

Heat resistant cables

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HEAT RESISTANT CABLES

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FLUOROPOLYMER INSULATED CABLES

PRODUCT RANGE

Application

Used as signal-, control- or measuring cable for transmission of analogue or digital signals in electronics, telecommunications, process control, information and data technology, motor and turbine engineering, vehicles, railway applications, domestic and industrial appliances, heating technologies. Further for energy supply in low voltage plants.

Material Properties

The fluoropolymers combine the following excellent properties:

- **Thermal resistance**
- **Excellent kryogenic properties**
- **Excellent flame retardancy**
- **Chemical resistance (acids, alkaline solutions, etc.)**
- **Resistant against ozone and UV-radiation**
- **Excellent mechanical stability**
- **Space-saving (thinwall insulation and sheathing)**
- **Excellent dielectric properties**

Operating Temperature Range

+ 130 °C

+ 180 °C

+ 200 °C

+ 260 °C

Conductor size and -material

Metrical: 0.14 mm² - 120 mm², MIL / ASTM: AWG32 - AWG0000; solid, flexible or extra flexible stranded

Thermocouple extension or compensating material acc. to DIN IEC 584,

Plain annealed copper

Tinned copper

Silver-plated copper

Nickel-plated copper

Insulationmaterial

ETFE, FEP, PFA

ETFE (150 °C), FEP, PFA

FEP, PFA

PFA

Stranding Element

Cores, Pairs, Triples, Quads, unscreened or screened

Screens for Stranding Elements / Overall Screen

Copper wire braid or aluminium/PETP-tape over drain wire

Types of Armouring

Wire braid of galvanized steel or stainless steel

Sheathing Materials

ETFE, FEP, PFA

ETFE, FEP, PFA

FEP, PFA

PFA

Operating Voltages

U_{rms}

max.

250 V

600 V

1000 V

SILICONE RUBBER INSULATED CABLES

PRODUCT RANGE

Application

Used as signal-, control- or measuring cable for transmission of analogue or digital signals in electronics, telecommunications, process control, information and data technology, motor and turbine engineering, vehicles, railway applications, domestic and industrial appliances, heating technologies. Further for energy supply in low voltage plants.

Material Properties

The silicone rubber compounds combine the following properties:

- **Thermal resistance**
- **Excellent kryogenic properties**
- **Excellent flame retardancy**
- **Fire resistance**
- **Zero halogen**
- **Low smoke emission of combustion gases**
- **Low toxicity of combustion gases**
- **Resistant against ozone and UV-radiation**
- **Excellent mechanical stability (Notch propagation)**

Operating Temperature Range

Operating:
- 50°C upto + 180°C

under short circuit:
+ 200°C + 350°C (with glass fibre yarn)

Conductor size and -material

Metrical: 0.35 mm² - 240 mm², solid or flexible stranded; Plain annealed copper or tinned copper

Insulation material

Silicone rubber (standard), Silicone rubber (with excellent notch propagation) or Silicone rubber + impregnated glass fibre yarn

Stranding Element

Cores, Pairs, Triples, Quads, unshielded or shielded

Screens for Stranding Elements / Overall Screen

Copper wire braid

Types of Armouring

Glass fibre yarn plus Steel wire braid

Sheathing Materials

Silicone rubber (standard), Silicone rubber (with excellent notch propagation) or Silicone rubber + impregnated glass fibre yarn

Rated voltage

U₀ / U

max.

300/500 V

600/1000 V

HIGHTECHPLASTICS INSULATED CABLES

ZERO HALOGEN, FLAME RETARDANT

PRODUCT RANGE

Application

Used as signal-, control- or measuring cable for transmission of analogue or digital signals in electronics, telecommunications, process control, information and data technology, motor and turbine engineering, vehicles, railway applications, domestic and industrial appliances, heating technologies. Further for energy supply in low voltage plants.

Material Properties

The hightechplastics combine the following excellent properties:

- **Thermal resistance**
- **Excellent kryogenic properties**
- **Excellent flame retardancy**
- **Zero halogen**
- **low smoke emission of combustion gases**
- **low toxicity of combustion gases**
- **Chemical resistance (acids, alkaline solutions, etc.)**
- **Resistant against ozone and UV-radiation**
- **Excellent mechanical stability**
- **Space-saving (thinwall insulation and sheathing)**
- **Excellent dielectric properties**

Conductor size and -material

Metrical: 0.14 mm² - 120 mm², MIL / ASTM: AWG32 - AWG0000; solid, flexible or extra flexible stranded

Thermocouple extension or compensating material acc. to DIN IEC 584,

Plain annealed copper (upto +130 °C), Tinned copper (upto +180 °C), silver-plated copper (upto +200 °C)

Insulationmaterial (Operating Temperature Range)

HTK1 (-40 °C upto +130 °C (short-term +140 °C))

HTK2 (-40 °C upto +200 °C (short-term +250 °C))

Stranding Element

Cores, Pairs, Triples, Quads, unscreened or screened

Screens for Stranding Elements / Overall Screen

Copper wire braid or aluminium/PETP-tape over drain wire

Types of Armouring

Wire braid of glavanized steel or stainless steel

Sheathingmaterials (Operating Temperature Range)

HTK1 (-40 °C upto +130 °C (short-term +140 °C))

HTK2 (-40 °C upto +200 °C (short-term +250 °C))

PUR (-40 °C upto +90 °C))

Polymer (-25 °C upto +90 °C)

Operating Voltages

U_{rms}

max.

250 V

600 V

1000 V