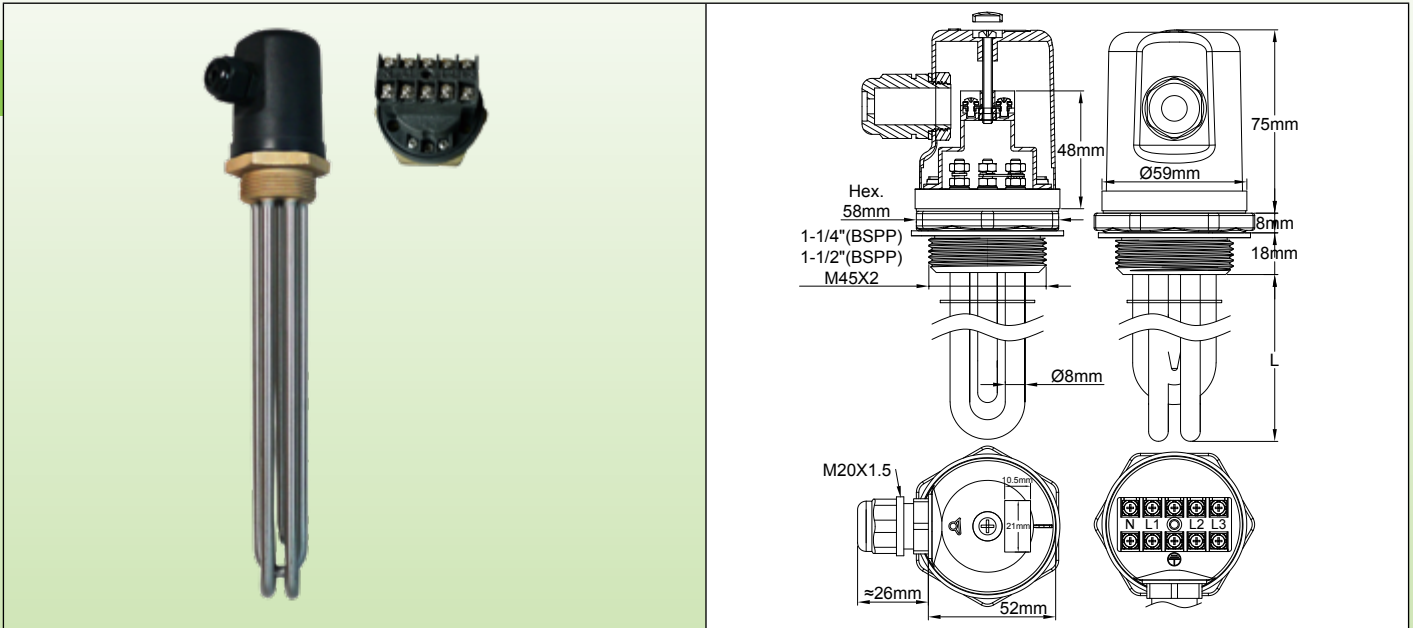




Immersion heaters with plastic connection box

Immersion heater with round enclosure, dia. 58 × 75mm. 1"1/4, 1"1/2, M45x2 fittings. **Type 9ST2**



Main applications: liquid heating, hot water circuits, containers and buffer tanks.

These immersion heaters are the smallest with connection box and 3 heating elements. They have been designed with a built-in connection block for easier wiring. Their small size does not allow having a thermostat inside.

They exist in:

- 5 standard power levels: 1kW - 1,5kW - 2kW - 3kW - 4kW.
- 3 types of standard fittings: 1"1/4, 1"1/2 and M45x2.
- 2 types of surface load density: 5W/cm² and 10W/cm². See technical introduction to optimize the surface load.

Heater tube material: 3 heating elements dia. 8mm dia. AISI 304 or Incolloy 800 (AISI 316; AISI 321; Incolloy 825 on request).

Fitting material: Brass, not swiveling, brazed on tubes. (AISI 304 or AISI 316, TIG welded, or brazed, models are available on request). Supplied without gasket and without nut. See accessories below.

Thread: 1"1/4, 1"1/2 BSPP (ISO 228) and Metric thread M45x2.

Enclosure: dia. 58mm × 75mm, black PA66 fiber glass reinforced, with gasket. Opening by center M4 screw without access to end user.

Ingress protection class: IP54.

Cable gland: M20, PA66. Nickel-plated brass on request.

Thermowell: On request.

Heating element connections: Terminals with stainless steel screw, nut and stainless steel washer. Switching straps for single phase/ 3 phases.

Heating elements are connected on a built-in 5 ways connection block, for wires up to 2.5mm².

Support grid: 1 grid AISI 304 for lengths from 400 to 600mm, 2 grids above.

Not heating immersed zone: 50mm.

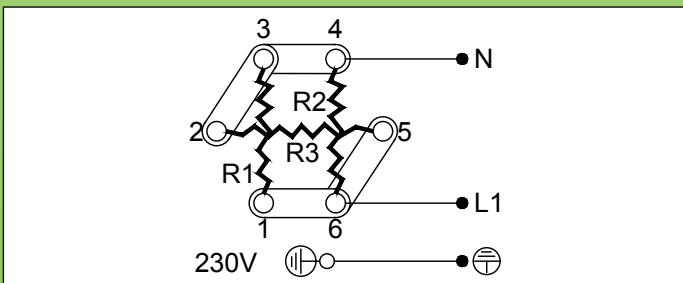
Surface load: standard 5W/cm² or 10W/cm², other values on request.

Voltage: 220-240V single phase or three phases 380-400V (Star connection with neutral)

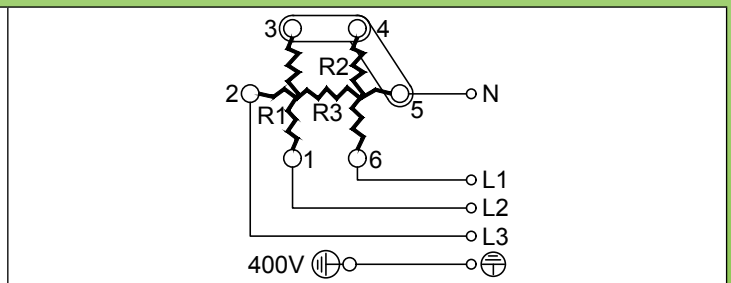
Variants on request:

- Only one or only 2 heating elements.
- M45x2 brass fitting.

Electric Wiring



Straps position in 220-240V single phase



Straps position in 380-400V 3 phases

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Main references 5W/cm², 1"1/2* brass fitting

| Power | 1kW | 1.5kW | 2kW | 3kW | 4kW |
|---------------------------|------------------|------------------|------------------|------------------|------------------|
| Length (mm) | 170 | 240 | 300 | 440 | 570 |
| Reference in AISI 304 | 9ST2A5E0010U8170 | 9ST2A5E0015U8240 | 9ST2A5E0020U8300 | 9ST2A5E0030U8440 | 9ST2A5E0040U8570 |
| Reference in Incolloy 800 | 9ST2A5E0010UK170 | 9ST2A5E0015UK240 | 9ST2A5E0020UK300 | 9ST2A5E0030UK440 | 9ST2A5E0040UK570 |

10W/cm², 1"1/2* brass fitting


| Power | 1kW** | 1.5kW | 2kW | 3kW | 4kW |
|---------------------------|------------------|------------------|------------------|------------------|------------------|
| Length (mm) | 135 | 135 | 170 | 240 | 300 |
| Reference in AISI 304 | 9ST2A5E0010BK130 | 9ST2A5E0015U8130 | 9ST2A5E0020U8170 | 9ST2A5E0030U8240 | 9ST2A5E0040U8300 |
| Reference in Incolloy 800 | 9ST2A5E0010UK130 | 9ST2A5E0015UK130 | 9ST2A5E0020UK170 | 9ST2A5E0030UK240 | 9ST2A5E0040UK300 |

* 1"1/4 brass fitting instead of 1"1/2, replace A5 by A4 in the reference. M45x2 brass fitting instead of 1"1/2, replace A5 by A9 in the reference.


** This model has only 2 heating elements.

References of accessories in option (not included in the product, must be ordered separately):

Nuts

|  | Thread | 1"1/4 | 1"1/2 | M45x200 |
|--|---------|-----------------|-----------------|-----------------|
| | Brass | 9BRR3000ELH302A | 9BRR3000ELH303A | 9BRR3000ELH305A |
| | AISI304 | 9BRR3000ELH032A | 9BRR3000ELH006A | 9BRR3000ELH049A |
| | AISI316 | 9BRR3000ELH202A | 9BRR3000ELH203A | 9BRR3000ELH205A |

Gaskets

|  | Thread | 1"1/4 | 1"1/2 - M45x200 |
|---|--------|------------------|------------------|
| | NBR | 9BRJ03000ELH206A | 9BRJ03000ELH205A |
| | Fiber | 9BRJ03000ELH052A | 9BRJ03000ELH007A |
| | PTFE | 9BRJ03000ELH032A | 9BRJ03000ELH033A |

Other accessories and drawings: see last section of this catalogue