



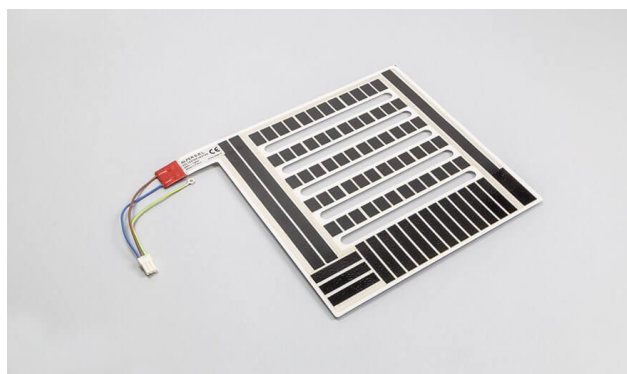
## FLEXIBLE ULTRA THIN POLYESTER HEATING ELEMENT

The Alper ultra-flat PET (polyester) heating foils are produced by screen printing and allow to reduce the thickness of the heating element to the minimum (min. 0.2mm). They are used in various fields of application such as aerospace, naval, small appliances and construction.

These resistances are produced by screen printing, initially depositing silver-based tracks, for the transport of electric current, and afterward a layer of conductive and heating ink. The continuous search for new formulations of heating inks has allowed Alper to make the production capacity and the development of new products based on customer specifications extremely flexible. The technology, unique in its kind, allows to reduce the tooling costs and any small changes on the required powers (+/- 20%) only by changing the composition of the heating inks.

### CHARACTERISTICS

- Maximum dimensions: 1000x600mm  
(other sizes available on request)
- Power and supply voltages on request
- Best temperature distribution
- Various thermal protections available  
such as thermal fuses, thermal protectors, probes  
and sensors
- Use of surface metal films used as earthing,  
thermal shields or mechanical protections.
- Application of adhesive surfaces using a wide  
range of specific double-sided adhesives for each  
use
- Wiring upon customer specification.
- Class I or II construction
- Customer specific design
- Min temperature: Min: -40 °C  
Max: 90 °C (continuously)  
Max: 100 °C (for short periods)
- Construction according to directive 2014/35/UE  
Test according to EN 60335-1 and EN 50106
- S.I. 2016 No. 1101 (Electrical Equipment (Safety)  
Regulations 2016)  
BS EN 60335-1  
BS EN 50106
- UL approval E466385 on request



Upon request