

Polywarm PWB DHW Buffer Cylinder



- Cost effective
- Extremely low standby heat losses

- Large connections
- Large inspection hatch

- Up to 3000 litres storage capacity

Technical data – Polywarm PWB DHW Buffer Cylinder

Large connections

Large connections on the cylinder which reduces the pressure drop within the unit.

Extremely low standby heat losses

Increasing system efficiency due to the extremely low standby heat loss as low as 2.6 kW/24hr.

Immersion heater option

Availability of an optional immersion element

Economic

One of the most cost effective products on the market.

Unvented kits

Matched optional/additional unvented kits are available to assist with installation.



A range of sizes

Seven models providing storage capacities ranging from 500 to 3000 litres.

Unique design

The Polywarm PWB cylinders are manufactured from carbon steel with a patented WRAS approved internal liner. The units are in compliance with ErP-Eco Design Requirements for Energy Related Products

Compliance

Certified to KIWA UK Regulation 4

A range of sizes

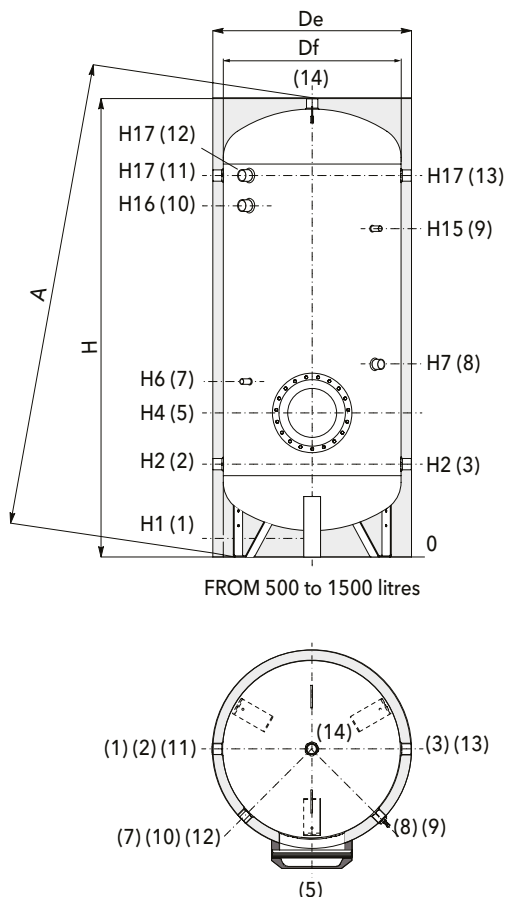
Seven models providing storage capacities ranging from 500 to 3000 litres.

Insulation

All models are supplied with insulation and a removable jacket.

External control

The stored DHW temperature can be monitored and controlled externally.



Item No.	Description
1	Drain
2	Domestic cold water inlet
3	Flow to external heat source
5	Blind inspection flange
7	1/2" BSP tapping for instrumentation
8	Re-circulation
9	1/2" BSP tapping for instrumentation
10	Connection for immersion heater
11	Alternative return from external heat source
12	T&P valve
13	Return from external heat source
14	Domestic hot water outlet
15	Drain 1" BSP (only models >1000L)

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Polywarm PWB			500	800	1000	1500	2000	2500	3000
Water	Nominal storage capacity	litres	500	791	1010	1442	1974	2310	2916
	Maximum operating pressure	bar	6	6	6	6	6	6	6
	Maximum operating temperature	°C	95	95	95	95	95	95	95
Energy	Energy class		C	C	C	C	C	-	-
	Standby heat loss stored temperature 65°C	kw/24hr	2.6	2.9	3.2	3.9	4.3	-	-
Electrical	Optional electric elements	kW/phase	1.5 up to 3kW/1 Phase or 4 up to 6kW/3 Phase			1.5 up to 3kW/1 Phase or 4 up to 12kW/3 Phase			
Misc.	Weight empty/full	kg	102 / 602	157 / 948	185 / 1192	233 / 1675	352 / 2326	388 / 2698	429 / 3345
	Magnesium anodes quantity/size		1/32 x 520	1/32 x 650	1/32 x 650	1/32 x 650	2/32 x 650	2/32 x 850	2/32 x 850

Dimensions

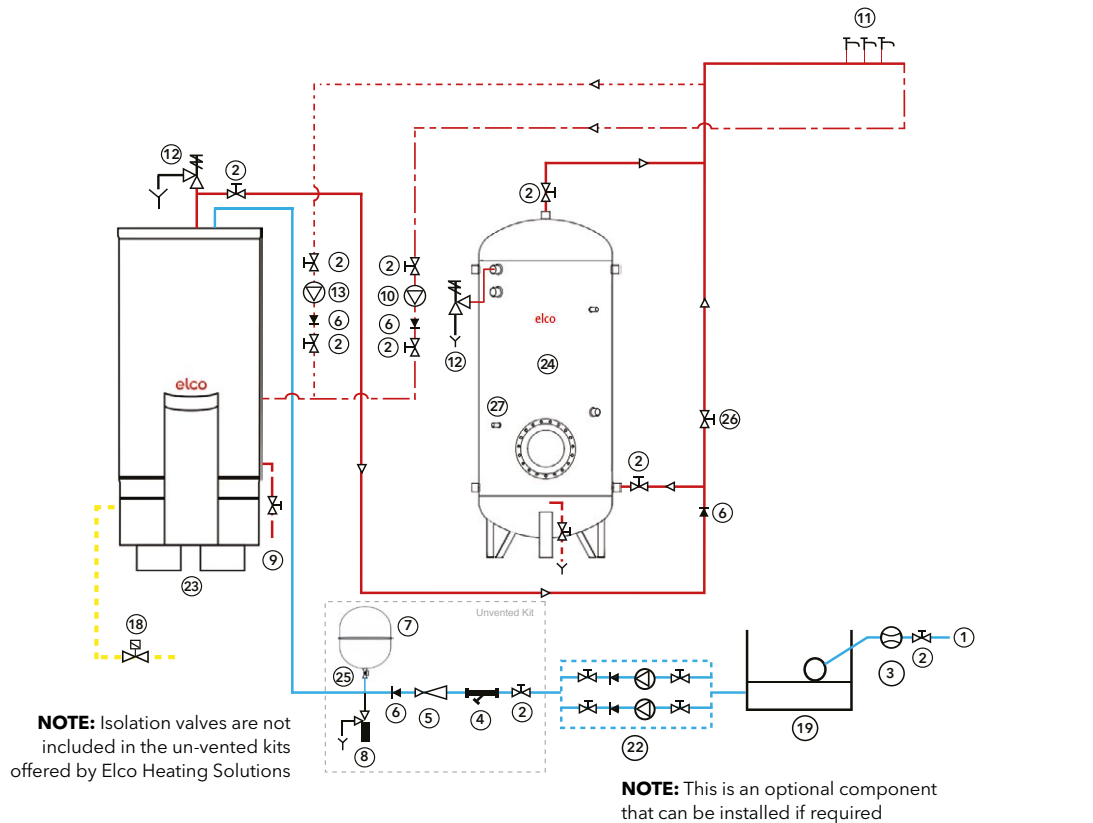
Polywarm PWB	Df	De	H	A	H1	H2	H4	H6	H7	H15	H16	H17
	(mm)											
500	650	870	1891	2082	126	416	501	611	801	1411	1370	1526
800	750	970	2188	2393	113	433	518	628	898	1678	1638	1793
1000	850	1070	2188	2436	101	454	539	649	989	1645	1606	1760
1500	950	1170	2440	2706	109	440	525	635	1075	1935	1895	2050
2000	1100	1320	2492	2820	91	467	542	652	842	1952	1877	2057
2500	1250	1470	2361	2781	140	551	626	736	976	1816	1741	1891
3000	1250	1470	2861	3217	140	551	626	736	876	2316	2232	2391

Connections

Polywarm PWB	1	2, 3, 11, 13	5	7 & 9	8	10	12	14
	Gas F							
500	1 1/4"	1 1/4"	Øi 300mm	1/2"	1 1/4"	1 1/2"	2"	1 1/4"
800	1 1/4"	1 1/4"	Øi 300mm	1/2"	1 1/4"	1 1/2"	2"	1 1/4"
1000	1 1/2"	1 1/2"	Øi 300mm	1/2"	1 1/4"	2"	2"	1 1/2"
1500	1"	1 1/2"	Øi 300mm	1/2"	1 1/4"	2"	2"	2"
2000	1"	2"	Øi 300mm	1/2"	1 1/4"	2"	2"	2"
2500	1"	2"	Øi 300mm	1/2"	1 1/4"	2"	2"	2"
3000	1"	2"	Øi 300mm	1/2"	1 1/4"	2"	2"	2"

Installation schematics – Polywarm PWB DHW Buffer Cylinder

Typical NHREC Gas Water Heater and 1 additional SSB or PWB DHW buffer vessels schematic



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|----------------------------|---|-----------------------------------|
| 1. Cold water supply | 8. Expansion relief valve | 19. Cold water storage tank |
| 2. Isolation valve | 9. Drain | 22. Cold water booster pump set |
| 3. Water meter | 10. DHW secondary re-circulation pump | 23. NHREC water heater |
| 4. Strainer | 11. Hot water outlets | 24. PWB buffer vessel |
| 5. Pressure limiting valve | 12. Temperature and pressure relief valve | 25. Lockshield valve |
| 6. Non-return valve | 13. Pump for Charging PWB buffer vessel | 26. Normally closed valve |
| 7. Expansion vessel | 18. Gas shut-off valve | 27. Thermostat to control pump 13 |

For more schematics please refer to the Installation and Operation manual or contact ELCO Heating Solutions

These illustrations are designed to provide general guidance on the hydraulic scheme and should not be considered as an installation drawing.

Clearances

