

**Compensating cable**  
**KN9L NiCr/Ni KCA 2X1,5 IEC round**

**DB0162010**  
valid from: 16.07.2015

**Application**

The compensating cable KN 9 L 2 x 1,5 mm<sup>2</sup> is a PVC 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	1,5mm <sup>2</sup> (48 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	PVC compound
Core identification	Positive conductor: green Negative conductor: white
Stranding	Cores twisted together
Outer sheath	PVC compound 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	1 kV

**Mechanical and thermal properties**

Minimum bending radius	occasionally flexing: 12 x cable Ø fixed installation: 6 x cable Ø
Temperature range	occasionally flexing: -5 °C up to +80 °C fixed installation: -10 °C up to +80 °C
Application temperature range	Type KCA: 0°C bis +150°C (acc. to IEC 60584-3) for item 0162010: 0°C bis +80°C (considering the Insulation material)
Flame retardant	acc. to IEC 60332-1-2