

# Kingspan Range

## Tribune Xe

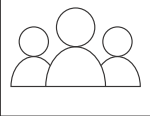
### Product Guide

Our most advanced cylinder for energy efficiency with outstanding SAP performance



# Kingspan Range Hot Water Solutions

The Hot Water  
People



For over 85 years, Kingspan Range has been a leading manufacturer of premium quality hot water and heating products for the housing sector. We have a proven track record of bringing innovative, high performance products to the market that stand the test of time.

Our commitment to achieving ever higher standards, through a programme of continued testing and product improvement, is recognised by our BS EN ISO 9001:2015 accreditation. This results in Kingspan Range products being at the forefront in terms of efficiency and performance.

At Kingspan Range we pride ourselves on a deep understanding of the challenges faced by housebuilders, developers

and contractors. We have specifically developed the Kingspan Range product portfolio and support services such as Kingspan Service and Coates Design to meet all of their requirements. That's why we are the hot water people they turn to time after time for solutions to their hot water and heating needs.

As one of Kingspan Environmental's premier brands, Kingspan Range benefits from the substantial backing of Kingspan Group, a global leader in high performance building products for the construction industry. The Kingspan Range brand fits within an overall philosophy of helping to deliver high efficiency, low cost and low carbon buildings for the future.

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# Why use Kingspan Hot Water Cylinders?

## Performance



## Premium Quality



## Expertise



With so many different products and skills involved in a building project, housebuilders and specifiers need to work with experts in every category. As part of the Kingspan worldwide building products group, Kingspan Environmental offers unrivalled experience and resources to support the UK housebuilder with the best solutions for hot water storage in terms of legislation compliance, quality standards and ease of installation.

As the world leader in insulation technology, we are designing high efficiency hot water cylinders with more insulation coverage and lower heat loss rates that not only deliver an improved SAP rating but also remain easier to fit in smaller spaces.

Importantly, Kingspan Environmental is perfectly tuned into contemporary lifestyle priorities when it comes to domestic hot water – comfort, energy efficiency and reliability. Our products ensure plentiful and constant hot water supply to suit family homes with baths

and showers, innovative solutions to allow more spacious and flexible accommodation, lower energy usage with associated cost savings, and less to worry about in terms of repair and maintenance.

The Kingspan Range Xe hot water cylinder is the latest model in a bestselling series that is already acknowledged for a quality assurance in which customers will have complete confidence. Kingspan Environmental continues to push the boundaries in new product development that meets the needs of new buildings and the environment, backed up by experienced design and technical support teams.

Across the UK, Kingspan Environmental works in partnership with housebuilders, specifiers and contractors to provide the very best project support, including product advice, technical guidance and training when required. We allocate a centralised contract management team to coordinate with our field based specification managers to collate project information and ensure unparalleled production and supply chain capability. By working closely with key contractor and merchant contacts, we can anticipate all project requirements to meticulously plan our production and delivery schedules that guarantee all products arrive on site in full and on time.

Kingspan Environmental also provides a comprehensive aftercare service from our nationwide team of engineers for the full peace of mind of the homeowner, contractor, and housing developer.

## Performance

When it comes to delivering what our customers want, the top priority is performance - it's key to providing maximum operating efficiencies and fast hassle-free installation.

## Premium Quality

Kingspan Range unvented hot water cylinders only feature the highest quality components that are rigorously tested to ensure they provide safe, efficient storage of hot water.

## Expertise

Our team of technical experts contains a broad spectrum of skilled professionals, including engineers with experience in the construction industry, accredited system designers, SAP assessors and people with practical plumbing experience.

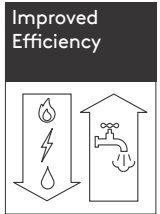


FM 611051





# A different approach to energy efficiency



Energy efficiency is the issue that nobody - specifiers, installers and homeowners alike - can afford to ignore. Ever tighter legislation on emissions, BREEAM ratings, the energy-related products directive (ErP) and reduced carbon emissions construction targets have driven the building industry to seek more and more energy efficient solutions, while concerns for the environment and rising fuel costs mean it's one of the most important factors for buyers considering a new property.

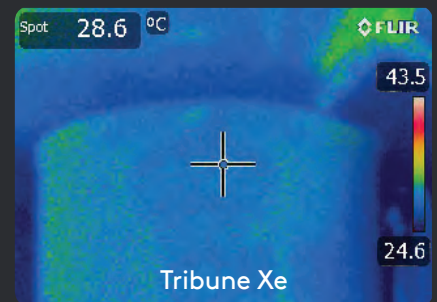
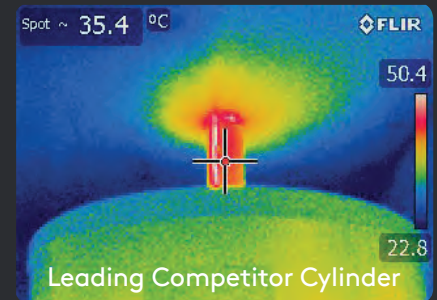
With this in mind, we went back to the drawing board to reconsider every aspect of hot water cylinder design and see where we could make improvements. The result, after many years of development, is the all new Range Tribune Xe cylinder.

By going right back to the basics, we managed to make over 50 improvements to individual components and production

processes. Each one contributes to an improvement in energy efficiency or installation efficiency. Together, they add up to our most energy efficient cylinder, ever.

For example, moving the hot water outlet from the top of the cylinder to the side looks, on the face of it, a relatively small change. Yet, it was one that took considerable re-engineering.

The reason? A traditional top mounted outlet - while easier to manufacture - means having a pipe penetration through the insulation at the hottest part of the cylinder. By switching to a side outlet, the top of the cylinder can be fully insulated with foam, making for better heat retention and a more energy efficient performance.



The thermal images above show the dramatic reduction in heat loss from the top of a cylinder between a traditional top hot water outlet and new side mounted outlet on the Kingspan Range Tribune Xe.

## 45% More Insulation

### Built-in Thermal Expansion

Expansion control is a key part of any unvented hot water system; it helps protect the system from excessive pressure by providing a space for the water to expand into as it is heated.

The new Xe design features a built-in thermal expansion space made possible by moving the hot water outlet to the side wall.

This 'air bubble' at the top of the cylinder provides additional insulation for extra thermal efficiency. It also makes

installation quicker and easier by eliminating the need for an external expansion vessel, freeing up valuable space in the airing cupboard.

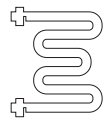
In addition, cylinders with an internal expansion provide on average 14% more usable hot water - that's water at 40°C - than a standard unvented cylinder. This is because the expanded hot water is held within the cylinder at 60°C while external vessels take the expanded water from the cold feed.



As the water heats up it expands and compresses the air pocket at the top of the cylinder; a floating baffle separates the air from the water.

# Coates Design Partnership

Design



## Expertise

- Heating System Design
- Hot and Cold Water Services
- SAP Calculations
- Solar Thermal & Photovoltaic
- Air Source Heat Pumps
- District Heating Systems
- MVHR & Air Conditioning
- Underfloor Heating
- Rainwater Harvesting

## Expert Design Service

Coates Design is a specialist building services consultancy, within the Kingspan Group. Through Coates we are proud to offer developers and housebuilders expert help and advice to ensure that their systems are designed with the lowest carbon footprint, whilst helping them optimise their build costs and achieve the SAP scores they require.

As a key partner to many leading industry brands such as: Ideal Boilers, Vaillant Boilers, Glow-Worm Boilers, Stelrad Radiators, Quinn Radiators, Danfoss, Honeywell, Pegler Yorkshire and many others, Coates are often able to offer their design services at a reduced rate or even free, depending on the design specification deal.

**FREE**  
DESIGN  
AVAILABLE\*

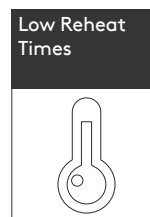
# Setting the Standards for Hot Water Storage

OUTSTANDING  
**SAP**  
PERFORMANCE

PRODUCTS THAT HELP YOUR  
CUSTOMERS SAVE MONEY  
ON THEIR BILLS



# Introducing Tribune Xe



Kingspan Range Tribune Xe is a new generation of unvented hot water cylinders that sets the best performance standards to date for hot water energy storage through better design, components and materials. Strongly focused on energy efficiency and heat loss reduction, over 50 new features make the Range Tribune Xe a significantly improved offer in terms of both energy rating and SAP assessment.

The new casing specification and thicker insulation dramatically improve thermal efficiency. The cylinder benefits from 45% additional insulation with a minimal increase in size and weight.

Equally significant engineering changes include a side mounted hot water outlet, new inlet set and swivel connection T&P relief valve. In fact, every potential heat loss factor has been improved.

For the popular 120 and 150 litre sizes, the Tribune Xe is now a KIWA approved cylinder. The new cylinder design also makes handling, installation and commissioning quicker and easier.

A premium feature of the new cylinder is internal expansion control using an air pocket device to maintain pressure when water is drawn off. This further improves heat retention characteristics but also means no external expansion vessel is needed, resulting in a quicker and more flexible, space saving installation.

A bestselling cylinder brand since its launch in 2001, the proven product quality backed by our customer service commitment and in-house design consultancy make Kingspan Range Tribune Xe a genuinely added value offer for energy efficient, pressurised domestic hot water storage.

## Key Features:

- Our most efficient cylinder for energy efficiency with outstanding SAP performance
- Wide range of capacities from 120 to 300 litres
- Self-contained expansion space that acts as an additional insulator
- Gives 14%<sup>#</sup> more usable hot water
- High flow-rate controls – ideal for multiple bathrooms and powerful showers
- Low reheat times for fast availability of hot water
- 62mm of high performance environmentally-friendly insulation
- Duplex stainless steel basic vessel with superior corrosion resistance
- Fully transferable 25-year guarantee on the basic vessel and 2 years on components<sup>‡</sup>
- Aesthetically pleasing outer case
- The complete package – just add pipework

## Kingspan Range Tribune Xe

# 33%

Improvement in heat loss performance  
compared to Tribune HE

### Technical information

Model	Heat Loss (kWh/24h)	DER
Tribune HE	1.57	14.7
Tribune Xe	1.16	14.62

<sup>‡</sup> See installation instructions on our website for full terms and conditions

<sup>#</sup> Average increase in hot water output at 40°C compared to the equivalent standard unvented cylinder using the new V40 testing in accordance with BS EN 12897:2016 standard.

Heat loss improvement based on 150L cylinder

# Technical Data

## Tribune Xe

### Direct

Designed to be heated directly by the built-in high quality 3kW electric immersion heater, these cylinders heat up quickly and retain the temperature for a long period. Each direct cylinder features a secondary backup 3kW electric immersion heater that can also act as a boost when the primary heater is not on.

Capacity	Reheat Time (Minutes)	Immersion Heaters (3kW)
120	56	2
150	79	2
180	93	2
210	107	2
250	125	2
300	152	2

### Indirect

Designed to heat up rapidly using the heating coil connected to a gas or oil boiler, the cylinder will retain its heat for long periods so you can be assured of the most economical system choice. These cylinders also feature a backup immersion heater as a secondary heat source that can act as a boost when the primary heat source is not available.

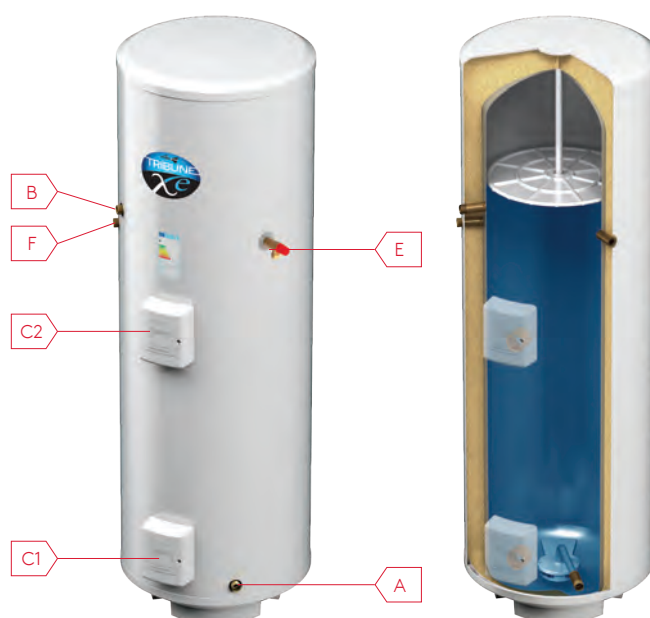
Capacity	Reheat Time (Minutes)	Coil Rating (kW)	Immersion Heaters (3kW)
120	22	20	1
150	25	22	1
180	28	24	1
210	30	24	1
250	34	24	2
300	44	24	2

### Solar Indirect

Designed with two indirect heating coils, the primary coil connects to a solar thermal system and the secondary coil is connected to a gas or oil boiler, providing heat when there is insufficient input from the solar heat source. In addition each cylinder features a 3kW electric immersion heater as a secondary backup and to offer a boost to the primary heat source.

Capacity	Dedicated Solar Volume (L)	Fossil Fuel Volume (L)	Immersion Heaters (3kW)	Surface Area Solar Coil (m <sup>2</sup> )	Fluid Content Solar Coil (L)
180	55	125	1	0.77	4.20
210	65	145	1	0.86	4.75
250	90	160	1	0.86	4.75
300	100	200	1	0.96	5.28

### Direct Cylinders



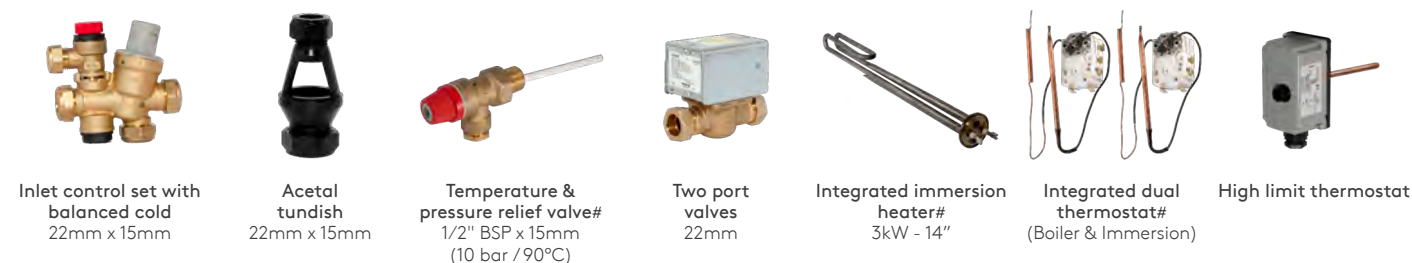
### Connections

- A 22mm Cold feed with dip pipe to diffuser in bottom of cylinder
- B 22mm Hot water outlet
- C1 Immersion heater with integrated thermostat
- C2 Secondary immersion heater with integrated thermostat - Direct cylinders and 250 and 300 litre Indirect cylinders only
- D1 22mm Boiler coil connections
- D2 22mm Solar coil connections
- E 1/2" Temperature relief valve connection (valve factory-fitted to cylinder)
- F 22mm Secondary return - for cylinders with a capacity of 210 litres and above only
- G1 Dry stat pocket - solar control
- G2 Dry stat pocket - high limit

\* Not to be used as the primary heat source on indirect or solar indirect cylinders  
# Factory fitted to a cylinder



## Supplied with



## Indirect Cylinders



## Solar Indirect Cylinders



Cylinder Type and Code		Capacity (Litres)	Height (mm)	Dia. (mm)	Weight full (kg)	Boss Centre from floor										ErP					
						A (mm)	B (mm)	C1 (mm)	C2 (mm)	D1 (mm)	D2 (mm)	E (mm)	F (mm)	G1 (mm)	G2 (mm)	Rating	Standing Loss, (W)	Load Profile	Noise Level (dB)	Efficiency (%)	kWh/year
DIRECT	TXD120ERP	120	1000	580	155	175	652	238	525	n/a	n/a	610	NF	n/a	n/a	C	45	L	15	39.3	2604
	TXD150ERP	150	1186	580	188	175	828	238	625	n/a	n/a	796	NF	n/a	n/a	C	48	M	15	39.0	1315
	TXD180ERP	180	1368	580	220	175	1012	238	725	n/a	n/a	980	NF	n/a	n/a	C	53	L	15	37.7	2716
	TXD210ERP	210	1558	580	252	175	1078	238	825	n/a	n/a	1046	NF	n/a	n/a	C	57	L	15	37.4	2735
	TXD250ERP	250	1805	580	293	175	1323	238	965	n/a	n/a	1291	NF	n/a	n/a	C	68	L	15	37.0	2766
	TXD300ERP	300	2075	580	352	175	1575	238	1116	n/a	n/a	1543	NF	n/a	n/a	C	73	L	15	39.0	2622
INDIRECT	TXN120ERP	120	1000	580	154	446	642	346*	NF	306	n/a	610	NF	n/a	n/a	B	45	n/a	n/a	n/a	n/a
	TXN150ERP	150	1186	580	189	446	828	376*	NF	336	n/a	796	NF	n/a	n/a	B	48	n/a	n/a	n/a	n/a
	TXN180ERP	180	1368	580	223	481	1012	406*	NF	366	n/a	980	NF	n/a	n/a	B	53	n/a	n/a	n/a	n/a
	TXN210ERP	210	1558	580	255	481	1078	406*	NF	366	n/a	1046	NF	n/a	n/a	B	58	n/a	n/a	n/a	n/a
	TXN250ERP	250	1805	580	297	521	1323	441*	1096*	401	n/a	1291	NF	n/a	n/a	C	68	n/a	n/a	n/a	n/a
	TXN300ERP	300	2075	580	346	521	1575	441*	1246*	401	n/a	1543	NF	n/a	n/a	C	73	n/a	n/a	n/a	n/a
SOLAR INDIRECT	TXSN180ERP	180	1368	580	225	521	1012	906*	NF	842	333	980	NF	388	1008	B	53	n/a	n/a	n/a	n/a
	TXSN210ERP	210	1558	580	256	521	1078	956*	NF	892	363	1046	1017	418	1074	B	58	n/a	n/a	n/a	n/a
	TXSN250ERP	250	1805	580	303	521	1323	1026*	NF	962	363	1291	1262	418	1319	C	68	n/a	n/a	n/a	n/a
	TXSN300ERP	300	2075	580	350	521	1575	1056*	NF	992	398	1543	1514	453	1571	C	73	n/a	n/a	n/a	n/a

NF = Not Fitted

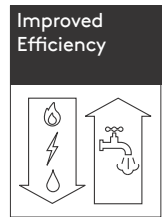
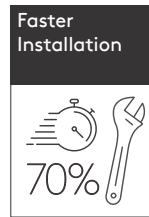
# Easy Maintenance and Installation

REDUCED  
INSTALLATION  
TIME

PRODUCTS THAT HELP YOU  
SAVE YOUR VALUABLE TIME



# Tribune Xe Pre-Plumb Cylinder Options



We have optimised the layout of the pre-plumb pipework making it easier and faster to install the cylinder; the new configuration is much cleaner with improved access for the installer.

Tribune Xe pre-plumb cylinders come with all pipework, inlets and components pre-fitted, allowing 'plug and play' installation, straight out of the box. And with our new straight line configuration, it's now even easier to align and connect

all essential inlet and outlet feeds and power supplies.

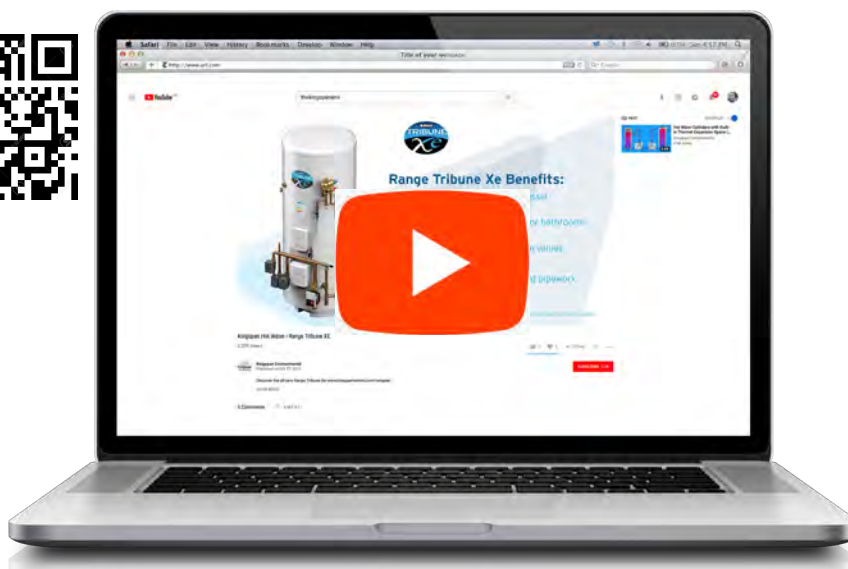
You also get the added protection of our full guarantee, as the factory fitted plumbing is covered as part of the cylinder. Plus, each unit is pre-plumbed and pre-wired using high grade components to deliver exceptional performance, easy maintenance and reliability.

## Improved installation efficiency x2.5 faster

Than installing a regular  
non pre-plumbed option

See for yourself how simple and quick it is to install and plumb the Tribune Xe by viewing our time trial video. Simply scan the QR Code here or watch via Youtube at:

Kingspan Range Tribune Xe Time Trial



### Key Features:

- Up to 70% quicker to install
- Pre-plumb Indirect models: 120, 150, 180, 210, 250 & 300 litre capacity
- Pre-plumb Indirect solar models: 180, 210, 250 & 300 litre capacity
- Designed with the installer in mind for a quicker, easier installation and setup
- Seven day programmable room thermostat with timed domestic hot water (DHW) control
- Separate central heating and hot water zones
- 'A' Rated EuP-compliant variable speed circulating pump
- Automatic bypass valve for system efficiency
- Connections for vented and unvented heating primaries
- Central heating expansion vessel pack
- Brazed pipework fabrication
- Simplified on-site installation
- Factory assembled for reliability; reduces costly call-backs and delays
- Consistent electrical and plumbing layout - neat, professional finish
- Greater customer satisfaction
- ISO 9001:2015 quality assured

# Technical Data

## Pre-Plumb Cylinders

### Pre-Plumb System-Fit Indirect

These cylinders have been optimised for use with system boilers with no circulating pump, robokit or programmer. As with the standard Xe indirect, it heats up rapidly using the heating coil connected to a gas or oil system boiler. The cylinder will retain its heat for long periods and features a backup 3kW immersion heater as a secondary heat source that can act as a boost when the primary heat source is not available.

Capacity	Reheat Time (Minutes)	Coil Rating (kW)	Immersion Heaters (3kW)
120	22	20	1
150	25	22	1
180	28	24	1
210	30	24	1
250	34	24	2
300	44	24	2

### Pre-Plumb Indirect

Designed to heat up rapidly using the heating coil connected to a gas or oil boiler, the cylinder will retain its heat for long periods. The cylinder also features a backup immersion heater as a secondary heat source that can act as a boost when the primary heat source is not available.

Capacity	Reheat Time (Minutes)	Coil Rating (kW)	Immersion Heaters (3kW)
120	22	20	1
150	25	22	1
180	28	24	1
210	30	24	1
250	34	24	2
300	44	24	2

### Pre-Plumb Solar Indirect

Designed with two indirect heating coils, the primary coil connects to a solar thermal system and the secondary coil is connected to a gas or oil boiler, providing heat when there is insufficient input from the solar coil. In addition each cylinder features a 3kW electric immersion heater as a secondary backup.

Capacity	Dedicated Solar Volume (L)	Fossil Fuel Volume (L)	Immersion Heaters (3kW)	Surface Area Solar Coil (m <sup>2</sup> )	Fluid Content Solar Coil (L)
180	55	125	1	0.77	4.20
210	65	145	1	0.86	4.75
250	90	160	1	0.86	4.75
300	100	200	1	0.96	5.28

### Pre-Plumb System-Fit Indirect



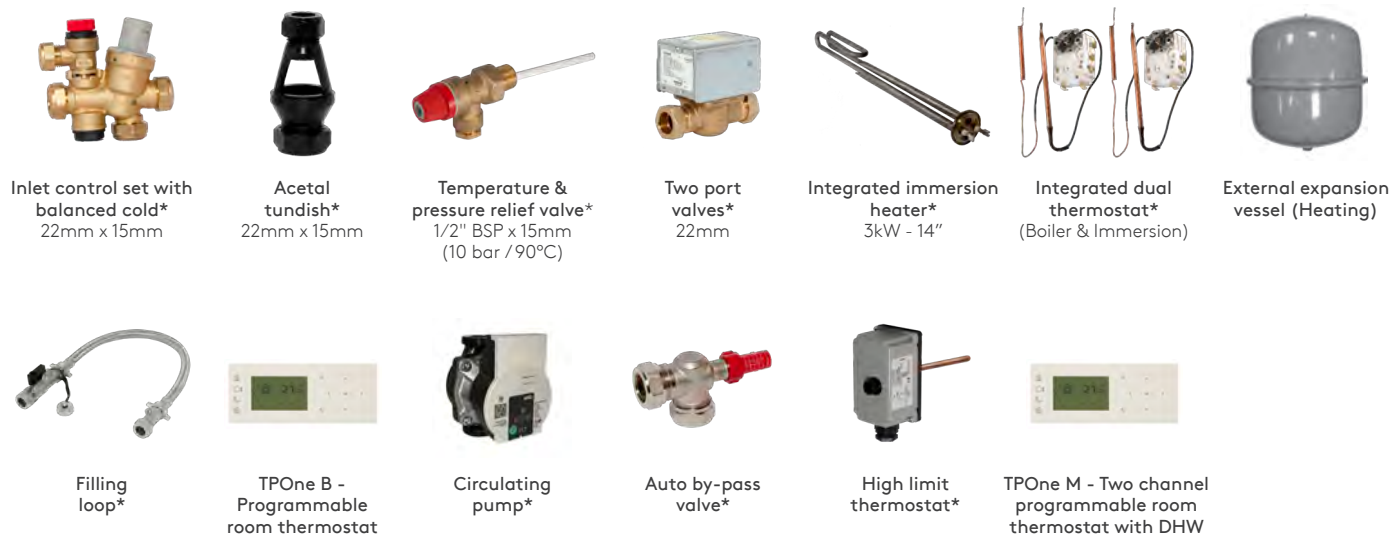
### Connections

- |   |  |
|---|--|
| <b>A</b> 22mm Inlet control set – cold feed                       | <b>K</b> Immersion heater & dual thermostats (Not to be used as the primary heat source) |
| <b>B</b> 22mm Hot water draw-off                                  | <b>L</b> Filling loop flexible hose  |
| <b>C</b> 22mm Tundish drain off                                   | <b>M</b> Wiring centre   |
| <b>D</b> 22mm Secondary return (210L, 250L & 300L only)           | <b>N</b> Circulating pump (Excluding system-fit models)                                  |
| <b>E</b> 28mm Flow from boiler                                    | <b>O</b> Manual bottle air eliminator  |
| <b>F</b> 28mm Return to boiler                                    | <b>P</b> Auto bypass valve   |
| <b>G</b> 22mm Central heating flow - two port valve (Single zone) | <b>Q</b> Cold feed drain   |
| <b>H</b> 22mm Central heating flow - two port valve (Twin zone)   | <b>R1</b> Dry Stat pocket – Solar  |
| <b>I</b> 28mm Central heating return                              | <b>R2</b> Dry Stat pocket – High limit   |
| <b>J</b> DHW two port valve                                       | <b>S</b> 22mm Solar coil connections   |

\* Factory fitted to a cylinder



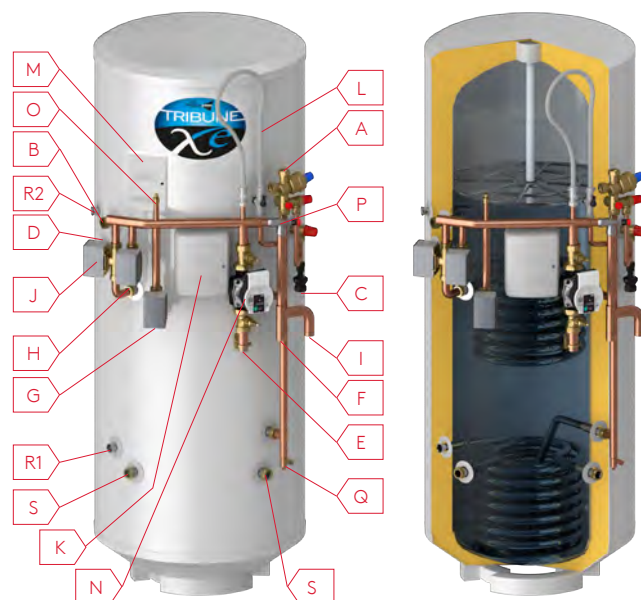
## Supplied with



## Pre-Plumb Indirect



## Pre-Plumb Solar Indirect



Cylinder Type and Code		Capacity (Litres)	Height (mm)	Dia. (mm)	Weight full (kg)#	Boss Centre from floor										ErP	
						A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	S (mm)	Rating	Standing Loss, (W)	
SYSTEM FIT	TXN120PSBERP	120	1000	580	164	826	642	456	NF	388	186	161	161	n/a	B	45	
	TXN150PSBERP	50	1186	580	199	1012	828	642	NF	408	216	191	191	n/a	B	48	
	TXN180PSBERP	180	1368	580	233	1196	1012	826	NF	448	246	221	221	n/a	B	53	
	TXN210PSBERP	210	1558	580	265	1262	1078	892	NF	448	246	221	221	n/a	B	58	
	TXN250PSBERP	250	1805	580	307	1507	1323	1137	NF	483	281	256	256	n/a	C	68	
	TXN300PSBERP	300	2075	580	356	1759	1575	1389	NF	483	281	256	256	n/a	C	73	
INDIRECT	TXN120PERP	120	1000	580	164	826	642	456	NF	163	186	161	161	n/a	B	45	
	TXN150PERP	150	1186	580	199	1012	828	642	NF	193	216	191	191	n/a	B	48	
	TXN180PERP	180	1368	580	233	1196	1012	826	NF	223	246	221	221	n/a	B	53	
	TXN210PERP	210	1558	580	265	1262	1078	892	NF	223	246	221	221	n/a	B	58	
	TXN250PERP	250	1805	580	307	1507	1323	1137	NF	258	281	256	256	n/a	C	68	
	TXN300PERP	300	2075	580	356	1759	1575	1389	NF	258	281	256	256	n/a	C	73	
SOLAR INDIRECT	TXSN180PERP	180	1368	580	235	1196	1012	826	NF	724	746	721	721	333	B	53	
	TXSN210PERP	210	1558	580	266	1262	1078	892	1017	774	796	771	771	363	B	58	
	TXSN250PERP	250	1805	580	313	1507	1323	1137	1262	772	844	841	841	363	C	68	
	TXSN300PERP	300	2075	580	360	1759	1575	1389	1514	802	874	871	871	398	C	73	

For Twin zone models add 'T' after the 'P' in the code, e.g. TXN120PSBERP becomes TXN120PTSBERP NF = Not Fitted  
# Including 10kg added for pre-plumb

## Choosing the Right Cylinder

### Domestic Selection Guide

Recommendations are based on the guidelines in BS 6700. Guidance should be sought for unusual applications, e.g. high flow rate showers, large baths etc.

Hot water demand	Bedrooms	Indirect cylinder capacity (litres)	Direct cylinder capacity (litres)
1 standard bath or shower	Bedsit/1 bed	120	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

Recommendations based on the guidelines in BS 6700. Guidance should be sought for unusual applications, e.g. 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

#### Example illustration

A swimming pool has 5 showers in each of 2 changing rooms. The shower heads are flow-restricted to 9 ltrs per minute ( $\frac{2}{3}$  rds of this will be hot water). There are up to 8 lessons per day, usually 45 minutes each. Assuming a class size of 30 children.

Maximum demand = 10 shower heads x 6 litres / min. = 60 litres / min, up to 3bar. This is more than one Tribune Xe can supply (see flow rate graph).

At least 3 Tribune Xe's will be needed to provide this:

Total demand = 30 children x 6 litres / minute x 5-minute shower each = 900 litres

Therefore, 3 x 300 litre units will be required.

Reheat time has to be a maximum of 45 minutes so it is reheated in time for the next lesson. A TXN300 can reheat its entire content in 44 minutes with a boiler power of 20kW. So total boiler power required = 60 kW.

## Guidance for Linking Cylinders

### Using cylinders in parallel

For applications where very high flow rates or larger amounts of storage are required, two or more Tribune Xe 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 mains).

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 and overtime office hours.

A factory production line will have a peak demand at the breaks in the shift or at the end when the workforce 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.

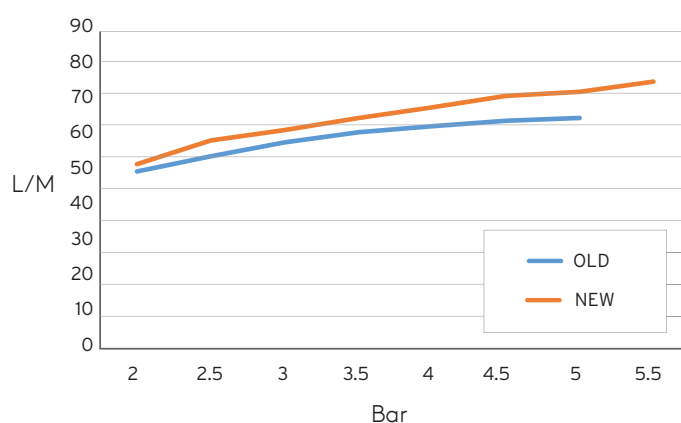
So your selection must take into account a number of things:

- The maximum simultaneous hot water demand
- The total hot water demand required
- The required system reheat time

#### IMPORTANT NOTE:

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

#### Flow Rate Graph



## Standards and Specifications

### Materials

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

### Casework

Toughened case coating to protect and provide pleasing aesthetics.

### Insulation

Polyurethane foam, nominal thickness 62mm. The foam is CFC-free & HCFC-free. It has an Ozone Depletion Potential of Zero and a Global Warming Potential of 3.1.

### Control Settings

Pressure Reducing Valve - 3.0 Bar  
Expansion Relief Valve - 8 Bar  
Pressure and Temperature Relief Valve - 10 Bar/90°C  
High Limit Thermostat In Dual Thermostat 82°C  
High Limit Thermostat in Immersion Heater 82°C

### Immersion Heater

1 3/4" BSP Parallel Threaded Head  
Long Life Incoloy Sheathed Low Noise Element 14" Long  
Brazed Construction  
Element Rating 3kW at 240V A/C

### Approvals

KIWA Approved to Building Regulations G3 & L, CE Compliant and fitted with BEAB Approved Immersion Heater.

## Fittings as Standard

	Direct	Indirect	Solar Indirect
Inlet Control Set	✓	✓	✓
Temperature & Pressure Relief Valve 1/2" BSP 10 Bar/90°	✓	✓	✓
15mm/22mm Tundish	✓	✓	✓
Primary 3kW Immersion Heater	✓	✓	✓
Secondary 3kW Immersion Heater	✓	250L & 300L Units	
1x Two-Port Valve	✓	✓	✓
1x Dual Thermostat Integrated into Immersion Heater	✓	✓	✓
1x Single High Limit Stat			✓
2x Sensor Pocket Retaining Bungs			✓
Installation & Maintenance Manual Including Benchmark Log	✓	✓	✓

## Installation Overview

### Regulations

All unvented units with a capacity over 15 litres must be installed by a competent installer in accordance with the following Regulations: England and Wales – Building Regulations G3, Scotland – Technical Standard P3, N. Ireland – Building Regulations P5.

### Siting

With no header tanks to consider, Tribune Xe units can be sited almost anywhere in the house. The side mounted hot water outlet enables the cylinder to be installed under shelving or other equipment. Tribune Xe can supply outlets both above and below its location. Tribune Xe 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 Xe delivers the high performance of which it is capable. We recommend a minimum supply of 1.5 (fiche sheet) bar with a flow rate of 25 litres/min.

### 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.

### Secondary Return

A dedicated 22mm secondary return connection is fitted to 210, 250 and 300 litre sizes. A swept tee (not supplied) may 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 Xe 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.

As a Charter member of the Hot Water Association (HWA), Kingspan Environmental is committed to uphold the principles and objective of the 'HWA' Charter:



- To supply fit for purpose products clearly and honestly described.
- To supply products that meet, or exceed, appropriate standards and building and water regulations.
- To provide pre and post sales technical support.
- To provide clear and concise warranty details to customers.

'HWA' members are independently audited to ensure independent governance supports the Charter principle of being clear and honest; not only do members have to comply with the Charter standards, they also have to show an external accreditor how they do it.

For more information visit [www.hotwater.org.uk](http://www.hotwater.org.uk)

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**Hot Water Energy Storage**

Unvented Cylinders

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