Ceramic Infrared Long Panel Heaters   FSL

Figure 1: Elstein FSL series

Elstein FSL long panel heaters are ceramic infrared heaters with a low overall height, designed for operating temperatures up to 550 °C and surface ratings up to 45 kW/m².
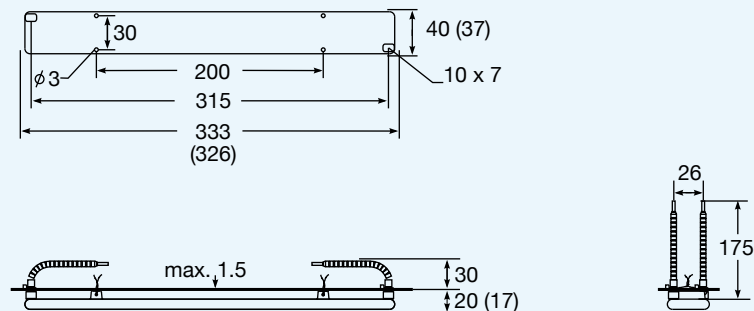
They have two sockets with integrated litz fixing wires, which are put through corresponding holes in the mounting sheet and twisted behind it. In this way FSL heaters are easy to install and are space-saving. No special pre-punched holders or reflector plates are required for the assembly.

FSL series heaters are particularly suitable for lamellar heating tasks due to their long narrow design.

An example for lamellar heating tasks can be found in the lamp industry where FSL heaters are used for curing the coating of fluorescent tubes.

Elstein FSL long panel heaters are available in two designs with 300 W and 600 W.
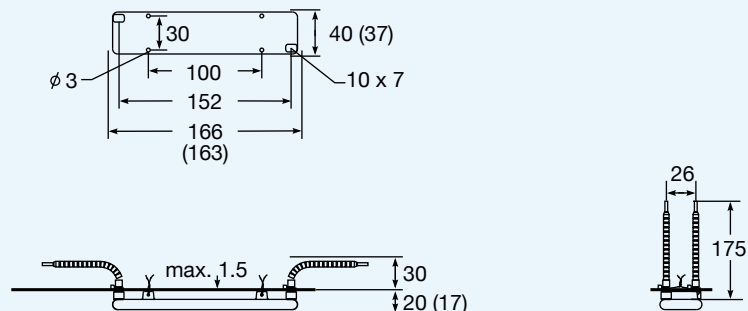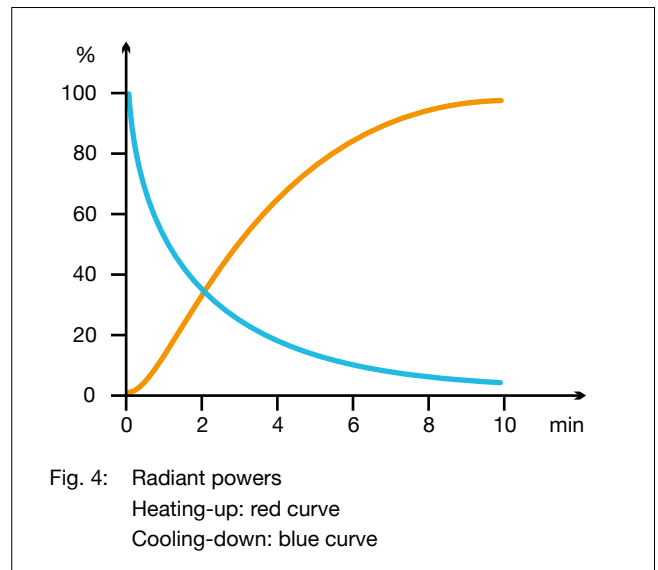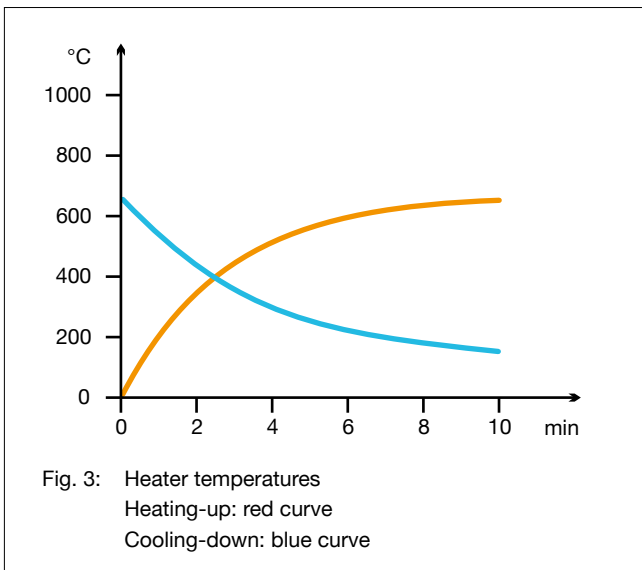
FSL

FSL/2

Figure 2: Mounting dimensions and heater dimensions ( ) in mm

Fig. 3: Heater temperatures
Heating-up: red curve
Cooling-down: blue curve

Fig. 4: Radiant powers
Heating-up: red curve
Cooling-down: blue curve

Type, weight, wattage	FSL	220 g	600	W
	FSL/2	130 g	300	W
Installable surface rating			45.0	kW/m²
Typical operating temperature			to 550	°C
Maximum permissible temperature			700	°C
Wavelength range			2 - 10	µm

Standard design

Operating voltage 230 V
Ceramic full-pour casting
Leads 175 mm
Two litz mountings

Thermocouple heaters

Designation T-FSL, T-FSL/2
Integrated thermocouple
Type K (NiCr-Ni)
TC leads 110 mm

Variants

Special wattages
Special voltages
Extended leads
Leads with ring terminals

The power can be controlled using thermocouple heaters together with TRD 1 temperature controllers, TSE thyristor switching units and other accessories.

The national safety regulations must be complied with for the respective application, for example, the IEC or EN standard 60519-1, Safety in electrical heating installations.

Our instructions for mounting, operation and safety must be observed.