

HIGH TEMPERATURE WIRES AND CABLES
FOR THE GENERAL MARKET
SECTION I: CROSS LINKED ELASTOMERS

SILCABLE® CSC and ECSC

Double insulating layer

-60 °C to +180 °C

SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible bare copper (ref. CSC) or tin-plated (ref. ECSC) core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.

Approvals - standards

- Halogen-free:
IEC 60754-1 / EN 60754-1.
- Low corrosivity of gas emissions:
IEC 60754-2 / EN 60754-2.
 - Low smoke density:
IEC 61034-2 / EN 61034-2.
 - Fire retardant:
NF C 32-070 test C1.
- Safety of household and similar electrical appliances: NF EN 60335-1.

Applications

- Class 2 lighting equipment and convectors or any other household electrical appliance complying with standard NF EN 60335-1.
 - Cabling for rotating machines (class H).

Options

- Nickel-plated copper core: ref. CNCSC.
 - Silver-plated copper core: ref. ACSC.
- Pure nickel core (not described in IEC 60228):
ref. NCSC.
 - Outer electrical shielding:
> Tin-plated copper braid: ref. CSCBE or ECSCBE.
 - Outer Flexible armour:
> Galvanised steel braid: ref. CSCBG or ECSCBG.
 - > Stainless steel braid: ref. CSCBI or ECSCBI.
 - Stranded bare copper (ref. CSC) or tin-plated (ref. ECSC) core - class 2 as per IEC 60228: see details of the option below.
 - Solid bare copper (ref. RCSC) or tin-plated (ref. RECSC) core - class 1 as per IEC 60228: contact us.
- Other nominal cross-sections: contact us.
 - Other options and/or combinations of the options outlined above: contact us.

Characteristics

General

- Continuous operating temperatures: -60 °C to +180 °C.
- Good resistance to thermal shock and UV.

Electrical

- Rated voltage: 300/500 V.
- Test voltage: 3750 V.

Standard products

- Inner insulating layer: white.
- Outer insulating layer: all colours including two-coloured.

CSC and ECSC

Flexible core • class 5 as per IEC 60228

Nominal cross-section (mm ²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (bare copper core)
0.5	16 x 0.20	39.0
0.75	24 x 0.20	26.0
1	32 x 0.20	19.5
1.5	30 x 0.25	13.3
2.5	50 x 0.25	7.98
4	56 x 0.30	4.95
6	84 x 0.30	3.30
10	80 x 0.40	1.91
16	126 x 0.40	1.21
25	196 x 0.40	0.780
35	276 x 0.40	0.554
50	396 x 0.40	0.386

INSULATED WIRE OR CABLE

Total nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.7	2.4	10.2
0.7	2.6	13.1
0.7	2.8	16.1
0.8	3.2	22.2
0.9	3.8	33.9
1.0	4.6	52.3
1.2	5.6	78.0
1.4	7.2	128
1.6	8.6	192
2.0	10.8	301
2.0	12.2	406
2.2	14.9	592

Option • CSC and ECSC

Stranded core • class 2 as per IEC 60228

Nominal cross-section (mm ²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)
0.5	7 x 0.30	36.0
0.75	7 x 0.37	24.5
1	7 x 0.43	18.1
1.5	7 x 0.52	12.1
2.5	7 x 0.67	7.41
4	7 x 0.85	4.61
6	7 x 1.04	3.08

INSULATED WIRE

Total nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.7	2.3	9.6
0.7	2.5	12.6
0.7	2.7	15.6
0.8	3.2	22.4
0.9	3.8	34.2
1.0	4.6	52.7
1.2	5.5	77.2

For this product, please contact:

OMERIN division principale

Zone Industrielle - F 63600 Ambert
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10
omerin@omerin.com

OMERIN division silisol

BP 87 - ZI du Devey - F 42000 Saint-Etienne
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 37 00
silisol@omerin.com

www.omerin.com

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.

® Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

omerin
LES CABLES DE L'EXTREME