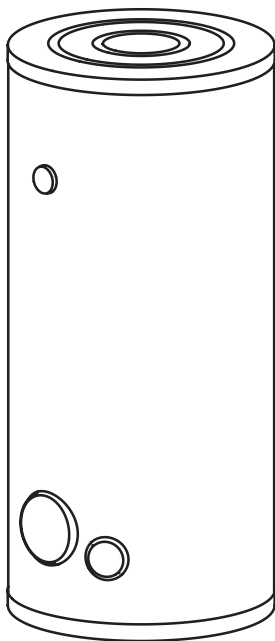


## *Hot Water Cylinder*



**SE**



## *Product description*

SE Cylinder is intended to hold the domestic hot water. A main unit element is vitreous enamel coated steel tank. Magnesium anode creates additional active anticorrosion protection. Thermal insulation ensures high thermal accumulation.

SE Cylinder is suitable for fitting an immersion heater with thermostat (e.g. GRW 1.4, GRW 2.0,..). The immersion heater must be fitted in lieu of cork 1½ [7].

A maximum length of immersion heater:

- 360 mm (Cylinders of 140 litres)
- 450 mm (Cylinders of 200 litres)
- 550 mm (Cylinders of 250,300 litres)
- 600 mm (Cylinders of 400 litres)
- 670 mm Cylinders of 500, 800, 1000 litres).

SE Cylinder is intended for storing and heating the water (cylinder with an immersion heater) in residential buildings, municipal dwellings, sanitary rooms etc. It's designed for vertical installation only.

## *Safety instructions*

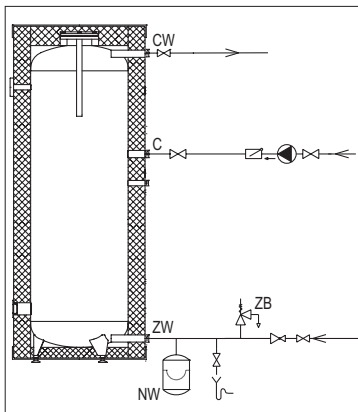
1. Read and strictly follow this installation and operating instructions to ensure a long life and reliable cylinder operation.
2. The manufacturer of this cylinder will not be liable for any damages due to the failure to follow the installation and operation instructions.
3. The cylinder must not be installed in rooms where the temperature may drop below 0°C.
4. The cylinder installation and initial start-up as well as all electrical and hydraulic work must be performed by a qualified professional installer.
5. Rated temperature of water in the cylinder should not exceed 80°C.

## Installation

- Cylinder is designed for vertical mounting only (screw on feet).
- Connection to the water supply system must be made after mounting.
- Pipes must be made in accordance with diagram in this installation instruction. Failure to observe the installation instruction invalidate the warranty and may cause cylinder damage.
- Cylinder must be mounted in the place and in such a way to avoid room flooding caused by leaking tank or connectors.

### Connection to the water system

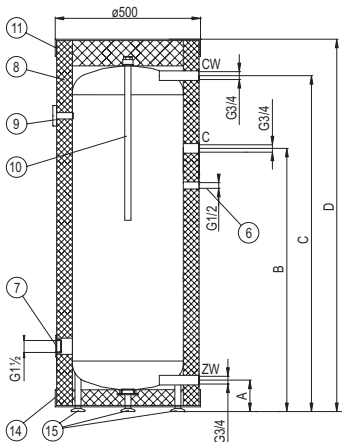
- safety valve (6 bar) must be installed on cold water inlet (according to the flow direction shown on valve body),
- it's forbidden to install a cut-off valve (or any flow reducer) between tank and the safety valve,
- outlet pipe of the safety valve must be opened, directed downward and stay in a place that is not exposed to frost, the outgoing water must be easy to spot,
- installation of safety valve above the cylinder upper edge make the valve replacement much easier (let you change the valve without emptying the cylinder),
- if the non-return valve is installed on cold water inlet pipe, it's recommended to install an expansion vessel for domestic water supply system,
- cut-off valve and drain valve must be installed on cold water inlet.



Hot water outlet pipe (CW) must be connected to the fitting, which is located in the upper part of the cylinder.

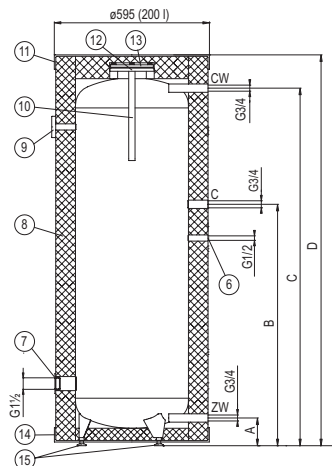
Each cylinder is equipped with 3/4" connector for circulation C connection.

## Construction



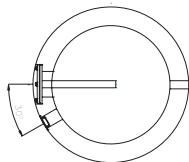
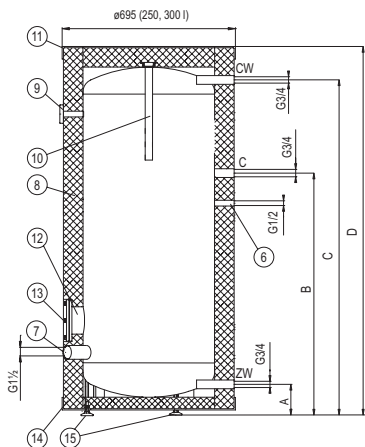
### SE Cylinder construction (140 litres)

- [6] - sensor pipe
- [7] - immersion heater connector (cork 1½")
- [8] - thermal insulation
- [9] - thermometer
- [10] - magnesium anode
- [11] - upper lid
- [14] - lower lid
- [15] - feet
- C - circulation
- A-D - dimensions described in data table



### SE Cylinder construction (200 litres)

- [6] - sensor pipe
- [7] - immersion heater connector (cork 1½")
- [8] - thermal insulation
- [9] - thermometer
- [10] - magnesium anode
- [11] - upper lid
- [12] - access hole  $\varnothing$  150/115
- [13] - access hole cover
- [14] - lower lid
- [15] - feet
- ZW - cold water
- CW - hot water
- C - circulation
- A-D - dimensions described in data table

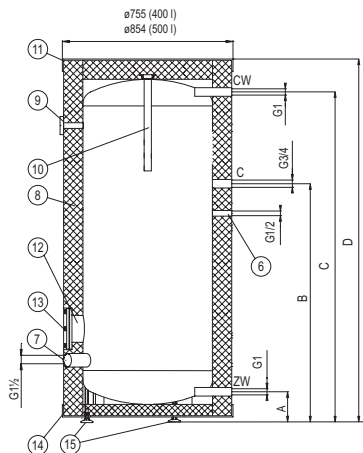


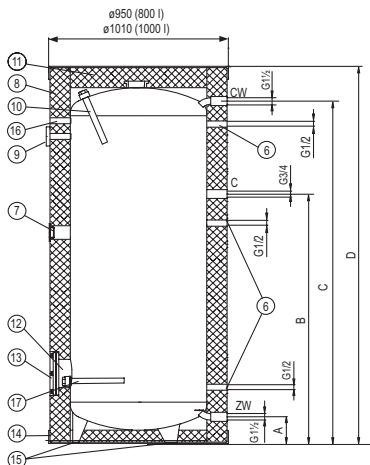
### SE Cylinder construction

250,300 litres

400,500 litres

- [6] - sensor pipe
- [7] - immersion heater connector  
(cork 1½")
- [8] - thermal insulation
- [9] - thermometer
- [10] - magnesium anode
- [11] - upper lid
- [12] - access hole  $\varnothing$  150/115
- [13] - access hole cover
- [14] - lower lid
- [15] - feet
- ZW - cold water
- CW - hot water
- C - circulation
- A-D - dimensions described in data table





## SE Cylinder construction

### SE-800 and 1000

- [6] - sensor pipe
- [7] - immersion heater connector  
(cork 1½")
- [8] - thermal insulation
- [9] - thermometer
- [10] - magnesium anode 1
- [11] - upper lid
- [12] - access hole ø 150/115
- [13] - access hole cover
- [14] - lower lid
- [15] - feet
- [16] - hole on the thermoregulator
- [17] - magnesium anode 2
- ZW - cold water
- CW - hot water
- C - circulation
- A-D - dimensions described in data table

## Start up

Check out the pipe connections and make sure that you observe the connection diagrams before start-up.

Cylinder filling:

- 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,

Check for water leaks.

Check out the safety valve performance in accordance to valve manufacturer's instruction.

## 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 depend on the degree of water hardness. The cleaning should be done by an qualified person.
- The wear condition of the anode must be inspected annually.
- The anode must be replaced once every 18 months.
  - anode rod replacement [10] (SE Cylinder – 140,250,300,400 litres): take off the upper lid [11], 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 can easily screw out the anode rod (avoiding room flooding) screw off the cork and screw out the anode rod,
  - anode rod replacement [10] (SE Cylinder -200 litres): take off the upper lid [11], take out an insulation ring, turn off the cut-off valve on cold water supply pipe, turn on the hot water (mixer tap), turn the drain valve on, drain as much water as you can easily screw out the anode rod (avoiding room flooding), take off the access hole cover [13] and screw out the anode rod.
  - anode rod replacement [17]: in order to replace anode rod in cylinders of 800 l and 1000 l capacity it is necessary to undo the zip of the thermal insulation, replace the insulation, uncover anode's muff placed next to the inspection hole, close cut-out valve on the cold water supply pipe, open hot water valve placed on the mixer tap, open drain valve, drain as much water from the installation as to enable rode's replacement without flooding the room, unscrew the cork and replace 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 to minimise the heat loss (recommended).

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



## Technical data

Domestic hot water cylinder		SE140	SE200	SE250	SE300	SE400	SE500	SE800	SE1000
Storage capacity	l	140	200	250	300	400	500	800	1000
Rated pressure	MPa	0,6							
Rated temperature	°C	80							
Weight (without water)	kg	40	60	62	71	99	128	175	211
	mm	500	595	695		755	854	950	1010
Dimensions	Diameter								
	A	111	127	127	127	124	136	282	284
	B	993	1199	943	1093	1125	1220	1272	1274
	C	1301	1464	1230	1464	1507	1584	1577	1650
	D	1435	1610	1380	1615	1660	1800	1947	2012
3/4" ø22 Magnesium anode		420							
M8 ø33 Magnesium anode		-							
M8 ø40 Magnesium anode	mm	450							
ø31 Magnesium anode		-							
ø31 Magnesium anode		-							
		400							
		-							
		760							
		-							
		570							





