

Heating cable ø2mm, 5-48V DC, silicone insulation

Reference: AM7968
EAN13: -
HS code: 85168080



Product attributes:

Resistance heating cable: 0.3 Ohm/m, 0.6 Ohm/m, 1 Ohm/m, 2 Ohm/m, 5 Ohm/m, 10 Ohm/m, 15 Ohm/m, 20 Ohm/m, 25 Ohm/m, 38 Ohm/m, 50 Ohm/m, 74 Ohm/m, 120 Ohm/m, 180 Ohm/m, 256 Ohm/m, 362 Ohm/m, 588 Ohm/m

Product features:

Voltage: 5-48 V DC
Average: 2 mm
Quantity core: 1
Max. voltage: 300 V
Minimum bending radius: 3 cm

Product description:

The 2 mm diameter heating cable is designed for low-voltage DC power supply in the range of 5-48 V DC. Thanks to its silicone insulation and resistive heating core, it is suitable for integration into heated elements, temperature control systems and technical applications where mechanical flexibility, thermal resistance and uniform heating along the length of the conductor are required.

Technical specifications

- Product type: heating cable
- Cable outer diameter: 2 mm
- Power supply: 5-48V DC
- Resistance variant: 0.6 Ohm/m
- Insulation: silicone rubber
- Heating core material: nickel-chromium alloy or copper-nickel
- Cable shape: round
- Maximum insulation temperature resistance: 200 °C
- Insulation resistance: $\geq 100 \text{ M}\Omega$
- Test voltage resistance: 2000 V
- Rated voltage resistance: 300 V
- Expected lifespan: more than 30000 hours

Functions and features

- Designed for DC low voltage applications.
- Silicone insulation ensures good flexibility even when operating at elevated temperatures.
- The insulation's resistance to oils, acids and UV radiation expands its application possibilities in technical practice.
- The small cable diameter makes it easy to install in confined spaces.
- The heating power depends on the supply voltage, the length of the cable used and the resistance per meter.
- Power calculation: $P=(U \times U)/(L \times R)$, where U is the voltage, L is the cable length and R is the resistance per meter.

Ideal for

- Heated car seats and steering wheels
- Refrigerators, air conditioning and defrosting systems
- Electric blankets, pads and heated textiles
- Window heating and pipe freezing protection
- Incubators, medical and cosmetic equipment
- Heated towels, heating belts and specialized temperature applications

Package contents

- 1x heating cable Ø2 mm with silicone insulation
- Delivery by the metre according to the ordered quantity

Why choose this product?

- Compact design with a diameter of 2 mm for easy integration into devices.
- Wide supply voltage range of 5-48 V DC for various low-voltage systems.
- Silicone insulation suitable for applications requiring thermal and chemical resistance.
- A clearly defined resistance of 0.6 Ohm/m allows for more accurate design of cable length and resulting power.
- Suitable solution for construction, service and development use.

Installation and operating instructions

- When designing, it is necessary to calculate the resulting power based on the supply voltage, cable length and resistance per meter.
- Choose the cable so that the operating temperature matches the device design and ambient conditions.
- For proper and safe operation, we recommend ensuring even heat dissipation from the cable surface.
- Do not shorten or modify the cable without verifying the resulting electrical power and current load.
- During installation, take care to avoid mechanical damage to the insulation.

Safety notice

- The product is intended for use in accordance with the appropriate electrical and thermal parameters of the application.
- During operation, the cable surface may heat up to an elevated temperature.
- An incorrectly selected length or supply voltage can lead to excessive thermal load.
- We recommend that the installation be carried out only with appropriate protection and checking of the power supply parameters.
- The product is not intended for use without appropriate structural protection in applications where direct contact with sensitive or flammable materials could occur.

