



BY HEATRAESADIA



DATA SHEET

Megaflo Eco Solar Indirect

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

MAX FLOW

3
kW

IMMERSION HEATERS

190-300
Litres

NOMINAL CAPACITY

60
mm

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

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

*In domestic installations

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SPECIFICATIONS

Model	190i	210i	250i	300i
Product code	95050511	95050513	95050515	95050517
Nominal capacity (litres)	190	210	250	300
Internal expansion with floating baffle	√	√	√	√
Insulation thickness (mm)	60	60	60	60
Immersion heater rating (No. x kW)	1 x 3	1 x 3	1 x 3	1 x 3
Weight empty (kg)	45.5	47.5	56.5	66.5
Weight full (kg)	235.5	257.5	306.5	366.5
Standing heat loss (kWh/24h)	1.32	1.41	1.56	1.84
Standing heat loss (kWh/year)	481.8	514.65	569.4	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 at 15l/min, 80°C primary flow (mins) from 15°C to 60°C	21	21	24.5	22.5

ERP TECHNICAL DATA

Storage volume V in litres @ 3 bar	120	120	145	175
The declared load profile	L	XL	XL	XL
The water heating energy efficiency class of the model	C	C	C	C
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)
Solar primary pressure relief valve	0.6 MPa (6 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	24 litre expansion vessel

COMPONENTS

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

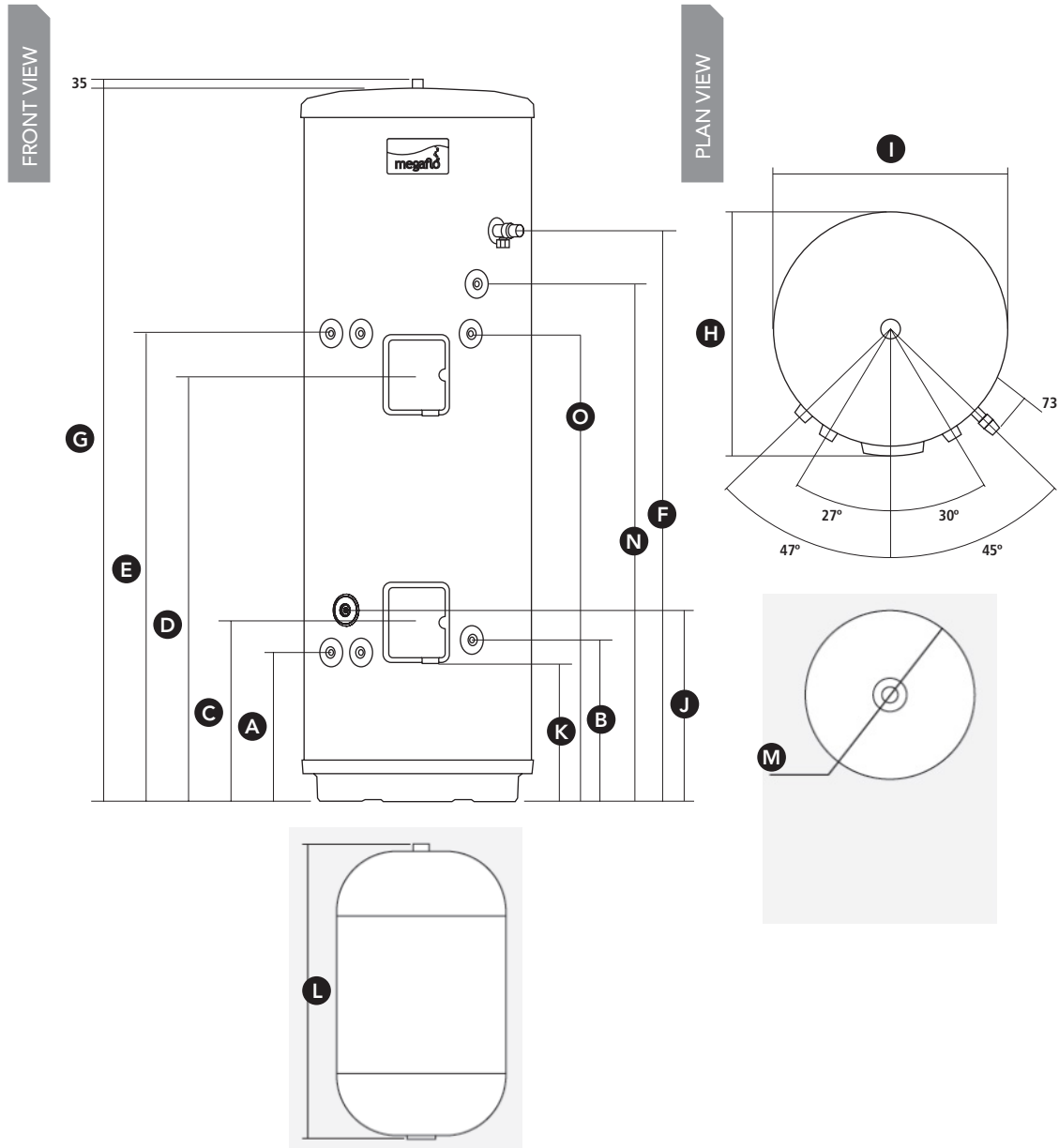
Immersion(s)	Factory fitted immersion heater(s) and thermal controls. Long-life superloy 825 alloy sheathed elements.
Cold water	Cold water inlet control kit comprising of 0.3MPa (3 bar) pressure reducing valve 0.8MPa (8 bar) pressure relief valve (BS EB 1567, BS EN 1491, EN 13959) 1/4 turn isolating 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, Additional thermostat and thermal cut out Solar control thermal cut out, 24 litre DHW expansion vessel with brackets
Electrical	Wiring centre 22mm 2 port motorised valve

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	190i	210i	250i	300i
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)	814	949	1068	1255
E Secondary coil connections (mm)	925	1095	1258	1573
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 Sensor Pocket (mm)	410	410	410	410
K Cable entry lower (mm)	275	275	275	275
L Portable water expansion vessel height (mm)	492	492	492	492
M Portable water expansion vessel diameter (mm)	280	280 <td 280	280	
N Secondary return	925	1095	1258	1573
O Sensor Pocket (mm)	825	995	1156	1473





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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 2001/65/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:

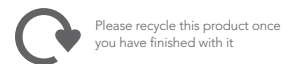
- BS EN ISO 9001
- OHSAS 18001
- ISO 14001
- ISO 50001

Megaflo Eco Solar approvals:

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



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



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