

Mica taped wires

SamicaFirewall® SK651

- **Taped winding wire for operating temperature up to 500 °C**
- **Wire with a very high peak temperature resistance up to 1000 °C**

General description

SK 651 high-temperature winding wire is a copper wire or a nickel-plated copper wire taped with a very thin Mica film, that has been developed by Von Roll. Mica is highly resistant to temperature and it has also good dielectric properties such as, dielectric strength and corona resistance. A glass fabric is used as carrier for the Mica. There are very few amounts of organic materials included in the insulation.

Nickel-plated copper wires do not oxidize at high temperatures.

Applications

- Motors operating at high temperature coils with high temperature resistance as required in the textiles and plastics industry
- Fire resistant motors
- Thermo-couples
- Different high temperature applications

Standard Types

Round copper wire or nickel-plated copper wire
 Diameter \varnothing 0.70 ... 3.50 mm
 Standard thickness of nickel-plating: 5 μ m
 or as specified by customer

Advantages

Excellent thermal resistance
 Good dielectric strength
 Very good corona resistance

Appearance

Slight color variations are raw material or process-related and have no influence on the technical properties of the wire.

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Technical Data

Temperature resistance	
Operating temperature:	max. 230 °C (not nickel-plated) 300 - 500 °C (depending on the thickness of nickel-plating)
Peak temperature:	>1000 °C
Dielectric strength:	>700 V (Mandrel 10 x d)
Increase due to insulation:	0.44 mm (+0.05 mm / -0.05 mm)

Order Data

Quantity, Diameter of wire, Type, Supply for

e.g.:

Diameter	0.80mm
Material of wire	Cu nickel-plated
Thickness of nickel	5 μ m
Type of insulation	SK651

The order shall specify the type of reels required, e.g.:

Cylindrical reels acc. to IEC 60264-2: DIN 250, 355, 500
 or conical reels acc. to IEC 60263-3: DIN A250, A315

e.g.: 2000 kg RD SK651 NIP 0.80mm D355