

POWERFLOW

UNVENTED MAINS PRESSURE SYSTEM

SOLAR & HEATPUMP UNITS AVAILABLE



McDonald
Water Storage

Hot Water Storage Solutions

UNVENTED MAINS PRESSURE SYSTEMS

POWERflow is the upgraded successor of one of the original unvented mains pressure systems, which we first developed in the early 90's. Using the experience we have gained over these years, we have been able to develop our unit, concentrating on Ease of Installation, Reliability and a Reduction in Maintenance. High efficiency solar, ground or air source heat pump coils, can also be fitted to utilise sustainable energy. Increased surface area coils for heat pumps, mean the best utilisation of lower temperature heat pump input.

By using compression fittings and pre-piping the discharge valves, **POWERflow** is the easiest unvented unit to install and by having an external expansion vessel, is much easier to service and maintain.

WHY CHOOSE POWERflow

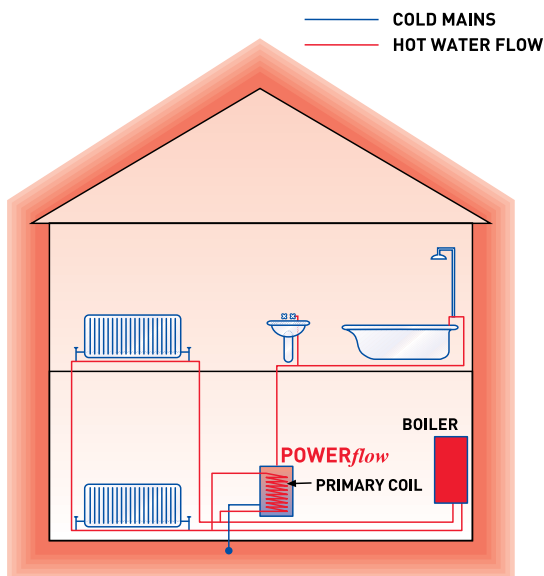
- Copper - superior performance
- No tanks in the attic
- Reliable - 25 year guarantee
- Reduced maintenance
- Very easy to install
- No anode
- Produced by the UK's most experienced cylinder manufacturer
- Manufactured for over 20 years

THE ADVANTAGES OF COPPER

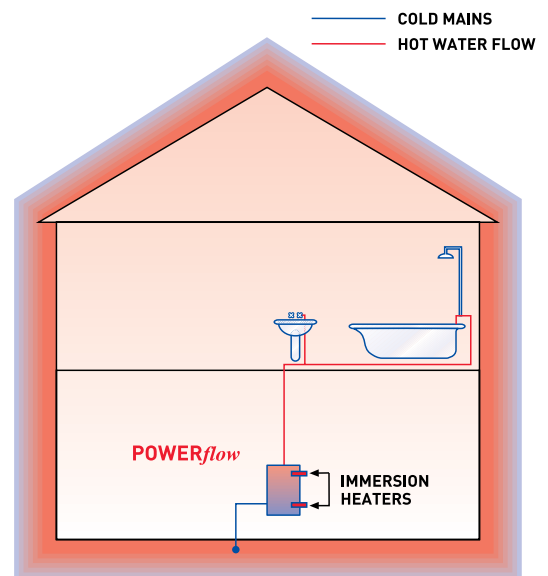
- Best heat transfer available
- Tried and tested material
- Proven to be healthy and safe
- Long-lasting
- 100% Recyclable, benefiting the environment



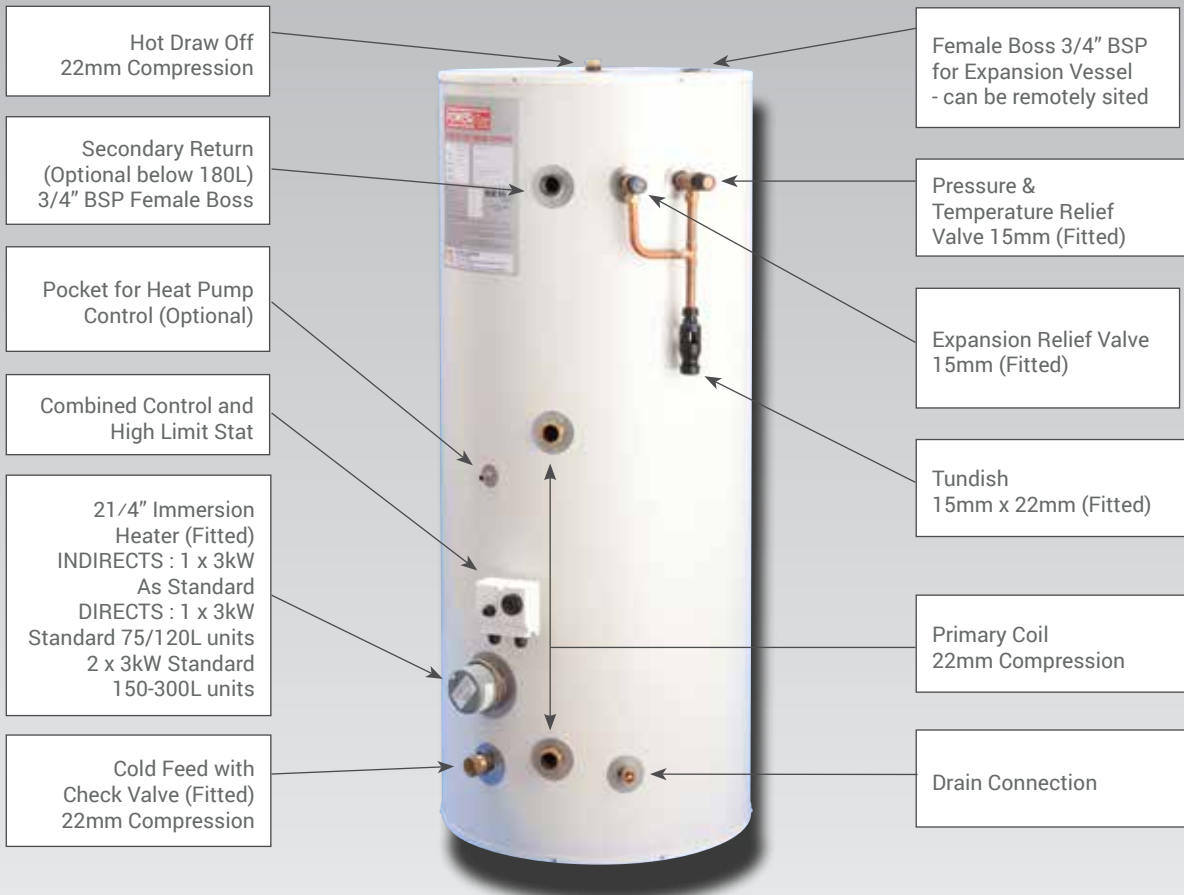
INDIRECT (BOILER) SYSTEM



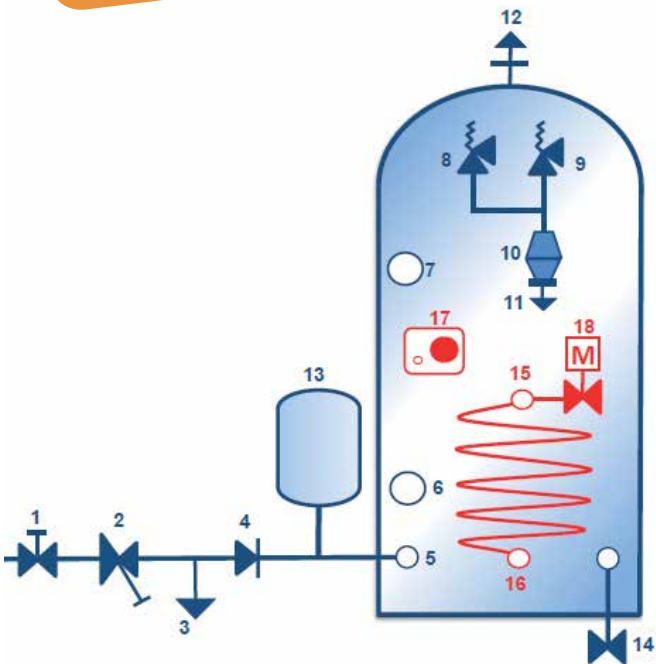
DIRECT (ELECTRIC) SYSTEM



POWERflow CONNECTIONS (Boiler Model shown)



NEW IMPROVED



- 1. Isolating Valve
- 2. Pressure Reducing Valve Set @ 2.1 Bar*
- 3. Balanced Cold Outlet
- 4. 22mm Check Valve #
- 5. Cold Feed #
- 6. Immersion Heater #
- 7. Immersion Heater # (only standard on 150 Litre Direct Upwards)
- 8. Expansion Relief Valve #
- 9. Pressure & Temperature Relief Valve #
- 10. 15 x 22mm Visible Discharge Tundish #
- 11. Discharge in 22mm
- 12. 22mm Hot Draw Off #
- 13. Expansion Vessel *
- 14. Drain Connection #

- INDIRECTS ONLY**
- 15. 22mm Primary Flow #
 - 16. 22mm Primary Return #
 - 17. Thermostat c/w non self re-setting Thermal Cut-out *
 - 18. 2 Port Motorised Zone Valve *

* Supplied
Supplied & Fitted

SUPPLIED WITH ALL UNITS



22mm Pressure Reducing Valve Set @ 2.1 Bar



Temp / Press Relief Valve (Fitted)



Expansion Relief Valve (Fitted)



Tundish (Fitted)



EXPANSION VESSEL
To Sizes (mm)
Suit Ht.xDia.
75L 330x200
120L 315x270
150L 315x270
180L 420x270
210L 420x270
250L 450x290
300L 450x290



50mm Foam Insulation



Check Valve (Fitted)



3kW Immersion Heaters
One standard on all indirects. One on 75 + 120 direct. Two on 150 direct upwards. Extras available as option.



Compression Fittings where applicable

INDIRECT UNITS ONLY



Dual Thermostat Control + Hi Limit



2 Port Motorised Zone Valve

EXTRAS



Remote Fixing Kit for Expansion Vessel (Standard on 250L and 300L units)



Cased White Goods Finish

TECHNICAL DATA

		75 Litre	120 Litre	150 Litre	180 Litre	210 litre	250 litre	300 Litre
Energy Efficiency Class	Indirect	B	C	C	C	C	C	C
Energy Efficiency Class	Direct	D	D	D	D	D	D	D
Heat Loss	Watts	43	57	64	68	71	76	81
Height	mm	925	925	1125	1325	1525	1525	1825
Overall Diameter	mm	450	550	550	550	550	600	600
Weight (empty)	Kg	26	37	44	55	61	70	86
Weight (full)	Kg	101	157	194	235	271	320	386
Pressure Regulator	Bar	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Expansion Vessel	Litres	8	12	12	18	18	24	24
Primary Coil	kW	13	21	26	31	37	44	52
Heat Up Time	min	20	20	20	20	20	20	20

Heat loss figures quoted are based on 50mm foam lagging. If you require improved heat loss performance, contact us now to discuss the range of solutions we can offer.

SIZING GUIDE

Installation	Indirect	Direct
1 bedroom + bath/shower	75/120	120/150
2 bedroom + bath/shower	150	180
3 bedroom + bath/shower	180	210
4 bedroom + bath/shower	210/250	250/300
Larger Properties	300+	300+

* Other sizes and capacities readily available on request.
For Solar, step up one size

OPTIONS

- Solar or heat pump high efficiency coil fitted
- Connections sited to suit installation
- Super fast recovery finned coil
- Individually tailored units
- Secondary return
- Larger diameter valves
- 28mm coil connections (for gravity)
- Horizontal units