



ELECRO G2 Heat Exchanger

30-kW (102K BTU) - 122-kW (416K BTU)

Features

- Robust, durable construction
- Titanium tube bundle
- 316 Stainless Steel shell with special polyamide fittings
- Wall mountable (bracket supplied)
- Vast, unrivalled heat transfer surface area
- Rigid Thermal Insulation shell to insulate the primary circuit and enable maximum efficiency
- Available with fully equipped Analogue or Digital control (optional)

Construction

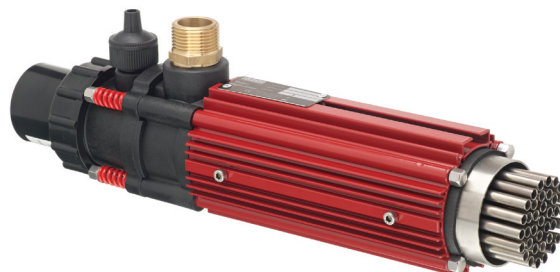
The Elecro G2 Heat Exchanger is manufactured from top quality components and materials at the Elecro works in Hertfordshire, England.

The heat exchanger construction gives a vast heat transfer surface area, consisting of a densely populated multi-tubular bundle, secured by the uniquely designed polyamide-rubber tube sheet. The heat exchanger shell is constructed from BS 316 Stainless Steel enclosed by a rigid thermal shell for enhanced insulation of the primary (HOT) water, enabling even greater heat transfer; this is capped at each end with primary and secondary moulded fittings manufactured from specially formulated polymer alloy material.

The standard G2 heat exchanger is supplied complete with:

- 2 x 1" male/male Brass Primary connections
- 1 x 1" Non-Return Valve
- Titanium thermostat pocket
- 1 x Blanking Cap and Gasket (for non-thermostat side)

The Elecro G2 Heat Exchanger has been designed to allow the installation engineer to select which way to plumb the primary and secondary water to achieve maximum thermal gain; this is achieved by routing the primary (HOT) flow in an opposing direction to the secondary (POOL) water.



Cross Section

Operation

The Elecro heat exchanger is installed in the pool filtration circuit from which water passes through the tube side of the exchanger. Water from the primary heating circuit flows counter-current through the shell side of the exchanger, heating the swimming pool water. Elecro heat exchangers are ideal for use with gas or oil fired boiler circuits, solar panels, heat pumps or chillers.

Specification & Models

| | |
|---------------------------|---|
| Tube bundle: | Pure titanium |
| Water connections: | |
| Primary (HOT) | 1" BSP male (brass fittings supplied) |
| Secondary (POOL): | 1.5" or 50-mm NB adapters for connection to PVC or ABS pipe |
| Working pressure: | 4 bar maximum |

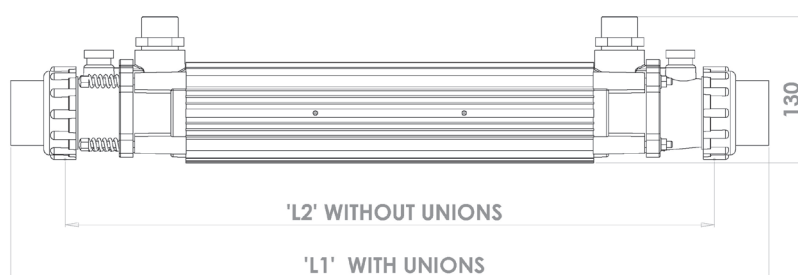
| Titanium Tube Bundle Product Code | Standard Power Output | Dimension 'L1' | Dimension 'L2' |
|-----------------------------------|-----------------------|----------------|----------------|
| G2-HE-30T | 30-kW (102K BTU) | 540mm | 426mm |
| G2-HE-49T | 49-kW (167K BTU) | 710mm | 596mm |
| G2-HE-85T | 85-kW (290K BTU) | 840mm | 726mm |
| G2-HE-122T | 122-kW (416K BTU) | 1000mm | 886mm |

Transfer Values

| Standard Output | Primary (HOT) Flow (m ³ /h) | Primary (HOT) Head Loss (kPa) | Secondary (POOL) Flow (m ³ /h) | Secondary (POOL) Head Loss (kPa) | ▲T 15°C (kW) | ▲T 20°C (kW) | ▲T 30°C (kW) | ▲T 40°C (kW) | ▲T 50°C (kW) | ▲T 60°C (kW) | ▲T 70°C (kW) |
|-----------------|--|-------------------------------|---|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 30-kW | 1.1 | 6.1 | 10 | 5 | 9 | 11 | 16 | 20 | 26 | 30 | 33 |
| 30-kW | 1.3 | 6.8 | 10 | 5 | 10 | 13 | 18 | 23 | 31 | 34 | 39 |
| 30-kW | 1.3 | 6.8 | 14 | 7 | 11 | 15 | 20 | 26 | 34 | 41 | 46 |
| 49-kW | 1.6 | 7.7 | 16 | 9.2 | 13 | 18 | 25 | 34 | 41 | 50 | 56 |
| 49-kW | 1.8 | 8.3 | 16 | 9.2 | 14 | 20 | 28 | 38 | 45 | 55 | 62 |
| 49-kW | 2.2 | 9.6 | 17 | 9.8 | 16 | 22 | 33 | 44 | 52 | 64 | 73 |
| 85-kW | 2.4 | 11.3 | 17 | 10.6 | 22 | 28 | 40 | 53 | 64 | 75 | 81 |
| 85-kW | 2.7 | 12.9 | 17 | 10.6 | 26 | 32 | 46 | 60 | 73 | 82 | 89 |
| 85-kW | 3.2 | 14.7 | 17 | 10.6 | 28 | 34 | 49 | 64 | 77 | 90 | 102 |
| 122-kW | 3.8 | 18.3 | 19 | 12.6 | 33 | 43 | 68 | 75 | 93 | 108 | 120 |
| 122-kW | 4.2 | 20 | 19 | 12.6 | 36 | 48 | 70 | 89 | 108 | 126 | 143 |
| 122-kW | 4.6 | 21.1 | 19 | 12.6 | 38 | 52 | 73 | 95 | 116 | 137 | 156 |

▲T = Temperature difference between Primary (HOT) and Secondary (POOL)

Dimensions



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