



BY HEATRAESADIA



DATA SHEET

MegaFlo Eco Solar Direct

UNVENTED CYLINDER

MegaFlo Eco Solar provides an abundance of hot water for fast filling baths and invigorating powerful showers without the need for pumps or tanks, while running costs are kept to a minimum by harnessing the sun's energy when used in conjunction with a separately available solar thermal flat plate collector or evacuated tube package. Proudly made in the UK from high grade duplex stainless steel to combat even the most aggressive water conditions, MegaFlo Eco comes with a lifetime guarantee* for total peace of mind.

76 l/min at 3 bar	2x3 kW	170-300 Litres	60 mm
MAX FLOW	IMMERSION HEATERS	NOMINAL CAPACITY	INSULATION



FEATURES

- 60mm insulation
- Insulated T&P valve
- High grade duplex stainless steel
- MegaFlo Eco delivers up to 76 litres per minute of hot water at 3 bar pressure
- Titanium elements
- High performance solar coil

BENEFITS

- Best possible heat retention and energy efficiency
- Reduces heat loss for better energy efficiency
- High corrosion resistance and a high strength to weight ratio
- Outstanding hot water performance without the need for shower pumps, even at low pressures
- The highest quality elements, specially designed for longer life in even the most aggressive or corrosive water conditions
- Maximising harnessed energy

*In domestic installations

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SPECIFICATIONS

Model	170D	210DD	260DD	300DD
Product code	95050527	95050512	95050528	95050516
Nominal capacity (litres)	170	210	260	300
Insulation thickness (mm)	60	60	60	60
Immersion heater rating (No. x kW)	1 x 3	2 x 3	2 x 3	2 x 3
Weight empty (kg)	37.8	42.5	47.3	61.5
Weight full (kg)	207.8	252.5	307.3	361.5
Standing heat loss (kWh/24h)	1.25	1.41	1.63	1.84
Standing heat loss (kWh/year)	456.25	514.65	594.95	671.6
Max flow at 3.5 bar (l/min)	76	76	76	76
Max flow at 1 bar (l/min)	45	45	45	45
Heat up time direct at 45K (mins) using lower element only (3kW)	126	150	178	220

ERP TECHNICAL DATA

Storage volume V in litres @ 3 bar	120	140	170	200
Mixed water at 40°C V40 in litres	141	208	271	309.3
The declared load profile	L	XL	XL	XL
The water heating energy efficiency class of the model	C	C	C	C
The water heating energy efficiency in %	38.6	38.6	38.3	38.2
The annual electricity consumption in kWh	2651	4338	4377	4386
The daily electricity consumption in kWh	12.2	19.96	20.19	20.24
The thermostat temperature settings of the water heater, as placed on the market by the supplier				60°C

TECHNICAL SPECIFICATION

Maximum supply pressure to incoming mains cold water combination valve (supplied)	1.6 MPa (16 bar)
Minimum recommended supply pressure and flow rate	0.15 MPa (1.5 bar) – 20 litres per minute
Operating pressure	0.3 MPa (3 bar)
Inner water container	High grade duplex stainless steel pressure tested to 15 bar
Thermal insulation (nominal thickness 60mm)	CFC/HCFC free, fire retardant expanded polyurethane foam with zero ozone depletion Global warming potential (GWP) = 3.1
DHW Pressure relief valve	0.8 MPa (8 bar)
Immersion heater rating (AC supply only)	3kW @ 240V 2.8kW @ 230V
Solar/Auxiliary coil hydraulic resistance @ 15 l/min	0.0002 MPa (0.002 bar)
Connections	22mm compression / 3/4" BSP male Secondary return 1/2" BSP female connection
Domestic Hot Water Expansion	Comes complete with 24 litre remote expansion vessel and bracket

COMPONENTS

The following components are supplied as standard with Megaflo Eco Solar Direct

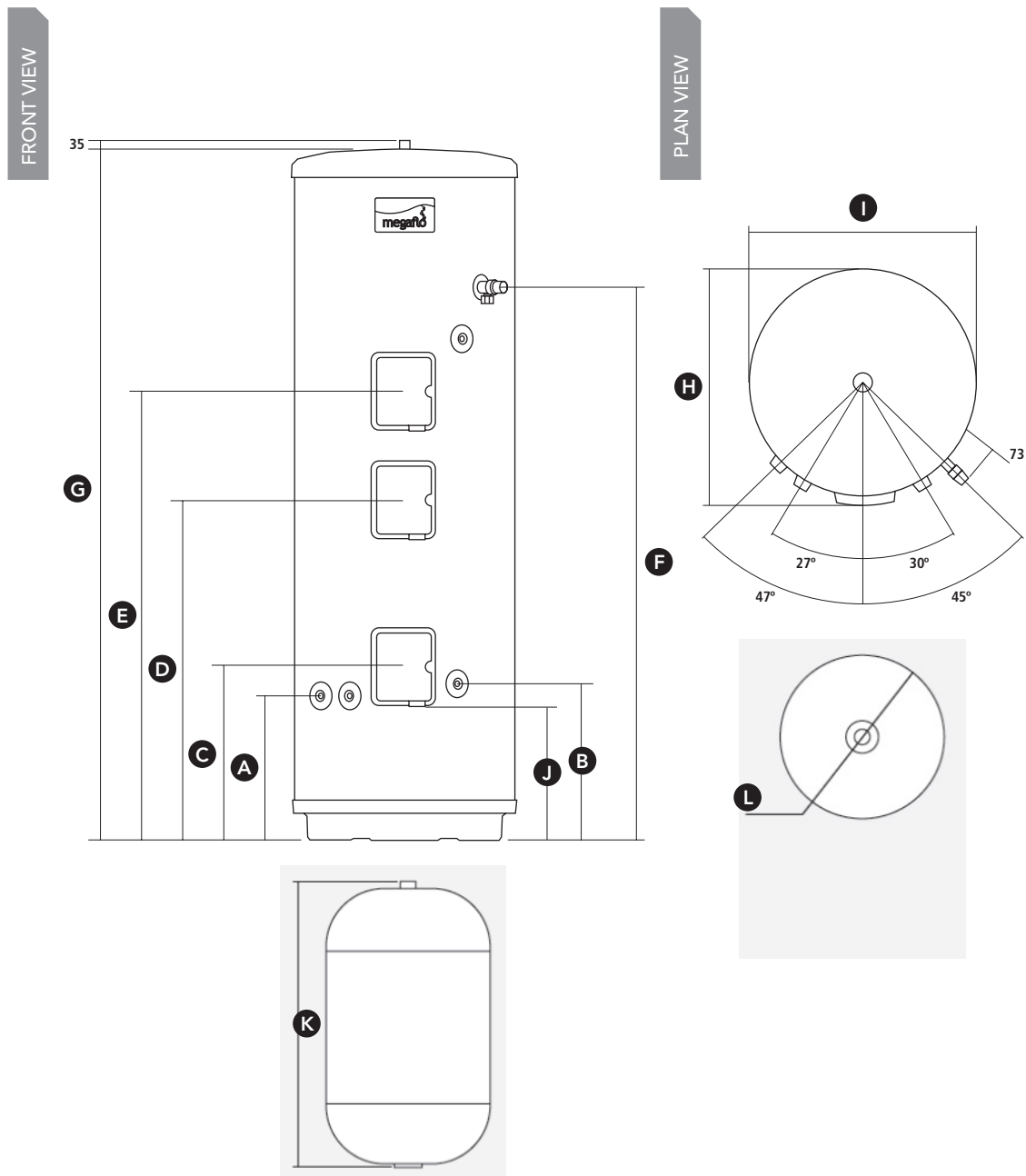
Immersion(s)	Factory fitted immersion heater(s) and thermal controls. Titanium elements.
Cold water	Cold water inlet control kit comprising of 0.3MPa (3 bar) pressure reducing valve 0.8MPa (8 bar) pressure relief valve (BS EB 1567, BS EN 1491, EN 13959) 1/4 turn isolating valve, line strainer, non-return valve, drain valve
Safety	Factory fitted temperature and pressure relief valve set at 90°C / 1 Mpa (10 bar) (BS EN 1490) inc. T&P valve insulation kit 22mm Tundish, Solar control thermal cut out 24 litre DHW expansion vessel with brackets

A range of solar collectors and accessories are available through Heatrae Sadia, visit heatraesadia.com for further details.

For more information 01603 420220 | enquiries@megaflo.com | www.megaflo.com

DIMENSIONS

Model	170D	210DD	260DD	300DD
A Primary coil connections (mm)	373	373	373	373
B Inlet (mm)	454	454	454	454
C Solar control housing (mm)	795	932	995	1289
D Back up element control housing (mm)	794	829	888	983
E Auxiliary element control housing (mm)	–	1103	1167	1444
F T&P valve (mm)	925	1184	1441	1693
G Height (mm)	1229	1489	1802	2053
H Depth (mm)	600	600	600	600
I Width (mm)	579	579	579	579
J Cable entry lower (mm)	275	275	275	275
K Portable water expansion vessel height (mm)	492	492	492	492
L Portable water expansion vessel diameter (mm)	280	280	280	280





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CODES OF PRACTICE/LEGISLATION

EU Directives:

- Pressure Equipment Directive 97/23/EC.
- Low Voltage Directive (LVD) 2014/30/EU.
- RoHS Directive 2011/65/EU.
- Electromagnetic Compatibility (EMC) Directive 2014/35/EU.

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.
- Safety-Particular requirements for storage water heaters.
- 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:

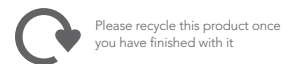
- BS EN ISO 9001
- OHSAS 18001
- ISO 50001
- ISO 14001

Megaflo Eco Solar approvals:

- Kiwa Certification Number: 1608707.
- Nemko Certification Number: P10213136/A3.



For more information
 01603 420220 | enquiries@megaflo.com
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