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|---------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1161016                   | <b>Data sheet</b>                                              |  |
| Valid from:<br>12.02.2025 | <b>Thermocouple cable K SIA-SIA NiCr/Ni 2x0.8<br/>IEC oval</b> |                                                                                     |

## Application

The thermocouple cable K SIA-SIA NiCr/Ni 2x0.8 mm<sup>2</sup> is a silica wrapped thermocouple cable type K, which transmits the thermoelectric voltage of NiCr/Ni-thermocouples. It is for flexible use and fixed installation in dry rooms. They may only be installed outdoors with UV-protection and in observation of the maximum permitted temperature range.

## Design

|                     |                                                                                                                     |
|---------------------|---------------------------------------------------------------------------------------------------------------------|
| Conductor           | 0,8 mm <sup>2</sup> (solid)                                                                                         |
| Conductor material  | K alloys, according to IEC 60584-1<br>Positive conductor: NiCr (Nickel chromium)<br>Negative conductor: Ni (Nickel) |
| Core insulation     | Silica                                                                                                              |
| Core identification | Positive conductor: green<br>Negative conductor: white                                                              |
| Core layering       | Cores parallel next to each other                                                                                   |
| Outer braid         | Braid made of Silica, with green tracer yarn                                                                        |

## Electrical properties

|                         |                                          |
|-------------------------|------------------------------------------|
| Limiting deviation      | ±2,5°C (acc. to IEC 60584-1)             |
| Thermocouple tolerances | -40°C up to 1200°C (acc. to IEC 60584-1) |
| Test voltage            | 500 V                                    |

## Mechanical and thermal properties

|                        |                                                                                      |
|------------------------|--------------------------------------------------------------------------------------|
| Minimum bending radius | occasionally flexing: 20 x cable diameter<br>fixed installation: 10 x cable diameter |
| Temperature range      | occasionally flexing: -25°C up to +1000°C<br>fixed installation: -50°C up to +1000°C |

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automation

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| Originator: LUJU/PCS<br>Approved: ALTE/PDC | Document: DB1161016DE<br>Version: 01 | Page 1 of 1 |
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