

**Vitocell 300-B**  
**Type EVBA-A**  
DHW cylinder, 300 and 500 l  
**Vitocell 300-V/W**  
**Type EVIA-A**  
DHW cylinder, 160 to 500 l

*For applicability, see the last page*

## **VITOCCELL 300-B** **VITOCCELL 300-V/W**



## Safety instructions

### Safety instructions



Please follow these safety instructions closely to prevent accidents and material losses.

#### Safety instructions explained



##### **Danger**

This symbol warns against the risk of injury.



##### **Please note**

This symbol warns against the risk of material losses and environmental pollution.

##### **Note**

*Details identified by the word "Note" contain additional information.*

#### Target group

These instructions are exclusively intended for qualified contractors.

- Work on electrical equipment may only be carried out by a qualified electrician.
- The system must be commissioned by the system installer or a qualified person authorised by the installer.

#### Regulations to be observed

- National installation regulations
- Statutory regulations for the prevention of accidents
- Statutory regulations for environmental protection
- Codes of practice of the relevant trade associations
- All relevant safety regulations as defined by DIN, EN, DVGW, VDE and locally applicable standards
  - Ⓐ ÖNORM, EN and ÖVE
  - Ⓒ SEV, SUVA, SVTI, SWKI and SVGW

#### Working on the system

- Isolate the system from the power supply (e.g. by removing the separate fuse or by means of a mains isolator) and check that it is no longer live.
- Safeguard the system against reconnection.



##### **Please note**

Electronic assemblies can be damaged by electrostatic discharge. Prior to commencing any work, touch earthed objects such as heating or water pipes to discharge static loads.



##### **Danger**

Hot surfaces can cause burns.

- Before maintenance and service work, switch OFF the appliance and let it cool down.
- Never touch the hot surfaces of uninsulated pipes and fittings.

#### Repair work



##### **Please note**

Repairing components that fulfil a safety function can compromise the safe operation of the system. Replace faulty components only with genuine Viessmann spare parts.










**Safety instructions** (cont.)**Auxiliary components, spare and wearing parts**

- ! **Please note**  
Spare and wearing parts that have not been tested together with the system can compromise its function. Installing non-authorized components and making non-approved modifications or conversions can compromise safety and may invalidate our warranty.  
For replacements, use only original spare parts supplied or approved by Viessmann.







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## Symbols

Symbol	Meaning
	Reference to other document containing further information
	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	<ul style="list-style-type: none"> <li>Component must audibly click into place.</li> <li>or</li> <li>Acoustic signal</li> </ul>
	<ul style="list-style-type: none"> <li>Fit new component.</li> <li>or</li> <li>In conjunction with a tool: Clean the surface.</li> </ul>
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do <b>not</b> dispose of component in domestic waste.

The steps in connection with commissioning, inspection and maintenance are found in the "Commissioning, inspection and maintenance" section and identified as follows:

Symbol	Meaning
	Steps required during commissioning
	Not required during commissioning
	Steps required during inspection
	Not required during inspection
	Steps required during maintenance
	Not required during maintenance

## Intended use

The appliance is only intended to be installed and operated in sealed unvented systems that comply with EN 12828 / DIN 1988, or solar thermal systems that comply with EN 12977, with due attention paid to the associated installation, service and operating instructions. DHW cylinders are only designed to store and heat water of potable water quality. Heating water buffer cylinders are only designed to hold fill water of potable water quality. Only operate solar collectors with the heat transfer medium approved by the manufacturer.

Intended use presupposes that a fixed installation in conjunction with permissible, system-specific components has been carried out.

Commercial or industrial usage for a purpose other than heating the building or DHW shall be deemed inappropriate.

Any usage beyond this must be approved by the manufacturer for the individual case.

Incorrect usage or operation of the appliance (e.g. the appliance being opened by the system user) is prohibited and results in an exclusion of liability.

Incorrect usage also occurs if the components in the system are modified from their intended use (e.g. through direct DHW heating in the collector).

Adhere to statutory regulations, especially concerning the hygiene of potable water.

### Product information

#### Vitocell 300-B, type EVBA-A

Stainless steel DHW cylinder with internal indirect coil for DHW heating in conjunction with solar thermal systems, floorstanding and wall mounted boilers and/or heat pumps for dual mode operation.

Capacity: 300 and 500 l

#### Vitocell 300-B and Vitocell 300-V/W

- An immersion heater can be used for 300 and 500 l cylinder capacities.
- Suitable for systems to DIN 1988, EN 12 828 and DIN 4753

#### Vitocell 300-V/W, type EVIA-A

Stainless steel DHW cylinder with internal indirect coil for DHW heating in conjunction with floorstanding and wall mounted boilers.

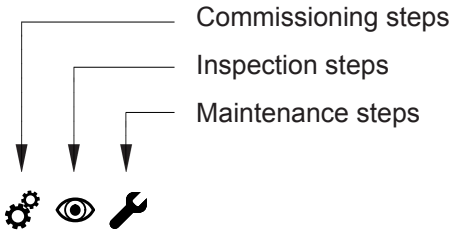
Capacity: 160, 200, 300 and 500 l

### Inspection and maintenance

DIN 1988 requires a visual inspection and (if necessary) cleaning no later than 2 years after the cylinder has been commissioned, and thereafter according to requirements.



**Steps - commissioning, inspection and maintenance**



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   **Filling the DHW cylinder**

1. Fill the DHW cylinder on the DHW side.

**Note**

If the DHW cylinder is pressurised, retighten the flange cover with a torque of 40 Nm.  
The cylinder cap does **not** need to be retightened.

2. Check the fittings on the heating water and DHW sides for leaks and retighten if required.
3. Check the function of the safety valves according to the manufacturer's instructions.

   **Shutting down the system**

   **Checking the sensor wells for leaks**

   **Checking the safety valve function**

   **Cleaning the inside of the DHW cylinder**

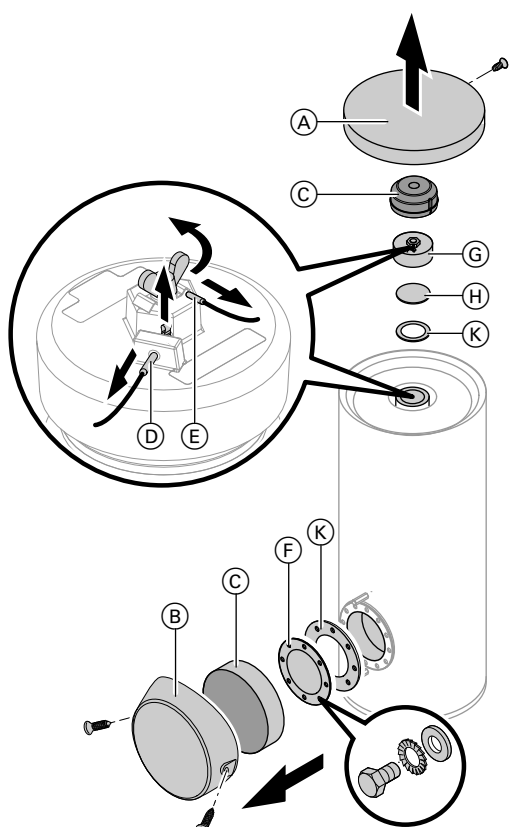


Fig. 1

1. Drain the DHW cylinder on the DHW side.
2. Remove top panel (A) and cover (B) (for 300 and 500 l).
3. Remove thermal insulation (C).  
For 160 to 300 l: Flange insulation  
For 500 l: Upper thermal insulation mat
4. Pull out thermometer sensor (D) (where installed), disconnecting the spring clip to do so.
5. Pull out high limit safety cut-out sensor (E), removing the clamping bracket with wing screw to do so.
6. Remove flange cover (F) (for 300 and 500 l) and cylinder cap (G) with stainless steel circular blank (H) and gaskets (K).
7. To prevent cleaning agents and contaminants entering the pipework, separate the DHW cylinder from the pipework.
8. Remove loose deposits with a high pressure cleaner.

**!** **Please note**  
Pointed or sharp cleaning tools will damage the cylinder interior.  
Only use plastic tools to clean the inside.





## Cleaning the inside of the DHW cylinder (cont.)

- Use a chemical cleaning agent to remove hard deposits that cannot be removed with a high pressure cleaner.

**!** **Please note**  
Cleaning agents containing hydrochloric acid will attack the DHW cylinder material. Use cleaning agents suitable for stainless steel only.

**!** **Danger**  
Cleaning agent residues can result in **poisoning**. Always observe the information provided by the cleaning agent manufacturer.

- Fully** drain all cleaning agent.
- Flush the DHW cylinder **thoroughly** after cleaning.



## Returning the DHW cylinder to use

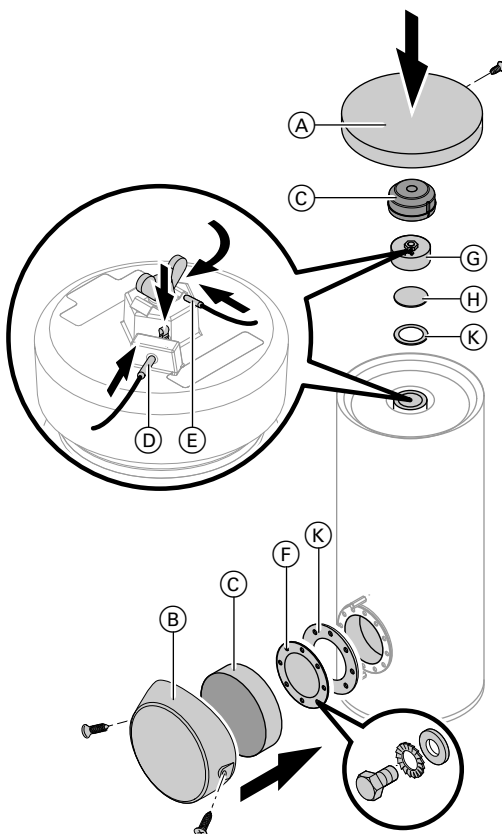


Fig. 2

- Reconnect the DHW cylinder to the pipework.
- Insert **new** gaskets (K) to flange cover (F) (for 300 and 500 l) and on cylinder cap (G).
- Mount flange cover (F) (for 300 and 500 l) and cylinder cap (G) with stainless steel circular blank (H) and tighten to required torque.
  - Cylinder cap: 160 Nm
  - Flange cover: 40 Nm
- Fill the DHW cylinder on the DHW side.
- When the DHW cylinder is pressurised, retighten the screws on flange cover (F) to a torque of 40 Nm.
- Mount thermometer sensor (D) (where installed) and high limit safety cut-out sensor (E), thermal insulation (C), cover (B), and top panel (A).



## Checking connections and sensor wells for tightness on the water side



**Checking connections and sensor wells for tightness on the water side**



## Overview of assemblies

The following details are required when ordering parts:

- Serial no. (see type plate (A))
- Assembly (from this parts list)
- Position number of the individual part within the assembly (from this parts list)

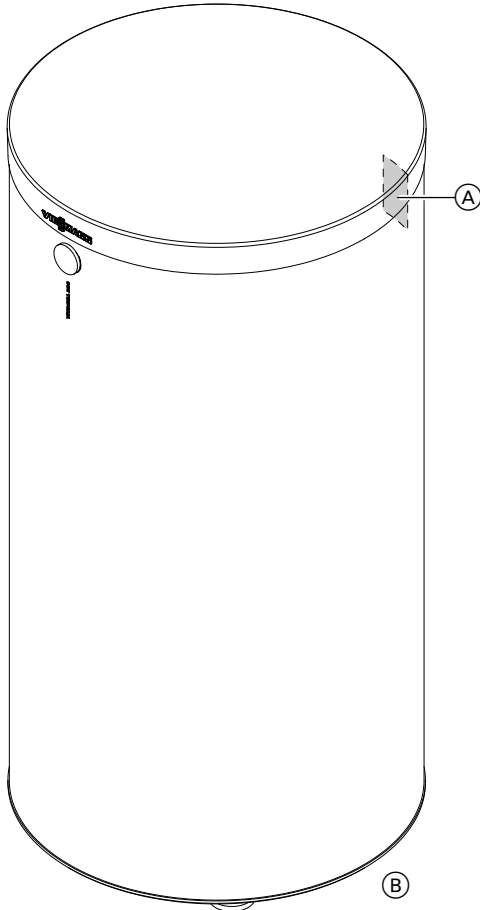


Fig. 3

- (A) Vitocell 300 type plate
- (B) DHW cylinder

**DHW cylinder**

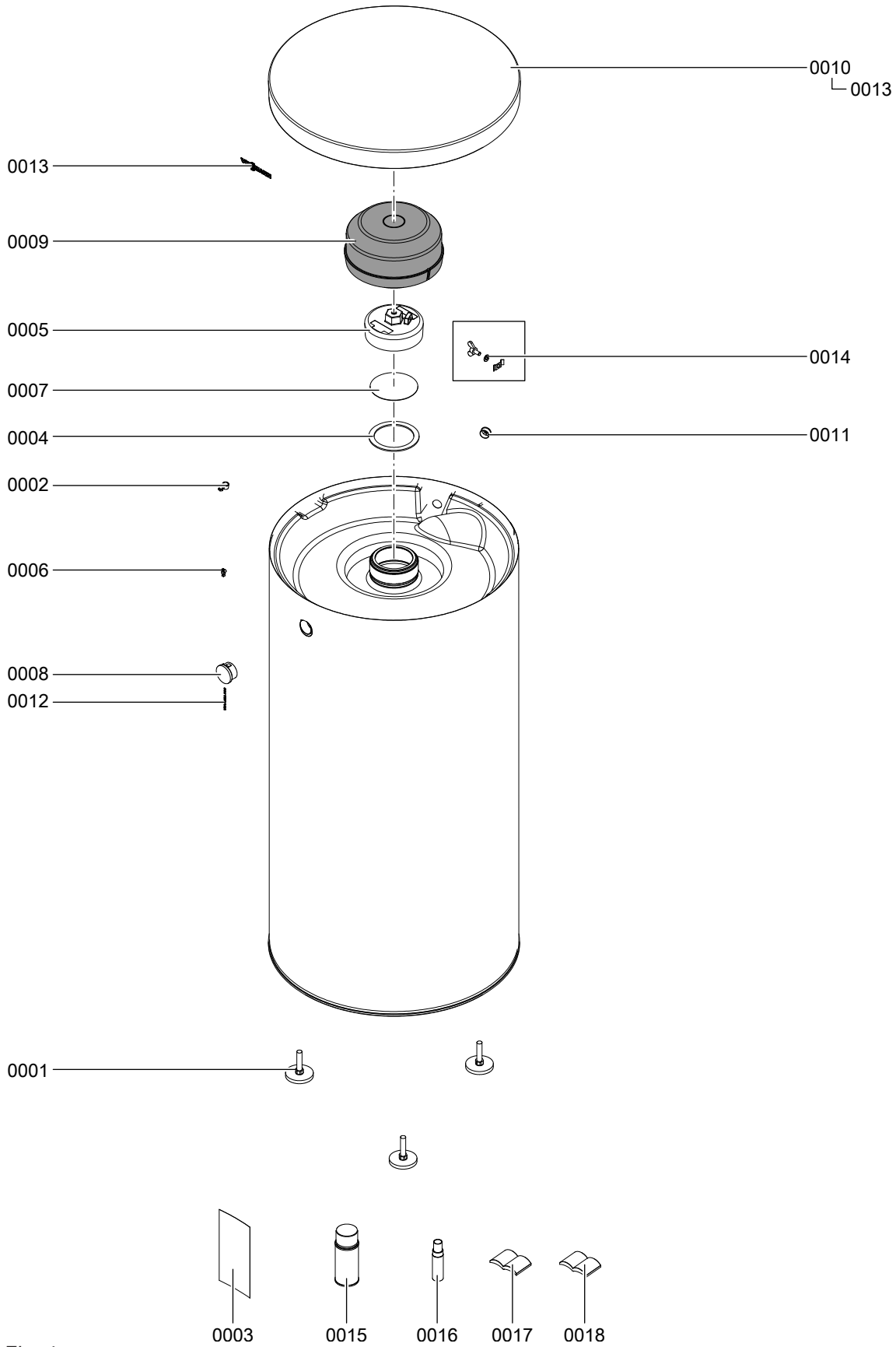


Fig. 4

**DHW cylinder** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Adjustable foot
0002	Strain relief
0003	Type plate
0004	Gasket
0005	Cylinder cap
0006	Clip
0007	Circular blank
0008	Thermometer 30 - 120 °C
0009	Flange insulation
0010	Top panel (cover)
0011	Locating ferrule
0012	Vitocell logo
0013	Viessmann logo
0014	Clamping bracket
0015	Vitosilver or white spray paint
0016	Vitosilver or white touch-up paint
0017	Installation instructions
0018	Service instructions



**DHW cylinder** (cont.)

## Overview of assemblies

The following details are required when ordering parts:

- Serial no. (see type plate (A))
- Assembly (from this parts list)
- Position number of the individual part within the assembly (from this parts list)

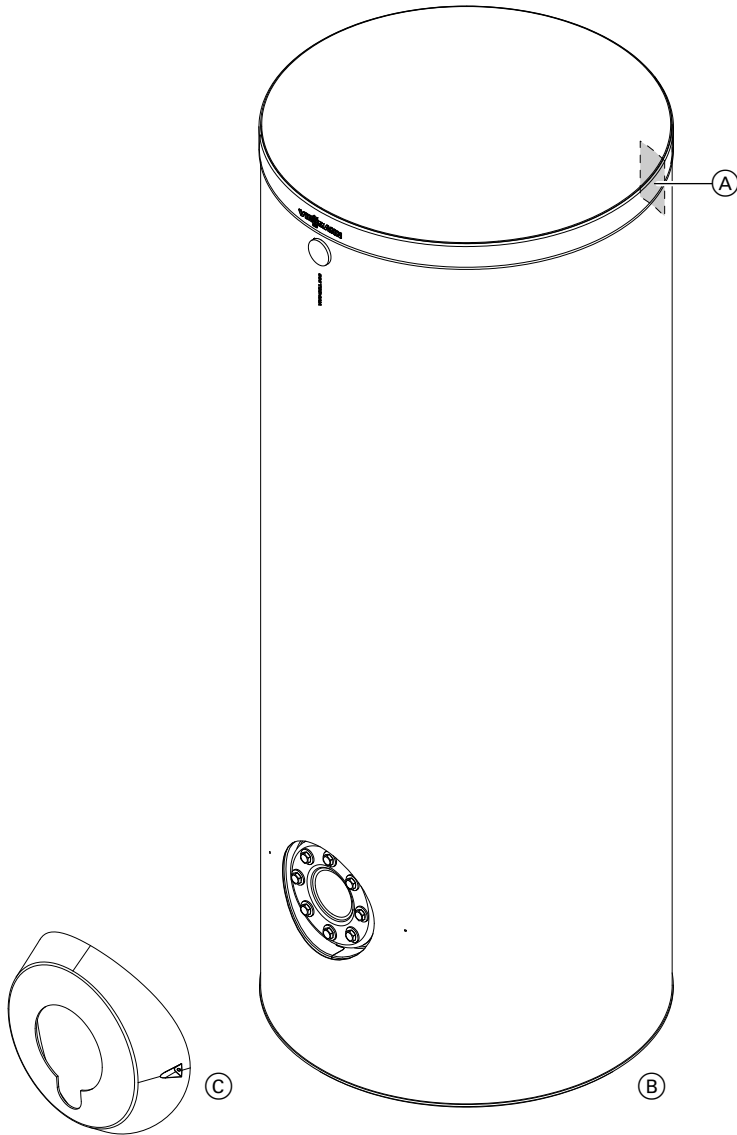


Fig. 5

- (A) Vitocell 300 type plate
- (B) DHW cylinder
- (C) Immersion heater flange



**Vitocell 300-B DHW cylinder**

Components

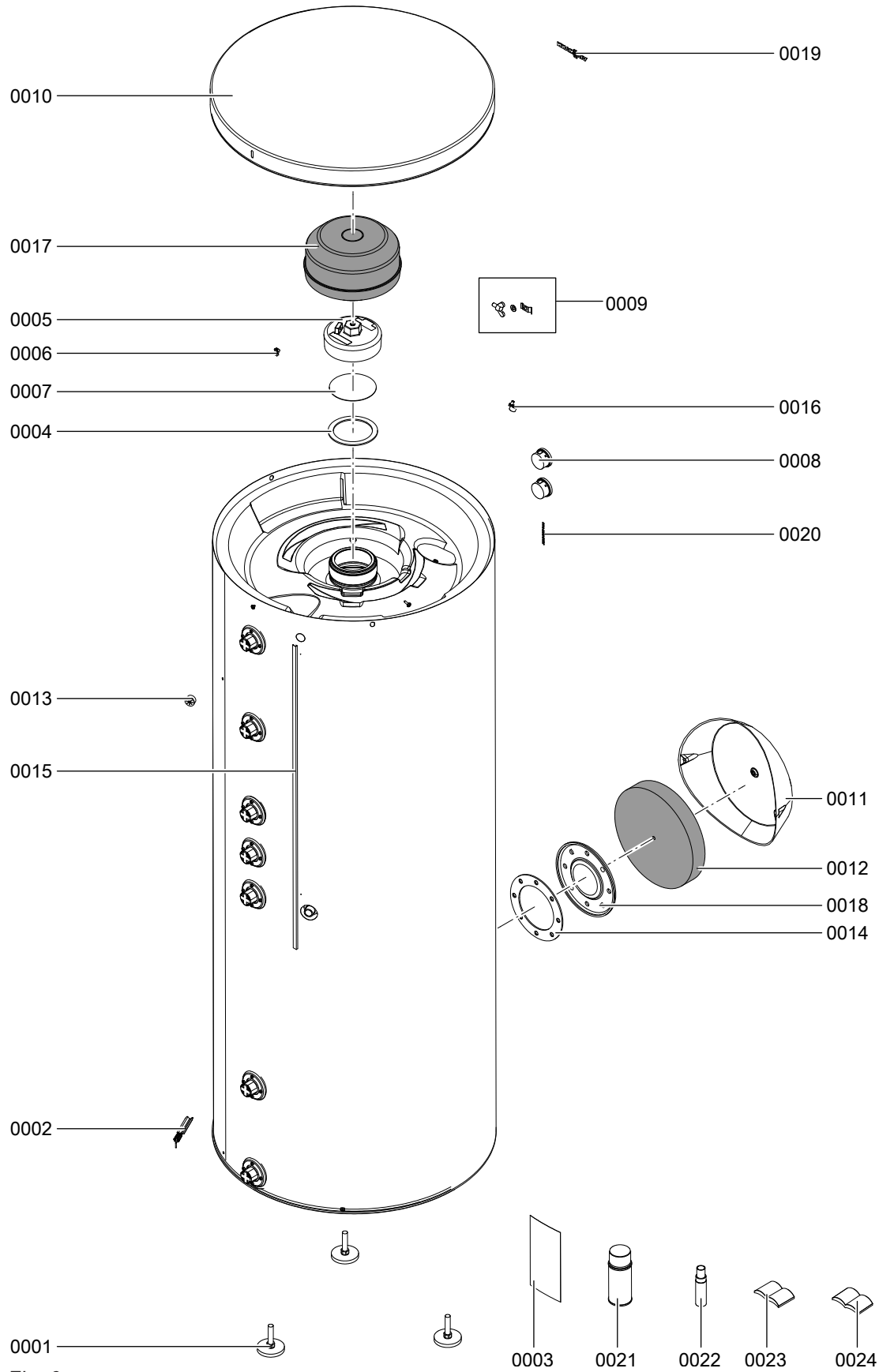


Fig. 6



**Vitocell 300-B DHW cylinder** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Adjustable foot
0002	Sensor retainer
0003	Type plate
0004	Gasket
0005	Cylinder cap
0006	Clip
0007	Circular blank
0008	Thermometer 30 - 120 °C
0009	Clamping bracket
0010	Top panel (cover)
0011	Cover
0012	Thermal insulation mat
0013	Locating ferrule
0014	Gasket
0015	Cable channel
0016	Strain relief
0017	Flange insulation
0018	Blank flange
0019	Viessmann logo
0020	Vitocell logo
0021	Vitosilver spray paint
0022	Vitosilver touch-up paint
0023	Installation instructions
0024	Service instructions



**Vitocell 300-V/W DHW cylinder**

Components

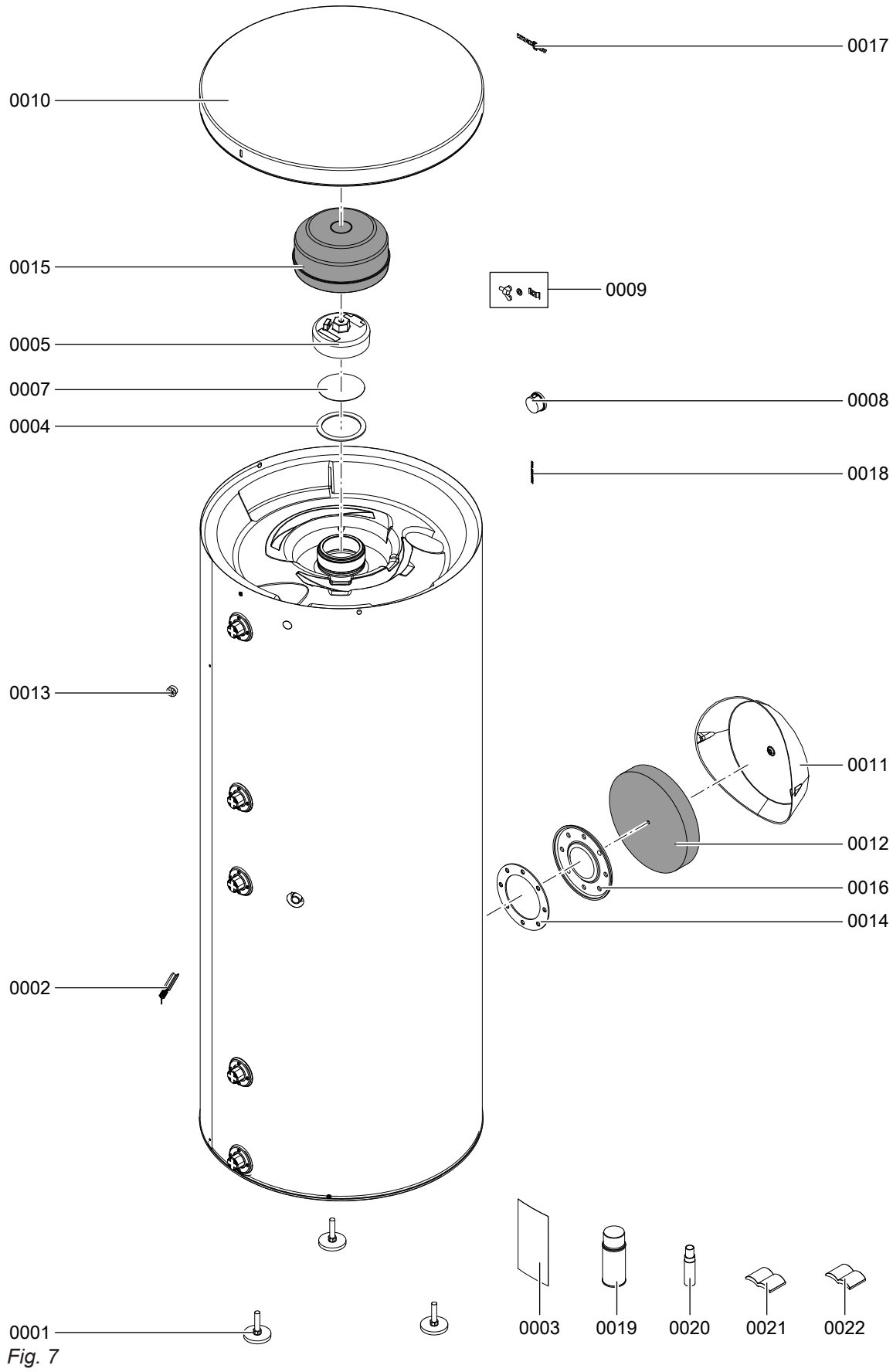


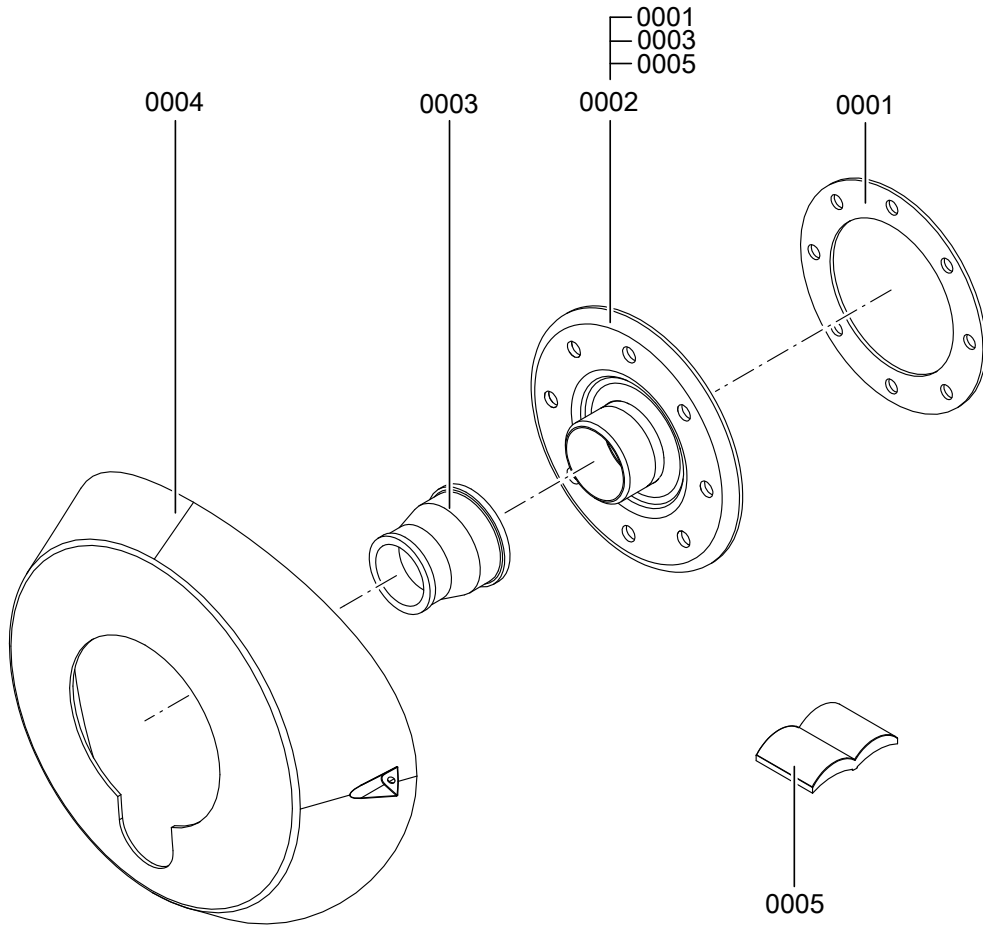
Fig. 7

**Vitocell 300-V/W DHW cylinder** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Adjustable foot
0002	Sensor retainer
0003	Type plate
0004	Gasket
0005	Cylinder cap
0006	Clip
0007	Circular blank
0008	Thermometer 30 - 120 °C
0009	Clamping bracket
0010	Top panel (cover)
0011	Cover
0012	Thermal insulation mat
0013	Locating ferrule
0014	Gasket
0015	Flange insulation
0016	Blank flange
0017	Viessmann logo
0018	Vitocell logo
0019	Vitosilver or white spray paint
0020	Vitosilver or white touch-up paint
0021	Installation instructions
0022	Service instructions



Immersion heater flange



Components

Fig. 8

**Immersion heater flange** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Gasket
0002	Flange cover
0003	Reducer
0004	Immersion heater fascia
0005	Flange installation instructions

**Immersion heater flange** (cont.)

## Overview of assemblies

The following details are required when ordering parts:

- Serial no. (see type plate (A))
- Assembly (from this parts list)
- Position number of the individual part within the assembly (from this parts list)

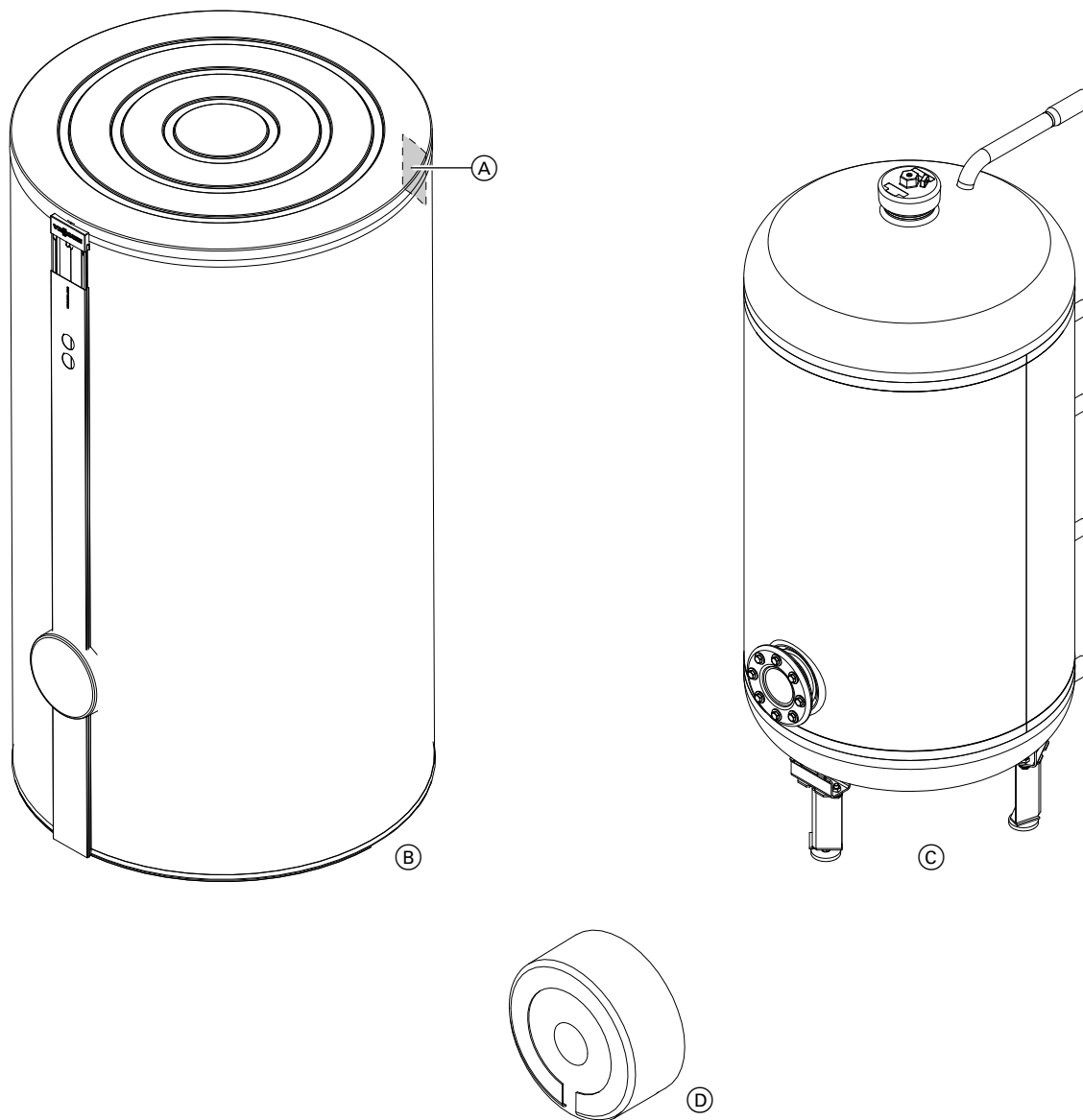


Fig. 9

- (A) Vitocell 300 type plate
- (B) Cylinder body
- (C) Thermal insulation
- (D) Immersion heater flange

Vitocell 300-B cylinder body

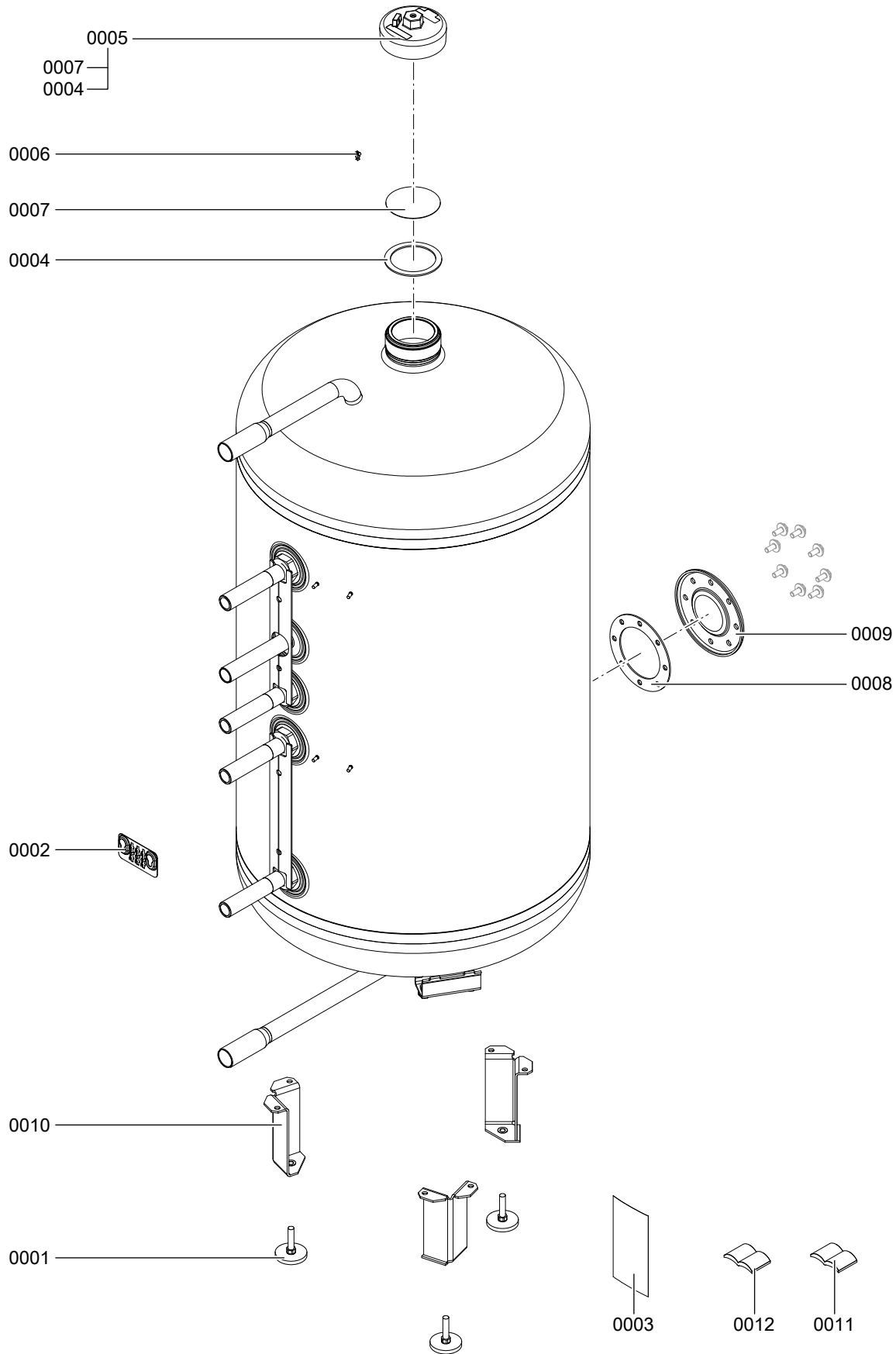


Fig. 10



**Vitocell 300-B cylinder body** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Adjustable foot
0002	Clamps for temperature capture
0003	Type plate
0004	Gasket
0005	Cylinder cap
0006	Clip
0007	Circular blank
0008	Gasket
0009	Blank flange
0010	Support
0011	Installation instructions
0012	Service instructions



**Vitocell 300-V cylinder body**

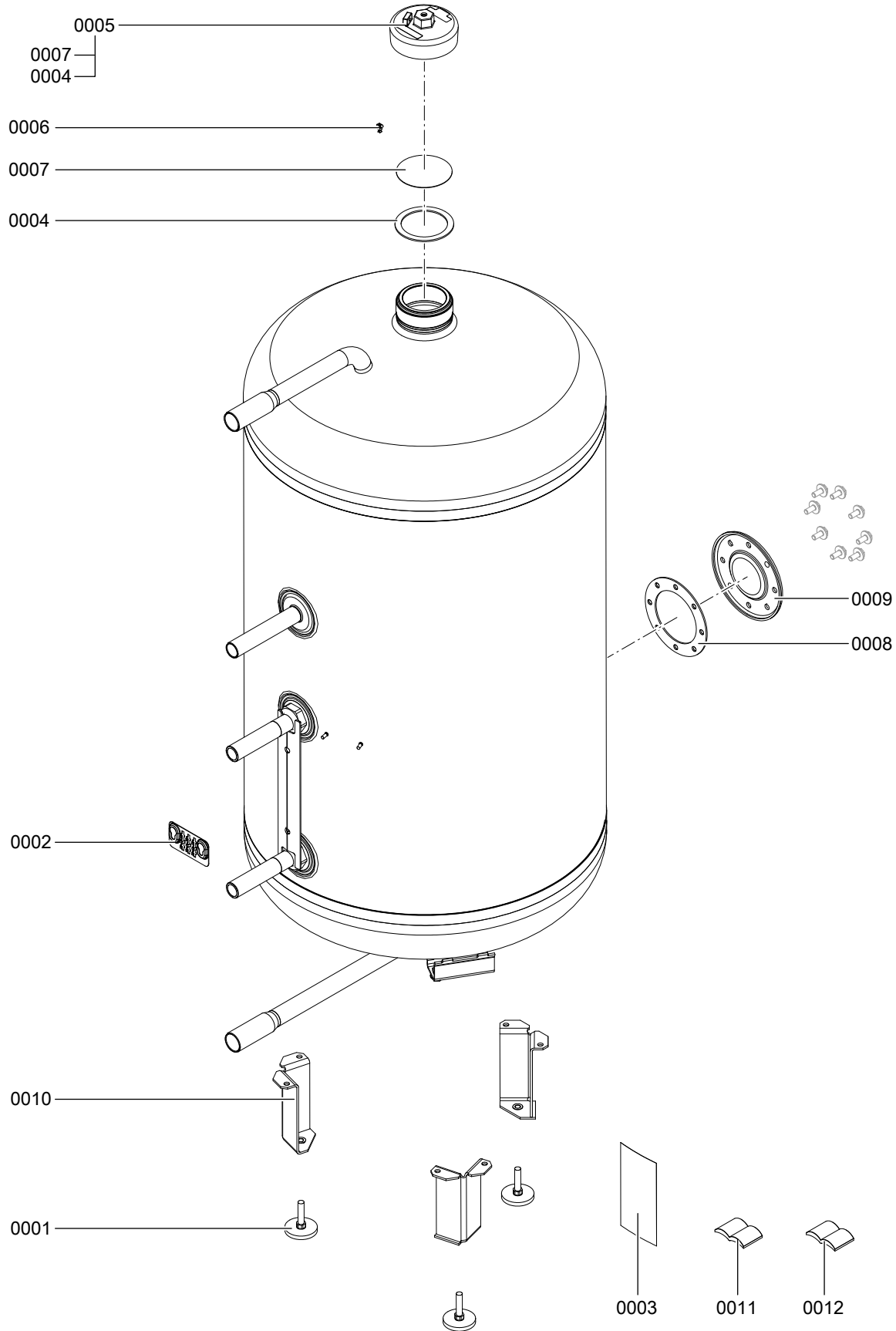


Fig. 11

**Vitocell 300-V cylinder body** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Adjustable foot
0002	Clamps for temperature capture
0003	Type plate
0004	Gasket
0005	Cylinder cap
0006	Clip
0007	Circular blank
0008	Gasket
0009	Blank flange
0010	Support
0011	Installation instructions
0012	Service instructions



**Vitocell 300-B/V thermal insulation**

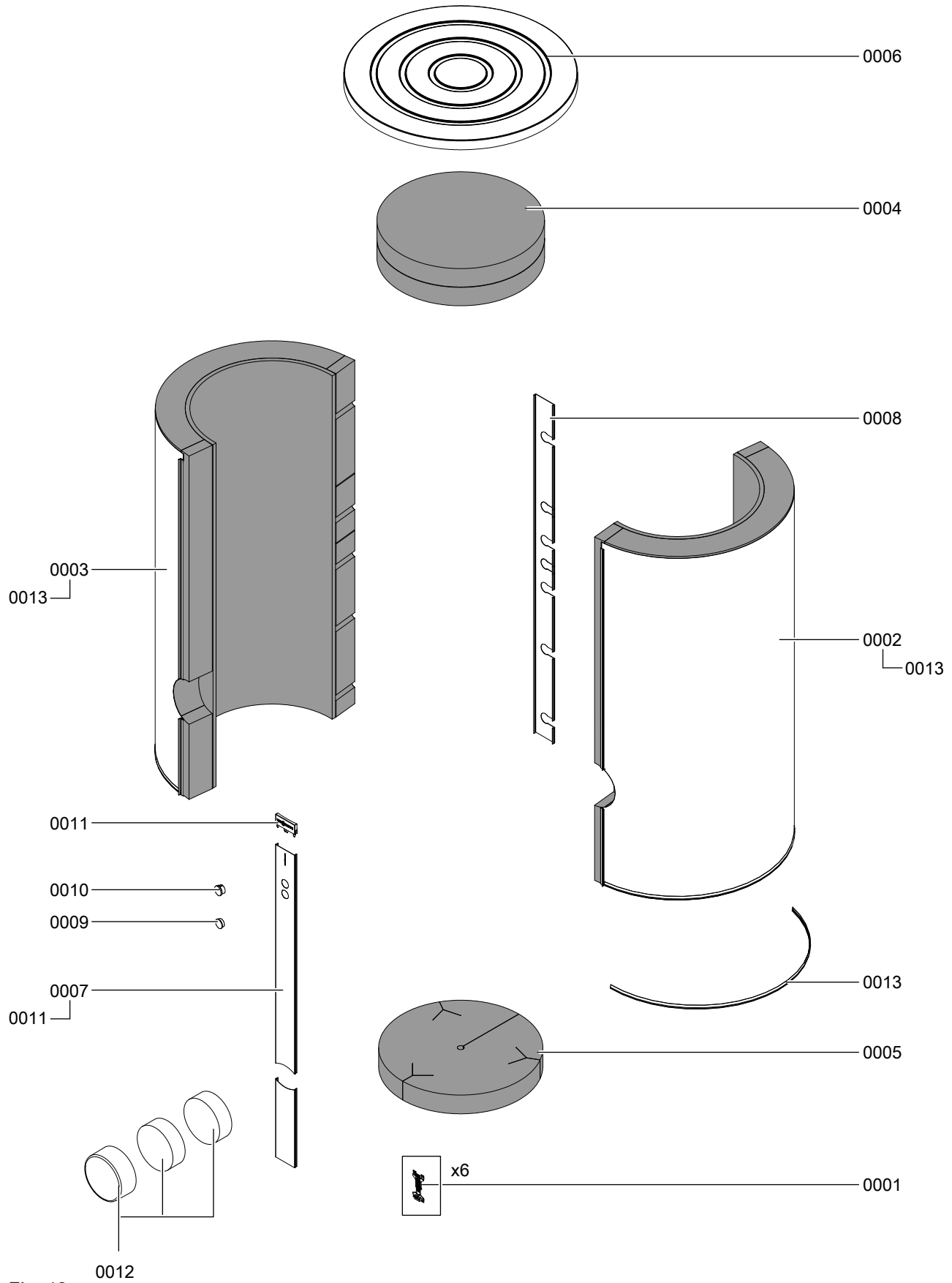


Fig. 12

**Vitocell 300-B/V thermal insulation** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Clip closure
0002	Thermal insulation jacket, right section
0003	Thermal insulation jacket, left section
0004	Upper thermal insulation mat
0005	Lower thermal insulation mat
0006	Cover
0007	Front cover strip
0008	Rear cover strip
0009	Thermometer cover
0010	Thermometer 30 - 120 °C
0011	Cap with Viessmann logo
0012	Flange cover
0013	Lower protective profile



Immersion heater flange

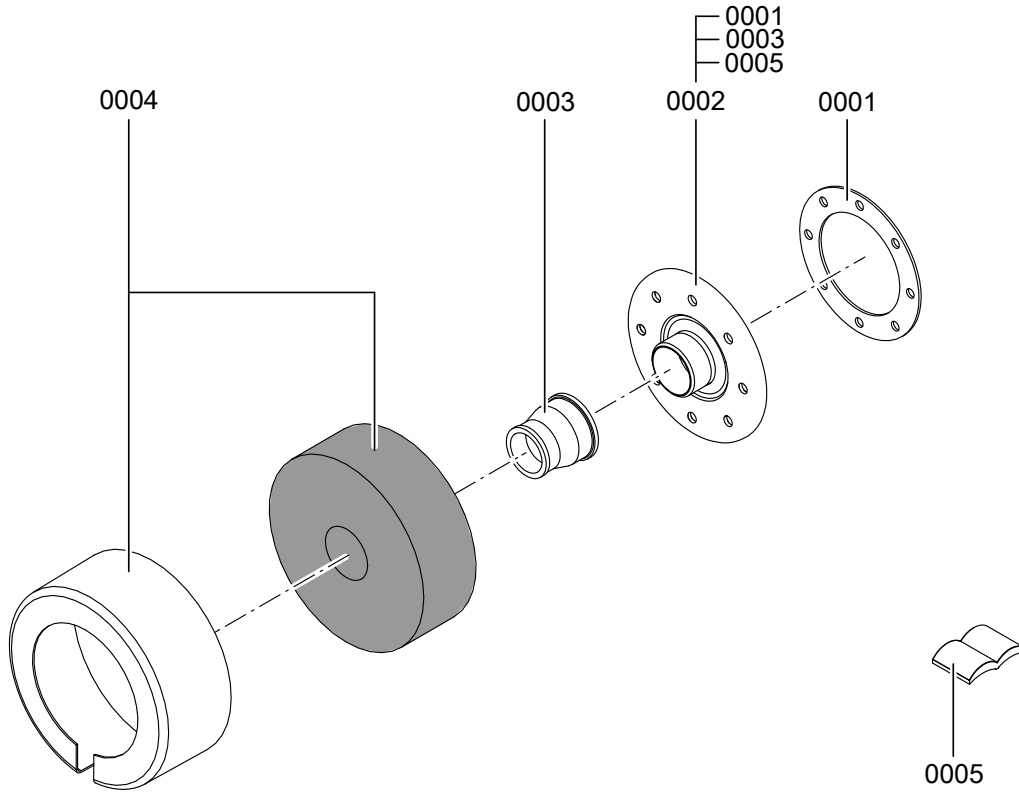


Fig. 13

**Immersion heater flange** (cont.)

<b>Pos.</b>	<b>Part</b>
0001	Gasket
0002	Flange cover
0003	Reducer
0004	Immersion heater fascia
0005	Flange installation instructions



Commissioning/service reports

**Commissioning/service reports**

	<b>Commissioning</b>	<b>Maintenance/service</b>	<b>Maintenance/service</b>
Date:			
By:			

	<b>Maintenance/service</b>	<b>Maintenance/service</b>	<b>Maintenance/service</b>
Date:			
By:			

	<b>Maintenance/service</b>	<b>Maintenance/service</b>	<b>Maintenance/service</b>
Date:			
By:			

	<b>Maintenance/service</b>	<b>Maintenance/service</b>	<b>Maintenance/service</b>
Date:			
By:			

	<b>Maintenance/service</b>	<b>Maintenance/service</b>	<b>Maintenance/service</b>
Date:			
By:			



## Specification

## Vitocell 300-B, type EVBA-A

Cylinder capacity	I	300	500
<b>DIN registration number</b>		Applied for	
<b>Standby heat loss</b>	kWh/24 h	1.06	1.37
<b>Dimensions</b>			
Length a (Ø)			
▪ Incl. thermal insulation	mm	667	1022
▪ Excl. thermal insulation	mm	–	715
Width b			
▪ Incl. thermal insulation	mm	744	1084
▪ Excl. thermal insulation	mm	–	954
Height c			
▪ Incl. thermal insulation	mm	1734	1852
▪ Excl. thermal insulation	mm	–	1667
Height when tilted			
▪ Incl. thermal insulation	mm	1825	–
▪ Excl. thermal insulation	mm	–	1690
<b>Weight</b> incl. thermal insulation	kg	112.4	122.2
<b>Connections</b> (male thread)			
Indirect coils	G	1	1
Cold water, DHW	G	1	1¼
DHW circulation	G	1	1

## Vitocell 300-V/W, type EVIA-A

Cylinder capacity	I	160	200	300	500
<b>DIN registration number</b>		Applied for			
<b>Standby heat loss</b>	kWh/24 h	0.90	0.91	1.06	1.37
<b>Dimensions</b>					
Length (Ø) a					
▪ Incl. thermal insulation	mm	581	581	667	1022
▪ Excl. thermal insulation	mm	–	–	–	715
Width b					
▪ Incl. thermal insulation	mm	605	605	744	1084
▪ Excl. thermal insulation	mm	–	–	–	954
Height d					
▪ Incl. thermal insulation	mm	1189	1409	1734	1852
▪ Excl. thermal insulation	mm	–	–	–	1667
Height when tilted					
▪ Incl. thermal insulation	mm	1260	1460	1825	–
▪ Excl. thermal insulation	mm	–	–	–	1690
<b>Weight</b> incl. thermal insulation	kg	59.3	70.0	104.5	110.1
<b>Connections</b> (male thread)					
Heating water flow and return	G	¾	¾	1	1
Cold water, DHW	G	¾	¾	1	1¼
DHW circulation	G	¾	¾	1	1

## Specification

### Specification (cont.)

#### Immersion heater

<b>Rated output in standard mode/quick heat-up</b>	<b>kW</b>	<b>2</b>	<b>4</b>	<b>6</b>
Only for use with soft to medium hard water up to 14 °dH (hardness level 2).				
<b>Current type and rated voltage</b>		3/N/400 V/50 Hz		
<b>Rated current</b>	A	8.7		
<b>Heat-up time from 10 to 60 °C</b>				
Vitocell 300-B				
300 l	h	7.1	3.6	2.4
500 l	h	11.0	5.5	3.7
Vitocell 300-V/W				
300 l	h	7.3	3.6	2.4
500 l	h	11.4	5.7	3.8
<b>Content that can be heated by the immersion heater</b>				
Vitocell 300-B				
300 l	l		245	
500 l	l		379	
Vitocell 300-V/W				
300 l	l		256	
500 l	l		390	

## Final decommissioning and disposal

Viessmann products can be recycled. Components and substances from the system are not part of ordinary household waste.

For decommissioning the system, isolate the system from the power supply and allow components to cool down where appropriate.

All components must be disposed of correctly.

## Declaration of conformity

### Vitocell 300-B and Vitocell 300-V/W

We, Viessmann Werke GmbH & Co. KG, D-35107 Allendorf, declare as sole responsible body that the named products comply with the listed directives:

2014/30/EU	EMC Directive
2014/35/EU	Low Voltage Directive
2014/68/EU	Pressure Equipment Directive
2006/42/EC	Machinery Directive
2009/125/EC	Ecodesign Directive
2010/30/EU	Energy Labelling Directive
812/2013	EU Regulation "Energy Efficiency Label"
814/2013	EU Regulation "Energy Efficiency Requirements"

#### Applied standards:

DIN 4753-7:2011  
EN 12897:2016

In accordance with the listed directive, this product is designated with **CE-0036**.

Details according to the Pressure Equipment Directive (2014/68/EU):

- Heated pressure vessel (not at risk from overheating)
- DHW and heating water proportion to article 3, section (3)
- Solar part according to category 1, diagram 2
- Modules B and C 1 according to Appendix III
- Materials according to AD regulations, individual assessment and Appendix I, 4.2, b)
- Corrosion supplement to Appendix I, 2.2 and AD regulations

The pressure vessel was tested without fitted equipment (safety equipment).

It must be equipped in accordance with national regulations before installation and commissioning.

Allendorf, 20 January 2017

Viessmann Werke GmbH & Co. KG



Authorised signatory Manfred Sommer

## Applicability

#### Serial No.:

7637037	7637038	7637039	7637040
7637042	7637043	7637045	7637047
7637048			

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5791 764 GB Subject to technical modifications.