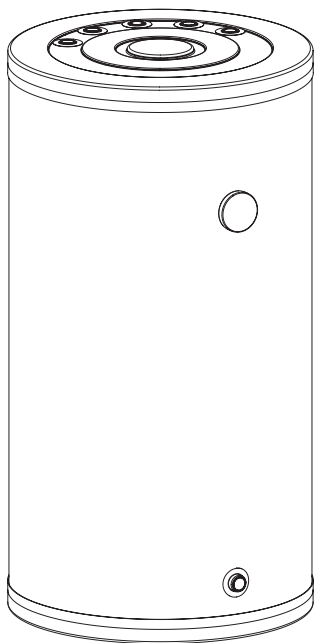




Domestic Hot Water Cylinder



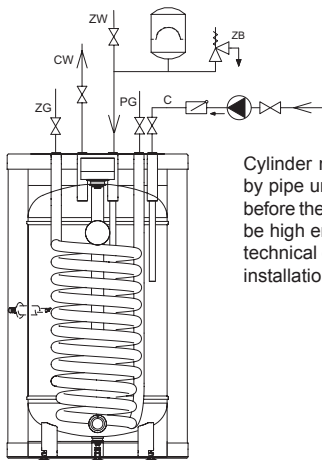
SWK

Assembly and operating manual

Safety instructions

1. Read and strictly follow this installation and operating instructions to ensure a long life and reliable cylinder operation.
2. The manufacturer of this cylinder will not be liable for any damages due to the failure to follow the installation and operation instructions.
3. The cylinder must not be installed in rooms where the temperature may drop below 0°C.
4. The cylinder installation and the initial start-up, as well as all electrical and hydraulic work must be performed by a qualified professional installer- in strict accordance with assembly and operating instructions.
5. The cylinder is designed for standing vertical installation- screw on three feet.
6. The device must be installed in such a place and in such a way in order not to flood the room in case of the emergency water leak.
7. Connections to water supply system, central heating system, and solar collectors must be made in accordance with the diagram in this installation instruction. Failure to follow the installation instruction invalidate the warranty and may cause cylinder's damage.
8. Connections to water supply system must be made in accordance with the legally binding standards.
9. The cylinder is a pressure appliance designed for connection to the water supply system where the water pressure doesn't exceed 0,6 MPa. If the water pressure exceeds 0,6 MPa, the pressure reducing valve before cylinder must be fitted.
10. A small leak from the safety valve through the outlet pipe may occur, it is a normal operating state of the appliance. The outlet of the pipe has to remain open. Do not clog it, as a clogged outlet may cause cylinder's breakdown.
11. Do not use the cylinder if you suspect that the safety valve may be faulty.
12. The tank is equipped with a magnesium anode - an additional protection against corrosion. The anode is an operating part, therefore, it is exposed to wear.
The condition of the magnesium anode should be controlled every 12 months. The anode must be replaced once every 18 months.
13. Rated temperature of water in the cylinder should not exceed 80°C.

Connection to the central heating system



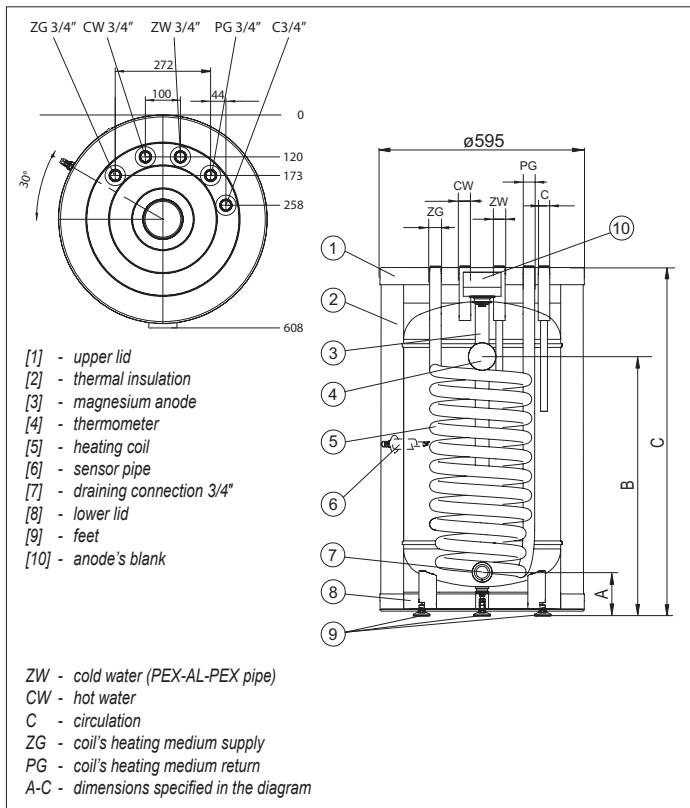
Cylinder must be fitted to the central heating system by pipe unions 3/4". A cut-off valves must be installed before the pipe unions. A flow rate of heating water must be high enough to maximise cylinder's efficiency (see technical data table). It concerns the forced circulation installation (with a central heating water pump).

Connection to the water system

Connection to the water system must be performed according to binding norms of hydraulic installation. The cylinder is a pressure appliance designed for connection to the water supply system where the water pressure doesn't exceed 0,6 MPa. If the water pressure exceeds 0,6 MPa, the pressure reducing valve before cylinder must be fitted. Please follow the water connection instructions below:

- install the T-connection with 6 bar safety valve (e.g. ZB-4) to the fitting of cold water inlet [ZW]. It's forbidden to install a cut-off valve (or any flow reducer) between tank and the safety valve and on its outlet. The safety valve must be installed in such a place as to quickly let you notice the outgoing water,
- install the cylinder equipped with the safety valve to the water system,
- install the cut-off valve on cold water supply pipe.

Hot water outlet should be led to the connection 3/4" in the upper part of the cylinder. Every cylinder is equipped with connection 3/4" intended for its installation to the DHW circulation.



Dimensions	SWK120	SWK140
A	127	
B	705	816
C	1018	1140

Start-up

Before the start-up close the draining connection e.g. by screwing the valve in and make sure that the installation procedures have been carried out in accordance with the regulations included in this manual.

Cylinder must be filled with water:

- turn on the valve on cold water supply pipe,
- turn on the hot water outlet valve (water outflow without the air bubbles indicates that the tank is full),
- turn off the outlet valves.

Turn on the valves connecting cylinder with the central and the solar collector heating system. Check for water and heating medium leaks. Check out the safety valve performance in accordance with valve manufacturer's instruction.

Operation

Follow the guidelines below for safety and trouble-free cylinder operation:

- Check out the safety valve performance once every 14 days. Do not use the cylinder if the water does not come out (it indicates that the valve is broken).
- Clean inside of the cylinder periodically. The frequency of cleaning depends on the degree of water hardness. The cleaning should be done by a qualified person.
- The wear condition of the anode must be inspected annually.
- The anode must be replaced once every 18 months.
 - anode rod replacement [3]: take off anode's blank [10], take out an insulation ring, turn off the cut-off valve on cold water supply pipe, turn on the hot water valve (mixer tap), turn the drain valve on, drain as much water as you need to easily unscrew the anode rod (avoiding room flooding). Remove the cork and unscrew the anode rod.
- Heat up the water above 70°C periodically for hygiene reasons.
- Failures or malfunctions notify to the seller.
- Insulate the outlet pipe and heating coil connection pipes to minimise the heat loss (recommended).

Above activities are beyond of the scope of warranty service (should be done by the user).

Cylinder emptying

In order to empty the cylinder:

- turn off the valves which connect cylinder with central heating system,
- turn off the valve on the cold water inlet,
- turn on the drain valve.

Technical data

Domestic Hot Water Cylinder			SWK	SWK
Capacity		l	120	140
Rated pressure	storage	MPa	0,6	
	coil		1	
Rated temperature		°C	80	
Surface area of coil		m ²	1,0	1,1
Capacity of coil		dm ³	6,4	7,6
Power of coil		kW	30* 9**	32* 10**
Efficiency of coil		l/h	750*; 225**	800*; 250**
Weight (without water)		kg	65	72
Magnesium anode M8 ø33		mm	450	

*80/10/45°C } - heating water temp./ supply water temp./ domestic water temperature; flow rate of heating water through the coil - 2,5 m³/h.
**55/10/45°C }

