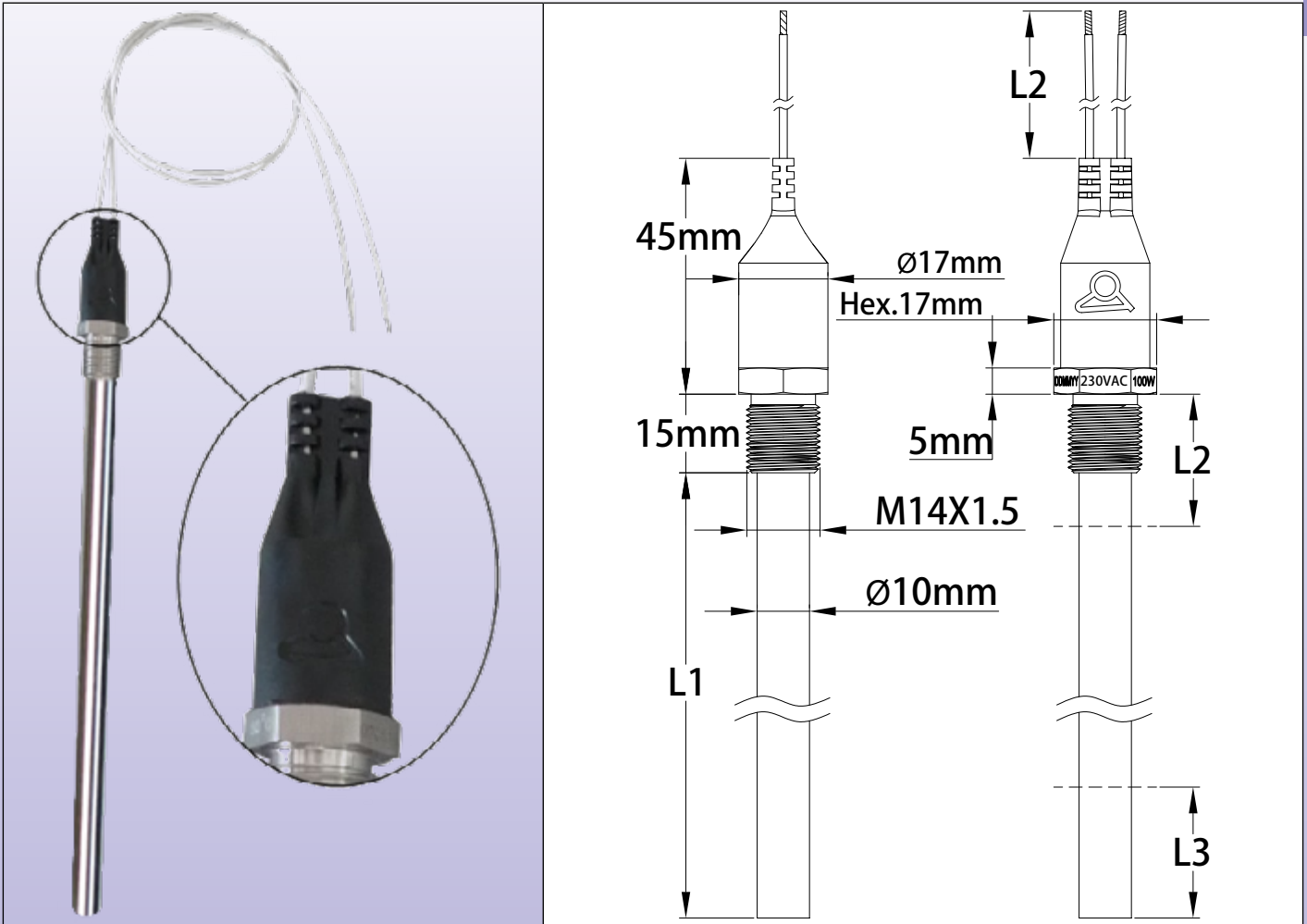




# Cartridge heaters

Cartridge heaters dia. 10mm, with built-in thermostat, M14 × 1.5 thread  
Type 9T10



**Main applications:** Liquid heating when the space available for the heating element is reduced. E.g. heating oil supply systems, oil filters, sump engines, gearboxes, hydraulic power units. The heater has a built-in thermostat. It is the smaller heating element with built-in thermostat.

- 3 surface load values: 2,5W/cm<sup>2</sup>, 5W/cm<sup>2</sup>, 10W/cm<sup>2</sup>. See technical introduction to optimize the surface load.

**Heating tube material:** Element diameter 10mm, AISI 304 (AISI 316, AISI 321; Incolloy 800, 825 on request).

**Insulation:** Magnesia compressed by lamination guaranteeing good heat transfer and allows loads up to 20W/cm<sup>2</sup>

**Fitting Material:** TIG welded 304 stainless steel, with gasket seat. Shipped without gasket.

**Thread:** M14x1.5

**Connection:** PVC insulated wires, 300V, 300mm length

**Ingress Protection:** IP65 wires output, carried out by PA66 over-molding.

**Standard lengths (L1):** 215, 315, 415, 515, 615mm

**Not immersed heating zone (L2):** 40mm.

**Non-heating zone receiving the thermostat (L3):** 50mm

**Surface load:** 2, 5W/cm<sup>2</sup> (main applications for oils), 5W/cm<sup>2</sup> (water without flow), 10W/cm<sup>2</sup> (circulating water). Other surface loads on request.

**Voltage:** 220-240V single phase, and 24VDC

**Thermostat calibration temperatures:** 50 ±5°C (122±9°F), 70 ±5°C (158±9°F), 90 ±5°C (194±9°F), 100 ±5°C (212±9°F), 110 ±5°C (230±9°F)

**Options on request (MOQ may apply):**

- Other calibration temperature, from 40°C to 150°C (104 to 302°F).
- Types without built-in thermostat
- Lower tolerances on the calibration temperature
- Different wire lengths
- Over-molded cable output
- Tube length up to 1.8m (Maximum power 1700W in 230V and 360W in 24VDC)
- Other thread
- Other voltage

# Cartridge heaters



## Main references in 230V, thermostat set at 50°C±5°C (122±9°F)\*

Length L1	2,5W/cm <sup>2</sup>		5W/cm <sup>2</sup>		10W/cm <sup>2</sup>	
	Power (W)	Reference	Power (W)	Reference	Power (W)	Reference
215	100	9T10215FF010C5V3	200	9T10215FF020C5V3	400	9T10215FF040C5V3
315	180	9T10315FF018C5V3	360	9T10315FF036C5V3	720	9T10315FF072C5V3
415	260	9T10415FF026C5V3	520	9T10415FF052C5V3	1040	9T10415FF104C5V3
515	340	9T10515FF034C5V3	670	9T10515FF067C5V3	1350	9T10515FF135C5V3
615	420	9T10515FF042C5V3	820	9T10515FF082C5V3	1650	9T10515FF165C5V3

## Main references in 24VDC, thermostat set at 50°C±5°C (122±9°F)\*

Length L1	2,5W/cm <sup>2</sup>		5W/cm <sup>2</sup>	
	Power (W)	Reference	Power (W)	Reference
215	100	9T10215FB010C5V3	200	9T10215FB020C5V3
315	180	9T10315FB018C5V3	360	9T10315FB036C5V3
415	260	9T10415FB026C5V3	Higher power not available	

- \*Thermostat set at 70 ±5°C (158±9°F), replace C5 by C7 in the reference
- \*Thermostat set at 90 ±5°C (194±9°F), replace C5 by C9 in the reference
- \*Thermostat set at 100 ±5°C (212±9°F), replace C5 by CA in the reference
- \*Thermostat set at 110 ±5°C (230±9°F), replace C5 by CB in the reference

Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice