

Figure 38: Elstein HLS series and MPO, MPO/2. Mounting profiles MPO and MPO/2 are optional accessories

Elstein HLS high performance radiators are ceramic infrared rod radiators, which can be used for operating temperatures up to 1000 °C and surface ratings up to 87 kW/m².

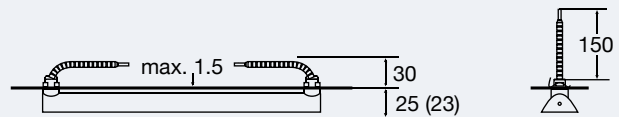
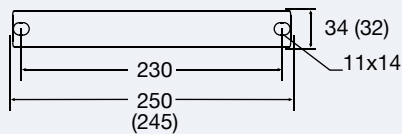
HLS series radiators have a gold-plated ceramic parabolic reflector and transfer up to 80% of the energy supplied as infrared radiation to the material to be heated.

In this way, HLS radiators allow material temperatures of up to 700 °C or high throughput speeds. The typical operating temperature of 1000 °C is reached in less than one minute.

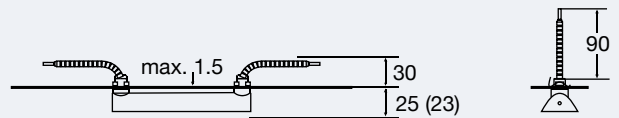
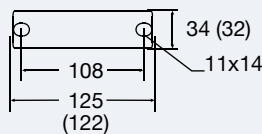
HLS series radiators are therefore particularly suitable for use in plant construction in which special solutions have to be drawn up for the customer's specific needs and for applications requiring high outputs.

Elstein HLS high performance radiators are available in two designs with 750 W / 230 V and for pairwise serial connection with 375 W / 115 V.

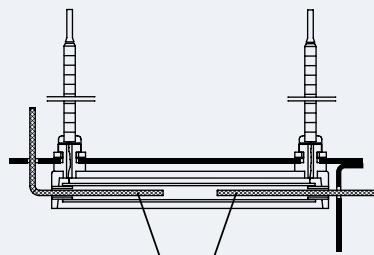
HLS



HLS/2

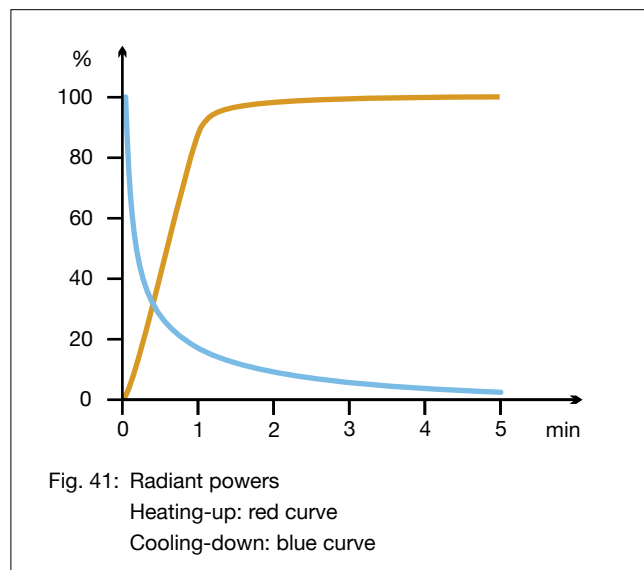
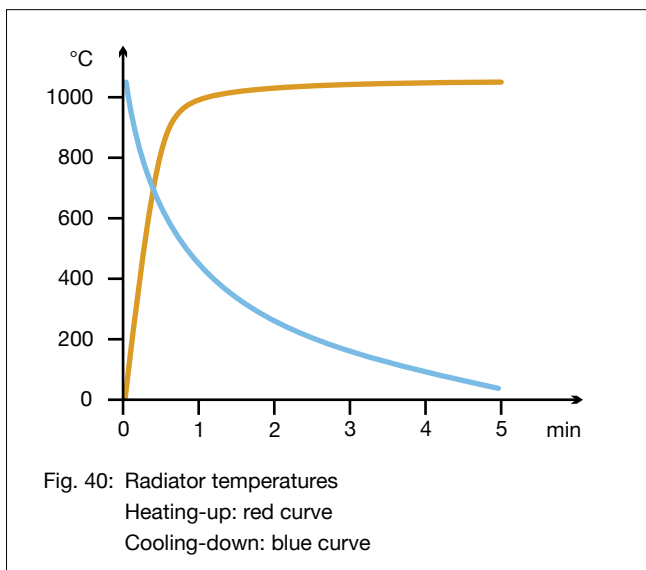


HLS - Series with sheathed thermocouple



Sheathed thermocouple, max. \varnothing 2 mm

Figure 39: Mounting dimensions and radiator dimensions () in mm



Type, weight, wattage	HLS	120 g	750	W
	HLS/2	60 g	325	W
Surface rating			87.0	kW/m ²
Typical operating temperature			1000	°C
Maximum permissible temperature			1100	°C
Wavelength range			2 - 10	µm

Standard design	Thermocouple radiators	Variants
HLS operating voltage 230 V HLS/2 operating voltage 115 V HLS leads 150 mm HLS/2 leads 90 mm Parabolic reflector gold-plated on the inside	Not available. For means of controlling output see below.	Special wattages Special voltages Extended leads Live leads with ring terminals

The power can be controlled using proprietary Type S sheathed thermocouples (Pt-PtRh) in conjunction with TRD temperature controllers, TSE thyristor switching units and further accessories. The sheathed thermocouples are pushed into the side (cf. Figure 39). They are not included in Elstein's range of products and therefore, if required, must be procured by the user.

IR radiation areas can be assembled using MPO mounting profiles.

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.

Further information and safety information are given in the mounting instruction enclosed with each radiator.