

RANGE Tribune HE

Unvented Hot Water Cylinders



Making Life Simpler



Kingspan®





Meet the family

For over 80 years, Range have been synonymous with quality. The Range brand has embodied all the hallmarks of manufacturing excellence and product innovation.

All Range factories work to, and are accredited to, BS EN ISO 9001:2008.

Exhaustive research and development has culminated in the new Tribune HE family of Duplex stainless steel unvented cylinders. Tribune aims to set new benchmarks for quality, performance and endurance.

With over 50 models in its product range, there is sure to be a Tribune HE capable of fulfilling your needs today and long into the future.

- Duplex stainless steel for ultimate peace of mind
- Fully transferable 25-year guarantee
- High flow-rate controls - ideal for multiple bathrooms & powerful showers
- Fast reheat and high insulation values resulting in high efficiency
- A complete package - just add pipework

Standard unvented direct and indirect models 90-300 litres

Slimline unvented direct and indirect cylinders 60-210 litres

Solar unvented direct and indirect cylinders 150-300 litres

Pre-plumbed standard and solar unvented units 120-300 litre

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Lots of powerful hot water

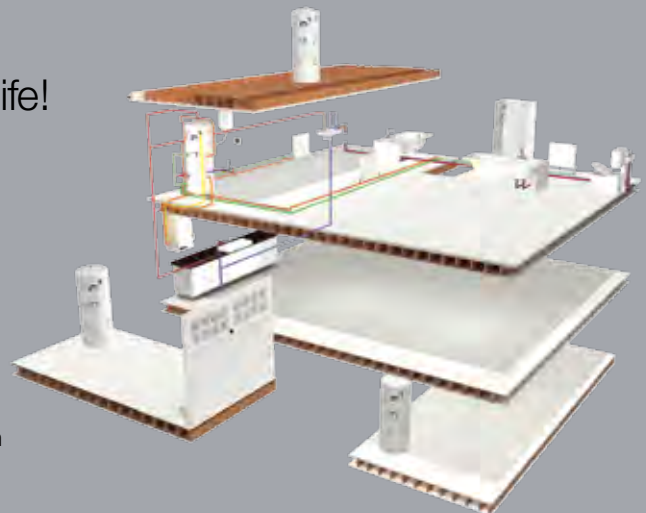
hour after hour, day after day, month after month... year after year!

Some applications simply require the best the market has to offer. In such a case specify a Range Tribune HE. No home need be without the outstanding user benefits that come as standard with every Tribune HE cylinder. Fantastic flow rates, assured reliability and extremely low running costs are just some of the benefits.

The Tribune HE is extremely flexible in terms of siting and will furnish powerful mains pressure hot water to multiple points around the home.

Choose Range Tribune HE - a cylinder for life!

- | | |
|---|---|
| » Mains Pressure | - Powerful Showers |
| » High Flow Rates | - Baths fill very quickly
- Ideal for multiple bathrooms |
| » Fast Reheat | - Hot water quickly available |
| » Very Well Insulated | - Low heat loss
- Economical to run |
| » Stove Enamelled Steel Outer Casing | - Smart, tough and wipe clean |
| » Low Maintenance | - No hidden costs |
| » 25-Year Fully Transferable Guarantee | - Peace of mind |

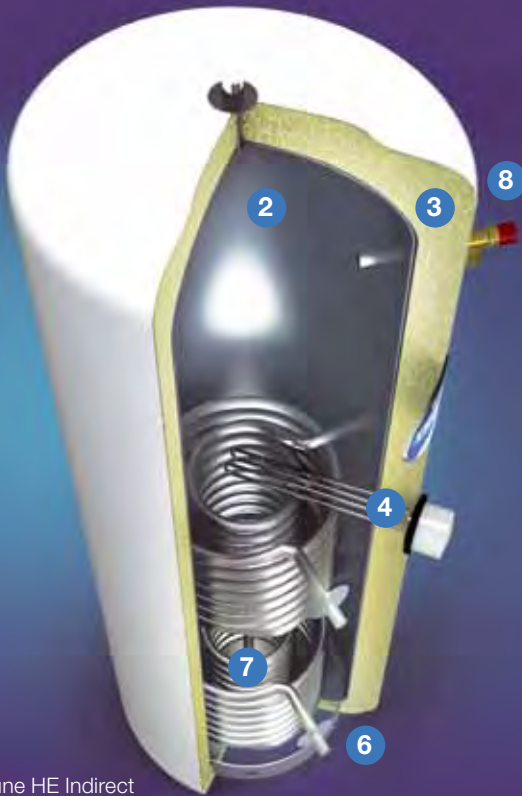


- | | |
|---|---|
| ■ - Hot water flow | ■ - Heated water flow in |
| ■ - Cold water flow | ■ - Heated water flow out |

4

RANGE

Its strength
is in its detail...



Tribune HE Indirect
Solar Cylinder Shown

The beauty of the Range Tribune HE is not only skin deep. Take a look inside. See for yourself how we've combined the highest manufacturing standards with tried and tested valves, control sets and thermostats from renowned manufacturers.

- 1 Appliance Quality Finish.
- 2 High quality Duplex stainless steel cylinder - pressure tested to 15 bar.
- 3 Totally insulated with 50mm thick HCFC & CFC-Free foam, exceeding CHeSS best standards. ODP Zero & GWP One.
- 4 Long-life & quiet incoloy immersion heater.
- 5 22mm hot water outlet.
- 6 22mm coil connections.
- 7 Primary coil-in-coil heat exchanger.
- 8 Temperature and pressure relief valve operating at 90°C/7 bar.
- 9 High quality controls.
- 10 Cold water inlet diffuser.



Duplex stainless steel - the only option

Duplex stainless steel, for so long reserved for the intense demands of chemical plants, forms the heart of every Tribune HE unit. Duplex offers superior corrosion resistance over copper, glass-lined steel and other lesser grades of stainless steel, particularly in aggressive water areas.

Duplex stainless steel is a special combination of Austenitic and Ferritic stainless steels. Its low-carbon, high-chromium composition is allied to careful design and state-of-the-art TIG welding equipment in our multi-million pound factory.

As a result Tribune HE is resistant to all forms of corrosion including crevice-corrosion, pitting-corrosion, uniform-corrosion and stress-corrosion cracking. Tribune's superior corrosion resistance is achieved without an anode and its associated maintenance worries.

Duplex stainless steel has a superior strength-to-weight ratio compared to copper or glass-lined steel. The Tribune HE has higher pressure ratings than copper whilst typically weighing less than half that of an equivalent glass-lined steel unit.

Duplex Stainless and The Environment

Duplex stainless steel is extremely environmentally friendly. As a material it is 100% recyclable. In fact over 90% of new stainless steel comes from old re-melted stainless steel. Stainless steel will go on to complete full life cycles indefinitely.



Duplex stainless steel
coil-in-coil heat exchanger and cold water inlet diffuser

Fully Transferable 25-year guarantee

All Range Tribune HE units are sure to offer their user a long operational life and with the absence of a sacrificial anode to inspect, maintain or replace, running costs are reduced. The units are backed by our fully transferable 25-year guarantee.



Expansion vessel
12 Ltr 18 Ltr 25 Ltr



High flow rate
inlet control set



Dual thermostat

Greater than the sum of its parts...

Cold Water Inlet Control Set

The inlet control set on every Tribune HE unit is of a well-proven 'high-flow' design, allowing flows in excess of 50ltr/min (where local conditions permit).

The set combines a pressure reducing valve, complete with strainer, non-return valve and expansion relief valve with provision for expansion vessel and balanced cold connections. The operating pressure is 3 bar, but the valve will continue to give good performance down to an inlet pressure of 1 bar.

Coil-in-Coil Heat Exchanger

With its large surface area you are assured of fast reheats. The smaller sizes of Tribune HE Indirect Units exceed the CHeSS Best Practice guidelines.

Either coil connection can be used as the inlet. Reheat performance is equally good either way.

In reaching right down to the bottom of the cylinder, the coil-in-coil heats the Tribune HE's entire capacity. A sophisticated cold water baffle helps preserve the stratification and prevent mixing during draw-off. As a result, a 150 litre Tribune HE produces 150 litres of hot water - as simple as that!

Environmentally Friendly Insulation

As you would expect, the Tribune HE is very well insulated. A class leading 50mm thick insulation layer surrounds the cylinder. Coupled with the close-fitting case, Tribune HE's heat loss is low. Heat loss figures meet CHeSS Best Practice guidelines for insulation. The insulation is CFC-Free, HCFC-Free and contains no ozone depleting chemicals with an ODP of Zero and GWP of One.

External Expansion Vessel - Flexible and Reliable

We have chosen to use an external expansion vessel for our Tribune HE. With no air bubble to lose, it promises improved reliability. Add flexible siting and reduced overall cylinder height and you have a winning combination.

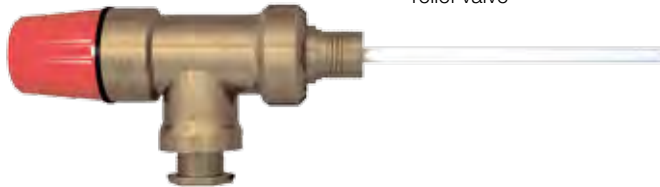
Comprehensive kit of parts with every unit

We've not cut corners in our kit of parts. You get all the components you need to complete the installation - just add pipework and fittings. This attention to detail means no lost time making a trip to the merchants and no hidden costs involved when you buy a Tribune HE.

Incoloy long life
3 kW immersion heater



Temperature and pressure
relief valve



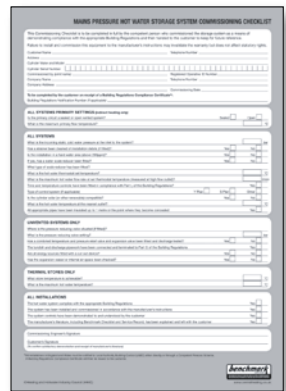
Acetal tundish 15 x 22 mm



Two port valve



Installation & Maintenance
Instructions



Benchmark Log Book

You get it all...

Tribune HE comes complete with all the fittings you need to complete the installation:

**DIRECT MODELS
(ELECTRIC)**

- Inlet control set
- Temp & pressure relief valve
- 15mm / 22mm Tundish
- Expansion vessel
- 2 x 3kW immersion heaters (1 on 60ltr & 90ltr)
- Installation & Maintenance Instructions
- Benchmark Log Book

**INDIRECT MODELS
(GAS, OIL OR ELECTRIC)**

- Inlet control set
- Temp & pressure relief valve
- 15mm / 22mm Tundish
- Expansion vessel
- 1 x 3kW immersion heater (2 x 3kW on 250 & 300 ltr)
- Two port valve
- Dual thermostat
- Installation & Maintenance Instructions
- Benchmark Log Book

**DIRECT SOLAR MODELS
(ELECTRIC)**

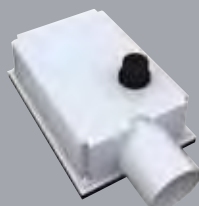
- Inlet control set
- Temp & pressure relief valve
- 15mm / 22mm Tundish
- Expansion vessel
- 2 x 3kW immersion heaters
- 1 x Two port valve
- 1 x Single high limit thermostat
- Installation & Maintenance Instructions
- Benchmark Log Book
- 2 x Sensor pocket retaining bungs

**INDIRECT SOLAR MODELS
(ALTERNATIVE ENERGY
SOURCE)**

- Inlet control set
- Temp & pressure relief valve
- 15mm / 22mm Tundish
- Expansion vessel
- 1 x 3kw immersion heater
- 2 x Two port valves
- 1 x Dual thermostat
- 1 x Single control thermostat
- 1 x Single high limit thermostat
- Installation & Maintenance Instructions
- Benchmark Log Book
- 2 x Sensor pocket retaining bungs



Single control thermostat
(Supplied with Indirect Solar only)



Single high limit thermostat
(Supplied with Direct & Indirect
Solar only)

For Spare Parts call: 01924 376026

Domestic selection guide

These recommendations are based on the guidelines in BS 6700. Guidance should be sought for unusual applications. Eg: High flow-rate showers, large baths etc.

Hot Water Demand	Bedrooms	Indirect units	Direct units
1 Standard Bath or Shower	Bedsit / 1 Bed	60/90	150
	2 – 3 Bed	120	180
	3 – 4 Bed	150	210
1 Standard Bath	2 – 3 Bed	120	180
	3 – 4 Bed	150	210
1 Bath and En-suite	2 – 3 Bed	150	210
	3 – 4 Bed	150	210
	4 – 5 Bed	180	250
2 Standard Baths	2 – 3 Bed	180	210
	3 – 4 Bed	180	210
	4 – 5 Bed	210	250
3 Bathrooms	3 – 4 Bed	250	300
	4 – 5 Bed	250	300
	5 – 6 Bed	300	300

Commercial selection guide

These recommendations are based on the guidelines in BS 6700. Guidance should be sought for unusual applications. Eg: High flow-rate showers, large baths etc.

Typical Commercial Application	Indirect units
Large House - 6 bed / 4 Bathrooms	2 x 210
Guest House - 8 bed / 4 Bathrooms	2 x 300
Small Hotel - 8 bed / 8 Bathrooms	3 x 210
Sports Pavilion (25 people / 4 showers)	2 x 300
Sports Pavilion (25 people / 6 showers)	3 x 210
Student House (25 people / 3 bathrooms)	3 x 300
Old People's Home (60 beds / 10 bathrooms)	5 x 300 each supplying 2 bathrooms

Example illustration

A school swimming pool has 5 showers in each of two changing rooms. The shower heads are flow-restricted to 9 ltrs per minute ($\frac{2}{3}$ rds of this will be hot water). Usually there are 3 one hour lessons each morning and three each afternoon. Assuming a class size of 30 children.

Maximum demand = 10 shower heads x 9 litres / min = 90 litres / min. This is more than one Tribune HE can supply.

At least two Tribune HEs will be needed to provide this (see flow rates graph) Total demand = 30 children x 6 litres / minute x 5 minute shower each = 900 litres

3 x 300 litre units will be required

Reheat time has to be a maximum of one hour so it is reheated in time for the next lesson. A TI300 can reheat its entire contents in 60 minutes with a boiler power of 15 kW. So total boiler power required = 45 kW. If direct units were used they would have to be fitted with immersion heaters rated at 15 kW (typically 1 x 9 kW + 1 x 6 kW).



Using Tribune HE units in parallel

For applications where very high flow rate or larger amounts of storage are required, two or more Tribune HE units can be linked in parallel.

When linking two cylinders, a separate cold feed is taken to each one and the outlets are joined together. The flow rate available doubles (subject to the cold main).

The demand for hot water will vary considerably between types of buildings and the activities taking place there.

For Example:

An office building will require small quantities frequently to many outlets during normal & overtime office hours.

A factory production line will have a peak demand at the breaks in the shift or at the end when the work force may all want to wash their hands simultaneously.

A Sports Pavilion will need to be able to provide large quantities of hot water for the teams' showering needs over a short period of time after the game.

So your selection must take into account a number of things:

1. The maximum simultaneous hot water demand.
2. The total hot water demand required.
3. The required system reheat time.



Applications using Tribune HE Solar units (Also suitable for other renewable energy sources)

Tribune HE Indirect Solar units can be used in various ways:

1. To couple two different boilers up to the Tribune HE
2. For systems with solar heating. Solar heat is fed in via the lower coil.
3. Bio-mass
4. Micro-CHP

IMPORTANT NOTE

It is a requirement of building regulations that any heat sources connected to an unvented cylinder (such as Tribune HE) are under full thermostatic control and are able to turn themselves COMPLETELY off.

As a result you cannot connect an Aga (or equivalent) or a solid fuel stove to a Tribune HE.

Installation

Regulations

All unvented units with a capacity over 15ltr must be installed by a competent installer in accordance with the following Regulations:

England and Wales – Building Regulation G3

Scotland – Technical Standard P3

N Ireland – Building Regulation P5

Siting

With no header tanks to consider, Tribune HE units can be sited almost anywhere in the house. Tribune HE can supply outlets both above and below its location. Tribune HE must be fixed VERTICALLY on a flat surface capable of holding its (full) weight.

Water Supply

An adequate mains water supply is vital to ensure Tribune HE produces the high performance of which it is capable. We recommend a minimum supply of 1.0 bar with a flow rate of 25 litres/min. The maximum supply pressure is 16 bar.

Compatible Boilers

Gas, electric or oil fired boilers fitted with an integral control thermostat and cut-out. Any heat source that lacks full thermostatic control such as most solid fuel boilers, Agas, Rayburns and Stanleys cannot normally be connected to any unvented system.

The Primary circuit may be Open Vented or Sealed (operating at up to 7 bar). The primary circuit must be pumped.

Connection Sizes

Cold Inlet - 22mm compression.

Hot Outlet - 22mm compression.

Coil connections - 22mm compression.

Safety Valves - 15mm compression outlet.

Inlet Control Set - 22mm compression inlet and outlet.

Tundish - 15mm compression inlet / 22mm compression outlet.

Secondary Return

A dedicated 22mm secondary return connection is fitted to 210, 250 and 300 litre sizes. A swept tee (not supplied) could be used to provide a secondary return on the smaller sizes.

Electrical Wiring

Controls should be wired to the boiler / programmer etc. in accordance with the control scheme being used. Although compatible with Y, W or S Plan layouts, Tribune HE units are perhaps best suited to installation as an S Plan since we already supply one of the two port valves necessary, so reducing installation costs compared to other plans.

Each immersion heater must have a permanent connection via a double pole-linked isolating switch with a minimum rating of 13 amps. All electrical wiring must comply with the latest IEE wiring regulations.





Indirect reheat performance

CAPACITY	REHEAT TIME	COIL kW RATING
90	11.26 minutes	15.78 kW
120	14.04 minutes	18.35 kW
150	15.55 minutes	19.07 kW
180	19.94 minutes	20.28 kW
210	22.00 minutes	23.08 kW
250	26.96 minutes	24.40 kW
300	33.25 minutes	24.87 kW

The reheat performance is measured from 15°C to 65°C after drawing off 70% of the capacity. The coil kW rating is a guide to the minimum size of boiler required to achieve the reheat times stated.

Direct reheat performance

MODEL	REHEAT TIME (2 x 3kW Elements)
120	45 minutes
150	61 minutes
180	79 minutes
210	96 minutes
250	112 minutes
300	132 minutes

Immersion heaters

Tribune HE units are fitted with Immersion Heaters as follows:

SIZE	DIRECT	INDIRECT
60/90 Litre	1 x 3kW Immersion Heater	1 x 3kW Immersion Heater
120/150 Litre	2 x 3kW Immersion Heaters	1 x 3kW Immersion Heater
180/210 Litre	2 x 3kW Immersion Heaters	1 x 3kW Immersion Heater
250/300 Litre	2 x 3kW Immersion Heaters	2 x 3kW Immersion Heaters

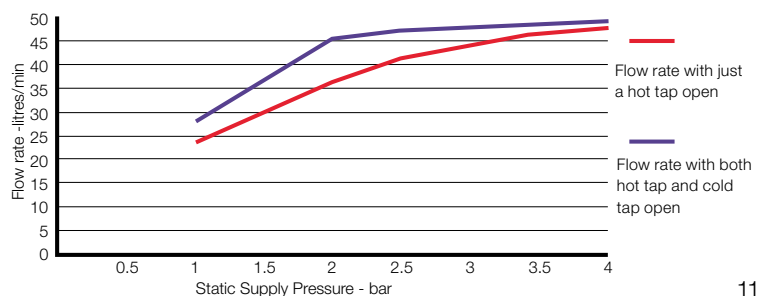
Immersion Heater options

6kW & 9kW in units at 210 litre and above can be specified.

In non-domestic (Commercial, Industrial and multiple accommodation units) applications high quality Titanium immersion heaters are recommended.

Flow rates

Tribune HE Unvented Pressure v Flow Performance
(measured at 50% Backpressure to simulate the effect of the draw-off pipework and taps)



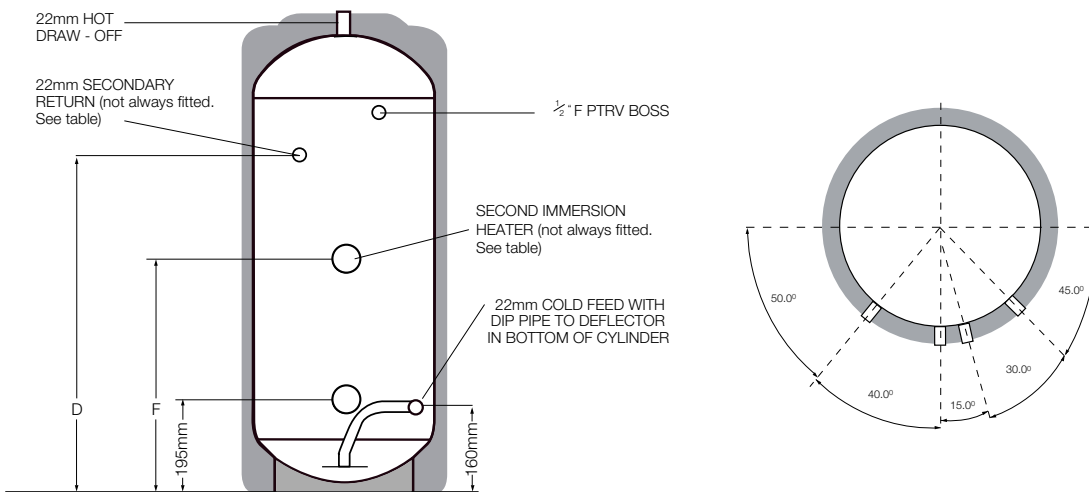


Range Tribune HE Unvented Standard Direct and Indirect Cylinders

With over 50 models in the product range there is a Tribune HE capable of fulfilling your needs today and long into the future.

Technical Specifications

DIRECT

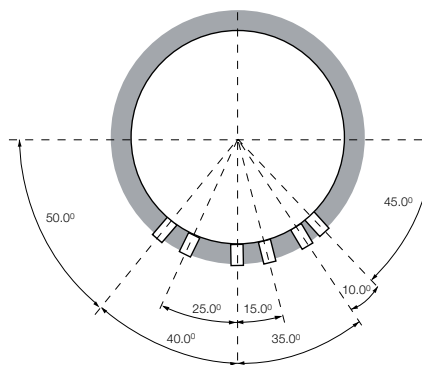
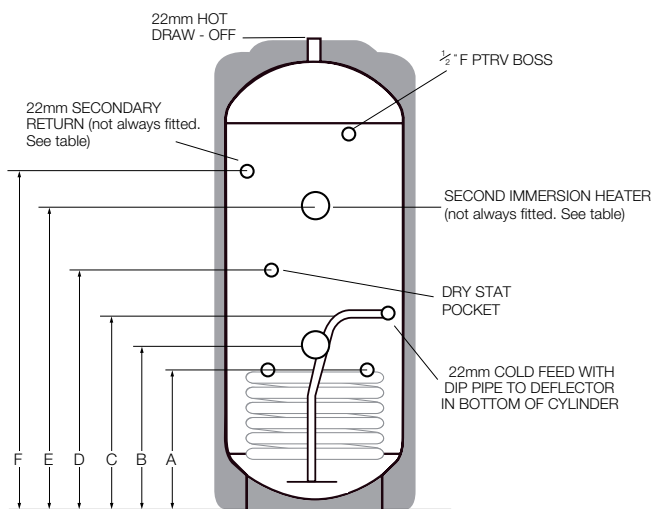


CODE	CAPACITY (Litres)	HEIGHT	DIAMETER	D	F	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TD90	90	718	550	N/F	N/F	25	115
TD120	120	906	550	N/F	510	30	150
TD150	150	1093	550	N/F	610	35	185
TD180	180	1281	550	N/F	710	40	220
TD210	210	1469	550	1000	810	45	255
TD250	250	1719	550	1250	950	50	300
TD300	300	2032	550	1500	1100	55	355

All Dimensions are in mm and are of the cased unit.
N/F = not fitted.

Technical Specifications

INDIRECT



CODE	CAPACITY (Litres)	HEIGHT	DIAMETER	A	B	C	D	E	F	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TI90	90	718	550	290	330	390	345	N/F	N/F	30	120
TI120	120	906	550	290	330	390	345	N/F	N/F	35	155
TI150	150	1093	550	330	370	465	385	N/F	N/F	40	190
TI180	180	1281	550	330	370	465	385	N/F	N/F	45	225
TI210	210	1469	550	365	405	465	465	N/F	1150	50	260
TI250	250	1719	550	365	405	465	560	950	1400	55	305
TI300	300	2032	550	365	405	465	660	1100	1600	60	360

All Dimensions are in mm and are of the cased unit.

N/F = not fitted.

RANGE



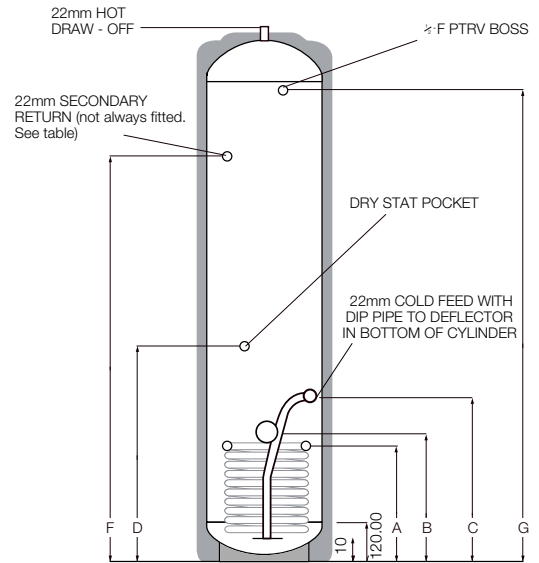
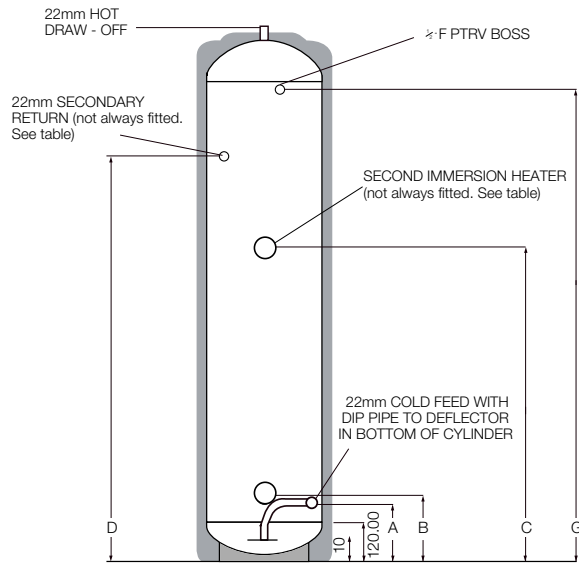
Range Tribune HE Slimline Unvented Direct and Indirect Cylinders

Thanks to the new Tribune HE Slimline from Range Cylinders, many older homes, despite their original design limitations, can now enjoy the benefits of having an unvented cylinder, which are typically around 550mm in diameter. The new family of Tribune HE Slimline cylinders have a nominal diameter of only 478mm and come in a range of sizes from 60 litres to 210 litres in both indirect

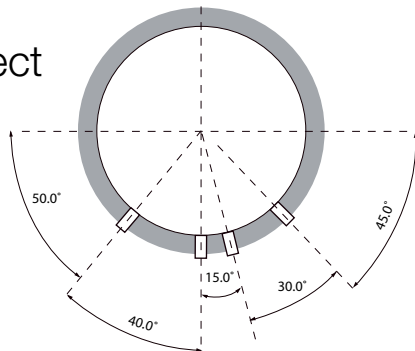
and Direct versions. This reduced cylinder diameter means that houses that previously could not enjoy mains pressure hot water (and balanced cold) can now enjoy the benefits of modern style showers, aerated mixer taps etc. for the first time. All the endurance and performance characteristics that have made Tribune HE a market favourite - now available in Slimline. Now that fits the bill.

Technical specifications

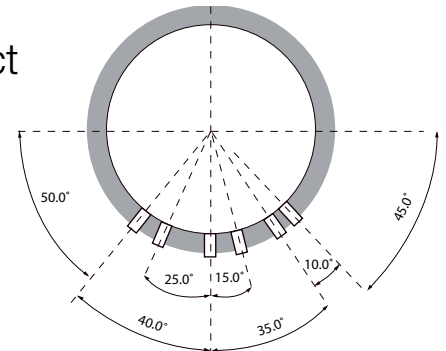
SLIMLINE UNITS



Direct



Indirect



Direct

CODE	CAPACITY (Litres)	HEIGHT	DIAMETER	A	B	C	D	G	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TDS60	60	673	478	175	210	N/A	N/A	483	34	94
TDS90	90	1048	478	175	210	610	N/A	858	43	133
TDS120	120	1236	478	175	210	710	N/A	1046	52	172
TDS150	150	1424	478	175	210	810	N/A	1234	60	210
TDS180	180	1647	478	175	210	910	N/A	1484	68	248
TDS210	210	1987	478	175	210	1110	1500	1797	74	284

Indirect

CODE	CAPACITY (Litres)	HEIGHT	DIAMETER	A	B	C	D	F	G	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TIS60	60	673	478	340	380	440	395	N/A	483	40	100
TIS90	90	1048	478	340	380	440	395	N/A	858	50	140
TIS120	120	1236	478	340	380	440	395	N/A	1046	58	178
TIS150	150	1424	478	380	420	520	520	N/A	1234	66	216
TIS180	180	1647	478	380	420	520	610	N/A	1484	74	254
TIS210	210	1987	478	380	420	520	710	1500	1797	82	292

N/F = not fitted.

All Dimensions are in mm and are of the cased unit.





Range Tribune HE Solar Unvented Direct and Indirect Cylinders

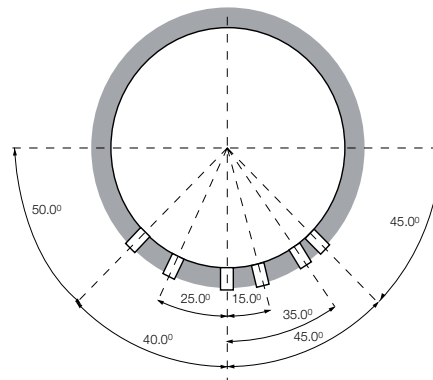
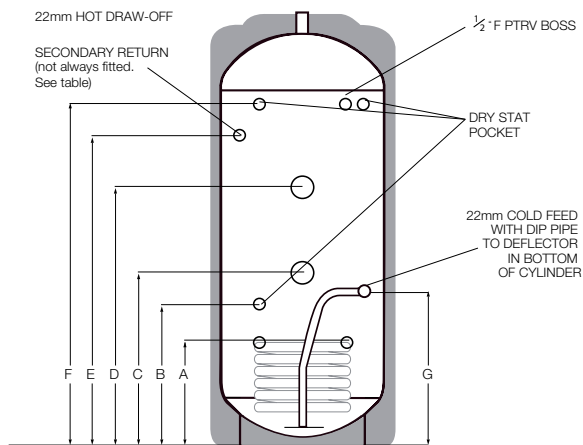
Range Tribune HE Solar cylinders have been designed specifically with Solar applications in mind and are based on the highly successful Range Tribune unvented units. Featuring a purpose designed solar coil which allows maximum heat transfer of solar energy into the stored water, the cylinders are suitable for use with a wide range of solar systems now available in the UK and are an efficient and environmentally friendly way of providing domestic hot water.

Tribune HE Solar cylinders also offer the benefit of mains pressure hot water – powerful showers and fast filling baths. Range Tribune HE Solar cylinders are available in a range of sizes from 150 to 300 litres and in Direct or Indirect versions.

As with the rest of the Range Tribune HE family, Tribune HE Solar cylinders are manufactured from high grade Duplex stainless steel and come with a 25-year fully transferable Guarantee on the inner container.

Technical specifications

DIRECT SOLAR



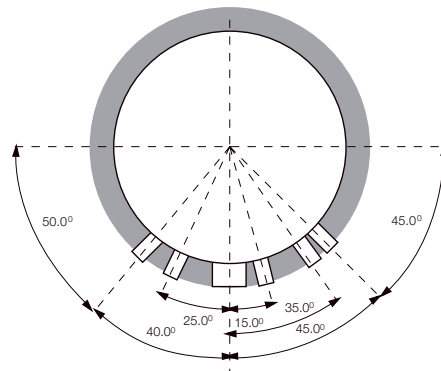
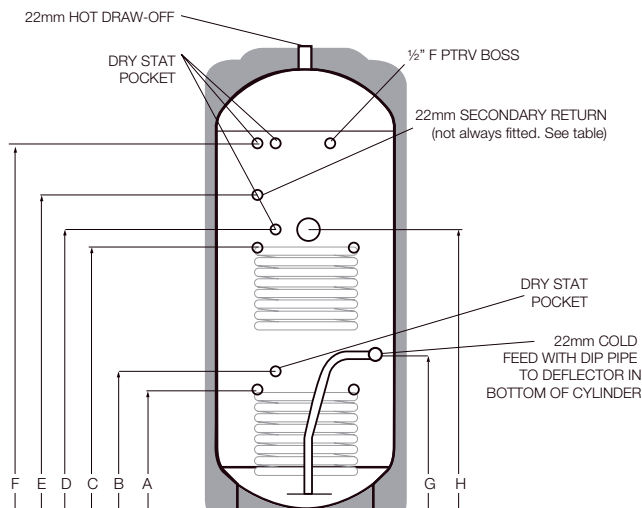
CODE	CAPACITY (Litres)	HEIGHT	DIAMETER	A	B	C	D	E	F	G	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TSS150	150	1093	550	290	345	390	610	N/F	892	390	40	190
TSS180	180	1281	550	290	345	445	710	N/F	1080	390	45	225
TSS210	210	1469	550	365	420	500	810	1150	1268	465	50	260
TSS250	250	1719	550	365	420	670	1045	1400	1519	465	55	305
TSS300	300	2032	550	365	420	670	1100	1600	1831	465	60	360

N/F = not fitted.

All Dimensions are in mm and are of the cased unit.

Technical specifications

INDIRECT SOLAR



CODE	CAPACITY (Litres)	HEIGHT	DIAMETER	A	B	C	D	E	F	G	H	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TT150	150	1093	550	290	345	642	697	N/F	892	390	693	45	195
TT180	180	1281	550	290	345	674	729	N/F	1080	390	725	50	230
TT210	210	1469	550	365	420	779	834	1150	1268	465	830	55	265
TT250	250	1719	550	365	420	950	1005	1400	1518	465	1000	60	310
TT300	300	2032	550	365	420	979	1034	1600	1831	465	1030	65	365

N/F = not fitted.

All Dimensions are in mm and are of the cased unit.

Range Solar Cylinders are designed to accept heat input from a renewable/sustainable (ie: Solar) heat source.

Where this input does not fully meet the desired temperature, a guaranteed quantity of water can be heated to an acceptable temperature by the householders' traditional heat source of gas, oil or electricity.

The Domestic Heating Compliance Guide document L1A and L1B provides excellent advice in sizing both cylinder designated solar areas and heat exchangers to the surface area of the solar collectors. Using this guide Range are able to offer sizing advice for specification.

Water Capacities (litres)

Model	Designated Solar Volume	Fossil Fuel Volume	Total Capacity
TT150/TSS150	45	105	150
TT180/TSS180	55	125	180
TT210/TSS210	65	145	210
TT250/TSS250	90	160	250
TT300/TSS300	100	200	300

Lower (Solar) Coil Specification

Model	Surface Area (m ²)	Fluid Content (litres)
TT150/TSS150	0.670	3.687
TT180/TSS180	0.670	3.687
TT210/TSS210	0.860	4.826
TT250/TSS250	0.860	4.826
TT300/TSS300	0.860	4.826

NB: The total detail of Domestic Heating Compliance Guide document should be consulted prior to specifying product or commencing design.

Foam Insulation and Heat Loss

All stainless unvented Tribune HE products utilise the latest foam injection which provides significant improvements in standing heat loss values:

Model (Capacity)	Standing Heat Loss (kWh/24hrs)
90ltr	0.83
120ltr	1.05
150ltr	1.31
180ltr	1.60
210ltr	1.85
250ltr	2.10
300ltr	2.31

In addition our insulation process offers benefits to the 'green' specifier.

Ozone Depletion Potential (ODP) ZERO

Global Warming Potential (GWP) ONE



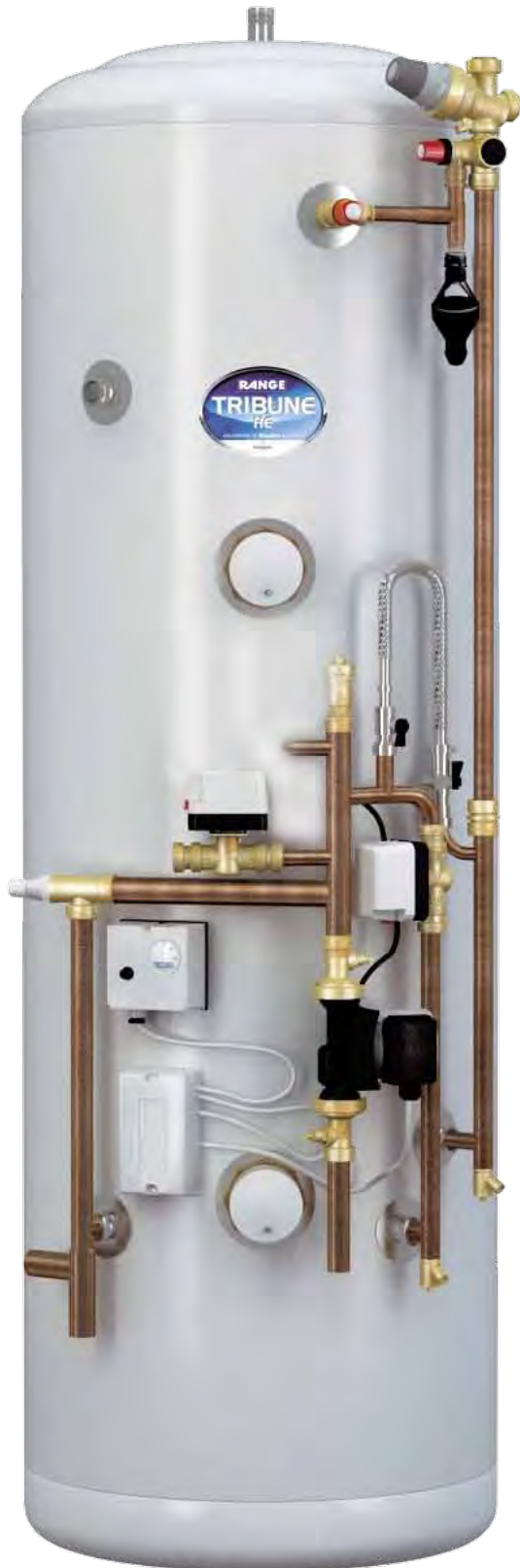
Range Tribune HE Pre-plumbed Unvented Indirect Standard and Solar Cylinders

Tribune HE indirect standard and solar models are available in a highly popular plug-in, re-plumbed format - designed to significantly reduce the installation time. The units are factory assembled and are both pre-plumbed and pre-wired with 230V central heating controls, a pump, 2 x two port motorised valves, automatic bypass and a balancing valve. All units are also supplied with programmer, room stat and both a central heating & hot water expansion vessel pack.

Twin zone models come with an extra two port valve for underfloor heating and additional programmable room thermostat.

This pre-plumbed Tribune HE will not only speed up the installation process, but will also increase the quality and integrity of the central heating system. This results in an elimination of costly call-backs.

The Ultimate Plug-in, Pre-Plumbed Solution



Features

- » Standard Indirect Models: 120, 150, 180, 210, 250 and 300 litre capacity
- » Indirect Solar Models: 180, 210, 250 and 300 litre capacity
- » Seven day programmer and room thermostat with timed domestic hot water (DHW) control
- » Separate central heating and hot water zones
- » No maintenance three speed circulating pump
- » Automatic bypass valve for system efficiency
- » Load balancing valve for indirect coil efficiency
- » Connections for vented and unvented heating primaries
- » Central heating expansion vessel pack
- » Plug-in electrical connections for all controls

Benefits

- » Simplified on-site installation
- » Up to 70% quicker to install
- » Factory assembled for reliability - reduces costly call-backs and delays
- » Consistent electrical and plumbing layout - neat, professional finish
- » Greater customer satisfaction
- » ISO 9001:2008 quality assured
- » No tanks in the roof space & only requires a standard boiler
- » Aids with Part P (Electrical wiring) as installer doesn't need an electrician on site to change any components, simply plug & go!

ISO 9001:2008 Quality Assured Assembly

- Consistent electrical and plumbing layout
- Brazed pipework fabrication
- Neat and tidy layout
- Pre-wired and pre-plumbed

Specification list

The pre-plumbed Tribune HE System is manufactured from high grade materials inside and out, offering exceptional performance and reliability.

Separate Central Heating and Hot Water Configuration

- 22mm motorised valve to radiator circuit
- 22mm motorised valve to coil heat exchanger
- Wiring centre
- Hot water temperature thermostat
- Seven day programmer and room thermostat with timed domestic hot water (DHW) control



The new advanced controls are now supplied with all pre-plumbed cylinders:

- The TP9000 advanced controller now acts as programmer and room thermostat in a single unit.
- Reduced installation time.
- Fully compliant with Part L Building Regulations.
- This acts as a 'load compensator' and 'delayed start' device ensuring the boiler's 'ON' time is reduced to a minimum.
- These additional features score in SAP software by reducing both energy cost and carbon emissions.

The twin zone Tribune has all the benefits of the single zone with the following additional features:

- Only Twin Zone models have built in 2nd heating zone valve, fully wired & plumbed.
- The additional TP5000 Si room thermostat provides programmable time and temperature control for the 2nd zone.
- Individual zones – allows flexible time programming and freedom to choose different temperatures at different times of the day.
- Additional SAP software benefits of 'Twin Zone' heating.
- Twin zone heating is compulsory in homes over 150 sq metres as per the Domestic Heating Compliance Guide.

High Performance Configuration

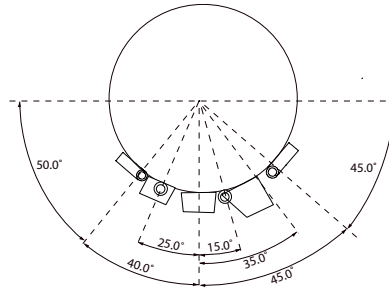
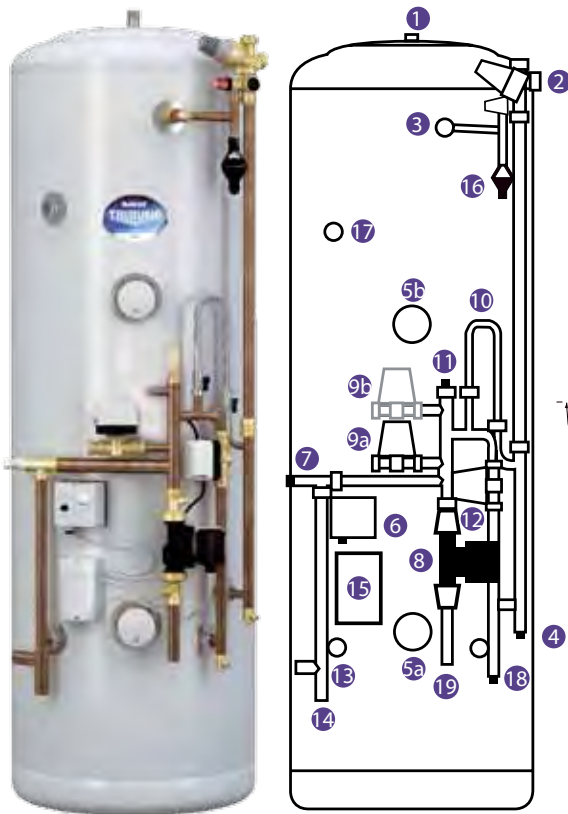
- Automatic bypass valve
- Three speed circulating pump with high quality isolating valves
- Balancing valve
- 22mm cold water combination valve (supplied loose)
- Combined expansion valve/check valve housing
- 22mm hot outlet to taps
- 28mm primary flow
- 28mm primary return
- Immersion heater with integral thermostat and thermal cut-out
- Drain cocks
- Comes complete with central heating expansion vessel pack and pressure gauge

Comprehensive Safety Controls

- Temperature and pressure relief valve operating at 90°C / 7 bar
- 22mm tundish outlet
- High limit hot water thermal cut-out



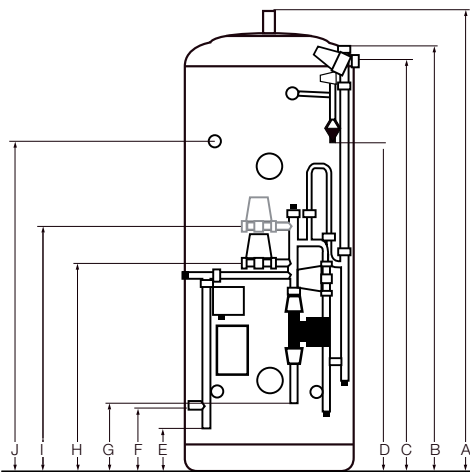
INDIRECT PRE-PLUMBED



Technical specifications

Connections:

1. 22mm Hot Water Draw-Off
2. Inlet Control Set
3. Temperature Relief Valve
4. Cold Feed Drain Elbow
- 5a. Immersion Heater 3kW
- 5b. Immersion Heater 3kW on 250L & 300L cylinders only
6. Dual Thermostat
7. 22mm Auto Bypass Valve
8. Circulating Pump
- 9a. Central Heating Flow Two Port Valve Zone 1
- 9b. Central Heating Flow Two Port Valve Zone 2 (Optional - supplied only with Twin Zone models)
10. Filling Loop Flexible Hose
11. Manual Bottle Air Eliminator
12. 22mm DHW Two Port Valve
13. 28mm Return from Radiator Circuit
14. 28mm Return to Boiler
15. Wiring Centre
16. Tundish
17. Secondary Return on 210L, 250L & 300L cylinders only
18. DHW Drain
19. 28mm Flow to Boiler



CODE*	CAPACITY (Litres)	HEIGHT	DIAMETER	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TI120P4	120	906	550	45	165
TI150P4	150	1093	550	50	200
TI180P4	180	1281	550	55	235
TI210P4	210	1469	550	60	270
TI250P4	250	1719	550	65	315
TI300P4	300	2032	550	70	370

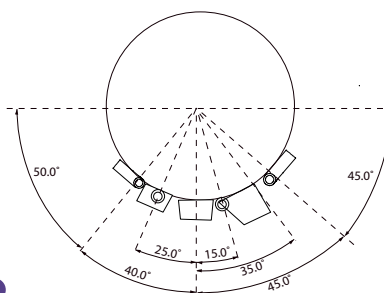
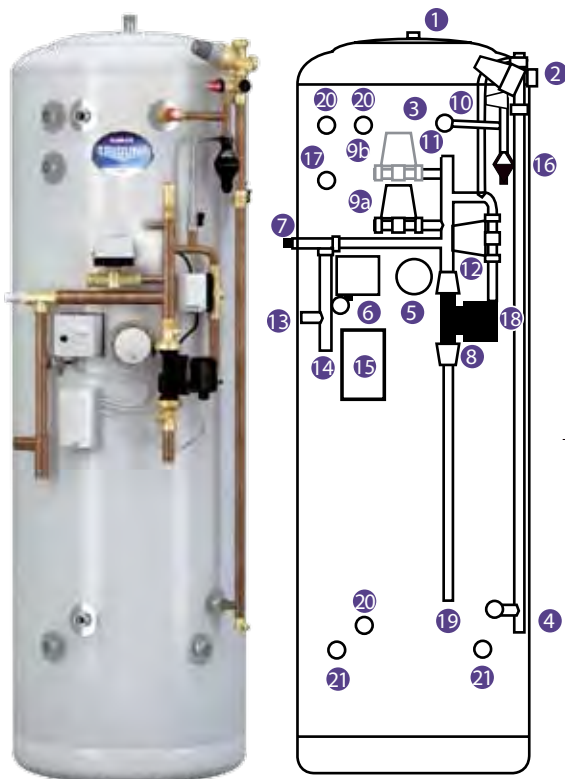
CODE*	A	B	C	D	E	F	G	H	I	J
TI120P4	922	883	836	573	171	246	102	470	590	N/F
TI150P4	1109	1070	1023	760	211	286	140	508	628	N/F
TI180P4	1297	1258	1211	948	211	286	320	690	810	N/F
TI210P4	1485	1446	1399	1136	246	321	320	690	810	1150
TI250P4	1735	1696	1649	1386	246	321	320	690	810	1400
TI300P4	2048	2009	1962	1699	246	321	418	784	904	1600

24 All Dimensions are in mm and are of the cased unit. N/F = not fitted.

*For Twin Zone models please replace 'P4' at the end of product code with 'PT4', e.g. TI120PT4.

RANGE

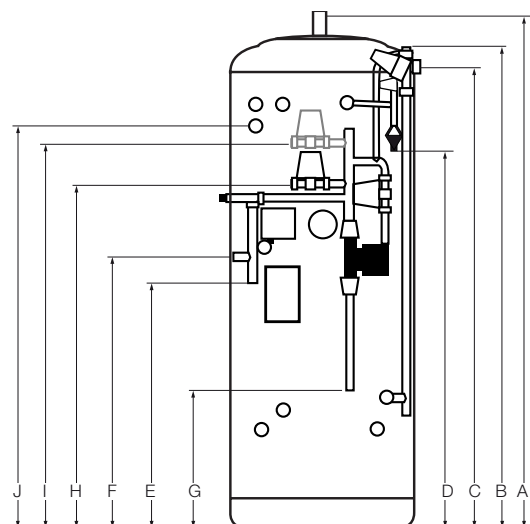
INDIRECT SOLAR PRE-PLUMBED



Technical specifications

Connections:

1. 22mm Hot Water Draw-Off
2. Inlet Control Set
3. Temperature Relief Valve
4. Cold Feed Drain Elbow
5. Immersion Heater 3kW
6. Dual Thermostat
7. 22mm Auto Bypass Valve
8. Circulating Pump
- 9a. Central Heating Flow Two Port Valve Zone 1
- 9b. Central Heating Flow Two Port Valve Zone 2 (Optional - supplied only with Twin Zone models)
10. Filling Loop Flexible Hose
11. Manual Bottle Air Eliminator
12. 22mm DHW Two Port Valve
13. 28mm Return from Radiator Circuit
14. 28mm Return to Boiler
15. Wiring Centre
16. Tundish
17. Secondary Return on 210L, 250L & 300L cylinders only
18. DHW Drain
19. 28mm Flow to Boiler
20. Stat Pocket
21. Solar Coil Connections



CODE*	CAPACITY (Litres)	HEIGHT	DIAMETER	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
TT180P4	180	1281	550	60	240
TT210P4	210	1469	550	65	275
TT250P4	250	1719	550	70	320
TT300P4	300	2032	550	75	375

CODE*	A	B	C	D	E	F	G	H	I	J
TT180P4	1297	1258	1211	948	560	635	480	850	970	N/F
TT210P4	1485	1446	1399	1136	665	740	585	955	1075	1150
TT250P4	1735	1696	1649	1386	830	905	770	1130	1250	1400
TT300P4	2048	2009	1962	1699	859	934	799	1159	1279	1600

All Dimensions are in mm and are of the cased unit. N/F = not fitted

*For Twin Zone models please replace 'P4' at the end of product code with 'PT4', e.g. TT180PT4.

Products List

Kingspan offer a complete range of renewable energy and related products for both domestic and commercial applications. Our complete solar package solutions include initial advice, professional design specifications and technical assistance through to a network of fully trained Kingspan Solar Accredited Installers who are kept up-to-date with the latest regulations and available grants.

Our range of products consists of:

RANGE

Range Cylinders manufacture open vented copper cylinders in over 400 different sizes, types and styles. They are designed to heat up quickly and to retain their heat for long periods, offering a good economical system for domestic applications.

Range of products includes Solarmax - a double feed indirect twin coil cylinder for use with solar collectors. Bottom coil is designed to accept input from a renewable heat source. When this input is not sufficient, the water can be heated by traditional gas, oil or electric boiler.



Albion AEROCYL

Albion Aerocyl is the new range of copper unvented hot water cylinders and buffer tanks. The cylinders have been designed specifically to be installed in conjunction with a heat pump only or a solar thermal system and additional input from a heat pump. Manufactured from high grade copper, Aerocyl unvented cylinders feature energy efficient, CFC and HCFC-free foam insulation for low standing heat loss and are environmentally friendly way of providing Domestic Hot Water.

Aerocyl buffer tank is integrated into the space heating system when additional volume of hot water is required to provide smooth and uninterrupted operation of a heat pump and prevent the radiators or underfloor heating from cooling during the heat pump defrost cycle. They are available for both open vented and sealed systems in a range of capacities to suit different size heat pumps available in the UK.



Albion Manchester Calorifiers

Exceeding the Standard

Albion Water Heaters and Manchester Calorifiers design and manufacture a large range of open vented and unvented calorifiers for commercial and industrial use in copper, stainless steel and mild steel. They also offer marine calorifiers and hot water provision for light commercial vehicles. All products feature high quality, durability and exceptional performance.

For maximum efficiency, units can be custom-designed for each specific application. A renewable heat source, e.g. solar panels, can also be incorporated into the system and sized to meet the heating and hot water requirements of the property.



RANGE

Kingspan AEROMAX PLUS

Aeromax Plus heat pumps use natural heat from the air outside to provide central heating (underfloor heating or traditional radiators) and/or hot water for your home.

Highly efficient, the units are compact and easy to install. Incredibly quiet, they require virtually no maintenance.

Offered with complete package solutions and can be coupled with the highly efficient Albion Aerocyl renewable energy cylinder to maximise efficiency benefits.



Kingspan SOLAR

Kingspan Solar provides the commercial and domestic markets with an ultimate solar package, custom-designed to suit requirements of each individual application.

The Package incorporates high quality flat plate solar thermal panels or high performance Thermomax evacuated tube solar collectors. The system can incorporate the latest condensing boiler technology, underfloor heating or the traditional radiator system. It is then coupled to a high performance Range Tribune HE Duplex stainless steel solar cylinder. The package includes all components required to complete the installation.



Kingspan Training

Sustainable energy systems have become an important area for the building services industry. Understanding how to utilise these systems and applications is seen as key in meeting the future needs of both commercial and domestic heating.

Kingspan Training Centre, offer a range of courses that have been specifically designed to provide experienced heating, plumbing, installation and building professionals with a real understanding of the potential for renewable energy systems installations.

The hands-on courses range from one to four days and cover wide array of subjects from unvented hot water systems through solar thermal applications to heat pumps. They are open to installers with relevant industry experience and offer an industry standard qualification by gaining LOGIC certification and help towards gaining MCS accreditation.



Tribune HE Unvented Cylinders

Specification Summary



Materials

Inner shell - Duplex Stainless Steel
Coil - 22mm Diameter Stainless Steel
Bosses - Stainless Steel
Every Tribune HE is water tested to a pressure of 15 bar.



Insulation

Polyurethane foam, nominal thickness 50mm.
The foam is CFC-Free and HCFC-Free.
The foam has an Ozone Depletion Potential of Zero and a Global Warming Potential of One.



Casework

Zintec corrosion proofed steel throughout
Durable, stove enamelled, gloss white paint finish



Anode

None fitted / none required



Expansion Vessel

12 Litre size with 60, 90, 120 and 150 Litre models
18 Litre size with 180, 210 and 250 Litre models
25 Litre size with 300 Litre model

WRc-NSF Ltd
Building Regulations Approved



Control Settings

Pressure Reducing Valve - 3 Bar
Expansion Relief Valve - 6 Bar
Pressure and Temperature Relief Valve - 7 Bar/90°C
High Limit Thermostat in Dual Thermostat - 85°C
High Limit Thermostat in Immersion Heater - 85°C

Immersion Heater

1½" BSP Parallel Threaded Head
Long Life Incoloy Sheathed Low Noise Element 14" Long
Long Life Incoloy Sheathed Thermostat Pocket 11" Long
Braze Construction
11" Combined Thermostat and Safety Cut-Out
Element Rating 3kW at 240V A/C

Approvals

WRAS Approved to the Water Regulations
WRc-NSF Approved to Building Regulations G3 & L
CE Compliant and fitted with a BEAB Approved Immersion Heater

Guarantee Terms

The Tribune HE's stainless steel vessel carries a fully transferable, 25-year guarantee against faulty materials or manufacture provided that: It has been correctly installed as per the Installation Instructions and all the relevant standards, regulations and codes of practice in force at the time. It has not been modified in any way, other than by Range. It has not been misused, tampered with or subjected to neglect. The system is fed from the public mains water supply. It has only been used for the storage of potable water. It has not been subjected to frost damage. The unit has been serviced annually. The Benchmark Log Book has been filled in after each annual service. The guarantee period starts from the date of purchase. Please note that invoices for servicing may be requested to prove that the unit has been serviced annually. The expansion vessel and cold water controls supplied with the Range Tribune HE carry a 5-year guarantee. All other components fitted to/or supplied with the unit carry a 2-year guarantee.

Exclusions – The Guarantee does not cover:

The effects of scale build up.
Any labour charges associated with replacing the unit or its parts.
Any consequential losses caused by the failure or malfunction of the unit.

Kingspan Renewables have a policy of continuous product development and may introduce product modifications from time to time. As a consequence details given in this brochure are subject to alteration without notice.



Range Cylinders

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Kingspan Renewables: A trading name of Kingspan Hot Water Systems Ltd. Registered Office: Tadman Street, Wakefield WF1 5QU. Registered in England, No. 04357772

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