

# POWER *flow* 2000

Unvented Mains Pressure System

SOLAR & HEAT PUMP  
UNITS AVAILABLE



**WRAS**  
APPROVED  
PRODUCT



**ME** **MCDONALD ENGINEERS**  
HOT WATER SYSTEMS

# POWERflow 2000

## Unvented Mains Pressure System

### The best of the old & the new

**POWERflow 2000** is the upgraded successor of the highly successful, original **POWERflow**, which was 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 coils can also be fitted to utilise free sustainable energy from the sun.

By using compression fittings and pre-piping the discharge valves, **POWERflow 2000** is the easiest unvented unit to install and by having an external expansion vessel is much easier to service and maintain.

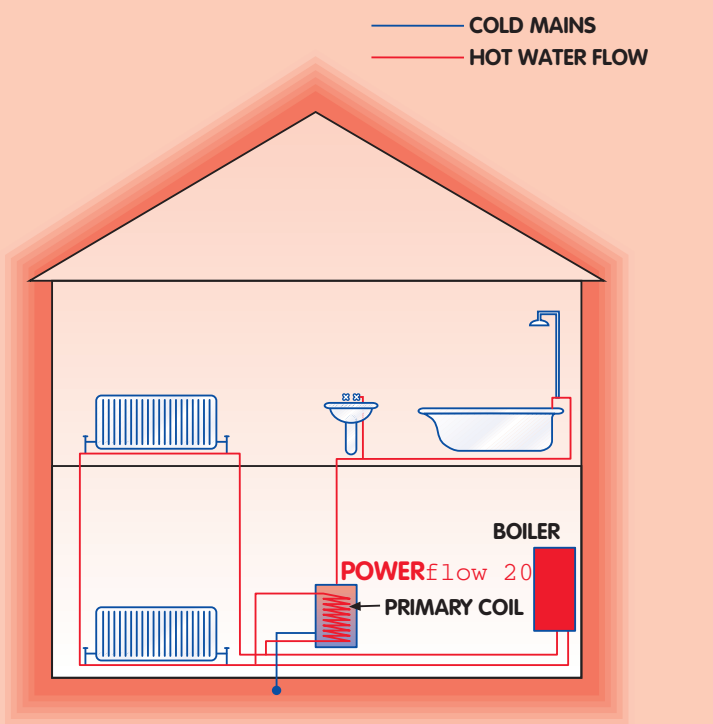
### WHY CHOOSE POWERflow 2000

- Fabulous Performance
- Reliable - 25 year guarantee
- Reduced Maintenance
- Very Easy to Install
- No Anode
- Produced by the UK's most experienced cylinder manufacturer

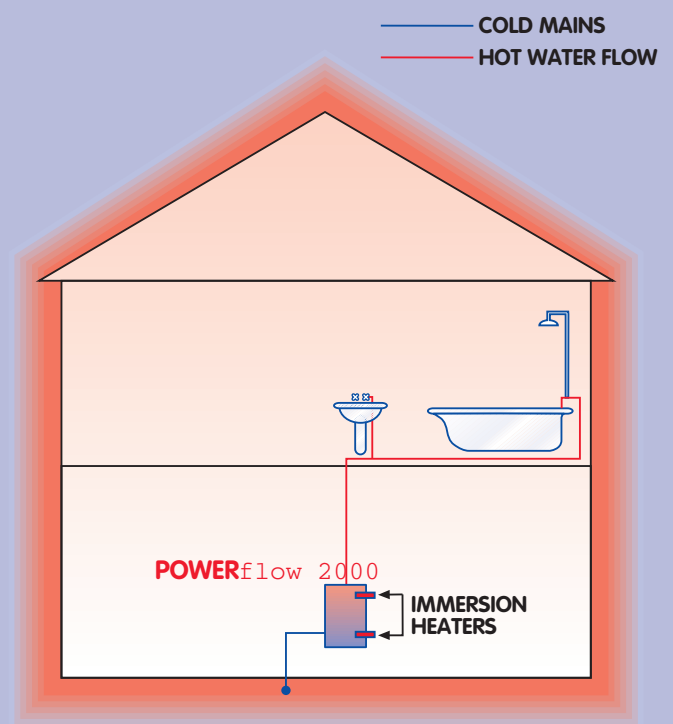
### THE ADVANTAGES OF COPPER

- Tried and tested material
- Proven to be healthy and safe
- Long-lasting
- Recyclable - 100% recycled, which benefits the environment

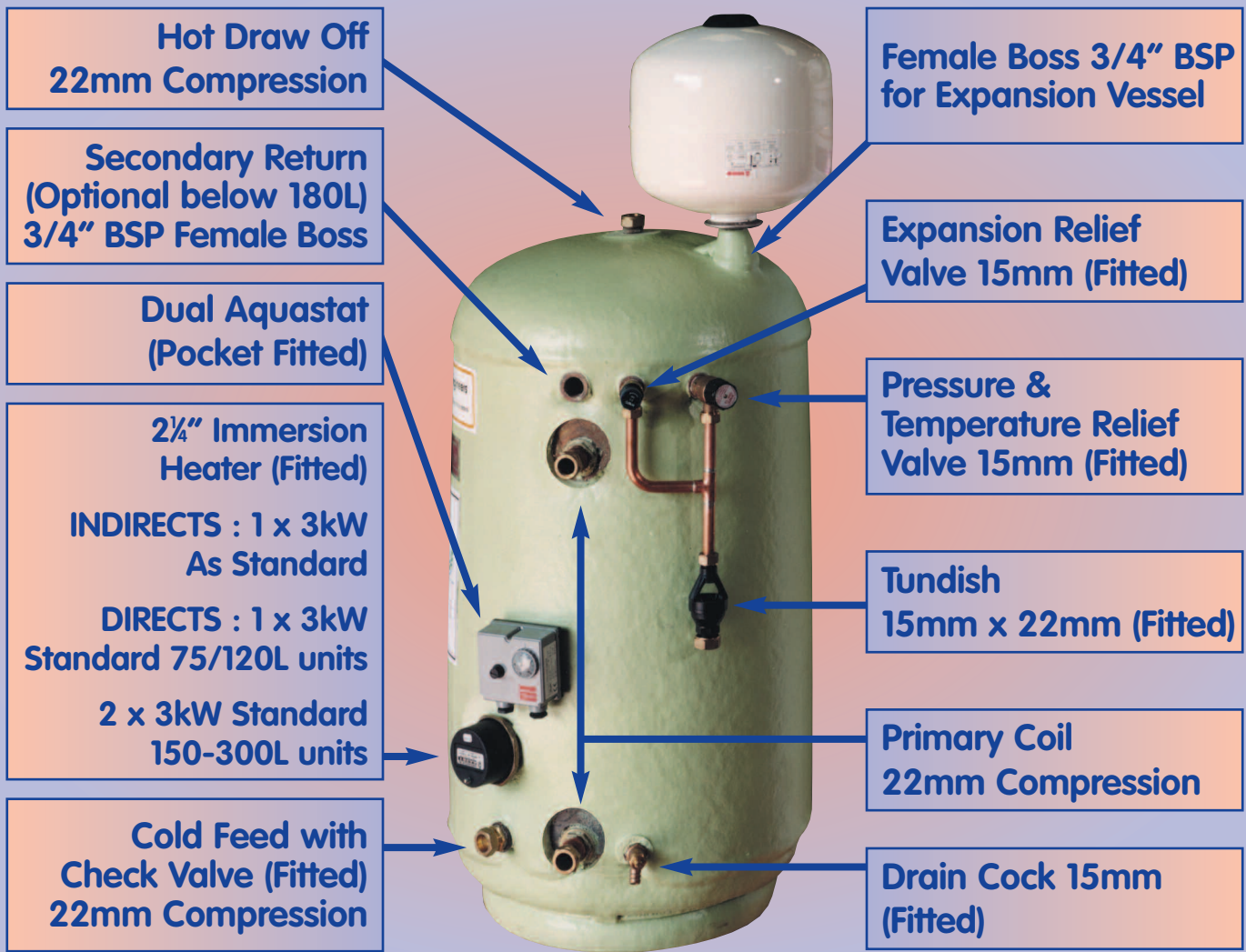
### INDIRECT SYSTEM



### DIRECT (ELECTRIC) SYSTEM



HELPLINE  
01592 611123



Hot Draw Off  
22mm Compression

Secondary Return  
(Optional below 180L)  
3/4" BSP Female Boss

Dual Aquastat  
(Pocket Fitted)

2 1/4" Immersion  
Heater (Fitted)  
  
INDIRECTS : 1 x 3kW  
As Standard  
  
DIRECTS : 1 x 3kW  
Standard 75/120L units  
  
2 x 3kW Standard  
150-300L units

Cold Feed with  
Check Valve (Fitted)  
22mm Compression

Female Boss 3/4" BSP  
for Expansion Vessel

Expansion Relief  
Valve 15mm (Fitted)

Pressure &  
Temperature Relief  
Valve 15mm (Fitted)

Tundish  
15mm x 22mm (Fitted)

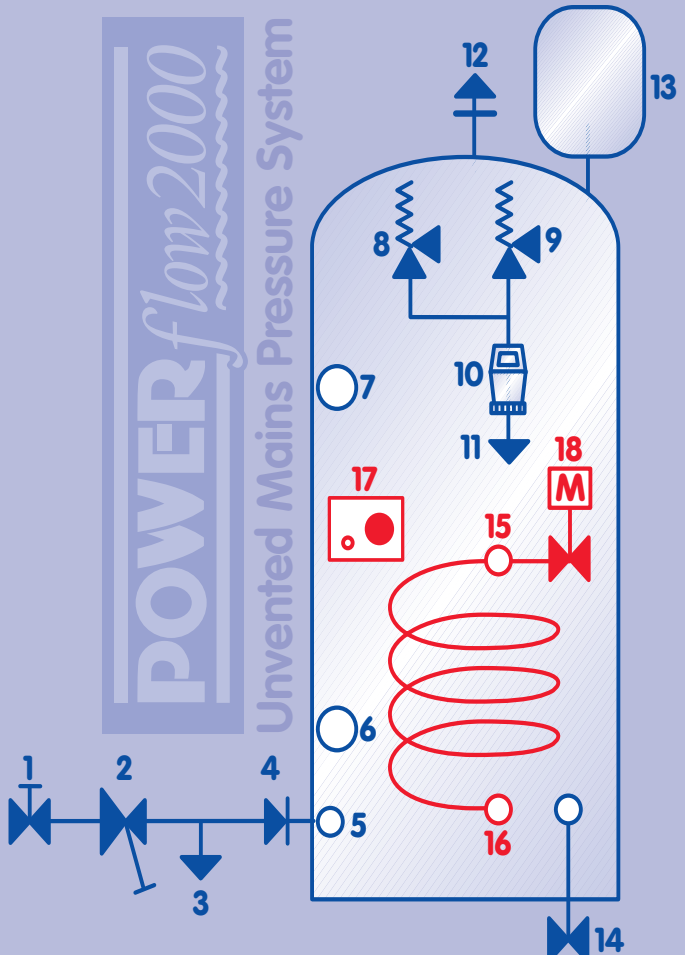
Primary Coil  
22mm Compression

Drain Cock 15mm  
(Fitted)

**NEW IMPROVED**

**POWER** *flow2000*

**Unvented Mains Pressure System**



- 1. Isolating Valve
- 2. Pressure Reducing Valve Set @ 2.1 Bar c/w Strainer \*
- 3. Balanced Cold Outlet
- 4. 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. Hot Draw Off #
- 13. Expansion Vessel \*
- 14. Drain Cock #

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

\* Supplied  
# Supplied & Fitted

**HELPLINE**  
**01592**  
**611123**

# POWERflow2000

## Unvented Mains Pressure System

TECHNICAL DATA

### SIZING GUIDE

Installation	Indirect	Direct
1 Bedroom + Bath / Shower	75/120	120/150
2 Bedroom + Bath / Shower	150	180
3 Bedroom + 2 Baths / Shower	180	210
4 Bedroom + 2 Baths / Shower	210/250	250/300
Larger Properties (Phone Technical Help)	300+	300+

\*Other sizes and capacities readily available on request\*

# TECHNICAL DATA

### DIMENSIONS

Capacity (Litres)	Size Including Insulation
75	925 x 450mm
120	925 x 550mm
150	1125 x 550mm
180	1325 x 550mm
210	1525 x 550mm
250	1525 x 600mm
300	1825 x 600mm

### SUPPLIED WITH ALL UNITS



22mm Pressure Reducing Valve Set @ 2.1 Bar



Check Valve (Fitted)



Temp / Press Relief Valve (Fitted)



Expansion Relief Valve (Fitted)



Tundish (Fitted)



Expansion Vessel



50mm Foam Insulation



Drain-Cock



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

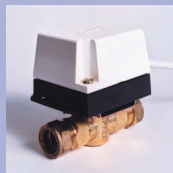
#### EXPANSION VESSEL

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

### 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

### 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)

## McDONALD ENGINEERS

FLEMINGTON ROAD  
QUEENSWAY INDUSTRIAL ESTATE  
GLENROTHES FIFE KY7 5QF

Tel : 01592 611123 Fax : 01592 611166  
sales@mcdonald-engineers.com www.mcdonald-engineers.com

POWERflow 2000 is a Trade Mark of McDonald Engineers.  
In the interests of continued improvement the manufacturers reserve the right to change the specifications and design without notice.

### Warranty Terms & Conditions

The **POWERflow 2000** Shell carries a 25 Year Guarantee against faulty manufacture or materials. The shell will be repaired or replaced at the manufacturer's discretion, provided the following are satisfied:-

The unit has been correctly installed as per the manufacturer's instruction booklet and all appropriate current legislation, codes of practice and regulations, current at time of installation.

The unit must be serviced annually as per the manufacturer's instruction booklet and a service record must be kept in the Annual Service Record Card. Proof of service invoices may be required.

Within 60 days of installation, the user completes and returns the warranty card with proof of purchase. The warranty will not be activated if this is not done.

The unit has only been used for potable water from a mains supply.

The unit has not been frost damaged, over-pressurised or modified. Any replacement valves must be supplied from the manufacturer.

The **POWERflow 2000** controls are guaranteed for a period of 2 years from date of sale.

The warranty does not cover any removal, re-installation or consequential costs.

This warranty does not affect your statutory rights.

Solar  
Trade  
Association  
ASSOCIATE MEMBER