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)

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

sales@mcdonaldwaterstorage.com  TEL: 01592 611123
UNVENTED MAINS PRESSURE SYSTEM

SUPPLIED WITH ALL UNITS

- 22mm Pressure Reducing Valve Set @ 2.1 Bar
- Temp / Press Relief Valve (Fitted)
- Expansion Relief Valve (Fitted)
- Tundish (Fitted)
- 50mm Foam Insulation
- Check Valve (Fitted)
- 3kW Immersion Heaters
- Compression Fittings where applicable

INDIRECT UNITS ONLY

- Expansion Vessel
  - To Sizes (mm)
  - 75L 330x200
  - 120L 315x270
  - 150L 315x270
  - 180L 420x270
  - 210L 420x270
  - 250L 450x290
  - 300L 450x290

EXTRAS

- Dual Thermostat Control + Hi Limit
- Remote Fixing Kit for Expansion Vessel
- 2 Port Motorised Zone Valve
- Cased White Goods Finish
- Optional Expansion Relief Valve
- Optional Tundish

TECHNICAL DATA

<table>
<thead>
<tr>
<th></th>
<th>75 Litre</th>
<th>120 Litre</th>
<th>150 Litre</th>
<th>180 Litre</th>
<th>210 litre</th>
<th>250 litre</th>
<th>300 Litre</th>
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<tbody>
<tr>
<td>Energy Efficiency Class</td>
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<tr>
<td>Heat Loss (Watts)</td>
<td>43</td>
<td>57</td>
<td>64</td>
<td>68</td>
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<td>76</td>
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<tr>
<td>Height (mm)</td>
<td>950</td>
<td>950</td>
<td>1150</td>
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<td>1550</td>
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<td>1850</td>
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<td>Overall Diameter (mm)</td>
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<td>Weight (empty) (Kg)</td>
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<td>37</td>
<td>44</td>
<td>55</td>
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<td>Weight (full) (Kg)</td>
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<td>157</td>
<td>194</td>
<td>235</td>
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<td>Pressure Regulator (Bar)</td>
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<td>2.1</td>
<td>2.1</td>
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<tr>
<td>Expansion Vessel (Litres)</td>
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<td>12</td>
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<td>18</td>
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<td>Heat Up Time (min)</td>
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<td>20</td>
<td>20</td>
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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.

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

SIZING GUIDE

<table>
<thead>
<tr>
<th>Installation</th>
<th>Indirect</th>
<th>Direct</th>
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<tbody>
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<td>1 bedroom + bath/shower</td>
<td>75/120</td>
<td>120/150</td>
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<tr>
<td>2 bedroom + bath/shower</td>
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<td>180</td>
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<td>3 bedroom + bath/shower</td>
<td>180</td>
<td>210</td>
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<tr>
<td>4 bedroom + bath/shower</td>
<td>210/250</td>
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<tr>
<td>Larger Properties</td>
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</table>

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