

Large capacity uniSTOR



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.

Key features and benefits

- **Single guarantee for all components**
Complete peace of mind from one manufacturer
- **Unvented cylinder kit, expansion vessel and sensor available as an accessory**
Complete system solution offering whilst meeting all building regulations
- **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 around environmental requirements

- **In-built lifting eye**
Easy to move over any terrain
- **Secondary return**
Accommodates complex and larger dwellings
- **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	860	1249
Peak performance of boiler (10 minutes) at 40°C	l	1433	2081
Peak performance of boiler (60 minutes) at 60°C	l	1584	2317
Peak performance of boiler (60 minutes) at 40°C	l	2640	3861
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

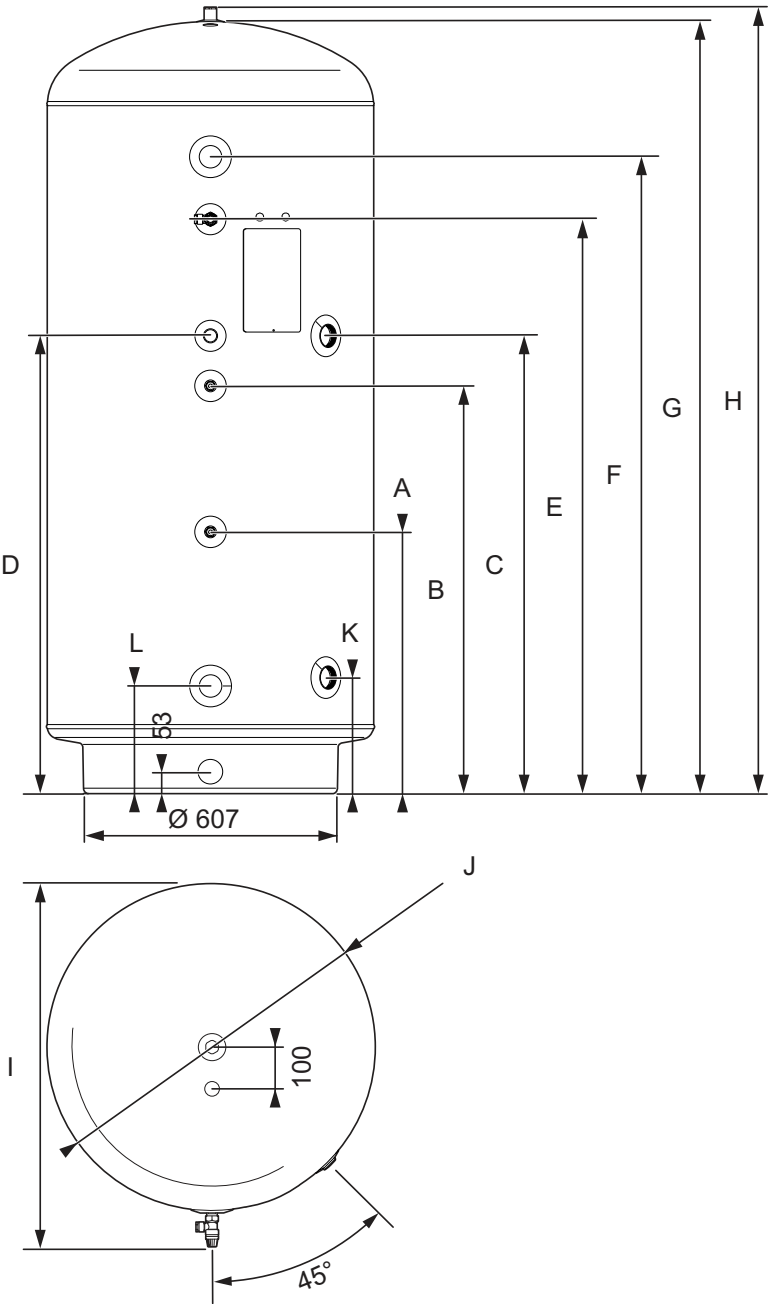
NOTE: Calculated figures are based on the heat pump flow temperature of 60°C and boiler flow temperatures of 80°C

Dimensions	Unit	500 litre uniSTOR	800 litre uniSTOR
Outer diameter with insulation	mm	785	986
Height with insulation	mm	19	19
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"

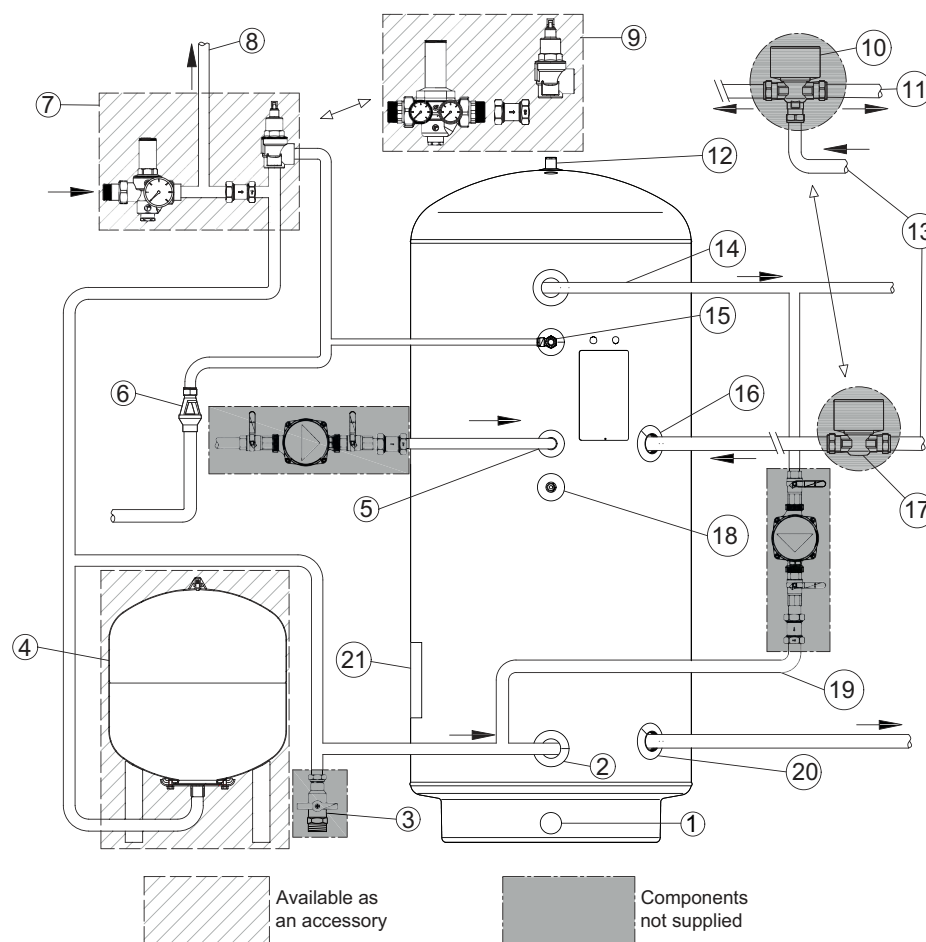
Large capacity uniSTOR

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	1,853	1,886	872	785	279	259
800 litre uniSTOR	mm	745	1,180	1,130	1,280	1,381	1,480	1,872	1,905	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).