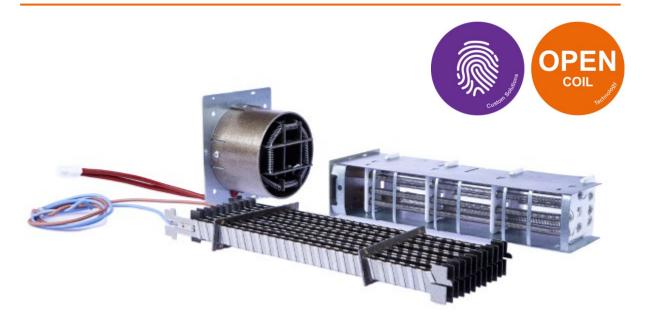
Open Coil Heating Solutions

Ω DBK

Wire Heating Technology



PRODUCT DESCRIPTION

Open Coil Heating Elements are based on traditional wire heating technology and come in a variety of shapes. For all wire heating elements, a special metal wire serves as heat source. The heating conductor heats up due to its electrical resistance when being supplied with current. When designing a resistance wire heater, the heating conductor's alloy and shape are most important next to the power output. Therefore, a selection of round and flat wires of various alloys and cross-sections is available. The selected heating conductor usually becomes a winding part on insulation material, such as ceramic or Micanite, or a spiral for tubular heating elements and heating cartridges. Open or etched heating elements are also possible.

FEATURES

- DBK has developed a unique heating technology, using ribbon wire wound onto mica formers featuring narrow dimension facing the air flow
- Flat wire, round wire or sprung wire all available depending on the application and specific requirements
- Maximum of 25 Watt per cm²
- Maximum temp of 950 degrees C
- Up to 500 volts
- Unlimited Construction types
- Minimal shadowing of heating element
- Open element very low resistance for air flow
- High surface area to cross sectional area ratio results in low surface density
- High power capability with Watt densities as low as 2 W/cm²
- No glow significantly reduced radiated losses reduced fire hazard
- To achieve equivalent surface density with round wire requires x3 weight of wire

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FLAT WIRE

ROUND WIRE

SPRUNG WIRE

APPLICATIONS

- White Goods such as Washing machines, Tumble Dryers, Dishwashers, Toasters, Hair Dryers, Hand Dryers
- HVAC such as Air Conditioning units, Air curtains, Pre-heat Inlets and Outlets for heat pumps
- Printing such as 3D Printers, Ink Dryers
- Manufacturing Applications such as Heat Treatments of materials, Plastic Processing
- And more