



Copper

Specification

Renewable energy

Stainless

Telford
**COPPER &
STAINLESS
CYLINDERS**
LIMITED



HOT WATER SOLUTIONS

Stainless Steel Unvented Cylinders



Telford Copper & Stainless Cylinders Ltd produce a comprehensive range of stainless steel unvented cylinders to the highest material specification on the market and with modern production techniques and standards.

Our cylinder shells are produced from Duplex 2304, coils and bosses from 316L. We are proud that all processes of our production are made here in the UK at our factory in Telford, Shropshire.

The range of stainless steel cylinders has expanded over the years to accommodate renewable heat sources and to offer easier solutions to difficult installs such as solar cylinders, heat pump, horizontal, pre-plumbed and more. We are also proud of our bespoke service, if our standard product range doesn't meet your requirements then we have a friendly and qualified team who can discuss with you, your requirements and offer a competitive bespoke design.

As well as our stainless unvented tanks carry a lifetime guarantee (please contact our offices for full guarantee details) all of our cylinders are fully ERP compliant.

Stainless Steel Unvented Cylinders



History

- Over 15 years of producing stainless steel products.
- British made, every process of production is completed here at Telford, Shropshire.
- Family run company whereby product and service take priority.
- Transport, we have built our own fleet of varying sized vehicles to ensure your product arrives safely and quickly.

Standard Technical Specifications

- Unvented and vented tanks supplied with 22mm compression fittings (up to 300L) for ease of installation.
- 3bar max operating pressure.
- 22mm primary coils, increased surface area for quick recovery, as standard.
- Recommended minimum flow rate of 20 L/min and pressure of 1.5bar.
- WRAS approval on all products
- Fully ERP compliant products, insulated with high density polyurethane insulation.

Guarantee

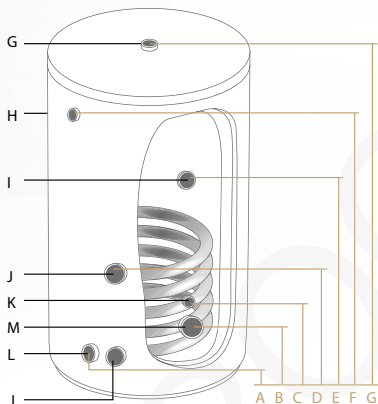
- Lifetime guarantee on all unvented products.
- 10 year guarantee on all openvented products.
- 2 year guarantee on all component parts.
- Duplex 2304 stainless steel used on all products, contains superior corrosion resistant properties to other grades.
- All cylinders are pickled after welding to guarantee corrosive properties are restored after welding.

Other & Optional Extras

- Made to measure cylinders, bespoke heights and diameters.
- Bespoke connection configurations (if it can be made, we will make it for you).
- Horizontal versions.
- Slim line versions starting at 470mm diameter.
- Pre plumbed options on all variants, including horizontals.
- Any other? We're eager to help and if you can't find what you're looking for please call or email us your requirements

Technical Specification

Tempest Indirect



G - 22mm Hot water draw off

H - 1/2" F TPR valve

I - Secondary return

J - Boiler Flow & Return

K - Stat Pocket

L - 22mm Cold feed

M - Immersion

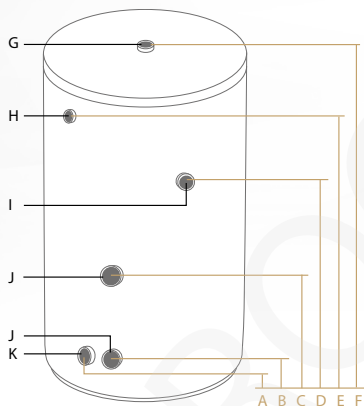


Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G
90	750	510	170	200	400	495	-	550	750
125	935	510	170	200	400	495	-	750	935
150	1060	510	170	200	400	495	-	880	1060
170	1200	510	170	200	450	600	-	1030	1200
200	1120	580	195	225	475	625	815	930	1120
250	1490	580	195	225	555	845	975	1140	1330
300	1780	580	195	225	555	845	1255	1435	1650
400	1590	710	240	270	640	870	1240	1340	1590
500	1835	710	240	270	640	890	1390	1590	1835

Dimensions are for use as guideline only.

Technical Specification

Tempest Direct



G - 22mm Hot water draw off

H - 1/2" F TPR valve

I - Secondary return

J - 1 3/4" Immersion heater boss

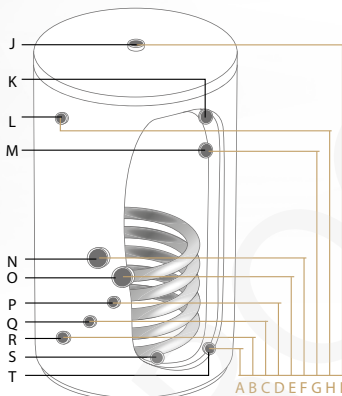
K - 22mm Cold feed



Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G
90	750	510	170	200	400	495	-	550	750
125	935	510	170	200	400	495	-	750	935
150	1060	510	170	200	400	495	-	880	1060
170	1200	510	170	200	450	600	-	1030	1200
200	1120	580	195	225	475	625	815	930	1120
250	1490	580	195	225	555	845	975	1140	1330
300	1780	580	195	225	555	845	1255	1435	1650

Dimensions are for use as guideline only.

Tempest Direct Solar



J - Hot Water draw off

K - T&P Relief valve solar stat

L - Solar stat

M - Secondary return*

N - Immersion heater 1³/₄

O - Immersion heater 1³/₄

P - Solar flow

Q - Aquastat pocket

R - Solar sensor

S - Cold water

T - Solar return



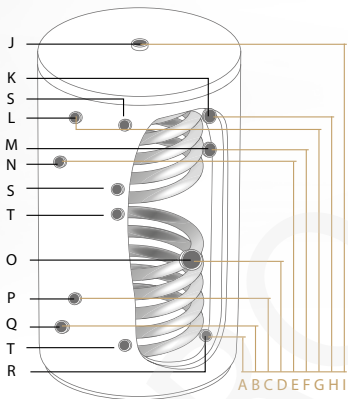
Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G	H	I
170	1200	510	175	165	395	505	535	395	865	1915	1780
200	1120	580	200	245	395	510	615	395	785	900	1600
250	1490	580	195	245	395	505	575	395	890	1025	1920
300	1780	580	200	250	400	510	575	650	895	1030	2080
400	1590	710	235	285	435	620	715	1085	1240	1340	1590
500	1835	710	235	285	435	620	715	1085	1390	1590	1835

Dimensions are for use as guideline only.

* - 200L and above.

Technical Specification

Tempest Twin Coil



J - Hot water draw off

K - T&P relief valve

L - Solars stat

M - Secondary return*

N - Boiler stat

O - Immersion heater 1³/₄

P - Aux stat

Q - Solar stat

R - Mains inlet

S - Boiler Flow & Return

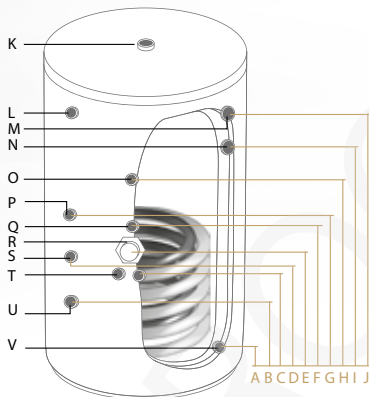
T - Solar Flow & Return



Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G	H	I
170	1200	510	175	175	395	500	535	585	865	1015	n/a
200	1120	580	190	245	390	500	545	585	780	890	1600
250	1490	580	190	245	390	500	575	640	890	1025	1025
300	1780	580	190	245	390	500	570	640	885	1020	1250
400	1590	710	235	285	435	620	715	820	1120	1240	1240
500	1835	710	235	285	435	620	715	820	1120	1240	1590

Dimensions are for use as guideline only.
* 200ltr and above

Tempest Heat Pump Solar



K - 22mm Hot water draw off

L - 22mm Stat pocket

M - 1/2" F TPR valve

N - Secondary return

O - Solar flow

P - 22mm stat pocket

Q - Solar return

R - 1 3/4" Immersion heater boss

S - 22mm stat pocket

T - Heat pump flow & return

U - 22mm stat pocket

V - Cold feed

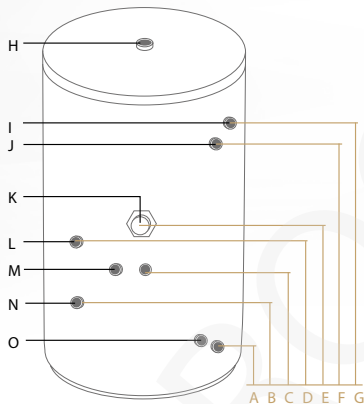


Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G	H	I	J
200	1500	554	178	578	778	828	878	978	1078	1188	1120	1320
250	1800	554	178	578	778	828	878	978	1078	1188	1420	1620
300	1780	580	193	593	793	843	893	993	1093	1203	1261	1443
400	1590	710	238	593	738	843	893	993	1093	1273	1248	1348
500	1835	710	238	593	738	843	893	993	1093	1293	1398	1598

Dimensions are for use as guideline only.

Technical Specification

Tempest Heat Pump Indirect



H - 22mm Hot water draw off

I - 1/2" F TPR valve

J - Secondary return

K - 1 3/4" Immersion heater boss

L - Stat pocket

M - 1" Flow & return

N - Stat pocket

O - 22mm cold feed

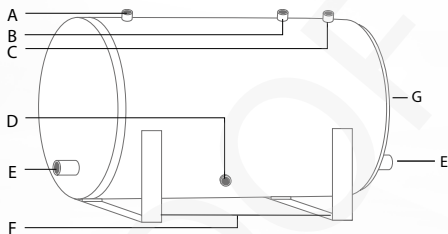


Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G
200	1500	554	178	578	778	828	878	1120	1320
250	1800	554	178	578	778	828	878	1420	1620
300	1780	580	193	593	793	843	893	1261	1443
400	1590	710	238	593	738	843	893	1248	1348
500	1835	710	238	593	738	843	893	1398	1598

Dimensions are for use as guideline only.

Technical Specification

Tempest Horizontal Unvented Direct



A - Hot Outlet 22mm

E - 1 3/4" F Immersion Heater Boss

B - 1/2" T&P

F - Cradles

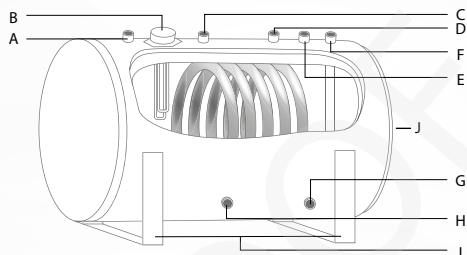
C - Cold inlet 22mm

G - Secondary Return

D - 1/2" F Drain Off

Water Capacity (LTR)	Length mm	Diameter mm	Height mm	Height With Cradles mm
90	750	510	510	610
125	935	510	510	610
150	1060	510	510	610
170	1200	510	510	610
200	1120	555	555	655
250	1490	555	555	655
300	1780	555	555	655

Tempest Horizontal Unvented Indirect



A - Hot Outlet 22mm

B - 1 ³/₄ "F Immersion Heater Boss

C - Boiler Flow 22mm

D - Boiler Return 22mm

E - 1/2 T&P

F - Cold Inlet 22mm

G - 22mm Blind Stat Pocket

H - 1/2 "F Drain Off

I - Cradles

J - Secondary Return

Water Capacity (LTR)	Length mm	Diameter mm	Height mm	Height With Cradles mm.
90	750	510	510	610
125	935	510	510	610
150	1060	510	510	610
170	1200	510	510	610
200	1120	555	555	655
250	1490	555	555	655
300	1780	555	555	655
400	1590	710	660	760
500	1835	710	660	760

Variants

Tempest Plus Cylinder

With the introduction of the European Energy rated Products Directive for all hot water cylinders, Telford are now happy to introduce to the market a premium model of our Tempest cylinder, the Tempest Plus. We are pleased to announce that the Tempest Plus will achieve an A Rating from 90-200litre capacity and a B on 250-300litres. This unit will also come with a Titanium immersion heater as standard and carry our usual lifetime guarantee.

Pre Plumbed

The Tempest unvented is also available as a pre-plumbed that save valuable time on site for both the plumbing and electrical contractor. They also offer a uniform and consistent installation for new builds.

Our standard indirect version comes as an S Plan with 1 heating zone, if you require additional zones or a bespoke pre-plumbed design our friendly technical team will be happy to design your required system with you to meet your needs.

High Gain

High gain cylinders, commonly known as quick recovery, are available on request where quicker than usual recovery times are required. We offer an off the shelf standard high gain, with approximately half the reheat time of its standard equivalent however if you require a certain KW rating/reheat time then providing the coil can fit in the cylinder, we will make it.

Slim Line

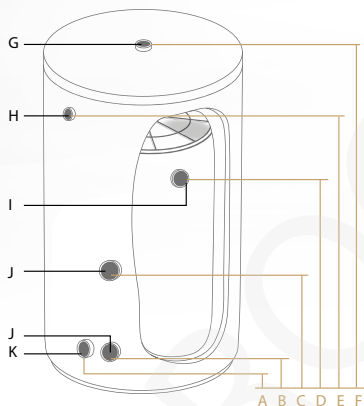
Our Unvented range is available in a slim line variant, perfect for tight installations. They carry the same lifetime guarantee as our standard Tempest range and are available in Indirect, Direct, Direct Solar and Twin Coil Solar versions, horizontal specials are also available on request.

Size (litres)	Height (mm)	Width (mm)
90	900	470
125	1050	470
150	1200	470
170	1500	470
200 opt 1	1800	470
200 opt 2	1500	510
250	1800	510

Technical Specification

Tornado 3.0 Direct

With internal expansion air gap



G - 22mm Hot water draw off

H - 1/2" F TPR valve

I - 22mm Hot water draw off

J - 1 3/4" Immersion heater boss

K - 22mm Cold feed

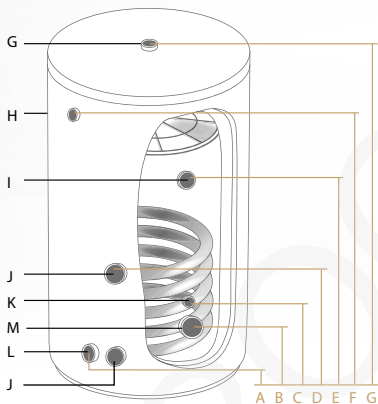
B/C

Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F
125	1025	580	178	200	495	665	800	1025
150	1260	580	178	200	495	900	950	1260
170	1325	⊕ 580	178	200	495	965	1065	1325
200	1550	580	178	200	495	1050	1150	1550
250	1800	580	178	200	495	1250	1350	1800
300	2050	580	178	200	495	1400	1500	2050

Dimensions are for use as guideline only.

Tornado 3.0 Indirect

With internal expansion air gap



G - 22mm Hot water draw off

H - 1/2" F TPR valve

I - 22mm Hot water draw off

J - Boiler Flow & Return

K - Stat Pocket

L - 22mm Cold feed

M - Immersion

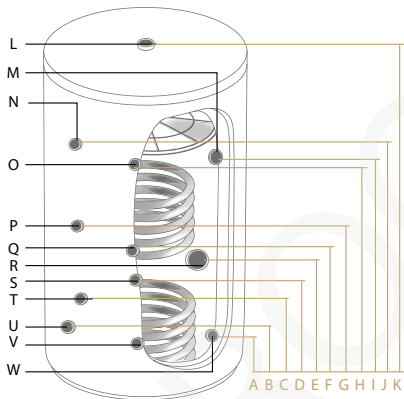
B/C

Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G
125	1025	580	178	248	495	505	665	800	1025
150	1260	580	178	248	495	505	900	950	1260
170	1325	580	178	248	495	605	965	1065	1325
200	1550	580	178	248	495	605	1050	1150	1550
250	1800	580	178	248	495	825	1250	1350	1800
300	2050	580	178	248	495	825	1400	1500	2050

Dimensions are for use as guideline only.

Tornado 3.0. Twin Coil

With internal expansion air gap



L - 22mm Hot water draw off

M - 22mm Hot water draw off

N - T&P Relief Valve

O - Boiler Flow

P - Boiler Stat

Q - Boiler Return

R - Immersion Heater

S - Solar Flow

T - Solar Stat

U - Solar Stat

V - Solar Return

W - Cold Feed

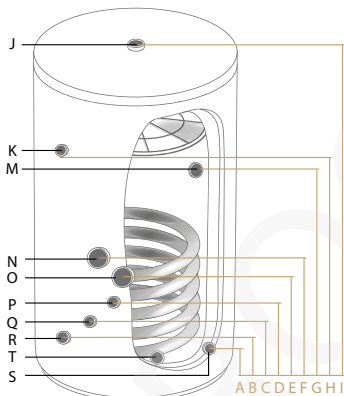
B/C

Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G	H	I	J	K
170	1325	580	178	248	350	450	675	745	825	900	950	1065	1325
200	1550	580	178	248	350	450	675	745	825	1050	1050	1150	1550
250	1800	580	178	248	350	450	675	745	825	1125	1255	1350	1800
300	2050	580	178	248	350	450	675	745	825	1125	1355	1500	2050

Dimensions are for use as guideline only.

Tornado Direct Solar

With internal expansion air gap



J - Hot Water draw off

K - T&P Relief valve solar stat

L - Solars stat

M - Hot water draw off

N - Immersion heater 1³/₄

O - Immersion heater 1³/₄

P - Solar flow

Q - Aquastat pocket

R - Solar sensor

S - Cold water

T - Solar return

B/C

Capacity (LTR)	Height mm	Diameter mm	A	B	C	D	E	F	G	H	I
170	1325	580	178	248	350	450	550	750	950	1065	1325
200	1550	580	178	248	350	450	550	750	1050	1150	1550
250	1800	580	178	248	350	450	550	750	1255	1350	1800
300	2050	580	178	248	350	450	550	750	1355	1500	2050

Dimensions are for use as guideline only.

Commercial

Telford Copper & Stainless Cylinders have been a market leader in Hot Water Storage Solutions for over 25 years. We still manufacture every product in our UK facility, using the finest materials and highest standards of workmanship. Blending experience with vision, future-proof packages are available meaning Telford have a solution that works for everyone.

THE PAST Starting with a small workforce producing domestic copper cylinders, Telford grew quickly to be the leading supplier to the UK's biggest merchants and distributors. Based on firm and unwavering dedication to quality, the Telford brand became synonymous with quality and reliability, trusted across the UK.

THE PRESENT Telford are now an established leading supplier to the UK market for both Copper and Stainless cylinders. Our flagship Tempest range of Unvented Stainless cylinders is a popular and respected brand. Customers point to ease of fitting, reliability and a class-leading warranty and it set us apart from the rest. Our express delivery system allows distributors and merchants to supply installers quickly and efficiently. A range of delivery options are available to satisfy all parts of the supply chain.

THE FUTURE Renewable energies are very much the focus of our growing team. Building on a solid brand, Telford are able to offer a range of solutions that fit any project of size and budget. Partnering with leading manufacturers including Samsung, we bring to market affordable, world-class renewable products seamlessly integrated with our British Standard cylinders.



OEM

Telford Copper & Stainless Cylinders Ltd are proud to be the approved manufacturer of hot water storage solutions for many OEMs. Our British Standard certified manufacturing facilities are used to produce fully customisable and bespoke ranges for customers with very stringent expectations around quality, service and delivery.

Our OEM cylinders are built to the same high standards you would expect from a manufacturer with over 20 years experience. We work in close partnership with all clients, with a dedicated technical design team, to ensure the final product is attractively priced one you can be proud to put your name to. Also available in bespoke sizes and colours.

Specification

Telford Copper & Stainless Cylinders Ltd offer a free and fully qualified design and specification team for projects of any size. Working with main contractors, M&E companies, architects and designers, we are on hand to ensure every project has the correct Hot Water Solution, meeting both compliance and budget requirements.

We can design a Hot Water Solution around an existing specification, or work with you to build a bespoke system. Our British Standard products have been built to the highest standards for over 20 years, and blended with our experience of the renewables market we can bring the right solution to any project.

Contract Cylinders

For larger contracts we are able to supply our Hurricane range of unvented cylinders. Based on our flagship Tempest unit, the Hurricane is available for clients who require high quantities able to meet tight contract budgets.

Built to the same standards as all our unvented units, the Hurricane is perfect for large scale deployments and fitted with reliable, warranted components at project pricing. Speak to our sales team for full details.

Bespoke Cylinders

Manufacturing to order we pride ourselves on flexibility and our ability to provide our customers with cylinders exactly to their requirements, from dimensions, fittings, coil sizes and tapping layouts our bespoke cylinders can be on all of our variants

• Copper /stainless vented • Stainless unvented • Thermal stores • Buffer stores
If you require extra help with your specification, please do not hesitate to call our technical or sales team who will be happy to discuss your requirements.

Commercial Premises

When specifying one of our cylinders for use in commercial premises, i.e. hairdressers, restaurants, nursing homes, we recommend requesting a Titanium or 6Kw Immersion heater to be used within the product. For more information or technical requirements regarding these types of applications please Call our friendly technical department 01952 257961



Telford Buffer Stores

Buffer cylinders (also known as Buffer stores) are used to combine heat sources together in a single unit. The stored hot water, which would otherwise go unused, can be used to supply underfloor heating and radiators.

Air source heat pumps work efficiently with buffer stores as the return temperature of the water is lower than the regular flow an important feature because water below 5 degrees celcius will cause the pump to cut out.

Buffer Stores are also useful with solar as a heat source. A standard solar cylinder can only use energy created by the panels to heat domestic hot water, used with a buffer store that heat can also be used with radiators or underfloor heating.

At Telford, our bespoke service means we can manufacture buffer stores for any heat requirement, in sizes from 90Litre up to 4,000 Litres. (Cylinders up to 500L will have a white case finish, cylinders above this size a foam lagged finish).

The heat sources below can be connected to Buffer stores either individually or collectively, depending on your needs:

- Heat Pumps
- Boilers
- Solar and boiler
- Heat pump and Solar
- Solid fuel with sealed system coils or just solid fuel
- Biomass
- Communal heating systems



Calorifiers

Telford Copper & Stainless Cylinders also produce a wide range of bespoke or standard Calorifiers for commercial and industrial applications.

Our stainless steel version is available in 90-4000litre capacities and our copper from 30 to 1000litre.

We offer a range of bespoke options including:

- Custom dimensions (height and width)
- Connection sizes (standard compression fittings, BSP threaded bosses up to 2" or PN16 flanges up to DN250mm),
- Increased coil ratings/surface areas.
- Inspection hatches on stainless steel models.
- Connections in specific positions to your requirements for ease of installation
- Horizontal versions are also available
- Pressure rating from 3-6bar
- Single or Three phase immersions rated from 3-12kw.



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