



# Unvented stainless steel cylinders

**Indirect / Direct / Solar / Horizontal**  
With internal and external expansion vessel

Fast filling baths, power showers without pumps, constant water pressure (even when the washing machine is on and someone is flushing a toilet), efficient hot water delivery throughout the house, lower household utility bills... Welcome to Thermsaver unvented cylinders.

With a reputation for innovation and excellent workmanship, Thermsaver is one of the UK's leading distributors of unvented water heaters using duplex stainless steel – a lighter, stronger and safer material than any other previously used.

Thermsaver unvented hot water cylinders offer high performance, top quality and reliability at an affordable price. The use of a stainless steel cylinder is especially good news in hard water areas, where copper cylinders are prone to corrode. Stainless steel construction also means that there is no need for anodes, which are intended to counteract corrosion in other cylinders (and require regular replacement at significant expense). Thermsaver unvented cylinders

are low maintenance. Along with spares and service back-up, they come with a comprehensive 25-year cylinder guarantee.

The Thermsaver range is available in different sizes, ranging from 130 litres to 305 litres, so there's a size suitable for every home. Even if you have a four bedroom house and want to allow for two showers as well as a bath every day, a Thermsaver unvented cylinder will provide amply for your needs.

You'll benefit from a balanced water pressure that doesn't give you a nasty surprise when you're standing under the shower and someone happens to flush a toilet downstairs! Operating to a maximum pressure of 3 bar, the Thermsaver unvented cylinder will fill your bath in minutes, offering fast flow rates, even when other appliances are in use.

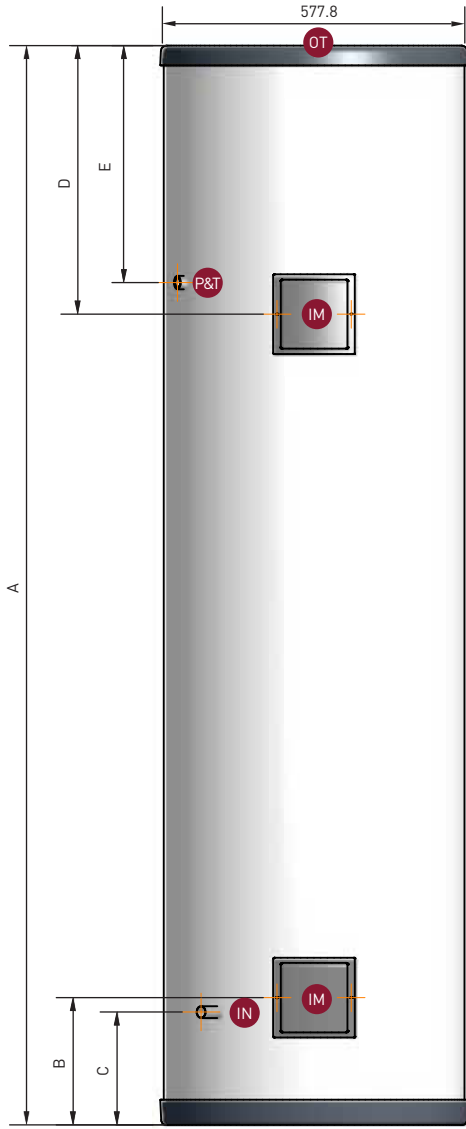
In order to accommodate alternative energy systems, such as solar panels within a domestic unvented water heating system, the Thermsaver range now includes the twin coil/solar and horizontal cylinders available in a range of sizes.

As both hot and cold water comes direct from the mains, Thermsaver unvented cylinders can be sited in any location on any floor of the property although try to keep pipe runs as short as possible for maximum economy. The unit can be fitted into a conventional airing cupboard and does not require any insulation. In addition, when in use, it will not be hot to touch.

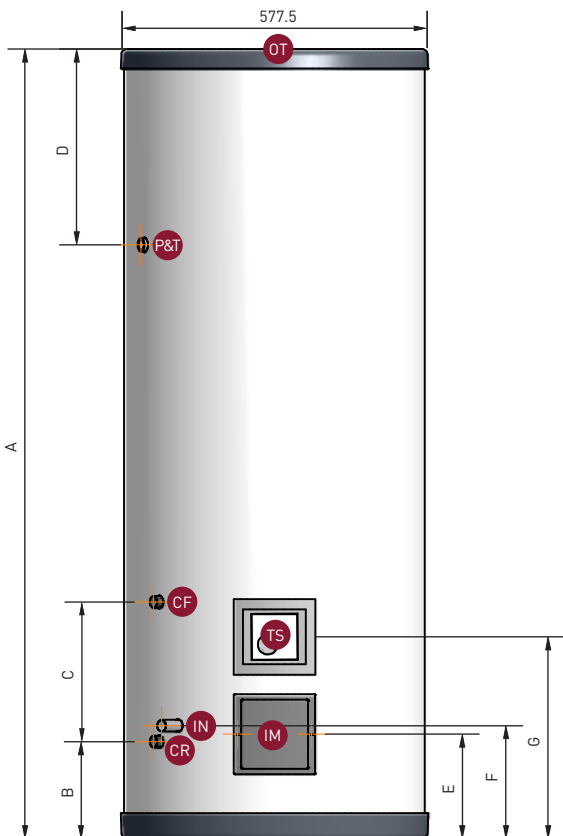
## Thermsaver cylinder selection

Application	Indirect	Direct
1 bed/1 shower	130 litre	130 litre
2 bed/1 bath/1 shower	130 litre	150/175 litre
3 bed/1 bath/2 shower	150 litre	175 litre
4 bed/1 bath/2 shower	175 litre	175/215 litre
4 bed/1 bath/3 shower	215 litre	255 litre
5 bed/2 bath/2 shower	255 litre	305 litre
Large domestic dwelling	305 litre	305 litre
Light commercial property	305 litre	305 litre

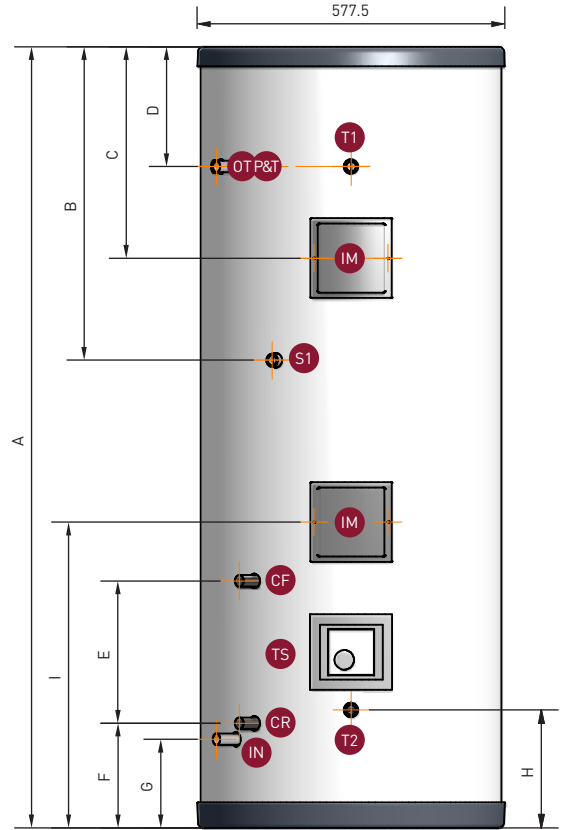
Direct Cylinder



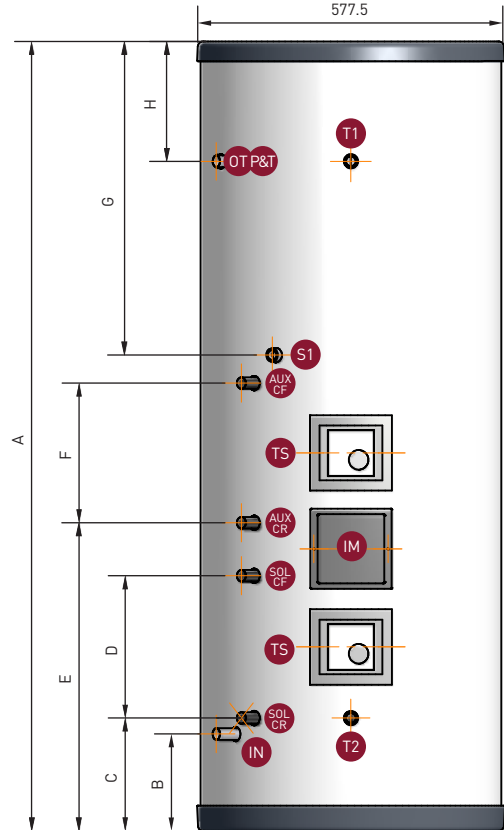
Indirect Cylinder



Solar Direct Cylinder



Solar Indirect Cylinder



Key

P&T	Pressure and temperature relief valve 1/2 BSP female
OT	Outlet 22mm plain pipe
T1, T2	Temperature sensor
S1	Secondary return 22mm plain pipe
IM	Immersion heater
CF, CR	Coil flow/return 22mm plain pipe
IN	Inlet 22mm plain pipe
TS	Twin stat
AUX	Auxiliary coil
SOL	Solar

## Direct Cylinder

Internal and External Expansion Vessel

Size	A	B	C	D	E
130L	957.5	196	182.5	331.5	388
150L	1085.5	196	182.5	340	438
175L	1242.5	196	182.5	352	489.5
215L	1462	196	182.5	368.5	465.5
255L	1752.5	196	182.5	388	484
305L	2029	196	182.5	409.5	488.5

## Indirect Cylinder

Internal and External Expansion Vessel

Size	A	B	C	D	E	F	G
130L	957.5	212.5	192.5	331.5	196.5	182.5	339
150L	1085.5	212.5	192.5	341	196.5	182.5	339
175L	1242.5	212.5	262.5	352	196.5	182.5	379.5
215L	1462	212.5	262.5	368.5	196.5	182.5	379.5
255L	1752.5	212.5	262.5	388	196.5	182.5	379.5
305L	2029	212.5	262.5	409.5	196.5	182.5	379.5

## Solar Direct Cylinder

External Expansion Vessel

Size	A	B	C	D	E	F	G	H	I
130L	957.5	300.5	348	225.5	192.5	212.5	182.5	182.5	455
150L	1085.5	300.5	398	225.5	192.5	212.5	182.5	182.5	513
175L	1242.5	469	398	225.5	267.5	212.5	182.5	182.5	589
215L	1462	590	398	225.5	267.5	212.5	182.5	182.5	589
255L	1752.5	469	398	225.5	267.5	212.5	182.5	182.5	589
305L	2029	590	398	225.5	267.5	212.5	182.5	182.5	589

## Solar Indirect Cylinder

External Expansion Vessel

Size	A	B	C	D	E	F	G	H
130L	957.5	182.5	212.5	192.5	505	192.5	301	225.5
150L	1085.5	182.5	212.5	192.5	505	192.5	301	225.5
175L	1242.5	182.5	212.5	267.5	579.5	262.5	469	225.5
215L	1462	182.5	212.5	267.5	579.5	262.5	590	225.5
255L	1752.5	182.5	212.5	267.5	579.5	262.5	590	225.5
305L	2029	182.5	212.5	267.5	579.5	262.5	590	225.5

All dimensions in millimetres (mm)

Larger Cylinders available on request

All unvented installations must comply with local building regulations:

England & Wales: G3 Building Regs  
 Scotland: Technical Standard P3  
 Northern Ireland: Building Regulation P5

## User features

- ▷ Mains pressure hot water
- ▷ Fast filling baths
- ▷ Powerful invigorating showers
- ▷ Simultaneous supply of water to all bathrooms
- ▷ No cold water storage tank required, freeing up valuable living space
- ▷ Long life - low maintenance hot water supply

## Installer features

- ▷ Duplex steel inner cylinder with 25 year guarantee
- ▷ Internal expansion for quick easy installation – models with external expansion available
- ▷ Solar and horizontal cylinders with external expansion vessel as standard
- ▷ CFC free foam injected insulation 60 mm thickness
- ▷ 3kw incoloy 825 immersion(s) for longer life
- ▷ Lightweight for easy handling to site
- ▷ Water inlet diffuser prevents hot and cold water mixing
- ▷ Tough plastic leather grain coating resists scratching
- ▷ No anode – reduces service requirements

## Heating performance

With internal and external expansion vessel		130L	150L	175L	215L	255L	305L
Direct	Reheat time after 70% draw off	97.3	112.2	130.9	160.9	190.8	228.2
	Time to heat from cold to 65 deg C	112.3	134.8	161.0	197.5	248.7	295.7
Indirect	Reheat time after 70% draw off	19.9	23.7	22.4	27.5	33.8	45.3
	Time to heat from cold to 65 deg C	25.0	29.6	28.2	34.1	42.6	50.4
Solar	Reheat time after 70% draw off	16.0	18.5	14.0	17.0	20.0	24.0
	Time to heat from cold to 65 deg C	20.0	23.0	20.0	24.0	28.5	34.0
Horizontal	Reheat time after 70% draw off	12.0	14.0	13.0	16.0	19.0	22.0
	Time to heat from cold to 65 deg C	14.0	16.0	18.0	21.5	25.0	30.0

All figures in minutes

## Technical specification

### Immersion

3kW @240v 50Hz

(Permanent connection to supply through a double pole linked isolated switch with a minimum breaking capacity of 13A)

Note: Direct cylinders have 2 immersion heaters;  
Indirect cylinders have one immersion heater as back up.

### Outer Casing

Dove Grey leather grain plastic coated steel.  
Option of air brushed stainless steel outer case.  
Please contact us for further details.

### Insulation

CFC free 60mm ODP zero fire retardant

### Inner Cylinder

Duplex 2304L 1.4362 EN10088 stainless steel

### Pressure Tests

All tested to 15 bar

### Primary Coil

22mm stainless steel

### Hot Water Outlet

22mm stainless steel pipe

### Thermostat

Direct Units:

Integral immersion thermostats and cut out

Indirect Units:

External dual thermostat and cut out

### T&P

Factory fitted 7 bar 90 deg C

### Safety Kit

Pressure reducing valve, expansion relief valve,  
tundish, motorised valve (indirect only) supplied

### Expansion

Internal air gap.

### Anode

Not required

### Approvals

BBA, CE, WRAS & Benchmark

### Guarantee

25 years for inner cylinder, 2 years on immersion  
(excluding effects of limescale) and 5 years on  
other components