

HIGH TEMPERATURE WIRES AND CABLES
FOR THE GENERAL MARKET
SECTION III: COMPOSITE INSULATIONS

SILICABLE® CN2K and CN4K

-190 °C to +250 °C



Approvals - standards

- Nickel-plated copper complying with the 2% class as per standard ASTM B355.
- VERITAS approval certificates No. 153624.

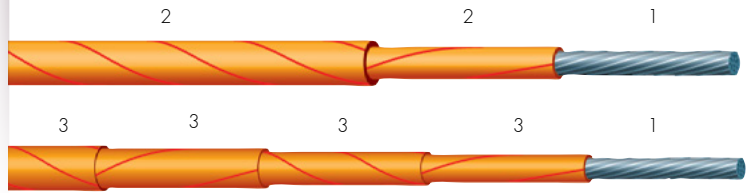
Applications

- Cabling for heating resistors, cartridges, bands and plates.
- All cabling requiring enhanced chemical resistance and resistance to radiations (chemical, nuclear industry, etc.).

Options

- Silver-plated copper core: ref. A2K and A4K.
- Pure nickel core (not described in IEC 60228 and NF C 32-018): ref. N2K and N4K.
- Assembly of unipolar cables ref. CN2K under polyimide sheath: ref. M2K-CN2K.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

UNIPOLAR WIRES AND CABLES WITH COMPOSITE INSULATION



- 1 • Nickel-plated copper core.
- 2 • Two heat-sealed crossed polyimide tapes.
- 3 • Four heat-sealed crossed polyimide tapes.

Characteristics

General

- Continuous operating temperatures: -190 °C to +200 °C - Peaks at +250 °C.
- Good resistance to moisture and common chemical agents.
- Excellent resistance of polyimide material to radiations: 1.10^9 rad.

Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.
- Enhanced dielectric strength for ref. CN4K.

Standard products

- Single colour: amber brown.

Conducting core

Nominal cross-section (1) (mm ²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.14**	7 x 0.16	152
0.22*	7 x 0.20	99.4
0.25**	8 x 0.20	87.2
0.34*	7 x 0.25	63.6
0.4*	19 x 0.16	58.0
0.5*	7 x 0.30	43.8
0.6*	19 x 0.20	36.3
0.75	24 x 0.20	28.7
0.93*	19 x 0.25	23.2
1	32 x 0.20	21.5
1.34*	19 x 0.30	16.1
1.5	30 x 0.25	14.7
1.91*	27 x 0.30	11.3
2.5	50 x 0.25	8.21
4	56 x 0.30	5.09
6	84 x 0.30	3.39
10	80 x 0.40	1.95
16	126 x 0.40	1.24
25	196 x 0.40	0.795
35	276 x 0.40	0.565
50	396 x 0.40	0.394

INSULATED WIRE OR CABLE

Nominal diameter (mm)	Approximate linear weight (kg/km)	
	CN2K	CN4K
0.8	1.1	1.9
0.9	1.2	2.8
1.0	1.3	2.9
1.0	1.3	3.8
1.1	1.4	4.2
1.2	1.5	5.3
1.3	1.6	6.3
1.5	1.8	7.7
1.6	1.9	9.5
1.6	1.9	10.1
1.8	2.1	13.4
1.9	2.2	14.6
2.2	2.5	23.8
2.3	2.6	24.7
2.9	3.2	37.8
3.5	3.8	56.1
4.7	5.0	90.8
	6.0	157
	7.4	254
	8.8	353
	10.6	512

For this product, please contact:

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(1) Nominal cross-sections described as per IEC 60228 except:

* Nominal cross-sections described as per NF C 32-018.

** Nominal cross-sections not described in IEC 60228 and NF C 32-018.

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The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force. For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

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LES CABLES DE L'EXTREME