

Installation manual Operating instructions

Chilled water buffer tank

WKS 155 – 3005



Installation and commissioning must be undertaken by a specialist.

General terms and conditions of warranty state that all installations must be carried out by a suitably trained and qualified plumber who observes the local norms and regulations.

The installation and maintenance record must be entirely completed and the user has to be instructed accordingly.

Efficient operation can only be guaranteed if the instructions of this manual are followed.

Warranty does not cover any damage caused due to non-observance of this manual and the technical rules in force.

The system is to be checked annually by a specialized company. In addition, occurring defects must be repaired immediately.

This document should be handed over to the client on completion of the installation.

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1 General

Depending on the type and design, WIKORA tanks are suitable for water storage. The maximum working pressure and working temperature can be found in the technical data.

Set-up, installation and commissioning must be undertaken by a qualified specialist, who must observe these instructions.

The site of installation must be frost-protected according to DIN 4753.

When setting-up and installing the tank, the following regulations should be considered:

In addition to the technical rules in force DIN 1988, DIN 18160, DIN 4753, DIN 4109, DIN 4708, DIN 4751 section 2-4 energy conservation law and VDE regulations are to be observed. Moreover, the relevant regulations of the suppliers as well as legal building regulations are to be considered.

2 Transport and installation

In order to prevent damage during transport, the packaging should only be removed at the site of installation. During shipment, it should be ensured that the tank does not come in contact with any spiky or sharp items, nor is damaged through dropping or knocks.

During installation, the tank must be disconnected from any humidity carrying components. Moreover, sufficient space for maintenance and cleaning purposes should be kept free in front of, beside, above and behind the tank.

The pre-assembled PS-jacket can be dismantled for installation. Damages which have been caused in the thermal insulation during installation must be professionally repaired.

The PS-jacket including rosettes are to be placed at the site of installation before installing the pipeworks.

3 Dimensions and connections

Chilled water buffer tank on base ring, interior not coated, exterior primer-painted for thermal insulation, 25 mm thermal insulation and PS-jacket in RAL 9220, pre-assembled with rosettes and cap.
 Manufactured in compliance with AD 2000 regulations and company standards, manufacturer's certificate for construction and pressure testing.

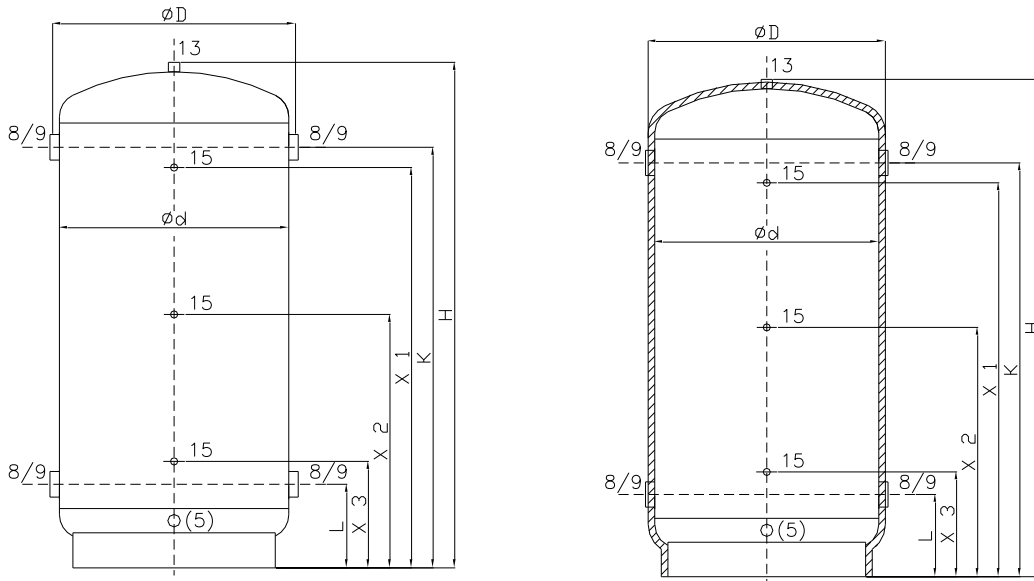


Illustration 1

Dimensions:

Type	d	D	H	W	K	L	X1	X2	X3
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
WKS 155	500	552	884	915	656	233	618	467	265
WKS 205	500	552	1128	1120	900	233	862	564	265
WKS 305	500	552	1641	1665	1413	233	1372	819	265
WKS 405	600	652	1635	1660	1395	265	1370	985	300
WKS 505	600	652	1895	1900	1655	265	1640	970	300
WKS 805	790	842	1802	1845	1520	290	1490	903	316
WKS 1005	790	842	2117	2150	1835	290	1805	1061	316
WKS 1505	1000	1052	2074	2130	1730	350	1680	1040	400
WKS 2005	1200	1252	2013	2100	1625	395	1575	1010	445
WKS 3005	1250	1302	2603	2680	2220	390	2170	1305	440

Chart 1

W = Tilting dimension; d = WKS excl. insulation, D = WKS incl. insulation

Connections:

Type			WKS 155	WKS 205	WKS 305	WKS 405	WKS 505	WKS 805	WKS 1005	WKS 1505	WKS 2005	WKS 3005
Load flow / return	8/9	Gi	1 1/2	1 1/2	2	2 1/2	2 1/2	3	3	3	3	3
Vent	13	Gi	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Sensor socket	15	Gi	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Drain	Ø(5)	Gi	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4

Chart 2

Gi = female thread

4 Technical data

Description		WKS 155	WKS 205	WKS 305	WKS 405	WKS 505	WKS 805	WKS 1005	WKS 1505	WKS 2005	WKS 3005
Storage volume (real) acc. to DIN EN 12897	[litre]	153	201	300	431	500	830	983	1535	2010	3035
Max. working temperature	[°C]	50	50	50	50	50	50	50	50	50	50
Min. working temperature	[°C]	2	2	2	2	2	2	2	2	2	2
Max. working pressure	[bar]	10	10	10	10	10	10	10	6	6	6
Max. rel. humidity	[%]	70	70	70	70	70	70	70	70	70	70
Max. env. temperature	[°C]	24	24	24	24	24	24	24	24	24	24
Weight (empty)	[kg]	95	100	103	122	151	206	234	273	359	431

Chart 3

5 Installation

All pipes connecting to the tank should have removable connections (fitting/flange). Pipe thread seals with teflon are to be avoided.

All tank connecting pipes are to be planned, constructed and tested according to the technical rules in force, as well as to the corresponding norms and regulations in accordance with their application and supply medium.

Sensors and thermostats necessary for temperature control must be securely and permanently positioned on the tank (immersion sleeve and sensor rail).

The tank's venting and draining facilities must have the appropriate dimensions and be correctly installed. The installation company is responsible for the correct execution of work and for the safe and careful insulation of the pipes.

All factory-made, non-insulated surfaces must be insulated in a professional manner on site.

6 Commissioning

- Before putting into operation, the entire system should be flushed through. Particles in the system compromise the operating reliability.
- Fill the heating system slowly with water and vent all the air.
- Start-up the system.
- **Before the handover of the system to the end user/owner, the plumbing contractor should ensure that the system is tested to full load, controls are set and that pipe work and connections are without leaks.** Afterwards, the end user has to be instructed in the operation and handling of the tank, as well as the system. The instruction must to be documented in the installation and maintenance record.
- Please note that the operation and lifetime of the system depend decisively on a regular maintenance.

7 Maintenance and wear parts

Regular maintenance increases the lifetime and operation reliability of the system.

A damp cloth is sufficient to clean the outer parts. Please avoid using any abrasive or solvent cleaning.

8 Recycling and disposal

The products are specified and manufactured according to VDI 2243. The products are mechanically separable and 100% recyclable. Make sure that the components are disposed according to the relevant regulations.

9 Warranties and guarantee

The warranty for our products is based on the legal provisions of the general Civil Code and the Consumer Protection Act.

In addition, defective appliances are replaced within the framework of our full warranty within 1 year, as of the date of the invoice, including the replacement, procurement and incidental costs. As far as our hot-water heaters and pressurized boilers are concerned, the warranty amounts for 6 months, as of the date of the invoice.

Subsequent to the full warranty, defective tanks are replaced within the framework of our guarantee. The guarantee of the different products and the conditions are shown in the table below.

All other claims are excluded. Repairs and costs which occur due to damage, inappropriate installation, chemical, electrochemical or electrical influences, incorrect operation or improper manipulation, are excluded. Furthermore, the warranty becomes invalid if the appliance has been modified through the installation of externally supplied parts or through irregular professional maintenance.

Subject to our general terms and conditions.

Products	Legal warranty 2 years	Guarantee years*	Conditions
DHW storage tanks			
WBO T/ToF	•	5	20 / 27
WBL	•	5	20 / 27
WBO Uno	•	5	20 / 27
WBO Duo	•	5	20 / 27
WP/Sol	•	5	20 / 27
WBO H	•	5	20 / 27
GS	•	5	20 / 27
Combi buffer tanks			
Wikosol Twin	•	10	27
Wikosol	•	10	27
WPKR H Twin	•	5	20 / 27
WPKR Twin	•	5	20 / 27
WPKR	•	5	20 / 27
WPK	•	5	20 / 27
WPH-FW (tank)	•	5	27
WPR-FW (tank)	•	5	27
Buffer tanks			
WPS	•	5	20 / 27
WPH	•	5	-
WPR	•	5	-
WPRR	•	5	-
WKS	•	5	-
Tank accessories			
Cu-finned tube heat exchanger	•	-	27
Electric heating element	•	-	-

Conditions:

- | | |
|----|--|
| 20 | Under condition that the limits of the valid DHW regulations have been respected, the anode has been examined for the first time after 2 years and afterwards annually and that the anode has been replaced by an original Wikora anode (individual receipts needed) by a specialized company. |
| 27 | Coverage Germany:
Compliance with the limits of the valid DHW regulations (TrinkwV 2001), especially the limits in accordance with Appendix 2, Part 1-2 and Appendix 3
Coverage EU :
Compliance with the limits of the EG-Regulations 83/98 |

* Start of guarantee at date of invoice

10 Installation record

The installation has been completed according to DIN and the technical rules in force. In addition, the customer has received instruction concerning the operation and maintenance.

Place..... Date.....

Customer Installer

.....
Signature Signature

Place of installation:

Name:

ZIP Code/Place:

Street:

Phone:

Tank model: Serial number

Date of invoice

In the case of reclamation, the receipts for maintenance must be provided as proof. Please complete the data sheet, including the reason for reclamation, and submit to Wikora.

Submitting the maintenance record does not ensure any promise of guarantee or claim.