

**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 mm<sup>2</sup> 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 <sup>2</sup> (7 x 0,2mm)   |
| Conductor material  | KCA alloys, accuracy class 2 according IEC 60584<br>Positive conductor: FE (iron, compensating material for NiCr)<br>Negative conductor: CuNi (cupronickel, compensating material for Ni) |
| Core insulation     | FEP   |
| Core identification | Positive conductor: green<br>Negative conductor: white  |
| Stranding           | Cores twisted together  |
| Outer sheath        | Silicone rubber<br>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<br>fixed installation: 6 x cable Ø   |
| Temperature range             | occasionally flexing: -50°C up to +180°C<br>fixed installation: -50°C up to +180°C                                |
| Application temperature range | Type KCA: 0°C up to +150°C (acc. to IEC 60584-3)<br>for item 1161011: 0°C up to +150°C (considering the Type KCA) |
| Flame retardant               | acc. to IEC 60332-1-2   |

 AbN  
automation

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