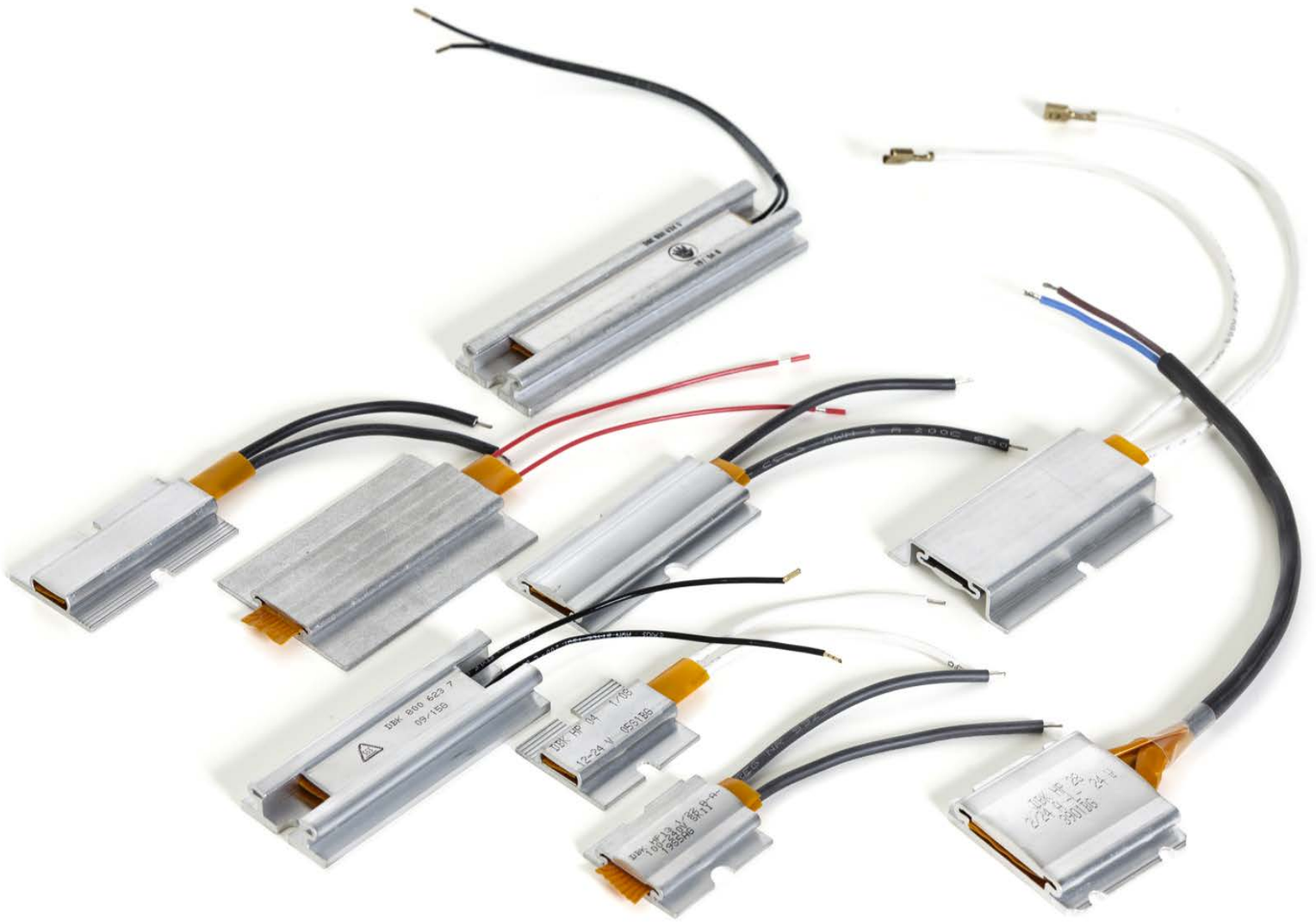


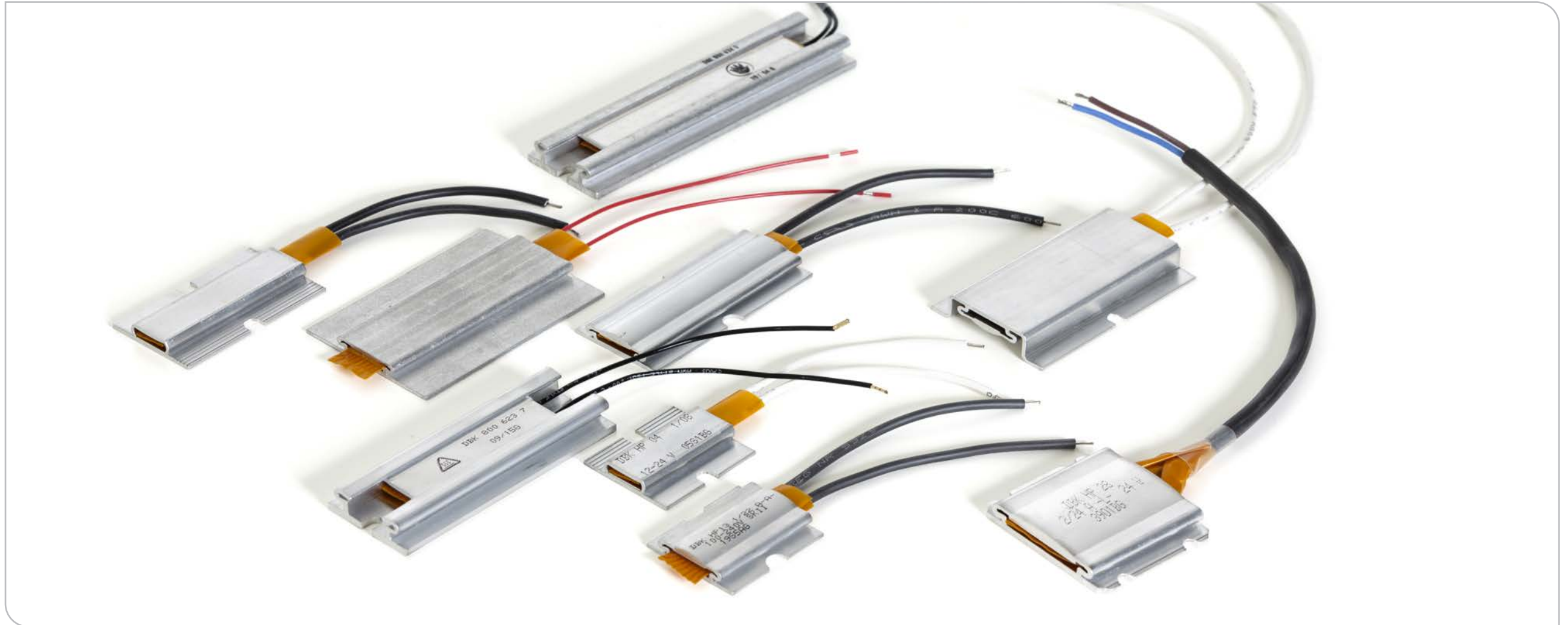
PTC Conductive Heating Elements



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Industrial Thermal Management is one of seven business units of the DBK Group. The specialists for heating, cooling and electronics are committed to always deliver the best quality possible to their industry customers in concept design, development, validation and serial production - for both, standard products and customized solutions. Thanks to technical excellence, scientific curiosity and flexibility DBK ranks among the technological leaders.

DBK's knowledge of thermal management gives us the experience to guide and support you with your technical challenges - we can manage the complete project from concept to full production release.



Types HP, HT

PTC conductive heating elements are dynamic heating elements combining heating and temperature limiting in a single unit. The range of application of PTC heating elements is almost unlimited. The elements need very little mounting space and feature a high power density. They are used for heating of solid bodies, containers, fluids and appliances in industrial, medical and cosmetics sectors as well as on variety of household appliances.

Conductive heating elements are available as:

- Heating profiles (HP)
- Heating discs (HT)

Besides the above types special versions are also available.

Features

- Voltage ranges 12 - 24V, 24 - 48V, 100 - 240V, special versions e.g. 400V or 72V on request, 600V for HP01B
- Protection classes SK I and SK II
- Selection of performances and temperature ranges
- Standard lengths of wires and insulation tubes
- Compliance with national and international safety regulations (VDE, UL, CSA)
- Fire hazard free
- Dynamic heating output and self regulating function depending on the ambient temperature

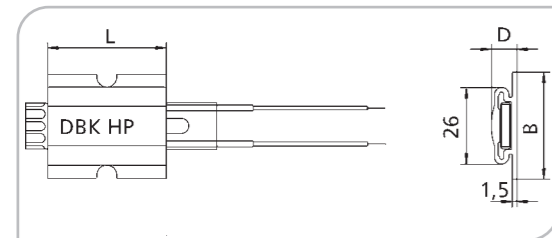
Applications

- Hotplates for coffee and teamakers, food warmers
- Heating of fluid-filled vessels
- Laminating equipment
- Video cameras
- Ultrasonic cleaning equipment
- Hair care appliances
- Cosmetic appliances
- Massage appliances
- Inhalation equipment
- Valve heating
- Condensation/ frost protection
- Medical apparatus
- Toys
- Telecommunication
- ...and many more

Heating Profiles (HP)

The HP series features a compact design and high power density. The flat aluminium housing can be easily installed and ensures optimum heat transfer. The ready-to-use heating element can be fixed in any place by corresponding fixing holes on the profiles (e.g. drilled or punched mounting holes).

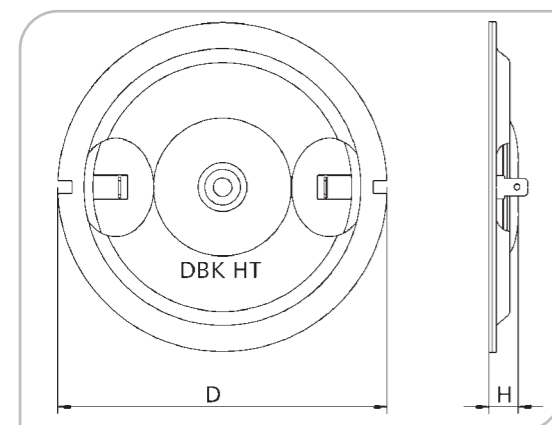
Technical Data		HP01	HP02	HP03	HP04	HP07	HP08	HP13/1	HP13/2
Temperature range	°C	50 - 270	50 - 270	50 - 240	50 - 240	50 - 240	50 - 240	50 - 240	50 - 240
Maximum power output	W*	150	150	80	60	200	200	120	200
Max. inrush current at 230V	A	4,5	4,5	2,5	1,5	6,0	6,0	3,0	6,0
Dimensions (Lengthx Widthx Thickness) mm		70 x 70 x 9,5	70 x 60 x 9,5	60 x 35 x 8,5	40 x 35 x 8,5	75 x 35 x 7,9	75 x 48 x 11,1	40 x 35 x 7,9	75 x 35 x 7,9



Heating Discs (HT)

High-quality compact heating element of round shape with central mounting hole. The concave prestressed contact surface ensures form-fit contact and thus optimum heat transfer. Equipped with spade terminals for electrical connection. The HT series comes with adhesive foil for easy installation.

Technical Data		HT01	HT02	HT03
Temperature range	°C	40 - 300	40 - 300	40 - 300
Maximum power output	W*	150	150	200
Max. inrush current at 230V	A	4,0	4,0	4,0
Dimensions (Lengthx Widthx Thickness) mm		95 x 6,2	95 x 6,2	100 x 5



* Power output in a waterfilled aluminium test tub with good heat transfer: initial and ambient temperature 20°C

