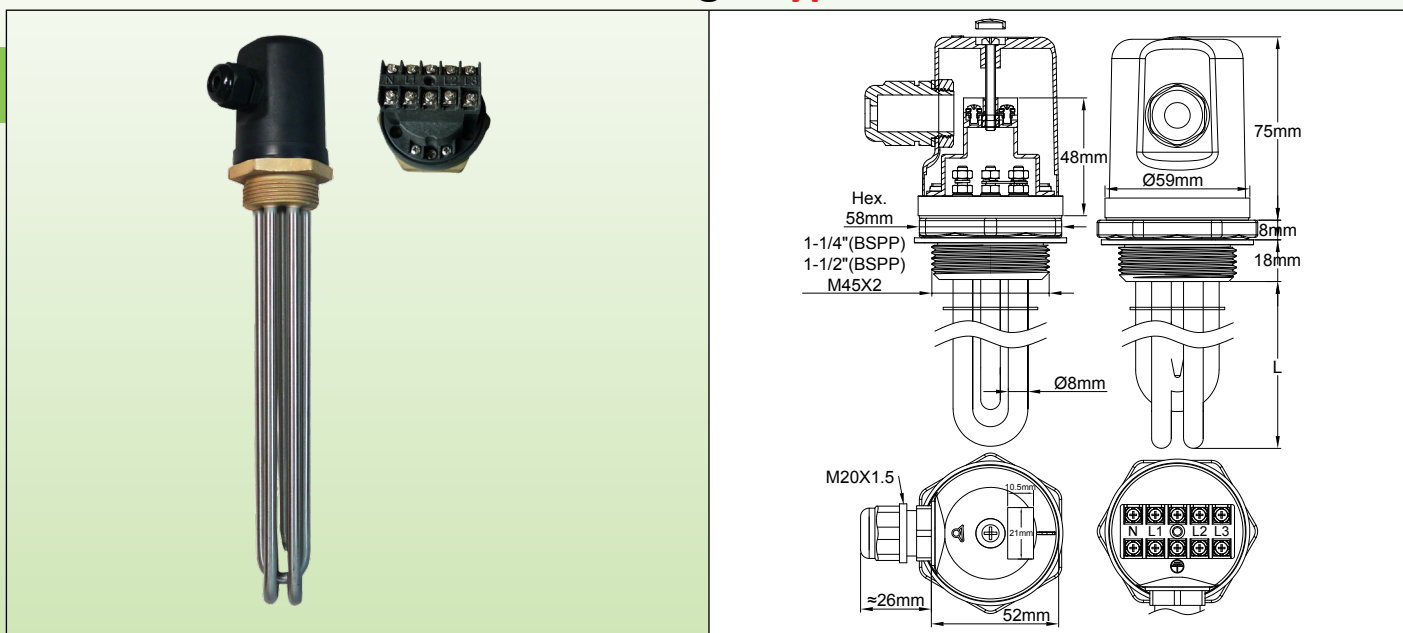


# Immersion heaters with plastic connection box

Immersion heater with round enclosure, dia. 58 × 75mm. 1"¼, 1"½, 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"¼, 1"½ and M45x2.
- 2 types of surface load density: 5W/cm<sup>2</sup> and 10W/cm<sup>2</sup>. 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"¼, 1"½ 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 2.5mm<sup>2</sup>.

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

**Not heating immersed zone:** 50mm.

**Surface load:** standard 5W/cm<sup>2</sup> or 10W/cm<sup>2</sup>, 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





# Immersion heaters with plastic connection box

## Main references

### 5W/cm<sup>2</sup>, 1"½\* 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/cm<sup>2</sup>, 1"½\* 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"¼ brass fitting instead of 1"½, replace A5 by A4 in the reference. M45x2 brass fitting instead of 1"½, 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"¼	1"½	M45x200
	Brass	9BRR3000ELH302A	9BRR3000ELH303A	9BRR3000ELH305A
	AISI304	9BRR3000ELH032A	9BRR3000ELH006A	9BRR3000ELH049A
	AISI316	9BRR3000ELH202A	9BRR3000ELH203A	9BRR3000ELH205A

### Gaskets

	Thread	1"¼	1"½ - M45x200
	NBR	9BRJ03000ELH206A	9BRJ03000ELH205A
	Fiber	9BRJ03000ELH052A	9BRJ03000ELH007A
	PTFE	9BRJ03000ELH032A	9BRJ03000ELH033A

Other accessories and drawings: see last section of this catalogue