

INTRODUCING THE NEW HIGH RECOVERY CYLINDER RANGE



A NEW CYLINDER RANGE, CRAFTED WITH YOU, FOR YOU

Vaillant has expanded its portfolio to further support installers' needs, delivering the ultimate hot water solution for your customers. Our brand new, cutting-edge range of high recovery cylinders have been designed with efficiency and simplicity at the heart of our latest innovation. Experience increased performance with a larger, high recovery coil and faster installation with handy features like labelled connections and front-facing connections. This cylinder range has been crafted for installers, ensuring a flawless fit every time.

The range is available in both standard and slimline diameters and is compatible with all Vaillant domestic boilers and heat pumps. Our range includes internal and external expansion options to support the varied requirements of you and your customers, along with a patented stackable buffer to reduce the overall footprint of the installation.



uniSTOR pure and plus

High recovery heat pump
cylinders



90L - 300L

Features and benefits

25-YEAR GUARANTEE

2-year parts and labour guarantee, with a 25-year anti-corrosion guarantee on the internal stainless-steel tank.

UNISTOR PLUS FEATURES AN INTERNAL EXPANSION VESSEL

Quick to install, the neater appearance maximises space in tight installation spaces.

IMPROVED REHEAT TIMES AND SYSTEM EFFICIENCY

Large coil surface area maximises heat transfer to ensure connected Vaillant systems run at their optimum efficiency, reducing running costs and increasing hot water performance.

CAPACITIES SUITABLE FOR ALL CUSTOMERS AND PROPERTY REQUIREMENTS

Slimline ranges available in outputs from 90 to 210 litres.
Standard diameter range available in outputs from 150 to 300 litres.

INCREASED LEVELS OF INSULATION AND PERFORMANCE

Cylinder insulation has been increased to 50mm for the slimline diameter range and 60mm for the standard diameter range (10mm increase from the previous range) to improve recovery times and standby losses.

uniSTOR pure and plus CONTINUED

High recovery heat pump
cylinders



90L - 300L

Features and benefits

FRONT FACING CONNECTIONS AND PIPEWORK

Easy to connect pipework when working in tight spaces, reducing time during installation.

LABELLED CONNECTIONS FOR SIMPLICITY

Easy-to-recognise, giving onsite guidance for installation and maintenance.

CARRY HANDLE INCLUDED WITH EVERY CYLINDER

Allows for easy 2-person lifting and manoeuvring into tight spaces.

SUPPORT AND KNOWLEDGE FROM VAILLANT

A range of tutorial videos available to support successful installation and maintenance.

PRE-PLUMBED OPTIONS AVAILABLE

Reducing installation time.

uniSTOR plus

Internal expansion



INTERNAL EXPANSION OR 'BUBBLE TOP'

INTERNAL AIR BUBBLE IS TRAPPED AT THE TOP OF THE CYLINDER AS IT FILLS WITH WATER AT THE COMMISSIONING STAGE

AIR IS COMPRESSED AND ABSORBS THE EXPANSION

INTERNAL FLOATING BAFFLE LIMITS THE CONTACT BETWEEN AIR AND WATER

SIMPLER DESIGN, WITHOUT THE NEED TO FIT AN EXPANSION VESSEL

RECHARGING THE AIR GAP TO PREVENT SAFETY DISCHARGE IS PART OF THE ANNUAL SERVICE

Click [here](#) to watch our video on how to re-charge the internal air gap.

Nomenclature

e.g. VIH RW 175/5 B ES

V	Vaillant
I	Indirectly heated
H	Type of storage - high pressure
R	Cylindrical shape (round)
W	Heat pump - application
175	Tank capacity in litres
/5	Generation of the appliance

C	Performance of insulation (ErP 'C' label)
SL	Slimline
PP	Pre-plumbed
IA	Internal air gap ('bubble top' models only)
E	Electric heater
S	Stainless steel

Existing slimline range vs uniSTOR pure slimline range



Capacity	150l
Plumbed	Pre-plumbed
Expansion	External
Coil size	1m², 21.7kW
Diameter	Ø 435
Polyurethane insulation foam	40mm
Compatibility	3.5, 5 and 7kW heat pumps
Pallet size	1,200mm x 800mm
Reheat time (70%)	12.9 minutes (based on 150l)
Standby losses	1.8 kWh/24h (based on 150l)



Capacity	90, 150, 175 and 210l
Plumbed	Pre-plumbed and non-plumbed
Expansion	External
Coil size	1.85m², 25.2kW (90-175l) 2.4m², 35.1kW (210l)
Diameter	Ø 490mm (fits through loft hatch)
Polyurethane insulation foam	50mm
Compatibility	All Vaillant domestic heat pumps and boilers
Pallet size	800mm x 800mm 1,200 x 800mm (210l)
Reheat time (70%)	11.45 minutes (based on 150l)
Standby losses	1.44 kWh/24h (based on 150l)

Existing slimline range vs uniSTOR plus slimline range



Capacity	150l
Plumbed	Pre-plumbed
Expansion	External
Coil size	1m ² , 21.7kW
Diameter	Ø 435
Polyurethane insulation foam	40mm
Compatibility	3.5, 5 and 7kW heat pumps
Pallet size	1,200mm x 800mm
Reheat time (70%)	12.9 minutes (based on 150l)
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Capacity	150, 175 and 210l
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Expansion	Internal
Coil size	1.85m ² , 25.2kW (150-175l) 2.4m ² , 35.1kW (210l)
Diameter	Ø 490mm (fits through loft hatch)
Polyurethane insulation foam	50mm
Compatibility	All Vaillant domestic heat pumps and boilers
Pallet size	800mm x 800mm
Reheat time (70%)	11.45 minutes (based on 150l)
Standby losses	1.39 kWh/24h (based on 150l)

Existing standard range vs uniSTOR pure standard range



Capacity	150, 200, 250 and 300l
Plumbed	Pre-plumbed and non-plumbed
Expansion	External
Coil size	1m ² - 2.8m ²
Diameter	Ø 595
Polyurethane insulation foam	50mm
Compatibility	All Vaillant domestic heat pumps and boilers
Pallet size	1,200 x 800mm

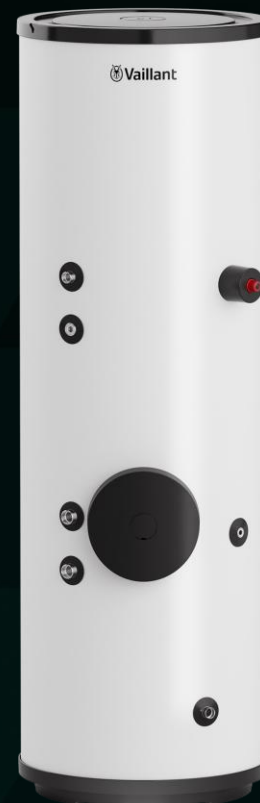


Capacity	150, 175, 210, 250 and 300l
Plumbed	Pre-plumbed and non-plumbed
Expansion	External
Coil size	1.8m ² (150 and 175l) 2.6m ² (210, 250 and 300l)
Diameter	Ø 580
Polyurethane insulation foam	60mm
Compatibility	All Vaillant domestic heat pumps and boilers
Pallet size	800 x 800mm (150, 210 and 250l) 1,200 x 800mm (300l)

Existing standard range vs uniSTOR plus standard range



Capacity	150, 200, 250 and 300l
Plumbed	Pre-plumbed and non-plumbed
Expansion	External
Coil size	1m ² - 2.8m ²
Diameter	Ø 595
Polyurethane insulation foam	50mm
Compatibility	All Vaillant domestic heat pumps and boilers
Pallet size	1,200 x 800mm



Capacity	150, 175, 210, 250 and 300l
Plumbed	Pre-plumbed and non-plumbed
Expansion	Internal
Coil size	1.8m ² (150 and 175l) 2.6m ² (210, 250 and 300l)
Diameter	Ø 580
Polyurethane insulation foam	60mm
Compatibility	All Vaillant domestic heat pumps and boilers
Pallet size	800 x 800mm

uniSTOR pure slimline

Technical data - pre-plumbed

	Unit of measure	90l	150l	175l	210l
Net weight (empty cylinder)	kg	35.6	49.3	52.9	58.5
Insulation thickness	mm	50			
Total tank capacity	l	94.24	149.84	181.84	206.7
Hot water capacity / draw off*	l	160.54	260.59	318.17	359.56
Standby losses	kWh/24h	1.31	1.44	1.76	2.06
Energy-related Products (ErP)	A++-F	C			
Re-heat time (70%)	Minutes	7.39	11.45	14.07	17.45
Coil rating acc. EN 12897	kW	22.55			28.59
Heat exchanger volume	l	5.84			7.7
Heat exchanger surface area	m²	1.85			2.4
Primary flow rate	l/h	2000			
Heat exchanger pressure drop	mbar	0.1			0.140

* Calculation from test EN 12897.

uniSTOR pure slimline

Technical data - non-plumbed

	Unit of measure	90l	150l	175l	210l
Net weight (empty cylinder)	kg	32.9	46.3	49.9	53
Insulation thickness	mm	50			
Total tank capacity	l	94.24	149.84	181.84	206.7
Hot water capacity / draw off*	l	160.54	260.59	318.17	359.56
Standby losses	kWh/24h	1.31	1.44	1.76	2.06
Energy-related Products (ErP)	A++-F	C			
Re-heat time (70%)	Minutes	7.39	11.45	14.07	17.45
Coil rating acc. EN 12897	kW	22.55			28.59
Heat exchanger volume	l	5.84			7.7
Heat exchanger surface area	m²	1.85			2.4
Primary flow rate	l/h	2000			
Heat exchanger pressure drop	mbar	0.1			0.140

* Calculation from test EN 12897.

uniSTOR plus slimline

Technical data - pre-plumbed

	Unit of measure	150l	175l	210l
Net weight (empty cylinder)	kg	47.2	51.6	58.9
Insulation thickness	mm	50		
Total tank capacity	l	151.84	177.44	205.1
Hot water capacity / draw off*	l	197.88	221.22	257.86
Standby losses	kWh/24h	1.39	1.71	2.01
Energy-related Products (ErP)	A+-F	C		
Re-heat time (70%)	Minutes	11.45	13.23	15.32
Coil rating acc. EN 12897	kW	22.55		28.59
Heat exchanger volume	l	5.84		7.7
Heat exchanger surface area	m²	1.85		2.4
Primary flow rate	l/h	2000		
Heat exchanger pressure drop	mbar	0.1		0.140

* Calculation from test EN 12897.

uniSTOR plus slimline

Technical data - non-plumbed

	Unit of measure	150l	175l	210l
Net weight (empty cylinder)	kg	44.2	48.6	53.4
Insulation thickness	mm	50		
Total tank capacity	l	151.84	171.6	205.1
Hot water capacity / draw off*	l	197.88	221.22	257.86
Standby losses	kWh/24h	1.36	1.71	2.01
Energy-related Products (ErP)	A+-F	C		
Re-heat time (70%)	Minutes	11.45	13.23	15.32
Coil rating acc. EN 12897	kW	22.55		28.59
Heat exchanger volume	l	5.84		7.7
Heat exchanger surface area	m²	1.85		2.4
Primary flow rate	l/h	2000		
Heat exchanger pressure drop	mbar	0.1		0.140

* Calculation from test EN 12897.

uniSTOR slimline

Dimensions with buffer



uniSTOR pure standard

Technical data - pre-plumbed

	Unit of measure	150l	175l	210l	250l	300l
Net weight (empty cylinder)	kg	48	53	58	68	74
Insulation thickness	mm	60				
Total tank capacity	l	153.84	179.14	207.56	258.16	288.46
Hot water capacity / draw off*	l	193.8	224.8	225.75	317.7	354.9
Standby losses	kWh/24h	1.32	1.39	1.7	1.69	1.80
Energy-related Products (ErP)	A+-F	B		C		
Re-heat time (70%)	Minutes	13.96	16.55	14.82	17.68	19.71
Coil rating acc. EN 12897	kW	25.8		34.5		
Heat exchanger volume	l	6.24		9.36		
Heat exchanger surface area	m²	1.88		2.6		
Primary flow rate	l/h	2000				
Heat exchanger pressure drop	mbar	275		420		

* Calculation from test EN 12897.

uniSTOR pure standard

Technical data - non-plumbed

	Unit of measure	150l	175l	210l	250l	300l
Net weight (empty cylinder)	kg	43	48	53	63	69
Insulation thickness	mm	60				
Total tank capacity	l	153.84	179.14	207.56	258.16	288.46
Hot water capacity / draw off*	l	193.8	224.8	225.75	317.7	354.9
Standby losses	kWh/24h	1.32	1.39	1.70	1.69	1.80
Energy-related Products (ErP)	A+-F	B		C		
Re-heat time (70%)	Minutes	13.96	16.55	14.82	17.65	19.71
Coil rating acc. EN 12897	kW	25.8		34.5		
Heat exchanger volume	l	6.24		9.36		
Heat exchanger surface area	m²	1.88		2.6		
Primary flow rate	l/h	2000				
Heat exchanger pressure drop	mbar	275		420		

* Calculation from test EN 12897.

uniSTOR plus standard

Technical data - pre-plumbed

	Unit of measure	150l	175l	210l	250l	300l
Net weight (empty cylinder)	kg	49	53	58	68	73.2
Insulation thickness	mm	60				
Total tank capacity	l	145.73	168.44	203.26	239.56	270.16
Hot water capacity / draw off*	l	190.45	220.3	250.5	310.1	347.4
Standby losses	kWh/24h	1.27	1.35	1.45	1.49	1.68
Energy-related Products (ErP)	A+-F	B			C	
Re-heat time (70%)	Minutes	13.2	14.95	13.69	16.45	18.41
Coil rating acc. EN 12897	kW	25.8		34.5		
Heat exchanger volume	l	6.24		9.36		
Heat exchanger surface area	m²	1.88		2.6		
Primary flow rate	l/h	2000				
Heat exchanger pressure drop	mbar	275		420		

* Calculation from test EN 12897.

uniSTOR plus standard

Technical data - non-plumbed

	Unit of measure	150l	175l	210l	250l	300l
Net weight (empty cylinder)	kg	44	48	53	62	68
Insulation thickness	mm	60				
Total tank capacity	l	145.73	168.44	203.26	239.56	270.16
Hot water capacity / draw off*	l	190.45	220.3	250.5	310.1	347.4
Standby losses	kWh/24h	1.27	1.35	1.45	1.49	1.68
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Heat exchanger volume	l	6.24		9.36		
Heat exchanger surface area	m²	1.88		2.6		
Primary flow rate	l/h	2000				
Heat exchanger pressure drop	mbar	275		420		

* Calculation from test EN 12897.

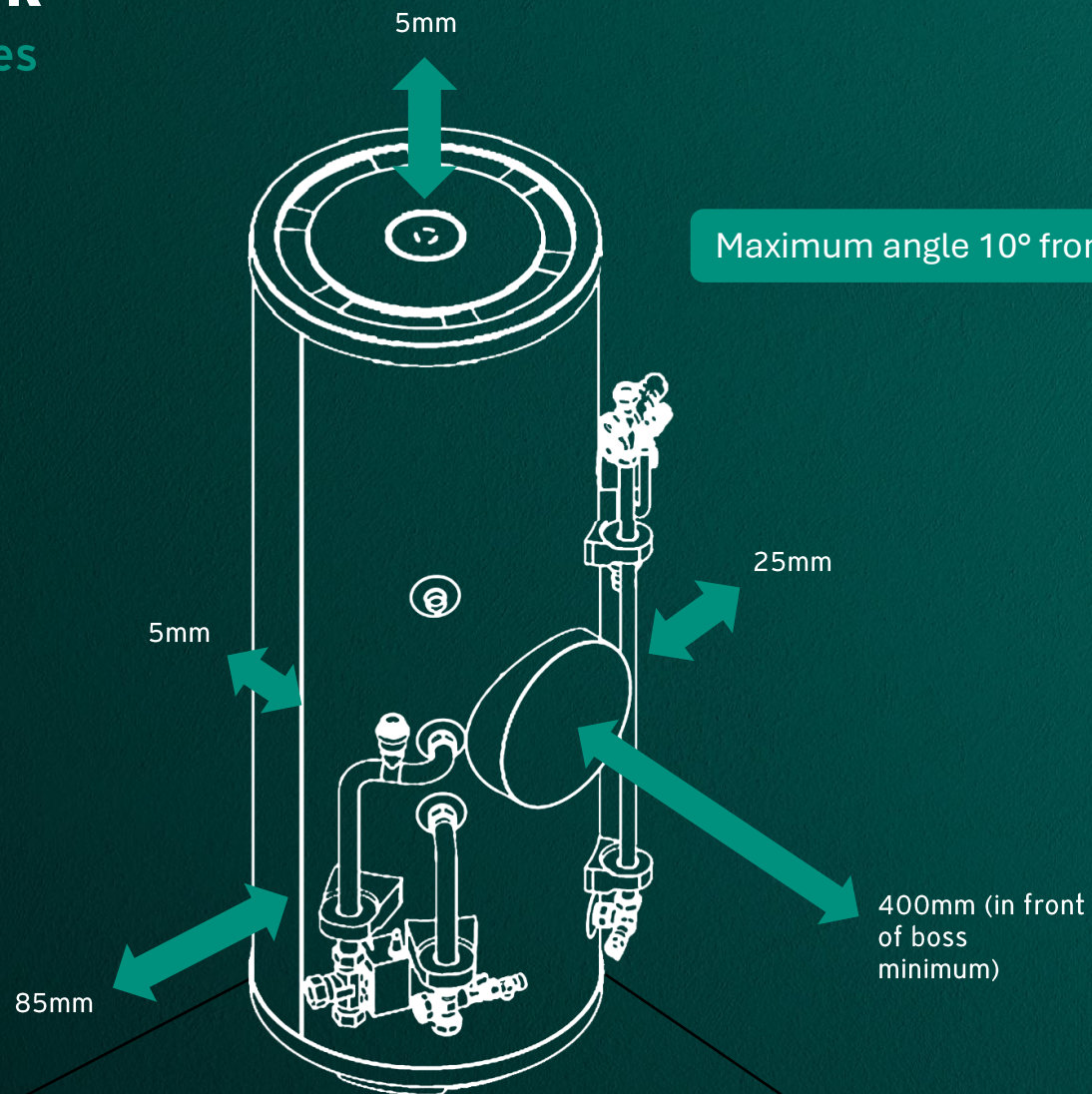
uniSTOR standard

Dimensions without buffer



uniSTOR

Clearances



The key clearance is in front of the immersion heater boss to facilitate the removal of the heating element

All water connections front front-facing

The cylinder maximises cupboard space, as it can be situated very close to the back and side walls

Planning

Calculating DHW demand - 'rule of thumb' method

The rule of thumb method used by MCS is based on BS 6700: 2006+A1:2009 and assumes a usage volume of 45 litres per person, per day.



$3 + 1 = 4$

×



LITRES OF DHW PER
PERSON, PER DAY

=



DAILY WATER USAGE

Note: if the number of occupants is greater than that given by the above formula, then the number of occupants should be used instead of bedrooms.

uniSTOR ACCESSORIES

New patented purpose-built buffer



The new buffer store solution has been expertly crafted with installer feedback at its core. Our cleverly designed buffer solution has been optimised to maximise space within your customers home as a stackable solution.

This unique solution can be installed to sit either below or above the standard and slimline diameter cylinder ranges when required as part of the heat pump system. Available in 30 litre slimline diameter and 40 litre standard diameter either volume is perfect as a volumiser or a true buffer store.

This accessory offers hydraulic decoupling, stores an additional heating capacity to use at peak demands, de-ices the evaporator without the need for back up heating. The buffer provides additional litres of open system volume to ensure heat pumps run at their peak efficiency.

ARTICLE NUMBERS:

SLIMLINE DIAMETER SOLUTION - 8000011534

STANDARD DIAMETER SOLUTION - 8000011528

ADDITIONAL ACCESSORIES

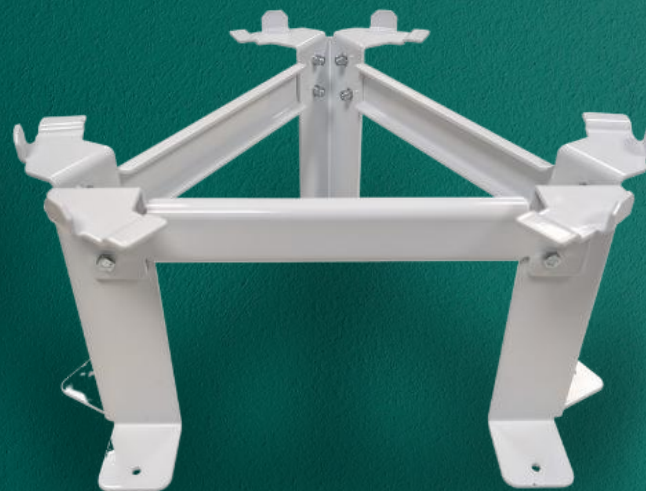
Designed with you in mind, to support with your installations.



PRESSURE GAUGE

The pressure gauge provides visibility of the system pressure when the boiler display is remote from the filling loop.

Available as an optional accessory.



PLINTH

A new optional accessory that can be used to elevate the cylinder 200mm to allow for access to pipework and electrical connections.

Supplied ready to assemble with options for both standard and slimline diameter models. Can be fitted to base of either cylinder or buffer.

ADDITIONAL ACCESSORIES

Designed with you in mind, to support with your installations.



TITANIUM IMMERSION HEATER ELEMENT

Available to order as an upgrade the immersion heater is more resistant to both chemical attack and scale deposition, increasing both longevity and efficiency.

The temperature should never be set higher than 60°C.



3-WAY VALVE

The 3-way valve is available as an after-market accessory, for use when the heat generator for an existing cylinder is being changed from a boiler, which uses a 2-port safety valve to a heat pump.

The valve is designed to return by spring action to the heating port, shutting off the flow to the hot water coil in an emergency situation.

FAQs

What is the new cylinder range compatible with?

The new range of slimline and standard diameter uniSTOR cylinders are compatible with all Vaillant heat pump and system boiler solutions.

How do you maintain the product guarantee?

There is a 2-year guarantee on the cylinder when registered on Vaillant Advance, with a 25-year guarantee on the inner tank. An annual service must be carried out to maintain this guarantee, including checking all connections for tightness and recharging the air gap (plus models only).

Are there any supporting videos for the new range of cylinders?

There is a suite of videos available either on our YouTube channel or via the Vaillant Academy, covering installation considerations, recharging the internal air gap and more.

How is the internal air gap covered by the guarantee?

The internal baffle is very unlikely to fail, but, if an inspection proves this to be the case, then provided that the service history is complete, a replacement would be provided under the 25-year guarantee.

INDUSTRY LEADING TRAINING FOR INDUSTRY LEADING ENGINEERS

TRAINING

At Vaillant, we pride ourselves on being at the forefront of technology and sharing our expertise. That's why we offer a wide range of training courses to help support our installers and their businesses. Whether you're looking for online, practical or accredited courses, we can help find the right training journey for you.

We've integrated our brand-new uniSTOR cylinder range into existing courses to make sure you get the most out of your training with us. So, whether you opt for in-centre training or choose on-demand learning with the Vaillant Academy, we want to make sure you're equipped for our full range of heating solutions.

RELEVANT COURSES

- aroTHERM plus install commission set up
- ecoTEC plus installation and servicing

Login to the [Academy](#) today.



Delivering innovative
heating solutions,
**It's our commitment
to you, for life**



Vaillant for life

