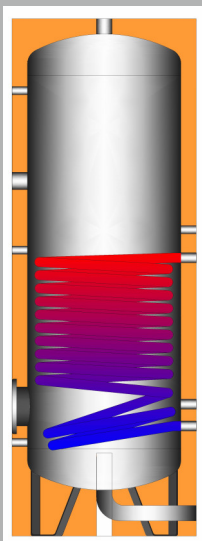


Product Guide

**DOMESTIC HOT WATER SOLUTIONS
INDIRECT CYLINDERS**

Inventive Engineering



Indirect Storage Cylinders



The Arbe AB series of indirect cylinders are used for the production of potable domestic hot water through a fixed coil type heat exchanger. There are 2 options for materials on the vessels and either single or twin coil versions available. All vessels supplied with insulation designed and selected to meet the ErP Directive & a high-strength PVC jacket with a grey finish. Sacrificial anodes are supplied with our enamelled steel storage cylinders as standard.

The standard range of indirect cylinders covers capacities from 150 to 2000 litres, available vertically for water primary medium. We can also supply our indirect cylinders with specially designed oversized lower coils for heat pump input.

ABX - Stainless steel shell, AISI 316L, with a fixed stainless steel coil(s), AISI 316L and a vessel inspection opening for maintenance and inspection purposes.

ABG - Carbon steel shell, enamelled internally with the lining carried out in accordance with DIN4753, supplied with a fixed coil(s), and a vessel inspection opening for maintenance and inspection purposes.

Our storage cylinders can be supplied with accessories either loose or factory fitted such as primary control packages and de-stratification pump sets



Energy Efficiency

All Arbe storage calorifiers are fully compliant with the latest Energy Efficiency Directive with improved energy efficiency classes, as shown on the table on the following page, compliant to Reg. 814/2013 (Dir. 2009/125/CE) with new legislation coming into force in September 2017

Warranty

All Arbe storage calorifiers have a minimum 5 year warranty on the shell and 3 years on the heater battery, covering against all manufacturing defects. If we supply controls & commissioning, this can be extended to 8 years!

ABX Design Details		
Model	Maximum Temperature	Maximum Pressure
Shell - Secondary	99°C	8 BarG
Coil - Primary	99°C	10 BarG

ABG Design Details		
Model	Maximum Temperature	Maximum Pressure
Shell - Secondary	95°C	10 BarG
Coil - Primary	95°C	10 BarG

ABX Indirect Stainless Steel Storage Cylinders



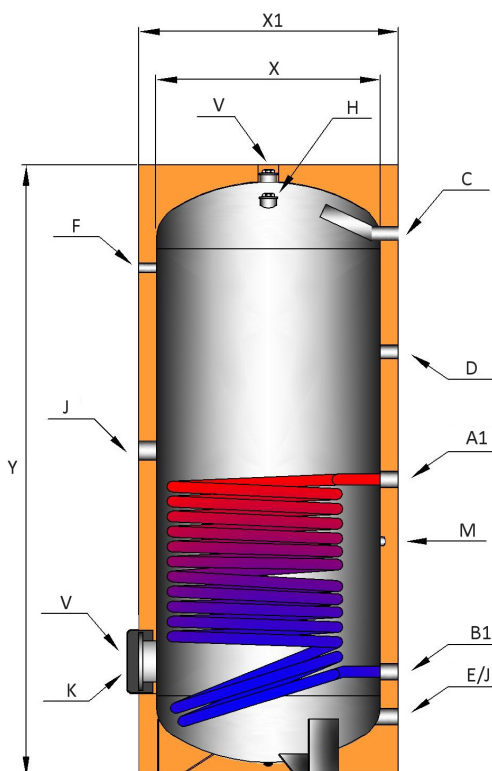
Please see information below for ABX stainless steel indirect cylinders

Dimensions		ABX Capacity (Litres)						
		200	300	500	800	1000	1500	2000
X1	mm	610	610	760	970	970	1200	1400
X	mm	500	500	650	790	790	1000	1200
Y	mm	1280	1670	1750	1830	2080	2290	2250
A	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
B	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
C	BSP	1"	1"	1"	1¼"	1¼"	1½"	1½"
D	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"
E/L	BSP	1"	1"	1"	1¼"	1¼"	1¼"	1¼"
J	BSP	2"	2"	2"	2"	2"	2"	2"
K	mm	130	130	130	130	130	130	130
M	BSP	½"	½"	½"	½"	½"	½"	½"
V	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
Coil Area (ADX1)	m²	1.2	1.5	2.2	3.0	3.5	5.0	6.0
Lower Coil Area (ADX2)	m²	1.0	1.5	2.0	2.5	3.0	5.0	6.0
Upper Coil Area (ADX2)	m²	0.8	1.0	1.0	1.5	1.6	2.0	2.0
Energy Efficiency Class ErP Compliant	Rating	C	C	C	C	C	C	C
	W	67	81	102	113	121	143	169

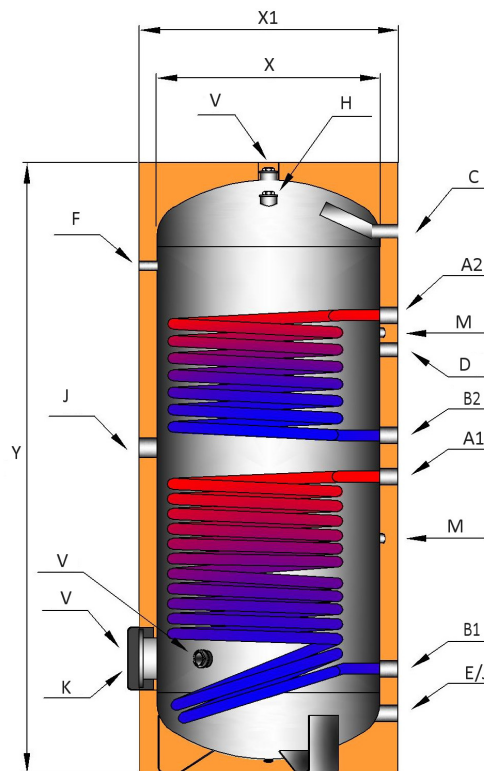
ABX Design Details		
Characteristics	Standard	Optional
Tank Capacity	200 - 2000 Litre	
Arrangement	Vertical	
Tank & Coil Material	Stainless Steel 316L	
Insulation	PLFH High Density Insulation & Cladding	
Accessories	Standard	Optional
	Thermometer	Unvented Kit & Safety Valve
	Drain Valve	Immersion Heater
		Anode
Design Code		
European Pressure Equipment Directive 2014/64/CE		

Connections

- A1 Lower Coil Primary Inlet
- B1 Lower Coil Primary Outlet
- A2 Upper Coil Primary Inlet
- B2 Upper Coil Primary Outlet
- C Secondary Flow
- D Secondary Return
- E/J Cold Feed / Drain
- F Gauge
- H Safety Valve
- J Immersion Heater
- K Inspection Opening
- M Sensor
- V Anode



Single Coil



Twin Coil

ABG Indirect Enamelled Steel Storage Cylinders

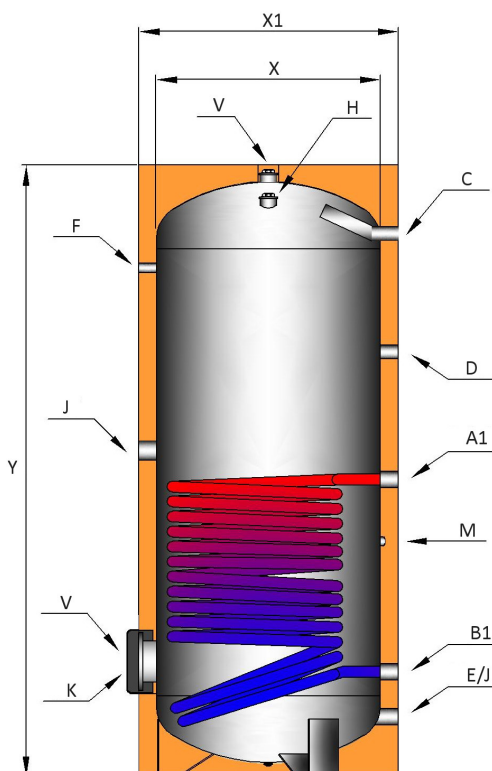
Please see information below for ABG enamelled carbon steel indirect cylinders

Dimensions		ABG Capacity (Litres)								
		150	200	300	400	500	800	1000	1500	2000
X1	mm	610	610	610	710	760	970	970	1200	1400
X	mm	500	500	500	600	650	790	790	1000	1200
Y	mm	1010	1280	1670	1670	1750	1830	2080	2290	2250
A	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
B	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
C	BSP	1"	1"	1"	1"	1"	1¼"	1¼"	1½"	1½"
D	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
E/L	BSP	1"	1"	1"	1"	1"	1¼"	1¼"	1¼"	1¼"
J	BSP	2"	2"	2"	2"	2"	2"	2"	2"	2"
K	mm	130	130	130	130	130	130	130	130	130
M	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"
V	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
Coil Area (ADX1)	m²	0.8	1.2	1.5	1.5	2.2	3.0	3.5	5.0	6.0
Lower Coil Area (ADX2)	m²	-	1.0	1.5	1.5	2.0	2.5	3.0	5.0	6.0
Upper Coil Area (ADX2)	m²	-	0.8	1.0	1.0	1.0	1.5	1.6	2.0	2.0
Energy Efficiency Class ErP Compliant	Rating	C	C	C	C	C	C	C	C	C
	W	58	67	81	96	102	113	121	143	169

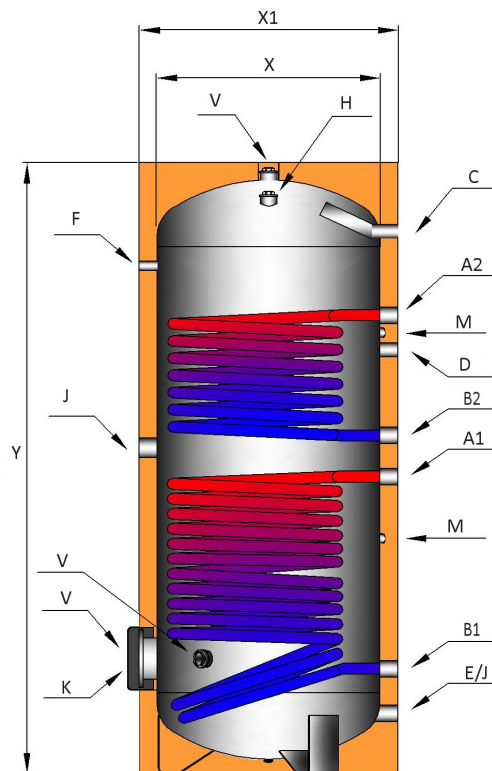
ABG Design Details		
Characteristics	Standard	Optional
Tank Capacity	150 - 2000 Litre	
Arrangement	Vertical	
Tank & Coil Material	Carbon Steel Glass Enamelled	
Insulation	PLFH High Density Insulation & Cladding	
Accessories	Standard	Optional
	Thermometer	Unvented Kit & Safety Valve
	Drain Valve	Immersion Heater
	Anode	
Design Code		
European Pressure Equipment Directive 2014/64/CE		

Connections

- A1 Lower Coil Primary Inlet
- B1 Lower Coil Primary Outlet
- A2 Upper Coil Primary Inlet
- B2 Upper Coil Primary Outlet
- C Secondary Flow
- D Secondary Return
- E/J Cold Feed / Drain
- F Gauge
- H Safety Valve
- J Immersion Heater
- K Inspection Opening
- M Sensor
- V Anode



Single Coil

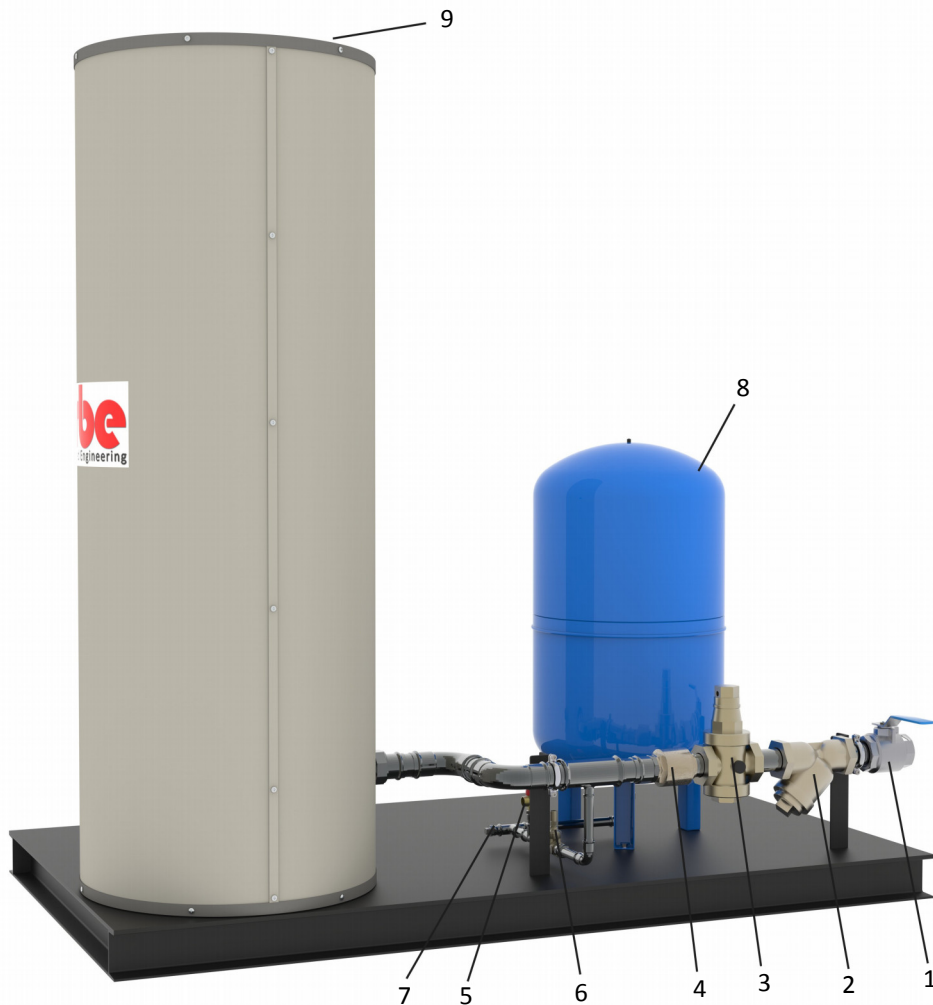


Twin Coil

Indirect Storage Cylinders



The layout below is the standard recommended cold feed kit available with our AB indirect cylinders for unvented systems, complying with Building Regulations. The size of each cold feed and kit expansion vessel is project specific so please contact us with any queries on sizing or the kit that is required. The unit can be supplied factory packaged with the unvented kit on a fabricated skid base, reducing site installation time, which also removes the need for a concrete plinth to be made on site



Key

1. Isolating Valve
2. Strainer
3. Pressure Reducing Valve
4. Check Valve
5. Expansion Relief Valve
6. Expansion Isolating Valve
7. Expansion Drain Valve
8. Expansion Vessel
9. Vessel P/T Safety Valve

Welcome to Arbe Integrated Engineering

Arbe Integrated Engineering offer a range of products and services for the HVAC building services industry, ranging from bare heat exchangers and storage cylinders to fully packaged plantrooms and associated equipment. With over 20 years of design experience, our design and technical team can offer a complete solution for a wide range of project requirements.

Seamless Integration:

With our next generation range of equipment, our products offer complete integration with renewable and future energies, ensuring all available energy is utilised, reducing fossil fuel usage. In addition, our HevaSys products offers a unique next generation range of equipment with integral BMS style controls that can be adapted to any installation and can provide a standalone management system for buildings where the heating and hot water generation is relatively small, such as a leisure centre or a school.

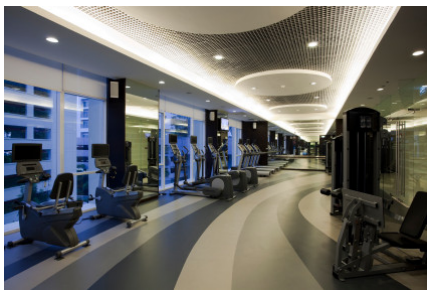
Inventive Engineering:

In addition to our standard equipment, including heat exchangers, storage calorifiers and packaged solutions, we also design and manufacture bespoke equipment to end user or consultant specifications and we carry out extensive research and development to invent new products and enhance current designs.

Application Solutions:

With our complete range of products, we have solutions to cover most applications. With our ability to carry out complete bespoke design, we have a solution for each and every project requirement. Our end users include:

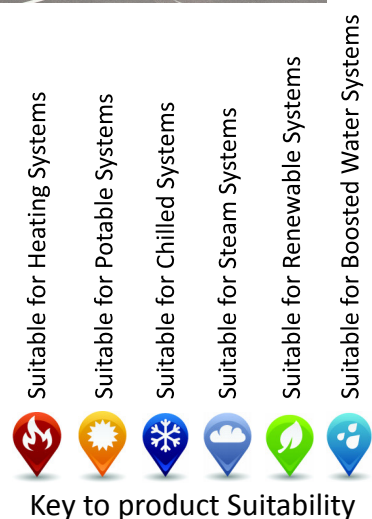
- Hotels
- Schools
- Universities
- Leisure Centres & Gyms
- Hospitals



Products Include:

Calorifiers
Indirect Cylinders
Direct Cylinders
Thermal Stores
Pressure Vessels
Plate Heat Exchangers
Braze Heat Exchangers
Shell & Tube Exchangers
Heat Exchanger Packages

TwinHeat DHW/LTHW Systems
Gas Fired Calorifiers
Boilers & Associated Equipment
Packaged Boiler Houses
Packaged Plant Rooms
Solar Energy Packages
Heat Pumps
Booster Sets & Pressurisation
Bespoke Engineering Packages



Arbe Integrated Engineering Ltd
Coal Lane
Causeway Foot
Halifax, HX2 9PG
Tel 01422 646865, Fax 01422 500018
mail@arbe.co.uk www.arbe.co.uk