electrical potential in the water

If you use a heating rod in the cylinder, the external voltage may build up electrical potential in the water which can result in the electrochemical corrosion of the heating rod.

- ▶ Ensure that both the hot water and cold water pipes are connected to the earth line by means of an earth cable directly on the cylinder.
- ▶ You must also make sure that the heating rod is connected to the earth line via the earthing terminal.

1.3.4 Material damage due to leaks

- ▶ Ensure that there is no mechanical tension on the supply lines.
- ▶ Do not suspend any loads from the pipelines (e.g. clothing).

1.3.5 Material damage due to water that is too hard

Water that is too hard may impair the system's functionality and cause damage in a short period of time.

- ▶ Ask your local water company about the water hardness.
- ▶ When deciding whether the water used must be softened, follow directive VDI 2035.

- ▶ In the installation and servicing instructions for the unit that your system comprises, you can read the qualities that the water that is used must have.

1.3.6 Risk of injury

The volume of water in the cylinder expands every time the hot water is heated.

- ▶ Install an expansion relief valve in the hot water pipe.
- ▶ Install a safety discharge pipe.
- ▶ Guide the safety discharge pipe to a suitable outflow location.

1.3.7 Risk of scalding

The outlet temperature at the draw-off points can be up to 85 °C.

- ▶ Install a thermostat mixing valve to limit the outlet temperature at the draw-off points.

1.4 CE label



The CE label shows that the products comply with the basic requirements of all applicable directives as stated on the identification plate.

The declaration of conformity can be viewed at the manufacturer's site.

1.5 Regulations (directives, laws, standards)

Applies to: EXP English-speaking

Please observe the existing national rules and regulations, standards, laws and guidelines.

2 Notes on the documentation

2.1 Observing other applicable documents

- You must observe all the operating and installation instructions included with the system components.

2.2 Document storage

- Pass these instructions and all other applicable documents and, if necessary, any required tools to the system operator.

2.3 Applicability of the instructions

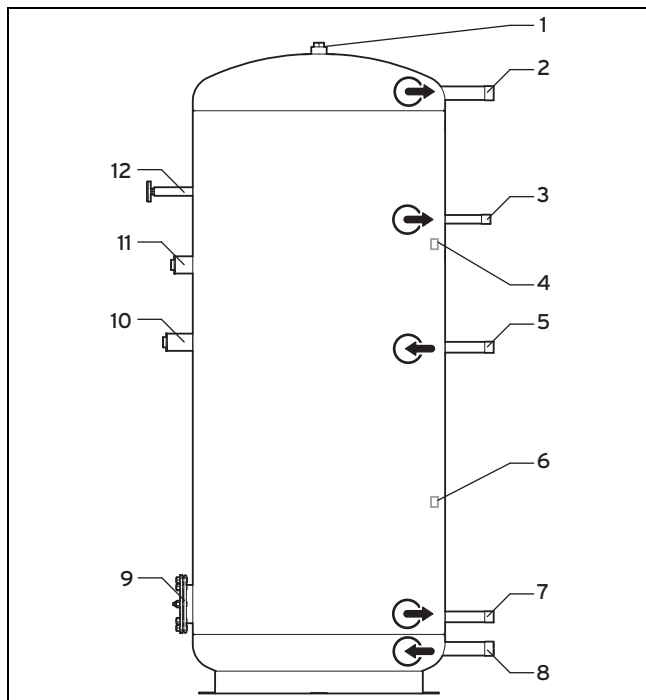
These instructions apply for the following products only:

Type designation	Article number
VIH R 750	0010014931
VIH R 1000	0010014932
VIH R 1500	0010014933
VIH R 2000	0010014934
VIH S 750	0010014935
VIH S 1000	0010014936
VIH S 1500	0010014937
VIH S 2000	0010014938

3 Description of the unit

3.1 Design

VIH R

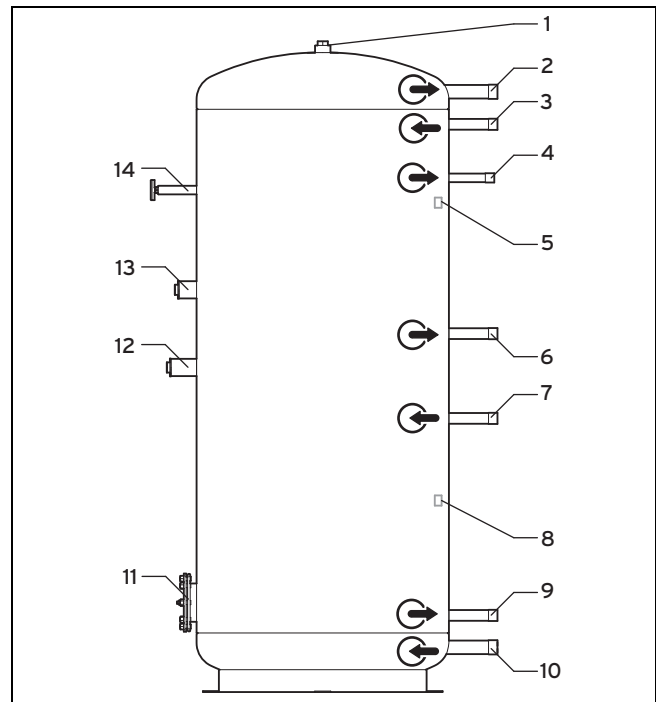


- 1 Magnesium protection anode connection (VIH R 750 and VIH R 1000 only)
- 2 Hot water connection
- 3 Secondary circulation line connection
- 4 Upper sensor strap
- 5 Solar supply pipe connection
- 6 Lower sensor strap

- 7 Solar return connection
- 8 Cold water connection
- 9 Inspection opening
- 10 Optional heating rod connection

- 11 External current anode connection (VIH R 1500 and VIH R 2000 only)
- 12 Thermometer connection

VIH S



- 1 Magnesium protection anode connection (VIH S 750 and VIH S 1000 only)
- 2 Hot water connection
- 3 Reheating flow connection
- 4 Secondary circulation line connection
- 5 Upper sensor strap
- 6 Reheating return connection
- 7 Solar supply pipe connection
- 8 Lower sensor strap
- 9 Solar return connection
- 10 Cold water connection
- 11 Inspection opening
- 12 Optional heating rod connection
- 13 External current anode connection (VIH S 1500 and VIH S 2000 only)
- 14 Thermometer connection

The cylinder is equipped with external heat insulation. The cylinder vessel is made of enamelled steel. The pipe spirals that transfer the heat are located inside the vessel. For additional corrosion protection, the vessel has two magnesium protection anodes (cylinder with 750 l and 1000 l) or two external current anodes (cylinder with 1500 l and 2000 l).

The following can be used as an option

- Circulation pump to increase the hot water comfort, particularly at more distant draw-off points
- Heating rod (6 kW/400 V)

4 Installation

4 Installation

4.1 Checking the scope of delivery

- Check that the scope of delivery is complete.

Quantity	Name
1	Cylinder
2/3	Side heat insulation
1	Upper heat insulation
1	Cover
1	Brass plug for heating rod opening
1	Thermal insulation cap for heating rod opening
1	Inspection opening cover
2	Anodes
1	Plug potentiostat & connection cable (for 1500 l and 2000 l cylinders only)
1	Thermometer
1	Identification plate sticker
1	Operating instructions
1	Installation and maintenance instructions

4.2 Checking the requirements for the installation site



Caution.

Material damage due to frost

Frozen water in the system can damage the heating installation, the solar system and the installation room.

- Install the cylinder in a dry, permanently frost-free room.



Caution.

Material damage due to escaping water

In the event of damage, water may escape from the cylinder.

- Select the installation location so that, in the event of damage, large volumes of water can be drained safely (e.g. into a floor drain).



Caution.

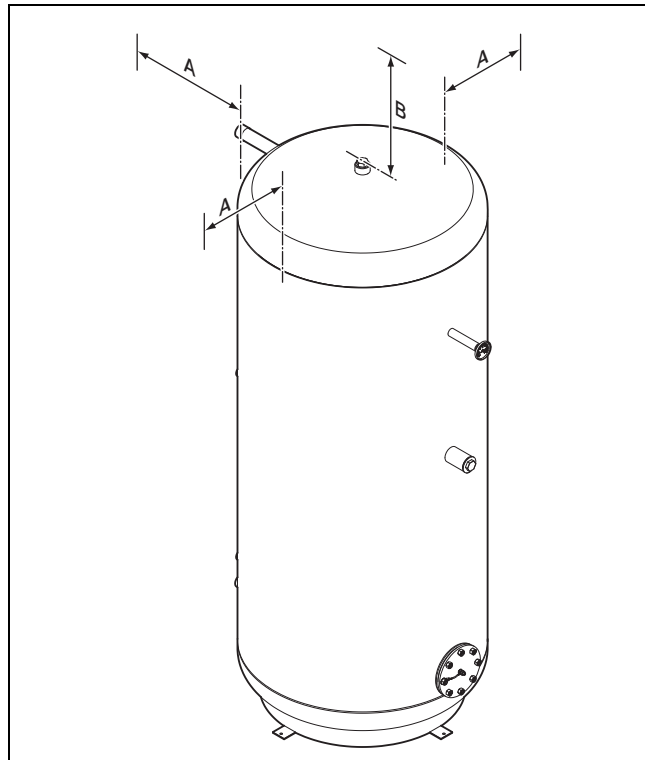
Material damage due to high load

Due to its weight, the filled cylinder may damage the floor.

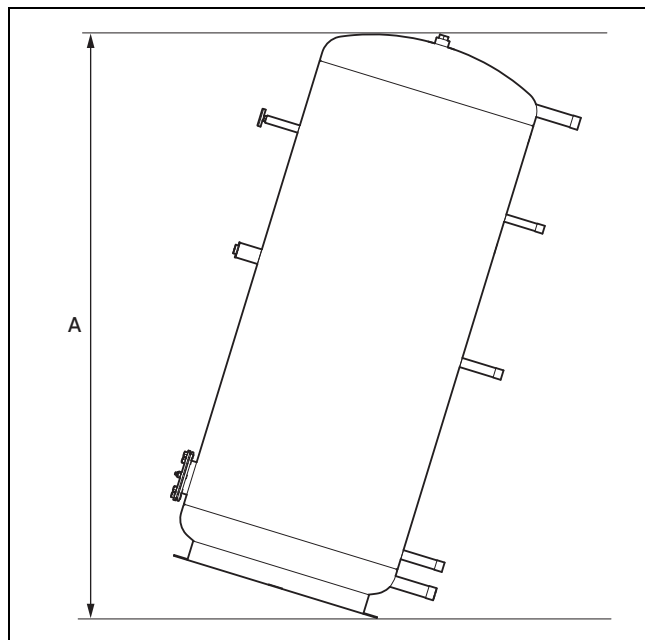
- When selecting the installation site, note the weight of the filled cylinder and the bearing load of the floor.
- If necessary, ensure the foundation is suitable.

1. Install the cylinder as close to the heat generator as possible.
2. Make sure that the base is level and stable.
3. Select the installation site so that the cables can be easily routed.
4. Observe the dimensions of the unit and the connections (→ Page 12).

4.3 Observing the minimum clearances



1. During installation, make sure there is sufficient clearance from the walls (**A**) and the ceiling (**B**).
 - Rear wall clearance A: 250 mm
 - Side clearance A: 250 mm
 - Ceiling clearance B: 350 mm



A Tilt measurement

2. When selecting the installation room, note the tilt measurement of the cylinder.

Type designation	Tilt measurement A [mm]
VIH R 750	1800
VIH R 1000	2070
VIH R 1500	2090
VIH R 2000	2420
VIH S 750	1800
VIH S 1000	2070
VIH S 1500	2090
VIH S 2000	2420

4.4 Transporting the cylinder



Danger!

Risk of injury and material damage due to improper transport

The screwed connections on the support rim may become loose if stored in an angled position. The cylinder may fall off the pallet and injure someone.

- ▶ Transport the cylinder on the pallet using a pallet truck.
- ▶ Only use suitable means to transport the cylinder.



Caution.

Risk of damage to the threads

Unprotected threads may be damaged during transport.

- ▶ Only remove the protective thread caps once at the installation site.

1. Transport the cylinder to the installation site.
2. Transport the heat insulation to the cylinder.
 - Working materials: Safety gloves

4.5 Unpacking and setting up the cylinder



Caution.

Risk of damage to the threads

Unprotected threads may be damaged during transport.

- ▶ Only remove the protective thread caps once at the installation site.

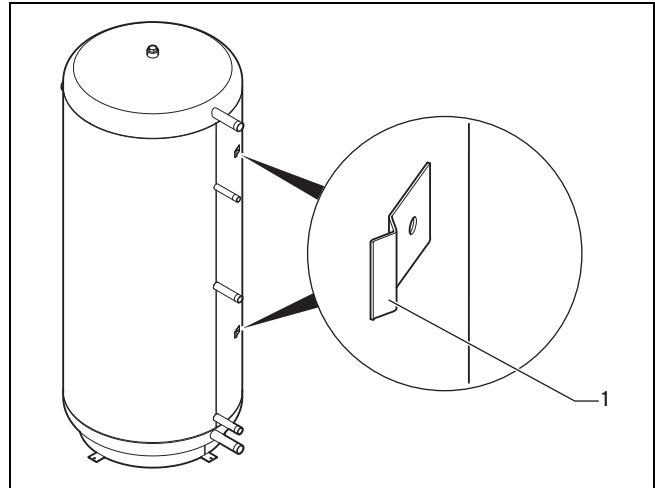
1. Remove the cylinder packaging.
2. Remove the protective case from the cylinder.
3. Retain the protective case.
4. Remove the screwed connections from the support ring.
5. Set up the cylinder at the installation site. Observe the connection dimensions (→ Page 12).

4.6 Preparing the piping

Tightening the bolts on the inspection opening flange

1. Tighten the bolts on the inspection opening flange.
 - Torque: 20 Nm

Installing the cylinder temperature sensor



1 Sensor strap

2. Install the cylinder temperature sensor on the sensor strap (1).



Danger!

Risk of death from live connections!

When working in electronics boxes of system components that are connected to the low-voltage network (230 V), there is a risk of death from electric shock. Continuous voltage is present on the mains connection terminals, even if the main switch is turned off.

- ▶ Disconnect the system components from the power supply by unplugging the mains plug or actuating the electrical partition. The electrical partition must have a contact opening of at least 3 mm, it must cause isolation in all poles and ensure complete isolation from the power supply.
- ▶ Secure the power supply against being switched on again.
- ▶ Check that there is no voltage in the system components.
- ▶ Open the electronics box only when the system components are disconnected from the power source.

3. Wire the cylinder temperature sensor (1) to the boiler or to an external controller.



Note

You can find the installation location for each terminal strip and terminal name in the corresponding installation instructions for the boiler or controller.

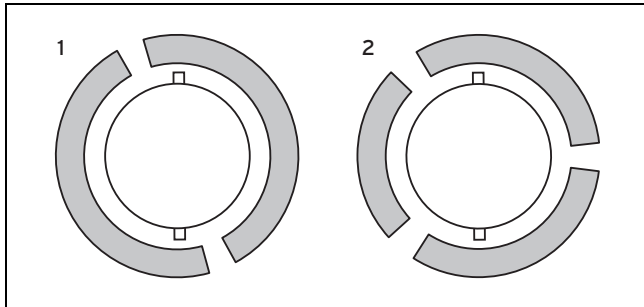
4 Installation

Installing the heating rod

Conditions: The optional heating rod should be installed

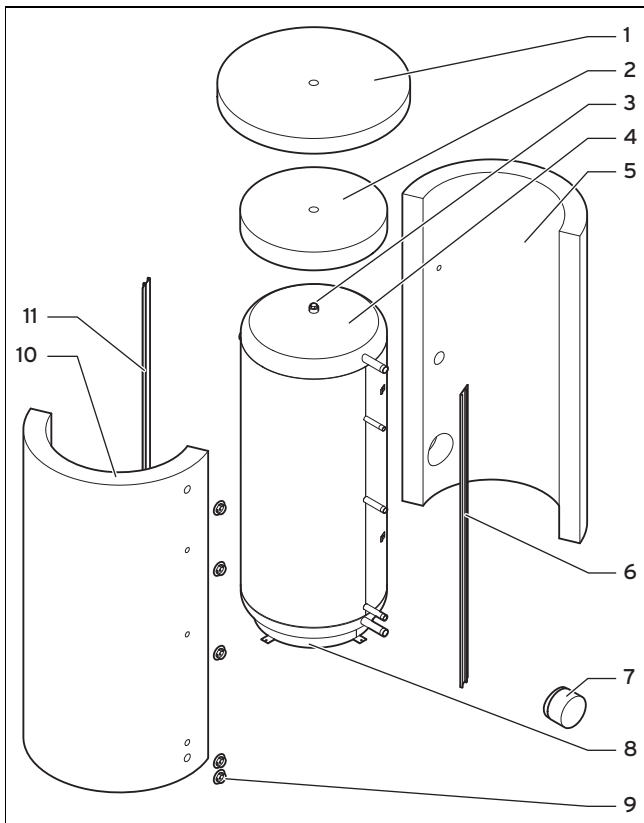
- Install the heating rod (→ **Heating rod instructions**).

4.7 Installing the heat insulation



- 1 **VIH R 750, VIH S 750, VIH R 1000, VIH S 1000** 2 **VIH R 1500, VIH S 1500, VIH R 2000, VIH S 2000**

1. Depending on the type of cylinder, note the installation positions of the heat insulation (1, 2).



- | | |
|---|----------------------------|
| 1 Cover | 6 Terminal strip |
| 2 Upper heat insulation | 7 Inspection opening cover |
| 3 Magnesium protection anode connection | 8 Support ring |
| 4 Cylinder | 9 Collar |
| 5 Side heat insulation | 10 Side heat insulation |
| | 11 Terminal strip |



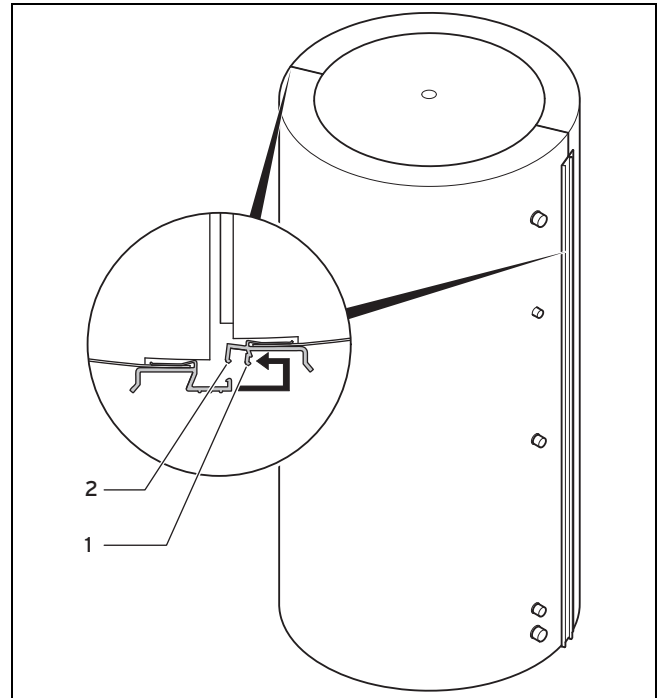
Caution.

Material damage due to low temperatures

Risk of the heat insulation breaking at temperatures below 10 °C.

- Install the heat insulation in a room where the room temperature is at least 10 °C.
- Wait until the heat insulation has adapted to the room temperature.

2. Remove the heat insulation from the packaging.
3. Place the upper heat insulation (2) on the cylinder (4) (example shown here: **VIH R**).
4. Remove the fleece residues from the heat insulation cut-outs.
5. Install the side heat insulation (5, 10) by guiding the cylinder pipes through the heat insulation cut-outs.



- 1 Last catch 2 First catch

6. Press the heat insulation onto the buffer cylinder so that the terminal strips between the two layers of heat insulation engage in the first catch (2).
7. Press the remaining terminal strips into the first catch.
8. Press the terminal strips between the two heat insulation layers together until the last catch (1).
9. Press the remaining terminal strips together until the last catch.
 - Installation aid: Short terminal strip supplied

4.8 Installing the external current anode

Applies to: VIH R, VIH S 1500

OR VIH R, VIH S 2000

1. Check whether the thread on the external current anode is sealed.
 - Thread not sealed
 - Seal the thread on the external current anode.
 - Working materials: Sealant
2. Secure the earthing cable of the external current anode between the two washers on the cylinder earthing lug.



Caution.

Risk of corrosion

If you extend the connection cable supplied or use a different connection cable, there is a risk of polarity reversal, and as a result, there is a risk of corrosion.

- ▶ Only use the connection cable supplied.

3. Place the two vessel-side terminal fittings of the connection cable on the flat plug of the anode tooth washer.
 4. Insert the two flat plugs on the other end of the connection cable into the plug potentiostat connection openings provided.
 - Large flat plug on wide pin
 - Small flat plug on narrow pin
 5. Connect the plug potentiostats to the mains voltage.
 - Mains voltage: 230 V
 6. Fill the cylinder.
 7. Check that the cylinder is leak-tight.
 8. Connect a measuring instrument.
 - Negative input: Cylinder vessel
 - Positive input: External current anode
 - Working materials: Direct-voltage measuring instrument
- Voltage drive: $\geq 2.3 V_{DC}$
- ▶ Measure the voltage drive.
 - ▶ Pay attention to the correct polarity.
9. Service the external current system and the external current anode. (→ Page 10)
 10. Also pay attention to the **operating manual for the external current system**.

4.9 Completing the heat insulation

1. Place the cover on the cylinder.
2. Fit the collars on the cylinder connections.

Conditions: The optional heating rod is not installed

- ▶ Fit the thermal insulation cap on the heating rod connection.
- ▶ Cover the inspection opening with the appropriate cover.
- ▶ Cover the external current anodes with the appropriate covers.

4.10 Installing the thermometer

- ▶ Install the thermometer.

4.11 Installing the cylinder piping

Applies to: VIHS auroSTOR

- ▶ Connect the heating flow and heating return.
1. Connect the solar supply pipe and solar return.



Caution.

Material damage due to escaping liquid.

Internal pressure that is too high can cause the cylinder to leak.

- ▶ Install an expansion relief valve with a discharge line in the cold water pipe.

2. Install an expansion relief valve in the cold water pipe.
 - Operating pressure: $\leq 0.7 \text{ MPa}$ ($\leq 7 \text{ bar}$)
3. Connect the cold water pipe and hot water pipe.



Danger!

Risk of death due to legionella

Legionella in the water may cause a life-threatening infection.

- ▶ Install an anti-legionella function.

4. If required, install a circulation pump and a secondary circulation line.

Conditions: Circulation pump and secondary circulation line not installed

- ▶ Seal the secondary circulation line connection with a plug.
- ▶ Thermally insulate the secondary circulation line connection.

5 Start-up

Applies to: VIHS auroSTOR

- ▶ Fill the heating circuit.
1. Fill the solar circuit (→ **Filling pump operating instructions**).
 2. Fill the cylinder.
 3. Purge the system on the drinking-water side.
 4. Check all pipe connections for leak-tightness.
 5. Set the temperature and the hot water time period on the controller (→ **Controller operating instructions**).
 6. Bring the boiler into operation.
 7. Start up the solar circuit.

6 Handing the product over to the operator

6 Handing the product over to the operator

1. Inform the operator about how to handle the system. Answer any questions the operator may have. In particular, draw attention to the safety information which the operator must follow.
2. Explain to the operator how the safety devices work and where they are located.
3. Inform the operator of the necessity to have the system maintained according to the specified intervals.
4. Provide the operator with all relevant instructions and unit documentation for safe-keeping.
5. Inform the operator about the ways to limit the hot water outlet temperature so that scalding can be prevented.

7 Detecting and rectifying faults

Fault	Possible cause	Remedy
The cylinder temperature is too high.	The cylinder temperature sensor is incorrectly seated.	Correctly position the cylinder temperature sensor.
The cylinder temperature is too low.		
There is no water pressure at the draw-off point.	Not all valves are open.	Open all valves.
The boiler is switching itself on and off alternately.	The return flow temperature of the secondary circulation line is too low.	Ensure that the return flow temperature of the secondary circulation line is within an appropriate range.

8 Inspection, maintenance and spare parts

8.1 Maintenance plan

8.1.1 Calendar-based maintenance intervals

Calendar-based maintenance intervals

Interval	Maintenance work	Page
Annually after the first 2 years	Applies to: VIH R, VIH S 750 OR VIH R, VIH S 1000 Servicing the magnesium protection anode	10

8.1.2 Maintenance-related interval

Maintenance-related interval

Interval	Maintenance work	Page
As required	Applies to: VIH R, VIH S 1500 OR VIH R, VIH S 2000 Servicing the external current system and external current anode	10

Interval	Maintenance work	Page
As required	Cleaning the inner vessel	10
	Emptying the cylinder	10

8.2 Servicing the magnesium protection anode

Applies to: VIH R, VIH S 750

OR VIH R, VIH S 1000

1. To service the lower magnesium protection anode, open the inspection opening.
2. Unscrew the flange from the magnesium protection anode.

Conditions: Optional heating rod installed

- To service the upper magnesium protection anode, disconnect the electrical connection for the heating rod.
3. Check the magnesium protection anode for wear.

Conditions: 60% of the magnesium protection anode is worn

- Replace the magnesium protection anode.

8.3 Servicing the external current system and external current anode

Applies to: VIH R, VIH S 1500

OR VIH R, VIH S 2000

1. Check the indicator lamp of the plug potentiostat on the external current system for the external current anode (→ **Operating manual for the external current system**).

2. Alternatives 1 / 2

Conditions: Indicator lamp: Red

- Check the installation of the external current system and external current anode (→ **Operating manual for the external current system**).
- Replace the external current anode if it is defective (→ Page 8).

2. Alternatives 2 / 2

Conditions: Indicator lamp: Off

- Check whether the mains voltage is connected to the external current system.

8.4 Cleaning the inner vessel

- Clean the inner vessel by rinsing it.

8.5 Emptying the cylinder

1. Switch off the boiler hot water generation.
2. Close the cold water pipe.
3. Secure a hose on the cylinder drain cock.
4. Place the free end of the hose in a suitable outflow location.



Danger! **Risk of scalding**

Hot water at the hot water draw-off points and the outflow location may scald.

- Avoid contact with hot water at the hot water draw-off points and outflow location.

5. Open the drain cock.
6. Open the highest hot water draw-off point to drain the water pipes completely and to ventilate them.

Conditions: Water has drained off

- Close the hot water draw-off point and the drain cock.
7. Remove the hose.

8.6 Caring for the product



Caution.

Risk of material damage caused by unsuitable cleaning agents.

Unsuitable cleaning agents can damage the casing, the fittings or the operator control elements.

- Do not use sprays, scouring agents, detergents, solvents or cleaning agents that contain chlorine.

- Clean the casing with a damp cloth and a little solvent-free soap.

8.7 Procuring spare parts

The original components of the unit were also certified as part of the CE declaration of conformity. If you do not use certified Vaillant genuine spare parts for maintenance or repair work, this voids the CE conformity of the unit. We therefore strongly recommend that you fit Vaillant genuine spare parts. You can find information about the available Vaillant original spare parts on the back page of these instructions, below the contact address.

- If you require spare parts for maintenance or repair work, use only Vaillant genuine spare parts.

9 Decommissioning

9.1 Emptying the cylinder

- Empty the cylinder. (→ Page 10)

9.2 Decommissioning components



Danger!

Risk of death from live connections!

When working in electronics boxes of system components that are connected to the low-voltage network (230 V), there is a risk of death from electric shock. Continuous voltage is present on the mains connection terminals, even if the main switch is turned off.

- Disconnect the system components from the power supply by unplugging the mains plug or actuating the electrical partition. The electrical partition must have a contact opening of at least 3 mm, it must

cause isolation in all poles and ensure complete isolation from the power supply.

- Secure the power supply against being switched on again.
- Check that there is no voltage in the system components.
- Open the electronics box only when the system components are disconnected from the power source.

- If required, decommission individual system components in accordance with the applicable installation instructions.

10 Recycling and disposal

Disposing of the packaging

- Dispose of the packaging correctly.

Disposing of the product and accessories

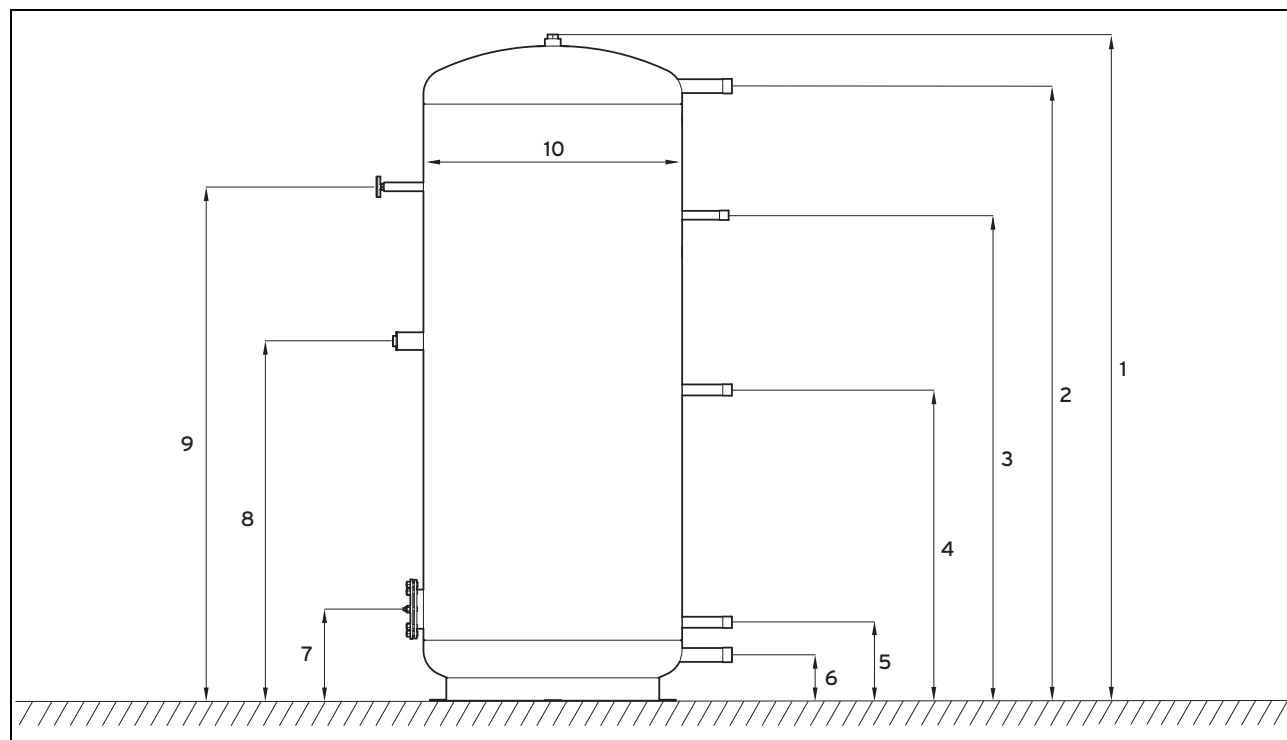
- Do not dispose of the product or the accessories with household waste.
- Dispose of the product and all accessories correctly.
- Observe all relevant regulations.

11 Technical data

11 Technical data

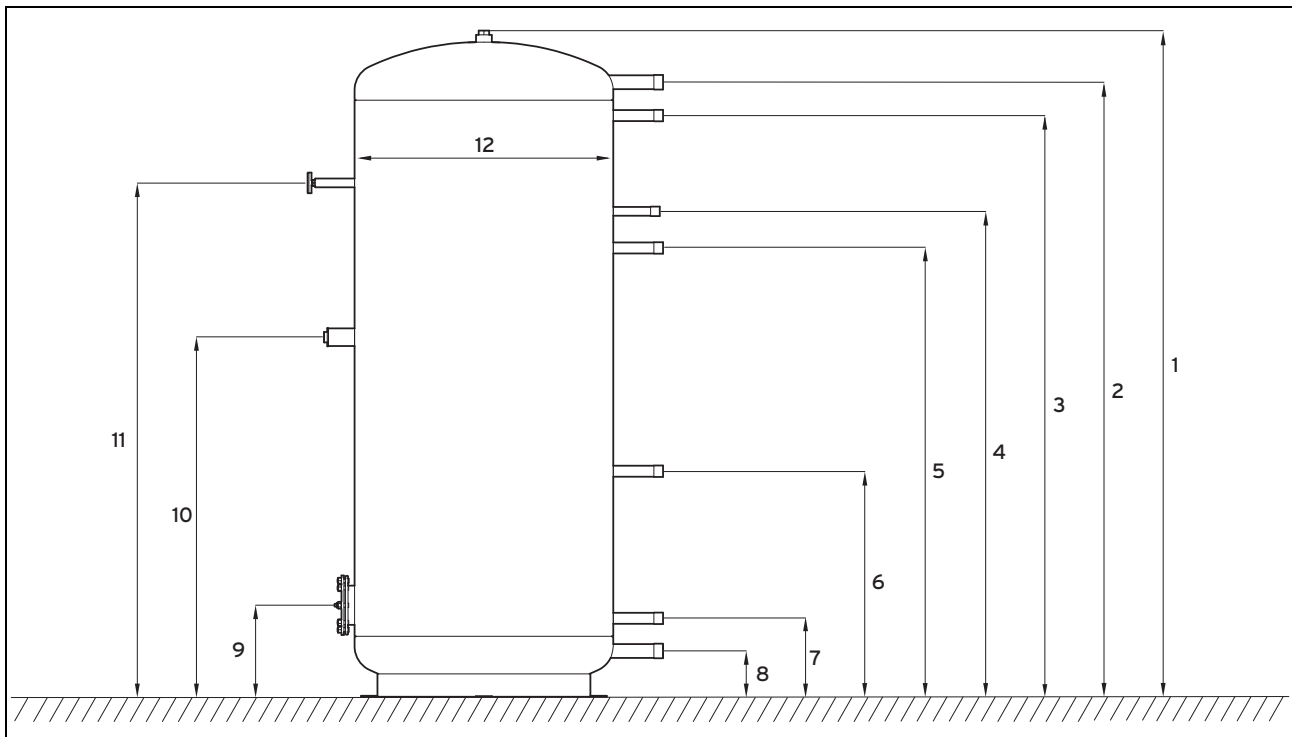
11.1 Connection dimensions

11.1.1 VIH R



Dimension	Unit	Tolerance	VIH R 750	VIH R 1000	VIH R 1500	VIH R 2000
1	mm	± 10	1755	2025	2020	2355
2	mm	± 10	1600	1880	1800	2135
3	mm	± 10	1207	1485	1460	1800
4	mm	± 10	690	950	1175	1360
5	mm	± 10	240	240	300	350
6	mm	± 10	140	140	190	240
7	mm	± 10	280	280	460	510
8	mm	± 10	880	1100	1230	1420
9	mm	± 10	1472	1572	1480	1690
10	mm	± 10	790	790	1000	1100

11.1.2 VIH S



Dimension	Unit	Tolerance	VIH S 750	VIH S 1000	VIH S 1500	VIH S 2000
1	mm	± 10	1745	2025	2020	2355
2	mm	± 10	1600	1880	1800	2135
3	mm	± 10	1500	1778	1680	2020
4	mm	± 10	1207	1485	1460	1800
5	mm	± 10	1095	1373	1180	1430
6	mm	± 10	690	690	935	1075
7	mm	± 10	240	240	300	350
8	mm	± 10	140	140	190	240
9	mm	± 10	280	280	460	510
10	mm	± 10	880	1100	1230	1150
11	mm	± 10	1472	1572	1480	1690
12	mm	± 10	790	790	1000	1100

11.2 Technical data

11.2.1 VIH R

	Unit	VIH R 750	VIH R 1000	VIH R 1500	VIH R 2000
Collector surface/weight					
Collector surface of suitable collectors	m ²	11 ... 16	14 ... 20	21 ... 30	28 ... 40
Net weight	kg	198	233	351	446
Weight (ready for operation)	kg	945	1107	1693	2355
Hydraulic connection					
Cold/hot water connection	—	R 1 1/4		R 1 1/2	
Solar flow/return connection	—	R1			
Circulation connection	—	R 3/4			
Cylinder output data					
Contents	l	747	875	1342	1909

11 Technical data

	Unit	VIH R 750	VIH R 1000	VIH R 1500	VIH R 2000
Inner vessel	—	Steel, enamelled, with 2 magnesium protection anodes		Steel, enamelled, with 2 external current anodes	
Maximum operating pressure (cylinder)	MPa (bar)	0.7 (7)			
Maximum permissible operating temperature	°C	95			
Continuous hot water output *	kW/h	65	77	97	118
	l/h	1596	1891	2382	2898
Continuous hot water output **	kW/h	34	40	51	62
	l/h	835	982	1252	1523
10-minute output ***	l/10 min	716	1200	1285	1524
Standby energy consumption	KWh/24 hrs	2.26	2.45	3.15	4.35
Output characteristic figure NL ***	—	22	38	42	65
Heating circuit output data					
Heating area of the heat exchanger	m ²	2,25	3.0	4.0	5.0
* Reheat temperature 80 °C, draw-off temperature 45°C, cold water inlet temperature 10 °C					
** Reheat temperature 60 °C, draw-off temperature 45 °C, cold water inlet temperature 10 °C					
*** Reheat temperature 80 °C, cylinder temperature 60 °C, draw-off temperature 45 °C, cold water inlet temperature 10 °C					

11.2.2 VIH S

	Unit	VIH S 750	VIH S 1000	VIH S 1500	VIH S 2000
Collector surface/weight					
Collector surface of suitable collectors	m ²	11 ... 16	14 ... 20	21 ... 30	28 ... 40
Net weight	kg	228	246	378	480
Weight (ready for operation)	kg	959	1112	1708	2372
Hydraulic connection					
Cold/hot water connection	—	R 1 1/4		R 1 1/2	
Solar flow/return connection	—	R1			
Circulation connection	—	R 3/4			
Cylinder output data					
Contents	l	731	866	1330	1892
Inner vessel	—	Steel, enamelled, with 2 magnesium protection anodes		Steel, enamelled, with 2 external current anodes	
Maximum operating pressure (cylinder)	MPa (bar)	0.7 (7)			
Maximum permissible operating temperature	°C	95			
Continuous hot water output *	kW/h	60	60	77	87
	l/h	1474	1474	1891	2138
Continuous hot water output **	kW/h	31	32	40	48
	l/h	761	786	982	1179
10-minute output ***	l/10 min	392	426	606	920
Standby energy consumption	KWh/24 hrs	2.26	2.45	3.15	4.35
Output characteristic figure NL ***	—	5	5.5	16	37
Heating circuit output data					
Maximum operating pressure (heating)	MPa (bar)	0.6 (6)			
Maximum hot water flow temperature	°C	115			
Heating area of the lower heat exchanger (solar)	m ²	2.1	2.1	3.0	4.0

	Unit	VIH S 750	VIH S 1000	VIH S 1500	VIH S 2000
Heating area of the upper heat exchanger (auxiliary boiler)	m ²	2.0	2.0	3.0	4.0
Heating water of the upper heat exchanger (auxiliary boiler)	l	13.2	13.2	19.8	26.3
* Reheat temperature 80 °C, draw-off temperature 45°C, cold water inlet temperature 10 °C ** Reheat temperature 60 °C, draw-off temperature 45 °C, cold water inlet temperature 10 °C *** Reheat temperature 80 °C, cylinder temperature 60 °C, draw-off temperature 45 °C, cold water inlet temperature 10 °C					

12 Customer service

12 Customer service

Applies to: EXP English-speaking

For contact details for our customer service department, you can write to the address that is provided on the back page, or you can visit vaillant.com.

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