

HIGH TEMPERATURE WIRES AND CABLES  
FOR THE GENERAL MARKET  
SECTION 1: CROSS LINKED ELASTOMERS

# SILICABLE® CS-FRNC and ECS-FRNC

Improved flame resistance  
-60 °C to +180 °C

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible bare copper (ref. CS-FRNC) or tin-plated (ref. ECS-FRNC) 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.
- Resistance to vertical flame propagation  
for a single insulated wire.  
IEC 60332-1-2 / EN 60332-1-2 /  
NF C 32-070 test C2.

### Applications

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

### Options

- Nickel-plated copper core: ref. CNCS-FRNC.
- Silver-plated copper core: ref. ACS-FRNC.
- Pure nickel core (not described in IEC 60228):  
ref. NCS-FRNC.
- Outer electrical shielding:  
> Tin-plated copper braid: ref. CSBE-FRNC  
or ECSBE-FRNC.
- Stranded bare copper (CS-FRNC)  
or tin-plated (ref. ECS-FRNC) 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.
- Excellent flame resistance properties.

### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V.

### Standard products

- All colours including two-coloured.

### CS-FRNC and ECS-FRNC

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

| Nominal cross-section<br>(mm²) | Nominal stranding | Maximum linear resistance at 20 °C<br>(Ω/km)<br>(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                                                               |

#### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.1                      | 8.7                                  |
| 0.6                                     | 2.4                      | 12.0                                 |
| 0.6                                     | 2.5                      | 14.3                                 |
| 0.6                                     | 2.8                      | 19.5                                 |
| 0.7                                     | 3.4                      | 30.7                                 |

#### Option • CS-FRNC and ECS-FRNC

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

| Nominal cross-section<br>(mm²) | Nominal stranding | Maximum linear resistance at 20 °C<br>(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                                         |

#### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.1                      | 8.6                                  |
| 0.6                                     | 2.4                      | 12.0                                 |
| 0.6                                     | 2.5                      | 14.5                                 |
| 0.6                                     | 2.8                      | 19.7                                 |
| 0.7                                     | 3.4                      | 31.0                                 |

For this product, please contact:

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