

# CS-ES and ECS-ES

**-60 °C to +180 °C**



- 1 • Extra-flexible bare copper (ref. CS-ES) or tin-plated (ref. ECS-ES) core - class 6 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.

## Applications

- Cabling for alternate bending use, cabling requiring a low bending radius.
- Cabling for household electrical heating appliances or industrial appliances requiring the use of highly flexible cables.
- Measuring cables.

## Options

- Outer electrical shielding:  
> Tin-plated copper braid: ref. CSBE-ES or ECSBE-ES.
- Outer Flexible armour:  
> Galvanised steel braid:  
ref. CSBG-ES or ECSBG-ES.
- > Stainless steel braid:  
ref. CSBI-ES or ECSBI-ES.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

## Characteristics

### General

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

### Electrical

- |                  |                                  |                               |
|------------------|----------------------------------|-------------------------------|
|                  | <b>S &lt; 2.5 mm<sup>2</sup></b> | <b>S ≥ 2.5 mm<sup>2</sup></b> |
| • Rated voltage: | 300/500 V                        | 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 240 mm<sup>2</sup>: all colours except two-coloured.

## CS-ES and ECS-ES

### Extra-flexible core • class 6 as per IEC 60228

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Max. linear resistance at 20 °C (Ω/km) (bare copper core)
0.5	260 x 0.05 or 130 x 0.07	39.0
0.75	390 x 0.05 or 200 x 0.07	26.0
1	520 x 0.05 or 260 x 0.07	19.5
1.5	390 x 0.07 or 190 x 0.10	13.3
2.5	650 x 0.07 or 320 x 0.10	7.98
4	512 x 0.10 or 224 x 0.15	4.95
6	342 x 0.15 or 192 x 0.20	3.30
10	324 x 0.20	1.91
16	512 x 0.20	1.21
25	796 x 0.20	0.780
35	1120 x 0.20	0.554
50	1600 x 0.20	0.386
70	2240 x 0.20	0.272
95	3025 x 0.20	0.206
120	3820 x 0.20	0.161
150	4775 x 0.20	0.129
185	5888 x 0.20	0.106
240	7639 x 0.20	0.0801

### INSULATED WIRE OR CABLE

Nominal thickness of insulation (mm)	Nominal diameter (mm)	Approximate linear weight (kg/km)
0.6	2.1	8.6
0.6	2.4	11.8
0.6	2.5	14.0
0.6	2.8	19.1
0.7	3.4	30.3
0.8	4.2	47.0
0.8	5.0	69.7
1.0	6.4	115
1.2	7.8	180
1.4	9.6	275
1.4	11.0	377
1.6	13.2	546
1.6	14.8	731
1.8	17.4	980
1.8	19.4	1312
2.0	21.4	1562
2.2	23.9	1899
2.2	26.4	2496

For this product, please contact:

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