Storage tank
NIBE VPB S200/ VPB S300

The NIBE VPB S200/ VPB S300 are efficient water heaters and accumulator tanks that are designed for connection to heat pumps, gas boilers and oil-fired boilers.

The customised design of the NIBE VPB S200 and the NIBE S1155 ground source heat pump produces a stylish system solution with the option of concealing the pipework between the products. The storage tank is insulated with polyurethane, which provides excellent heat insulation.

The NIBE S range is a natural part of your connected home. Its smart technology automatically adjusts the indoor climate and gives you full control of the system from your phone or tablet. Maximum comfort and minimum energy consumption in your home. And you're doing the environment a favour too.

- Efficient water heaters and accumulator tanks developed for connection to heat pumps or other energy sources.
- Stylishly designed to match the NIBE S series heat pump systems with minimum heat loss.
- Part of your smart, energy-efficient home in combination with a heat pump from the NIBE S series.

Good to know about VPB S200/ VPB S300

VPB S200/ VPB S300 is covered by a 3-year product guarantee.

For full terms and conditions, see nibe.se.

Principle

VPB S200/ VPB S300 is a series water heater, which is suitable for connection to an external heat source.

VPB S200 and the ground source heat pump /S1155 are designed together. This enables a very elegant installation with concealed piping between the products.

Design

VPB S200/ VPB S300 has internal copper, stainless steel or enamel corrosion protection. The water heater is equipped with a charge coil that heats the domestic water, resulting in excellent properties for hot water charging.

VPB S200/ VPB S300 is designed and manufactured for a maximum pressure of 10 bar.

VPB S200/ VPB S300 is designed and manufactured for a maximum cut-off pressure of 10 bar.

The insulation is polyurethane, which provides excellent thermal insulation.

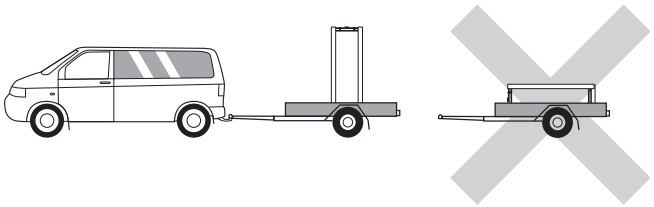
VPB S200/ VPB S300 is equipped with submerged tubes for sensors for external control and display of hot water heating.

Equipment

VPB S200 and VPB S300 can be supplemented with up to two hot water sensors, one for display and one for control. Use the sensors supplied with the heat pump (or other heat source). When no sensors have been provided, these should be ordered from the manufacturer of the heat source.

Transport and storage

VPB S200/ VPB S300 should be transported and stored vertically in a dry place. However, the VPB S200/ VPB S300 may be carefully laid on its back when being moved into a building.

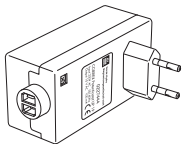


Installation and positioning

- VPB S200/ VPB S300 must only be installed vertically.
- Position VPB S200/ VPB S300 on a firm base that can take the weight, preferably on a concrete floor or foundation. Use the adjustable feet to obtain a horizontal and stable set-up.
- The area where the VPB S200/ VPB S300 is located must be frost-proof and equipped with a floor drain.

Supplied components

VPB S200/ VPB S300 ENAMEL



Potentiostat

Installation

Pipe installation

Pipe installation must be carried out in accordance with current norms and directives.

VPB S200/ VPB S300 must be fitted with the necessary valves, such as safety valves, shut-off valves, non-return valves and vacuum valves (vacuum valves only apply to copper).

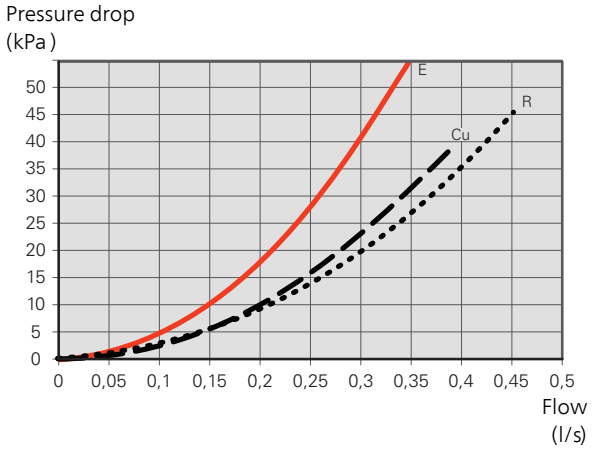
VPB S200/ VPB S300 must be supplied with a mixing valve, which limits the temperature of outgoing hot water to 60 °C. If this valve is not fitted, some other measure must be taken to prevent the risk of scalding.

Ensure that incoming water is clean. When using a private well, it may be necessary to supplement with an extra water filter.

If uncertain, contact a plumber alternatively see applicable standards.

PRESSURE DROP DIAGRAM, CHARGE COIL

VPB S200



Electrical installation

Electrical installation and service must be carried out under the supervision of a qualified electrician. Electrical installation and wiring must be carried out in accordance with the stipulations in force.

SENSORS

VPB S200 and VPB S300 can be supplemented with up to two hot water sensors, one for display and one for control. The display sensor is positioned in the submerged tube for the display sensor and the control sensor is positioned in the submerged tube for the control sensor . Where it is only possible to connect one sensor, use the submerged tube for the control sensor .

Use the sensors provided with the heat pump (or other heat source). When no heat sensors have been provided these must be ordered from the manufacturer of the heat source.

DIRECT-CURRENT ANODE

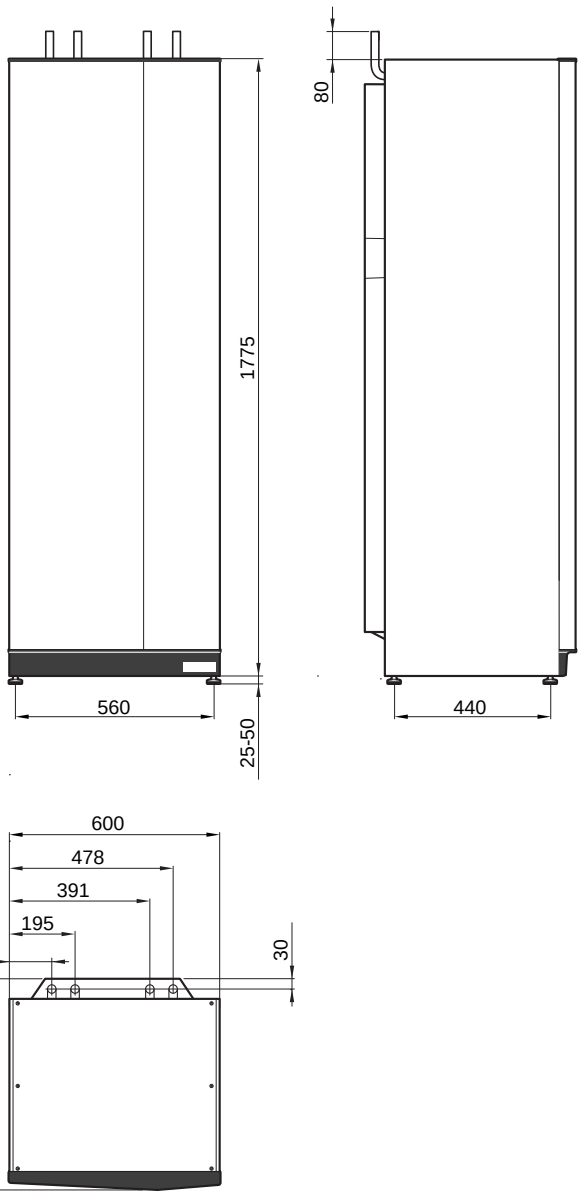
VPB S200/ VPB S300 Enamel is supplied from the factory with a direct-current anode and an enclosed potentiostat. The anode cable is installed in the anode from the factory and only needs to be connected to the potentiostat.

Technical data

Dimensions

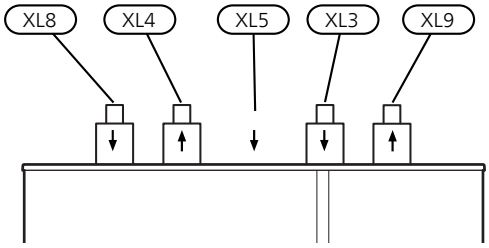
VPB S200

VPB S300



Pipe connections

VPB S200 / VPB S300



Connection		
XL3 Cold water Ø	mm	22
XL4 Hot water Ø	mm	22
XL5 Hot water circulation Ø (Does not apply to VPB S200/ VPB S300 -Cu)	mm	15
XL8 Docking connection, supply line Ø	mm	22
XL9 Docking connection, return line Ø	mm	22

Technical specifications

VPB S200		*Copper*	*Enamel*	*Stainless*
Efficiency class[1]		C	C	C
Volume	litre	178	178	176
Volume, charge coil	litre	2.0	4.8	7.8
Heat transfer (60/50°C at 50°C hot water temperature)	kW	13.0	10.1	10.1
Heat content at 50°C	kWh	8.0	8.3	8.2
Equivalent amount of hot water (40°C)	litre	230	238	235
Heating time (10°C to 45°C) 8 kW charge power	hours	0.9	0.9	0.9
Heating time (10°C to 80°C) 8 kW charge power	hours	1.8	1.8	1.8
Max operating temperature	°C	85		
Max pressure, primary side	bar/MPa	3/0.3		
Max pressure, water heater	bar/MPa	10/1.0		
Compatible NIBE heat pumps[2]		S1155, F2040, F2120[3]		
Height	mm	1500		
Required ceiling height[4]	mm	1670		
Width	mm	600		
Depth	mm	600		
Net weight	kg	101	111	80
Part No.		081 139	081 140	081 141

1 Scale for the product's efficiency class A+ to F.

2 For ground source heat pumps, this recommendation applies to max. 10°C brine temperature and 53°C in the tank.

3 Does not apply to F1145-15 and 17, F2040-16, F2120-20

4 With the feet removed, the required ceiling height is approx. 1650 mm.

VPB S300		*Copper*	*Enamel*	*Stainless*
Efficiency class[1]		C	C	C
Volume	litre	278	274	282
Volume, charge coil	litre	2	8.4	8.8
Heat transfer (60/50°C at 50°C hot water temperature)	kW	14	11.9	11.5
Heat content at 50°C	kWh	12.6	12.7	13.4
Equivalent amount of hot water (40°C)	litre	362	364	376
Heating time (10°C to 45°C) 8 kW charge power	hours	1.4	1.4	1.4
Heating time (10°C to 80°C) 8 kW charge power	hours	2.8	2.8	2.8
Max operating temperature	°C	85		
Max pressure, primary side	bar/MPa	3/0.3		
Max pressure, water heater	bar/MPa	10/1.0		
Compatible NIBE heat pumps[2]		S1155, F2040, F2120[3]		
Height	mm	1800		
Required ceiling height[4]	mm	1950		
Width	mm	600		
Depth	mm	600		
Net weight	kg	130	143	101
Part No.		081 142	081 144	081 143

1 Scale for the product's efficiency class A+ to F.

2 For ground source heat pumps, this recommendation applies to max. 10°C brine temperature and 53°C in the tank.

3 Does not apply to F1145-15 and 17, F2040-16, F2120-20

4 With the feet removed, the required ceiling height is approx. 1930 mm.

Tested according to standard EN 12897.

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