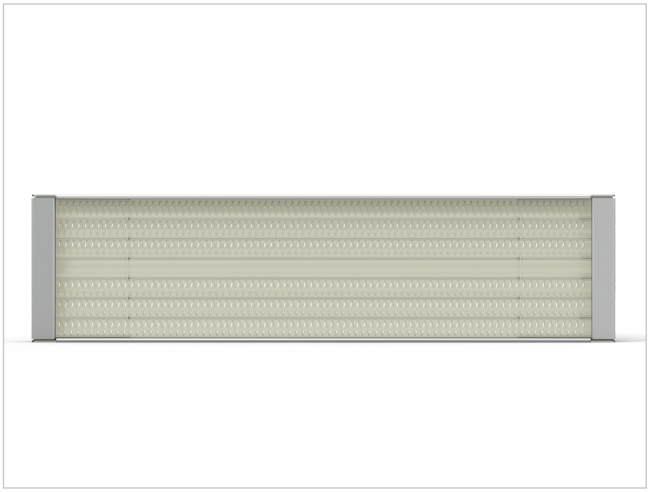
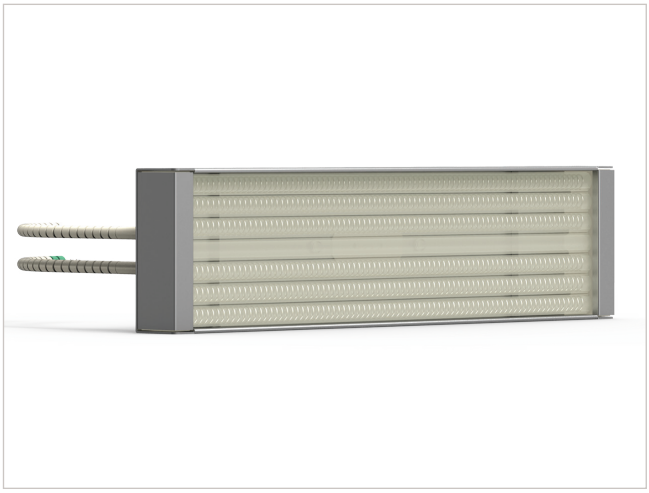
PFQE TcK - Pillared Full Quartz Element -TcK





Pillared Full Quartz Element with type K thermocouple

Properties: Quartz infrared heating elements provide medium wave infrared radiation. They are favoured in industrial applications where a more rapid heater response is necessary, including systems with long heater off cycles. The standard quartz heating elements range consists of cassette style elements constructed with polished aluminium clad steel as standard, stainless steel is also an option. These emitters have peak emissions in the medium to long wavelength range.

Type K thermocouple is the standard we use. This gives an indication of the operating tempreature of the emitter itself at a point close to the resistance heating coil.

Technical specification

Material	Polished aluminium clad steel body with an ironchrome aluminium resistance wire
Heater Voltage	230 V *(standard)*
Useful wave-length range	1.5 - 8 µm *(microns)* - Long wave
Dimensions	247 x 62.5 x 59 mm
Average weight	421 g
Thermocouple leads	150 mm ceramic beaded thermocouple leads
Assembly	Recommended radiation distance from heater is 100mm to 200mm
Mounting slot size	42 x 15 mm
Element spacing	Minimum spacing between elements 5 mm
Average operating life	Up to 10,000 hrs depending on conditions
Standards	CE
Operating temperature	Ensure temperature of aluminium clad steel body does not exceed 500 °C *(932 °F)*
Note	Element should always be mounted so the quartz glass tubes are horizontal.

Standard PFQE TcK range

	Mean Surface Temperature °C	Max Power Density kW/m²
250 W	438	15
400 W	542	24
500 W	593	30
650 W	664	39
750 W	690	45
1000 W	772	60

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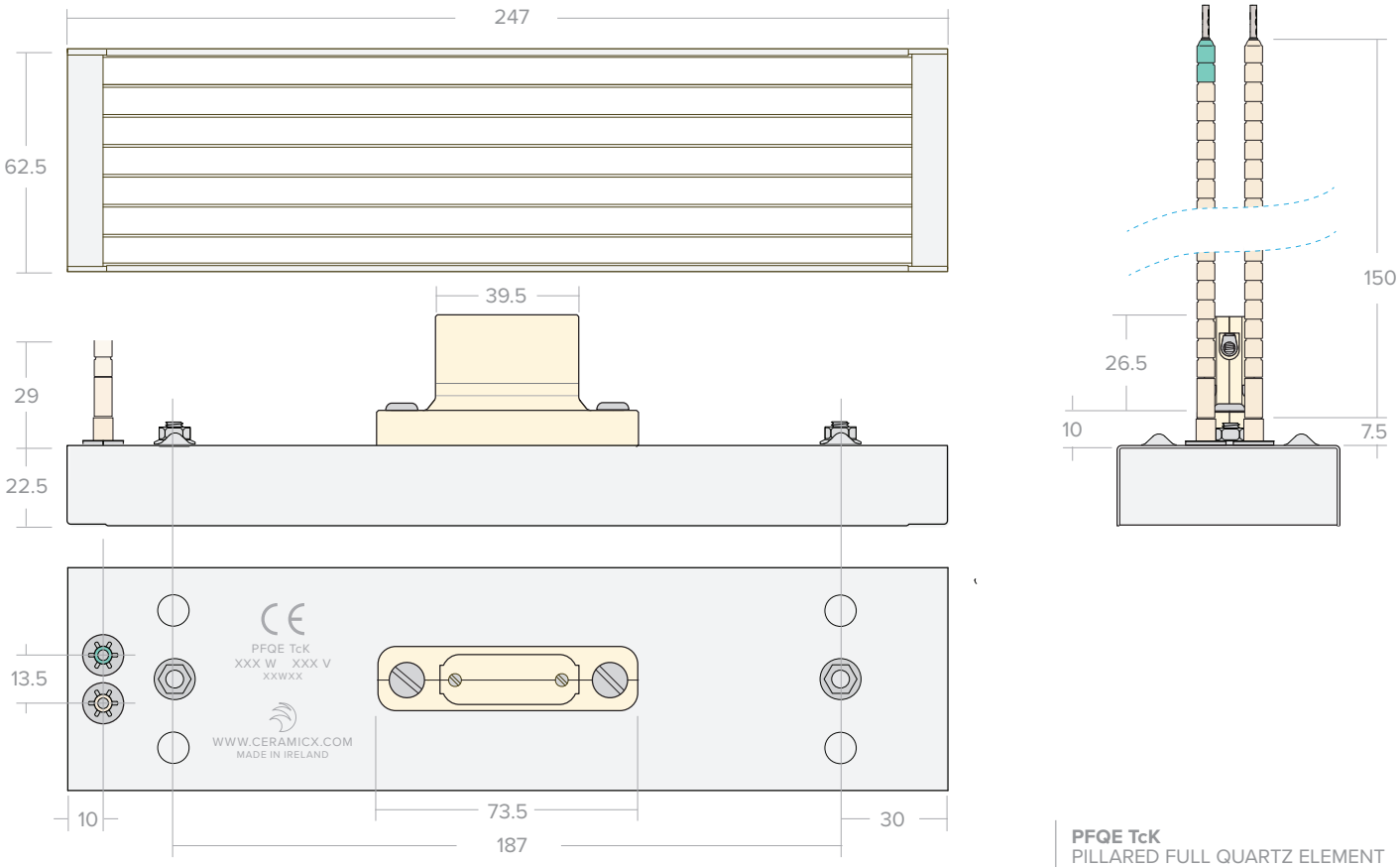

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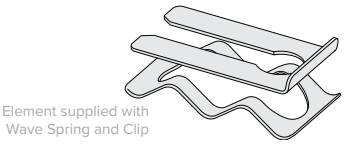
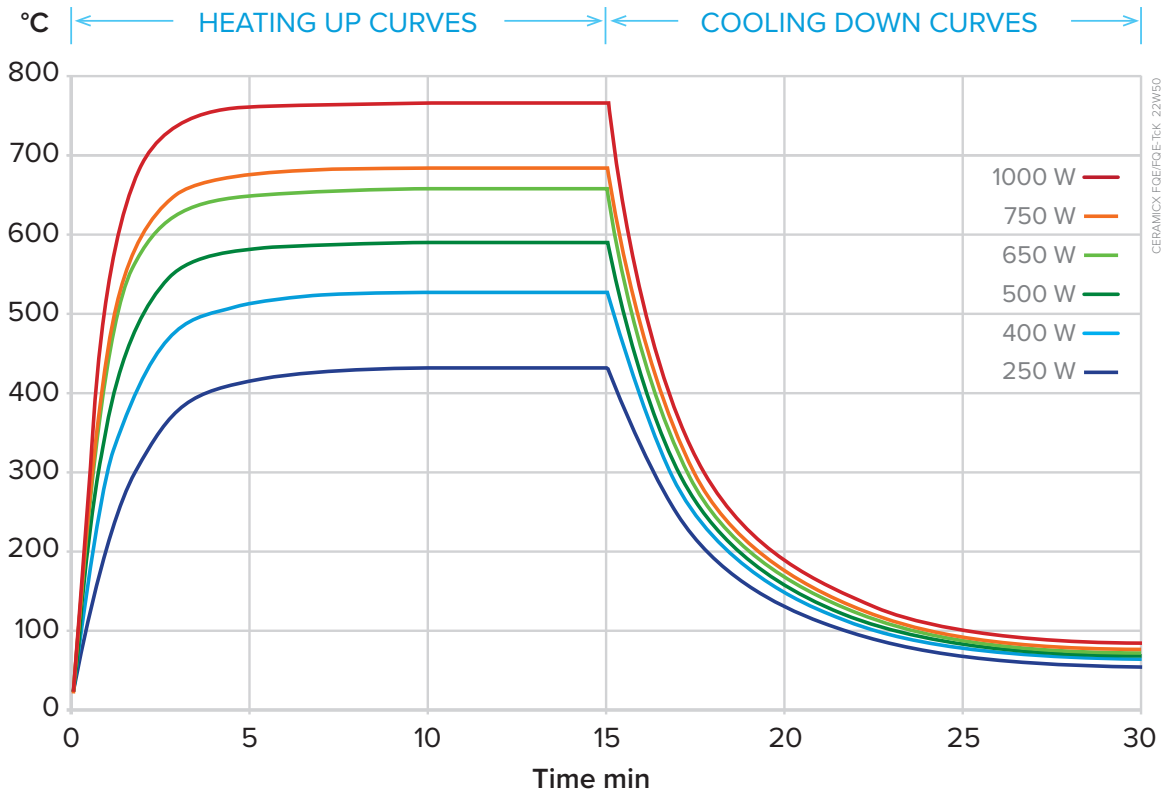


Element supplied with
Wave Spring and Clip

PFQE TcK
PILLARED FULL QUARTZ ELEMENT
WITH TYPE K THERMOCOUPLE
Tolerances apply, all dimensions mm.
Heater body manufactured from 0.75 mm
polished aluminium clad steel (500°C max)

24W36



PFQE TcK Heat up and cool down curves showing average surface temperature measured with a thermal imaging camera set to an emissivity of 0.7