

Installation & Operating Manual

BA-ST 9022 - FE

BA-ST 9030 - FE

BA-ST 9040 - FE

BA-ST 9050 - FE

BA-ST 9075 - FE

BA-ST 9100 - FE

Hot Water Storage Tank

All installation diagrams in this manual do not replace the system design; they can only be used for illustrative purposes. The product is not intended for use by persons with reduced physical fitness/mental efficiency or without sufficient experience and knowledge, if they are not supervised or instructed by a person responsible for their safety. Operation of the product by children is strictly prohibited.

We reserve the right to make the product design changes and changes in the manual.

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1 General

Introduction

Thank you for your trust and selection of a NIBE device. To fully take advantage of this device, you should read this manual before using the equipment, in particular chapters relating to installation, safety, service and warranty. Please keep the manual in a safe place, for the future reference.

CAUTION

Sections of the Manual relating to the installation, inspection and maintenance are intended for the qualified installer.

CAUTION

The manufacturer shall not be held liable for any damages caused by failure to comply with the recommendations and observations contained in this Manual.

Intended Use

NIBE-BIAWAR hot water storage tanks are only intended for heating up, storage and supply the domestic hot water. The accumulated energy is transferred to the heating system. After installing the heating module, storage tanks of BA-ST Series are designed to heat and store hot water in systems.

The storage tank enables trouble-free operation with almost any central heating system with forced circulation. They are easy to install, safe and comfortable to use, if installed and operated in accordance with the advices contained in this Manual. The heated water can be supplied to several intake points at various, mutually distant locations, such as, a bathtub, wash-basin, sink, etc.

CAUTION

Storage tanks are designed to heat up and supply water for domestic purposes. Any inappropriate use, not in compliance with its intended use is not permitted. Neither manufacturer nor supplier shall be responsible for damages resulting from this.

Contact

If you have any questions or doubts, please contact us:

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NIBE-BIAWAR sp. z o.o. reserve the right to make technical changes of our products.

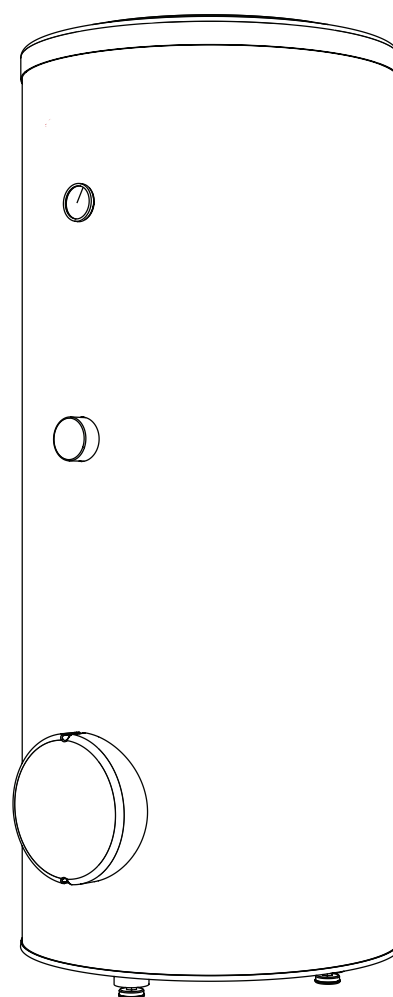


Fig. 1 BA-ST hot water storage tank.

2 Design

Vertical storage tanks with of BA-ST Series are pressure equipment, i.e. the pressure within the storage tanks are equivalent to the pressures in the corresponding systems.

INFORMATION

All products are ready for the installation of a heating unit containing an electric heater with thermostat and thermal switch.

Storage tank is made of high quality steel. Storage tank is allowed to work in water installations with a maximum pressure of 10 bar (BA-ST 9022-FE up to 6 bar). Storage tanks are equipped with all the necessary connections: for hot and cold water, connections for the circulation, an adapter for mounting an electrical heating unit, thermometer and temperature sensor cover. All storage tanks have an inspection opening. Thermal insulation of the tank is a specially selected insulation that provides excellent thermal insulation properties of all devices. Storage tanks have aesthetic plastic housing, a temperature indicator, inspection opening and connectors for mounting electric heating unit and connecting the hot water circulation.

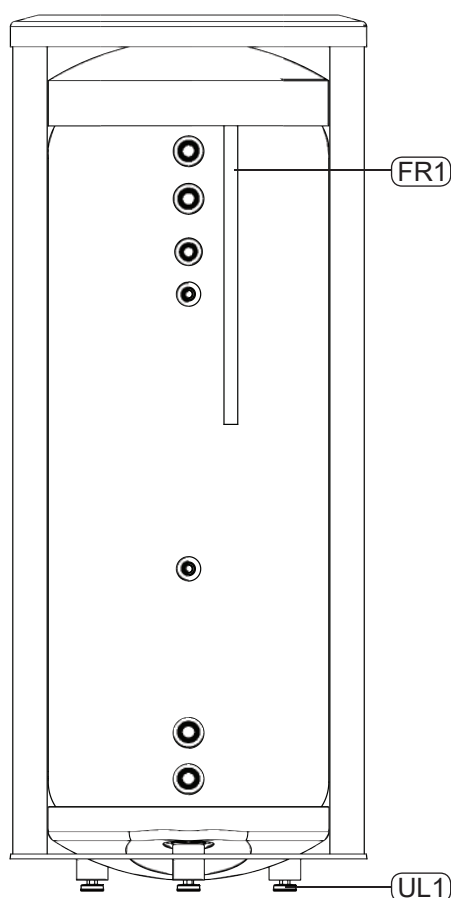


Fig. 2 Section of the BA-ST 9022-9050-FE storage tanks.

- FR1 Protective magnesium anode
- UL1 Adjustable foot
- XL54 Thermometer
- XL35 Connector pipe for mounting electric heating unit
- QQ1 Inspection opening
- XL4 Hot water intake connector pipe

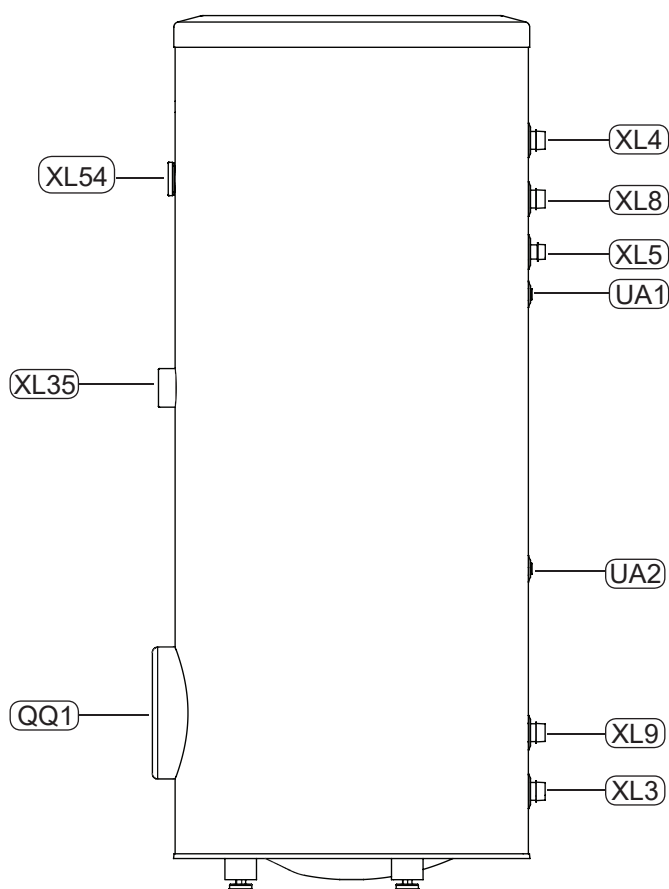


Fig. 3 Side view of the BA-ST 9022-9050-FE storage tanks.

- XL8 Hot water inlet connector pipe
- XL5 Hot water circulation connector pipe
- UA1-2 Temperature sensor cover
- XL9 Cold water inlet connector pipe
- XL3 Cold water supply connector pipe

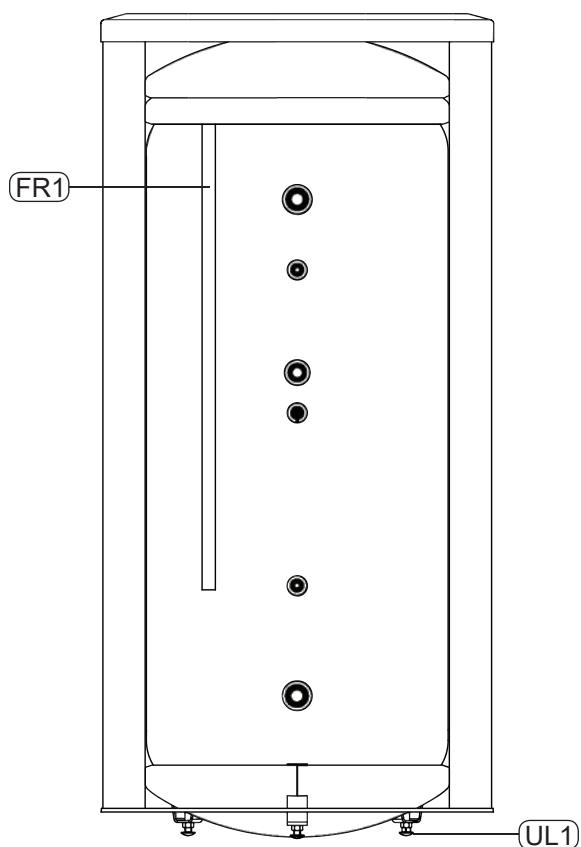


Fig. 4 Section of the BA-ST 9075-9100-FE storage tanks.

- FR1 Protective magnesium anode
- UL1 Adjustable foot
- XL54 Thermometer
- XL35 Connector pipe for mounting electric heating unit
- QQ1 Inspection opening

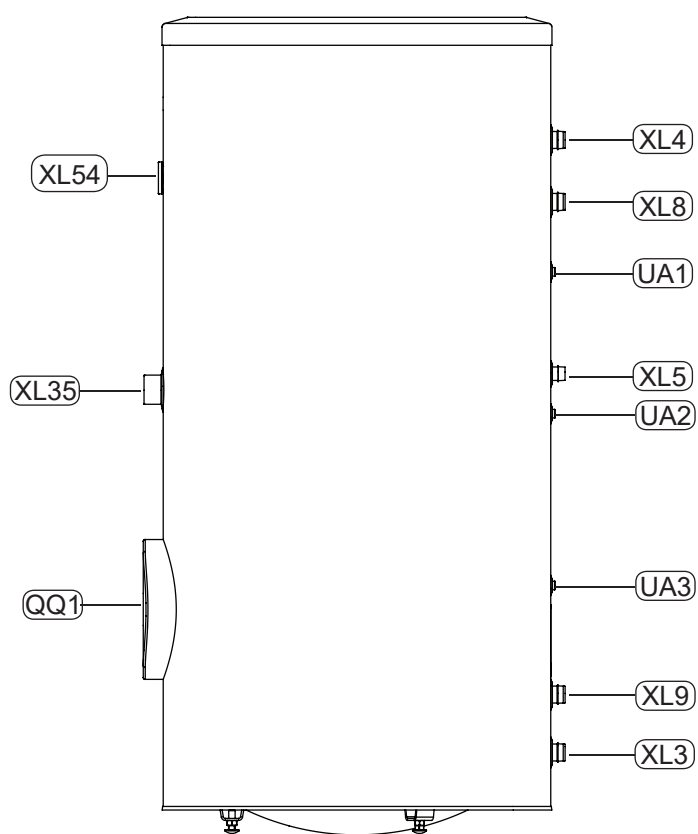


Fig. 5 Side view of the BA-ST 9075-9100-FE storage tanks.

- XL4 Hot water intake connector pipe
- XL8 Hot water inlet connector pipe
- XL5 Hot water circulation connector pipe
- UL1-3 Temperature sensor cover
- XL9 Cold water inlet connector pipe
- XL3 Cold water supply connector pipe

3 Installation

Location of the Storage Tank

The storage tanks can be installed in any room protected against a temperature drop below 0°C, which will prevent freezing of water in the tanks. It should be installed in a convenient place for the user (eg basement, boiler room, etc.), in a way that will enable easy maintenance or servicing in the future. Consider the filled tank weight when selecting its location. As a rule, select the device location in a way allowing the rational routing of both the hot water and the heating lines. To avoid loss of heat energy, all hydraulic pipes should be thoroughly insulated.

INFORMATION

When installing the storage tank, consider free space above the unit required to maintain/replace the protective magnesium anode.

If space for the installation of the magnesium bar anode (used as standard), you can use the appropriate titanium anode (that should be installed in accordance with the anode manufacturer's instructions) or the appropriate magnesium chain anode. For the specification of the protective anodes available at NIBE, see Section 6 "Accessories and Spare Parts".

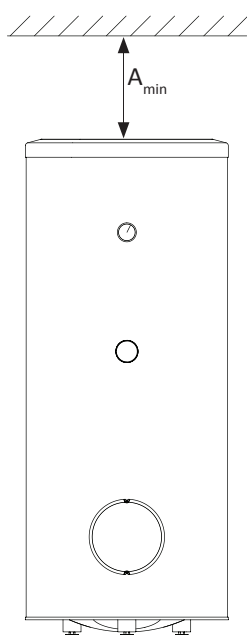


Fig. 6 Min clearance for the replacement of the protective magnesium anode.

CAUTION

For the minimum clearances to be observed when installing the storage tank, see Table 3.

INFORMATION

You can decrease the A_{min} clearance when using the magnesium chain anode or titanium anode.

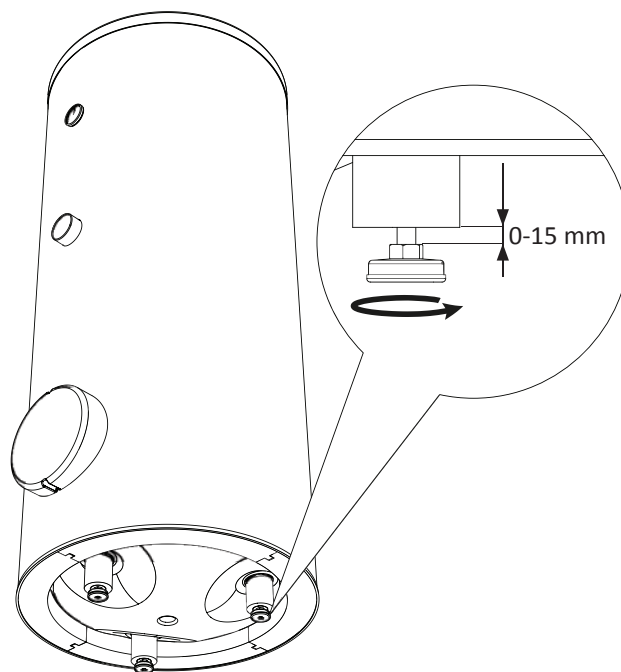


Fig. 7 Levelling the unit.

The storage tank stands on three feet that can be adjusted within the range from 0 to 15 mm to level the tank.

Housing Disassembly

Removable housing with thermal insulation facilitates transport and installation of the storage tank. Disassembly the housing in the following order (see Fig. 8):

1. Remove the Temperature gauge, plug of the heating element connector pipe and blanking plate of the inspection opening.
2. Remove the upper cover of the housing together with thermal insulation.
3. Remove the plugs from the connector pipes and black bushings.
4. Remove the fixing screws and the strip connecting the housing jacket.
5. Remove the jacket surrounding the tank (housing jacket.)
6. Remove the four-piece thermal insulation.

After the installation of the storage tank in its final location, reinstall the removed components in the reverse order.

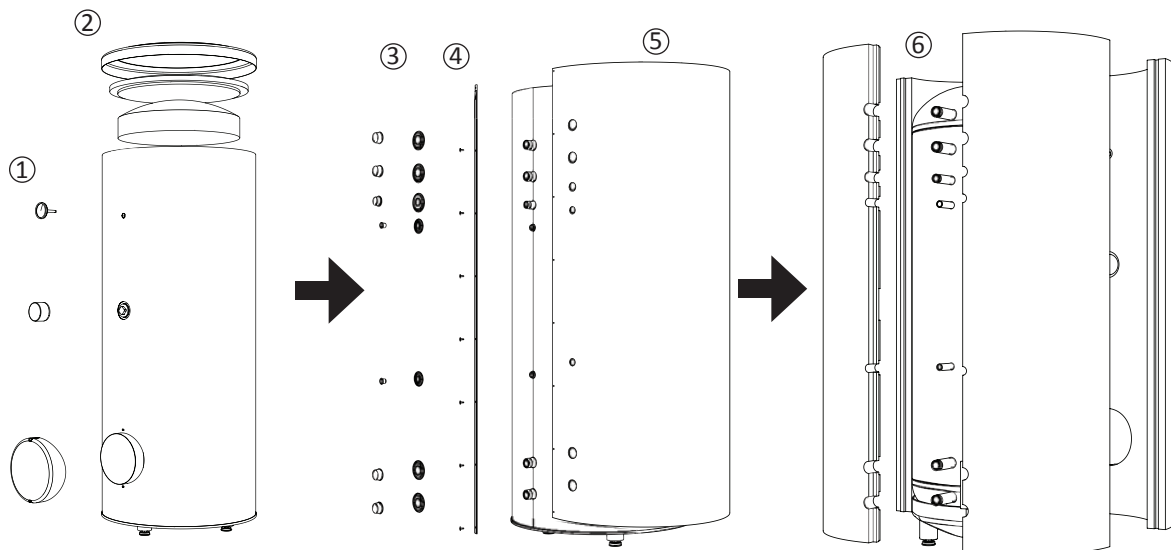


Fig. 8 Housing and thermal insulation disassembly.

Installation Requirements

CAUTION

Installation and commissioning of the storage tank shall only be done by appropriately qualified installer. The installer should inform the user of the functions of the product and provide the necessary information on its safe use.

Protection against overpressure shall be made in accordance with the relevant regulations in force.

Connect the storage tank to the water supply system of water pressure at least 1 bar and max 10 bar (BA-ST 9022-FE up to 6 bar)(see Table 6 Technical data). Install a pressure reducer if the pressure at the cold water inlet to the tank is higher than allowed.

Connect the heating and water supply systems in accordance with the installation diagram (see Fig. 9, 10, 11.)

Pressure increases during heating the water in the storage tank. Therefore, the appropriate safety valve must be installed in each storage tank, at the cold water inlet that will protect the storage tank against overpressure. During heating the water, small and temporary water flow from the safety valve can occur, which indicates that the pressure has increased above the rated value, which triggered the valve. This may in no way be prevented. Blocked safety valve can cause equipment failure. Drain the outflow from the safety valve to the sewerage or drain grate. The safety valve outflow line should be installed with a slope and be protected against water freeze, and it should remain open to the atmosphere. The manufacturer is not responsible for flooding the room as a result of the valve operation.

INFORMATION

In order to minimize the flow of water from the safety valve associated with the thermal expansion of the liquid, it is advisable to install a suitable expansion vessel at the cold water connection (see Fig. 9, 10, 11 item CM1.)

INFORMATION

We recommend installing a strainer in order to protect the pumps, check valve and the components of the heating system.

CAUTION

Installation of the appropriate safety valve in the cold water supply line protecting the unit against overpressure is mandatory!

CAUTION

Installation of necking of any kind (such as reducers, dirt pockets, etc.) and cut-off valves between the storage tank and the safety valve is not allowed. Only a T-pipe with a drain valve and a T-pipe with an expansion vessel may be installed in these line sections.

CAUTION

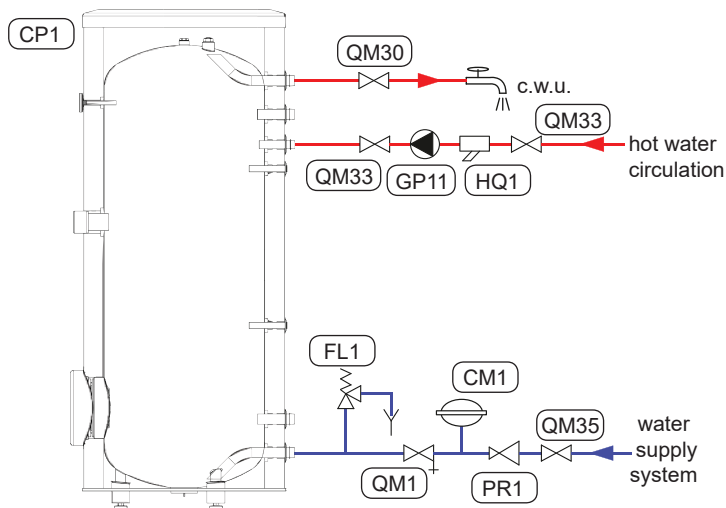
Never block the safety valve or drain line. This can cause a dangerous overpressure in the storage tank.

CAUTION

When heating water, slight, temporary discharge from the safety valve can occur. This is a correct safety valve function. Any attempt to interfere in its operation can lead to the danger and destruction of the storage tank.

CAUTION

Never use the equipment with clogged safety valves.



- CP1 BA-ST xx-FE storage tank.
 CP2 BA-ST xx-1FE N storage tank.
 QM30 Cut-off valve-Hot water outflow
 QM31 Cut-off valve-supply from the heat source
 QM32 Cut-off valve-return to the heat source
 QM33 Cut-off valve-hot water circulation
 QM35 Cut-off valve-Cold water intake
 QM42 Cut-off valve-loading the storage tank
 FL1 Safety valve.
 QM1 Drain valve.
 PR1 Pressure reducer (option, if the pressure in the system exceeds the allowable value).
 HQ1 Strainer filter.
 GP11 Hot water circulating pump.
 GP12 Circulation pump - return from the tank
 GP14 Circulation pump - supply to the exchanger.
 GP15 Pump for loading the hot water tank
 CM1 Hot water expansion vessel.

Fig. 9 Installation diagram of the BA-ST 9022-FE storage tank

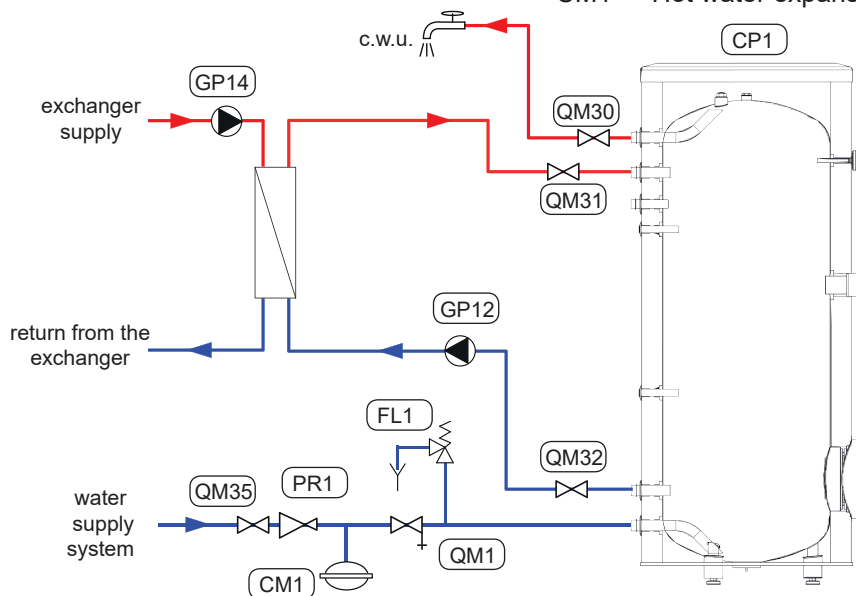


Fig. 10 Preparing hot water using a plate heat exchanger and a BA-ST water tank

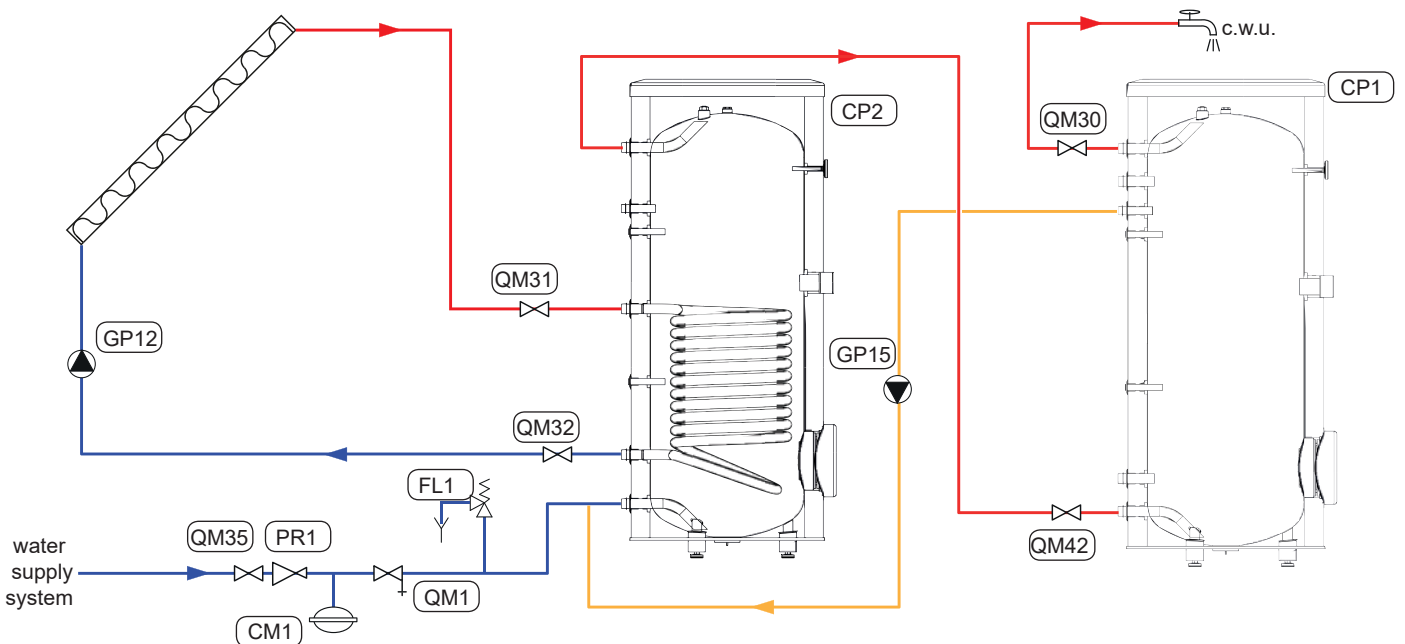


Fig. 11 Loading of the BA-ST tank cooperating with the coil tank and the solar system.

BA-ST 9022-9100-FE

4 Connection and start-up

Connection

CAUTION

The storage tank connections may not be made of materials more precious than carbon steel due to the increased electrochemical corrosion. This applies to connector pipes (fittings) contacting the tank connector pipe thread. Preferably, use galvanized pipe connectors (fittings.)

After the installation and levelling the tank, follow the procedure below (for the connector pipe numbers, refer to Fig. 3 and Fig. 5):

1. Remove protecting plugs from the connector pipes
2. Connect the hot water intake line (XL4).
3. Connect the cold water supply line together with the required safety valves (XL3).
4. If the system has the hot water circulation system, connect it to the connector pipe (XL5). Otherwise, plug the pipe.
5. Connect all temperature sensors (UA1-3).

Start-Up

Fill the storage tank with water and vent it after making correct connections.

CAUTION

If there is an electric heating module installed in the storage tank, fill the tank with water before connecting it to the electrical installation.

Filling and venting the hot water storage tank:

1. Open the cold water cut-off valve at the inlet and the hot water intake point.
2. Fill the storage tank until obtaining uniform water outflow at the hot water intake point. Close the intake points.
3. Check tightness of the entire system.

When properly filled and vented, the storage tank is ready to use.

INFORMATION

We recommend connecting the tank connector pipes with the system lines by means of unions to allow disconnection of the tank, if required.

CAUTION

Open the hot water intake valves before heating the system up for the first time or after a longer break in its operation in order to check whether the storage tank is filled with water and the cut-off valve at the cold water inlet is not closed.

Thermal Insulation of the System

In order to minimize thermal energy losses, insulate all connector pipes, pipelines and temperature sensor covers thoroughly after the installation of the unit and performance of the leak proof test. For this purpose, use thermal insulation of correctly selected thickness and thermal insulation parameters.

INFORMATION

No thermal insulation, its inadequate thickness or insulation made of improper materials will degrade the thermal insulation of the installation.

Warnings and Practical Requirements

CAUTION

It is possible to grow Legionella bacteria in domestic hot water. To eliminate this danger, it is recommended to heat the water to 70°C once a week and keep it at this temperature for 5 minutes.

We recommend the following

- Check the operation of the safety valve as described by the manufacturer of the valve.
- Clean the inside of the storage tank periodically. Cleaning intervals depends, among other things, on the hardness of the water present in a given area.
- To ensure optimum protection of the storage tank against corrosion, we recommended checking the level of wear of the isolated magnesium anode once a year.
- The isolated protective anode earth conductor must be connected to the steel components of the storage tank (top bottom of the tank). Otherwise, the tank will not be protected against corrosion.
- In order to eliminate any odour of hydrogen sulphide (caused by bacteria in the oxygen deficient water), we recommend observing the periodic cleaning of the tank and replacement of the electrode and, in addition, from time to time and independently of the normal temperature setting, overheating the water in the tank to a tempera-

ture above 70 °C. This also eliminates the risk of Legionella bacteria growth.

- In the systems with the electric heating unit, ensure that the electrical installation is properly protected by protective circuit.
- When heating water using a coil, limit the temperature of the heating medium to 80°C, it will be possible to avoid turning on the temperature limiter.
- In order to reduce the risk of scalding with water, we recommend installing a anti-scalding valve.
- Report any malfunctions in the storage tank operation to the authorized service centres.

It is forbidden to

- Activate the heating medium circuit or electric heating unit if the tank is not filled with water.
- Use the storage tank, if you find any malfunction of the safety valve.
- Install any device (such as cut-off and/or check valves, etc.) between the storage tank and the safety valve (except T-pipes).
- Make any unauthorized repairs.
- Stop water leaks from the safety valve.

5 Maintenance

Periodic inspections and maintenance are the conditions of continuous operational readiness, reliability and a long service life of the product.

Maintenance activities include the following:

- Routine inspections and replacement of the protective magnesium anode
- Cleaning of the storage tank

CAUTION

Check the safety valve performance as specified by the valve manufacturer periodically (min. every 14 days) or before each start-up of the heater after decommissioning.

Inspection of the Protective Magnesium Anode

Storage tanks of BA-ST Series are, in order to protect them against corrosion, coated inside with ceramic enamel and in addition, protected with isolated protective magnesium anode. The anode corrodes first under normal operation, thus protecting the storage tank jacket. Therefore, you have to inspect its condition from time to time. Corrosion rate of the protective anode is different and depends upon the quality of water in the area. We recommend checking the protective anode condition once a year in order to ensure optimum corrosion protection.

INFORMATION

The use of the isolated anode allows you to monitor the degree of wear of the anode by measuring the intensity of the protecting direct current without having to remove it and empty the tank (interrupting operation of the storage tank). This solution simplifies operation and additionally contributes to the reliability and long lifetime.

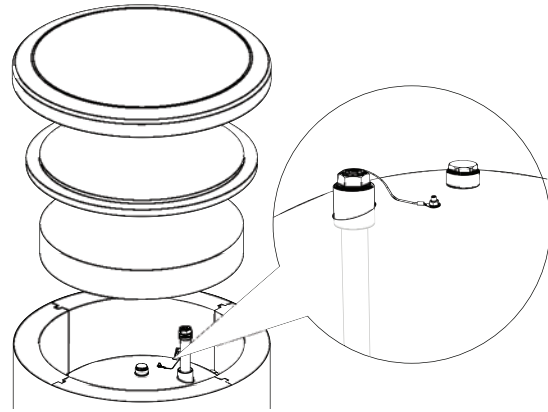


Fig. 12 Insulated protective magnesium anode.

Measurement of the Protective Magnesium Anode Wear

In order to check the degree of wear of the anode, do the following (see Fig. 13):

1. Remove the housing cover together with thermal insulation.
2. Disconnect the connecting conductor (protective) from the storage tank top head.
3. Connect an electric meter (range in mA) between the protective conductor and the M5 threaded pin and measure the intensity of the protective direct current.

Intensity of the protective direct current should not be lower than 0.3 mA at full storage tank. If it is too low, remove the anode and check its wear visually. If the anode is significantly corroded (above 50 % loss), replace it immediately. Connect the anode protective conductor to the tank after the measurement.

CAUTION

If the current intensity measurements do not indicate any wear of the anode, its max operating time is not longer than 18 months. The anode should be replaced after this time.

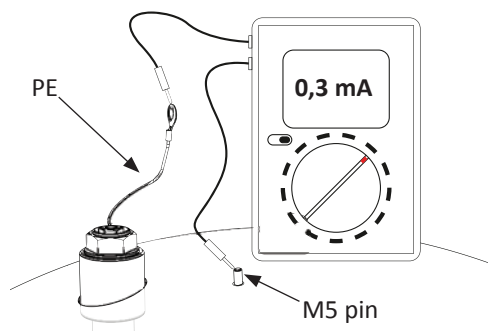


Fig. 13 Measurement of the protective direct current intensity.

Replacement of the Protective Magnesium Anode

Replace the protective magnesium anode every 18 months (regardless the measurement). In replacement of the magnesium anode, you can use a titanium anode, which you do not need to replace. Its assembly should be carried out in accordance with the assembly manuals of the anode manufacturer.

CAUTION

The replacement of the magnesium protective anode should be carried out at least once every 18 months during the warranty period. After the warranty expires, the frequency of replacing the protective anode depends on the degree of wear. Timely replacement and correct installation are a condition for maintaining the tank warranty.

When replacing the magnesium anode, follow the procedure below (see Fig. 14):

1. In units with the electric heating unit installed, disconnect power from the unit first.
2. Wait until the water inside cools down.
3. Cut-off the hot water supply and drain some water from the tank through the drain valve (see Fig. 9, 10, 11 item QM1).
4. Remove the housing cover together with thermal insulation (1).
5. Remove the anode protective conductor (2).
6. Remove the worn magnesium anode (3).
7. Screw the new magnesium anode.
8. Connect the anode protective conductor to the storage tank.
9. Fill the tank with water and vent it as described in par. "Start-Up".
10. Check tightness of the installed anode.
11. Reinstall the thermal insulation and the housing cover.

Connect the anode protective conductor to the M5 pin fixed to the top head of the storage tank. Once making the above steps, the storage tank is ready to use.

CAUTION

Ensure that the anode protective conductor is connected to the storage tank top head after installing the new isolated magnesium anode. Lack of connection of the anode with the tank will completely block the work of the anode and the tank will be deprived of corrosion protection.

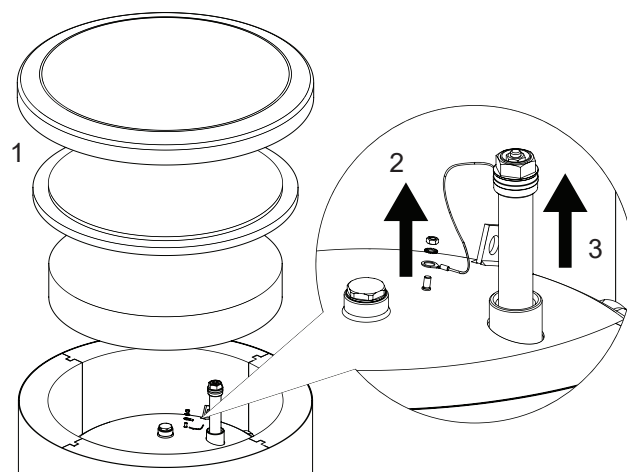


Fig. 14 Replacement of the protective magnesium anode.

Cleaning of the Storage Tank

During the use of the tank, the so-called boiler scale precipitation occurs from the heated water. The amount of deposited stone depends on the hardness of water, working temperature and time of use. Covering the heating surfaces with stone reduces their heating efficiency, increases energy consumption and lengthens the heating time. It is recommended to clean the tank from accumulated deposits at a frequency of at least once a year. In the case of hard or very hard water, it is necessary to carry out cleaning more frequently.

Storage tank cleaning procedure:

1. Prepare a new inspection opening gasket. The old gasket may not be reused (for the list of the inspection opening gaskets, see "Accessories and Spare Parts").
2. In storage tanks with the electric heating unit installed, disconnect power from the unit first.
3. Turn off the heating devices supplying the storage tank and wait until the water inside the tank cools down.
4. Cut-off the hot water supply and drain the storage tank through the drain valve (see Fig. 9, 10, 11 item QM1).
5. Remove the inspection opening blanking plate and gasket.
6. Remove the inspection opening screws and

flanged cover and flush the storage tank and remove accumulated sludge and lime slurry. Pay special attention to not damage the ceramic enamel coating.

7. Replace a new gasket and the inspection opening flanged cover. Screw tightening torque according to table 1.
8. Fill the tank with water and vent it as described in par. "Start-Up".
9. Check tightness of the inspection opening.
10. Replace the insulation and inspection opening blanking plate.

Once cleaned, the unit is ready to use.

INFORMATION

During mechanical cleaning, be careful to not damage the enamel. In the case of chemical cleaning, pay special attention to neutralize the chemicals used for cleaning.

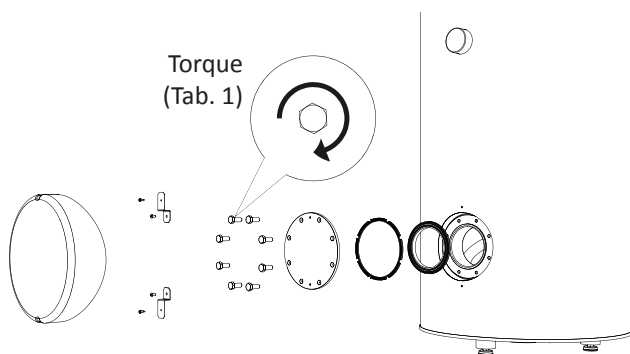


Fig. 15 Installation of the inspection opening cover (mounting order).

Table 1 Tightening torque

Storage tank model	Inspection opening diameter	Tightening torque
BA-ST 9022-FE BA-ST 9030-FE BA-ST 9040-FE BA-ST 9050-FE	ø 120	25 ± 5 Nm
BA-ST 9075-FE BA-ST 9100-FE	ø 180	35 ± 5 Nm

6 Accessories and spare parts

Accessories and spare parts for BA-ST storage tanks can be purchased at our distributors or authorized service centres.

Table 2. Heating units.

Storage tank model	Type	Heating unit power	Connector pipe dia
BA-ST 9022-FE	ME 0015	1,5 kW	1 ¼"
	ME 0020	2,0 kW	
	ME 0030	3,0 kW	
	ME 0040	4,0 kW	
BA-ST 9030-FE	ME 1045	4,5 kW	1 ½"
	ME 1030	3,0 kW	
	ME 1060	6,0 kW	
BA-ST 9040-FE BA-ST 9050-FE	ME 1045	4,5 kW	1 ½"
	ME 1030	3,0 kW	
	ME 1060	6,0 kW	
	ME 1090	9,0 kW	
BA-ST 9075-FE	ME 2090	9,0 kW	2"
	ME 2180	18,0 kW	
BA-ST 9100-FE	ME 2090	9,0 kW	2"
	ME 2120	12,0 kW	
	ME 2180	18,0 kW	

Table 3. Protective anodes

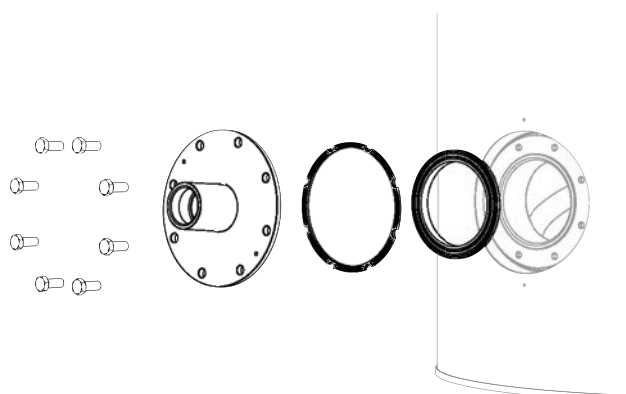
Application	Connector pipe dia.	Type of anode	A _{min}
BA-ST 9022-FE BA-ST 9030-FE	1"	Bar ø26x650	680 mm
		Chain ø26x4	150 mm
	¾"	Titanium anode	200 mm
BA-ST 9040-FE	1 ¼"	Bar ø33x500	530 mm
		Chain ø33x3	150 mm
	¾"	Titanium anode	200 mm
BA-ST 9050-FE	1 ¼"	Bar ø33x500	530 mm
		Chain ø33x3	150 mm
	¾"	Titanium anode	400 mm
BA-ST 9075-FE BA-ST 9100-FE	1 ¼"	Bar ø33x720	750 mm
		Chain ø33x5	150 mm
	¾"	Titanium anode	400 mm

Table 4. Inspection opening gaskets

Storage tank model	Inspection opening dia.	Type of gasket
BA-ST 9022-FE BA-ST 9030-FE BA-ST 9040-FE BA-ST 9050-FE	ø 120	Flanged gasket ø 150
BA-ST 9075-FE BA-ST 9100-FE	ø 180	Flanged gasket ø 180

Table 5. Mounting kit for electric heating module

Type	Application
Mounting kit for electric heating module - 1½" female	BA-ST 9022-9050-FE
Mounting kit for electric heating module - 2" female	BA-ST 9075-9100-FE

**Fig. 16.** Mounting kit for electric heating module – flanged cover with 1 ½" or 2" sleeve.

7 Service

Report any malfunctions in the buffer tank operation to the authorized service centres.

CAUTION

The storage tank may only be repaired/serviced by an authorized service since improper repair can cause safety risks, and the loss of product warranty.

8 Recycling and disposal

According to the NIBE-BIAWAR rules, the products have been manufactured of high quality materials using the latest technologies and solutions that do not endanger the environment.

When selecting materials, we took into account both the possibility of reuse of materials (recycling) that can be disassembled and separated from materials unsuitable for recycling, as well as risks arising from the processing of materials not intended to reuse.

The purchased device consists in more than 90 % of parts that can be recycled and reused, so they are safe for the environment and human health.

CAUTION

In order to prevent damage to piping systems and environmental pollution, the product should only be disassembled and taken out of service by appropriately qualified specialists.

CAUTION

At end-of-life, take care that the product and all the equipment were disposed of in accordance with applicable regulations.

INFORMATION

The packaging, in which the product is delivered, is made mainly of materials suitable for recycling and utilization. After installation, you should ensure the proper disposal of packaging in accordance with applicable regulations.

9. Technical data

Table 6. Technical data

Parameter	U/m	Storage tank model					
		BA-ST 9022-FE	BA-ST 9030-FE	BA-ST 9040-FE	BA-ST 9050-FE	BA-ST 9075-FE	BA-ST 9100-FE
Energy efficiency class	-	C	C	C	C	C	C
Storage volume (V)*	l	222,3	293,1	384,7	488,8	742,0	983,7
Standing loss (S)*	W	79,2	88,8	92,5	102,9	118,3	130,0
Max tank operating temp.	°C	85					
Max allowable instantaneous temp. in the tank	°C	98					
Max tank operating pressure	bar	6	10				
Electric heating module connection	inch	1¼" female	1½" female			2" female	
Corrosion protection	ceramic enamel + magnesium anode						
Anode connection	inch	1" female		1¼" female			
Magnesium anode dimensions	mm	ø26x650		ø33x500		ø33x720	
Weight	kg	52	83	97	113	180	210

* Acc. to EU regulations No. 812/2013 & 814/2013.

Dimensions

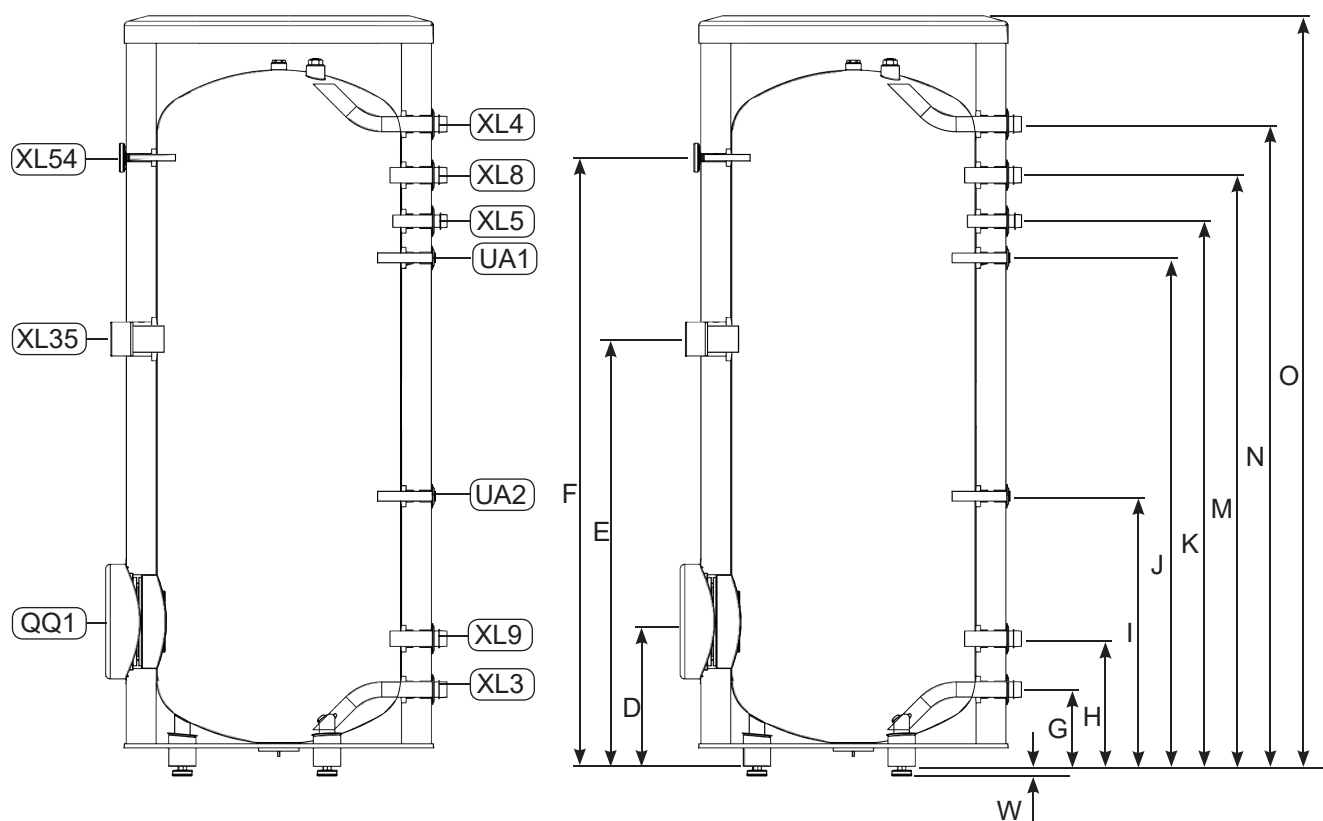


Fig. 17 Dimensions of the BA-ST 9022-9050-FE storage tanks.

Dimensions

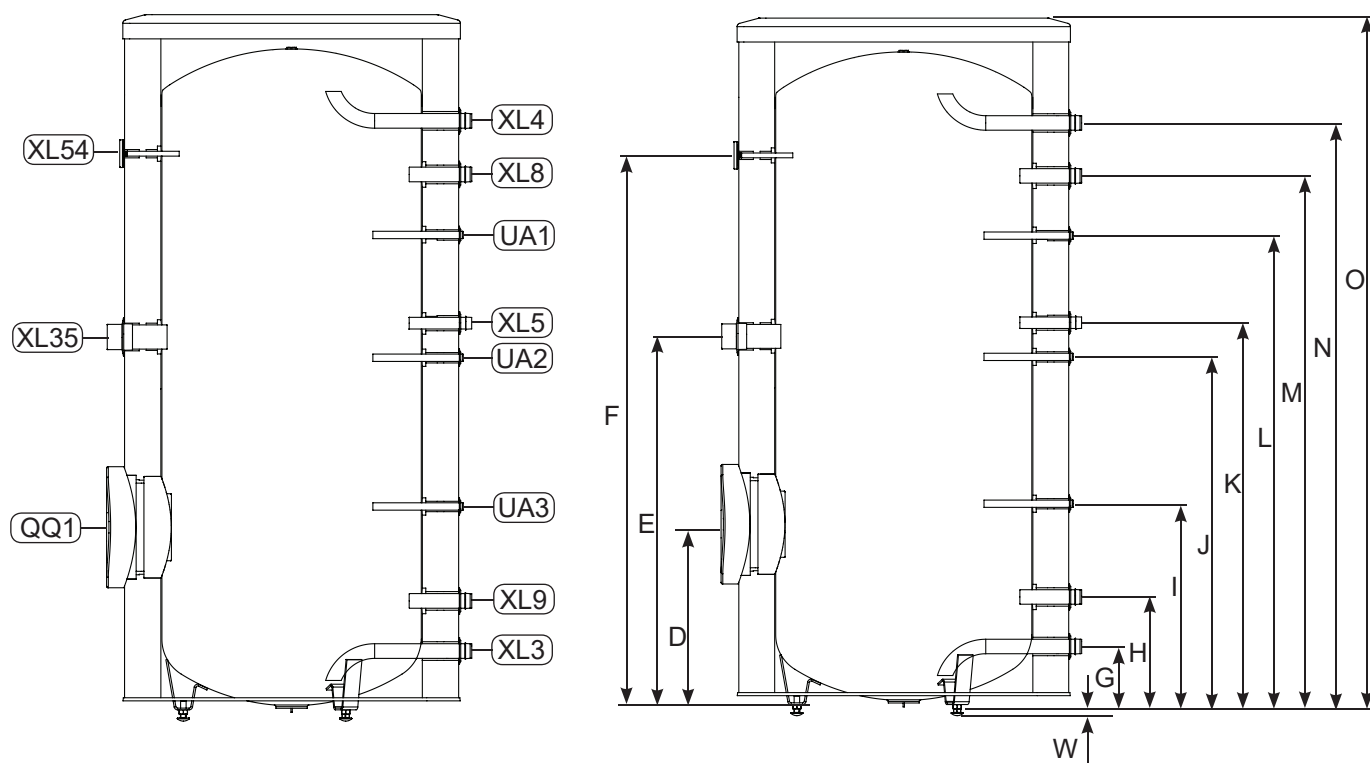


Fig. 18 Dimensions of the BA-ST 750-9100-FE storage tanks.

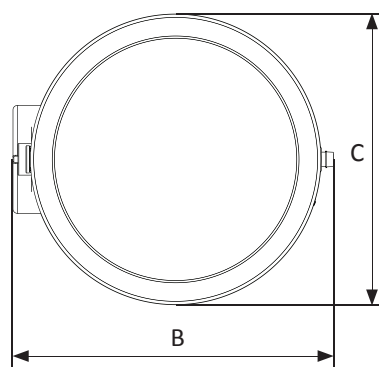


Table 7. Connector pipe diameters

Connection		U/m	Storage tank					
			BA-ST 9022-FE	BA-ST 9030-FE	BA-ST 9040-FE	BA-ST 9050-FE	BA-ST 9075-FE	BA-ST 9100-FE
QQ1	Inspection opening	mm	ø120				ø180	
XL35	Heating unit connection	cal	1¼" Female	1 ½" Female			2" Female	
XL54	Thermometer enclosure	mm	ø10 Female					
XL3	Cold water supply	cal	¾" Male	1" Male			1 ¼" Male	
XL9	Cold water inlet	cal	¾" Male	1" Male			1 ¼" Male	
UA1	Temp. sensor enclosure	mm	ø16 Female					
UA2	Temp. sensor enclosure	mm	ø16 Female					
XL5	Hot water circulation	cal	¾" Male				1" Male	
UA3	Temp. sensor enclosure	mm	-				ø16 Female	
XL8	Hot water supply	cal	¾" Male	1" Male			1 ¼" Male	
XL4	Hot water outlet	cal	¾" Male	1" Male			1 ¼" Male	

Table 8. Dimensions

Dimen- sions	U/m	Tank					
		BA-ST 9022-FE	BA-ST 9030-FE	BA-ST 9040-FE	BA-ST 9050-FE	BA-ST 9075-FE	BA-ST 9100-FE
B	mm	665	743	844	897	1055	1165
C		600	676	774	832	977	1087
D		267	315	323	337	541	576
E		919	930	913	967	1091	1126
F		1409	1325	1323	1477	1621	1656
G		119	167	175	188	183	203
H		214	278	274	288	328	363
I		579	588	373	387	601	636
J		1159	1107	1095	1234	1021	1066
K		1259	1187	1165	1302	1141	1166
L		-				1386	1421
M		1359	1287	1277	1441	1561	1596
N		1476	1398	1417	1545	1716	1766
O		1650	1634	1692	1835	2023	2091
W		21 -0/+15					

NOTES

Declaration of conformity

declare under our sole responsibility that the product

- **BA-ST 9022-FE** Storage tank for domestic water
- **BA-ST 9030-FE** Storage tank for domestic water
- **BA-ST 9040-FE** Storage tank for domestic water
- **BA-ST 9050-FE** Storage tank for domestic water
- **BA-ST 9075-FE** Storage tank for domestic water
- **BA-ST 9100-FE** Storage tank for domestic water

To which this declaration relates is in conformity with requirements of following directives

EC directive on:

Pressure Equipment (PED): **2014/68/EC**

Ecodesign Directive (ErP): **2009/125/EC**

Commission Regulation (EU) No. 814/2013

Energy Labelling Directive: **2010/30/UE**

Commission Regulation (EU) No. 812/2013

Restriction of Hazardous Substances (RoHS): **2011/65/EU**

Commission Regulation (EU) No. 2015/863 (RoHS III)

Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): **1907/2006/EC**

This pressure equipment is covered by Article 4 in EU Directive 2014/68/UE. As prescribed in item 3 of this article, the equipment is designed and manufactured in accordance with the sound engineering practice of a member state in order to ensure safe use. Such pressure equipment must not bear the CE marking referred to in Article 18 in EU Directive 2014/68/UE.

The conformity was checked in accordance with the following EN-standards

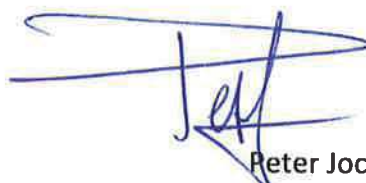
*DIN 4753-3:2016-10 Water heaters, water heating installations and storage water heaters for drinking....

*PN-EN 12897:2016-07 Water supply - Specification for indirectly heated, not vented (closed)...

Markaryd 2019.07.05



Kenneth Magnusson
Quality and Environmental Manager



Peter Jocić
Business Area Product Manager

