

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

# SILICABLE® CS and ECS

## -60 °C to +180 °C

### SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible bare copper (ref. CS) or tin-plated (ref. ECS) 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.
- Fire retardant:  
NF C 32-070 test C1.

### Applications

- Cabling for household electrical heating appliances.
- Rotating machines (class H).
  - Lighting.
- Industrial cabling in hot atmospheres.

### Options

- Nickel-plated copper core: ref. CNCS.
- Silver-plated copper core: ref. ACS.
- Pure nickel core (not described in IEC 60228):  
ref. NCS.
  - Outer electrical shielding:
- > Tin-plated copper braid: ref. CSBE or ECSBE.
  - Outer Flexible armour:
- > Galvanised steel braid: ref. CSBG or ECSBG.
  - > Stainless steel braid: ref. CSBI or ECSBI.
- Stranded bare copper (ref. CS) or tin-plated (ref. ECS) core - class 2 as per IEC 60228:  
see details of the option below.
- 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: | <b>S &lt; 2.5 mm<sup>2</sup></b><br>300/500 V | <b>S ≥ 2.5 mm<sup>2</sup></b><br>600/1000 V. |
| • Test voltage:  | 2000 V  | 3000 V.                                      |

### Standard products

- Up to 120 mm<sup>2</sup>: all colours including two-coloured.
- From 150 mm<sup>2</sup> to 400 mm<sup>2</sup>: all colours except two-coloured.

### CS and ECS

#### Flexible core • class 5 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km) (bare copper core)
0.25 *	14 x 0.15	78.6
0.5	16 x 0.20	39.0
0.6 *	19 x 0.20	32.8
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
70	360 x 0.50	0.272
95	485 x 0.50	0.206
120	608 x 0.50	0.161
150	756 x 0.50	0.129
185	944 x 0.50	0.106
240	1221 x 0.50	0.0801
300	1525 x 0.50	0.0641
400	2037 x 0.50	0.0486

#### INSULATED WIRE OR CABLE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.6	1.9	5.8
0.6	2.1	8.6
0.6	2.2	9.6
0.6	2.4	12.0
0.6	2.5	14.3
0.6	2.8	19.4
0.7	3.4	30.6
0.8	4.2	48.2
0.8	4.8	68.4
1.0	6.4	113
1.2	7.8	171
1.4	9.6	269
1.4	11.0	359
1.6	13.2	514
1.6	14.8	693
1.8	17.4	937
1.8	19.4	1186
2.0	21.4	1459
2.2	23.9	1834
2.2	26.4	2371
2.4	29.9	2990
2.6	34.2	3933

#### Option • CS and ECS

##### Stranded core • class 2 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	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

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.6	2.0	8.1
0.6	2.4	12.0
0.6	2.5	14.4
0.6	2.7	19.0
0.7	3.4	30.9
0.8	4.2	48.6
0.8	4.7	67.8

\* Nominal cross-sections not described in IEC 60228.

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LES CABLES DE L'EXTREME