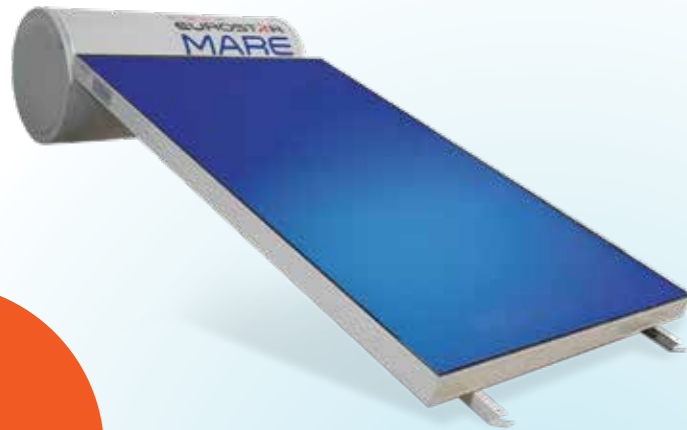




SOLE S.A. is the inventor
of the closed circuit Solar Water Heater



Advantages

- Maximizes efficiency.
- No need for refilling the solar loop.
- Upgraded aesthetic results.
- Design of extremely low height.
- Maximum protection against oxidation.
- Easy to install.
- Minimum maintenance needed.
- Magnesium anode for extra protection against aggressive "hard" water.

Commitment to the environment

Since its foundation in 1974 SOLE S.A. has been committed to the protection of the environment and the reduction of CO₂ emission.

SOLE S.A. holds numerous prizes and environmental distinctions, contributing with its products to the environment in all 5 continents.

Quality Solar Systems

SOLE
SOLAR SYSTEMS MANUFACTURER

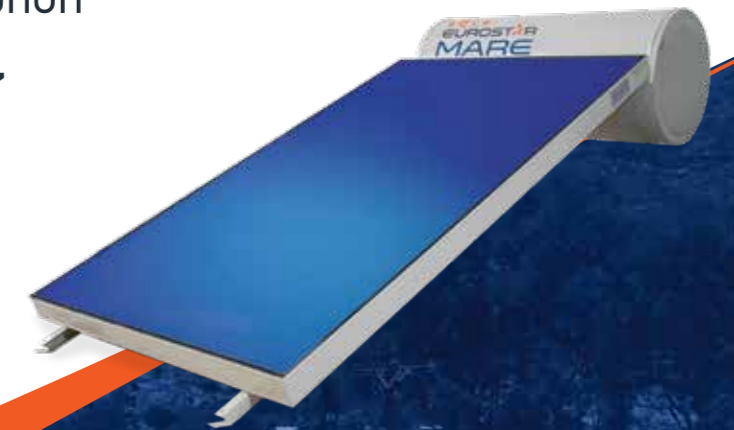
Solar Water Heater

**EUROSTAR
MARE**

Durable
Withstanding 22,5 bar pressure!!!

Discrete
With a low version (hidden tank)
for preserving architectural designs.

The new series of thermosiphon systems EUROSTAR MARE, have been designed in order to cope with the demands of any market all over the world specializing in very hot climates without the need for refilling the solar circuit.



The EUROSTAR MARE solar water heater is manufactured in compliance with the International Standards for Quality Assurance ISO 9001:2015, is tested according to international standards EN12976-1-2.

The collector's performance and reliability is tested according to EN 12975-2. The system has been granted with the Solar Keymark Certificate.

SOLE S.A.

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www.eurostar-solar.com

EUROSTAR MARE COLLECTOR



The EUROSTAR MARE collector casing is made of specially designed extruded aluminum profile, without any external connections, screws, nuts or rivets. The Rockwool insulation will maintain very high temperatures achieving an incredibly high efficiency.

The back of the collector is powder coated for greater anticorrosive protection over time and greater safety for installers during installation.

The absorber is composed of Blue Selective Aluminum fins 0,50mm thickness, welded to copper pipes with laser welding. The Heliothermic liquid achieves maximum transfer of heat to the water while protecting the system against scaling, rusting, freezing and overheating

EUROSTAR MARE TANK



The EUROSTAR MARE tank has a mild steel external casing, with high temperature oven powder coating for maximum protection from rain, sun and sea air, ensuring durability and an elegant appearance.

The FREON FREE polyurethane insulation is casted under pressure in the tank, surrounding the cylinder and maintaining hot water for up to 48 hours.

The new revolutionary heat exchanger of the closed circuit assures instant hot water at very high

temperature. The tank is made of low carbon steel with a double "enameling" coating (glass), oven-treated at 860C. The magnesium anode effectively protects the cylinder from electrolysis. The backup electric heater ensures hot water even in very cloudy days

EUROSTAR MARE SUPPORT FRAME



The powder coated support frame is available at extremely low height to cover the boundaries set by any architectural design.

The use of stainless steel screws / nuts to assemble the solar system ensures maximum protection against oxidation.

Solar collector in the same powder coated color as the profile, the support frame and the tank so that the entire solar system has a unified color, which leads to enhanced aesthetics and maximum protection.

The EUROSTAR MARE is the eco-friendly thermosiphon solar water heater completely made from material that can be recycled.

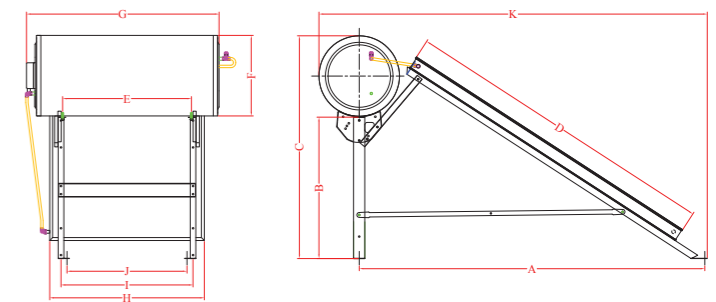
SOLE's respect for the environment starts at the production stage.



THERMOSIPHON SYSTEMS SPECIFICATIONS

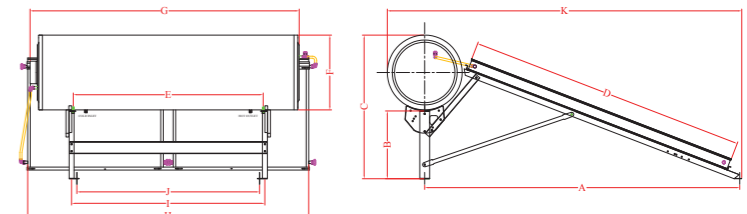
TECHNICAL CHARACTERISTICS

| | 150-1-S200 | 150-1-S230 | 200-1-S230 | 200-1-S260 | 300-2-S200 | 300-2-S230 |
|---|---|--------------|--------------|--------------|-------------|--------------|
| COLLECTOR | | | | | | |
| NUMBER OF COLLECTORS | 1 | 1 | 1 | 1 | 2 | 2 |
| AREA OF COLLECTOR m ² | 1.88 | 2.28 | 2.28 | 2.64 | 3.76 | 4.56 |
| DIMENSIONS mm | 1960x960x81 | 1960x1165x81 | 1960x1165x81 | 2135x1238x81 | 1960x960x81 | 1960x1165x81 |
| WEIGHT kg | 29.50 | 35.50 | 35.50 | 40.00 | 59.00 | 71.00 |
| FRAME | Aluminum profile powder coated. Free of screws and rivets. | | | | | |
| COVER | Tempered low iron prismatic glass 3.2 mm. 90.5% transmission. | | | | | |
| SEALING | Acrylic foam - Silicon | | | | | |
| INSULATION | Rockwool 40mm (50kg/m3) back and Glass wool 20 mm (30kg/m3) sides | | | | | |
| ABSORBER MATERIAL | Blue Selective Aluminum fins 0,50mm thickness, welded to copper pipes with laser welding. | | | | | |
| ABSORPTION (α) | 95% (± 0.02) | | | | | |
| EMISSIVITY (ε) | 5% (± 0.02) | | | | | |
| EFFICIENCY (η) | 0.763 | | | | | |
| MAX. WORKING PRESSURE | 15 bar | | | | | |
| TEST PRESSURE | 22,5 bar | | | | | |
| MAX. WORKING TEMPERATURE | 150°C | | | | | |
| TANK | | | | | | |
| NOMINAL CAPACITY (lt) | 150 | 150 | 200 | 200 | 300 | 300 |
| WEIGHT EMPTY (kg) | 55 | 55 | 61 | 61 | 95 | 95 |
| BOILER BODY | The boiler "body" is made from USD 37.2 steel plate. The boiler is (glass) enameled with the advanced double "direct" method "fired" at 860°C | | | | | |
| HEAT EXCHANGER | Internal heat exchanger made from 3.0 mm S235 steel certified for testing pressure at 22,5 bar & operating pressure of 15 bar | | | | | |
| INSULATION | Freon free Polyurethane 40-50mm (40kg/m3) casted under pressure | | | | | |
| EXTERNAL COVER | Steel sheet galvanized, powder coated, oven treated RAL 9006 | | | | | |
| ANODE PROTECTION | Magnesium rod | | | | | |
| MAX. WORKING PRESSURE | 13,3 bar | | | | | |
| TEST PRESSURE | 20 bar | | | | | |
| MAX. WORKING PRESSURE OF SOLAR CIRCUIT | 15 bar | | | | | |
| TESTING PRESSURE OF SOLAR CIRCUIT | 22,5 bar | | | | | |
| MAX. WORKING TEMPERATURE OF SOLAR CIRCUIT | 150°C | | | | | |



LOW HEIGHT DIMENSIONS (mm)

| TYPE | A | B | C | D | E | F | G | H | I | J | K |
|------------|------|-----|------|------|------|-----|------|------|------|------|------|
| 150-1-S200 | 2147 | 878 | 1383 | 1960 | 800 | 500 | 1195 | 960 | 820 | 745 | 2411 |
| 150-1-S230 | 2147 | 878 | 1383 | 1960 | 800 | 500 | 1195 | 1165 | 820 | 745 | 2411 |
| 200-1-S230 | 2147 | 878 | 1413 | 1960 | 800 | 530 | 1215 | 1165 | 820 | 745 | 2426 |
| 200-1-S260 | 2147 | 878 | 1413 | 1960 | 800 | 530 | 1215 | 1238 | 820 | 745 | 2426 |
| 300-2-S200 | 2147 | 878 | 1413 | 1960 | 1345 | 530 | 1905 | 1980 | 1370 | 1295 | 2426 |
| 300-2-S230 | 2147 | 878 | 1413 | 1960 | 1345 | 530 | 1905 | 2390 | 1370 | 1295 | 2426 |



EXTRA LOW HEIGHT DIMENSIONS (mm)

| TYPE | A | B | C | D | E | F | G | H | I | J | K |
|------------|------|-----|------|------|------|-----|------|------|------|------|------|
| 150-1-S200 | 2231 | 480 | 988 | 1960 | 800 | 500 | 1195 | 960 | 820 | 745 | 2495 |
| 150-1-S230 | 2231 | 480 | 988 | 1960 | 800 | 500 | 1195 | 1165 | 820 | 745 | 2495 |
| 200-1-S230 | 2231 | 480 | 1018 | 1960 | 800 | 530 | 1215 | 1165 | 820 | 745 | 2510 |
| 200-1-S260 | 2231 | 480 | 1018 | 1960 | 800 | 530 | 1215 | 1238 | 820 | 745 | 2510 |
| 300-2-S200 | 2231 | 480 | 1018 | 1960 | 1345 | 530 | 1905 | 1980 | 1370 | 1295 | 2510 |
| 300-2-S230 | 2231 | 480 | 1018 | 1960 | 1345 | 530 | 1905 | 2390 | 1370 | 1295 | 2510 |

