

Compensating cable
KCA FEP-Sil NiCr/Ni 2x0,22 IEC**DB1161011**
valid from: 30.09.2015**Application**

The compensating cable KCA FEP-Sil NiCr/Ni 2x0,22 mm² is a FEP/Silicone rubber insulated compensating cable type KCA which transmits the thermoelectric voltage of NiCr/Ni thermocouples. It is for flexible use and fixed installation in dry and damp rooms. They may only be installed outdoors with UV protection and in observation of the max. permitted temperature range.

Compensating cables are made of conductors that have a different nominal composition as that of the corresponding thermocouple. In the application temperature range, the thermoelectric properties largely correspond to the characteristics of the thermocouple.

Design

Conductor	0,22mm ² (7 x 0,2mm)
Conductor material	KCA alloys, accuracy class 2 according IEC 60584 Positive conductor: FE (iron, compensating material for NiCr) Negative conductor: CuNi (cupronickel, compensating material for Ni)
Core insulation	FEP
Core identification	Positive conductor: green Negative conductor: white
Stranding	Cores twisted together
Outer sheath	Silicone rubber Colour: green

Electrical properties at 20°C

Limiting deviation class 2	± 100 µV (± 2,5°C) (acc. to IEC 60584-3)
Measuring point temperature	+900°C (acc. to IEC 60584-3)
Test voltage	500 V

Mechanical and thermal properties

Minimum bending radius	occasionally flexing: 12 x cable Ø fixed installation: 6 x cable Ø
Temperature range	occasionally flexing: -50°C up to +180°C fixed installation: -50°C up to +180°C
Application temperature range	Type KCA: 0°C up to +150°C (acc. to IEC 60584-3) for item 1161011: 0°C up to +150°C (considering the Type KCA)
Flame retardant	acc. to IEC 60332-1-2