The **TECHNICAL** Brochure

Heating Hot water Renewables

Why Vaillant? Quality accessories create perfect solutions.

Vaillant heat pump cylinder range

Vaillant

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Please note the information contained in this guide is for the use of competent and qualified heating engineers in the UK. We always recommend attending a training course provided by Vaillant to ensure complete knowledge of the appliance and/or accessories you are installing. The Vaillant Group does not warrant the accuracy or completeness of any of the information provided in this brochure. Should you require any clarification or further information, please speak with your Regional Business Manager or call our technical helpline. The Vaillant Group does not accept liability or responsibility resulting from the installer's failure to comply with the guides or otherwise. For more detailed information, please refer to the installation manual for each product you are using.

About Vaillant

The Vaillant Group

Vaillant UK is proud to be part of the worldwide heating and hot water corporation Vaillant Group, a family-owned business that was founded by Johann Vaillant in his workshop in Remscheid, Germany in 1874.

In 1894, Johann patented a new closed-system gas-fired bathroom boiler. Over the years, Johann's technical innovations continued and in 1924, he launched the world's first central heating boiler. Since these revolutionary inventions, Vaillant continues to drive the evolution of heating technologies, launching the first ever combi boiler in 1967, and the game changing aroTHERM plus in 2020.

Today, Vaillant is still setting the standard in the heating marketplace, developing market leading products that work seamlessly together, to provide a full systems solution. With a growing focus on developing products that use renewable energy, Vaillant became the first boiler manufacturer in the UK to launch a heat pump production line, which opened at their headquarters in Belper, 2022. This, together with the research and development of on-going hydrogen trials, marks a huge milestone for Vaillant in supporting the brands mission to create a better climate, inside each home and the world around it.

Why Vaillant?

The entire uniSTOR high recovery heat pump cylinder range has been designed to work in harmony with Vaillant heat pumps, to provide highly efficient heating and hot water systems.

A uniSTOR's large surface area and smooth coil design maximises heat transfer, to ensure connected Vaillllant heat pumps run at their optimum efficiency. This reduces running costs and increases hot water performance.

Ranging from 150 up to 800 litres, our uniSTOR heat pump cylinders are available in both pre-plumbed (150-300 litres only) and standard options, giving you and your customers even more flexibility. In addition to this, the 250 and 300 litre cylinders have an increased coil size making them compatible with a wider range of ground source heat pump systems.

uniSTOR cylinders have a Global Warming Potential (GWP) of less than five. This is thanks to thermal injected insulation, as well as a 100% recyclable stainless steel tank with an ultra hard-wearing outer shell. These elements of the design contribute to a highly efficient and sustainable heating system. What's more, Vaillant cylinders come with a 25-year guarantee on the outer shell, giving extra added peace of mind.

Choosing your perfect solution

Cylinder compatibility matrix chart
The following cylinder compatibility matrix is provided to help guide you during the specification stages of a heat pump system. Vaillant cylinders provide excellent efficiency, durability and ensure optimum system performance when combined with Vaillant heat pumps. For further information and support, please speak to one of our technical advisors on 0330 100 3540.

Air-to-water heat pumps

aroTHERM plus	uniSTOR 150 litre cylinder	uniSTOR 200 litre cylinder	uniSTOR 250 litre cylinder	uniSTOR 300 litre cylinder	uniSTOR 500 litre cylinder	auroSTOR 500 litre cylinder*	uniSTOR 800 litre cylinder
3.5kW	✓	✓					
5kW	✓	✓	✓				
7kW	✓	✓	✓	✓			
10kW		✓	✓	✓	✓		
12kW		✓	✓	✓	✓		✓

aroTHERM split	uniSTOR 150 litre cylinder	uniSTOR 200 litre cylinder	uniSTOR 250 litre cylinder	uniSTOR 300 litre cylinder	uniSTOR 500 litre cylinder	auroSTOR 500 litre cylinder*	uniSTOR 800 litre cylinder
3.5kW	✓	✓					
5kW	✓	✓					
7kW	✓	✓	✓	✓			
10kW		✓	✓	✓	✓		
12kW		✓	✓	✓	✓		✓

Ground-source heat pump

flexoTHERM	uniSTOR 150 litre cylinder	uniSTOR 200 litre cylinder	uniSTOR 250 litre cylinder	uniSTOR 300 litre cylinder	uniSTOR 500 litre cylinder	auroSTOR 500 litre cylinder*	uniSTOR 800 litre cylinder
5kW	✓	✓	✓				
8kW		✓	✓	✓		✓	
11kW			✓	✓	✓	✓	
15kW			✓	✓	✓		
19kW							✓

* auroSTOR 500 litre cylinder for combined heat pump and solar thermal systems.

Pre-plumbed uniSTOR

Overview
The pre-plumbed uniSTOR high recovery heat pump cylinder range comes in 200, 250, and 300 litre capacities. The pre-plumbed range is designed to simplify installation and comes with inline connections and a mounting plate for controls, all sized to accommodate the heat pump interface.

Features & benefits

Includes 28mm three-way valve
Allows cost saving by reducing number of valves.

Factory fitted immersion heater
Emergency backup in case of main heat source failure.

Supplied with expansion vessel and sensor
To provide a complete system solution.

Global Warming Potential less than five and ozone depletion of zero
Designed to have minimal environmental impact.

Large diameter, smooth bore coil technology
Provides quiet operation, reduces build-up of scale and aids in long term efficiency through automatic descaling.

Automatic air vent included
Simplifies installation.

Thermal injected polyurethane insulation combined with vacuum panels
Superior insulation and efficiency.

Adjustable feet
Makes on-site installation easier.

Pre-plumbed uniSTOR technical specification

Technical data	Unit	200 litre pre-plumbed uniSTOR	250 litre pre-plumbed uniSTOR	300 litre pre-plumbed uniSTOR
Article number		0020237130	0020237131	0020237132
Total tank capacity	l	198.4	249.2	288.7
Actual capacity (without coil volume)	l	190.7	236.3	273.5
Hot water capacity / draw off*	l	172.5	211.0	208
Standby losses	kWh/24h	1.2	1.4	1.6
Energy-related Products	A+ - F	B	B	B
Reheat time (70%)*	Minutes	14.2	10.6	7.5
Coil rating	kW	26.0	40.7	52.5
Heat exchanger volume	l	7.7	12.9	15.2
Heat exchanger surface	m^2	1.4	2.4	2.8
Primary flow rate	l/h	900	900	1400
Heat exchanger pressure drop	mbar	100	170	200
Maximum operating DHW temperature	°C	85	85	85
Maximum operating heat circuit temperature	°C	95	95	95
Quantity of temperature sensor tubes	qty	1	1	1
Size of supplied expansion vessel	l	18	25	25
Immersion heater rating	kW	3.0	3.0	3.0
Immersion heater cable size	mm	1.5	1.5	1.5
Immersion heater current	A	13	13	13

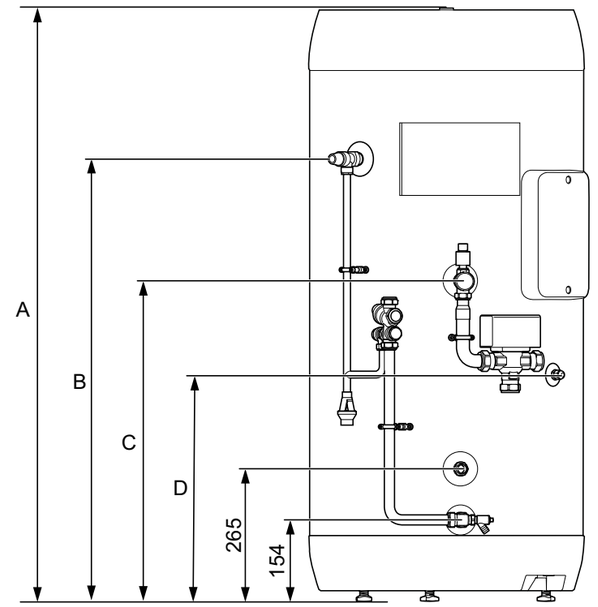
* Calculation from test EN 12897.

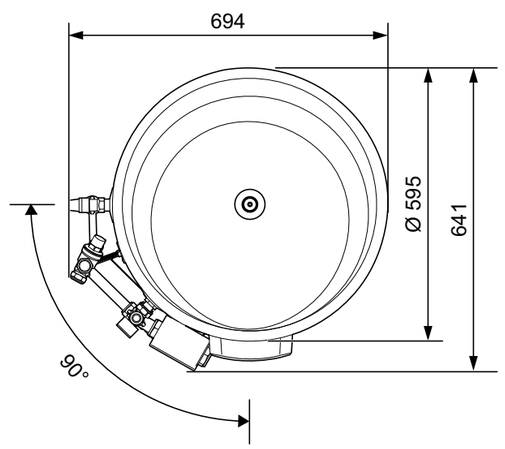
Dimensions	Unit	200 litre pre-plumbed uniSTOR	250 litre pre-plumbed uniSTOR	300 litre pre-plumbed uniSTOR
Outer diameter with insulation	mm	595	595	595
Height with insulation	mm	1265	1535	1745
Net weight empty cylinder	kg	58.0	73.3	80.6
Weight of filled cylinder	kg	249.4	313.6	369.4
Insulation thickness	mm	50	50	50

Connections	Unit	200 litre pre-plumbed uniSTOR	250 litre pre-plumbed uniSTOR	300 litre pre-plumbed uniSTOR
Primary heat exchanger flow & return connection	BSP female	¾“	¾“	¾“
Cold & hot water connection	BSP female	¾“	¾“	¾“
Temperature sensor sleeve diameter	mm	8	8	8
Immersion heater boss diameter	BSP female	1 ¼“	1 ¼“	1 ¼“

Pre-plumbed uniSTOR

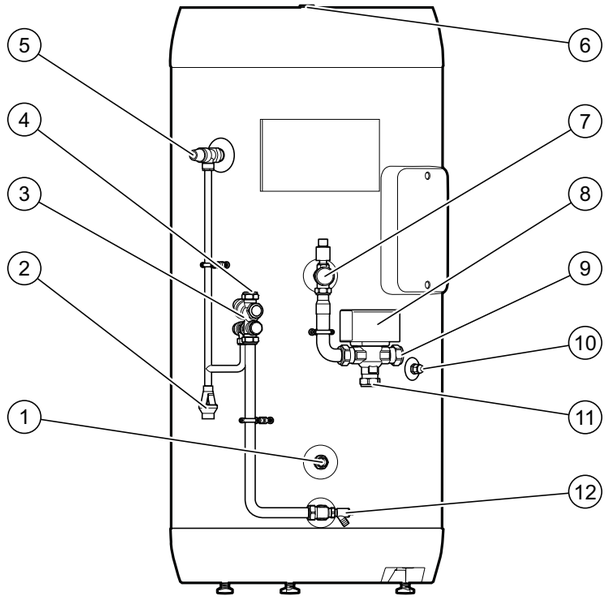
Dimensions





Heat pump cylinder	Unit	A	B	C	D
200 litre pre-plumbed uniSTOR	mm	1,265	940	675	470
250 litre pre-plumbed uniSTOR	mm	1,535	1,210	865	565
300 litre pre-plumbed uniSTOR	mm	1,745	1,420	865	565

Connections



Item	Description
1	Cylinder heating return
2	Tundish
3	Unvented cylinder kit
4	Cold water inlet
5	Temperature and pressure expansion relief valve
6	Hot water outlet
7	Cylinder heating inlet
8	Three-way motorised valve
9	Heating circuit heating flow
10	Cylinder dry pocket for sensor
11	Heating flow from the heat pump
12	Drain valve

NOTE: The expansion vessel is included with the cylinder. The tundish, three-way motorised valve, and unvented cylinder kit are pre-installed on the cylinder.

Pre-plumbed slimline uniSTOR

Overview

The pre-plumbed slimline uniSTOR high recovery cylinder has been designed with the installer in mind. Its smaller size makes it perfect for space sensitive installations, as well as improving installation times. The cylinder has a specifically designed smooth bore coil, which is purposefully placed to ensure optimum heat transfer within the compact cylinder. The slimline cylinder still offers high performance with a low standby loss of 1.8kW per 24 hours ensuring the hot water stays hot all day long.

Features & benefits

Slim design
Fits into compact spaces allowing for flexible siting.

Thermal injected polyurethane insulation combined with vacuum panels
Superior insulation and efficiency.

28mm three-way valve supplied
Allows cost saving by reducing number of valves.

Factory fitted immersion heater
Emergency backup in case of main heat source failure.

Expansion vessel and sensor included with product
Complete system solution offering.

Global Warming Potential less than five and ozone depletion of zero
Designed to have minimal environmental impact.

Smooth bore coil technology
Provides quiet operation, reduces build-up of scale and aids in long term efficiency through automatic descaling.

Adjustable feet
Simplifies installation.

Pre-plumbed slimline uniSTOR technical specification

Technical data	Unit	150 litre pre-plumbed slimline uniSTOR
Article number		0020237129
Total tank capacity	l	145.1
Actual capacity (without coil volume)	l	139.5
Hot water capacity / draw off*	l	127.0
Standby losses	kWh/24h	1.8
Energy-related Products	A+ - F	C
Reheat time (70%)*	Minutes	12.9
Coil rating	kW	21.7
Heat exchanger volume	l	5.6
Heat exchanger surface	m^2	1.0
Primary flow rate	l/h	900
Heat exchanger pressure drop	mbar	70
Maximum operating DHW temperature	°C	85
Maximum operating heat circuit temperature	°C	95
Quantity of temperature sensor tubes	qty	1
Size of supplied expansion vessel	l	12
Immersion heater rating	kW	3.0
Immersion heater cable size	mm	1.5
Immersion heater current	A	13

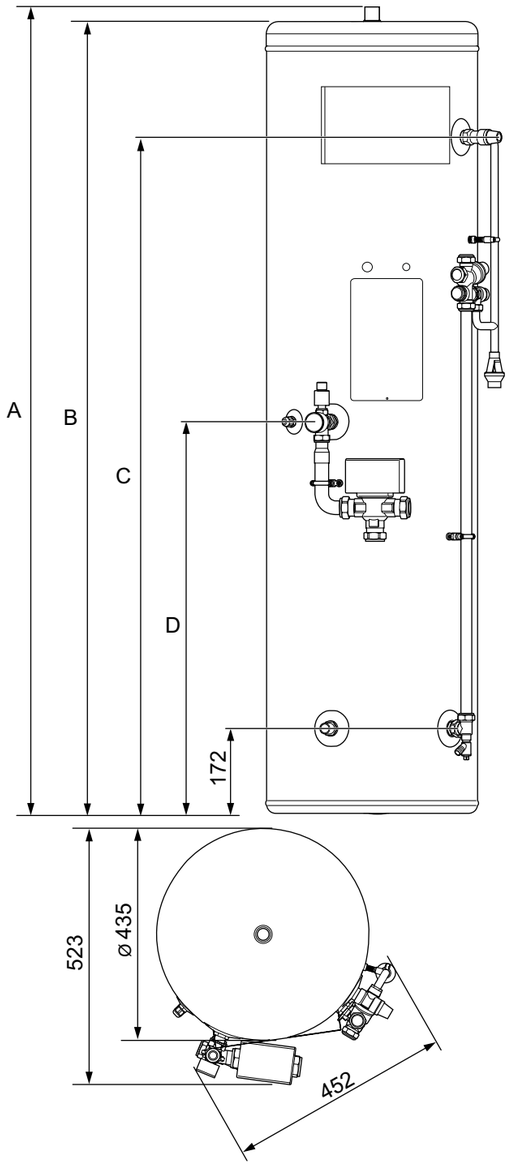
* Calculation from test EN 12897.

Dimensions	Unit	150 litre pre-plumbed slimline uniSTOR
Outer diameter with insulation	mm	435
Height with insulation	mm	1667
Net weight empty cylinder	kg	54.5
Weight of filled cylinder	kg	193.9
Insulation thickness	mm	40

Connections	Unit	150 litre pre-plumbed slimline uniSTOR
Primary heat exchanger flow & return connection	BSP female	¾“
Cold & hot water connection	BSP female	¾“
Temperature sensor sleeve diameter	mm	8
Immersion heater boss diameter	BSP female	1“

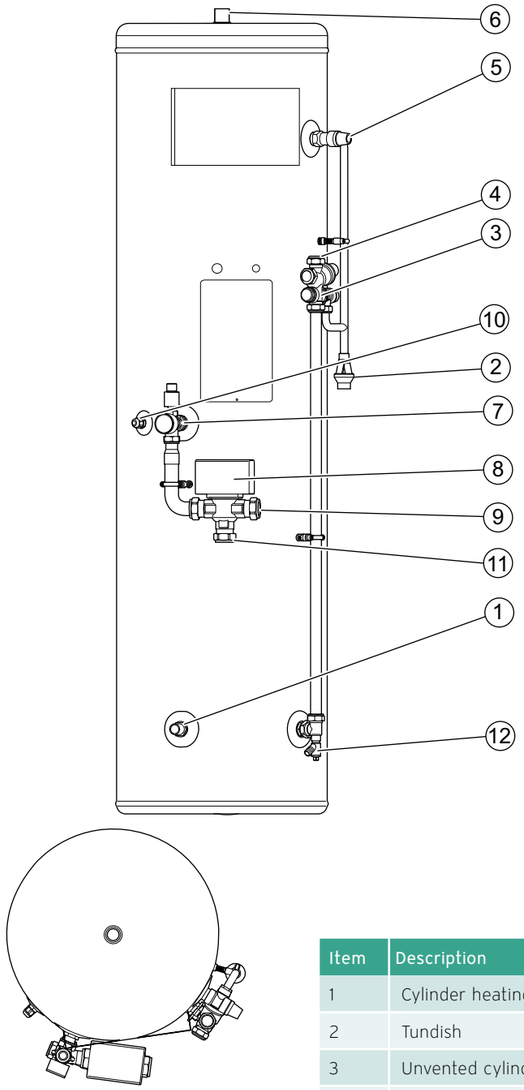
Pre-plumbed slimline uniSTOR

Dimensions



Heat pump cylinder	Unit	A	B	C	D
150 litre pre-plumbed slimline uniSTOR	mm	1,642	1,613	1,377	797

Connections



Item	Description
1	Cylinder heating return
2	Tundish
3	Unvented cylinder kit
4	Cold water inlet
5	Temperature and pressure expansion relief valve
6	Hot water outlet
7	Cylinder heating inlet
8	Three-way motorised valve
9	Heating circuit heating flow
10	Cylinder dry pocket for sensor
11	Heating flow from heat pump
12	Drain valve

NOTE: The expansion vessel is included with the cylinder. The tundish, three-way motorised valve, and unvented cylinder kit are pre-installed on the cylinder.

Non-plumbed uniSTOR

Overview

The non-plumbed uniSTOR high recovery heat pump cylinder is available in 150, 200, 250, and 300 litres. Each cylinder uses the latest thermal injected insulation for the lowest heat losses in its class, with as little as 1kW per 24 hours. The strategically positioned large diameter smooth bore coil provides optimum hot water performance and automatically de-scales to ensure long term efficient hot water generation.

Features & benefits

Heat loss from as low as 1kW/24 hours
Reduce energy bills for homeowners.

Thermal injected polyurethane insulation combined with vacuum panels
Superior insulation and efficiency.

28mm three-way valve supplied
Allows cost saving by reducing number of valves.

Factory fitted immersion heater
Emergency backup in case of main heat source failure.

Expansion vessel and sensor included with product
Complete system solution offering.

Global Warming Potential less than five and ozone depletion of zero
Designed to have minimal environmental impact.

Large diameter, smooth bore coil technology
Provides quiet operation, reduces build-up of scale and aids in long term efficiency through automatic descaling.

Adjustable feet
Makes on-site installation easier.

Non-plumbed uniSTOR technical specification

Technical data	Unit	150 litre non-plumbed uniSTOR	200 litre non-plumbed uniSTOR	250 litre non-plumbed uniSTOR	300 litre non-plumbed uniSTOR
Article number		0020235271	0020235272	0020235273	0020235274
Total tank capacity	l	148.6	198.4	249.2	288.7
Actual capacity (without coil volume)	l	143.8	190.7	236.3	273.5
Hot water capacity / draw off*	l	127.0	172.5	211.0	230.9
Standby losses	kWh/24h	1.0	1.2	1.4	1.6
Energy-related Products	A+ - F	B	B	B	B
Reheat time (70%)*	Minutes	13.8	14.6	10.6	7.5
Coil rating	kW	20.8	26.0	40.7	52.5
Heat exchanger volume	l	5.5	7.7	12.9	15.2
Heat exchanger surface	m^2	1.0	1.4	2.4	2.8
Primary flow rate	l/h	900	900	900	900
Heat exchanger pressure drop	mbar	44	100	170	200
Maximum operating DHW temperature	°C	85	85	85	85
Maximum operating heat circuit temperature	°C	95	95	95	95
Quantity of temperature sensor tubes	qty	1	1	1	1
Size of supplied expansion vessel	l	12	18	25	25
Immersion heater rating	kW	3.0	3.0	3.0	3.0
Immersion heater cable size	mm	1.5	1.5	1.5	1.5
Immersion heater current	A	13	13	13	13

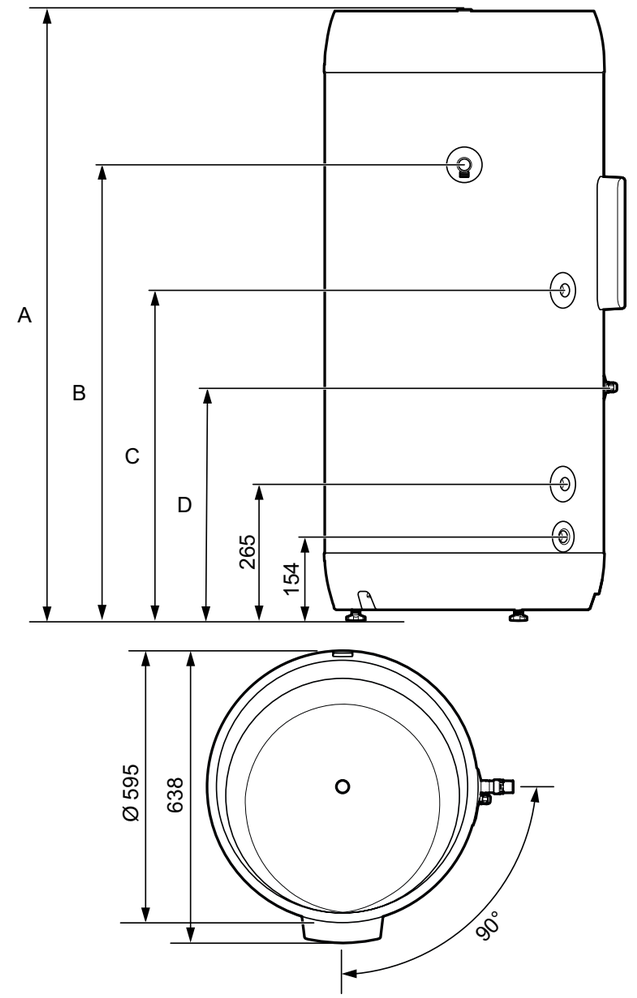
* Calculation from test EN 12897

Dimensions	Unit	150 litre non-plumbed uniSTOR	200 litre non-plumbed uniSTOR	250 litre non-plumbed uniSTOR	300 litre non-plumbed uniSTOR
Outer diameter with insulation	mm	595	595	595	595
Height with insulation	mm	1000	1265	1535	1745
Net weight empty cylinder	kg	38.0	46.0	61.0	67.6
Weight of filled cylinder	kg	181.3	237.4	301.3	356.8
Insulation thickness	mm	50	50	50	50

Connections	Unit	150 litre non-plumbed uniSTOR	200 litre non-plumbed uniSTOR	250 litre non-plumbed uniSTOR	300 litre non-plumbed uniSTOR
Primary heat exchanger flow & return connection	BSP female	¾"	¾"	¾"	¾"
Cold & hot water connection	BSP female	¾"	¾"	¾"	¾"
Temperature sensor sleeve diameter	mm	8	8	8	8
Immersion heater boss diameter	BSP female	1 ¼"	1 ¼"	1 ¼"	1 ¼"

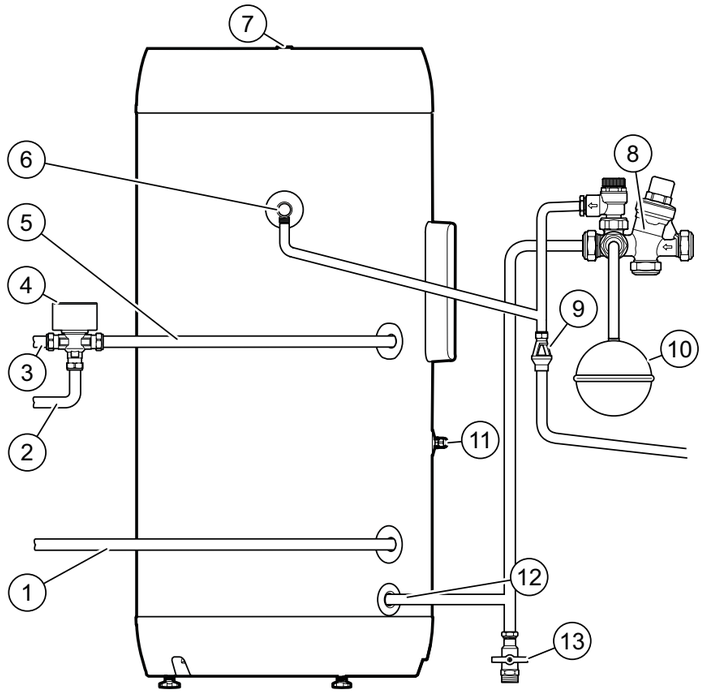
Non-plumbed uniSTOR

Dimensions



Heat pump cylinder	Unit	A	B	C	D
150 litre non-plumbed uniSTOR	mm	1,000	675	520	393
200 litre non-plumbed uniSTOR	mm	1,265	940	675	470
250 litre non-plumbed uniSTOR	mm	1,535	1,210	865	565
300 litre non-plumbed uniSTOR	mm	1,745	1,420	865	565

Connections



Item	Description
1	Heat pump return
2	Heating flow from heat pump
3	Heating circuit heating flow
4	Three-way motorised valve
5	Cylinder heating inlet
6	Temperature and pressure expansion relief valve
7	Hot water outlet
8	Unvented cylinder kit
9	Tundish
10	Expansion vessel
11	Cylinder dry pocket for sensor
12	Cold water inlet
13	Drain valve

NOTE: Standard uniSTOR cylinders come with tundish, three-way motorised valve, unvented cylinder kit, expansion vessel and 3/4" x 28mm MI-copper compression fitting. The 250 and 300 litre standard uniSTOR comes with secondary return T piece connection.

Large capacity uniSTOR

Overview

The Vaillant cylinder range includes two large capacity cylinders and a complete range of accessories. The 500 and 800 litre models have impressive coil sizes, of 4.7m² and 7m² which are manufactured using high grade stainless steel, and pass the highest Vaillant standards and quality control requirements. In addition, a comprehensive range of accessories are available which includes a choice of unvented cylinder kits, compatible expansion vessels, and a 7.5kW immersion (800 litre only). This provides the installer and specifier with maximum flexibility during design and installation.

Both cylinders can also be easily cascaded to generate higher requirements for hot water. Vaillant's dedicated technical designers can advise on any project for additional support and peace of mind.

Features & benefits

Single guarantee for all components
Complete peace of mind from one manufacturer.

Large diameter, smooth bore coil technology
Provides quiet operation, reduces build-up of scale and aids in long term efficiency through automatic descaling.

Global Warming Potential less than five and ozone depletion of zero
Designed to have minimal environmental impact.

In-built lifting eye
Easy to move over any terrain.

Unvented cylinder kit, expansion vessel and sensor available as an accessory
Complete system solution offering whilst meeting all building regulations.

Factory fitted T & P valve
Ensures safety requirements to meet regulations.

Large 7.5kW single phase immersion available
Emergency backup in case of main heat source failure (800 litre only).

Inspection port included
Meets requirement of many commercial specifications (800 litre only).

Large capacity uniSTOR technical specification

Technical data	Unit	500 litre uniSTOR	800 litre uniSTOR
Article number		0010019228	0010019229
Total tank capacity	l	541.4	784.0
Actual capacity (without coil volume)	l	512.0	740.0
Hot water capacity / draw off*	l	460.0	635.0
Standby losses	kWh/24h	2.5	3.0
Energy-related Products	A+ - F	C	C
Reheat time (70%)*	Minutes	20.0	18.3
Coil rating at 15 litres per minute*	kW	36.2	54.3
Coil rating at 30 litres per minute*	kW	50.5	74.5
Coil rating at 60 litres per minute*	kW	71.4	104.7
Heat exchanger volume	l	29.0	44.0
Heat exchanger surface	m^2	4.7	7.0
Primary flow rate	l/h	1800	1800
Heat exchanger pressure drop at 15 litres per minute	bar	0.02	0.006
Heat exchanger pressure drop at 30 litres per minute	bar	0.03	0.02
Heat exchanger pressure drop at 60 litres per minute	bar	0.2	0.1
Peak performance of heat pump (10 minutes) at 60°C	l	656	953
Peak performance of heat pump (10 minutes) at 40°C	l	1093	1588
Peak performance of heat pump (60 minutes) at 60°C	l	1380	2021
Peak performance of heat pump (60 minutes) at 40°C	l	2300	3368
Peak performance of boiler (10 minutes) at 60°C	l	421	604
Peak performance of boiler (10 minutes) at 40°C	l	702	1007
Peak performance of boiler (60 minutes) at 60°C	l	842	1208
Peak performance of boiler (60 minutes) at 40°C	l	1404	2014
Maximum operating DHW temperature	°C	85	85
Maximum operating heat circuit temperature	°C	95	95
Quantity of temperature sensor tubes	qty	2	2
Size of expansion vessel	l	50 (supplied as accessory)	80 (supplied as accessory)
Immersion heater rating	kW	5.0	7.5
Immersion heater cable size	mm	4.0	6.0
Immersion heater current	A	32	40

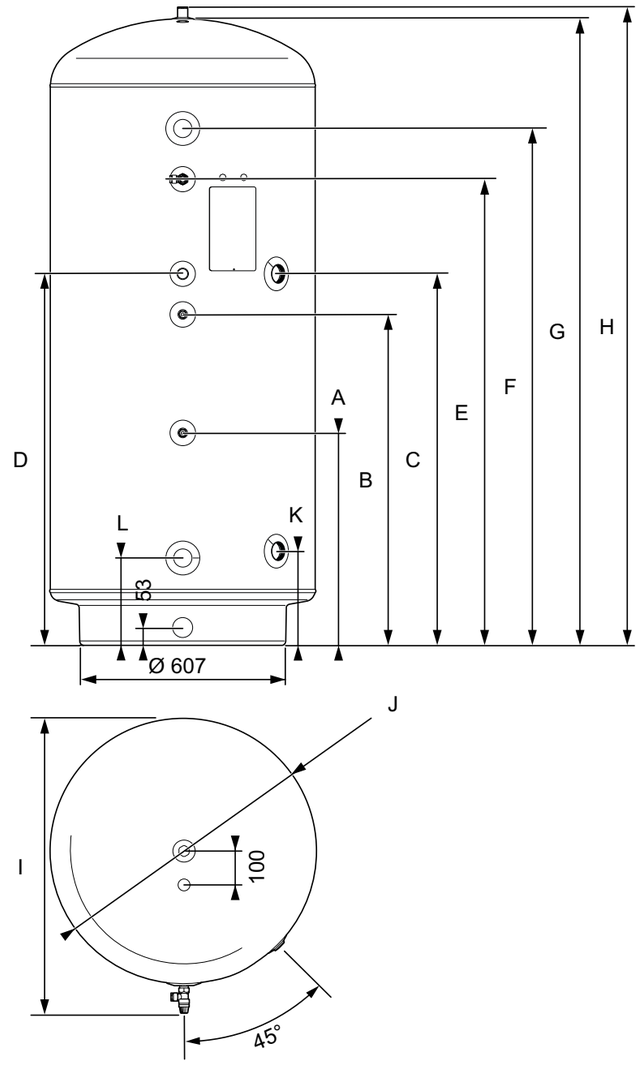
* Calculation from test EN 12897.
NOTE: Calculated figures are based on the heat pump flow temperature of 60°C and boiler flow temperatures of 80°C.

Dimensions	Unit	500 litre uniSTOR	800 litre uniSTOR
Outer diameter with insulation	mm	785	986
Height with insulation	mm	1.9	1.9
Net weight empty cylinder	kg	140	231
Weight of filled cylinder	kg	690	1015
Insulation thickness	mm	65	100

Connections	Unit	500 litre uniSTOR	800 litre uniSTOR
Primary heat exchanger flow & return connection	BSP female	1 ½"	1 ½"
Cold & hot water connection	BSP female	1 ½"	1 ½"
Temperature sensor sleeve diameter	mm	8	8
Immersion heater boss diameter	BSP female	1 ¼"	1 ¼"

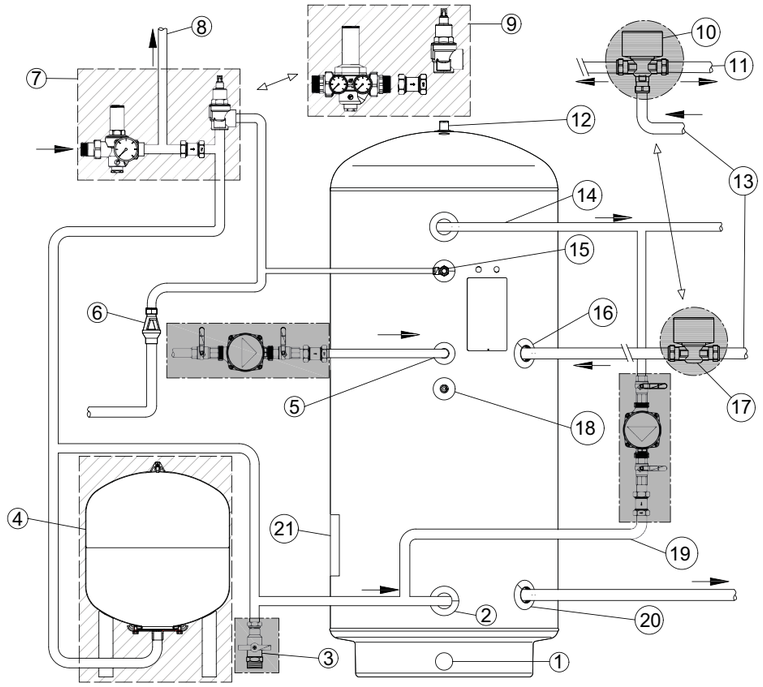
Large capacity uniSTOR

Dimensions



Heat pump cylinder	Unit	A	B	C	D	E	F	G	H	I	J	K	L
500 litre uniSTOR	mm	649	979	1,099	1,099	1,379	1,529	1,843	1,919	872	785	279	259
800 litre uniSTOR	mm	745	1,180	1,130	1,280	1,381	1,480	1,871	1,908	1,071	986	310	310

Connections



Item	Description
1	Cylinder drain
2	Cold water inlet
3	System drain valve (not supplied)
4	Expansion vessel
5	Secondary circulation (not supplied)
6	Tundish
7	Safety group (available as an accessory)
8	Balanced cold water
9	2" Safety group supplied with additional pressure gauge
10	Heat pump connection method: three-way motorised diverter valve (not supplied)
11	Heating circuit heating flow
12	Non-removable lifting eye (manual vent behind lifting eye)
13	Heating flow from heat source
14	Domestic hot water outlet
15	Temperature-pressure relief valve
16	Cylinder heating flow
17	Boiler connection method: motorised valve (not supplied)
18	Temperature sensor pocket
19	Legionella protection loop (not supplied)
20	Cylinder heating return
21	Inspection hatch (800 litre only)

NOTE: Large capacity auroSTOR cylinders come with a tundish. Unvented cylinder kits and expansion vessels are available in a range of sizes as accessories (see page 26).

Large capacity auroSTOR

Overview

The large capacity 500 litre twin coil auroSTOR cylinder has been specifically designed to accommodate both a heat pump and solar thermal system. The 500 litre twin coil auroSTOR cylinder utilises two smooth coils to ensure a quick heat recovery and prolonged life, due to its automatic de-scaling properties.

auroSTOR has a multitude of accessories to complete the Vaillant system including a choice of unvented cylinder kits and a compatible expansion vessel.

auroSTOR completes a Vaillant renewable system by enabling solar thermal options.

Features & benefits

Single guarantee for all components
Complete peace of mind from one manufacturer.

Global Warming Potential less than five and ozone depletion of zero
Designed to have minimal environmental impact.

Unvented cylinder kit, expansion vessel and sensor available as an accessory
Complete system solution offering whilst meeting all building regulations.

Factory fitted T & P valve
Ensures safety requirements to meet regulations.

Large diameter, smooth bore coil technology
Provides quiet operation, reduces build-up of scale and aids in long term efficiency through automatic descaling.

Factory fitted immersion heater
Emergency backup in case of main heat source failure.

Large capacity auroSTOR technical specification

Technical data	Unit	500 litre auroSTOR
Article number		0010019234
Total tank capacity	l	541.4
Actual capacity (without coil volume)	l	510.0
Hot water capacity / draw off*	l	248.0/438.0
Standby losses	kWh/24h	2.6
Energy-related Products	band	C
Reheat time (70%)*	minutes	13.8 (upper) / 48.8 (lower)
Coil rating at 15 litres per minute	kW	35.0 (upper) / 19.2 (lower)
Coil rating at 30 litres per minute	kW	52.3 (upper) / 29.8 (lower)
Coil rating at 60 litres per minute	kW	77.2 (upper) / 39.9 (lower)
Heat exchanger volume	l	23.0 (upper) / 8.0 (lower)
Heat exchanger surface	m^2	2.3 (upper) / 1.0 (lower)
Primary flow rate	l/h	900
Heat exchanger pressure drop at 15 litres per minute	bar	0.01 (upper and lower)
Heat exchanger pressure drop at 30 litres per minute	bar	0.03 (upper and lower)
Heat exchanger pressure drop at 60 litres per minute	bar	0.1 (upper and lower)
Maximum operating DHW temperature	°C	85
Maximum operating heat circuit temperature	°C	95
Quantity of temperature sensor tubes	qty	2
Size of expansion vessel	l	50 (supplied as an accessory)
Immersion heater rating	kW	5.0
Immersion heater cable size	mm	4.0
Immersion current	A	32

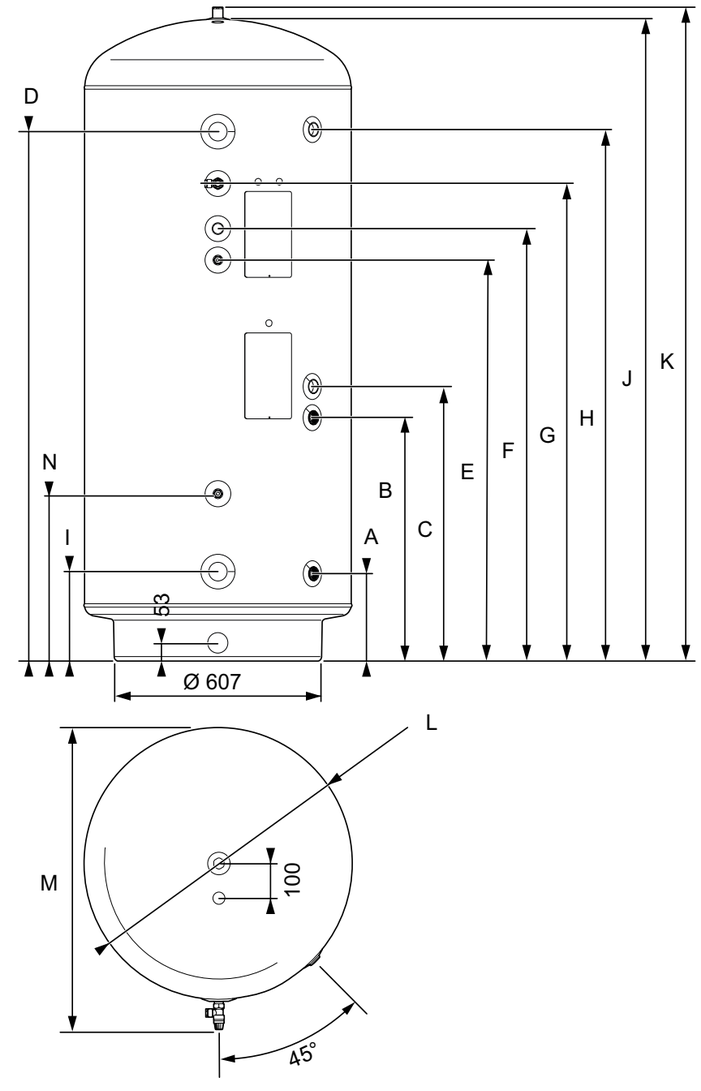
* Calculation from test EN 12897.

Dimensions	Unit	500 litre auroSTOR
Outer diameter with insulation	mm	785
Height with insulation	mm	1.9
Net weight empty cylinder	kg	155
Weight of filled cylinder	kg	705
Insulation thickness	mm	65

Connections	Unit	500 litre auroSTOR
Primary heat exchanger flow & return connection	BSP female	1 ½"
Cold & hot water connection	BSP female	1 ½"
Temperature sensor sleeve diameter	mm	8
Immersion heater boss diameter	BSP female	1 ¼"

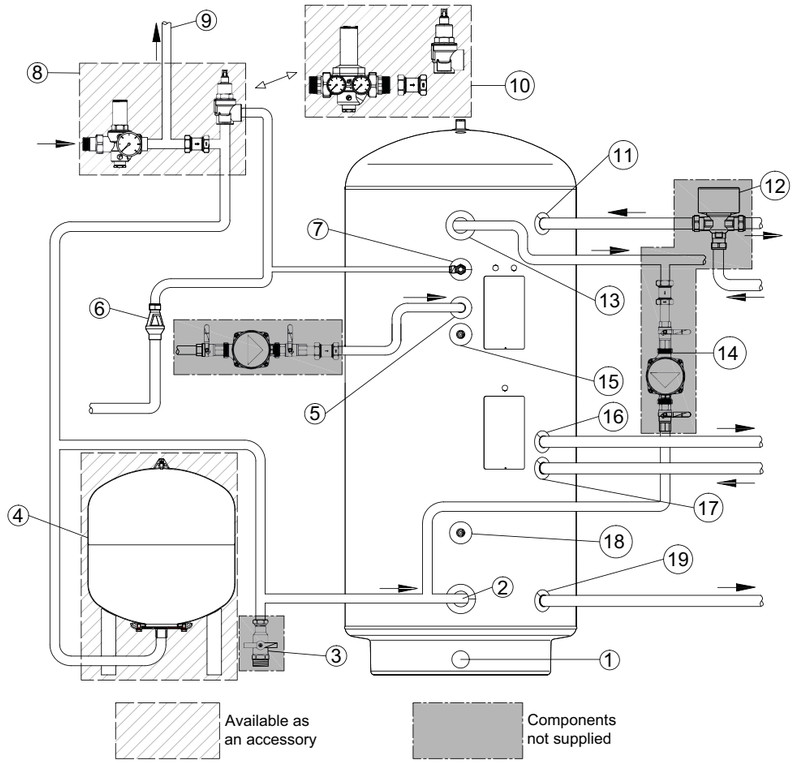
Large capacity auroSTOR

Dimensions



Heat pump cylinder	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
500 litre auroSTOR	mm	252	703	793	1,529	1,158	1,249	1,379	1,529	259	1,853	1,886	785	872	484

Connections



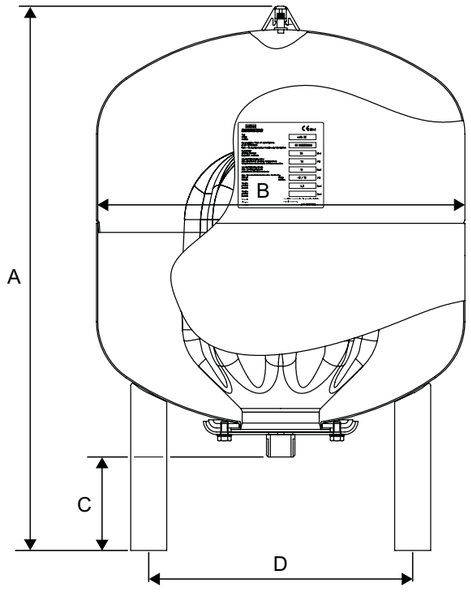
Item	Description
1	Cylinder drain
2	Cold water inlet
3	System drain valve (not supplied)
4	Expansion vessel (available as an accessory)
5	Secondary circulation (not supplied)
6	Tundish
7	Temperature-pressure relief valve
8	Unvented cylinder kit (available as an accessory)
9	Balanced cold water
10	2" unvented cylinder kit supplied with additional pressure gauge (available as an accessory)
11	Cylinder heating flow
12	Three-way motorised diverter valve (not supplied)
13	Hot water outlet
14	Legionella protection loop (not supplied)
15	Temperature sensor pocket
16	Cylinder heating return
17	Cylinder solar inlet
18	Solar temperature sensor pocket
19	Cylinder solar return

NOTE: Items included with large capacity auroSTOR cylinders are documentation and tundish. Unvented cylinder kits and expansion vessels are available in a range of sizes as an accessory, see page 26.

uniSTOR and auroSTOR accessories

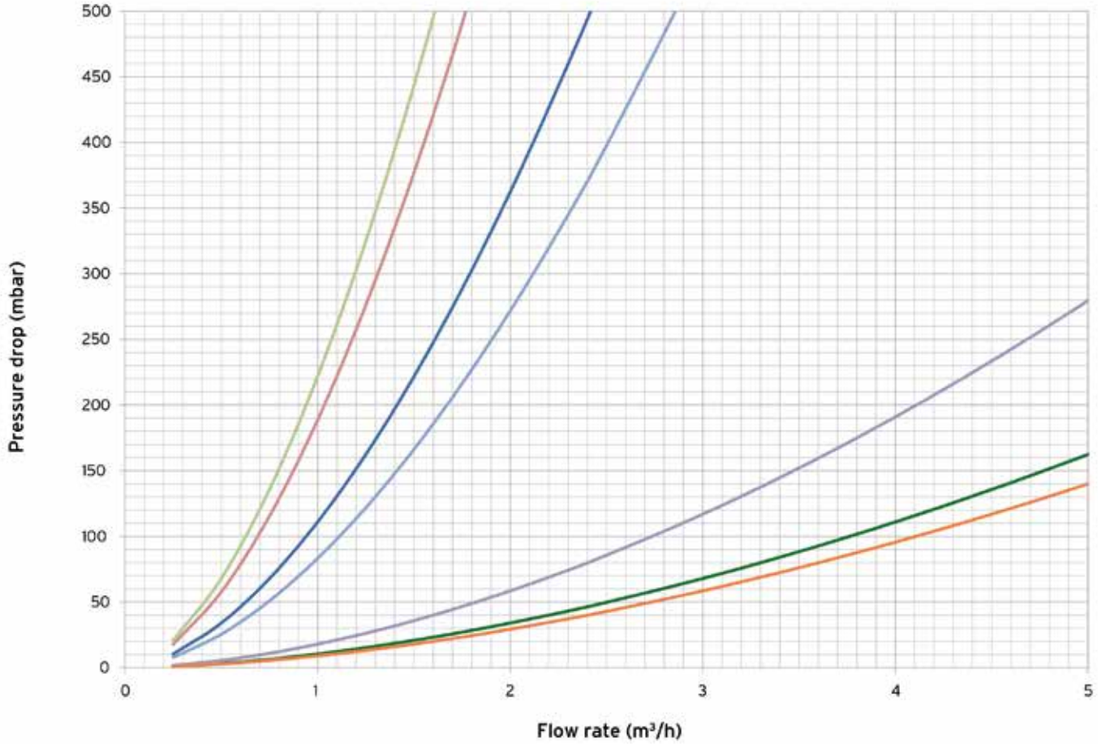
Description	Article number
Immersion heater 7kW (800 litre uniSTOR only)	0020235671
Unvented cylinder kit 1"	0020235964
Unvented cylinder kit 1¼"	0020235965
Unvented cylinder kit 1½"	0020235966
Unvented cylinder kit 2"	0020235967
Expansion vessel 50 litre (for uniSTOR and auroSTOR 500 litre)	0020229941
Expansion vessel 80 litre (for uniSTOR 800 litre)	0020229942

Expansion vessel dimensions



Dimensions	Unit	50 litre expansion vessel	80 litre expansion vessel
A = Height	mm	604	729
B = Diameter	mm	409	480
C = Connection height	mm	104	152
D = Feet span c/c	mm	293	351

Pressure drop chart



1.0 m² (Ø22 mm) = uniSTOR 150 litre and auroSTOR 500 litre (lower coil)

1.4 m² (Ø22 mm) = uniSTOR 200 litre

2.4 m² (Ø22 mm) = uniSTOR 250 litre

2.8 m² (Ø22 mm) = uniSTOR 300 litre

2.3 m² (Ø35 mm) = auroSTOR 500 litre (upper coil)

4.7 m² (Ø25.4 mm) = uniSTOR 500 litre

7.0 m² (Ø25.4 mm) = uniSTOR 800 litre

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At Vaillant UK, we invest as much of our resources into our service and support as we do in creating our outstanding heating solutions. So you can rest assured that when you choose a Vaillant product, you will be supported by the best service in the industry. Vaillant has specialist teams available to support installers and end-users with all enquiries. We pride ourselves on the efficiency of our service departments, supported by online tools that allow our customers to book appointments for our services for added convenience.

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Article numbers

Cylinders	Article number
200 litre pre-plumbed uniSTOR	0020237130
250 litre pre-plumbed uniSTOR	0020237131
300 litre pre-plumbed uniSTOR	0020237132
150 litre pre-plumbed slimline uniSTOR	0020237129
150 litre standard uniSTOR	0020235271
200 litre standard uniSTOR	0020235272
250 litre standard uniSTOR	0020235273
300 litre standard uniSTOR	0020235274
500 litre uniSTOR	0010019228
800 litre uniSTOR	0010019229
500 litre auroSTOR	0010019234

Accessories	Article number
Immersion heater 7kW (800 litre uniSTOR only)	0020235671
Unvented cylinder kit 1"	0020235964
Unvented cylinder kit 1¼"	0020235965
Unvented cylinder kit 1½"	0020235966
Unvented cylinder kit 2"	0020235967
Expansion vessel 50 litre (for uniSTOR and auroSTOR 500 litre)	0020229941
Expansion vessel 80 litre (for uniSTOR 800 litre)	0020229942

Contacts

Sales enquires
Vaillant sells its products through plumbing and heating merchants in the UK. For further information, contact your local Vaillant sales representative.
Phone: **0345 602 2922**

Renewables
For renewable products aftersales service and commissioning.
Phone: **0345 602 0262**
Email: **aftersales@vaillant.co.uk**

Training
For information on training centres and courses in your area.
Phone: **0345 601 8885**
Email: **training@vaillant.co.uk**

Technical enquiries
If you have a technical query, you can contact us by phone or email.
Phone: **0344 693 3133**
Email: **technical@vaillant.co.uk**

Spares enquiries
If you need helping finding a spare part, you can download our app from the appStore or Google Play.
Phone: **01773 596 615**
Option 1: Vaillant stock availability
Option 2: If you require a part number

Commercial
For commercial products aftersales service and commissioning.
Phone: **0330 100 8574**

General enquiries
If you are unsure of who you need to speak to or you have a general enquiry, our friendly reception staff will happily point you in the right direction.
Phone: **0345 602 2922**

Vaillant

Heating Hot water Renewables

Vaillant Group UK Ltd.
Nottingham Road, Belper, Derbyshire DE56 1JT
Telephone 0345 602 2922
www.vaillant.co.uk/for-installers
info@vaillant.co.uk

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