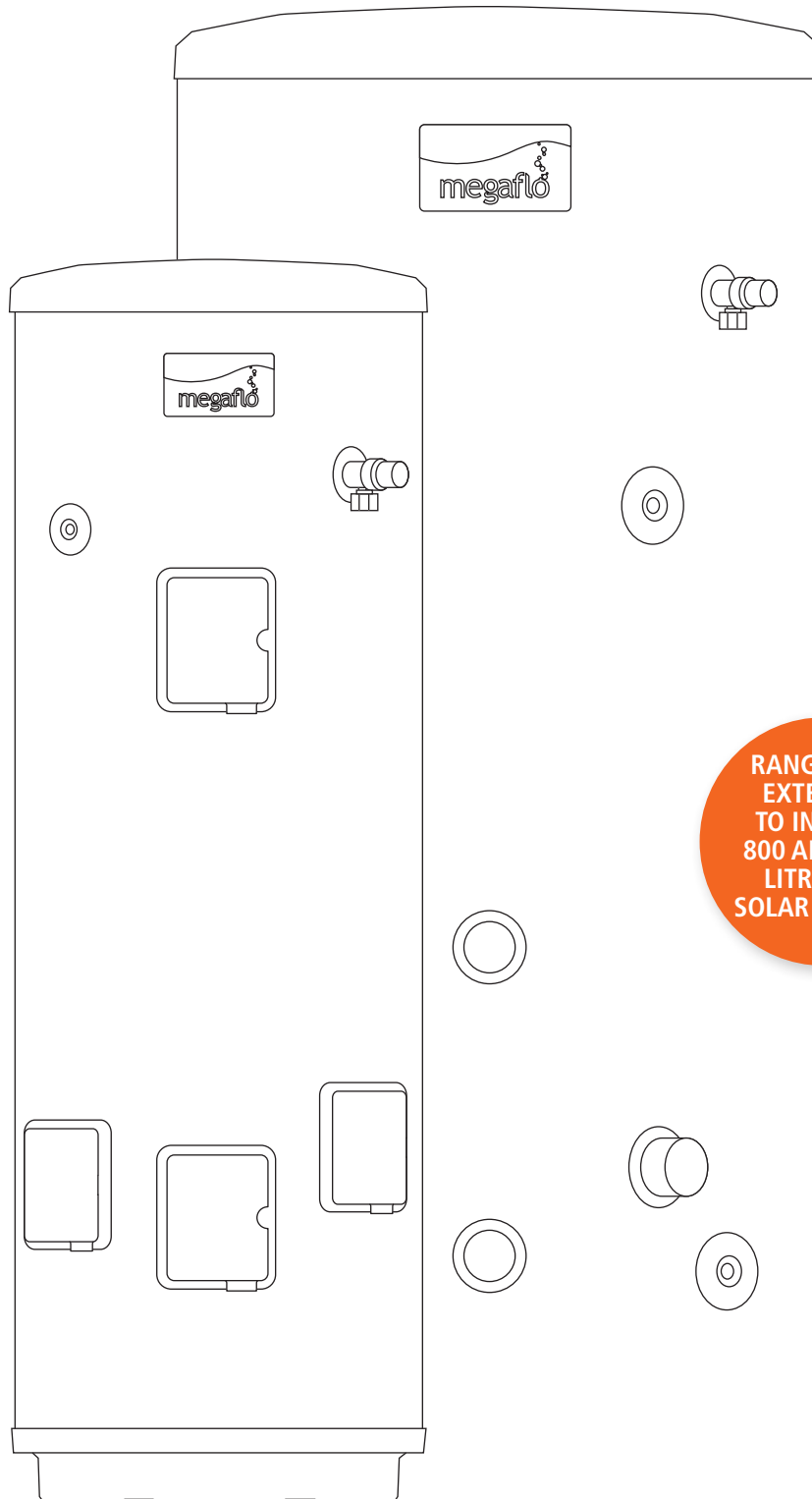




MEGAFLO Eco Plus

Technical data



**RANGE NOW
EXTENDED
TO INCLUDE
800 AND 1000
LITRE AND
SOLAR MODELS**



FOR THE ULTIMATE IN HOT WATER PERFORMANCE AND COMFORT



MEGAFLO Eco Plus

	DIRECT			INDIRECT			SOLAR	
	250 and 300 litre models	400 to 570 litre models	800 to 1000 litre models	250 to 300 litre models	400 to 570 litre models	800 to 1000 litre models	400 to 570 litre models	800 to 1000 litre models
TECHNICAL SPECIFICATIONS								
Maximum supply pressure to incoming mains cold water Combination Valve (supplied) (MPa / bar)	1.6 / 16	1.6 / 16	1.6 / 16	1.6 / 16	1.6 / 16	1.6 / 16	1.6 / 16	1.6 / 16
Minimum recommended supply pressure at 50 litres per minute (MPa / bar)	0.15 / 1.5	0.15 / 1.5	0.15 / 1.5	0.15 / 1.5	0.15 / 1.5	0.15 / 1.5	0.15 / 1.5	0.15 / 1.5
Operating pressure (MPa / bar)	0.35 / 3.5	0.35 / 3.5	0.35 / 3.5	0.35 / 3.5	0.35 / 3.5	0.35 / 3.5	0.35 / 3.5	0.35 / 3.5
Inner water container	DUPLEX	DUPLEX	DUPLEX	DUPLEX	DUPLEX	DUPLEX	DUPLEX	DUPLEX
Thermal insulation - fire retardant expanded polyurethane foam. 60mm	YES	n/a	n/a	YES	n/a	n/a	n/a	n/a
Thermal insulation - fire retardant expanded polyurethane foam. 100mm	n/a	YES	YES	n/a	YES	YES	YES	YES
Pressure Relief Valve (MPa / bar)	0.6 / 6	0.8 / 8	0.8 / 8	0.6 / 6	0.8 / 8	0.8 / 8	0.8 / 8	0.8 / 8
Immersion Heater 3kW @ 240v, 2.8kW @ 230v - AC Supply only - Number fitted	4	4	n/a	1	1	1	1	n/a
Immersion Heater 6kW @ 240v, 5.6kW @ 230v - AC Supply only - Number fitted	n/a	n/a	4	n/a	n/a	n/a	n/a	1
Primary Coil hydraulic resistance at 15 lpm (MPa / bar)	n/a	n/a	n/a	0.02 / 0.2	0.002 / 0.02	0.002 / 0.02	n/a	n/a
Primary Coil hydraulic resistance at 30 lpm (MPa / bar)	n/a	n/a	n/a	-	0.006 / 0.06	0.008 / 0.08	n/a	n/a
Primary Coil hydraulic resistance at 60 lpm (MPa / bar)	n/a	n/a	n/a	-	0.025 / 0.25	0.03 / 0.3	n/a	n/a
Solar coil hydraulic resistance at 15 lpm (MPa / bar)	n/a	n/a	n/a	n/a	n/a	n/a	0.002 / 0.02	0.002 / 0.02
Solar coil hydraulic resistance at 30 lpm (MPa / bar)	n/a	n/a	n/a	n/a	n/a	n/a	0.006 / 0.06	0.008 / 0.08
Solar coil hydraulic resistance at 60 lpm (MPa / bar)	n/a	n/a	n/a	n/a	n/a	n/a	0.025 / 0.25	0.03 / 0.3
Auxiliary coil hydraulic resistance at 15 lpm (MPa / bar)	n/a	n/a	n/a	n/a	n/a	n/a	0.001 / 0.01	0.001 / 0.01
Auxiliary coil hydraulic resistance at 30 lpm (MPa / bar)	n/a	n/a	n/a	n/a	n/a	n/a	0.002 / 0.02	0.002 / 0.02
Auxiliary coil hydraulic resistance at 60 lpm (MPa / bar)	n/a	n/a	n/a	n/a	n/a	n/a	0.02 / 0.2	0.017 / 0.17
Maximum pressure Primary Coil (bar)	10	10	10	10	10	10	10	10
CONNECTIONS								
Primary flow	n/a	n/a	n/a	¾" BSP (M)	1" BSP (F)	1 1/4" BSP (F)	n/a	n/a
Primary Return	n/a	n/a	n/a	¾" BSP (M)	1" BSP (F)	1 1/4" BSP (F)	n/a	n/a
Hot outlet	¾" BSP (M)	1" BSP (F)	2" BSP (F)	¾" BSP (M)	1" BSP (F)	2" BSP (F)	1" BSP (F)	2" BSP (F)
Cold inlet	¾" BSP (M)	1" BSP (F)	1" BSP (F)	¾" BSP (M)	1" BSP (F)	1" BSP (F)	1" BSP (F)	1" BSP (M)
Immersion heater boss	1 ¾" BSP (F)	1 ¾" BSP (F)	1 ¾" BSP (F)	1 ¾" BSP (F)	1 ¾" BSP (F)	1 ¾" BSP (F)	1 ¾" BSP (F)	1 ¾" BSP (F)
Secondary return	n/a	1" BSP (F)	1" BSP (F)	n/a	1" BSP (F)	1" BSP (F)	1" BSP (F)	1" BSP (F)
Solar Flow	n/a	n/a	n/a	n/a	n/a	n/a	1" BSP (F)	1 1/4" BSP (F)
Solar Return	n/a	n/a	n/a	n/a	n/a	n/a	1" BSP (F)	1 1/4" BSP (F)
Auxilliary Flow	n/a	n/a	n/a	n/a	n/a	n/a	1" BSP (F)	1 1/4" BSP (F)
Auxilliary Return	n/a	n/a	n/a	n/a	n/a	n/a	1" BSP (F)	1 1/4" BSP (F)
Sensor pockets	n/a	n/a	n/a	n/a	n/a	n/a	½" BSP (F)	½" BSP (F)
COMPONENTS								
Factory fitted Immersion Heater(s)	YES	YES	YES	YES	YES	YES	YES	YES
Thermal Controls	YES	YES	YES	YES	YES	YES	YES	YES
Cold water inlet control comprising	YES	YES	YES	YES	YES	YES	YES	YES
0.35 MPa (3.5 bar) Pressure Reducing Valve	YES	YES	YES	YES	YES	YES	YES	YES
0.6 MPa (6 bar) Pressure Relief Valve (BS EN 1567,BS EN 1491,EN 13959)	YES	NO	NO	YES	NO	NO	NO	NO
0.8 MPa (8 bar) Pressure Relief Valve (BS EN 1567,BS EN 1491,EN 13959)	NO	YES	YES	NO	YES	YES	YES	YES
¼ Turn Isolating Valve	YES	YES	YES	YES	YES	YES	YES	YES
Line Strainer	YES	YES	YES	YES	YES	YES	YES	YES
Non-Return Valve	YES	YES	YES	YES	YES	YES	YES	YES
Factory fitted Temperature and Pressure Relief Valve set at 90°C / 1 MPa (10 bar) (BS EN 1490)	YES	YES	YES	YES	YES	YES	YES	YES
Tundish	YES	YES	YES	YES	YES	YES	YES	YES
Additional Thermostat and Thermal Cut-Out (Indirect models only)	n/a	n/a	n/a	YES	YES	YES	YES	YES
Drain Valve	YES	YES	YES	YES	YES	YES	YES	YES
Wiring Center (Indirect and Solar models only)	n/a	n/a	n/a	YES	YES	YES	YES	YES
2 Port Motorised Valve (Indirect and Solar models only)	n/a	n/a	n/a	YES	YES	YES	YES	YES
Expansion Vessel including mounting	YES	YES	YES	YES	YES	YES	YES	YES
Solar Thermal Cut-Out (Solar models only)	n/a	n/a	n/a	n/a	n/a	n/a	YES	YES



FOR THE ULTIMATE IN HOT WATER PERFORMANCE AND COMFORT
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MEGAFLO Eco Plus

ErP technical data

Direct							
Supplier's name or trade mark	MegaFlo Eco Plus						
Supplier's model identifier	250 DDDD	300 DDDD	400 DDDD	500 DDDD	570 DDDD	800 DDDD	1000 DDDD
Storage volume V in litres	250	300	400	500	570	800	1000
Mixed water at 40°C V40 in litres	327	476	772	893	861	1294	1711
The declared load profile	XL	XL	2XL	2XL	2XL	3XL	3XL
The water heating energy efficiency class of the model	C	C	D	D	D	D	D
The water heating energy efficiency in %	38.5	39.1	38.7	38.2	38.4	38.5	36.5
The annual electricity consumption in kWh	4347	4281	5575	5634	5617	10660	11251
Daily fuel consumption Q fuel in kWh	20.010	19.620	25.380	25.660	25.580	48.540	51.230
The thermostat temperature settings of the water heater, as placed on the market by the supplier	60°C						

Indirect							
Model(s)	250 i	300 i	400 i	500 i	570 i	800 i	1000 i
Energy efficiency class	C	C	B	C	C	C	C
Storage volume V in litres	250	300	400	500	570	800	1000
Standing loss in W	70	79	72	89	102	114	139

Solar Indirect					
Model(s)	400 i	500 i	570 i	800 i	1000 i
Energy efficiency class	B	C	C	C	C
Storage volume V in litres	400	500	570	800	1000
Standing loss in W	72	89	102	114	139

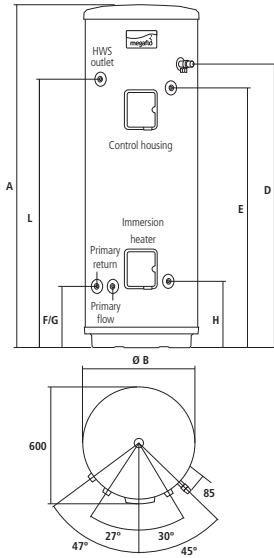




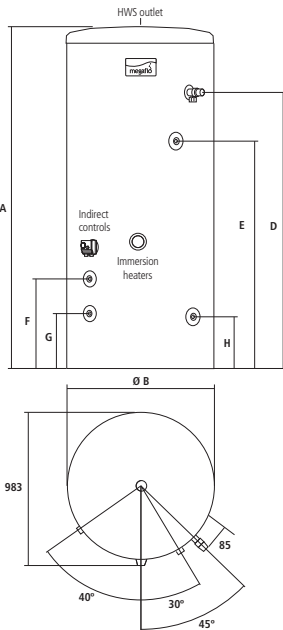
MEGAFLO Eco Plus

Indirect models

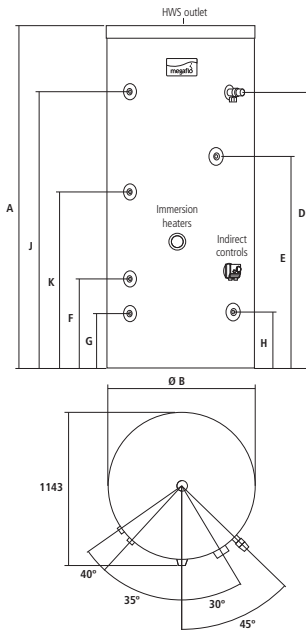
250 i EP AND 300 i EP



400 i EP, 500 i EP AND 570 i EP



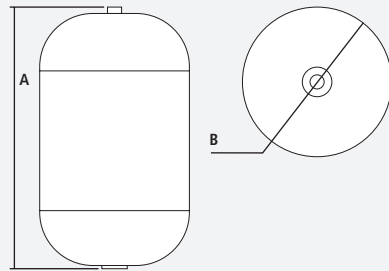
800 i EP AND 1000 i EP



Product code	95050710	95050711	95050712	95050713	95050714	95050721	95050722
Volume (litre)	250	300	400	500	570	800	1000
A Height (mm)	1737	2052	1502	1802	1997	1914	2327
B Diameter (mm)	579	579	861	861	861	1019	1019
D T&P Height (mm)	1441	1755	1116	1419	1611	1503	1863
E Secondary Return Height (mm)	1321	1635	832	1135	1330	1218	1438
F Primary Flow Height (mm)	373	373	499	499	499	623	623
G Primary Return Height (mm)	373	373	325	325	325	448	448
H Cold Water Inlet (mm)	354	354	309	309	309	438	438
J Sensor pocket (mm)	n/a	n/a	n/a	n/a	n/a	1503	1908
K Sensor pocket (mm)	n/a	n/a	n/a	n/a	n/a	1023	1023
L HWS outlet (mm)	1366	1681	n/a	n/a	n/a	n/a	n/a
Weight (dry kg)	59	66	78	95	107	211	219
Weight (full kg)	309	366	478	595	677	1011	1219
Insulation Thickness (mm)	60	60	100	100	100	100	100
T&P tapping	½	½	¾	¾	¾	¾	¾
T&P pressure setting (bar)	10	10	10	10	10	10	10
T&P temperature setting (°C)	90	90	90	90	90	90	90
Expansion Relief Setting (bar)	8	8	8	8	8	8	8
Electrical Heater Quantity	1	1	1	1	1	1	1
Electrical Heater Rating (@ 240V)	3kW	3kW	3kW	3kW	3kW	6kW	6kW
Re-heat times (mins)*	19	23	15	20	20	24	28
Heat Up time (from cold) (mins)‡	25	29	21	28	28	32	39
Max. Primary Pressure (coil) (bar)	10**	10**	10**	10**	10**	10**	10**
Primary Flow rate (Boiler l/min)	15	15	60	60	60	60	60
Primary Coil resistance at 15 lpm (MPa / bar)	0.02 / 0.2	0.02 / 0.2	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02
Primary Coil resistance at 30 lpm (MPa / bar)	-	-	0.006 / 0.06	0.006 / 0.06	0.006 / 0.06	0.008 / 0.08	0.008 / 0.08
Primary Coil resistance at 60 lpm (MPa / bar)	-	-	0.025 / 0.25	0.025 / 0.25	0.025 / 0.25	0.03 / 0.3	0.03 / 0.3
Continuous performance Δt 45K (l/hr)	648	656	1085	1035	1022	1068	1236
1st hour performance Δt 45K (l/hr)	898	956	1485	1535	1592	1868	2239
Coil rating‡ (kW)	42.2	42	56.9	54.3	53.6	58.7	64.8
Heat loss (W/litre)	0.37	2.52	0.18	0.18	0.19	0.21	0.24
Heat loss (kWh/24h)	1.67	1.89	1.72	2.14	2.44	2.74	3.33
Global Warming Potential	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Expansion Vessel (litre)	24	24	35	35	35	60	60
Maximum Primary working pressure (bar)	10**	10**	10**	10**	10**	10**	10**
Cylinder material	HGD	HGD	MGD	MGD	MGD	MGD	MGD

‡ Figures based on 80°C flow temperature with 15 lpm flow rate for cylinders up to 300 litres and 60 lpm for cylinders above 400 litres.
 * Continuous based on Δt 45K primary flow and a primary flow temperature of 80°C. ** Note coil is capable of 10 bar - Zone valve is up to 8.5 bar.
 ‡ If 10 bar is required a suitable replacement zone valve is needed (For 400 to 1000 litre models it is important to note that the coil must not be brought under pressure until the cylinder is full). HGD - High Grade Duplex, MGD - Marine Grade Duplex 2205.

POTABLE WATER EXPANSION VESSEL



Model	250	300	400	500	570	800	1000
Litres	24	24	35	35	35	60	60
Pre-set pressure (bar)	3	3	3	3	3	3	3
Connection (mbsp)	¾	¾	¾	¾	¾	1	1
A Height (mm)	492	492	440	440	440	761	761
B Diameter (mm)	280	280	365	365	365	635	635



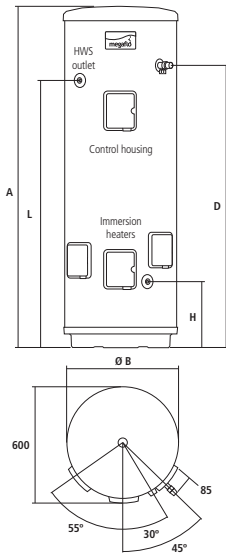
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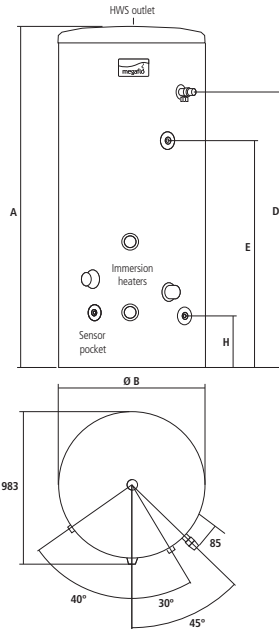
MEGAFLO Eco Plus

Direct models

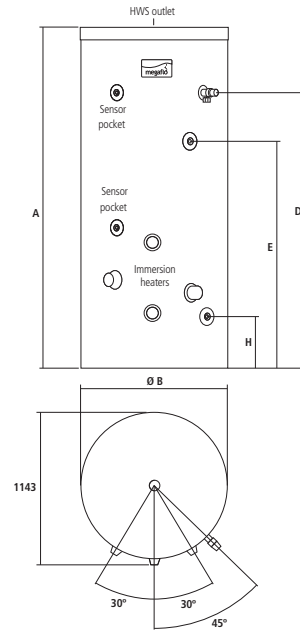
250 DDDD EP AND 300 DDDD EP



400 DDDD EP, 500 DDDD EP AND 570 DDDD EP



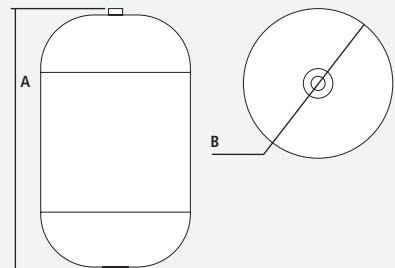
800 DDDD EP AND 1000 DDDD EP



Product code	95050700	95050701	95050702	95050703	95050704	95050723	95050724
Volume (litre)	250	300	400	500	570	800	1000
A Height (mm)	1737	2052	1502	1802	1997	1914	2327
B Diameter (mm)	579	579	861	861	861	1019	1019
D T&P Height (mm)	1379	1674	1116	1419	1611	1503	1908
E Secondary Return Height (mm)	1322	1573	832	1132	1436	1188	1583
H Cold Water Inlet (mm)	307	307	309	309	309	393	393
L HWS outlet (mm)	1366	1681	n/a	n/a	n/a	n/a	n/a
Weight (dry kg)	50	57	72	89	101	207	215
Weight (full kg)	296	346	472	589	671	1007	1215
Insulation thickness (mm)	60	60	100	100	100	100	100
T&P tapping	½	½	¾	¾	¾	¾	¾
T&P pressure setting (bar)	10	10	10	10	10	10	10
T&P temperature setting (°C)	90	90	90	90	90	90	90
Expansion Relief setting (bar)	8	8	8	8	8	8	8
Electrical Heater quantity	4	4	4	4	4	4	4
Electrical Heater rating (@ 240V)	4x 3kW	4x 3kW	4x 3kW	4x 3kW	4x 3kW	4x 6kW	4x 6kW
Re-heat times (mins)	65	78	73	92	104	73	92
Heat Up time (from cold) (mins)‡	257	310	104	131	149	104	133
Continuous performance Δt 45K (l/hr)	229	229	229	229	229	458	458
1st hour performance Δt 45K (l/hr)	479	529	629	729	799	1258	1458
Heat loss (kWh/24h)	1.67	1.89	1.72	2.14	2.44	2.74	3.33
Global Warming Potential	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Expansion Vessel (litre)	24	24	60	60	60	60	60
Cylinder material	HGD	HGD	MGD	MGD	MGD	MGD	MGD

‡ Figures based on 15lpm flow rate for Domestic cylinders up to 300 litres and 60 lpm for Commercial cylinders above 400 litres. HGD - High Grade Duplex, MGD - Marine Grade Duplex 2205.

POTABLE WATER EXPANSION VESSEL



Model	250	300	400	500	570	800	1000
Litres	24	24	35	35	35	60	60
Pre-set pressure (bar)	3	3	3	3	3	3	3
Connection (mbsp)	¾	¾	¾	¾	¾	1	1
A Height (mm)	492	492	440	440	440	761	761
B Diameter (mm)	280	280	365	365	365	635	635

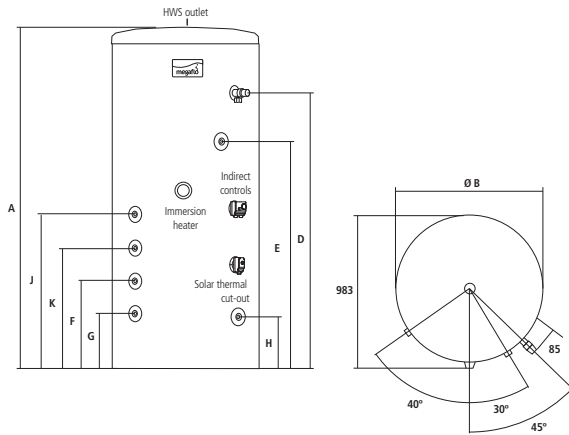


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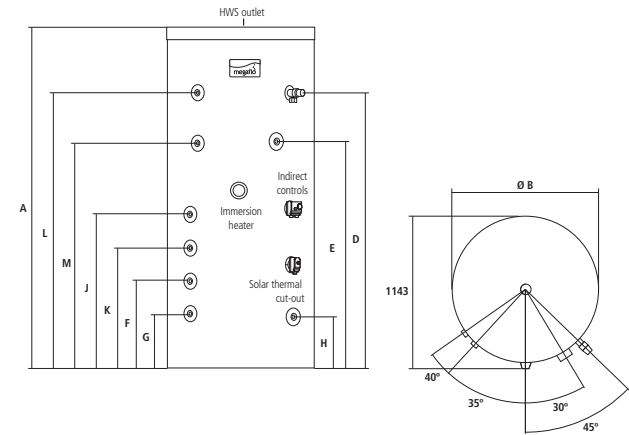


MEGAFLO Eco Plus Solar models

400 S, 500 S AND 570 S



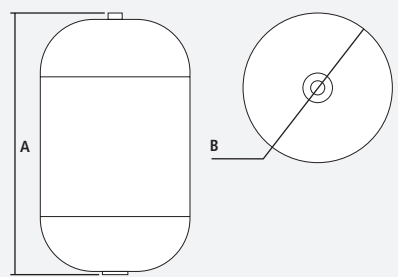
800 S AND 1000 S



Product codes	95050725	95050726	95050727	95050728	95050729
Volume (litre)	400	500	570	800	1000
A Height (mm)	1502	1802	1997	1914	2327
B Diameter (mm)	861	861	861	1019	1019
D T&P Height (mm)	1116	1419	1611	1503	1886
E Secondary Return Height (mm)	771	1135	1330	1218	1538
F Solar Flow Height (mm)	499	499	499	623	623
G Solar Return Height (mm)	325	325	325	448	448
H Cold Water Inlet (mm)	309	309	309	438	438
J Auxiliary Flow (mm)	871	871	1020	998	1198
K Auxiliary Return (mm)	671	671	820	798	998
L Sensor Pocket (mm)	n/a	n/a	n/a	1503	1886
M Sensor Pocket (mm)	n/a	n/a	n/a	1218	1538
Weight (dry kg)	83	100	112	217	225
Weight (full kg)	483	600	682	1017	1225
Insulation thickness (mm)	100	100	100	100	100
T&P tapping	¾	¾	¾	¾	¾
T&P pressure setting (bar)	10	10	10	10	10
T&P temperature setting (°C)	90	90	90	90	90
Expansion Relief setting (bar)	8	8	8	8	8
Electrical Heater quantity	1	1	1	1	1
Electrical Heater rating (@ 240V)	3kW	3kW	3kW	6kW	6kW
Max. Primary pressure (coil) (bar)	10**	10**	10**	10**	10**
Solar Coil resistance at 15 lpm (MPa / bar)	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02
Solar Coil resistance at 30 lpm (MPa / bar)	0.006 / 0.06	0.006 / 0.06	0.006 / 0.06	0.008 / 0.08	0.008 / 0.08
Solar Coil resistance at 60 lpm (MPa / bar)	0.025 / 0.25	0.025 / 0.25	0.025 / 0.25	0.03/ 0.3	0.03 / 0.3
Auxiliary coil resistance 15 lpm (MPa / bar)	0.001 / 0.01	0.001 / 0.01	0.001 / 0.01	0.001 / 0.01	0.001 / 0.01
Auxiliary coil resistance 30 lpm (MPa / bar)	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02	0.002 / 0.02
Auxiliary coil resistance 60 lpm (MPa / bar)	0.02 / 0.2	0.02 / 0.2	0.02 / 0.2	0.017 / 0.17	0.017 / 0.17
Solar coil rating at 30 l/min and 80°C flow temp	42	46.1	41.7	42.9	54.3
Aux Coil rating (kW)‡	37.6	38.2	38.1	47.5	45.8
Heat loss (W/litre)	0.19	0.21	0.24	0.25	0.28
Heat loss (kWh/24h)	1.72	2.14	2.44	2.74	3.33
Solar Primary Coil surface (m²)	2	2	2	3	3
Aux Coil surface area (m²)	1	1	1	1.5	1.5
Global Warming Potential	3.1	3.1	3.1	3.1	3.1
Expansion Vessel (litre)	35	35	35	60	60
Cylinder material	MGD	MGD	MGD	MGD	MGD

‡ Figures based on 80°C flow temperature with 15 lpm flow rate for cylinders up to 300 litres and 60 lpm for cylinders above 400 litres. Continuous based on Δt 45k at primary flow temperature of 80°C. **Note coil is capable of 10 bar - Zone valve is up to 8.5 bar. If 10 bar is required a suitable replacement zone valve is needed (For 400 to 1000 litre models it is important to note that the coil must not be brought under pressure until the cylinder is full). HGD - High Grade Duplex, MGD - Marine Grade Duplex 2205.

POTABLE WATER EXPANSION VESSEL



Model	250	300	400	500	570	800	1000
Litres	24	24	35	35	35	60	60
Pre-set pressure (bar)	3	3	3	3	3	3	3
Connection (mbsp)	¾	¾	¾	¾	¾	1	1
A Height (mm)	492	492	440	440	440	761	761
B Diameter (mm)	280	280	365	365	365	635	635



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MEGAFLO Eco Plus

Installation guidance

TYPICAL HOT WATER USAGE

Typical hot water volumes	
Handwashing	1 to 2.5 litres per person (40°C)
Kitchen sink	2 to 7 litres per meal (60°C)
Cleaning	10 litres per day (60°C)
Bath	60 litres per bath (60°C)
Hairdressing	10 litres per shampoo (40°C)
Dishwasher	2 litres per meal (60°C)
Washing machine	20 litres per cycle (60°C)
Showers	48 litres (40°C) per 4 minute shower at 12 litres per minute
The above quantities are intended as a guideline. Individual installation requirements should be calculated before selecting the correct water heater.	

OUTLET / TERMINAL FITTINGS

The MEGAFLO Eco Plus can be used in conjunction with most types of terminal fittings.

It is advantageous in many mixer showers to have balanced hot and cold supplies, in these instances the balanced cold water supply should be teed off the supply to the MEGAFLO Eco Plus immediately after the cold water combination valve (see illustration on page 8). Branches to cold drinking outlets should be taken before the valve.

Outlets situated higher than the MEGAFLO Eco Plus will give outlet pressures lower than that at the heater, a 10m height difference will result in a 1 bar pressure reduction at the outlet fitting.

NOTE: Terminal fittings should have a rated operating pressure of at least 0.8 MPa (8 bar).

LIMITATIONS

The MEGAFLO Eco Plus unvented water heater should not be used in any of the following circumstances:

Solid fuel boilers or any other boiler in which the energy input is not under effective thermostatic control unless additional and appropriate measures are installed.

Gravity circulation primaries.

Steam heating plant unless additional and appropriate safety devices are installed.

Ascending spray type bidets or any class 5 back syphonage risk requiring that a type AA, AB, AD or AG air gap is employed.

Water supplies that have either inadequate pressure / flow rate or where the supply may be intermittent.

Situations where it is not possible to safely convey any discharging water from the safety valves.

Areas where water consistently contains a high proportion of solids, e.g. suspended matter that could block the strainer, unless adequate filtration can be ensured.

INSTALLATION REQUIREMENT

The installation must be carried out in accordance with the appropriate Building Regulations & Technical Standards. Building Regulations Part G and Part L (England and Wales). Scottish Building Standards Section 4 and Section 6. Building Regulations (Northern Ireland) Parts F1 and F2 and Part P. Water Supply (Water Fittings) Regulations (England and Wales). The Water Byelaws 2004 (Scotland). Water Supply (Water Fittings) Regulations (Northern Ireland).

WATER SUPPLY

It should be noted that the incoming mains water supply will be supplying both the hot and cold water requirements.

It is recommended that the maximum water demand is assessed and the water supply checked to ensure the demand can be met.

NOTE: A high mains water pressure will not always guarantee high flow rates.

Wherever possible the main supply pipe should be in 28mm or greater.

The minimum mains water supply requirements should be 0.15 MPa (1.5 bar) working pressure and 50 litres per minute flow rate. At these values outlet flow rates may be unsatisfactory if several outlets are used simultaneously. The higher the available pressure and flow rate the better the system performance will be.

The MEGAFLO Eco Plus has an operating pressure of 3.5 bar which is controlled by the Cold Water Combination Valve. This valve can be connected to a maximum mains supply pressure of 1.6 MPa (16 bar).

The water supply must be of wholesome water quality (Fluid Category 1 as defined by the Water Regulations 1999).

The MEGAFLO Eco Plus is to be used for the storage of wholesome water (max.250mg/l chloride).

ELECTRICAL SUPPLY

The MEGAFLO Eco Plus must be earthed.

The MEGAFLO Eco Plus is suitable for AC supply only.

Electrical installation must be carried out by a competent electrician and be in accordance with the latest I.E.E. wiring regulations.

SECONDARY CIRCULATION

If a secondary circulation system is required using an indirect cylinder it is recommended that it be connected to the MEGAFLO Eco Plus as shown in the diagram on page 8.

If a secondary circulation system is required using a MEGAFLO Eco Plus 250/300 Direct cylinder it is recommended that it be connected via a swept tee joint into the cold feed to the cylinder.

The secondary return pipe bore should be sized accordingly and fitted with an appropriate check valve to prevent backflow. A suitable WRAS approved bronze circulation pump will be required.

NOTE: On larger systems, due to the increase in water content, it may be necessary to fit additional expansion volume to the secondary system by fitting an external expansion vessel to the circuit. This should be done if the capacity of the secondary system exceeds 10 litres.

As a guide:

Pipe capacities
15mm O/D = 0.13 litres per metre
(10 litres = 77m)

22mm O/D = 0.38 litres per metre
(10 litres = 26m)

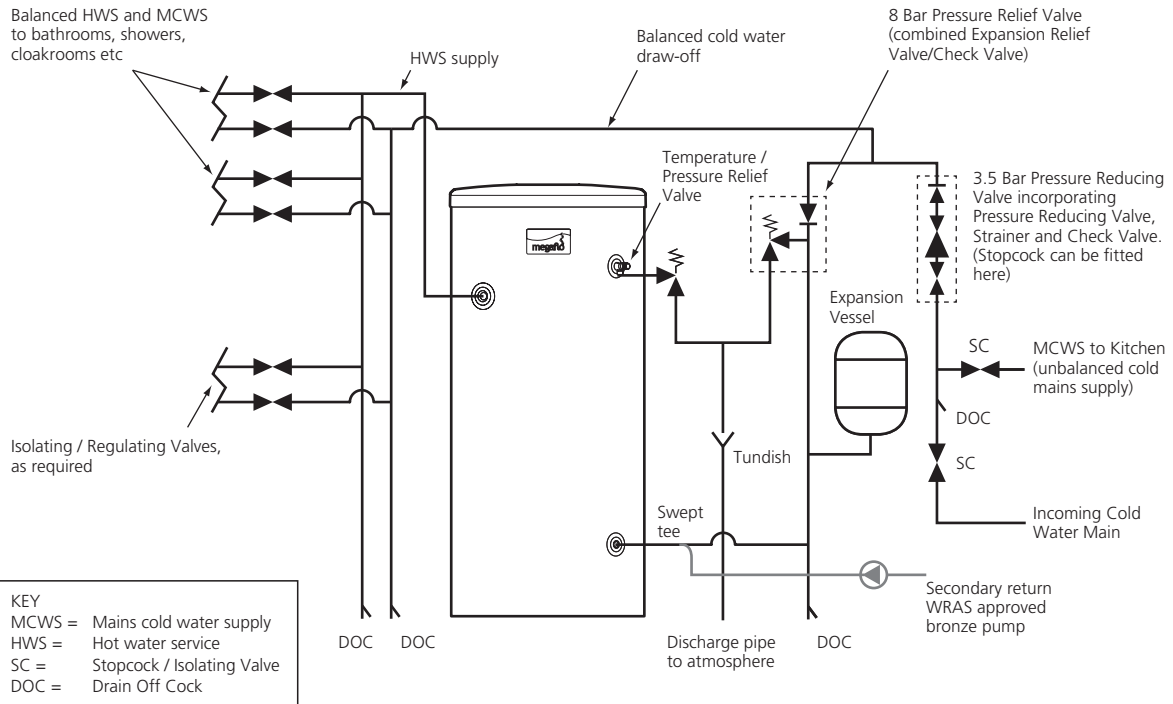
28mm O/D = 0.55 litres per metre
(10 litres = 18m)

In direct electric installations where a secondary circulation is required particular attention should be paid by the installer to maintain the return water temperature (guidelines state that a minimum of 55° return temperature is advisable). Factors such as, but not limited to, secondary circulation flow rates, minimising heat loss of all secondary circuit pipework and timed operation during periods of high demand are critical to the correct operation and longevity of the heating element(s) and thermostats.

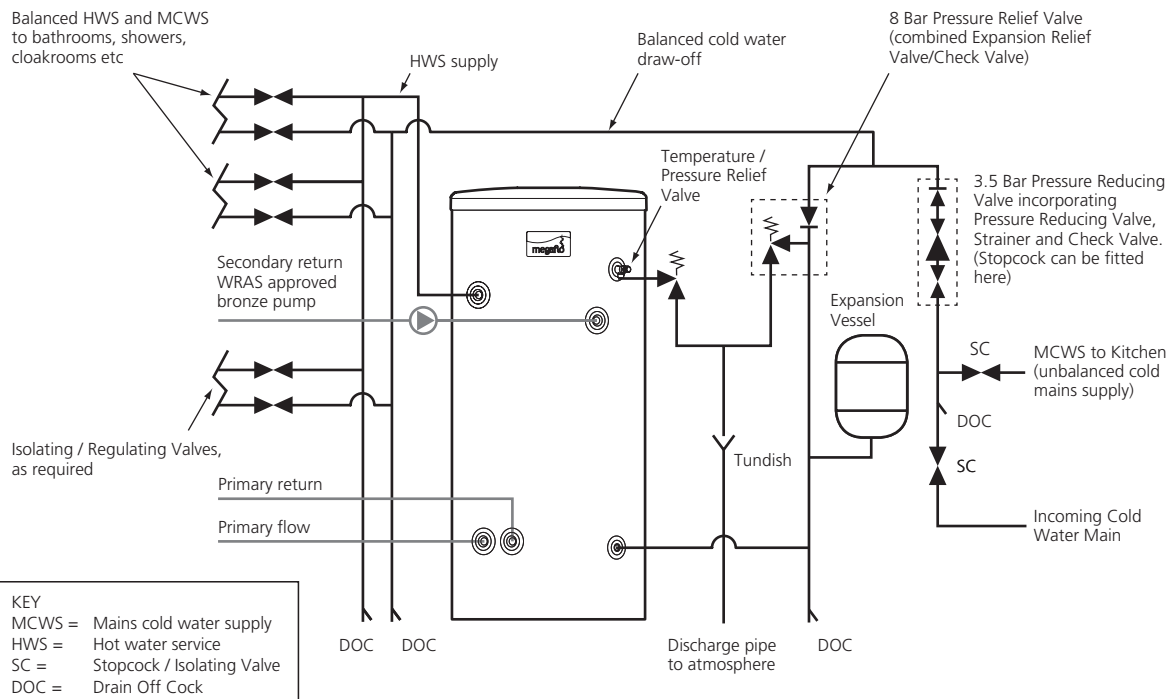
NOTE: Secondary circulation is not recommended for direct electric units using off-peak tariffs where the secondary circulation is not controlled in conjunction with the heat source as performance can be affected.



TYPICAL INSTALLATION – 250 / 300 DIRECT



TYPICAL INSTALLATION – 250 / 300 INDIRECT

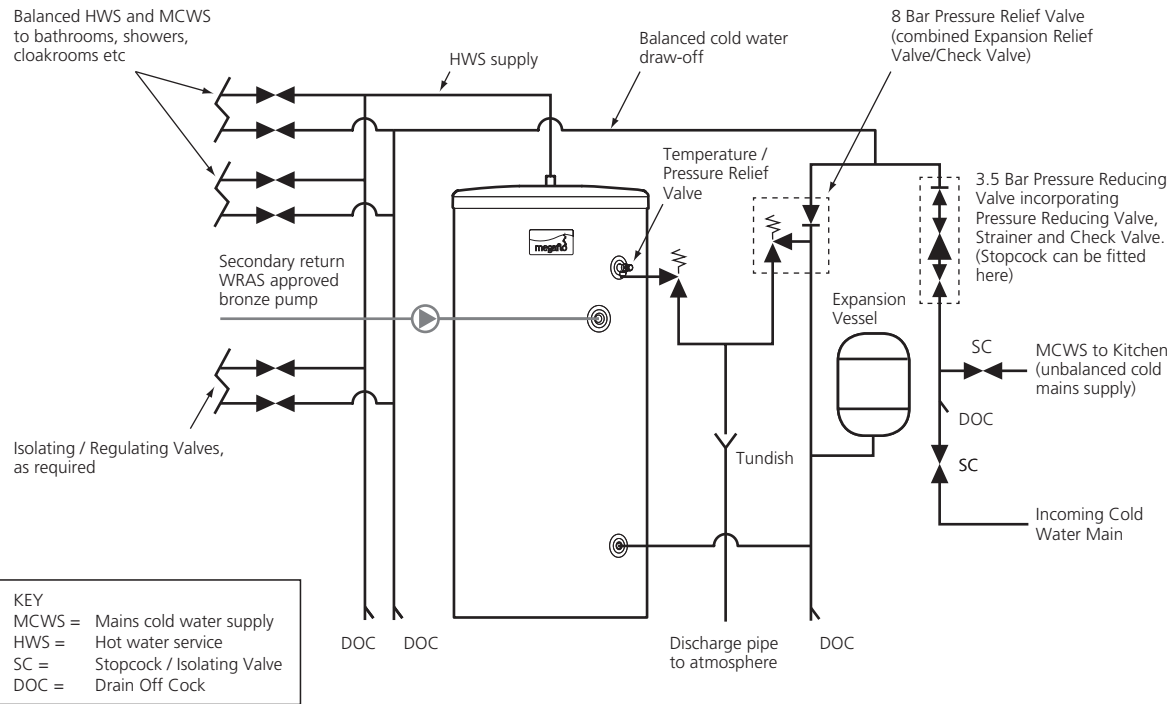




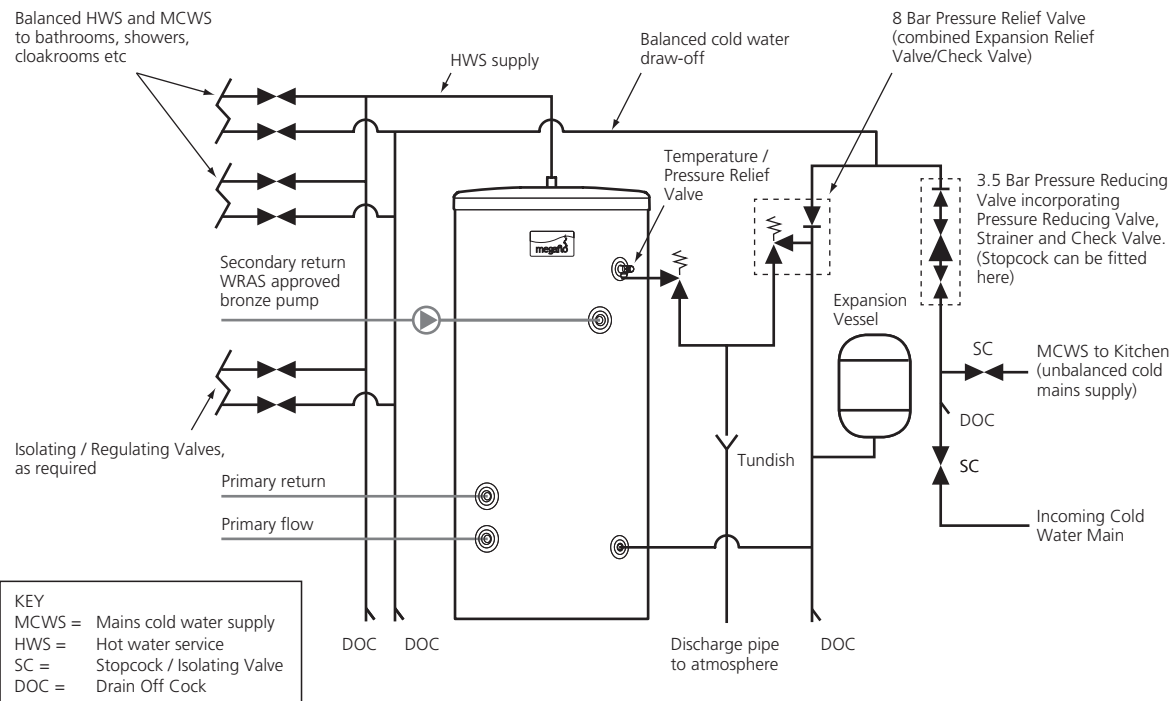
MEGAFLO Eco Plus

Installation guidance

TYPICAL INSTALLATION – 400-1000 DIRECT



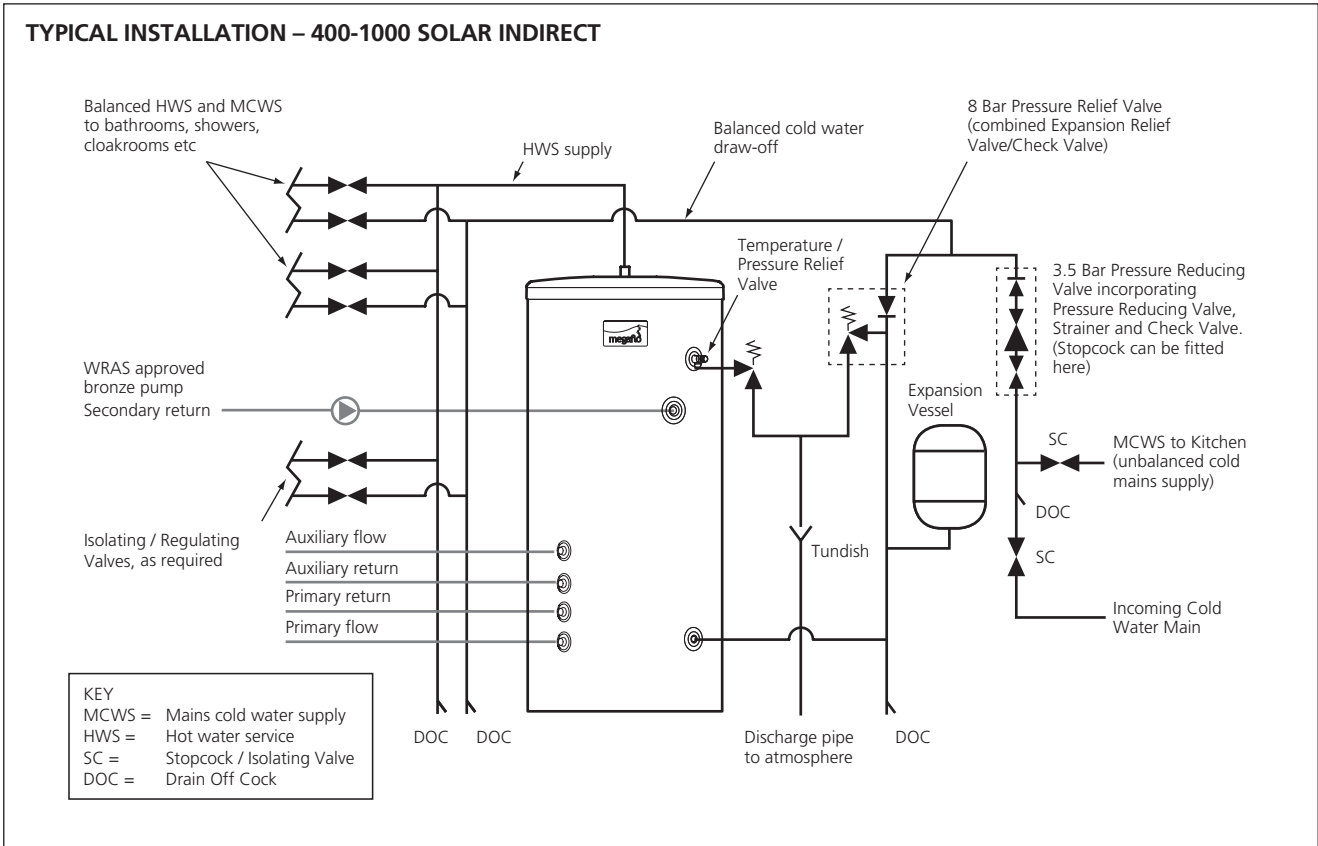
TYPICAL INSTALLATION – 400-1000 INDIRECT





MEGAFLO Eco Plus

Installation guidance



FOR THE ULTIMATE IN HOT WATER PERFORMANCE AND COMFORT
FOR SPECIFICATION ADVICE TEL: 01603 420220 OR EMAIL: SPECIFIER@HEATRAESADIA.COM



MEGAFLO Eco Plus

Codes of practice / legislation

EU DIRECTIVES:

- Pressure Equipment Directive 97/23/EC.
- Low Voltage Directive (LVD) 2006/95/EC.
- Electromagnetic Compatibility (EMC) Directive 2004/108/EC.

LEGISLATION:

- Building Regulations Part G and Part L (England and Wales).
- Scottish Building Standards Section 4 and Section 6.
- Building Regulations (Northern Ireland) Parts F1 and F2 and Part P.
- Water Supply (Water Fittings) Regulations (England and Wales).
- The Water Byelaws 2004 (Scotland).
- Water Supply (Water Fittings) Regulations (Northern Ireland).

STANDARDS:

- Relevant clauses of the following standards are complied with:
 - EN 12897 – Specification for indirectly heated unvented cylinders.
 - EN 60335-2-21 – Safety-Particular requirements for storage water cylinders.
- The stainless steel materials used comply with the relevant clauses of:
 - EN 10088 – Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes.

COMPONENTS SUPPLIED COMPLY WITH THE FOLLOWING STANDARDS:

- BS EN 1490 Building Valves – Combined Temperature and Pressure Relief Valves.
- BS EN 1491 Building Valves – Expansion Valves.
- BS 6144 Specification for Expansion Vessels Using An Internal Diaphragm For Unvented Water Supply Systems.
- BS EN 1567 Building Valves – Water Pressure Reducing Valves and Combination Reducing Valves.
- BS EN 60730-1 Automatic Electrical Controls – For households and similar use. Part 1: General Requirements.
- BS EN 60730-2-8 Automatic Electrical Controls – Particular Requirements for Electrically Operated Water Valves.
- BS EN 13959 Anti-pollution Check Valves.

THE USE OF THESE WATER HEATERS WILL AID IN COMPLIANCE WITH:

- Health and Safety Executive Approved Code of Practice L8: The control of legionella bacteria in water systems.
- BS EN 806 Parts 1 to 5: Specification for installations inside buildings conveying water for human consumption.
- BS 8558 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings.
- Chartered Institute of Building Services Engineers Guide B and Guide F.

MANUFACTURED IN A FACTORY APPROVED TO:

- BS EN ISO 9001.
- OHSAS 18001.
- ISO 50001.
- ISO 14001.

APPROVALS:

- Kiwa Certification Number: 1403700.
- Nemko Certification Number: P13217797.





Notes



MEGAFLO, HURRICANE WAY,
NORWICH, NORFOLK, NR6 6EA

MEGAFLO may introduce modifications to their products from time to time. Consequentially the details given in this brochure are subject to alteration without notice.

Contacts

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Please recycle this product once you have finished with it.

BY **HEATRAESADIA**

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