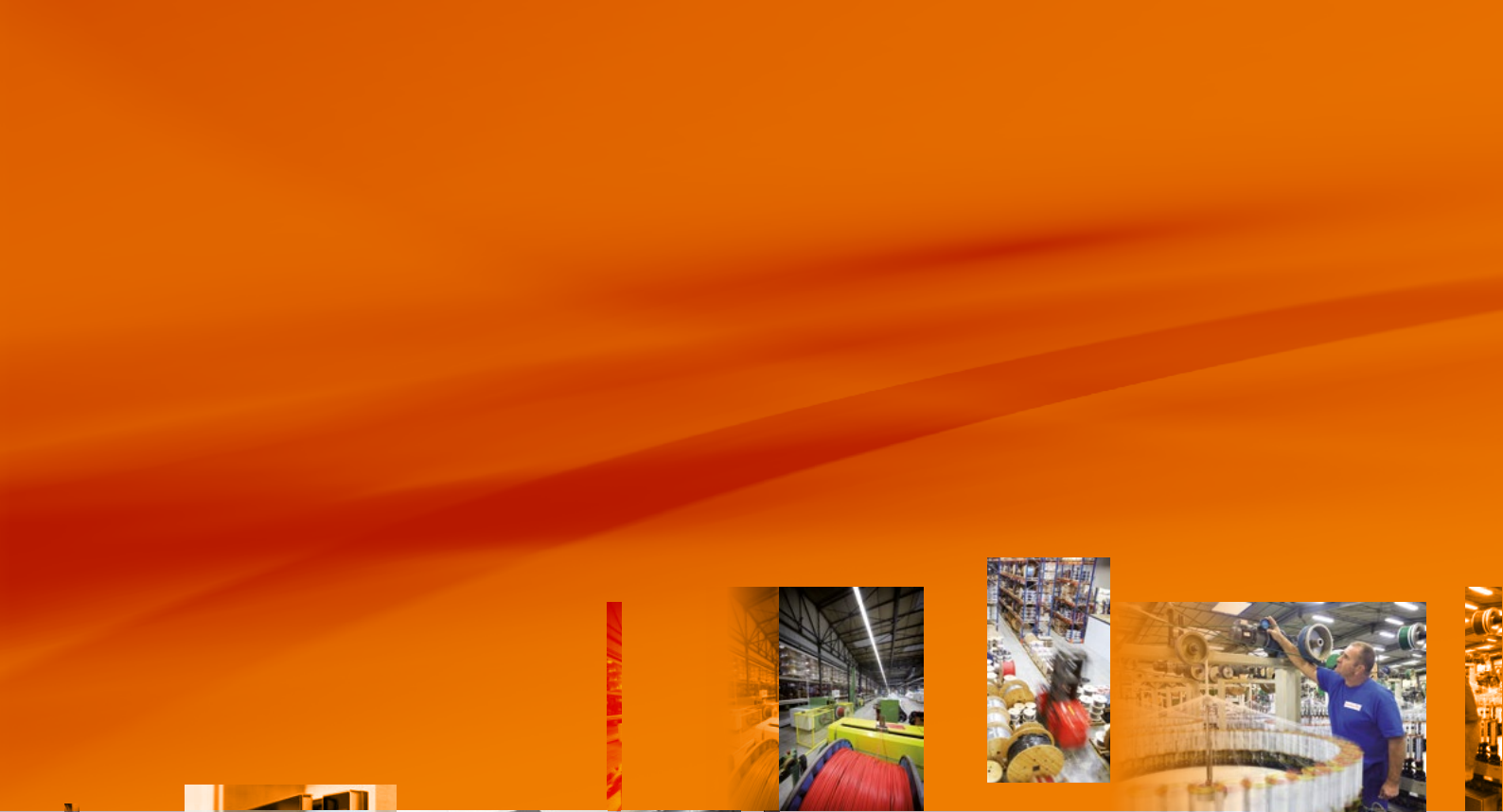


1

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

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LES CABLES DE L'EXTREME

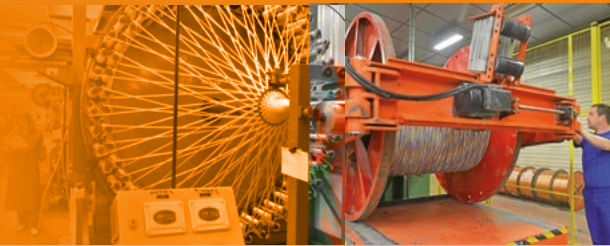


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**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET**

**1**

**SECTION I: CROSS LINKED ELASTOMERS**

**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET**

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**HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET**

**3**

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**4**

**CABLE SOLUTIONS FOR ROLLING STOCK**

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**CABLES FOR POWER STATIONS AND HIGH-RISK SITES**

**6**

**MARINE CABLES**

**7**

**PYROMETRY CABLES**

**8**

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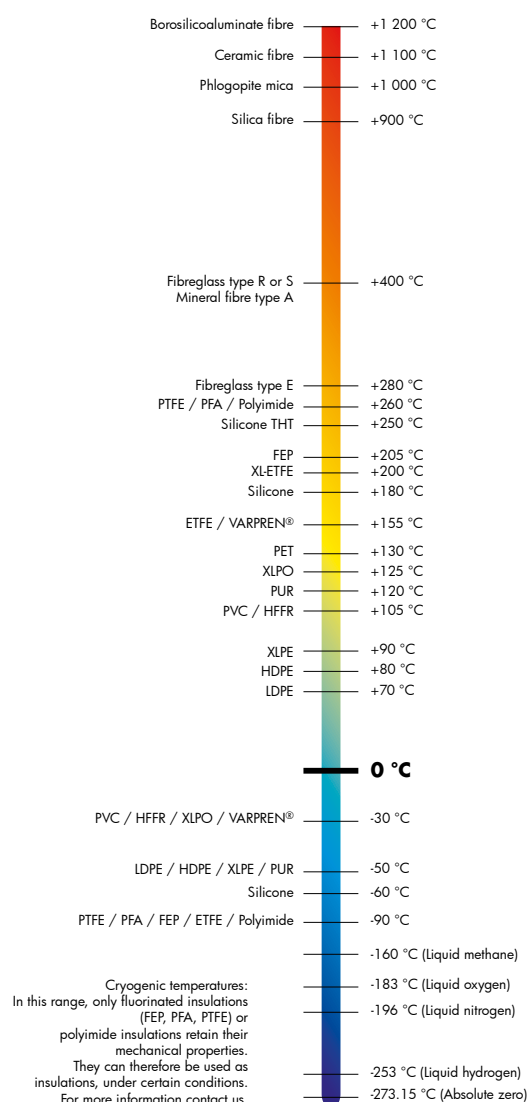
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**VEROX®** Fiberglass braided seals

**VIDEOCOAX®** Analog and digital video cables



## Thermal classification of insulations



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# 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 61034-2.
- 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       | $S < 2.5 \text{ mm}^2$ | $S \geq 2.5 \text{ mm}^2$ |
|------------------|------------------------|---------------------------|
| • 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 400 mm<sup>2</sup>: all colours except two-coloured.

### CS and ECS

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20 °C (Ω/km)<br>(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<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(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

|      |          |      |
|------|----------|------|
| 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

|     |     |      |
|-----|-----|------|
| 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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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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

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**omerin**  
LES CABLES DE L'EXTREME

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

## SILICABLE® RCS and RECS Solid core -60°C to +180°C

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



- 1 • Solid bare copper (ref. RCS) or tin-plated (ref. RECS) core - class 1 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.

#### Applications

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

#### Options

- Outer electrical shielding:
- > Tin-plated copper braid: ref. RCSBE or RECSBE.
- Other nominal cross-sections: contact us.
- Other options: 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: 2000 V.

#### Standard products

- All colours including two-coloured.

#### RCS and RECS

##### Solid core • class 1 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                            | 1 x 0.80          | 36.0                                                               |
| 0.75                           | 1 x 0.98          | 24.5                                                               |
| 1                              | 1 x 1.13          | 18.1                                                               |
| 1.5                            | 1 x 1.38          | 12.1                                                               |
| 2.5                            | 1 x 1.77          | 7.41                                                               |
| 4*                             | 1 x 2.24          | 4.61                                                               |
| 6*                             | 1 x 2.76          | 3.08                                                               |

##### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.0                      | 8.4                                  |
| 0.6                                     | 2.2                      | 11.3                                 |
| 0.6                                     | 2.4                      | 14.2                                 |
| 0.6                                     | 2.6                      | 19.1                                 |
| 0.7                                     | 3.2                      | 30.4                                 |
| 0.8                                     | 3.9                      | 47.2                                 |
| 0.8                                     | 4.4                      | 67.4                                 |

\* Nominal cross-sections not available with the ref. RECS.

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

# SILICABLE® H05S-K and H05S-U

USE <HAR> Approval

-60°C to +180°C

<HAR>

## Approvals - standards

- USE <HAR> Approval as per standard NF EN 50525-2-41.
- Halogen-free: IEC 60754-1 / EN 60754-1.

## Applications

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

## Characteristics

### General

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

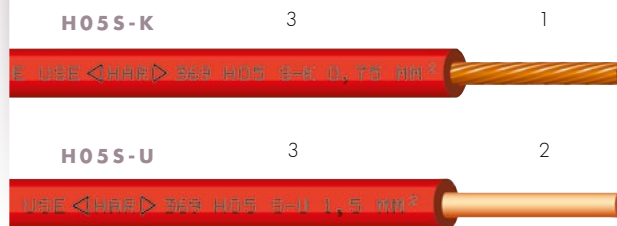
### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V (as per NF EN 50525-2-41).

## Standard products

- All colours including two-coloured.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible bare copper, tin-plated, nickel-plated or silver-plated core - class 5 as per IEC 60228 / EN 60228.
- 2 • Solid bare copper or tin-plated core - class 1 as per IEC 60228 / EN 60228.
- 3 • Insulation: Silicone rubber - type EI2 - NF C 32-525-1 / NF EN 50525-1 / EN 50363-1.

### H05S-K

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km)<br>(bare copper core) | Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) |      | Approximate linear weight<br>(kg/km) |
|---------------------------------------------|-------------------|-------------------------------------------------------------------|-----------------------------------------|--------------------------|------|--------------------------------------|
|                                             |                   |                                                                   |                                         | min.                     | max. |                                      |
| 0.5                                         | 16 x 0.20         | 39.0                                                              | 0.8                                     | 2.4                      | 3.1  | 10.8                                 |
| 0.75                                        | 24 x 0.20         | 26.0                                                              | 0.8                                     | 2.6                      | 3.2  | 14.0                                 |
| 1                                           | 32 x 0.20         | 19.5                                                              | 0.8                                     | 2.7                      | 3.4  | 16.8                                 |
| 1.5                                         | 30 x 0.25         | 13.3                                                              | 0.9                                     | 3.2                      | 4.0  | 23.7                                 |
| 2.5                                         | 50 x 0.25         | 7.98                                                              | 1.0                                     | 3.8                      | 4.7  | 35.7                                 |

#### INSULATED WIRE

### H05S-U

#### Solid core • class 1 as per IEC 60228

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal diameter<br>(mm) | Nominal diameter<br>(mm) |      | Approximate linear weight<br>(kg/km) |
|---------------------------------------------|--------------------------|--------------------------|------|--------------------------------------|
|                                             |                          | min.                     | max. |                                      |
| 0.5                                         | 1 x 0.80                 | 0.8                      | 2.3  | 10.4                                 |
| 0.75                                        | 1 x 0.98                 | 0.8                      | 2.4  | 13.5                                 |
| 1                                           | 1 x 1.13                 | 0.8                      | 2.6  | 16.3                                 |
| 1.5                                         | 1 x 1.38                 | 0.9                      | 3.0  | 23.1                                 |
| 2.5                                         | 1 x 1.77                 | 1.0                      | 3.6  | 35.2                                 |

#### INSULATED WIRE

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

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES

# SILICABLE® H05SS-K

Double insulating layer

USE <HAR> Approval

-60°C to +180°C

<HAR>

## Approvals - standards

- USE <HAR> Approval as per standard NF EN 50525-2-41.
- Halogen-free: IEC 60754-1 / EN 60754-1.

## Applications

- Cabling for class 2 household electrical heating appliances (convectors, etc.).
  - Class 2 lighting equipment.
  - Cabling for all other household electrical appliances meeting standard NF EN 60335-1.
- Cabling for rotating machines (class H).
  - Industrial cabling in hot atmospheres.

## 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: 2000 V (as per NF EN 50525-2-41).

## Standard products

- Standard insulation colour: white.
- Standard outer sheath colours: all colours including two-coloured.



69 H05SS-K

- 1 • Flexible bare copper, tin-plated, nickel-plated or silver-plated core - class 5 as per IEC 60228 / EN 60228.
- 2 • Insulation: Silicone rubber - type EI2 - NF C 32-525-1 / NF EN 50525-1 / EN 50363-1.
- 3 • Outer sheath: Silicone rubber - type EM9 - NF C 32-525-1 / NF EN 50525-1 / EN 50363-2-1.

## H05SS-K

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

| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) (bare copper core) |
|-----------------------------|-------------------|-------------------------------------------------------------|
| 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 (mm) |        | Nominal diameter (mm) |      | Approximate linear weight (kg/km) |
|------------------------|--------|-----------------------|------|-----------------------------------|
| insulation             | sheath | min.                  | max. |                                   |
| 0.6                    | 0.8    | 3.7                   | 4.7  | 24.9                              |
| 0.6                    | 0.9    | 4.1                   | 5.1  | 30.7                              |
| 0.8                    | 1.0    | 4.9                   | 6.1  | 45.3                              |
| 0.9                    | 1.1    | 5.7                   | 7.1  | 66.8                              |

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

## SILICABLE® SIF/SIR/SIE N2GFAF/N2GFA VDE approval -60°C to +180 °C



### Approvals - standards

- SIF, SIR and SIE: VDE approved as per licence no. 121112.
- N2GFAF AND N2GFA: VDE approved as per licence no. 101969.
- Halogen-free: IEC 60754-1 / EN 60754-1.

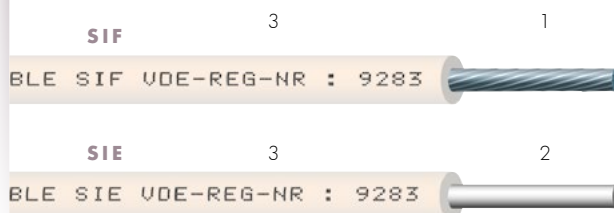
### Applications

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

### Options

- Nickel-plated copper core: contact us.
- Insulation: Very high temperature silicone rubber (+230 °C in continuous operation) - ref. SIF-THT.
  - Insulation: Silicone rubber with high mechanical properties - ref. SIF-HRD.
  - Other nominal stranding: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible bare copper or tin-plated core - class 5 as per IEC 60228 / DIN VDE 0295.
- 2 • Solid bare copper or tin-plated core - class 1 as per IEC 60228 / DIN VDE 0295.
- 3 • Insulation: Silicone rubber - type EI2 - DIN EN 50363-1.

### Characteristics

#### General

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

#### Electrical

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

### Standard products

- All colours including two-coloured.

#### SIF

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

| Nominal cross-section<br>(mm²) | Nominal stranding<br>Class 5 | Max. linear resistance at 20°C (Ω/km)<br>(tin-plated copper core) | Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|--------------------------------|------------------------------|-------------------------------------------------------------------|-----------------------------------------|--------------------------|--------------------------------------|
| 0.25 *                         | 14 x 0.15                    | 82.2                                                              | 0.6                                     | 1.9                      | 5.9                                  |
| 0.5                            | 16 x 0.20                    | 40.1                                                              | 0.6                                     | 2.1                      | 8.6                                  |
| 0.75 (1)                       | 24 x 0.20                    | 26.7                                                              | 0.6                                     | 2.4                      | 12.0                                 |
| 1                              | 32 x 0.20                    | 20.0                                                              | 0.6                                     | 2.5                      | 14.3                                 |
| 1.5                            | 30 x 0.25                    | 13.7                                                              | 0.7                                     | 2.8                      | 19.4                                 |
| 2.5                            | 50 x 0.25                    | 8.21                                                              | 0.8                                     | 3.4                      | 30.6                                 |

##### INSULATED WIRE

#### SIR

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

|      | Class 2  | Alternative |      |     |     |      |
|------|----------|-------------|------|-----|-----|------|
| 0.25 | 7 × 0.22 | -           | 81.2 | 0.6 | 1.9 | 5.9  |
| 0.5  | 7 × 0.30 | -           | 36.7 | 0.6 | 2.1 | 8.6  |
| 0.75 | 7 × 0.37 | 11 × 0.30   | 24.8 | 0.6 | 2.4 | 12.0 |
| 1    | 7 × 0.43 | 14 × 0.30   | 18.2 | 0.6 | 2.5 | 14.4 |
| 1.5  | 7 × 0.52 | 21 × 0.30   | 12.2 | 0.7 | 3.0 | 21.0 |
| 2.5  | 7 × 0.67 | 35 × 0.30   | 7.56 | 0.8 | 3.6 | 32.5 |

#### SIE

##### Solid core • class 1 as per IEC 60228

|          |          |      |     |     |      |
|----------|----------|------|-----|-----|------|
| 0.25 *   | 1 x 0.52 | 76.0 | 0.6 | 1.8 | 5.3  |
| 0.5      | 1 x 0.80 | 36.7 | 0.6 | 2.0 | 8.4  |
| 0.75 (2) | 1 x 0.98 | 24.8 | 0.6 | 2.3 | 11.8 |
| 1        | 1 x 1.13 | 18.2 | 0.6 | 2.5 | 14.8 |
| 1.5      | 1 x 1.38 | 12.2 | 0.7 | 2.8 | 20.3 |
| 2.5      | 1 x 1.77 | 7.56 | 0.8 | 3.4 | 31.9 |

\* Nominal cross-section not included in IEC 60228.

(1) Standardised VDE ref.: N2GFAF

(2) Standardised VDE ref.: N2GFA

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

# SILICABLE® SIR-IDC

For IDC connectors  
VDE approval

**-60°C to +180°C**



## Approvals - standards

- VDE approval as per licence no. 121112.
- Halogen-free: IEC 60754-1 / EN 60754-1.

## Applications

- A range of cables specially developed for use with IDC connectors:

Stocko ranges RFK 1 / RFK 2 / RAST 5 / ECO-DOMO only (Test report available on request).

## Options

- Other nominal stranding: contact us.

## Characteristics

### General

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

### Electrical

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

## Standard products

- All colours including two-coloured.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Stranded bare copper or tin-plated core.
- 2 • Insulation: Silicone rubber.

## SIR-IDC

| Stranded core               |                   |                                                                      | INSULATED WIRE                       |                       |                                   | Connector         |
|-----------------------------|-------------------|----------------------------------------------------------------------|--------------------------------------|-----------------------|-----------------------------------|-------------------|
| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km)<br>(tin-plated copper core) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |                   |
| 0.22*                       | 7 x 0.20          | 92.5                                                                 | 0.45                                 | 1.5                   | 3.7                               | RFK 1 / RFK 2     |
| 0.25                        | 7 x 0.22          | 81.2                                                                 | 0.45                                 | 1.5                   | 4.1                               | RFK 1 / RFK 2     |
| 0.34                        | 7 x 0.25          | 59.2                                                                 | 0.45                                 | 1.65                  | 5.1                               | ECO-DOMO / RAST 5 |
| 0.5                         | 7 x 0.30          | 36.7                                                                 | 0.6                                  | 2.1                   | 7.8                               | ECO-DOMO / RAST 5 |
| 0.75                        | 7 x 0.37          | 24.8                                                                 | 0.6                                  | 2.3                   | 10.6                              | ECO-DOMO / RAST 5 |
| 1                           | 7 x 0.43          | 18.2                                                                 | 0.6                                  | 2.5                   | 13.4                              | ECO-DOMO / RAST 5 |
| 1.5                         | 7 x 0.52          | 12.2                                                                 | 0.7                                  | 2.8                   | 18.4                              | ECO-DOMO / RAST 5 |

\* Nominal cross-section not included in VDE approval.

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

## SILICABLE® CS-ES and ECS-ES Extra-flexible core -60°C to +180°C

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



- 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<br>(mm <sup>2</sup> ) | Nominal stranding         | Max. linear resistance at 20°C<br>(Ω/km)<br>(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                                           | 1008 x 0.07 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<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(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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# HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION 1: 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 (mm²) | 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 (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) (bare copper core) |
|-----------------------------|-------------------|-------------------------------------------------------------|
| 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                              |

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

# SILICABLE® ECSC-VDE and CNCSC-VDE

Double insulating layer  
VDE approval  
-60 °C to +180 °C



## Approvals - standards

- VDE approval: Licence No. 119365.
  - Halogen-free: IEC 60754-1 / EN 60754-1.
- 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

- Solid tin-plated copper core (ref. RECSC-VDE) – class 1 as per IEC 60228:
  - > See details of the option below.
- > Option not available in nickel-plated copper.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- Flexible tin-plated (ref. ECSC-VDE) or nickel-plated (ref. CNCSC-VDE) copper core - class 5 as per IEC 60228 / DIN VDE 0295.
- Insulation: Silicone rubber - type EI2 - DIN EN 50363-1.

## Characteristics General

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

## Electrical

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

## Standard products

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

## ECSC-VDE and CNCSC-VDE

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

| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20 °C (Ω/km) (tin-plated copper core) | INSULATED WIRE                                          |                                                         | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|-----------------------------|-------------------|--------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|-----------------------|-----------------------------------|
|                             |                   |                                                                    | Nominal thickness of insulation (mm) on the inner layer | Nominal thickness of insulation (mm) on the outer layer |                       |                                   |
| 0.5                         | 16 x 0.20         | 40.1                                                               | 0.6                                                     | 0.6                                                     | 3.3                   | 14.7                              |
| 0.75                        | 24 x 0.20         | 26.7                                                               | 0.6                                                     | 0.6                                                     | 3.6                   | 18.6                              |
| 1                           | 32 x 0.20         | 20.0                                                               | 0.6                                                     | 0.6                                                     | 3.7                   | 21.3                              |
| 1.5                         | 30 x 0.25         | 13.7                                                               | 0.7                                                     | 0.7                                                     | 4.4                   | 30.4                              |
| 2.5                         | 50 x 0.25         | 8.21                                                               | 0.8                                                     | 0.8                                                     | 5.2                   | 45.5                              |

### Option • RECSC-VDE

#### Solid core • class 1 as per IEC 60228

| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20 °C (Ω/km) (tin-plated copper core) | INSULATED WIRE                                          |                                                         | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|-----------------------------|-------------------|--------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|-----------------------|-----------------------------------|
|                             |                   |                                                                    | Nominal thickness of insulation (mm) on the inner layer | Nominal thickness of insulation (mm) on the outer layer |                       |                                   |
| 0.5                         | 1 x 0.80          | 36.7                                                               | 0.6                                                     | 0.6                                                     | 3.2                   | 14.2                              |
| 0.75                        | 1 x 0.98          | 24.8                                                               | 0.6                                                     | 0.6                                                     | 3.4                   | 17.5                              |
| 1                           | 1 x 1.13          | 18.2                                                               | 0.6                                                     | 0.6                                                     | 3.6                   | 20.9                              |
| 1.5                         | 1 x 1.38          | 12.2                                                               | 0.7                                                     | 0.7                                                     | 4.2                   | 29.4                              |
| 2.5                         | 1 x 1.77          | 7.56                                                               | 0.8                                                     | 0.8                                                     | 5.0                   | 44.4                              |

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

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES

# SILICABLE® CS-THT and ECS-THT

Very high temperature insulation  
-60 °C to +250 °C

## Approvals - standards

- Halogen-free:  
IEC 60754-1 / EN 60754-1.

## Applications

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

## Options

- Nickel-plated copper core: ref. CNCS-THT.
- Silver-plated copper core: ref. ACS-THT.
- Pure nickel core (not described in IEC 60228):  
ref. NCS-THT.
- Outer electrical shielding:
  - > Tin-plated copper braid: ref. CSBE-THT or ECSBE-THT.
- Stranded bare copper (ref. CS-THT) or tin-plated (ref. ECS-THT) core - class 2 as per IEC 60228:  
See details of the option below.
  - Double insulating layers:  
ref. CSC-THT or ECSC-THT.
- 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 +250°C.
- Good resistance to thermal shock and UV.

## Electrical

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

## Standard products

- All colours including two-coloured.

## CS-THT and ECS-THT

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20 °C<br>(Ω/km)<br>(bare copper core) |
|---------------------------------------------|-------------------|--------------------------------------------------------------------|
| 0.25 *                                      | 14 x 0.15         | 78.6                                                               |
| 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                                                               |

### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 1.9                      | 5.8                                  |
| 0.6                                     | 2.1                      | 7.8                                  |
| 0.6                                     | 2.4                      | 10.9                                 |
| 0.6                                     | 2.5                      | 13.2                                 |
| 0.6                                     | 2.8                      | 18.2                                 |
| 0.7                                     | 3.4                      | 28.9                                 |
| 0.8                                     | 4.2                      | 45.7                                 |
| 0.8                                     | 4.8                      | 65.3                                 |

### Option • CS-THT and ECS-THT

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

|      |          |      |
|------|----------|------|
| 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

|     |     |      |
|-----|-----|------|
| 0.6 | 2.1 | 7.8  |
| 0.6 | 2.4 | 10.9 |
| 0.6 | 2.5 | 13.4 |
| 0.6 | 2.8 | 18.3 |
| 0.7 | 3.4 | 29.1 |
| 0.8 | 4.2 | 46.0 |
| 0.8 | 4.8 | 65.7 |

\* Nominal cross-section not included in IEC 60228.

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

# SILICABLE® RCS-THT and RECS-THT

Solid core

Very high temperature insulation

**-60°C to +250°C**

## Approvals - standards

- Halogen-free:  
IEC 60754-1 / EN 60754-1.

## Applications

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

## Options

- Outer electrical shielding:  
> Tin-plated copper braid: ref. RCSBE-THT  
or RECSBE-THT.
- Other nominal cross-sections: contact us.
- Other options: contact us.

## Characteristics

### General

- Continuous operating temperatures: -60°C to +250°C.
- Good resistance to thermal shock and UV.

### Electrical

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

## Standard products

- All colours including two-coloured.

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES



- 1 • Solid bare copper (ref. RCS-THT) or tin-plated (ref. RECS-THT) core - class 1 as per IEC 60228.
- 2 • Insulation: Very high temperature silicone rubber.

## RCS-THT and RECS-THT

### Solid core • class 1 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                            | 1 x 0.80          | 36.0                                                               |
| 0.75                           | 1 x 0.98          | 24.5                                                               |
| 1                              | 1 x 1.13          | 18.1                                                               |
| 1.5                            | 1 x 1.38          | 12.1                                                               |
| 2.5                            | 1 x 1.77          | 7.41                                                               |
| 4*                             | 1 x 2.24          | 4.61                                                               |
| 6*                             | 1 x 2.76          | 3.08                                                               |

### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.0                      | 7.6                                  |
| 0.6                                     | 2.2                      | 10.4                                 |
| 0.6                                     | 2.4                      | 13.1                                 |
| 0.6                                     | 2.6                      | 17.9                                 |
| 0.7                                     | 3.2                      | 28.7                                 |
| 0.8                                     | 3.9                      | 44.8                                 |
| 0.8                                     | 4.4                      | 64.6                                 |

\* Nominal cross-sections not available with the ref. RECS-THT.

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

## SILICABLE® 105°C Silicone insulation UL and cUL approval



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

2

1

105C 600V FT2 SILICABLE 105C 3171 AWM

- 1 • Bare copper or tin-plated core.
- 2 • Insulation: Silicone rubber.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "FT2 flame rating" as per cUL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances, rotating machines, lighting.
- Industrial cabling in hot atmospheres.

### Options

- Other nominal cross-sections: contact us.

### Characteristics General

- Continuous operating temperatures: -60°C to +105°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

| Style no.             |       | 3232                         |                   | 3243                         |                   | 3171                         |                   |
|-----------------------|-------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|
| Approval              |       | 105 °C – 300 V               |                   | 105 °C – 300 V               |                   | 105 °C – 600 V               |                   |
| Nominal cross-section |       | Avg thick-ness of insulation | Nominal diameter* | Avg thick-ness of insulation | Nominal diameter* | Avg thick-ness of insulation | Nominal diameter* |
| AWG                   | (mm²) | (mm)                         | (mm)              | (mm)                         | (mm)              | (mm)                         | (mm)              |
| 26                    | 0.13  | 0.38                         | 1.2               | 0.38                         | 1.3               | 0.76                         | 2.0               |
| 24                    | 0.22  | 0.38                         | 1.4               | 0.38                         | 1.5               | 0.76                         | 2.2               |
| 22                    | 0.34  | 0.38                         | 1.6               | 0.38                         | 1.6               | 0.76                         | 2.4               |
| -                     | 0.5   | 0.38                         | 1.7               | 0.38                         | 1.8               | 0.76                         | 2.5               |
| 20                    | 0.6   | 0.38                         | 1.8               | 0.38                         | 1.9               | 0.76                         | 2.6               |
| -                     | 0.75  | 0.38                         | 1.9               | 0.38                         | 2.0               | 0.76                         | 2.7               |
| 18                    | 0.93  | 0.38                         | 2.0               | 0.38                         | 2.1               | 0.76                         | 2.8               |
| -                     | 1     | 0.38                         | 2.1               | 0.38                         | 2.2               | 0.76                         | 2.9               |
| 16                    | 1.34  | 0.38                         | 2.3               | 0.38                         | 2.4               | 0.76                         | 3.1               |
| -                     | 1.5   | 0.38                         | 2.4               | 0.38                         | 2.5               | 0.76                         | 3.1               |
| 14                    | -     | -                            | -                 | -                            | -                 | 0.76                         | 3.6               |
| -                     | 2.5   | -                            | -                 | -                            | -                 | 0.76                         | 3.8               |
| 12                    | -     | -                            | -                 | -                            | -                 | 0.76                         | 4.1               |
| -                     | 4     | -                            | -                 | -                            | -                 | 0.76                         | 4.4               |
| Conducting metal      |       | B                            |                   | BF (Ø 0.05 mm)               |                   | BF (Ø 0.05 mm)               |                   |

#### KEY

Conducting metals  
**B** Tin-plated copper  
**B\*** Tin-plated copper ( $\phi > 0.38$  mm)  
**C** Nickel-plated copper  
**D** Silver-plated copper  
**E** Nickel  
**F** Bare copper  
**F\*** Bare copper ( $\phi > 0.38$  mm)  
**G** Nickel-plated copper 27 %

**AWM I A** Internal wiring, not subject to mechanical abuse  
**AWM I A/B** Internal wiring  
**AWM II A/B** External or Internal wiring

**NS** Not Specified  
**VNS** Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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

## SILICABLE® 150°C Silicone insulation UL and cUL approval



### Characteristics General

- Continuous operating temperatures: -60°C to +150°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965 (LL84986).
- "Horizontal flame test" as per UL approval.
- "FT2 flame rating" as per cUL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances, rotating machines, lighting.
- Industrial cabling in hot atmospheres.

### Options

- Other nominal cross-sections: contact us.
- Vertical flame test VW-1 for style no. 3132 and 3134: contact us.
- Other style nos. available: style 3113, 3136, 3140, 3141, 3142, 3754.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES

2

1



- 1 • Bare copper, tin-plated, nickel-plated or silver-plated core.
- 2 • Insulation: Silicone rubber.

| Style no.             |       | 3099                            |                   | 3132                            |                   | 3123                            |                   | 3133                            |                   |
|-----------------------|-------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|
| Approval              |       | 150°C – 300 V<br>(cUL 600 V)    |                   | 150°C – 300 V                   |                   | 150°C – 600 V                   |                   | 150°C – 600 V                   |                   |
| Nominal cross-section |       | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* |
| AWG                   | (mm²) | (mm)                            | (mm)              | (mm)                            | (mm)              | (mm)                            | (mm)              | (mm)                            | (mm)              |
| 26                    | 0.13  | -                               | -                 | 0.38                            | 1.2               | 0.76                            | 2.0               | 0.76                            | 2.0               |
| 24                    | 0.22  | -                               | -                 | 0.38                            | 1.4               | 0.76                            | 2.1               | 0.76                            | 2.1               |
| 22                    | 0.34  | -                               | -                 | 0.38                            | 1.55              | 0.76                            | 2.35              | 0.76                            | 2.35              |
| -                     | 0.5   | -                               | -                 | 0.38                            | 1.7               | 0.76                            | 2.5               | 0.76                            | 2.5               |
| 20                    | 0.6   | 0.76                            | 2.5               | 0.38                            | 1.75              | 0.76                            | 2.5               | 0.76                            | 2.5               |
| -                     | 0.75  | 0.76                            | 2.7               | 0.38                            | 1.9               | 0.76                            | 2.7               | 0.76                            | 2.7               |
| 18                    | 0.93  | 0.76                            | 2.8               | 0.38                            | 2.0               | 0.76                            | 2.8               | 0.76                            | 2.7               |
| -                     | 1     | 0.76                            | 2.9               | 0.38                            | 2.1               | 0.76                            | 2.8               | 0.76                            | 2.8               |
| 16                    | 1.34  | 0.76                            | 3.1               | 0.38                            | 2.3               | 0.76                            | 3.0               | 0.76                            | 3.1               |
| -                     | 1.5   | 0.76                            | 3.2               | 0.38                            | 2.4               | 0.76                            | 3.2               | 0.76                            | 3.2               |
| 14                    | -     | -                               | -                 | 0.38                            | 2.65              | -                               | -                 | -                               | -                 |
| -                     | 2.5   | -                               | -                 | 0.38                            | 2.8               | -                               | -                 | -                               | -                 |
| 12                    | -     | -                               | -                 | 0.38                            | 3.2               | -                               | -                 | -                               | -                 |
| -                     | 4     | -                               | -                 | 0.38                            | 3.4               | -                               | -                 | -                               | -                 |
| 10                    | -     | -                               | -                 | 0.38                            | 3.8               | -                               | -                 | -                               | -                 |
| -                     | 6     | -                               | -                 | 0.38                            | 3.9               | -                               | -                 | -                               | -                 |
| 8                     | -     | -                               | -                 | 0.38                            | 4.6               | -                               | -                 | -                               | -                 |
| -                     | 10    | -                               | -                 | 0.38                            | 5.2               | -                               | -                 | -                               | -                 |
| 6                     | -     | -                               | -                 | 0.38                            | 6.3               | -                               | -                 | -                               | -                 |
| -                     | 16    | -                               | -                 | 0.38                            | 6.3               | -                               | -                 | -                               | -                 |
| 4                     | -     | -                               | -                 | 0.38                            | 7.3               | -                               | -                 | -                               | -                 |
| -                     | 25    | -                               | -                 | 0.38                            | 7.8               | -                               | -                 | -                               | -                 |
| 2                     | 35    | -                               | -                 | 0.38                            | 8.9               | -                               | -                 | -                               | -                 |
| 1                     | -     | -                               | -                 | 0.38                            | 10.1              | -                               | -                 | -                               | -                 |
| -                     | 50    | -                               | -                 | 0.38                            | 10.5              | -                               | -                 | -                               | -                 |
| 1/0                   | -     | -                               | -                 | 0.38                            | 11.2              | -                               | -                 | -                               | -                 |
| 2/0                   | 70    | -                               | -                 | 0.38                            | 12.3              | -                               | -                 | -                               | -                 |
| 3/0                   | -     | -                               | -                 | 0.38                            | 13.9              | -                               | -                 | -                               | -                 |
| -                     | 95    | -                               | -                 | 0.38                            | 14.1              | -                               | -                 | -                               | -                 |
| 4/0                   | -     | -                               | -                 | 0.38                            | 15.5              | -                               | -                 | -                               | -                 |
| -                     | 120   | -                               | -                 | 0.38                            | 15.8              | -                               | -                 | -                               | -                 |
| 250MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| -                     | 150   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 300MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 350MCM                | 185   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 400MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| -                     | 240   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 500MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| -                     | 300   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 600MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 700MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 750MCM                | 400   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| Conducting metal      |       | BCD                             |                   | BCDEFG                          |                   | BCDEFG                          |                   | BCDEFG                          |                   |

### KEY

Conducting metals  
 B Tin-plated copper  
 B\* Tin-plated copper (ø > 0.38 mm)  
 C Nickel-plated copper  
 D Silver-plated copper  
 E Nickel  
 F Bare copper  
 F\* Bare copper (ø > 0.38 mm)  
 G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse  
 AWM I A/B Internal wiring  
 AWM II A/B External or Internal wiring

NS Not Specified  
 VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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**omerin**  
 LES CABLES DE L'EXTREME

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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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

| Style no.             |                    | 3134                                 |                   | 3137                                 |                   | 3138                                 |                   | 3529                                 |                   | 3536                                 |                   | 3580                                 |                   |
|-----------------------|--------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|
| Approval              |                    | 150°C – 600 V                        |                   | 150°C – 600 V                        |                   | 150°C – 600 V                        |                   | 150°C – 600 V                        |                   | 150°C – 600 V                        |                   | 150°C – 1000 V                       |                   |
| Nominal cross-section |                    | Average thickness of insulation (mm) | Nominal diameter* | Average thickness of insulation (mm) | Nominal diameter* | Average thickness of insulation (mm) | Nominal diameter* | Average thickness of insulation (mm) | Nominal diameter* | Average thickness of insulation (mm) | Nominal diameter* | Average thickness of insulation (mm) | Nominal diameter* |
| AWG                   | (mm <sup>2</sup> ) | (mm)                                 | (mm)              | (mm)                                 | (mm)              | (mm)                                 | (mm)              | (mm)                                 | (mm)              | (mm)                                 | (mm)              | (mm)                                 | (mm)              |
| 26                    | 0.13               | -                                    | -                 | 1.14                                 | 2.8               | -                                    | -                 | 0.76                                 | 2.0               | -                                    | -                 | 1.14                                 | 2.8               |
| 24                    | 0.22               | -                                    | -                 | 1.14                                 | 2.9               | -                                    | -                 | 0.76                                 | 2.1               | -                                    | -                 | 1.14                                 | 2.9               |
| 22                    | 0.34               | -                                    | -                 | 1.14                                 | 3.05              | -                                    | -                 | 0.76                                 | 2.35              | -                                    | -                 | 1.14                                 | 3.05              |
| -                     | 0.5                | -                                    | -                 | 1.14                                 | 3.2               | -                                    | -                 | 0.76                                 | 2.5               | 0.76                                 | 2.5               | 1.14                                 | 3.2               |
| 20                    | 0.6                | -                                    | -                 | 1.14                                 | 3.4               | -                                    | -                 | 0.76                                 | 2.5               | 0.76                                 | 2.5               | 1.14                                 | 3.4               |
| -                     | 0.75               | -                                    | -                 | -                                    | -                 | -                                    | -                 | 0.76                                 | 2.7               | 0.76                                 | 2.7               | 1.14                                 | 3.5               |
| 18                    | 0.93               | 0.76                                 | 2.7               | -                                    | -                 | 1.14                                 | 3.6               | 0.76                                 | 2.8               | 0.76                                 | 2.8               | 1.14                                 | 3.6               |
| -                     | 1                  | 0.76                                 | 2.9               | -                                    | -                 | 1.14                                 | 3.7               | 0.76                                 | 2.9               | 0.76                                 | 2.9               | 1.14                                 | 3.7               |
| 16                    | 1.34               | 0.76                                 | 3.1               | -                                    | -                 | 1.14                                 | 3.8               | 0.76                                 | 3.1               | 0.76                                 | 3.1               | 1.14                                 | 3.8               |
| -                     | 1.5                | 0.76                                 | 3.2               | -                                    | -                 | 1.14                                 | 4.0               | 0.76                                 | 3.2               | 0.76                                 | 3.2               | 1.14                                 | 4.0               |
| 14                    | -                  | 0.76                                 | 3.6               | -                                    | -                 | 1.14                                 | 4.3               | 0.76                                 | 3.5               | 0.76                                 | 3.5               | 1.14                                 | 4.3               |
| -                     | 2.5                | 0.76                                 | 3.6               | -                                    | -                 | 1.14                                 | 4.4               | 0.76                                 | 3.6               | 0.76                                 | 3.6               | 1.14                                 | 4.4               |
| 12                    | -                  | 0.76                                 | 4.0               | -                                    | -                 | 1.14                                 | 4.6               | 0.76                                 | 4.0               | 0.76                                 | 4.0               | 1.14                                 | 4.6               |
| -                     | 4                  | 0.76                                 | 4.2               | -                                    | -                 | 1.14                                 | 4.9               | 0.76                                 | 4.2               | 0.76                                 | 4.2               | 1.14                                 | 4.9               |
| 10                    | -                  | -                                    | -                 | -                                    | -                 | 1.14                                 | 5.3               | 1.14                                 | 5.3               | 1.14                                 | 5.3               | 1.14                                 | 5.3               |
| -                     | 6                  | -                                    | -                 | -                                    | -                 | 1.14                                 | 5.6               | 1.14                                 | 5.6               | 1.14                                 | 5.5               | 1.14                                 | 5.6               |
| 8                     | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 1.52                                 | 6.8               | 1.14                                 | 6.3               | 1.52                                 | 6.8               |
| -                     | 10                 | -                                    | -                 | -                                    | -                 | -                                    | -                 | 1.52                                 | 7.5               | 1.52                                 | 7.6               | 1.52                                 | 7.4               |
| 6                     | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 1.52                                 | 8.4               | 1.52                                 | 8.4               | 1.52                                 | 8.4               |
| -                     | 16                 | -                                    | -                 | -                                    | -                 | -                                    | -                 | 1.52                                 | 9.0               | 1.52                                 | 9.0               | 1.52                                 | 9.0               |
| 4                     | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 1.52                                 | 10.2              | 1.52                                 | 10.2              | 1.52                                 | 10.2              |
| -                     | 25                 | -                                    | -                 | -                                    | -                 | -                                    | -                 | 1.52                                 | 10.6              | 1.52                                 | 10.6              | 1.52                                 | 10.6              |
| 2                     | 35                 | -                                    | -                 | -                                    | -                 | -                                    | -                 | 1.52                                 | 11.4              | 1.52                                 | 11.4              | 1.52                                 | 11.4              |
| 1                     | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 13.9              | 2.03                                 | 13.9              | 2.03                                 | 13.9              |
| -                     | 50                 | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 14.6              | 2.03                                 | 14.6              | 2.03                                 | 14.6              |
| 1/0                   | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 15.0              | 2.03                                 | 15.0              | 2.03                                 | 15.0              |
| 2/0                   | 70                 | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 15.9              | 2.03                                 | 15.9              | 2.03                                 | 15.9              |
| 3/0                   | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 17.6              | 2.03                                 | 17.6              | 2.03                                 | 17.6              |
| -                     | 95                 | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 17.8              | 2.03                                 | 17.8              | 2.03                                 | 17.8              |
| 4/0                   | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 19.1              | 2.41                                 | 19.9              | 2.03                                 | 19.1              |
| -                     | 120                | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.03                                 | 19.5              | 2.41                                 | 20.3              | 2.03                                 | 19.5              |
| 250MCM                | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.41                                 | 21.1              | 2.41                                 | 21.1              | 2.41                                 | 21.1              |
| -                     | 150                | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.41                                 | 21.8              | 2.41                                 | 21.8              | 2.41                                 | 21.8              |
| 300MCM                | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.41                                 | 23.0              | 2.41                                 | 23.0              | 2.41                                 | 23.0              |
| 350MCM                | 185                | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.41                                 | 24.0              | 2.41                                 | 24.0              | 2.41                                 | 24.0              |
| 400MCM                | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.41                                 | 25.0              | 2.41                                 | 25.0              | 2.41                                 | 25.0              |
| -                     | 240                | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.41                                 | 26.3              | 2.41                                 | 26.3              | 2.41                                 | 26.3              |
| 500MCM                | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.41                                 | 27.6              | -                                    | -                 | 2.41                                 | 27.6              |
| -                     | 300                | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.79                                 | 30.1              | -                                    | -                 | -                                    | -                 |
| 600MCM                | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.79                                 | 30.7              | -                                    | -                 | -                                    | -                 |
| 700MCM                | -                  | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.79                                 | 32.6              | -                                    | -                 | -                                    | -                 |
| 750MCM                | 400                | -                                    | -                 | -                                    | -                 | -                                    | -                 | 2.79                                 | 33.6              | -                                    | -                 | -                                    | -                 |
| Conducting metal      |                    | BCDEG                                |                   | BCDEG                                |                   | BCDEG                                |                   | BCDEFG                               |                   | BCDEFG                               |                   | BCDEFG                               |                   |

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#### KEY

Conducting metals  
 B Tin-plated copper  
 B\* Tin-plated copper (ø > 0.38 mm)  
 C Nickel-plated copper  
 D Silver-plated copper  
 E Nickel  
 F Bare copper  
 F\* Bare copper (ø > 0.38 mm)  
 G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse  
 AWM I A/B Internal wiring  
 AWM II A/B External or Internal wiring

NS Not Specified  
 VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.  
 Only the average thickness of insulation should be taken into account.

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**omerin**  
 LES CABLES DE L'EXTREME

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

## SILICABLE® 200°C Silicone insulation UL and cUL approval



### Characteristics General

- Continuous operating temperatures: -60°C to +200°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965 (L184986).
- "Horizontal flame test" as per UL approval.
- "FT2 flame rating" as per cUL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances, rotating machines, lighting.
- Industrial cabling in hot atmospheres.

### Options

- Other nominal cross-sections: contact us.
- Vertical flame test VW-1 for style nos. 3512 and 3135: contact us.

For this product, please contact:

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**omerin**  
LES CABLES DE L'EXTREME

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES

2

1



- 1 • Bare copper, tin-plated, nickel-plated or silver-plated core.
- 2 • Insulation: Silicone rubber.

| Style no.             | 3367                            | 3135              | 3139                            | 3143              |                                 |                   |                                 |                   |
|-----------------------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|
| Approval              | 200°C – 300 V                   | 200°C – 600 V     | 200°C – 600 V                   | 200°C – 600 V     |                                 |                   |                                 |                   |
| Nominal cross-section | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* |
| AWG (mm²)             | (mm)                            | (mm)              | (mm)                            | (mm)              | (mm)                            | (mm)              | (mm)                            | (mm)              |
| 26 0.13               | 0.38                            | 1.2               | 0.76                            | 2.0               | 1.14                            | 2.8               | -                               | -                 |
| 24 0.22               | 0.38                            | 1.4               | 0.76                            | 2.1               | 1.14                            | 2.9               | -                               | -                 |
| 22 0.34               | 0.38                            | 1.6               | 0.76                            | 2.4               | 1.14                            | 3.05              | -                               | -                 |
| - 0.5                 | 0.38                            | 1.7               | 0.76                            | 2.5               | 1.14                            | 3.2               | -                               | -                 |
| 20 0.6                | 0.38                            | 1.8               | 0.76                            | 2.6               | 1.14                            | 3.4               | -                               | -                 |
| - 0.75                | 0.38                            | 1.9               | 0.76                            | 2.65              | 1.14                            | 3.5               | -                               | -                 |
| 18 0.93               | 0.38                            | 2.0               | 0.76                            | 2.8               | 1.14                            | 3.6               | 1.58                            | 4.4               |
| - 1                   | 0.38                            | 2.1               | 0.76                            | 2.8               | 1.14                            | 3.7               | 1.58                            | 4.5               |
| 16 1.34               | 0.38                            | 2.3               | 0.76                            | 3.05              | 1.14                            | 3.8               | 1.58                            | 4.7               |
| - 1.5                 | 0.38                            | 2.4               | 0.76                            | 3.2               | 1.14                            | 4.0               | 1.58                            | 4.8               |
| 14 -                  | 0.38                            | 2.7               | 0.76                            | 3.6               | 1.14                            | 4.3               | 1.58                            | 5.1               |
| - 2.5                 | 0.38                            | 2.9               | 0.76                            | 3.6               | 1.14                            | 4.4               | 1.58                            | 5.2               |
| 12 -                  | 0.38                            | 3.2               | 0.76                            | 4.0               | 1.14                            | 4.6               | 1.58                            | 5.6               |
| - 4                   | 0.38                            | 3.4               | 0.76                            | 4.4               | 1.14                            | 4.9               | 1.58                            | 5.8               |
| 10 -                  | 0.38                            | 4.0               | -                               | -                 | -                               | -                 | -                               | -                 |
| - 6                   | 0.38                            | 4.2               | -                               | -                 | -                               | -                 | -                               | -                 |
| 8 -                   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 10                  | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 6 -                   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 16                  | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 4 -                   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 25                  | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 2 35                  | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 1 -                   | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 50                  | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 1/0 -                 | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 2/0 70                | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 3/0 -                 | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 95                  | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 4/0 -                 | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 120                 | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 250MCM -              | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 150                 | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 300MCM -              | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 350MCM 185            | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 400MCM -              | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 240                 | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 500MCM -              | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| - 300                 | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 600MCM -              | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 700MCM -              | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| 750MCM 400            | -                               | -                 | -                               | -                 | -                               | -                 | -                               | -                 |
| Conducting metal      | B*CDEG                          | B*CDEF*G          | B*CDEG                          | B*CDEG            |                                 |                   |                                 |                   |

### KEY

Conducting metals

B Tin-plated copper

B\* Tin-plated copper (ø > 0.38 mm)

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper (ø > 0.38 mm)

G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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| Style no.             |       | 3268                                 | 3512**            | 3530                                 | 3755              | 30096                                | 3572                          | 3644                                 |                   |
|-----------------------|-------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------------------|--------------------------------------|-------------------|
| Approval              |       | 200°C – 600 V                        | 200°C – 600 V     | 200°C – 600 V                        | 200°C – 600 V     | 200°C – 750 V                        | 200°C – 1000 V<br>(cUL 600 V) | 200°C – 1000 V<br>(cUL 600 V)        |                   |
| Nominal cross-section |       | Average thickness of insulation (mm) | Nominal diameter* | Average thickness of insulation (mm) | Nominal diameter* | Average thickness of insulation (mm) | Nominal diameter*             | Average thickness of insulation (mm) | Nominal diameter* |
| AWG                   | (mm²) | (mm)                                 | (mm)              | (mm)                                 | (mm)              | (mm)                                 | (mm)                          | (mm)                                 | (mm)              |
| 26                    | 0.13  | -                                    | -                 | -                                    | -                 | 0.76                                 | 2.0                           | 0.76                                 | 2.0               |
| 24                    | 0.22  | -                                    | -                 | -                                    | -                 | 0.76                                 | 2.1                           | 0.76                                 | 2.1               |
| 22                    | 0.34  | -                                    | -                 | -                                    | -                 | 0.76                                 | 2.4                           | 0.76                                 | 2.4               |
| -                     | 0.5   | -                                    | -                 | 0.76                                 | 2.5               | 0.76                                 | 2.5                           | 0.76                                 | 2.5               |
| 20                    | 0.6   | -                                    | -                 | 0.76                                 | 2.6               | 0.76                                 | 2.6                           | 0.76                                 | 2.6               |
| -                     | 0.75  | -                                    | -                 | 0.76                                 | 2.65              | 0.76                                 | 2.65                          | 0.76                                 | 2.65              |
| 18                    | 0.93  | 0.76                                 | 2.7               | 0.76                                 | 2.7               | 0.76                                 | 2.7                           | 0.76                                 | 2.7               |
| -                     | 1     | 0.76                                 | 2.8               | 0.76                                 | 2.8               | 0.76                                 | 2.8                           | 0.76                                 | 2.8               |
| 16                    | 1.34  | 0.76                                 | 3.05              | 0.76                                 | 3.05              | 0.76                                 | 3.05                          | 0.76                                 | 3.05              |
| -                     | 1.5   | 0.76                                 | 3.2               | 0.76                                 | 3.2               | 0.76                                 | 3.2                           | 0.76                                 | 3.2               |
| 14                    | -     | 0.76                                 | 3.6               | 0.76                                 | 3.6               | 0.76                                 | 3.6                           | 0.76                                 | 3.6               |
| -                     | 2.5   | 0.76                                 | 3.6               | 0.76                                 | 3.6               | 0.76                                 | 3.6                           | 0.76                                 | 3.6               |
| 12                    | -     | 0.76                                 | 4.0               | 0.76                                 | 4.0               | 0.76                                 | 4.0                           | 0.76                                 | 4.0               |
| -                     | 4     | 0.76                                 | 4.4               | 0.76                                 | 4.4               | 0.76                                 | 4.4                           | 0.76                                 | 4.4               |
| 10                    | -     | -                                    | -                 | 1.14                                 | 5.5               | 1.14                                 | 5.3                           | 1.14                                 | 5.3               |
| -                     | 6     | -                                    | -                 | 1.14                                 | 5.5               | 0.76                                 | 4.6                           | 1.14                                 | 5.3               |
| 8                     | -     | -                                    | -                 | 1.14                                 | 6.1               | 0.76                                 | 4.8                           | 1.14                                 | 5.5               |
| -                     | 10    | -                                    | -                 | 1.52                                 | 7.4               | -                                    | -                             | 1.14                                 | 6.1               |
| 6                     | -     | -                                    | -                 | 1.52                                 | 8.3               | -                                    | -                             | 1.52                                 | 7.4               |
| -                     | 16    | -                                    | -                 | 1.52                                 | 8.9               | -                                    | -                             | 1.52                                 | 8.3               |
| 4                     | -     | -                                    | -                 | 1.52                                 | 9.8               | -                                    | -                             | 1.52                                 | 8.9               |
| -                     | 25    | -                                    | -                 | 1.52                                 | 10.2              | -                                    | -                             | 1.52                                 | 9.8               |
| 2                     | 35    | -                                    | -                 | 1.52                                 | 11.0              | -                                    | -                             | 1.52                                 | 10.2              |
| 1                     | -     | -                                    | -                 | 2.03                                 | 13.5              | -                                    | -                             | 1.52                                 | 11.0              |
| -                     | 50    | -                                    | -                 | 2.03                                 | 14.0              | -                                    | -                             | -                                    | 2.03              |
| 1/0                   | -     | -                                    | -                 | 2.03                                 | 14.6              | -                                    | -                             | -                                    | 13.5              |
| 2/0                   | 70    | -                                    | -                 | 2.03                                 | 16.0              | -                                    | -                             | -                                    | 14.0              |
| 3/0                   | -     | -                                    | -                 | 2.03                                 | 17.4              | -                                    | -                             | -                                    | 14.6              |
| -                     | 95    | -                                    | -                 | 2.03                                 | 18.0              | -                                    | -                             | -                                    | 16.0              |
| 4/0                   | -     | -                                    | -                 | 2.41                                 | 20.0              | -                                    | -                             | -                                    | 17.4              |
| -                     | 120   | -                                    | -                 | 2.41                                 | 20.8              | -                                    | -                             | -                                    | 18.0              |
| 250MCM                | -     | -                                    | -                 | 2.41                                 | 21.4              | -                                    | -                             | -                                    | 19.2              |
| -                     | 150   | -                                    | -                 | 2.41                                 | 22.3              | -                                    | -                             | -                                    | 20.0              |
| 300MCM                | -     | -                                    | -                 | 2.41                                 | 23.1              | -                                    | -                             | -                                    | 20.8              |
| 350MCM                | 185   | -                                    | -                 | 2.41                                 | 24.0              | -                                    | -                             | -                                    | 21.4              |
| 400MCM                | -     | -                                    | -                 | 2.41                                 | 25.3              | -                                    | -                             | -                                    | 22.3              |
| -                     | 240   | -                                    | -                 | 2.41                                 | 26.3              | -                                    | -                             | -                                    | 23.1              |
| 500MCM                | -     | -                                    | -                 | -                                    | -                 | -                                    | -                             | -                                    | 24.0              |
| -                     | 300   | -                                    | -                 | -                                    | -                 | -                                    | -                             | -                                    | 25.3              |
| 600MCM                | -     | -                                    | -                 | -                                    | -                 | -                                    | -                             | -                                    | 26.3              |
| 700MCM                | -     | -                                    | -                 | -                                    | -                 | -                                    | -                             | -                                    | 27.7              |
| 750MCM                | 400   | -                                    | -                 | -                                    | -                 | -                                    | -                             | -                                    | 27.9              |
| Conducting metal      |       | B*CDEF*G                             |                   | B*CDEG                               |                   | B*CDEF*G                             |                               | B*CDEG                               |                   |

For this product, please contact:

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#### KEY

Conducting metals

B Tin-plated copper

B\* Tin-plated copper (ø > 0.38 mm)

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper (ø > 0.38 mm)

G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.

Only the average thickness of insulation should be taken into account.

\*\* Also available in a triple UL, cUL and VDE approved version for metric cross-sections from 0.5 mm² to 2.5 mm² (ref. style 3512-VDE).

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

## SILICABLE® 250°C

### Silicone insulation UL approval



## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Bare copper nickel-plated or nickel core.
- 2 • Insulation: Silicone rubber.

### Characteristics General

- Continuous operating temperatures: -60°C to +250°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "FT2 flame rating" as per UL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances, rotating machines, lighting.
- Industrial cabling in hot atmospheres.

### Options

- Other nominal cross-sections: contact us.

### Style no. Approval

|                       |       | 3253                                 |                        | 30144                                |                        | 30145                                |                        |
|-----------------------|-------|--------------------------------------|------------------------|--------------------------------------|------------------------|--------------------------------------|------------------------|
|                       |       | 250 °C - 300 V                       |                        | 250 °C - 600 V                       |                        | 250 °C - 1000 V                      |                        |
| Nominal cross-section |       | Average thickness of insulation (mm) | Nominal diameter* (mm) | Average thickness of insulation (mm) | Nominal diameter* (mm) | Average thickness of insulation (mm) | Nominal diameter* (mm) |
| AWG                   | (mm²) |                                      |                        |                                      |                        |                                      |                        |
| 26                    | 0.13  | 0.76                                 | 2.0                    | 0.76                                 | 2.0                    | 0.76                                 | 2.0                    |
| 24                    | 0.22  | 0.76                                 | 2.1                    | 0.76                                 | 2.1                    | 0.76                                 | 2.1                    |
| 22                    | 0.34  | 0.76                                 | 2.4                    | 0.76                                 | 2.4                    | 0.76                                 | 2.4                    |
| -                     | 0.5   | 0.76                                 | 2.5                    | 0.76                                 | 2.5                    | 0.76                                 | 2.5                    |
| 20                    | 0.6   | 0.76                                 | 2.6                    | 0.76                                 | 2.6                    | 0.76                                 | 2.6                    |
| -                     | 0.75  | 0.76                                 | 2.7                    | 0.76                                 | 2.7                    | 0.76                                 | 2.7                    |
| 18                    | 0.93  | 0.76                                 | 2.8                    | 0.76                                 | 2.8                    | 0.76                                 | 2.8                    |
| -                     | 1     | 0.76                                 | 2.8                    | 0.76                                 | 2.8                    | 0.76                                 | 2.8                    |
| 16                    | 1.34  | 0.76                                 | 3.1                    | 0.76                                 | 3.1                    | 0.76                                 | 3.1                    |
| -                     | 1.5   | 0.76                                 | 3.2                    | 0.76                                 | 3.2                    | 0.76                                 | 3.2                    |
| 14                    | -     | 0.76                                 | 3.6                    | 0.76                                 | 3.6                    | 0.76                                 | 3.6                    |
| -                     | 2.5   | 0.76                                 | 3.6                    | 0.76                                 | 3.6                    | 0.76                                 | 3.6                    |
| 12                    | -     | 0.76                                 | 4.0                    | 0.76                                 | 4.0                    | 0.76                                 | 4.0                    |
| -                     | 4     | 0.76                                 | 4.4                    | 0.76                                 | 4.4                    | 0.76                                 | 4.4                    |
|                       |       | CEG                                  |                        | CEG                                  |                        | CEG                                  |                        |

For this product, please contact:

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LES CABLES DE L'EXTREME

### KEY

Conducting metals

B Tin-plated copper

B\* Tin-plated copper (ø > 0.38 mm)

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper (ø > 0.38 mm)

G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

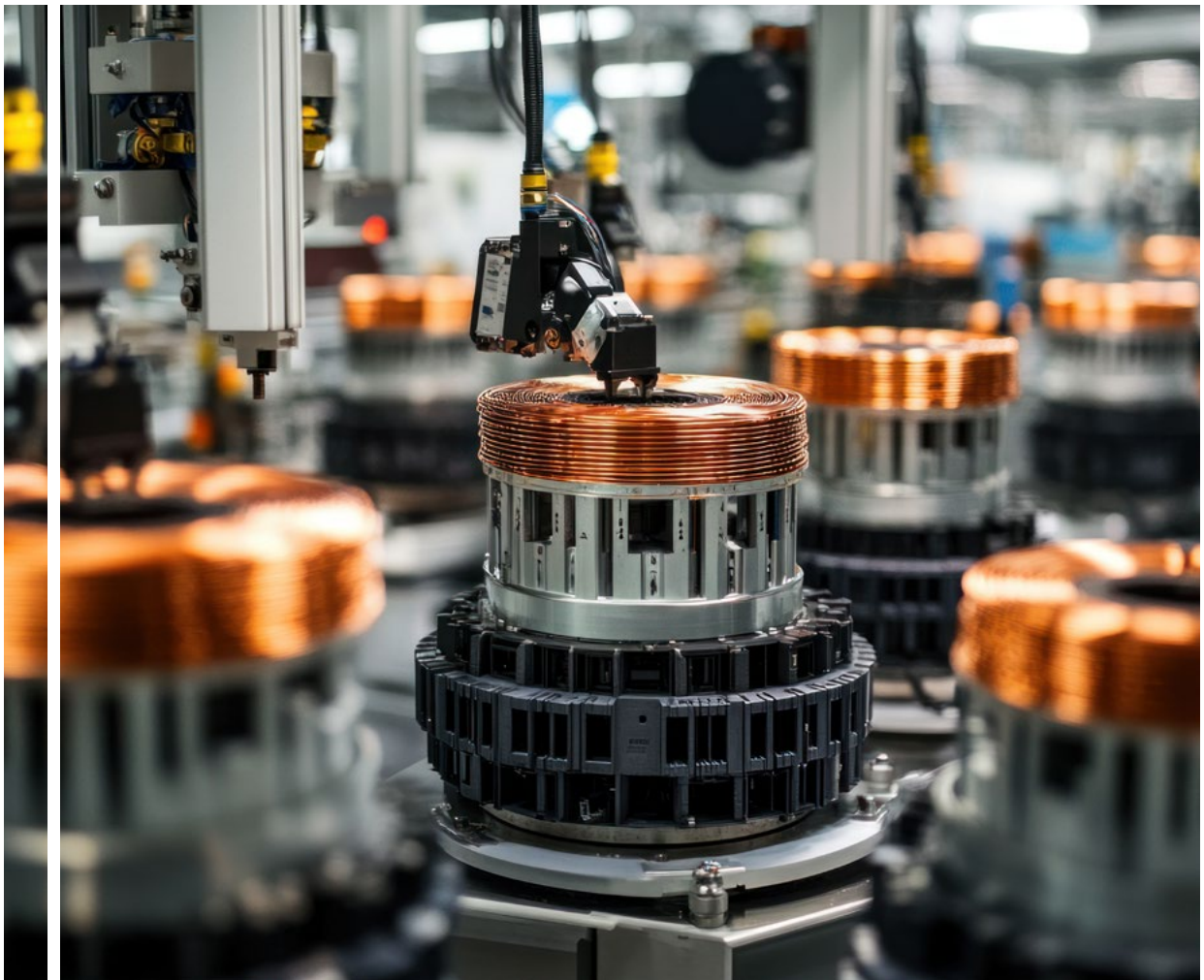
VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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

# SILICABLE® CS-HRD and ECS-HRD

Insulation with improved  
mechanical strength  
-60°C to +180°C

## Approvals - standards

- Halogen-free:  
IEC 60754-1 / EN 60754-1.

## Applications

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

## Options

- Nickel-plated copper core: ref. CNCS-HRD.
- Silver-plated copper core: ref. ACS-HRD.
- Pure nickel core (not described in IEC 60228):  
ref. NCS-HRD.
  - Outer electrical shielding:  
> Tin-plated copper braid: ref. CSBE-HRD  
or ECSBE-HRD.
- Stranded bare copper (ref. CS-HRD)  
or tin-plated (ref. ECS-HRD) core  
- class 2 as per IEC 60228:  
See details of the option below.
  - Double insulating layers:  
ref. CSC-HRD or ref. ECSC-HRD.
- 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.
- Improved mechanical strength.

## Electrical

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

## Standard products

- All colours including two-coloured.

## CS-HRD and ECS-HRD

### 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                                                              |
| 4                              | 56 x 0.30         | 4.95                                                              |
| 6                              | 84 x 0.30         | 3.30                                                              |

### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.1                      | 7.8                                  |
| 0.6                                     | 2.4                      | 11.0                                 |
| 0.6                                     | 2.5                      | 13.3                                 |
| 0.6                                     | 2.8                      | 18.2                                 |
| 0.7                                     | 3.4                      | 29.0                                 |
| 0.8                                     | 4.2                      | 45.8                                 |
| 0.8                                     | 4.8                      | 65.5                                 |

### Option • CS-HRD and ECS-HRD

#### Stranded core • class 2 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                            | 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<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.1                      | 7.8                                  |
| 0.6                                     | 2.4                      | 11.0                                 |
| 0.6                                     | 2.5                      | 13.4                                 |
| 0.6                                     | 2.8                      | 18.4                                 |
| 0.7                                     | 3.4                      | 29.2                                 |
| 0.8                                     | 4.2                      | 46.2                                 |
| 0.8                                     | 4.8                      | 66.0                                 |

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HIGH TEMPERATURE WIRES AND CABLES  
FOR THE GENERAL MARKET  
SECTION I: 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>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance<br>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>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance<br>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                                 |

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

## SILICABLE® HT

### Ignition wires

### -60°C to +180°C

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES

ECS-HT

2

1



- 1 • Bare copper, tin-plated, nickel-plated or silver-plated core.
- 2 • Insulation: Silicone rubber.

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Ignition circuit and creation of an electric arc for:
  - > Piezo-electric components in household electrical appliances.
  - > Gas or oil burners for boilers and professional appliances.

### Options

- Pure nickel core: ref. NCSV-HT or NCSVCS-HT.
  - Outer electrical shielding:
    - > Tin-plated copper braid: ref. CSBE-HT or CSVBE-HT or CSVCSBE-HT.
    - Cable resistant to vertical flame propagation: contact us.
    - Other nominal cross-sections or nominal stranding: contact us.
    - Other colours: contact us.
  - Other options and/or combinations of the options outlined above: contact us.
  - Applications requiring the design of a specific cable: contact us.

### Characteristics General

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

### Electrical

- Pulse voltage: from 15 to 30 kV.

### Standard products

- Main products: see table below.
- Standard insulation colours: white, black, brick red and colourless.

| Core                    | CS-HT range<br>Insulation:<br>Silicone rubber | CSV-HT range<br>Insulation:<br>Silicone rubber +<br>silicone coated<br>fibreglass braid | CSVCS-HT range<br>Insulation:<br>Silicone rubber<br>double layer with<br>intermediate fibreglass braid |
|-------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| In bare copper          | CS-HT                                         | CSV-HT                                                                                  | CSVCS-HT                                                                                               |
| In tin-plated copper    | ECS-HT                                        | ECSV-HT                                                                                 | ECSVCS-HT                                                                                              |
| In silver-plated copper | ACS-HT                                        | ACSV-HT                                                                                 | ACSVCS-HT                                                                                              |
| In nickel-plated copper | CNCS-HT                                       | CNCSV-HT                                                                                | CNCSVCS-HT                                                                                             |

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## 15 KV\*

## 20 KV\*

## 25 KV\*

## 30 KV\*

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding     | Maximum linear resistance at 20°C (Ω/km)<br>(tin-plated copper core) | Nominal diameter (mm) | Approx. linear weight (kg/km) | Nominal diameter (mm) | Approx. linear weight (kg/km) | Nominal diameter (mm) | Approx. linear weight (kg/km) | Nominal diameter (mm) | Approx. linear weight (kg/km) |
|------------------------------------------|-----------------------|----------------------------------------------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|
| <b>CS-HT</b>                             |                       |                                                                      |                       |                               |                       |                               |                       |                               |                       |                               |
| 0.25                                     | 8 x 0.20 or 14 x 0.15 | 82.9                                                                 | 2.7                   | 10.2                          | 3.4                   | 15.1                          | 4.8                   | 28.3                          | 6.3                   | 47.6                          |
| 0.34                                     | 7 x 0.25 or 19 x 0.16 | 59.2                                                                 | 2.8                   | 11.5                          | 3.5                   | 16.6                          | 4.9                   | 30.2                          | 6.4                   | 49.7                          |
| 0.5                                      | 7 x 0.30 or 16 x 0.20 | 40.1                                                                 | 3.0                   | 13.9                          | 3.7                   | 19.3                          | 5.0                   | 33.6                          | 6.6                   | 53.8                          |
| 0.6                                      | 19 x 0.20             | 33.7                                                                 | 3.0                   | 14.6                          | 3.7                   | 20.0                          | 5.2                   | 34.2                          | 6.6                   | 54.5                          |
| 0.75                                     | 24 x 0.20             | 26.7                                                                 | 3.2                   | 17.1                          | 3.9                   | 22.9                          | 5.3                   | 37.7                          | 6.8                   | 58.7                          |
| 0.93                                     | 19 x 0.25             | 21.6                                                                 | 3.3                   | 19.2                          | 4.0                   | 25.1                          | 5.4                   | 40.3                          | 6.9                   | 61.6                          |
| 1                                        | 32 x 0.20             | 20.0                                                                 | 3.4                   | 20.4                          | 4.1                   | 26.5                          | 5.5                   | 42.0                          | 7.0                   | 63.6                          |
| 1.34                                     | 19 x 0.30             | 15.0                                                                 | 3.5                   | 23.6                          | 4.2                   | 29.9                          | 5.6                   | 45.7                          | 7.1                   | 67.7                          |
| 1.5                                      | 30 x 0.25             | 13.7                                                                 | 3.6                   | 25.3                          | 4.3                   | 31.7                          | 5.8                   | 47.9                          | 7.2                   | 70.2                          |
| 2.5                                      | 50 x 0.25             | 8.21                                                                 | 4.0                   | 36.7                          | 4.8                   | 43.9                          | 6.2                   | 61.7                          | 7.7                   | 85.7                          |
| 4                                        | 56 x 0.30             | 5.09                                                                 | 4.6                   | 52.3                          | 5.3                   | 60.3                          | 6.7                   | 79.7                          | 8.2                   | 106                           |

**CSV-HT**

|      |                       |      |     |      |     |      |     |      |     |      |
|------|-----------------------|------|-----|------|-----|------|-----|------|-----|------|
| 0.34 | 7 x 0.25 or 19 x 0.16 | 59.2 | 2.8 | 11.5 | 3.5 | 16.6 | 4.9 | 30.2 | 6.4 | 49.7 |
| 0.5  | 7 x 0.30 or 16 x 0.20 | 40.1 | 3.0 | 13.9 | 3.7 | 19.3 | 5.1 | 33.6 | 6.6 | 53.8 |
| 0.6  | 19 x 0.20             | 33.7 | 3.0 | 14.6 | 3.7 | 20.0 | 5.1 | 34.2 | 6.6 | 54.5 |
| 0.75 | 24 x 0.20             | 26.7 | 3.2 | 17.1 | 3.9 | 22.9 | 5.3 | 37.7 | 6.8 | 58.7 |
| 0.93 | 19 x 0.25             | 21.6 | 3.5 | 20.3 | 4.2 | 26.5 | 5.6 | 42.2 | 7.1 | 64.0 |
| 1    | 32 x 0.20             | 20.0 | 3.6 | 21.6 | 4.3 | 27.9 | 5.7 | 43.9 | 7.2 | 66.1 |
| 1.34 | 19 x 0.30             | 15.0 | 3.7 | 24.9 | 4.4 | 31.3 | 5.8 | 47.7 | 7.3 | 70.2 |
| 1.5  | 30 x 0.25             | 13.7 | 3.8 | 26.6 | 4.5 | 33.2 | 5.9 | 49.9 | 7.4 | 72.7 |
| 2.5  | 50 x 0.25             | 8.21 | 4.3 | 38.1 | 5.0 | 45.6 | 6.4 | 63.8 | 7.9 | 88.4 |

**CSVCS-HT**

|      |                       |      |     |      |     |      |     |      |     |      |
|------|-----------------------|------|-----|------|-----|------|-----|------|-----|------|
| 0.5  | 7 x 0.30 or 16 x 0.20 | 40.1 | 3.3 | 16.1 | 4.8 | 30.1 | 6.3 | 49.4 | 8.7 | 90.9 |
| 0.6  | 19 x 0.20             | 33.7 | 3.3 | 16.8 | 4.8 | 30.8 | 6.3 | 50.0 | 8.7 | 91.6 |
| 0.75 | 24 x 0.20             | 26.7 | 3.5 | 19.5 | 5.0 | 34.2 | 6.5 | 54.1 | 8.9 | 96.8 |
| 0.93 | 19 x 0.25             | 21.6 | 3.6 | 21.6 | 5.1 | 36.6 | 6.6 | 56.9 | 9.0 | 100  |
| 1    | 32 x 0.20             | 20.0 | 3.8 | 23.7 | 5.2 | 38.3 | 6.7 | 58.9 | 9.1 | 103  |
| 1.34 | 19 x 0.30             | 15.0 | 3.9 | 27.1 | 5.3 | 41.9 | 6.8 | 62.9 | 9.2 | 107  |
| 1.5  | 30 x 0.25             | 13.7 | 4.0 | 28.8 | 5.4 | 44.0 | 7.3 | 71.9 | 9.3 | 110  |

\* Pulse voltage.

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

## SILICABLE® ECS-HT VDE

Ignition wires  
VDE approval  
-60°C to +180°C



### Approvals - standards

- VDE approval: licence No. 106491.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Ignition circuit and creation of an electric arc for:
  - > Piezo-electric components in household electrical appliances.
  - > Gas or oil burners for boilers and professional appliances.

### Options

- Solid tin-plated copper core (ref. RECS-HT VDE)
  - class 1 as per IEC 60228:
 See details of the option below.
  - Other colours: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES

2

1

SILICABLE ECS-HT 1,5MM<sup>2</sup> - VDE-REG-NR : 9916

- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228/ DIN VDE 0295.
- 2 • Insulation: Silicone rubber – type E12 - DIN EN 50363-1.

### Characteristics General

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

### Electrical

- Rated voltage: 1.8/3.0 kV.
- Pulse voltage: 10 kV.

### Standard products

- Standard insulation colours: white, black, brick red and colourless.

### ECS-HT VDE

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 0.75                                        | 24 x 0.20         | 26.7                                        |
| 1                                           | 32 x 0.20         | 20.0                                        |
| 1.5                                         | 30 x 0.25         | 13.7                                        |

#### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 1.3                                     | 3.8                      | 22.0                                 |
| 1.3                                     | 3.9                      | 24.6                                 |
| 1.3                                     | 4.2                      | 30.7                                 |

### Option • RECS-HT VDE

#### Solid core • class 1 as per IEC 60228

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal diameter<br>(mm) | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|--------------------------|---------------------------------------------|
| 0.75                                        | 1 x 0.98                 | 24.8                                        |
| 1                                           | 1 x 1.13                 | 18.2                                        |
| 1.5                                         | 1 x 1.38                 | 12.2                                        |

#### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 1.3                                     | 3.6                      | 20.6                                 |
| 1.3                                     | 3.8                      | 24.2                                 |
| 1.3                                     | 4.0                      | 29.7                                 |

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

## SILICABLE® MC-ECS -60°C to +180°C

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
  - Low corrosivity of gas emissions: IEC 60754-2 / EN 60754-2.
    - Fire retardant: NF C 32-070 test C1.
- Resistance to vertical flame propagation for an insulated cable: IEC 60332-1-2 / EN 60332-1-2 / NF C 32-070 test C2.
- Tests on electric cables under fire conditions  
Circuit integrity: IEC 60331-21.

### Options

- Bare copper core: ref. MC-CS.
- Nickel-plated copper core: ref. MC-CNCS.
  - Silver-plated copper core: ref. MC-ACS.
- Pure nickel core (not described in IEC 60228): ref. MC-NCS.
  - Outer electrical shielding:
    - > Tin-plated copper braid: ref. BEMCECS.
    - Outer flexible armour:
      - > Galvanised steel braid: ref. BGMCECS.
      - > Stainless steel braid: ref. BIMCECS.
  - Other nominal cross-sections: contact us.
    - Other nominal stranding: contact us.
    - Other colours: contact us.
- Other options and/or combinations of the options outlined above: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Outer sheath: Silicone rubber.

### Characteristics General

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

### Electrical

- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colour: brick red.

### Applications

- Cabling in hot atmospheres up to 180°C.
- Cabling in the metallurgical industry, glassworks, etc.
- Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
- Lights, spotlights, etc.

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

| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|-----------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 5.6                   | 39.8                              |
| 3 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.2                   | 51.0                              |
| 4 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.8                   | 61.8                              |
| 5 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 7.7                   | 77.6                              |
| 6 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.3                   | 85.7                              |
| 7 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.3                   | 94.4                              |
| 10 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 11.0                  | 145                               |
| 12 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 11.6                  | 171                               |
| 14 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.1                  | 191                               |
| 16 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.6                  | 210                               |
| 19 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 13.4                  | 245                               |
| 2 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.1                   | 49.1                              |
| 3 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.5                   | 59.5                              |
| 4 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.5                   | 78.7                              |
| 5 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.4                   | 96.9                              |
| 6 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.1                   | 108                               |
| 7 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.2                   | 122                               |
| 10 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 12.0                  | 180                               |
| 12 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 12.8                  | 218                               |
| 14 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.1                  | 237                               |
| 16 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.9                  | 268                               |
| 19 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 15.0                  | 322                               |

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 6.7                   | 61.1                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.2                   | 75.4                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.9                   | 92.2                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.9                   | 115                               |
| 6 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.7                   | 130                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.9                   | 149                               |
| 10 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 12.8                  | 217                               |
| 12 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.4                  | 254                               |
| 14 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.9                  | 283                               |
| 16 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 14.5                  | 313                               |
| 19 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 15.3                  | 362                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 7.4                   | 77.8                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 7.8                   | 94.2                              |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.5                   | 115                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 9.4                   | 139                               |
| 6 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.2                  | 155                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.2                  | 175                               |
| 10 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 13.2                  | 251                               |
| 12 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 15.0                  | 337                               |
| 14 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 15.6                  | 377                               |
| 16 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 16.2                  | 415                               |
| 19 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 17.0                  | 477                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 9.0                   | 119                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 9.5                   | 146                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 10.4                  | 179                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 11.4                  | 214                               |
| 6 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.4                  | 242                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.4                  | 272                               |
| 10 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 16.6                  | 411                               |
| 12 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 17.4                  | 487                               |
| 14 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 18.2                  | 552                               |
| 16 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 19.2                  | 622                               |
| 19 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 20.4                  | 730                               |
| 2 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 10.4                  | 167                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 11.4                  | 218                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 12.5                  | 269                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 13.9                  | 328                               |
| 6 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 15.6                  | 388                               |
| 7 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 15.6                  | 436                               |
| 10 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 20.0                  | 619                               |
| 12 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 21.0                  | 736                               |
| 14 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 22.4                  | 860                               |
| 16 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 23.4                  | 955                               |
| 19 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 24.6                  | 1107                              |
| 2 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 12.4                  | 243                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 12.8                  | 293                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 14.0                  | 363                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 17.4                  | 514                               |
| 6 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 18.8                  | 580                               |
| 7 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 18.8                  | 648                               |
| 2 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 15.4                  | 372                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 18.0                  | 532                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 20.0                  | 669                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 22.0                  | 805                               |
| 6 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 22.8                  | 850                               |
| 7 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 22.8                  | 963                               |
| 2 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 19.0                  | 570                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 21.0                  | 756                               |
| 4 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 23.2                  | 944                               |
| 5 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 25.6                  | 1141                              |
| 6 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 27.8                  | 1287                              |
| 7 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 27.8                  | 1458                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 24.0                  | 917                               |
| 3 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 25.6                  | 1160                              |
| 4 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 28.5                  | 1466                              |

## Standard conductor colours:

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

## • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup>  
(example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X  
(example 3 G 1.5 mm<sup>2</sup>).

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

## SILICABLE® MCBE-ECS and MCBAL-ECS -60°C to +180°C

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
- Low corrosivity of gas emissions: IEC 60754-2 / EN 60754-2.
- Fire retardant: NF C 32-070 test C1.
- Resistance to vertical flame propagation for an insulated cable: IEC 60332-1-2 / EN 60332-1-2 / NF C 32-070 test C2.
- Tests on electric cables under fire conditions  
Circuit integrity: IEC 60331-21.

### Options

- Bare copper core: ref. MCBE-CS and ref. MCBAL-CS.
- Inner protective sheath in silicone rubber between the conductor assembly and metal braid: ref. MCBEC-ECS and ref. MCBAL-ECS.
- Outer flexible armour:
  - > Galvanised steel braid: ref. BGMCBE-ECS and ref. BGMCBAL-ECS.
  - > Stainless steel braid: ref. BIMCBE-ECS and ref. BIMCBAL-ECS.
- Outer braid in silicone coated fibreglass ref. VMCBE-ECS and VMCBAL-ECS.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other colours: contact us.

### Characteristics General

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

### Electrical

- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

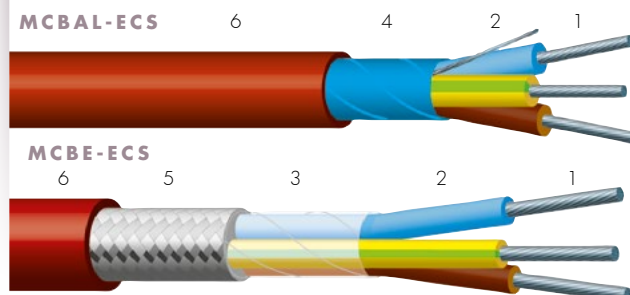
### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colour: brick red.

### Applications

- Industrial cabling in hot atmospheres up to 180 °C.
- Cabling in the metallurgical industry, glassworks, etc.
- Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
- Lights, spotlights, etc.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Optional separating tape.
- 4 • Electrical shielding: Aluminium/PET tape + continuity wire.
- 5 • Electrical shielding: Tin-plated copper braid.
- 6 • Outer sheath: Silicone rubber.

### 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) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.2                   | 55.0                              |
| 3 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.8                   | 71.8                              |
| 4 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 7.6                   | 88.7                              |
| 5 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.3                   | 104                               |
| 6 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.9                   | 115                               |
| 7 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.9                   | 124                               |
| 10 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 11.0                  | 168                               |
| 12 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 11.6                  | 194                               |
| 14 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.1                  | 216                               |
| 16 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.8                  | 247                               |
| 19 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 13.4                  | 279                               |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.7                   | 69.3                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.3                   | 85.6                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.1                   | 105                               |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.0                   | 126                               |
| 6 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.7                   | 141                               |
| 7 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.8                   | 155                               |
| 10 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 12.5                  | 226                               |
| 12 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.1                  | 260                               |
| 14 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.7                  | 290                               |
| 16 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 14.4                  | 321                               |
| 19 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 15.1                  | 365                               |

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**omerin**  
LES CABLES DE L'EXTREME

## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.3                   | 82.6                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.8                   | 99.7                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.5                   | 120                               |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.5                   | 146                               |
| 6 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 10.3                  | 165                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 10.5                  | 184                               |
| 10 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.0                  | 256                               |
| 12 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.9                  | 305                               |
| 14 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 14.7                  | 347                               |
| 16 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 15.8                  | 397                               |
| 19 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 16.4                  | 444                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.1                   | 104                               |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.5                   | 123                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 9.3                   | 149                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.2                  | 177                               |
| 6 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 11.0                  | 198                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 11.0                  | 218                               |
| 10 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 13.8                  | 307                               |
| 12 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 15.0                  | 375                               |
| 14 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 15.8                  | 425                               |
| 16 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 17.0                  | 488                               |
| 19 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 17.8                  | 574                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 9.8                   | 152                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 10.3                  | 182                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 11.2                  | 220                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.2                  | 265                               |
| 6 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 13.4                  | 305                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 13.4                  | 336                               |
| 10 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 17.1                  | 494                               |
| 12 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 17.8                  | 569                               |
| 14 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 18.9                  | 652                               |
| 16 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 20.1                  | 735                               |
| 19 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 21.5                  | 861                               |
| 2 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 11.0                  | 201                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 12.0                  | 257                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 13.3                  | 324                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 14.5                  | 384                               |
| 6 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 16.2                  | 451                               |
| 7 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 16.2                  | 499                               |
| 10 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 20.7                  | 730                               |
| 12 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 21.8                  | 855                               |
| 14 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 23.0                  | 977                               |
| 16 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 24.4                  | 1103                              |
| 19 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 26.1                  | 1320                              |
| 2 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 13.0                  | 283                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 14.6                  | 381                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 15.8                  | 461                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 18.0                  | 579                               |
| 6 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 19.5                  | 677                               |
| 7 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 19.5                  | 746                               |
| 2 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 16.0                  | 428                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 18.6                  | 599                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 20.8                  | 774                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 22.6                  | 911                               |
| 6 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 24.5                  | 1031                              |
| 7 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 24.5                  | 1144                              |
| 2 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 20.4                  | 676                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 21.8                  | 866                               |
| 4 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 24.0                  | 1069                              |
| 5 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 26.6                  | 1319                              |
| 6 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 29.1                  | 1511                              |
| 7 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 29.1                  | 1682                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 24.1                  | 996                               |
| 3 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 26.2                  | 1284                              |
| 4 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 29.3                  | 1620                              |

## Standard conductor colours:

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

## • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup>  
(example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

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

## SILICABLE® MC-HRD

Insulation and sheathing with  
improved mechanical strength

**-60°C to +180°C**

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES



### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Industrial cabling in hot atmospheres up to 180°C.
- Cabling in the metallurgical industry, glassworks, etc.
- Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
- Lights, spotlights, etc.

### Options

- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other colours: contact us.

### Characteristics General

- Continuous operating temperatures: -60°C to +180°C.
- Improved mechanical properties (tear strength, notch propagation and cut-through resistance).
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colour: black.

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

| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|-----------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 5.8                   | 36.1                              |
| 3 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.2                   | 43.9                              |
| 4 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 7.0                   | 56.1                              |
| 5 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 7.9                   | 70.1                              |
| 6 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.5                   | 77.7                              |
| 7 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.5                   | 85.6                              |
| 10 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 10.8                  | 122                               |
| 12 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 11.6                  | 149                               |
| 14 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.1                  | 167                               |
| 16 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.7                  | 186                               |
| 19 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 13.3                  | 212                               |
| 2 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.3                   | 44.6                              |
| 3 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.7                   | 54.5                              |
| 4 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.5                   | 68.9                              |
| 5 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.4                   | 84.9                              |
| 6 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.6                   | 104                               |
| 7 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.6                   | 115                               |
| 10 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 12.2                  | 163                               |
| 12 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 12.8                  | 192                               |
| 14 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.4                  | 217                               |
| 16 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 14.3                  | 248                               |
| 19 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 15.0                  | 285                               |

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LES CABLES DE L'EXTREME

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 6.7                   | 52.9                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.3                   | 67.6                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.9                   | 81.5                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.9                   | 102                               |
| 6 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.9                   | 119                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.9                   | 132                               |
| 10 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 12.6                  | 188                               |
| 12 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.2                  | 222                               |
| 14 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 14.1                  | 259                               |
| 16 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 14.8                  | 289                               |
| 19 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 15.5                  | 332                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 7.6                   | 70.8                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.0                   | 86.8                              |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.8                   | 108                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 9.6                   | 128                               |
| 6 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.4                  | 145                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.4                  | 163                               |
| 10 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 13.6                  | 238                               |
| 12 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 14.5                  | 289                               |
| 14 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 15.2                  | 329                               |
| 16 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 16.2                  | 376                               |
| 19 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 17.0                  | 434                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 9.2                   | 108                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 9.7                   | 134                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 10.6                  | 166                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 11.6                  | 199                               |
| 6 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.8                  | 230                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.8                  | 259                               |
| 10 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 16.2                  | 363                               |
| 12 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 17.0                  | 432                               |
| 14 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 18.0                  | 499                               |
| 16 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 19.2                  | 571                               |
| 19 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 20.2                  | 663                               |
| 2 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 10.8                  | 156                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 11.4                  | 196                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 12.7                  | 249                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 14.0                  | 302                               |
| 6 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 15.6                  | 354                               |
| 7 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 15.6                  | 400                               |
| 10 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 19.8                  | 562                               |
| 12 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 20.7                  | 666                               |
| 14 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 22.0                  | 774                               |
| 16 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 23.4                  | 882                               |
| 19 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 24.8                  | 1035                              |
| 2 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 12.4                  | 217                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 13.2                  | 278                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 14.6                  | 351                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 16.0                  | 423                               |
| 6 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 17.4                  | 483                               |
| 7 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 17.4                  | 548                               |
| 2 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 15.8                  | 346                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 16.9                  | 445                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 18.7                  | 561                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 20.5                  | 675                               |
| 6 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 22.8                  | 788                               |
| 7 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 22.8                  | 896                               |
| 2 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 18.8                  | 506                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 20.1                  | 654                               |
| 4 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 22.4                  | 833                               |
| 5 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 24.9                  | 1019                              |
| 6 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 27.4                  | 1175                              |
| 7 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 27.4                  | 1339                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 22.8                  | 773                               |
| 3 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 24.4                  | 1007                              |
| 4 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 27.2                  | 1285                              |

## Standard conductor colours:

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

## • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup>  
(example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X  
(example 3 G 1.5 mm<sup>2</sup>).

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

## SILICABLE® MCBE-HRD

*Insulation and sheathing with  
improved mechanical strength*

**-60°C to +180°C**

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Industrial cabling in hot atmospheres up to 180°C.
- Cabling in the metallurgical industry, glassworks, etc.
  - Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
  - Lights, spotlights, etc.

### Options

- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other colours: contact us.

### Characteristics

#### General

- Continuous operating temperatures: -60°C to +180°C.
- Improved mechanical properties (tear strength, notch propagation and cut-through resistance).
- Good resistance to thermal shock and UV.

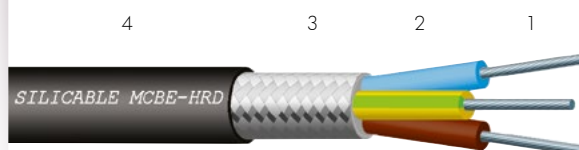
#### Electrical

- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colour: black.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber with high mechanical properties.
- 3 • Electrical shielding: Tin-plated copper braid.
- 4 • Outer sheath: Silicone rubber with high mechanical properties.

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

| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|-----------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.5                   | 52.3                              |
| 3 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 7.0                   | 66.6                              |
| 4 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 7.7                   | 80.9                              |
| 5 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.5                   | 96.8                              |
| 6 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 9.3                   | 112                               |
| 7 x 0.5                     | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 9.3                   | 119                               |
| 10 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 11.8                  | 170                               |
| 12 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.4                  | 193                               |
| 14 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.9                  | 214                               |
| 16 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 13.6                  | 244                               |
| 19 x 0.5                    | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 14.4                  | 279                               |
| 2 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.2                   | 69.2                              |
| 3 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.6                   | 81.8                              |
| 4 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.4                   | 99.8                              |
| 5 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.0                   | 115                               |
| 6 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 10.0                  | 134                               |
| 7 x 0.75                    | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 10.0                  | 145                               |
| 10 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 12.9                  | 215                               |
| 12 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.5                  | 246                               |
| 14 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 14.3                  | 279                               |
| 16 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 15.0                  | 309                               |
| 19 x 0.75                   | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 15.9                  | 355                               |

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LES CABLES DE L'EXTREME

## Flexible core • class 5 as per IEC 60228

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.6                   | 78.7                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.0                   | 93.4                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.6                   | 111                               |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.6                   | 134                               |
| 6 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 10.5                  | 154                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 10.5                  | 168                               |
| 10 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.3                  | 242                               |
| 12 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 14.1                  | 283                               |
| 14 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 14.7                  | 317                               |
| 16 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 15.7                  | 357                               |
| 19 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 16.4                  | 405                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.2                   | 94.6                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.6                   | 114                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 9.4                   | 138                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.2                  | 162                               |
| 6 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 11.0                  | 184                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 11.0                  | 202                               |
| 10 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 14.3                  | 298                               |
| 12 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 14.9                  | 345                               |
| 14 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 15.8                  | 394                               |
| 16 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 16.9                  | 445                               |
| 19 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 18.1                  | 542                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 9.8                   | 137                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 10.3                  | 166                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 11.2                  | 202                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.2                  | 245                               |
| 6 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 13.4                  | 283                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 13.4                  | 312                               |
| 10 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 17.3                  | 467                               |
| 12 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 18.2                  | 545                               |
| 14 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 19.3                  | 621                               |
| 16 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 20.5                  | 700                               |
| 19 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 21.7                  | 809                               |
| 2 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 11.6                  | 196                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 12.3                  | 242                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 13.4                  | 303                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 14.6                  | 358                               |
| 6 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 16.2                  | 419                               |
| 7 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 16.2                  | 465                               |
| 10 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 20.9                  | 689                               |
| 12 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 21.8                  | 798                               |
| 14 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 23.0                  | 912                               |
| 16 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 24.4                  | 1029                              |
| 19 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 26.1                  | 1234                              |
| 2 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 13.0                  | 256                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 14.1                  | 335                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 15.5                  | 416                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 16.9                  | 495                               |
| 6 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 18.7                  | 601                               |
| 7 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 18.7                  | 666                               |
| 2 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 16.7                  | 412                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 17.7                  | 517                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 19.7                  | 672                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 21.8                  | 810                               |
| 6 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 23.9                  | 934                               |
| 7 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 23.9                  | 1041                              |
| 2 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 19.7                  | 585                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 21.3                  | 780                               |
| 4 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 23.5                  | 970                               |
| 5 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 26.2                  | 1211                              |
| 6 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 28.7                  | 1396                              |
| 7 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 28.7                  | 1560                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 23.9                  | 901                               |
| 3 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 25.8                  | 1170                              |
| 4 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 28.6                  | 1470                              |

## Standard conductor colours:

## Identification

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

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

# SILICABLE® H05SS-F

USE <HAR> Approval

-60°C to +180°C

<HAR>

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES



## Approvals - standards

- USE <HAR> Approval as per NF EN 50525-2-83.
- Halogen-free: IEC 60754-1 / EN 60754-1.

## Applications

- Industrial cabling in hot atmospheres up to 180°C.
- Cabling in the metallurgical industry, glassworks, etc.
  - Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
  - Lights, spotlights, etc.

## Options

- Other outer sheath colours: 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: 2000 V (as per NF EN 50525-2-83).

## Standard products

- Standard conductor colours: as per HD 308 (see table below).
- Standard outer sheath colour: brick red.

### Standard conductor colours (as per HD 308)

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup> (example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km)<br>(tin-plated copper core) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal thickness of the sheath (mm) | Nominal diameter (mm) |      | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|----------------------------------------------------------------------|--------------------------------------|-----------------------|--------------------------------------|-----------------------|------|-----------------------------------|
|                                          |                   |                                                                      |                                      |                       |                                      | min.                  | max. |                                   |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.8                                  | 5.7                   | 7.4  | 53.4                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.9                                  | 6.2                   | 8.1  | 59.5                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.9                                  | 6.8                   | 8.8  | 80.4                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 1.0                                  | 7.6                   | 9.9  | 98.4                              |
| 2 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                  | 6.1                   | 8.0  | 62.6                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                  | 6.5                   | 8.5  | 75.4                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                  | 7.1                   | 9.3  | 90.8                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 1.0                                  | 8.0                   | 10.3 | 112                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.0                                  | 7.6                   | 9.8  | 96.0                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.0                                  | 8.0                   | 10.4 | 118                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.1                                  | 9.0                   | 11.6 | 156                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.1                                  | 9.8                   | 12.7 | 174                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.1                                  | 9.0                   | 11.6 | 148                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.1                                  | 9.6                   | 12.4 | 166                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.2                                  | 10.7                  | 13.8 | 226                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.3                                  | 11.9                  | 15.3 | 324                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                                                 | 1.0                                  | 4.6                   | 1.2                                  | 11.3                  | 14.5 | 266                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                                                 | 1.0                                  | 4.6                   | 1.3                                  | 12.7                  | 16.2 | 319                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                                                 | 1.0                                  | 5.2                   | 1.4                                  | 12.8                  | 16.3 | 343                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                                                 | 1.0                                  | 5.2                   | 1.5                                  | 14.2                  | 18.1 | 417                               |

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

## SILICABLE® H05SS-F HRD

USE <HAR> Approval

**-60°C to +180°C**

<HAR>

### Approvals - standards

- USE <HAR> Approval as per NF EN 50525-2-83.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Industrial cabling in hot atmospheres up to 180°C.
- Cabling in the metallurgical industry, glassworks, etc.
  - Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
  - Lights, spotlights, etc.

### Options

- Other colours: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible bare copper, tin-plated, nickel-plated or silver-plated core - class 5 as per IEC 60228 / EN 60228.
- 2 • Insulation: Silicone rubber with high mechanical properties - type EI2 - NF C 32-525-1 / NF EN 50525-1 / EN 50363-1.
- 3 • Outer sheath: Silicone rubber with high mechanical properties - type EM9 - NF C 32-525-1 / NF EN 50525-1 / EN 50363-2-1.

### Characteristics

#### General

- Continuous operating temperatures: -60°C to +180°C.
- Improved mechanical properties (tear strength, notch propagation and cut-through resistance).
- Good resistance to thermal shock and UV.

#### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V (as per NF EN 50525-2-83).

### Standard products

- Standard conductor colours: as per HD 308 (see table below).
- Standard outer sheath colour: black.

#### Standard conductor colours (as per HD 308)

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue - brown                        |
| 3                    | yellow/green - blue - brown                | brown - black - grey                |
| 4                    | yellow/green - brown - black - grey        | blue - brown - black - grey         |
| 5                    | yellow/green - blue - brown - black - grey | blue - brown - black - grey - black |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm² (example: 3 X 1.5 mm²).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm²).

For this product, please contact:

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km)<br>(tin-plated copper core) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal thickness of the sheath (mm) | Nominal diameter (mm) |      | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|----------------------------------------------------------------------|--------------------------------------|-----------------------|--------------------------------------|-----------------------|------|-----------------------------------|
|                                          |                   |                                                                      |                                      |                       |                                      | min.                  | max. |                                   |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.8                                  | 5.7                   | 7.4  | 45.8                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.9                                  | 6.2                   | 8.1  | 52.0                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.9                                  | 6.8                   | 8.8  | 70.3                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 1.0                                  | 7.6                   | 9.9  | 86.1                              |
| 2 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                  | 6.1                   | 8.0  | 54.2                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                  | 6.5                   | 8.5  | 66.2                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                  | 7.1                   | 9.3  | 80.4                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 1.0                                  | 8.0                   | 10.3 | 99.0                              |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.0                                  | 7.6                   | 9.8  | 82.8                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.0                                  | 8.0                   | 10.4 | 103                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.1                                  | 9.0                   | 11.6 | 136                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.1                                  | 9.8                   | 12.7 | 153                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.1                                  | 9.0                   | 11.6 | 128                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.1                                  | 9.6                   | 12.4 | 147                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.2                                  | 10.7                  | 13.8 | 200                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.3                                  | 11.9                  | 15.3 | 283                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                                                 | 1.0                                  | 4.6                   | 1.2                                  | 11.3                  | 14.5 | 235                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                                                 | 1.0                                  | 4.6                   | 1.3                                  | 12.7                  | 16.2 | 285                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                                                 | 1.0                                  | 5.2                   | 1.4                                  | 12.8                  | 16.3 | 308                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                                                 | 1.0                                  | 5.2                   | 1.5                                  | 14.2                  | 18.1 | 378                               |

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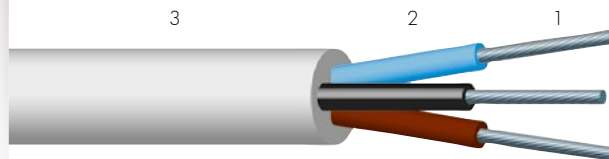
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# HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION I: CROSS LINKED ELASTOMERS

## SILICABLE® MC-EFEP -60°C to +200°C

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



- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Fluorinated polymer FEP.
- 3 • Outer sheath: Silicone rubber.

### Applications

- Cabling for electrical heating appliances.
  - Use in the medical field as cabling for sterilisable surgical instruments.
- Power cables for various industrial appliances.

### Options

- Bare copper core: ref. MC-FEP.
- Nickel-plated copper core: ref. MC-CNFEF.
- Silver-plated copper core: ref. MC-AFEP.
  - Extra-flexible tin-plated copper core – class 6 as per IEC 60228: ref. MC-EFEP-ES.
- Insulation: Fluorinated polymer PFA (improved thermal resistance of insulation): ref. MC-EPFA.
  - Insulation: Fluorinated polymer ETFE (+155°C in continuous operation - improved mechanical strength): ref. MC-EETFE.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other colours: contact us.
- Other options and/or combinations of the options outlined above: contact us.

### Characteristics General

- Continuous operating temperatures: -60°C to +200°C.
- Good resistance to common chemical influences.

### Electrical

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

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colours: white, black, grey or brick red.

#### Standard conductor colours:

| Number of conductors | With an earth wire                                 | Without an earth wire               |
|----------------------|----------------------------------------------------|-------------------------------------|
| 2                    | -                                                  | blue – brown                        |
| 3                    | yellow/green – blue – brown                        | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey                | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey         | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – white numbered<br>or black numbered | white numbered<br>or black numbered |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup> (example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.20                                 | 1.30                  | 4.4                   | 29.0                              |
| 3 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.20                                 | 1.30                  | 4.6                   | 34.8                              |
| 4 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.20                                 | 1.30                  | 5.0                   | 42.6                              |
| 5 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.20                                 | 1.30                  | 5.8                   | 55.5                              |
| 7 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.20                                 | 1.30                  | 6.1                   | 67.0                              |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.20                                 | 1.45                  | 4.9                   | 37.5                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.20                                 | 1.45                  | 5.2                   | 46.5                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.20                                 | 1.45                  | 6.0                   | 61.8                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.20                                 | 1.45                  | 6.5                   | 73.4                              |
| 7 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.20                                 | 1.45                  | 7.0                   | 92.0                              |
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.25                                 | 1.70                  | 5.1                   | 43.2                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.25                                 | 1.70                  | 5.4                   | 54.1                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.25                                 | 1.70                  | 6.2                   | 71.4                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.25                                 | 1.70                  | 6.7                   | 84.7                              |
| 7 x 1                                    | 32 x 0.20         | 20.0                                     | 0.25                                 | 1.70                  | 7.3                   | 109                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.30                                 | 1.95                  | 5.7                   | 56.6                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.30                                 | 1.95                  | 6.1                   | 72.6                              |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.30                                 | 1.95                  | 6.8                   | 92.6                              |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.30                                 | 1.95                  | 7.5                   | 113                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.30                                 | 1.95                  | 8.0                   | 143                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.30                                 | 2.50                  | 7.0                   | 88.4                              |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.30                                 | 2.50                  | 7.4                   | 113                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.30                                 | 2.50                  | 8.2                   | 143                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.30                                 | 2.50                  | 8.9                   | 171                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.30                                 | 2.50                  | 9.8                   | 225                               |

For this product, please contact:

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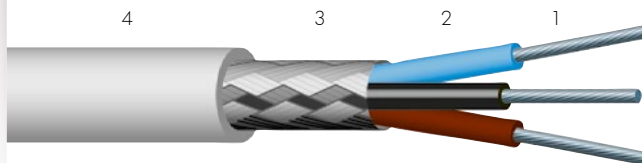
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# HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION I: CROSS LINKED ELASTOMERS

## SILICABLE® MCBE-EFEP -60°C to +200°C

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



- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Fluorinated polymer FEP.
- 3 • Electrical shielding: Tin-plated copper braid.
- 4 • Outer sheath: Silicone rubber.

### Applications

- Cabling for electrical heating appliances.
  - Use in the medical field as cabling for sterilisable surgical instruments.
  - Power cables for various industrial appliances.

### Options

- Bare copper core: ref. MCBE-FEP.
- Nickel-plated copper core: ref. MCBE-CNFEP.
- Silver-plated copper core: ref. MCBE-AFEP.
  - Extra-flexible tin-plated copper core – class 6 as per IEC 60228: ref. MCBE-EFEP-ES.
- Electrical shielding: Aluminium/PET tape + continuity wire: ref. MCBA-EFEP.
- Insulation: Fluorinated polymer PFA (improved thermal resistance of insulation): ref. MCBE-EPFA.
- Insulation: Fluorinated polymer ETFE (+155°C in continuous operation - improved mechanical strength): ref. MCBE-EETFE.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other colours: contact us.
- Other options and/or combinations of the options outlined above: contact us.

### Characteristics General

- Continuous operating temperatures: -60°C to +200°C.
- Good resistance to common chemical influences.

### Electrical

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

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colours: white, black, grey or brick red.

#### Standard conductor colours:

| Number of conductors | With an earth wire                                 | Without an earth wire               |
|----------------------|----------------------------------------------------|-------------------------------------|
| 2                    | -                                                  | blue – brown                        |
| 3                    | yellow/green – blue – brown                        | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey                | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey         | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – white numbered<br>or black numbered | white numbered<br>or black numbered |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup> (example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

For this product, please contact:

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20 °C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|-------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.20                                 | 1.30                  | 4.8                   | 37.8                              |
| 3 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.20                                 | 1.30                  | 5.0                   | 44.6                              |
| 4 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.20                                 | 1.30                  | 5.4                   | 53.5                              |
| 5 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.20                                 | 1.30                  | 6.0                   | 65.1                              |
| 7 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.20                                 | 1.30                  | 6.6                   | 85.6                              |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.20                                 | 1.45                  | 5.3                   | 47.3                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.20                                 | 1.45                  | 5.7                   | 58.7                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.20                                 | 1.45                  | 6.0                   | 68.5                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.20                                 | 1.45                  | 6.5                   | 81.0                              |
| 7 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.20                                 | 1.45                  | 7.0                   | 105                               |
| 2 x 1                                    | 32 x 0.20         | 20.0                                      | 0.25                                 | 1.70                  | 5.7                   | 56.4                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                      | 0.25                                 | 1.70                  | 6.0                   | 68.8                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                      | 0.25                                 | 1.70                  | 6.8                   | 91.6                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                      | 0.25                                 | 1.70                  | 7.3                   | 107                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                      | 0.25                                 | 1.70                  | 7.9                   | 140                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.30                                 | 1.95                  | 6.7                   | 77.5                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.30                                 | 1.95                  | 7.0                   | 94.0                              |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.30                                 | 1.95                  | 7.8                   | 122                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.30                                 | 1.95                  | 8.4                   | 144                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.30                                 | 1.95                  | 9.0                   | 179                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.30                                 | 2.50                  | 8.1                   | 119                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.30                                 | 2.50                  | 8.5                   | 147                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.30                                 | 2.50                  | 9.1                   | 177                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.30                                 | 2.50                  | 9.9                   | 211                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.30                                 | 2.50                  | 10.9                  | 272                               |

For this product, please contact:

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

## SILICABLE® 150°C

**Silicone insulation  
Silicone sheathing  
UL and cUL approval**



### Characteristics General

- Continuous operating temperatures: -60°C to +150°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved silicone insulated conductors ( $\geq 150^\circ\text{C}$ ).
- Standard outer sheath colours: black or brick red.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "Cable flame test" as per UL approval (AWM II A/B only).
- "FT2 flame rating" as per cUL approval.
- "FT1 flame rating" as per cUL approval (AWM II A/B only).
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Output cables for household and professional electrical heating appliances.
- Cabling for electrical heating appliances, etc.

### Options

- Other numbers of conductors and nominal cross-sections: contact us.
- Other colours: contact us.
- Electrical shielding: contact us.
- VW-1 Vertical flame test for Style 4389-S150: contact us.

#### KEY

Conducting metals

B Tin-plated copper

B\* Tin-plated copper ( $\phi > 0.38 \text{ mm}$ )

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper ( $\phi > 0.38 \text{ mm}$ )

G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.

Only the average thickness of insulation should be taken into account.

For this product, please contact:

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LES CABLES DE L'EXTREME

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • UL and cUL approved conductors with a silicone insulation.
- 2 • Outer sheath: Silicone rubber.

### Style no. 4389-S150

#### Approval

#### 150°C - 600 V

AWM II A/B  
(Wall 1.14 mm)

| No. of cond. | AWG | Nominal cross-section (mm²) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) |
|--------------|-----|-----------------------------|-------------------------------------|-------------------------------------|
| 2            | 26  | 0.13                        | 2.0                                 | 6.2                                 |
| 3            | 26  | 0.13                        | 2.0                                 | 6.6                                 |
| 4            | 26  | 0.13                        | 2.0                                 | 7.1                                 |
| 5            | 26  | 0.13                        | 2.0                                 | 7.6                                 |
| 7            | 26  | 0.13                        | 2.0                                 | 8.2                                 |

|   |    |      |     |     |
|---|----|------|-----|-----|
| 2 | 24 | 0.22 | 2.2 | 6.6 |
| 3 | 24 | 0.22 | 2.2 | 7.0 |
| 4 | 24 | 0.22 | 2.2 | 7.5 |
| 5 | 24 | 0.22 | 2.2 | 8.2 |
| 7 | 24 | 0.22 | 2.2 | 8.8 |

|   |    |      |      |     |
|---|----|------|------|-----|
| 2 | 22 | 0.34 | 2.35 | 6.9 |
| 3 | 22 | 0.34 | 2.35 | 7.3 |
| 4 | 22 | 0.34 | 2.35 | 8.0 |
| 5 | 22 | 0.34 | 2.35 | 8.6 |
| 7 | 22 | 0.34 | 2.35 | 9.3 |

|   |   |     |     |     |
|---|---|-----|-----|-----|
| 2 | - | 0.5 | 2.5 | 7.2 |
| 3 | - | 0.5 | 2.5 | 7.6 |
| 4 | - | 0.5 | 2.5 | 8.3 |
| 5 | - | 0.5 | 2.5 | 9.0 |
| 7 | - | 0.5 | 2.5 | 9.7 |

|   |    |     |     |     |
|---|----|-----|-----|-----|
| 2 | 20 | 0.6 | 2.5 | 7.2 |
| 3 | 20 | 0.6 | 2.5 | 7.8 |
| 4 | 20 | 0.6 | 2.5 | 8.3 |
| 5 | 20 | 0.6 | 2.5 | 9.0 |
| 7 | 20 | 0.6 | 2.5 | 9.7 |

|   |   |      |     |      |
|---|---|------|-----|------|
| 2 | - | 0.75 | 2.7 | 7.6  |
| 3 | - | 0.75 | 2.7 | 8.1  |
| 4 | - | 0.75 | 2.7 | 8.7  |
| 5 | - | 0.75 | 2.7 | 9.5  |
| 7 | - | 0.75 | 2.7 | 10.3 |

|   |    |      |     |      |
|---|----|------|-----|------|
| 2 | 18 | 0.93 | 2.8 | 7.8  |
| 3 | 18 | 0.93 | 2.8 | 8.3  |
| 4 | 18 | 0.93 | 2.8 | 9.0  |
| 5 | 18 | 0.93 | 2.8 | 9.8  |
| 7 | 18 | 0.93 | 2.8 | 10.6 |

|   |   |   |     |      |
|---|---|---|-----|------|
| 2 | - | 1 | 2.9 | 8.0  |
| 3 | - | 1 | 2.9 | 8.5  |
| 4 | - | 1 | 2.9 | 9.2  |
| 5 | - | 1 | 2.9 | 10.1 |
| 7 | - | 1 | 2.9 | 10.9 |

|   |    |      |     |      |
|---|----|------|-----|------|
| 2 | 16 | 1.34 | 3.1 | 8.4  |
| 3 | 16 | 1.34 | 3.1 | 8.9  |
| 4 | 16 | 1.34 | 3.1 | 9.7  |
| 5 | 16 | 1.34 | 3.1 | 10.6 |
| 7 | 16 | 1.34 | 3.1 | 11.5 |

|   |   |     |     |      |
|---|---|-----|-----|------|
| 2 | - | 1.5 | 3.2 | 8.6  |
| 3 | - | 1.5 | 3.2 | 9.2  |
| 4 | - | 1.5 | 3.2 | 10.0 |
| 5 | - | 1.5 | 3.2 | 10.9 |
| 7 | - | 1.5 | 3.2 | 11.8 |

|   |    |   |     |      |
|---|----|---|-----|------|
| 2 | 14 | - | 3.4 | 9.0  |
| 3 | 14 | - | 3.4 | 9.6  |
| 4 | 14 | - | 3.4 | 10.4 |
| 5 | 14 | - | 3.4 | 11.4 |
| 7 | 14 | - | 3.4 | 12.4 |

Conducting metal

BCDEFG

### 4476-S150

#### 150°C - 300 V

Internal wiring  
External wiring

| Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) |
|-------------------------------------|-------------------------------------|-------------------------------------|
| 1.2                                 | 3.9                                 | 4.6                                 |
| 1.2                                 | 4.1                                 | 4.8                                 |
| 1.2                                 | 4.4                                 | 5.1                                 |
| 1.2                                 | 4.7                                 | 5.5                                 |
| 1.2                                 | 5.1                                 | 5.8                                 |

|     |     |     |
|-----|-----|-----|
| 1.4 | 4.3 | 5.0 |
| 1.4 | 4.5 | 5.3 |
| 1.4 | 4.8 | 5.6 |
| 1.4 | 5.3 | 6.0 |
| 1.4 | 5.7 | 6.4 |

|      |     |     |
|------|-----|-----|
| 1.55 | 4.6 | 5.3 |
| 1.55 | 4.8 | 5.6 |
| 1.55 | 5.2 | 6.0 |
| 1.55 | 5.7 | 6.4 |
| 1.55 | 6.1 | 6.9 |

|     |     |     |
|-----|-----|-----|
| 1.7 | 4.9 | 5.6 |
| 1.7 | 5.1 | 5.9 |
| 1.7 | 5.6 | 6.3 |
| 1.7 | 6.1 | 6.8 |
| 1.7 | 6.6 | 7.3 |

|      |     |     |
|------|-----|-----|
| 1.75 | 5.0 | 5.7 |
| 1.75 | 5.3 | 6.0 |
| 1.75 | 5.7 | 6.5 |
| 1.75 | 6.2 | 7.0 |
| 1.75 | 6.7 | 7.5 |

|     |     |     |
|-----|-----|-----|
| 1.9 | 5.3 | 6.0 |
| 1.9 | 5.6 | 6.3 |
| 1.9 | 6.1 | 6.8 |
| 1.9 | 6.6 | 7.4 |
| 1.9 | 7.2 | 7.9 |

|     |     |     |
|-----|-----|-----|
| 2.0 | 5.5 | 6.2 |
| 2.0 | 5.8 | 6.6 |
| 2.0 | 6.3 | 7.1 |
| 2.0 | 6.9 | 7.6 |
| 2.0 | 7.5 | 8.2 |

|     |     |     |
|-----|-----|-----|
| 2.1 | 5.7 | 6.4 |
| 2.1 | 6.0 | 6.8 |
| 2.1 | 6.5 | 7.3 |
| 2.1 | 7.1 | 7.9 |
| 2.1 | 7.8 | 8.5 |

|     |     |     |
|-----|-----|-----|
| 2.3 | 6.1 | 6.8 |
| 2.3 | 6.4 | 7.2 |
| 2.3 | 7.0 | 7.8 |
| 2.3 | 7.7 | 8.4 |
| 2.3 | 8.4 | 9.1 |

|     |     |     |
|-----|-----|-----|
| 2.4 | 6.3 | 7.0 |
| 2.4 | 6.7 | 7.4 |
| 2.4 | 7.3 | 8.0 |
| 2.4 | 8.0 | 8.7 |
| 2.4 | 8.7 | 9.4 |

|      |     |      |
|------|-----|------|
| 2.65 | 6.8 | 7.5  |
| 2.65 | 7.2 | 8.0  |
| 2.65 | 7.9 | 8.6  |
| 2.65 | 8.6 | 9.4  |
| 2.65 | 9.4 | 10.2 |

BCDEFG

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| Style no.        |     |                                          | 4476-S150                           |                                     |                                     | 4476-S150                           |                                     |                                     |
|------------------|-----|------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Approval         |     |                                          | 150°C - 600 V                       |                                     |                                     | 150°C - 1 000 V (cUL 600 V)         |                                     |                                     |
|                  |     |                                          | AWM I A<br>(Wall 0.76 mm)           |                                     |                                     | AWM I A<br>(Wall 0.76 mm)           |                                     |                                     |
|                  |     |                                          | AWM II A/B<br>(Wall 1.14 mm)        |                                     |                                     | AWM II A/B<br>(Wall 1.14 mm)        |                                     |                                     |
| No. of cond.     | AWG | Nominal cross-section (mm <sup>2</sup> ) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) |
| 2                | 26  | 0.13                                     | 2.0                                 | 5.5                                 | 6.2                                 | 2.8                                 | 7.1                                 | 7.8                                 |
| 3                | 26  | 0.13                                     | 2.0                                 | 5.8                                 | 6.6                                 | 2.8                                 | 7.5                                 | 8.3                                 |
| 4                | 26  | 0.13                                     | 2.0                                 | 6.3                                 | 7.1                                 | 2.8                                 | 8.2                                 | 9.0                                 |
| 5                | 26  | 0.13                                     | 2.0                                 | 6.9                                 | 7.6                                 | 2.8                                 | 9.0                                 | 9.8                                 |
| 7                | 26  | 0.13                                     | 2.0                                 | 7.5                                 | 8.2                                 | 2.8                                 | 9.9                                 | 10.6                                |
| 2                | 24  | 0.22                                     | 2.2                                 | 5.9                                 | 6.6                                 | 2.9                                 | 7.3                                 | 8.0                                 |
| 3                | 24  | 0.22                                     | 2.2                                 | 6.2                                 | 7.0                                 | 2.9                                 | 7.7                                 | 8.5                                 |
| 4                | 24  | 0.22                                     | 2.2                                 | 6.8                                 | 7.5                                 | 2.9                                 | 8.5                                 | 9.2                                 |
| 5                | 24  | 0.22                                     | 2.2                                 | 7.4                                 | 8.2                                 | 2.9                                 | 9.3                                 | 10.1                                |
| 7                | 24  | 0.22                                     | 2.2                                 | 8.1                                 | 8.8                                 | 2.9                                 | 10.2                                | 10.9                                |
| 2                | 22  | 0.34                                     | 2.35                                | 6.2                                 | 6.9                                 | 3.05                                | 7.6                                 | 8.3                                 |
| 3                | 22  | 0.34                                     | 2.35                                | 6.5                                 | 7.3                                 | 3.05                                | 8.1                                 | 8.8                                 |
| 4                | 22  | 0.34                                     | 2.35                                | 7.1                                 | 7.9                                 | 3.05                                | 8.8                                 | 9.6                                 |
| 5                | 22  | 0.34                                     | 2.35                                | 7.8                                 | 8.6                                 | 3.05                                | 9.7                                 | 10.5                                |
| 7                | 22  | 0.34                                     | 2.35                                | 8.5                                 | 9.3                                 | 3.05                                | 10.6                                | 11.4                                |
| 2                | -   | 0.5                                      | 2.5                                 | 6.5                                 | 7.2                                 | 3.2                                 | 7.9                                 | 8.6                                 |
| 3                | -   | 0.5                                      | 2.5                                 | 6.9                                 | 7.6                                 | 3.2                                 | 8.4                                 | 9.2                                 |
| 4                | -   | 0.5                                      | 2.5                                 | 7.5                                 | 8.3                                 | 3.2                                 | 9.2                                 | 10.0                                |
| 5                | -   | 0.5                                      | 2.5                                 | 8.2                                 | 9.0                                 | 3.2                                 | 10.1                                | 10.9                                |
| 7                | -   | 0.5                                      | 2.5                                 | 9.0                                 | 9.7                                 | 3.2                                 | 11.1                                | 11.8                                |
| 2                | 20  | 0.6                                      | 2.5                                 | 6.5                                 | 7.2                                 | 3.4                                 | 8.3                                 | 9.0                                 |
| 3                | 20  | 0.6                                      | 2.5                                 | 6.9                                 | 7.6                                 | 3.4                                 | 8.8                                 | 9.6                                 |
| 4                | 20  | 0.6                                      | 2.5                                 | 7.5                                 | 8.3                                 | 3.4                                 | 9.7                                 | 10.4                                |
| 5                | 20  | 0.6                                      | 2.5                                 | 8.2                                 | 9.0                                 | 3.4                                 | 10.7                                | 11.4                                |
| 7                | 20  | 0.6                                      | 2.5                                 | 9.0                                 | 9.7                                 | 3.4                                 | 11.7                                | 12.4                                |
| 2                | -   | 0.75                                     | 2.7                                 | 6.9                                 | 7.6                                 | 3.5                                 | 8.5                                 | 9.2                                 |
| 3                | -   | 0.75                                     | 2.7                                 | 7.3                                 | 8.1                                 | 3.5                                 | 9.0                                 | 9.8                                 |
| 4                | -   | 0.75                                     | 2.7                                 | 8.0                                 | 8.7                                 | 3.5                                 | 9.9                                 | 10.7                                |
| 5                | -   | 0.75                                     | 2.7                                 | 8.8                                 | 9.5                                 | 3.5                                 | 10.9                                | 11.7                                |
| 7                | -   | 0.75                                     | 2.7                                 | 9.6                                 | 10.3                                | 3.5                                 | 12.0                                | 12.7                                |
| 2                | 18  | 0.93                                     | 2.8                                 | 7.1                                 | 7.8                                 | 3.6                                 | 8.7                                 | 9.4                                 |
| 3                | 18  | 0.93                                     | 2.8                                 | 7.5                                 | 8.3                                 | 3.6                                 | 9.3                                 | 10.0                                |
| 4                | 18  | 0.93                                     | 2.8                                 | 8.2                                 | 9.0                                 | 3.6                                 | 10.2                                | 10.9                                |
| 5                | 18  | 0.93                                     | 2.8                                 | 9.0                                 | 9.8                                 | 3.6                                 | 11.2                                | 12.0                                |
| 7                | 18  | 0.93                                     | 2.8                                 | 9.9                                 | 10.6                                | 3.6                                 | 12.3                                | 13.0                                |
| 2                | -   | 1                                        | 2.9                                 | 7.3                                 | 8.0                                 | 3.7                                 | 8.9                                 | 9.6                                 |
| 3                | -   | 1                                        | 2.9                                 | 7.7                                 | 8.5                                 | 3.7                                 | 9.5                                 | 10.2                                |
| 4                | -   | 1                                        | 2.9                                 | 8.5                                 | 9.2                                 | 3.7                                 | 10.4                                | 11.2                                |
| 5                | -   | 1                                        | 2.9                                 | 9.3                                 | 10.1                                | 3.7                                 | 11.5                                | 12.2                                |
| 7                | -   | 1                                        | 2.9                                 | 10.2                                | 10.9                                | 3.7                                 | 12.6                                | 13.3                                |
| 2                | 16  | 1.34                                     | 3.1                                 | 7.7                                 | 8.4                                 | 3.8                                 | 9.1                                 | 9.8                                 |
| 3                | 16  | 1.34                                     | 3.1                                 | 8.2                                 | 8.9                                 | 3.8                                 | 9.7                                 | 10.4                                |
| 4                | 16  | 1.34                                     | 3.1                                 | 9.0                                 | 9.7                                 | 3.8                                 | 10.6                                | 11.4                                |
| 5                | 16  | 1.34                                     | 3.1                                 | 9.9                                 | 10.6                                | 3.8                                 | 11.7                                | 12.5                                |
| 7                | 16  | 1.34                                     | 3.1                                 | 10.8                                | 11.5                                | 3.8                                 | 12.9                                | 13.6                                |
| 2                | -   | 1.5                                      | 3.2                                 | 7.9                                 | 8.6                                 | 4.0                                 | 9.5                                 | 10.2                                |
| 3                | -   | 1.5                                      | 3.2                                 | 8.4                                 | 9.2                                 | 4.0                                 | 10.1                                | 10.9                                |
| 4                | -   | 1.5                                      | 3.2                                 | 9.2                                 | 10.0                                | 4.0                                 | 11.1                                | 11.9                                |
| 5                | -   | 1.5                                      | 3.2                                 | 10.1                                | 10.9                                | 4.0                                 | 12.3                                | 13.0                                |
| 7                | -   | 1.5                                      | 3.2                                 | 11.1                                | 11.8                                | 4.0                                 | 13.5                                | 14.2                                |
| 2                | 14  | -                                        | 3.4                                 | 8.3                                 | 9.0                                 | 4.3                                 | 10.1                                | 10.8                                |
| 3                | 14  | -                                        | 3.4                                 | 8.8                                 | 9.6                                 | 4.3                                 | 10.8                                | 11.5                                |
| 4                | 14  | -                                        | 3.4                                 | 9.7                                 | 10.4                                | 4.3                                 | 11.8                                | 12.6                                |
| 5                | 14  | -                                        | 3.4                                 | 10.7                                | 11.4                                | 4.3                                 | 13.1                                | 13.9                                |
| 7                | 14  | -                                        | 3.4                                 | 11.7                                | 12.4                                | 4.3                                 | 14.4                                | 15.1                                |
| Conducting metal |     |                                          | BCDEFG                              |                                     |                                     | BCDEFG                              |                                     |                                     |

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

## SILICABLE® 200°C

**Silicone insulation  
Silicone sheathing  
UL and cUL approval**



### Characteristics General

- Continuous operating temperatures: -60°C to +200°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved silicone insulated conductors ( $\geq 200^\circ\text{C}$ ).
- Standard outer sheath colours: black or brick red.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "Cable flame test" as per UL approval (AWM II A/B only).
- "FT2 flame rating" as per cUL approval.
- "FT1 flame rating" as per cUL approval (AMW II A/B only).
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Output cables for household and professional electrical heating appliances.
- Cabling for electrical heating appliances, etc.

### Options

- Other numbers of conductors and nominal cross-sections: contact us.
- Other colours: contact us.
- Electrical shielding: contact us.
- VW-1 Vertical flame test for Style 4389-S200: contact us.

#### KEY

Conducting metals  
B Tin-plated copper  
B\* Tin-plated copper ( $\phi > 0.38 \text{ mm}$ )  
C Nickel-plated copper  
D Silver-plated copper  
E Nickel  
F Bare copper  
F\* Bare copper ( $\phi > 0.38 \text{ mm}$ )  
G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse  
AWM I A/B Internal wiring  
AWM II A/B External or Internal wiring

NS Not Specified  
VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.  
Only the average thickness of insulation should be taken into account.

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

**omerin**  
LES CABLES DE L'EXTREME

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • UL and cUL approved conductors with a silicone insulation.
- 2 • Outer sheath: Silicone rubber.

### Style no. 4389-S200

#### Approval

#### 200°C - 600 V

AWM II A/B  
(Wall 1.14 mm)

| No. of cond. | Nominal cross-section (mm <sup>2</sup> ) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) |
|--------------|------------------------------------------|-------------------------------------|-------------------------------------|
| 2            | 26                                       | 0.13                                | 2.0                                 |
| 3            | 26                                       | 0.13                                | 2.0                                 |
| 4            | 26                                       | 0.13                                | 2.0                                 |
| 5            | 26                                       | 0.13                                | 2.0                                 |
| 7            | 26                                       | 0.13                                | 2.0                                 |

|   |    |      |     |
|---|----|------|-----|
| 2 | 24 | 0.22 | 2.1 |
| 3 | 24 | 0.22 | 2.1 |
| 4 | 24 | 0.22 | 2.1 |
| 5 | 24 | 0.22 | 2.1 |
| 7 | 24 | 0.22 | 2.1 |

|   |    |      |     |
|---|----|------|-----|
| 2 | 22 | 0.34 | 2.4 |
| 3 | 22 | 0.34 | 2.4 |
| 4 | 22 | 0.34 | 2.4 |
| 5 | 22 | 0.34 | 2.4 |
| 7 | 22 | 0.34 | 2.4 |

|   |   |     |     |
|---|---|-----|-----|
| 2 | - | 0.5 | 2.5 |
| 3 | - | 0.5 | 2.5 |
| 4 | - | 0.5 | 2.5 |
| 5 | - | 0.5 | 2.5 |
| 7 | - | 0.5 | 2.5 |

|   |    |     |     |
|---|----|-----|-----|
| 2 | 20 | 0.6 | 2.6 |
| 3 | 20 | 0.6 | 2.6 |
| 4 | 20 | 0.6 | 2.6 |
| 5 | 20 | 0.6 | 2.6 |
| 7 | 20 | 0.6 | 2.6 |

|   |   |      |      |
|---|---|------|------|
| 2 | - | 0.75 | 2.65 |
| 3 | - | 0.75 | 2.65 |
| 4 | - | 0.75 | 2.65 |
| 5 | - | 0.75 | 2.65 |
| 7 | - | 0.75 | 2.65 |

|   |    |      |     |
|---|----|------|-----|
| 2 | 18 | 0.93 | 2.7 |
| 3 | 18 | 0.93 | 2.7 |
| 4 | 18 | 0.93 | 2.7 |
| 5 | 18 | 0.93 | 2.7 |
| 7 | 18 | 0.93 | 2.7 |

|   |   |   |     |
|---|---|---|-----|
| 2 | - | 1 | 2.8 |
| 3 | - | 1 | 2.8 |
| 4 | - | 1 | 2.8 |
| 5 | - | 1 | 2.8 |
| 7 | - | 1 | 2.8 |

|   |    |      |      |
|---|----|------|------|
| 2 | 16 | 1.34 | 3.05 |
| 3 | 16 | 1.34 | 3.05 |
| 4 | 16 | 1.34 | 3.05 |
| 5 | 16 | 1.34 | 3.05 |
| 7 | 16 | 1.34 | 3.05 |

|   |   |     |     |
|---|---|-----|-----|
| 2 | - | 1.5 | 3.1 |
| 3 | - | 1.5 | 3.1 |
| 4 | - | 1.5 | 3.1 |
| 5 | - | 1.5 | 3.1 |
| 7 | - | 1.5 | 3.1 |

|   |    |   |     |
|---|----|---|-----|
| 2 | 14 | - | 3.6 |
| 3 | 14 | - | 3.6 |
| 4 | 14 | - | 3.6 |
| 5 | 14 | - | 3.6 |
| 7 | 14 | - | 3.6 |

Conducting metal

B\*CDEF\*G

### 4421-S200

#### Approval

AWM II A/B  
(Wall 1.52 mm)

| No. of cond. | Nominal cross-section (mm <sup>2</sup> ) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) |
|--------------|------------------------------------------|-------------------------------------|-------------------------------------|
| 2            | 26                                       | 0.13                                | 2.0                                 |
| 3            | 26                                       | 0.13                                | 2.0                                 |
| 4            | 26                                       | 0.13                                | 2.0                                 |
| 5            | 26                                       | 0.13                                | 2.0                                 |
| 7            | 26                                       | 0.13                                | 2.0                                 |

|   |    |      |     |
|---|----|------|-----|
| 2 | 24 | 0.22 | 2.1 |
| 3 | 24 | 0.22 | 2.1 |
| 4 | 24 | 0.22 | 2.1 |
| 5 | 24 | 0.22 | 2.1 |
| 7 | 24 | 0.22 | 2.1 |

|   |    |      |     |
|---|----|------|-----|
| 2 | 22 | 0.34 | 2.4 |
| 3 | 22 | 0.34 | 2.4 |
| 4 | 22 | 0.34 | 2.4 |
| 5 | 22 | 0.34 | 2.4 |
| 7 | 22 | 0.34 | 2.4 |

|   |   |     |     |
|---|---|-----|-----|
| 2 | - | 0.5 | 2.5 |
| 3 | - | 0.5 | 2.5 |
| 4 | - | 0.5 | 2.5 |
| 5 | - | 0.5 | 2.5 |
| 7 | - | 0.5 | 2.5 |

|   |    |     |     |
|---|----|-----|-----|
| 2 | 20 | 0.6 | 2.6 |
| 3 | 20 | 0.6 | 2.6 |
| 4 | 20 | 0.6 | 2.6 |
| 5 | 20 | 0.6 | 2.6 |
| 7 | 20 | 0.6 | 2.6 |

|   |   |      |      |
|---|---|------|------|
| 2 | - | 0.75 | 2.65 |
| 3 | - | 0.75 | 2.65 |
| 4 | - | 0.75 | 2.65 |
| 5 | - | 0.75 | 2.65 |
| 7 | - | 0.75 | 2.65 |

|   |    |      |     |
|---|----|------|-----|
| 2 | 18 | 0.93 | 2.7 |
| 3 | 18 | 0.93 | 2.7 |
| 4 | 18 | 0.93 | 2.7 |
| 5 | 18 | 0.93 | 2.7 |
| 7 | 18 | 0.93 | 2.7 |

|   |   |   |     |
|---|---|---|-----|
| 2 | - | 1 | 2.8 |
| 3 | - | 1 | 2.8 |
| 4 | - | 1 | 2.8 |
| 5 | - | 1 | 2.8 |
| 7 | - | 1 | 2.8 |

|   |    |      |      |
|---|----|------|------|
| 2 | 16 | 1.34 | 3.05 |
| 3 | 16 | 1.34 | 3.05 |
| 4 | 16 | 1.34 | 3.05 |
| 5 | 16 | 1.34 | 3.05 |
| 7 | 16 | 1.34 | 3.05 |

|   |   |     |     |
|---|---|-----|-----|
| 2 | - | 1.5 | 3.1 |
| 3 | - | 1.5 | 3.1 |
| 4 | - | 1.5 | 3.1 |
| 5 | - | 1.5 | 3.1 |
| 7 | - | 1.5 | 3.1 |

|   |    |   |     |
|---|----|---|-----|
| 2 | 14 | - | 3.6 |
| 3 | 14 | - | 3.6 |
| 4 | 14 | - | 3.6 |
| 5 | 14 | - | 3.6 |
| 7 | 14 | - | 3.6 |

B\*CDEF\*G

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| Style no.        |     |                             | 4476-S200                           |                                     |                                     | 4476-S200                           |                                     |                                     | 4476-S200                           |                                     |                                     |
|------------------|-----|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Approval         |     |                             | 200°C – 300 V                       |                                     |                                     | 200°C – 600 V                       |                                     |                                     | 200°C – 1 000 V (cUL 600 V)         |                                     |                                     |
|                  |     |                             | AWM I A<br>(Wall 0.76 mm)           |                                     |                                     | AWM II A/B<br>(Wall 1.14 mm)        |                                     |                                     | AWM I A<br>(Wall 0.76 mm)           |                                     |                                     |
|                  |     |                             | AWM II A/B<br>(Wall 1.14 mm)        |                                     |                                     | AWM I A<br>(Wall 0.76 mm)           |                                     |                                     | AWM II A/B<br>(Wall 1.14 mm)        |                                     |                                     |
| No. of cond.     | AWG | Nominal cross-section (mm²) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) |
| 2                | 26  | 0.13                        | 1.2                                 | 3.9                                 | 4.6                                 | 2.0                                 | 5.5                                 | 6.2                                 | 2.0                                 | 5.5                                 | 6.2                                 |
| 3                | 26  | 0.13                        | 1.2                                 | 4.1                                 | 4.8                                 | 2.0                                 | 5.8                                 | 6.6                                 | 2.0                                 | 5.8                                 | 6.6                                 |
| 4                | 26  | 0.13                        | 1.2                                 | 4.4                                 | 5.1                                 | 2.0                                 | 6.3                                 | 7.1                                 | 2.0                                 | 6.3                                 | 7.1                                 |
| 5                | 26  | 0.13                        | 1.2                                 | 4.7                                 | 5.5                                 | 2.0                                 | 6.9                                 | 7.6                                 | 2.0                                 | 6.9                                 | 7.6                                 |
| 7                | 26  | 0.13                        | 1.2                                 | 5.1                                 | 5.8                                 | 2.0                                 | 7.5                                 | 8.2                                 | 2.0                                 | 7.5                                 | 8.2                                 |
| 2                | 24  | 0.22                        | 1.4                                 | 4.3                                 | 5.0                                 | 2.1                                 | 5.7                                 | 6.4                                 | 2.1                                 | 5.7                                 | 6.4                                 |
| 3                | 24  | 0.22                        | 1.4                                 | 4.5                                 | 5.3                                 | 2.1                                 | 6.0                                 | 6.8                                 | 2.1                                 | 6.0                                 | 6.8                                 |
| 4                | 24  | 0.22                        | 1.4                                 | 4.8                                 | 5.6                                 | 2.1                                 | 6.5                                 | 7.3                                 | 2.1                                 | 6.5                                 | 7.3                                 |
| 5                | 24  | 0.22                        | 1.4                                 | 5.3                                 | 6.0                                 | 2.1                                 | 7.2                                 | 7.9                                 | 2.1                                 | 7.2                                 | 7.9                                 |
| 7                | 24  | 0.22                        | 1.4                                 | 5.7                                 | 6.4                                 | 2.1                                 | 7.8                                 | 8.5                                 | 2.1                                 | 7.8                                 | 8.5                                 |
| 2                | 22  | 0.34                        | 1.6                                 | 4.7                                 | 5.4                                 | 2.4                                 | 6.3                                 | 7.0                                 | 2.4                                 | 6.3                                 | 7.0                                 |
| 3                | 22  | 0.34                        | 1.6                                 | 4.9                                 | 5.7                                 | 2.4                                 | 6.7                                 | 7.4                                 | 2.4                                 | 6.7                                 | 7.4                                 |
| 4                | 22  | 0.34                        | 1.6                                 | 5.3                                 | 6.1                                 | 2.4                                 | 7.3                                 | 8.0                                 | 2.4                                 | 7.3                                 | 8.0                                 |
| 5                | 22  | 0.34                        | 1.6                                 | 5.8                                 | 6.6                                 | 2.4                                 | 8.0                                 | 8.7                                 | 2.4                                 | 8.0                                 | 8.7                                 |
| 7                | 22  | 0.34                        | 1.6                                 | 6.3                                 | 7.0                                 | 2.4                                 | 8.7                                 | 9.4                                 | 2.4                                 | 8.7                                 | 9.4                                 |
| 2                | -   | 0.5                         | 1.7                                 | 4.9                                 | 5.6                                 | 2.5                                 | 6.5                                 | 7.2                                 | 2.5                                 | 6.5                                 | 7.2                                 |
| 3                | -   | 0.5                         | 1.7                                 | 5.1                                 | 5.9                                 | 2.5                                 | 6.9                                 | 7.6                                 | 2.5                                 | 6.9                                 | 7.6                                 |
| 4                | -   | 0.5                         | 1.7                                 | 5.6                                 | 6.3                                 | 2.5                                 | 7.5                                 | 8.3                                 | 2.5                                 | 7.5                                 | 8.3                                 |
| 5                | -   | 0.5                         | 1.7                                 | 6.1                                 | 6.8                                 | 2.5                                 | 8.2                                 | 9.0                                 | 2.5                                 | 8.2                                 | 9.0                                 |
| 7                | -   | 0.5                         | 1.7                                 | 6.6                                 | 7.3                                 | 2.5                                 | 9.0                                 | 9.7                                 | 2.5                                 | 9.0                                 | 9.7                                 |
| 2                | 20  | 0.6                         | 1.8                                 | 5.1                                 | 5.8                                 | 2.6                                 | 6.7                                 | 7.4                                 | 2.6                                 | 6.7                                 | 7.4                                 |
| 3                | 20  | 0.6                         | 1.8                                 | 5.4                                 | 6.1                                 | 2.6                                 | 7.1                                 | 7.9                                 | 2.6                                 | 7.1                                 | 7.9                                 |
| 4                | 20  | 0.6                         | 1.8                                 | 5.8                                 | 6.6                                 | 2.6                                 | 7.7                                 | 8.5                                 | 2.6                                 | 7.7                                 | 8.5                                 |
| 5                | 20  | 0.6                         | 1.8                                 | 6.3                                 | 7.1                                 | 2.6                                 | 8.5                                 | 9.3                                 | 2.6                                 | 8.5                                 | 9.3                                 |
| 7                | 20  | 0.6                         | 1.8                                 | 6.9                                 | 7.6                                 | 2.6                                 | 9.3                                 | 10.0                                | 2.6                                 | 9.3                                 | 10.0                                |
| 2                | -   | 0.75                        | 1.9                                 | 5.3                                 | 6.0                                 | 2.65                                | 6.8                                 | 7.5                                 | 2.65                                | 6.8                                 | 7.5                                 |
| 3                | -   | 0.75                        | 1.9                                 | 5.6                                 | 6.3                                 | 2.65                                | 7.2                                 | 8.0                                 | 2.65                                | 7.2                                 | 8.0                                 |
| 4                | -   | 0.75                        | 1.9                                 | 6.1                                 | 6.8                                 | 2.65                                | 7.9                                 | 8.6                                 | 2.65                                | 7.9                                 | 8.6                                 |
| 5                | -   | 0.75                        | 1.9                                 | 6.6                                 | 7.4                                 | 2.65                                | 8.6                                 | 9.4                                 | 2.65                                | 8.6                                 | 9.4                                 |
| 7                | -   | 0.75                        | 1.9                                 | 7.2                                 | 7.9                                 | 2.65                                | 9.4                                 | 10.2                                | 2.65                                | 9.4                                 | 10.2                                |
| 2                | 18  | 0.93                        | 2.0                                 | 5.5                                 | 6.2                                 | 2.7                                 | 6.9                                 | 7.6                                 | 2.8                                 | 7.1                                 | 7.8                                 |
| 3                | 18  | 0.93                        | 2.0                                 | 5.8                                 | 6.6                                 | 2.7                                 | 7.3                                 | 8.1                                 | 2.8                                 | 7.5                                 | 8.3                                 |
| 4                | 18  | 0.93                        | 2.0                                 | 6.3                                 | 7.1                                 | 2.7                                 | 8.0                                 | 8.7                                 | 2.8                                 | 8.2                                 | 9.0                                 |
| 5                | 18  | 0.93                        | 2.0                                 | 6.9                                 | 7.6                                 | 2.7                                 | 8.8                                 | 9.5                                 | 2.8                                 | 9.0                                 | 9.8                                 |
| 7                | 18  | 0.93                        | 2.0                                 | 7.5                                 | 8.2                                 | 2.7                                 | 9.6                                 | 10.3                                | 2.8                                 | 9.9                                 | 10.6                                |
| 2                | -   | 1                           | 2.1                                 | 5.7                                 | 6.4                                 | 2.8                                 | 7.1                                 | 7.8                                 | 2.8                                 | 7.1                                 | 7.8                                 |
| 3                | -   | 1                           | 2.1                                 | 6.0                                 | 6.8                                 | 2.8                                 | 7.5                                 | 8.3                                 | 2.8                                 | 7.5                                 | 8.3                                 |
| 4                | -   | 1                           | 2.1                                 | 6.5                                 | 7.3                                 | 2.8                                 | 8.2                                 | 9.0                                 | 2.8                                 | 8.2                                 | 9.0                                 |
| 5                | -   | 1                           | 2.1                                 | 7.1                                 | 7.9                                 | 2.8                                 | 9.0                                 | 9.8                                 | 2.8                                 | 9.0                                 | 9.8                                 |
| 7                | -   | 1                           | 2.1                                 | 7.8                                 | 8.5                                 | 2.8                                 | 9.9                                 | 10.6                                | 2.8                                 | 9.9                                 | 10.6                                |
| 2                | 16  | 1.34                        | -                                   | -                                   | -                                   | 3.05                                | 7.6                                 | 8.3                                 | 3.05                                | 7.6                                 | 8.3                                 |
| 3                | 16  | 1.34                        | -                                   | -                                   | -                                   | 3.05                                | 8.1                                 | 8.8                                 | 3.05                                | 8.1                                 | 8.8                                 |
| 4                | 16  | 1.34                        | -                                   | -                                   | -                                   | 3.05                                | 8.8                                 | 9.6                                 | 3.05                                | 8.8                                 | 9.6                                 |
| 5                | 16  | 1.34                        | -                                   | -                                   | -                                   | 3.05                                | 9.7                                 | 10.5                                | 3.05                                | 9.7                                 | 10.5                                |
| 7                | 16  | 1.34                        | -                                   | -                                   | -                                   | 3.05                                | 10.6                                | 11.4                                | 3.05                                | 10.6                                | 11.4                                |
| 2                | -   | 1.5                         | -                                   | -                                   | -                                   | 3.1                                 | 7.7                                 | 8.4                                 | 3.1                                 | 7.7                                 | 8.4                                 |
| 3                | -   | 1.5                         | -                                   | -                                   | -                                   | 3.1                                 | 8.2                                 | 8.9                                 | 3.1                                 | 8.2                                 | 8.9                                 |
| 4                | -   | 1.5                         | -                                   | -                                   | -                                   | 3.1                                 | 9.0                                 | 9.7                                 | 3.1                                 | 9.0                                 | 9.7                                 |
| 5                | -   | 1.5                         | -                                   | -                                   | -                                   | 3.1                                 | 9.9                                 | 10.6                                | 3.1                                 | 9.9                                 | 10.6                                |
| 7                | -   | 1.5                         | -                                   | -                                   | -                                   | 3.1                                 | 10.8                                | 11.5                                | 3.1                                 | 10.8                                | 11.5                                |
| 2                | 14  | -                           | -                                   | -                                   | -                                   | 3.6                                 | 8.7                                 | 9.4                                 | 3.5                                 | 8.5                                 | 9.2                                 |
| 3                | 14  | -                           | -                                   | -                                   | -                                   | 3.6                                 | 9.3                                 | 10.0                                | 3.5                                 | 9.0                                 | 9.8                                 |
| 4                | 14  | -                           | -                                   | -                                   | -                                   | 3.6                                 | 10.2                                | 10.9                                | 3.5                                 | 9.9                                 | 10.7                                |
| 5                | 14  | -                           | -                                   | -                                   | -                                   | 3.6                                 | 11.2                                | 12.0                                | 3.5                                 | 10.9                                | 11.7                                |
| 7                | 14  | -                           | -                                   | -                                   | -                                   | 3.6                                 | 12.3                                | 13.0                                | 3.5                                 | 12.0                                | 12.7                                |
| Conducting metal |     |                             | B*CDEG                              |                                     |                                     | B*CDEF*G                            |                                     |                                     | B*CDEF*G                            |                                     |                                     |

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

## SILICABLE® 150°C Fluoropolymer insulation Silicone sheathing UL and cUL approval



### Characteristics General

- Continuous operating temperatures: -60°C to +150°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved fluoropolymer insulated conductors ( $\geq 150^\circ\text{C}$ ).
- Standard outer sheath colours: black or brick red.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "Cable flame test" as per UL approval (AWM II A/B only).
- "FT2 flame rating" as per cUL approval.
- "FT1 flame rating" as per cUL approval (AMW II A/B only).

### Applications

- Output cables for household and professional electrical heating appliances.
- Cabling for electrical heating appliances, etc.

### Options

- Other numbers of conductors and nominal cross-sections: contact us.
- Other colours: contact us.
- Electrical shielding: contact us.
- VW-1 Vertical flame test for Style 4389-E150: contact us.

#### KEY

Conducting metals

B Tin-plated copper

B\* Tin-plated copper ( $\phi > 0.38 \text{ mm}$ )

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper ( $\phi > 0.38 \text{ mm}$ )

G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse  
AWM I A/B Internal wiring  
AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.

Only the average thickness of insulation should be taken into account.

For this product, please contact:

OMERIN division principale

Zone Industrielle - F 63600 Ambert

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silisol@omerin.com

**omerin**  
LES CABLES DE L'EXTREME

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • UL and cUL approved conductors with fluoropolymer insulation.
- 2 • Outer sheath: Silicone rubber.

Style no.  
Insulation  
Approval

4476-E150  
ETFE

150°C - 300 V

AWM I A  
(Wall 0.76 mm)

AWM II A/B  
(Wall 1.14 mm)

| No. of cond. | Nominal cross-section | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) |
|--------------|-----------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 2            | 26                    | 0.13                                | 0.75                                | 3.0                                 |
| 3            | 26                    | 0.13                                | 0.75                                | 3.1                                 |
| 4            | 26                    | 0.13                                | 0.75                                | 3.3                                 |
| 5            | 26                    | 0.13                                | 0.75                                | 3.5                                 |
| 7            | 26                    | 0.13                                | 0.75                                | 3.7                                 |
| 2            | 24                    | 0.22                                | 0.9                                 | 3.3                                 |
| 3            | 24                    | 0.22                                | 0.9                                 | 3.4                                 |
| 4            | 24                    | 0.22                                | 0.9                                 | 3.7                                 |
| 5            | 24                    | 0.22                                | 0.9                                 | 3.9                                 |
| 7            | 24                    | 0.22                                | 0.9                                 | 4.2                                 |
| 2            | 22                    | 0.34                                | 1.05                                | 3.6                                 |
| 3            | 22                    | 0.34                                | 1.05                                | 3.8                                 |
| 4            | 22                    | 0.34                                | 1.05                                | 4.0                                 |
| 5            | 22                    | 0.34                                | 1.05                                | 4.3                                 |
| 7            | 22                    | 0.34                                | 1.05                                | 4.6                                 |
| 2            | -                     | 0.5                                 | 1.25                                | 4.0                                 |
| 3            | -                     | 0.5                                 | 1.25                                | 4.2                                 |
| 4            | -                     | 0.5                                 | 1.25                                | 4.5                                 |
| 5            | -                     | 0.5                                 | 1.25                                | 4.9                                 |
| 7            | -                     | 0.5                                 | 1.25                                | 5.2                                 |
| 2            | 20                    | 0.6                                 | 1.3                                 | 4.1                                 |
| 3            | 20                    | 0.6                                 | 1.3                                 | 4.3                                 |
| 4            | 20                    | 0.6                                 | 1.3                                 | 4.6                                 |
| 5            | 20                    | 0.6                                 | 1.3                                 | 5.0                                 |
| 7            | 20                    | 0.6                                 | 1.3                                 | 5.4                                 |
| 2            | -                     | 0.75                                | 1.4                                 | 4.3                                 |
| 3            | -                     | 0.75                                | 1.4                                 | 4.5                                 |
| 4            | -                     | 0.75                                | 1.4                                 | 4.9                                 |
| 5            | -                     | 0.75                                | 1.4                                 | 5.3                                 |
| 7            | -                     | 0.75                                | 1.4                                 | 5.7                                 |
| 2            | 18                    | 0.93                                | 1.55                                | 4.6                                 |
| 3            | 18                    | 0.93                                | 1.55                                | 4.8                                 |
| 4            | 18                    | 0.93                                | 1.55                                | 5.2                                 |
| 5            | 18                    | 0.93                                | 1.55                                | 5.7                                 |
| 7            | 18                    | 0.93                                | 1.55                                | 6.1                                 |
| 2            | -                     | 1                                   | 1.65                                | 4.8                                 |
| 3            | -                     | 1                                   | 1.65                                | 5.1                                 |
| 4            | -                     | 1                                   | 1.65                                | 5.5                                 |
| 5            | -                     | 1                                   | 1.65                                | 6.0                                 |
| 7            | -                     | 1                                   | 1.65                                | 6.4                                 |
| 2            | 16                    | 1.34                                | 1.9                                 | 5.3                                 |
| 3            | 16                    | 1.34                                | 1.9                                 | 5.6                                 |
| 4            | 16                    | 1.34                                | 1.9                                 | 6.1                                 |
| 5            | 16                    | 1.34                                | 1.9                                 | 6.6                                 |
| 7            | 16                    | 1.34                                | 1.9                                 | 7.2                                 |
| 2            | -                     | 1.5                                 | 1.9                                 | 5.3                                 |
| 3            | -                     | 1.5                                 | 1.9                                 | 5.6                                 |
| 4            | -                     | 1.5                                 | 1.9                                 | 6.1                                 |
| 5            | -                     | 1.5                                 | 1.9                                 | 6.6                                 |
| 7            | -                     | 1.5                                 | 1.9                                 | 7.2                                 |
| 2            | 14                    | -                                   | 2.25                                | 6.0                                 |
| 3            | 14                    | -                                   | 2.25                                | 6.3                                 |
| 4            | 14                    | -                                   | 2.25                                | 6.9                                 |
| 5            | 14                    | -                                   | 2.25                                | 7.6                                 |
| 7            | 14                    | -                                   | 2.25                                | 8.2                                 |

Conducting metal

BCDEG

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| Style no.<br>Insulation<br>Approval |     |                             | 4476-E150<br>ETFE                   |                                     | 4476-E150<br>ETFE "Thin-wall"       |                                     | 4389-E150<br>ETFE                   |                                     | 4389-E150<br>ETFE "Thin-wall"       |                                     | 4476-E150<br>ETFE                                         |                                     |                                     |
|-------------------------------------|-----|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------------------------------------|-------------------------------------|-------------------------------------|
|                                     |     |                             | 150°C - 600 V                       |                                     | 150°C - 600 V                       |                                     | 150°C - 600 V                       |                                     | 150°C - 600 V                       |                                     | 150°C - 1 000 V (cUL 600 V)                               |                                     |                                     |
|                                     |     |                             | AWM I A<br>(Wall 0.76 mm)           |                                     | AWM I A<br>(Wall 0.76 mm)           |                                     | AWM II A/B<br>(Wall 1.14 mm)        |                                     | AWM II A/B<br>(Wall 1.14 mm)        |                                     | AWM I A<br>(Wall 0.76 mm)    AWM II A/B<br>(Wall 1.14 mm) |                                     |                                     |
| No. of cond.                        | AWG | Nominal cross-section (mm²) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm)                       | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) |
| 2                                   | 26  | 0.13                        | 1.05                                | 3.6                                 | -                                   | -                                   | 1.05                                | 4.3                                 | -                                   | -                                   | 1.55                                                      | 4.6                                 | 5.3                                 |
| 3                                   | 26  | 0.13                        | 1.05                                | 3.8                                 | -                                   | -                                   | 1.05                                | 4.5                                 | -                                   | -                                   | 1.55                                                      | 4.8                                 | 5.6                                 |
| 4                                   | 26  | 0.13                        | 1.05                                | 4.0                                 | -                                   | -                                   | 1.05                                | 4.8                                 | -                                   | -                                   | 1.55                                                      | 5.2                                 | 6.0                                 |
| 5                                   | 26  | 0.13                        | 1.05                                | 4.3                                 | -                                   | -                                   | 1.05                                | 5.1                                 | -                                   | -                                   | 1.55                                                      | 5.7                                 | 6.4                                 |
| 7                                   | 26  | 0.13                        | 1.05                                | 4.6                                 | -                                   | -                                   | 1.05                                | 5.4                                 | -                                   | -                                   | 1.55                                                      | 6.1                                 | 6.9                                 |
| 2                                   | 24  | 0.22                        | 1.15                                | 3.8                                 | 0.9                                 | 3.3                                 | 1.15                                | 4.5                                 | 0.9                                 | 4.0                                 | 1.65                                                      | 4.8                                 | 5.5                                 |
| 3                                   | 24  | 0.22                        | 1.15                                | 4.0                                 | 0.9                                 | 3.4                                 | 1.15                                | 4.7                                 | 0.9                                 | 4.2                                 | 1.65                                                      | 5.0                                 | 5.8                                 |
| 4                                   | 24  | 0.22                        | 1.15                                | 4.3                                 | 0.9                                 | 3.6                                 | 1.15                                | 5.0                                 | 0.9                                 | 4.4                                 | 1.65                                                      | 5.5                                 | 6.2                                 |
| 5                                   | 24  | 0.22                        | 1.15                                | 4.6                                 | 0.9                                 | 3.9                                 | 1.15                                | 5.3                                 | 0.9                                 | 4.7                                 | 1.65                                                      | 5.9                                 | 6.7                                 |
| 7                                   | 24  | 0.22                        | 1.15                                | 4.9                                 | 0.9                                 | 4.2                                 | 1.15                                | 5.7                                 | 0.9                                 | 5.0                                 | 1.65                                                      | 6.4                                 | 7.2                                 |
| 2                                   | 22  | 0.34                        | 1.3                                 | 4.1                                 | 1.05                                | 3.6                                 | 1.3                                 | 4.8                                 | 1.05                                | 4.3                                 | 1.8                                                       | 5.1                                 | 5.8                                 |
| 3                                   | 22  | 0.34                        | 1.3                                 | 4.3                                 | 1.05                                | 3.7                                 | 1.3                                 | 5.1                                 | 1.05                                | 4.5                                 | 1.8                                                       | 5.4                                 | 6.1                                 |
| 4                                   | 22  | 0.34                        | 1.3                                 | 4.6                                 | 1.05                                | 4.0                                 | 1.3                                 | 5.4                                 | 1.05                                | 4.8                                 | 1.8                                                       | 5.8                                 | 6.6                                 |
| 5                                   | 22  | 0.34                        | 1.3                                 | 5.0                                 | 1.05                                | 4.3                                 | 1.3                                 | 5.8                                 | 1.05                                | 5.1                                 | 1.8                                                       | 6.3                                 | 7.1                                 |
| 7                                   | 22  | 0.34                        | 1.3                                 | 5.4                                 | 1.05                                | 4.6                                 | 1.3                                 | 6.2                                 | 1.05                                | 5.4                                 | 1.8                                                       | 6.9                                 | 7.6                                 |
| 2                                   | -   | 0.5                         | 1.4                                 | 4.3                                 | 1.25                                | 4.0                                 | 1.4                                 | 5.0                                 | 1.25                                | 4.7                                 | 1.95                                                      | 5.4                                 | 6.1                                 |
| 3                                   | -   | 0.5                         | 1.4                                 | 4.5                                 | 1.25                                | 4.2                                 | 1.4                                 | 5.3                                 | 1.25                                | 4.9                                 | 1.95                                                      | 5.7                                 | 6.5                                 |
| 4                                   | -   | 0.5                         | 1.4                                 | 4.9                                 | 1.25                                | 4.5                                 | 1.4                                 | 5.6                                 | 1.25                                | 5.3                                 | 1.95                                                      | 6.2                                 | 6.9                                 |
| 5                                   | -   | 0.5                         | 1.4                                 | 5.3                                 | 1.25                                | 4.9                                 | 1.4                                 | 6.0                                 | 1.25                                | 5.6                                 | 1.95                                                      | 6.7                                 | 7.5                                 |
| 7                                   | -   | 0.5                         | 1.4                                 | 5.7                                 | 1.25                                | 5.2                                 | 1.4                                 | 6.4                                 | 1.25                                | 6.0                                 | 1.95                                                      | 7.3                                 | 8.1                                 |
| 2                                   | 20  | 0.6                         | 1.5                                 | 4.5                                 | 1.35                                | 4.2                                 | 1.5                                 | 5.2                                 | 1.35                                | 4.9                                 | 2.0                                                       | 5.5                                 | 6.2                                 |
| 3                                   | 20  | 0.6                         | 1.5                                 | 4.7                                 | 1.35                                | 4.4                                 | 1.5                                 | 5.5                                 | 1.35                                | 5.2                                 | 2.0                                                       | 5.8                                 | 6.6                                 |
| 4                                   | 20  | 0.6                         | 1.5                                 | 5.1                                 | 1.35                                | 4.7                                 | 1.5                                 | 5.9                                 | 1.35                                | 5.5                                 | 2.0                                                       | 6.3                                 | 7.1                                 |
| 5                                   | 20  | 0.6                         | 1.5                                 | 5.5                                 | 1.35                                | 5.1                                 | 1.5                                 | 6.3                                 | 1.35                                | 5.9                                 | 2.0                                                       | 6.9                                 | 7.6                                 |
| 7                                   | 20  | 0.6                         | 1.5                                 | 6.0                                 | 1.35                                | 5.5                                 | 1.5                                 | 6.7                                 | 1.35                                | 6.3                                 | 2.0                                                       | 7.5                                 | 8.2                                 |
| 2                                   | -   | 0.75                        | 1.55                                | 4.6                                 | 1.4                                 | 4.3                                 | 1.55                                | 5.3                                 | 1.4                                 | 5.0                                 | 2.1                                                       | 5.7                                 | 6.4                                 |
| 3                                   | -   | 0.75                        | 1.55                                | 4.8                                 | 1.4                                 | 4.5                                 | 1.55                                | 5.6                                 | 1.4                                 | 5.3                                 | 2.1                                                       | 6.0                                 | 6.8                                 |
| 4                                   | -   | 0.75                        | 1.55                                | 5.2                                 | 1.4                                 | 4.9                                 | 1.55                                | 6.0                                 | 1.4                                 | 5.6                                 | 2.1                                                       | 6.5                                 | 7.3                                 |
| 5                                   | -   | 0.75                        | 1.55                                | 5.7                                 | 1.4                                 | 5.3                                 | 1.55                                | 6.4                                 | 1.4                                 | 6.0                                 | 2.1                                                       | 7.2                                 | 7.9                                 |
| 7                                   | -   | 0.75                        | 1.55                                | 6.1                                 | 1.4                                 | 5.7                                 | 1.55                                | 6.9                                 | 1.4                                 | 6.4                                 | 2.1                                                       | 7.8                                 | 8.5                                 |
| 2                                   | 18  | 0.93                        | 1.8                                 | 5.1                                 | 1.55                                | 4.6                                 | 1.8                                 | 5.8                                 | 1.55                                | 5.3                                 | 2.25                                                      | 6.0                                 | 6.7                                 |
| 3                                   | 18  | 0.93                        | 1.8                                 | 5.4                                 | 1.55                                | 4.8                                 | 1.8                                 | 6.1                                 | 1.55                                | 5.6                                 | 2.25                                                      | 6.3                                 | 7.1                                 |
| 4                                   | 18  | 0.93                        | 1.8                                 | 5.8                                 | 1.55                                | 5.2                                 | 1.8                                 | 6.6                                 | 1.55                                | 6.0                                 | 2.25                                                      | 6.9                                 | 7.7                                 |
| 5                                   | 18  | 0.93                        | 1.8                                 | 6.3                                 | 1.55                                | 5.7                                 | 1.8                                 | 7.1                                 | 1.55                                | 6.4                                 | 2.25                                                      | 7.6                                 | 8.3                                 |
| 7                                   | 18  | 0.93                        | 1.8                                 | 6.9                                 | 1.55                                | 6.1                                 | 1.8                                 | 7.6                                 | 1.55                                | 6.9                                 | 2.25                                                      | 8.2                                 | 9.0                                 |
| 2                                   | -   | 1                           | 1.8                                 | 5.1                                 | 1.65                                | 4.8                                 | 1.8                                 | 5.8                                 | 1.65                                | 5.5                                 | 2.3                                                       | 6.1                                 | 6.8                                 |
| 3                                   | -   | 1                           | 1.8                                 | 5.4                                 | 1.65                                | 5.0                                 | 1.8                                 | 6.1                                 | 1.65                                | 5.8                                 | 2.3                                                       | 6.4                                 | 7.2                                 |
| 4                                   | -   | 1                           | 1.8                                 | 5.8                                 | 1.65                                | 5.5                                 | 1.8                                 | 6.6                                 | 1.65                                | 6.2                                 | 2.3                                                       | 7.0                                 | 7.8                                 |
| 5                                   | -   | 1                           | 1.8                                 | 6.3                                 | 1.65                                | 5.9                                 | 1.8                                 | 7.1                                 | 1.65                                | 6.7                                 | 2.3                                                       | 7.7                                 | 8.5                                 |
| 7                                   | -   | 1                           | 1.8                                 | 6.9                                 | 1.65                                | 6.4                                 | 1.8                                 | 7.6                                 | 1.65                                | 7.2                                 | 2.3                                                       | 8.4                                 | 9.1                                 |
| 2                                   | 16  | 1.34                        | 2.0                                 | 5.5                                 | 1.9                                 | 5.3                                 | 2.0                                 | 6.2                                 | 1.9                                 | 6.0                                 | 2.5                                                       | 6.5                                 | 7.2                                 |
| 3                                   | 16  | 1.34                        | 2.0                                 | 5.8                                 | 1.9                                 | 5.6                                 | 2.0                                 | 6.6                                 | 1.9                                 | 6.3                                 | 2.5                                                       | 6.9                                 | 7.6                                 |
| 4                                   | 16  | 1.34                        | 2.0                                 | 6.3                                 | 1.9                                 | 6.1                                 | 2.0                                 | 7.1                                 | 1.9                                 | 6.8                                 | 2.5                                                       | 7.5                                 | 8.3                                 |
| 5                                   | 16  | 1.34                        | 2.0                                 | 6.9                                 | 1.9                                 | 6.6                                 | 2.0                                 | 7.6                                 | 1.9                                 | 7.4                                 | 2.5                                                       | 8.2                                 | 9.0                                 |
| 7                                   | 16  | 1.34                        | 2.0                                 | 7.5                                 | 1.9                                 | 7.2                                 | 2.0                                 | 8.2                                 | 1.9                                 | 7.9                                 | 2.5                                                       | 9.0                                 | 9.7                                 |
| 2                                   | -   | 1.5                         | 2.0                                 | 5.5                                 | 1.9                                 | 5.3                                 | 2.0                                 | 6.2                                 | 1.9                                 | 6.0                                 | 2.55                                                      | 6.6                                 | 7.3                                 |
| 3                                   | -   | 1.5                         | 2.0                                 | 5.8                                 | 1.9                                 | 5.6                                 | 2.0                                 | 6.6                                 | 1.9                                 | 6.3                                 | 2.55                                                      | 7.0                                 | 7.7                                 |
| 4                                   | -   | 1.5                         | 2.0                                 | 6.3                                 | 1.9                                 | 6.1                                 | 2.0                                 | 7.1                                 | 1.9                                 | 6.8                                 | 2.55                                                      | 7.6                                 | 8.4                                 |
| 5                                   | -   | 1.5                         | 2.0                                 | 6.9                                 | 1.9                                 | 6.6                                 | 2.0                                 | 7.6                                 | 1.9                                 | 7.4                                 | 2.55                                                      | 8.4                                 | 9.1                                 |
| 7                                   | -   | 1.5                         | 2.0                                 | 7.5                                 | 1.9                                 | 7.2                                 | 2.0                                 | 8.2                                 | 1.9                                 | 7.9                                 | 2.55                                                      | 9.1                                 | 9.9                                 |
| 2                                   | 14  | -                           | 2.4                                 | 6.3                                 | 2.25                                | 6.0                                 | 2.4                                 | 7.0                                 | 2.25                                | 6.7                                 | 2.85                                                      | 7.2                                 | 7.9                                 |
| 3                                   | 14  | -                           | 2.4                                 | 6.7                                 | 2.25                                | 6.3                                 | 2.4                                 | 7.4                                 | 2.25                                | 7.1                                 | 2.85                                                      | 7.6                                 | 8.4                                 |
| 4                                   | 14  | -                           | 2.4                                 | 7.3                                 | 2.25                                | 6.9                                 | 2.4                                 | 8.0                                 | 2.25                                | 7.7                                 | 2.85                                                      | 8.3                                 | 9.1                                 |
| 5                                   | 14  | -                           | 2.4                                 | 8.0                                 | 2.25                                | 7.6                                 | 2.4                                 | 8.7                                 | 2.25                                | 8.3                                 | 2.85                                                      | 9.2                                 | 9.9                                 |
| 7                                   | 14  | -                           | 2.4                                 | 8.7                                 | 2.25                                | 8.2                                 | 2.4                                 | 9.4                                 | 2.25                                | 9.0                                 | 2.85                                                      | 10.0                                | 10.8                                |
| Conducting metal                    |     |                             | BCDEFG                              |                                     | BCDEFG                              |                                     | BCDEFG                              |                                     | BCDEFG                              |                                     | BCDEFG                                                    |                                     |                                     |

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

## SILICABLE® 200°C Fluoropolymer insulation Silicone sheathing UL and cUL approval



### Characteristics General

- Continuous operating temperatures: -60°C to +200°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Single conductors: UL and cUL approved fluoropolymer insulated conductors ( $\geq 200^\circ\text{C}$ ).
- Standard outer sheath colours: black or brick red.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "Cable flame test" as per UL approval (AWM II A/B only).
- "FT2 flame rating" as per cUL approval.
- "FT1 flame rating" as per cUL approval (AMW II A/B only).

### Applications

- Output cables for household and professional electrical heating appliances.
- Cabling for electrical heating appliances, etc.

### Options

- Other numbers of conductors and nominal cross-sections: contact us.
- Other colours: contact us.
- Electrical shielding: contact us.
- VW-1 Vertical flame test for Style 4389-F200: contact us.

#### KEY

Conducting metals

B Tin-plated copper

B\* Tin-plated copper ( $\phi > 0.38 \text{ mm}$ )

C Nickel-plated copper

D Silver-plated copper

E Nickel

F Bare copper

F\* Bare copper ( $\phi > 0.38 \text{ mm}$ )

G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical

abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

■ : UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core.

Only the average thickness of insulation should be taken into account.

For this product, please contact:

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Zone Industrielle - F 63600 Ambert

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**omerin**  
LES CABLES DE L'EXTREME

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



### Style no. Insulation Approval

### 4476-F200 ETFE "Thin-wall"

200°C - 300 V

AWM I A (Wall 0.76 mm) AWM II A/B (Wall 1.14 mm)

### 4476-F200 FEP

200°C - 300 V

AWM I A (Wall 0.76 mm) AWM II A/B (Wall 1.14 mm)

| No. of cond. | AWG | Nominal cross-section (mm²) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm) | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) |
|--------------|-----|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 2            | 26  | 0.13                        | 0.8                                 | 3.1                                 | 3.8                                 | 0.9                                 | 3.3                                 | 4.0                                 |
| 3            | 26  | 0.13                        | 0.8                                 | 3.2                                 | 4.0                                 | 0.9                                 | 3.4                                 | 4.2                                 |
| 4            | 26  | 0.13                        | 0.8                                 | 3.4                                 | 4.2                                 | 0.9                                 | 3.7                                 | 4.4                                 |
| 5            | 26  | 0.13                        | 0.8                                 | 3.6                                 | 4.4                                 | 0.9                                 | 3.9                                 | 4.7                                 |
| 7            | 26  | 0.13                        | 0.8                                 | 3.9                                 | 4.6                                 | 0.9                                 | 4.2                                 | 4.9                                 |
| 2            | 24  | 0.22                        | 0.9                                 | 3.3                                 | 4.0                                 | 1.0                                 | 3.5                                 | 4.2                                 |
| 3            | 24  | 0.22                        | 0.9                                 | 3.4                                 | 4.2                                 | 1.0                                 | 3.6                                 | 4.4                                 |
| 4            | 24  | 0.22                        | 0.9                                 | 3.7                                 | 4.4                                 | 1.0                                 | 3.9                                 | 4.7                                 |
| 5            | 24  | 0.22                        | 0.9                                 | 3.9                                 | 4.7                                 | 1.0                                 | 4.2                                 | 4.9                                 |
| 7            | 24  | 0.22                        | 0.9                                 | 4.3                                 | 5.0                                 | 1.0                                 | 4.5                                 | 5.2                                 |
| 2            | 22  | 0.34                        | 1.05                                | 3.6                                 | 4.3                                 | 1.15                                | 3.8                                 | 4.5                                 |
| 3            | 22  | 0.34                        | 1.05                                | 3.8                                 | 4.5                                 | 1.15                                | 4.0                                 | 4.7                                 |
| 4            | 22  | 0.34                        | 1.05                                | 4.0                                 | 4.8                                 | 1.15                                | 4.3                                 | 5.0                                 |
| 5            | 22  | 0.34                        | 1.05                                | 4.3                                 | 5.1                                 | 1.15                                | 4.6                                 | 5.3                                 |
| 7            | 22  | 0.34                        | 1.05                                | 4.6                                 | 5.4                                 | 1.15                                | 4.9                                 | 5.7                                 |
| 2            | -   | 0.5                         | 1.25                                | 4.0                                 | 4.7                                 | 1.3                                 | 4.1                                 | 4.8                                 |
| 3            | -   | 0.5                         | 1.25                                | 4.2                                 | 4.9                                 | 1.3                                 | 4.3                                 | 5.0                                 |
| 4            | -   | 0.5                         | 1.25                                | 4.5                                 | 5.3                                 | 1.3                                 | 4.6                                 | 5.4                                 |
| 5            | -   | 0.5                         | 1.25                                | 4.9                                 | 5.6                                 | 1.3                                 | 5.0                                 | 5.8                                 |
| 7            | -   | 0.5                         | 1.25                                | 5.2                                 | 6.0                                 | 1.3                                 | 5.4                                 | 6.1                                 |
| 2            | 20  | 0.6                         | 1.3                                 | 4.1                                 | 4.8                                 | 1.4                                 | 4.3                                 | 5.0                                 |
| 3            | 20  | 0.6                         | 1.3                                 | 4.3                                 | 5.1                                 | 1.4                                 | 4.5                                 | 5.3                                 |
| 4            | 20  | 0.6                         | 1.3                                 | 4.6                                 | 5.4                                 | 1.4                                 | 4.9                                 | 5.6                                 |
| 5            | 20  | 0.6                         | 1.3                                 | 5.0                                 | 5.8                                 | 1.4                                 | 5.3                                 | 6.0                                 |
| 7            | 20  | 0.6                         | 1.3                                 | 5.4                                 | 6.1                                 | 1.4                                 | 5.7                                 | 6.4                                 |
| 2            | -   | 0.75                        | 1.4                                 | 4.3                                 | 5.0                                 | 1.75                                | 5.0                                 | 5.7                                 |
| 3            | -   | 0.75                        | 1.4                                 | 4.5                                 | 5.3                                 | 1.75                                | 5.3                                 | 6.0                                 |
| 4            | -   | 0.75                        | 1.4                                 | 4.9                                 | 5.6                                 | 1.75                                | 5.7                                 | 6.5                                 |
| 5            | -   | 0.75                        | 1.4                                 | 5.3                                 | 6.0                                 | 1.75                                | 6.2                                 | 7.0                                 |
| 7            | -   | 0.75                        | 1.4                                 | 5.7                                 | 6.4                                 | 1.75                                | 6.7                                 | 7.5                                 |
| 2            | 18  | 0.93                        | 1.55                                | 4.6                                 | 5.3                                 | 1.9                                 | 5.3                                 | 6.0                                 |
| 3            | 18  | 0.93                        | 1.55                                | 4.8                                 | 5.6                                 | 1.9                                 | 5.6                                 | 6.3                                 |
| 4            | 18  | 0.93                        | 1.55                                | 5.2                                 | 6.0                                 | 1.9                                 | 6.1                                 | 6.8                                 |
| 5            | 18  | 0.93                        | 1.55                                | 5.7                                 | 6.4                                 | 1.9                                 | 6.6                                 | 7.4                                 |
| 7            | 18  | 0.93                        | 1.55                                | 6.1                                 | 6.9                                 | 1.9                                 | 7.2                                 | 7.9                                 |
| 2            | -   | 1                           | 1.65                                | 4.8                                 | 5.5                                 | 1.95                                | 5.4                                 | 6.1                                 |
| 3            | -   | 1                           | 1.65                                | 5.0                                 | 5.8                                 | 1.95                                | 5.7                                 | 6.5                                 |
| 4            | -   | 1                           | 1.65                                | 5.5                                 | 6.2                                 | 1.95                                | 6.2                                 | 6.9                                 |
| 5            | -   | 1                           | 1.65                                | 5.9                                 | 6.7                                 | 1.95                                | 6.7                                 | 7.5                                 |
| 7            | -   | 1                           | 1.65                                | 6.4                                 | 7.2                                 | 1.95                                | 7.3                                 | 8.1                                 |
| 2            | 16  | 1.34                        | 1.9                                 | 5.3                                 | 6.0                                 | 2.2                                 | 5.9                                 | 6.6                                 |
| 3            | 16  | 1.34                        | 1.9                                 | 5.6                                 | 6.3                                 | 2.2                                 | 6.2                                 | 7.0                                 |
| 4            | 16  | 1.34                        | 1.9                                 | 6.1                                 | 6.8                                 | 2.2                                 | 6.8                                 | 7.5                                 |
| 5            | 16  | 1.34                        | 1.9                                 | 6.6                                 | 7.4                                 | 2.2                                 | 7.4                                 | 8.2                                 |
| 7            | 16  | 1.34                        | 1.9                                 | 7.2                                 | 7.9                                 | 2.2                                 | 8.1                                 | 8.8                                 |
| 2            | -   | 1.5                         | 1.9                                 | 5.3                                 | 6.0                                 | 2.2                                 | 5.9                                 | 6.6                                 |
| 3            | -   | 1.5                         | 1.9                                 | 5.6                                 | 6.3                                 | 2.2                                 | 6.2                                 | 7.0                                 |
| 4            | -   | 1.5                         | 1.9                                 | 6.1                                 | 6.8                                 | 2.2                                 | 6.8                                 | 7.5                                 |
| 5            | -   | 1.5                         | 1.9                                 | 6.6                                 | 7.4                                 | 2.2                                 | 7.4                                 | 8.2                                 |
| 7            | -   | 1.5                         | 1.9                                 | 7.2                                 | 7.9                                 | 2.2                                 | 8.1                                 | 8.8                                 |
| 2            | 14  | -                           | 2.25                                | 6.0                                 | 6.7                                 | 2.5                                 | 6.5                                 | 7.2                                 |
| 3            | 14  | -                           | 2.25                                | 6.3                                 | 7.1                                 | 2.5                                 | 6.9                                 | 7.6                                 |
| 4            | 14  | -                           | 2.25                                | 6.9                                 | 7.7                                 | 2.5                                 | 7.5                                 | 8.3                                 |
| 5            | 14  | -                           | 2.25                                | 7.6                                 | 8.3                                 | 2.5                                 | 8.2                                 | 9.0                                 |
| 7            | 14  | -                           | 2.25                                | 8.2                                 | 9.0                                 | 2.5                                 | 9.0                                 | 9.7                                 |

Conducting metal

B\*CDEF\*G

B\*CDEF\*G

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| Style no.<br>Insulation<br>Approval |     |                             | 4476-F200<br>ETFE "Thin-wall"              |                                     | 4389-F200<br>ETFE "Thin-wall"                 |                                     | 4476-F200<br>FEP "Thin-wall"               |                                     | 4389-F200<br>FEP "Thin-wall"                  |                                     | 4476-F200<br>FEP                           |                                     | 4389-F200<br>FEP                              |                                     | 4476-F200<br>FEP                                                             |                                     |                                     |
|-------------------------------------|-----|-----------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------------------|------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
|                                     |     |                             | 200°C – 600 V<br>AWM I A<br>(Wall 0.76 mm) |                                     | 200°C – 600 V<br>AWM II A/B<br>(Wall 1.14 mm) |                                     | 200°C – 600 V<br>AWM I A<br>(Wall 0.76 mm) |                                     | 200°C – 600 V<br>AWM II A/B<br>(Wall 1.14 mm) |                                     | 200°C – 600 V<br>AWM I A<br>(Wall 0.76 mm) |                                     | 200°C – 600 V<br>AWM II A/B<br>(Wall 1.14 mm) |                                     | 200 °C – 1000 V<br>AWM I A<br>(Wall 0.76 mm)    AWM II A/B<br>(Wall 1.14 mm) |                                     |                                     |
| No. of cond.                        | AWG | Nominal cross-section (mm²) | Nominal diameter of the cond.* (mm)        | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm)           | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm)        | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm)           | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm)        | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm)           | Nominal diameter of the cable* (mm) | Nominal diameter of the cond.* (mm)                                          | Nominal diameter of the cable* (mm) | Nominal diameter of the cable* (mm) |
| 2                                   | 26  | 0.13                        | 1.0                                        | 3.5                                 | 1.0                                           | 4.2                                 | 0.9                                        | 3.3                                 | 0.9                                           | 4.0                                 | 1.2                                        | 3.9                                 | 1.2                                           | 4.6                                 | 1.5                                                                          | 4.5                                 | 5.2                                 |
| 3                                   | 26  | 0.13                        | 1.0                                        | 3.6                                 | 1.0                                           | 4.4                                 | 0.9                                        | 3.4                                 | 0.9                                           | 4.2                                 | 1.2                                        | 4.1                                 | 1.2                                           | 4.8                                 | 1.5                                                                          | 4.7                                 | 5.5                                 |
| 4                                   | 26  | 0.13                        | 1.0                                        | 3.9                                 | 1.0                                           | 4.7                                 | 0.9                                        | 3.6                                 | 0.9                                           | 4.4                                 | 1.2                                        | 4.4                                 | 1.2                                           | 5.1                                 | 1.5                                                                          | 5.1                                 | 5.9                                 |
| 5                                   | 26  | 0.13                        | 1.0                                        | 4.2                                 | 1.0                                           | 4.9                                 | 0.9                                        | 3.9                                 | 0.9                                           | 4.7                                 | 1.2                                        | 4.7                                 | 1.2                                           | 5.5                                 | 1.5                                                                          | 5.5                                 | 6.3                                 |
| 7                                   | 26  | 0.13                        | 1.0                                        | 4.5                                 | 1.0                                           | 5.2                                 | 0.9                                        | 4.2                                 | 0.9                                           | 4.9                                 | 1.2                                        | 5.1                                 | 1.2                                           | 5.8                                 | 1.5                                                                          | 6.0                                 | 6.7                                 |
| 2                                   | 24  | 0.22                        | 1.1                                        | 3.7                                 | 1.1                                           | 4.4                                 | 1.0                                        | 3.5                                 | 1.0                                           | 4.2                                 | 1.35                                       | 4.2                                 | 1.35                                          | 4.9                                 | 1.65                                                                         | 4.8                                 | 5.5                                 |
| 3                                   | 24  | 0.22                        | 1.1                                        | 3.9                                 | 1.1                                           | 4.6                                 | 1.0                                        | 3.6                                 | 1.0                                           | 4.4                                 | 1.35                                       | 4.4                                 | 1.35                                          | 5.2                                 | 1.65                                                                         | 5.0                                 | 5.8                                 |
| 4                                   | 24  | 0.22                        | 1.1                                        | 4.1                                 | 1.1                                           | 4.9                                 | 1.0                                        | 3.9                                 | 1.0                                           | 4.7                                 | 1.35                                       | 4.7                                 | 1.35                                          | 5.5                                 | 1.65                                                                         | 5.5                                 | 6.2                                 |
| 5                                   | 24  | 0.22                        | 1.1                                        | 4.5                                 | 1.1                                           | 5.2                                 | 1.0                                        | 4.2                                 | 1.0                                           | 4.9                                 | 1.35                                       | 5.1                                 | 1.35                                          | 5.9                                 | 1.65                                                                         | 5.9                                 | 6.7                                 |
| 7                                   | 24  | 0.22                        | 1.1                                        | 4.8                                 | 1.1                                           | 5.5                                 | 1.0                                        | 4.5                                 | 1.0                                           | 5.2                                 | 1.35                                       | 5.5                                 | 1.35                                          | 6.3                                 | 1.65                                                                         | 6.4                                 | 7.2                                 |
| 2                                   | 22  | 0.34                        | 1.25                                       | 4.0                                 | 1.25                                          | 4.7                                 | 1.15                                       | 3.8                                 | 1.15                                          | 4.5                                 | 1.45                                       | 4.4                                 | 1.45                                          | 5.1                                 | 1.8                                                                          | 5.1                                 | 5.8                                 |
| 3                                   | 22  | 0.34                        | 1.25                                       | 4.2                                 | 1.25                                          | 4.9                                 | 1.15                                       | 4.0                                 | 1.15                                          | 4.7                                 | 1.45                                       | 4.6                                 | 1.45                                          | 5.4                                 | 1.8                                                                          | 5.4                                 | 6.1                                 |
| 4                                   | 22  | 0.34                        | 1.25                                       | 4.5                                 | 1.25                                          | 5.3                                 | 1.15                                       | 4.3                                 | 1.15                                          | 5.0                                 | 1.45                                       | 5.0                                 | 1.45                                          | 5.7                                 | 1.8                                                                          | 5.8                                 | 6.6                                 |
| 5                                   | 22  | 0.34                        | 1.25                                       | 4.9                                 | 1.25                                          | 5.6                                 | 1.15                                       | 4.6                                 | 1.15                                          | 5.3                                 | 1.45                                       | 5.4                                 | 1.45                                          | 6.2                                 | 1.8                                                                          | 6.3                                 | 7.1                                 |
| 7                                   | 22  | 0.34                        | 1.25                                       | 5.2                                 | 1.25                                          | 6.0                                 | 1.15                                       | 4.9                                 | 1.15                                          | 5.7                                 | 1.45                                       | 5.8                                 | 1.45                                          | 6.6                                 | 1.8                                                                          | 6.9                                 | 7.6                                 |
| 2                                   | -   | 0.5                         | 1.4                                        | 4.3                                 | 1.4                                           | 5.0                                 | 1.3                                        | 4.1                                 | 1.3                                           | 4.8                                 | 1.65                                       | 4.8                                 | 1.65                                          | 5.5                                 | 1.95                                                                         | 5.4                                 | 6.1                                 |
| 3                                   | -   | 0.5                         | 1.4                                        | 4.5                                 | 1.4                                           | 5.3                                 | 1.3                                        | 4.3                                 | 1.3                                           | 5.0                                 | 1.65                                       | 5.0                                 | 1.65                                          | 5.8                                 | 1.95                                                                         | 5.7                                 | 6.5                                 |
| 4                                   | -   | 0.5                         | 1.4                                        | 4.9                                 | 1.4                                           | 5.6                                 | 1.3                                        | 4.6                                 | 1.3                                           | 5.4                                 | 1.65                                       | 5.5                                 | 1.65                                          | 6.2                                 | 1.95                                                                         | 6.2                                 | 6.9                                 |
| 5                                   | -   | 0.5                         | 1.4                                        | 5.3                                 | 1.4                                           | 6.0                                 | 1.3                                        | 5.0                                 | 1.3                                           | 5.8                                 | 1.65                                       | 5.9                                 | 1.65                                          | 6.7                                 | 1.95                                                                         | 6.7                                 | 7.5                                 |
| 7                                   | -   | 0.5                         | 1.4                                        | 5.7                                 | 1.4                                           | 6.4                                 | 1.3                                        | 5.4                                 | 1.3                                           | 6.1                                 | 1.65                                       | 6.4                                 | 1.65                                          | 7.2                                 | 1.95                                                                         | 7.3                                 | 8.1                                 |
| 2                                   | 20  | 0.6                         | 1.5                                        | 4.5                                 | 1.5                                           | 5.2                                 | 1.4                                        | 4.3                                 | 1.4                                           | 5.0                                 | 1.7                                        | 4.9                                 | 1.7                                           | 5.6                                 | 2.0                                                                          | 5.5                                 | 6.2                                 |
| 3                                   | 20  | 0.6                         | 1.5                                        | 4.7                                 | 1.5                                           | 5.5                                 | 1.4                                        | 4.5                                 | 1.4                                           | 5.3                                 | 1.7                                        | 5.2                                 | 1.7                                           | 5.9                                 | 2.0                                                                          | 5.8                                 | 6.6                                 |
| 4                                   | 20  | 0.6                         | 1.5                                        | 5.1                                 | 1.5                                           | 5.9                                 | 1.4                                        | 4.9                                 | 1.4                                           | 5.6                                 | 1.7                                        | 5.6                                 | 1.7                                           | 6.3                                 | 2.0                                                                          | 6.3                                 | 7.1                                 |
| 5                                   | 20  | 0.6                         | 1.5                                        | 5.5                                 | 1.5                                           | 6.3                                 | 1.4                                        | 5.3                                 | 1.4                                           | 6.0                                 | 1.7                                        | 6.1                                 | 1.7                                           | 6.8                                 | 2.0                                                                          | 6.9                                 | 7.6                                 |
| 7                                   | 20  | 0.6                         | 1.5                                        | 6.0                                 | 1.5                                           | 6.7                                 | 1.4                                        | 5.7                                 | 1.4                                           | 6.4                                 | 1.7                                        | 6.6                                 | 1.7                                           | 7.3                                 | 2.0                                                                          | 7.5                                 | 8.2                                 |
| 2                                   | -   | 0.75                        | 1.55                                       | 4.6                                 | 1.55                                          | 5.3                                 | 1.75                                       | 5.0                                 | 1.75                                          | 5.7                                 | 1.8                                        | 5.1                                 | 1.8                                           | 5.8                                 | 2.1                                                                          | 5.7                                 | 6.4                                 |
| 3                                   | -   | 0.75                        | 1.55                                       | 4.8                                 | 1.55                                          | 5.6                                 | 1.75                                       | 5.3                                 | 1.75                                          | 6.0                                 | 1.8                                        | 5.4                                 | 1.8                                           | 6.1                                 | 2.1                                                                          | 6.0                                 | 6.8                                 |
| 4                                   | -   | 0.75                        | 1.55                                       | 5.2                                 | 1.55                                          | 6.0                                 | 1.75                                       | 5.7                                 | 1.75                                          | 6.5                                 | 1.8                                        | 5.8                                 | 1.8                                           | 6.6                                 | 2.1                                                                          | 6.5                                 | 7.3                                 |
| 5                                   | -   | 0.75                        | 1.55                                       | 5.7                                 | 1.55                                          | 6.4                                 | 1.75                                       | 6.2                                 | 1.75                                          | 7.0                                 | 1.8                                        | 6.3                                 | 1.8                                           | 7.1                                 | 2.1                                                                          | 7.2                                 | 7.9                                 |
| 7                                   | -   | 0.75                        | 1.55                                       | 6.1                                 | 1.55                                          | 6.9                                 | 1.75                                       | 6.7                                 | 1.75                                          | 7.5                                 | 1.8                                        | 6.9                                 | 1.8                                           | 7.6                                 | 2.1                                                                          | 7.8                                 | 8.5                                 |
| 2                                   | 18  | 0.93                        | 1.8                                        | 5.1                                 | 1.8                                           | 5.8                                 | 1.9                                        | 5.3                                 | 1.9                                           | 6.0                                 | 2.0                                        | 5.5                                 | 2.0                                           | 6.2                                 | 2.25                                                                         | 6.0                                 | 6.7                                 |
| 3                                   | 18  | 0.93                        | 1.8                                        | 5.4                                 | 1.8                                           | 6.1                                 | 1.9                                        | 5.6                                 | 1.9                                           | 6.3                                 | 2.0                                        | 5.8                                 | 2.0                                           | 6.6                                 | 2.25                                                                         | 6.3                                 | 7.1                                 |
| 4                                   | 18  | 0.93                        | 1.8                                        | 5.8                                 | 1.8                                           | 6.6                                 | 1.9                                        | 6.1                                 | 1.9                                           | 6.8                                 | 2.0                                        | 6.3                                 | 2.0                                           | 7.1                                 | 2.25                                                                         | 6.9                                 | 7.7                                 |
| 5                                   | 18  | 0.93                        | 1.8                                        | 6.3                                 | 1.8                                           | 7.1                                 | 1.9                                        | 6.6                                 | 1.9                                           | 7.4                                 | 2.0                                        | 6.9                                 | 2.0                                           | 7.6                                 | 2.25                                                                         | 7.6                                 | 8.3                                 |
| 7                                   | 18  | 0.93                        | 1.8                                        | 6.9                                 | 1.8                                           | 7.6                                 | 1.9                                        | 7.2                                 | 1.9                                           | 7.9                                 | 2.0                                        | 7.5                                 | 2.0                                           | 8.2                                 | 2.25                                                                         | 8.2                                 | 9.0                                 |
| 2                                   | -   | 1                           | 1.8                                        | 5.1                                 | 1.8                                           | 5.8                                 | 1.95                                       | 5.4                                 | 1.95                                          | 6.1                                 | 2.0                                        | 5.5                                 | 2.0                                           | 6.2                                 | 2.3                                                                          | 6.1                                 | 6.8                                 |
| 3                                   | -   | 1                           | 1.8                                        | 5.4                                 | 1.8                                           | 6.1                                 | 1.95                                       | 5.7                                 | 1.95                                          | 6.5                                 | 2.0                                        | 5.8                                 | 2.0                                           | 6.6                                 | 2.3                                                                          | 6.4                                 | 7.2                                 |
| 4                                   | -   | 1                           | 1.8                                        | 5.8                                 | 1.8                                           | 6.6                                 | 1.95                                       | 6.2                                 | 1.95                                          | 6.9                                 | 2.0                                        | 6.3                                 | 2.0                                           | 7.1                                 | 2.3                                                                          | 7.0                                 | 7.8                                 |
| 5                                   | -   | 1                           | 1.8                                        | 6.3                                 | 1.8                                           | 7.1                                 | 1.95                                       | 6.7                                 | 1.95                                          | 7.5                                 | 2.0                                        | 6.9                                 | 2.0                                           | 7.6                                 | 2.3                                                                          | 7.7                                 | 8.5                                 |
| 7                                   | -   | 1                           | 1.8                                        | 6.9                                 | 1.8                                           | 7.6                                 | 1.95                                       | 7.3                                 | 1.95                                          | 8.1                                 | 2.0                                        | 7.5                                 | 2.0                                           | 8.2                                 | 2.3                                                                          | 8.4                                 | 9.1                                 |
| 2                                   | 16  | 1.34                        | 2.0                                        | 5.5                                 | 2.0                                           | 6.2                                 | 2.2                                        | 5.9                                 | 2.2                                           | 6.6                                 | 2.2                                        | 5.9                                 | 2.2                                           | 6.6                                 | 2.5                                                                          | 6.5                                 | 7.2                                 |
| 3                                   | 16  | 1.34                        | 2.0                                        | 5.8                                 | 2.0                                           | 6.6                                 | 2.2                                        | 6.2                                 | 2.2                                           | 7.0                                 | 2.2                                        | 6.2                                 | 2.2                                           | 7.0                                 | 2.5                                                                          | 6.9                                 | 7.6                                 |
| 4                                   | 16  | 1.34                        | 2.0                                        | 6.3                                 | 2.0                                           | 7.1                                 | 2.2                                        | 6.8                                 | 2.2                                           | 7.5                                 | 2.2                                        | 6.8                                 | 2.2                                           | 7.5                                 | 2.5                                                                          | 7.5                                 | 8.3                                 |
| 5                                   | 16  | 1.34                        | 2.0                                        | 6.9                                 | 2.0                                           | 7.6                                 | 2.2                                        | 7.4                                 | 2.2                                           | 8.2                                 | 2.2                                        | 7.4                                 | 2.2                                           | 8.2                                 | 2.5                                                                          | 8.2                                 | 9.0                                 |
| 7                                   | 16  | 1.34                        | 2.0                                        | 7.5                                 | 2.0                                           | 8.2                                 | 2.2                                        | 8.1                                 | 2.2                                           | 8.8                                 | 2.2                                        | 8.1                                 | 2.2                                           | 8.8                                 | 2.5                                                                          | 9.0                                 | 9.7                                 |
| 2                                   | -   | 1.5                         | 2.0                                        | 5.5                                 | 2.0                                           | 6.2                                 | 2.0                                        | 5.9                                 | 2.0                                           | 6.6                                 | 2.3                                        | 6.1                                 | 2.3                                           | 6.8                                 | 2.55                                                                         | 6.6                                 | 7.3                                 |
| 3                                   | -   | 1.5                         | 2.0                                        | 5.8                                 | 2.0                                           | 6.6                                 | 2.2                                        | 6.2                                 | 2.2                                           | 7.0                                 | 2.3                                        | 6.4                                 | 2.3                                           | 7.2                                 | 2.55                                                                         | 7.0                                 | 7.7                                 |
| 4                                   | -   | 1.5                         | 2.0                                        | 6.3                                 | 2.0                                           | 7.1                                 | 2.2                                        | 6.8                                 | 2.2                                           | 7.5                                 | 2.3                                        | 7.0                                 | 2.3                                           | 7.8                                 | 2.55                                                                         | 7.6                                 | 8.4                                 |
| 5                                   | -   | 1.5                         | 2.0                                        | 6.9                                 | 2.0                                           | 7.6                                 | 2.2                                        | 7.4                                 | 2.2                                           | 8.2                                 | 2.3                                        | 7.7                                 | 2.3                                           | 8.5                                 | 2.55                                                                         | 8.4                                 | 9.1                                 |
| 7                                   | -   | 1.5                         | 2.0                                        | 7.5                                 | 2.0                                           | 8.2                                 | 2.2                                        | 8.1                                 | 2.2                                           | 8.8                                 | 2.3                                        | 8.4                                 | 2.3                                           | 9.1                                 | 2.55                                                                         | 9.1                                 | 9.9                                 |
| 2                                   | 14  | -                           | 2.4                                        | 6.3                                 | 2.4                                           | 7.0                                 | 2.7                                        | 6.9                                 | 2.7                                           | 7.7                                 | 2.7                                        | 6.9                                 | 2.7                                           | 7.7                                 | 3.0                                                                          | 7.5                                 | 8.2                                 |
| 3                                   | 14  | -                           | 2.4                                        | 6.7                                 | 2.4                                           | 7.4                                 | 2.7                                        | 7.4                                 | 2.7                                           | 8.2                                 | 2.7                                        | 7.4                                 | 2.7                                           | 8.2                                 | 3.0                                                                          | 8.0                                 | 8.7                                 |
| 4                                   | 14  | -                           | 2.4                                        | 7.3                                 | 2.4                                           | 8.0                                 | 2.7                                        | 8.0                                 | 2.7                                           | 8.8                                 | 2.7                                        | 8.0                                 | 2.7                                           | 8.8                                 | 3.0                                                                          | 8.7                                 | 9.5                                 |
| 5                                   | 14  | -                           | 2.4                                        | 8.0                                 | 2.4                                           | 8.7                                 | 2.7                                        | 8.8                                 | 2.7                                           | 9.6                                 | 2.7                                        | 8.8                                 | 2.7                                           | 9.6                                 | 3.0                                                                          | 9.6                                 | 10.3                                |
| 7                                   | 14  | -                           | 2.4                                        | 8.7                                 | 2.4                                           | 9.4                                 | 2.7                                        | 9.6                                 | 2.7                                           | 10.4                                | 2.7                                        | 9.6                                 | 2.7                                           | 10.4                                | 3.0                                                                          | 10.5                                | 11.2                                |
| Conducting metal                    |     |                             | B*CDEF*G                                   |                                     | B*CDEF*G                                      |                                     | B*CDEF*G                                   |                                     | B*CDEF*G                                      |                                     | B*CDEF*G                                   |                                     | B*CDEF*G                                      |                                     | B*CDEF*G                                                                     |                                     |                                     |

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

## SILICABLE® M-CS-TBT -60°C to +180°C

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES



- 1 • Flexible bare copper core – class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.

### Approvals - standards

- Meets the requirements of standards for low voltage lighting systems: NF EN 60598-1, NF EN 60598-2-xx and UTE C 15-559.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for low voltage lighting systems.

### Options

- Tin-plated copper core: ref. M-ECS-TBT.
- Nickel-plated copper core: ref. M-CNCS-TBT.
- Identification using a coloured longitudinal stripe on one of the two conductors: contact us.
- Other colours: contact us.
- UL approval 200°C 1000 V (Style 4457): contact us.
- Other nominal cross-sections: contact us.

### Characteristics General

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

### Electrical

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

### Standard products

- Standard insulation colour: white.
- Identification by marking on one of the 2 conductors.

### M-CS-TBT

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 2 x 0.5                                     | 16 x 0.20         | 39.0                                        |
| 2 x 0.75                                    | 24 x 0.20         | 26.0                                        |
| 2 x 1                                       | 32 x 0.20         | 19.5                                        |
| 2 x 1.5                                     | 30 x 0.25         | 13.3                                        |
| 2 x 2.5                                     | 50 x 0.25         | 7.98                                        |

#### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal dimensions<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|----------------------------|--------------------------------------|
| 0.6                                     | 2.1 x 4.4                  | 15.8                                 |
| 0.6                                     | 2.4 x 5.0                  | 22.0                                 |
| 0.6                                     | 2.5 x 5.2                  | 26.7                                 |
| 0.6                                     | 2.8 x 5.8                  | 36.6                                 |
| 0.7                                     | 3.4 x 7.0                  | 58.2                                 |

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

# SILICABLE® SIZ-VDE

VDE approval

**-60°C to +180°C**



## Approvals - standards

- VDE approval as per licence no. 101609.
- Halogen-free: IEC 60754-1 / EN 60754-1.

## Applications

- Cabling for low voltage lighting systems.

## Options

- Other colours: contact us.
- Identification using a coloured longitudinal stripe on one of the two conductors: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES



- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228 / DIN VDE 0295.
- 2 • Insulation: Silicone rubber – type EI2 – DIN EN 50363-1.

## Characteristics

### General

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

### Electrical

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

## Standard products

- Standard insulation colour: white.
- Identification by marking on one of the 2 conductors.

## SIZ-VDE

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 2 x 0.5                                     | 16 x 0.20         | 40.1                                        |
| 2 x 0.75                                    | 24 x 0.20         | 26.7                                        |
| 2 x 1                                       | 32 x 0.20         | 20.0                                        |
| 2 x 1.5                                     | 30 x 0.25         | 13.7                                        |
| 2 x 2.5                                     | 50 x 0.25         | 8.21                                        |

### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal dimensions<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|----------------------------|--------------------------------------|
| 0.6                                     | 2.1 x 4.4                  | 15.8                                 |
| 0.6                                     | 2.4 x 5.0                  | 22.0                                 |
| 0.6                                     | 2.5 x 5.2                  | 26.7                                 |
| 0.7                                     | 2.8 x 5.8                  | 36.6                                 |
| 0.8                                     | 3.4 x 7.0                  | 58.2                                 |

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

# SILISOL® SIHF-TBT

## -60°C to +180°C

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES



- 1 • Flexible bare copper or tin-plated core – class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Outer sheath: Silicone rubber.

### Approvals - standards

- Meets the requirements of standards for low voltage lighting systems: NF EN 60598-1, NF EN 60598-2-xx and UTE C 15-559.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for low voltage lighting systems.

### Options

- Nickel-plated copper core: contact us.
- Other conductor colours: contact us.
- Other outer sheath colours: contact us.
- Other nominal cross-sections: contact us.

### Characteristics General

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

### Electrical

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

### Standard products

- Standard conductor colours: blue / brown.
- Standard outer sheath colour: grey.

### SIHF-TBT

| Flexible core • class 5 as per IEC 60228    |                   |                                                                          | INSULATED CONDUCTORS                    |                          | SHEATHED CABLE           |                                  |
|---------------------------------------------|-------------------|--------------------------------------------------------------------------|-----------------------------------------|--------------------------|--------------------------|----------------------------------|
| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20 °C<br>(Ω/km)<br>(tin-plated copper core) | Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Nominal diameter<br>(mm) | Nominal linear weight<br>(kg/km) |
| 2 x 0.5                                     | 16 x 0.20         | 40.1                                                                     | 0.6                                     | 2.1                      | 5.8                      | 42.9                             |
| 2 x 0.7                                     | 24 x 0.20         | 26.7                                                                     | 0.6                                     | 2.4                      | 6.4                      | 53.9                             |
| 2 x 1                                       | 32 x 0.20         | 20.0                                                                     | 0.6                                     | 2.5                      | 6.6                      | 59.8                             |
| 2 x 1.5                                     | 30 x 0.25         | 13.7                                                                     | 0.6                                     | 2.8                      | 7.5                      | 80.8                             |
| 2 x 2.5                                     | 50 x 0.25         | 8.21                                                                     | 0.7                                     | 3.4                      | 9.2                      | 125                              |
| 2 x 4                                       | 56 x 0.30         | 5.09                                                                     | 0.8                                     | 4.2                      | 10.6                     | 174                              |

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

## SILICABLE® Style 3858 -60°C to +150°C



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

2

1



- 1 • Extra-flexible bare copper core.
- 2 • Silicone insulation.

### Approvals - standards

- EN 45545-2: R15 HL2 / R16 HL3.
- UL approval as per standard UL 758 - File no.: E101965.
  - Conductor resistance according to IEC 60228 class 6.
- Flame resistance according to IEC 60332-1-2 and IEC 60332-3-24.
- Low smoke toxicity according to IEC 61034-2.
  - Halogen free according to IEC 60754.

### Applications

- Switchboards, Power cabinets.
  - Battery energy storage.
- Cabling for static machines: transformers, inductors, inverters, choppers.
- Railway Industry (current collector, etc.).

### Options

- Extra-flexible tin-plated, silver-plated or nickel-plated copper core.
- Other markings: contact us.
- Other nominal cross-sections: contact us.

### Characteristics

#### General

- High flexibility due to 0.10 mm strand of core.
- Continuous operating temperatures: -60°C to +150°C.
- Good resistance to thermal shock and UV.
- Bending radius in fixed installation: 2 x D.
- Bending radius in flexible installation: 4 x D.

#### Electrical

- Rated voltage: 3 kV.
- Test voltage: 10 kV.

### Standard product

- Colour: black.
- Other colours available on request.

### Marking

- OMERIN 369 – SILICABLE 150C 3000V 3858 AWM

### SILICABLE® Style 3858

| Extra-flexible core |                             |                                  | INSULATED WIRE OR CABLE                   |                                |                                       |
|---------------------|-----------------------------|----------------------------------|-------------------------------------------|--------------------------------|---------------------------------------|
| Part number         | Nominal cross-section (mm²) | Nominal diameter of strands (mm) | Minimum nominal insulation thickness (mm) | Nominal external diameter (mm) | Max. linear resistance at 20°C (Ω/km) |
| A0752002            | 35                          | 0.10                             | 1.75                                      | 13.8                           | 0.554                                 |
| A0752003            | 50                          | 0.10                             | 1.75                                      | 15.5                           | 0.386                                 |
| A0752004            | 70                          | 0.10                             | 1.75                                      | 18.0                           | 0.272                                 |
| A0752005            | 95                          | 0.10                             | 1.75                                      | 20.0                           | 0.206                                 |
| A0752006            | 120                         | 0.10                             | 1.75                                      | 21.5                           | 0.161                                 |
| A0752007            | 150                         | 0.10                             | 1.75                                      | 23.5                           | 0.129                                 |
| A0752008            | 185                         | 0.10                             | 1.80                                      | 26.0                           | 0.106                                 |
| A0752001            | 240                         | 0.10                             | 1.80                                      | 30.0                           | 0.0801                                |
| A0752009            | 300                         | 0.10                             | 1.95                                      | 32.5                           | 0.0641                                |

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

## SILICABLE® Style 30122 -60°C to +180°C



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

2 1

SILICABLE 150C 3000V 30122 AWM

- 1 • Extra-flexible bare copper core.
- 2 • Silicone insulation.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
  - Conductor resistance according to IEC 60228 class 6.
- Flame resistance according to IEC 60332-1-2.
- Low smoke toxicity according to IEC 61034-2.
  - Halogen free according to IEC 60754.

### Applications

- Switchboards, Power cabinets.
  - Battery energy storage.
- Cabling for static machines: transformers, inductors, inverters, choppers.
- Railway Industry (current collector, etc.).
  - Test bench.

### Options

- Extra-flexible tin-plated, silver-plated or nickel-plated copper core.
- Other markings: contact us.
- Other nominal cross-sections: contact us.

### Characteristics

#### General

- High flexibility due to 0.10 mm strand of core.
- Continuous operating temperatures: -60°C to +180°C (+150°C as per UL).
- Good resistance to thermal shock and UV.
- Bending radius in fixed installation: 2 x D.
- Bending radius in flexible installation: 4 x D.

#### Electrical

- Rated voltage: 3 kV.
- Test voltage: 10 kV.

### Standard product

- Colour: black.
- Other colours available on request.

### Marking

- OMERIN 369 – SILICABLE 150C 3000V 30122 AWM

### SILICABLE® Style 30122

| Extra-flexible core |                             |                                  | INSULATED WIRE OR CABLE                   |                                |      |                                       |
|---------------------|-----------------------------|----------------------------------|-------------------------------------------|--------------------------------|------|---------------------------------------|
| Part number         | Nominal cross-section (mm²) | Nominal diameter of strands (mm) | Minimum nominal insulation thickness (mm) | Nominal external diameter (mm) |      | Max. linear resistance at 20°C (Ω/km) |
|                     |                             |                                  |                                           | min.                           | max. |                                       |
| A0753001            | 35                          | 0.10                             | 1.27                                      | 11.5                           | 14.1 | 0.554                                 |
| A0753002            | 50                          | 0.10                             | 1.27                                      | 13.2                           | 15.8 | 0.386                                 |
| A0753003            | 70                          | 0.10                             | 1.27                                      | 15.5                           | 18.5 | 0.272                                 |
| A0753004            | 95                          | 0.10                             | 1.27                                      | 17.3                           | 20.3 | 0.206                                 |
| A0753005            | 120                         | 0.10                             | 1.27                                      | 19.0                           | 22.0 | 0.161                                 |
| A0753006            | 150                         | 0.10                             | 1.27                                      | 20.7                           | 24.3 | 0.129                                 |
| A0753007            | 185                         | 0.10                             | 1.27                                      | 23.2                           | 26.8 | 0.106                                 |
| A0753008            | 240                         | 0.10                             | 1.27                                      | 25.9                           | 29.9 | 0.0801                                |
| A0753009            | 300                         | 0.10                             | 1.27                                      | 28.8                           | 32.8 | 0.0641                                |

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

## SILICABLE® Style 30123 -60°C to +180°C



### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
  - Conductor resistance according to IEC 60228 class 6.
- Flame resistance according to IEC 60332-1-2.
- Low smoke toxicity according to IEC 61034-2.
  - Halogen free according to IEC 60754.

### Applications

- Switchboards, Power cabinets.
  - Battery energy storage.
- Cabling for static machines: transformers, inductors, inverters, choppers.
- Railway Industry (current collector, etc.).
  - Test bench.

### Options

- Extra-flexible tin-plated, silver-plated or nickel-plated copper core.
- Other markings: contact us.
- Other nominal cross-sections: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES

5 4 3 2 1



- 1 • Extra-flexible bare copper core.
- 2 • Silicone insulation.
- 3 • Tinned copper braid.
- 4 • Aluminium/PET tape.
- 5 • Silicone sheath with high tear strength

### Characteristics

#### General

- High flexibility due to 0.10 mm strand of core.
- Continuous operating temperatures: -60°C to +180°C (+150°C as per UL).
- Good resistance to thermal shock and UV.
- High tear resistance.
- Bending radius in fixed installation: 3 x D.

#### Electrical

- Rated voltage: 3 kV.
- Test voltage: 10 kV (sparktest).

### Standard product

- Colour: black.
- Other colours available on request.

### Marking

- OMERIN 369 – SILICABLE 150C 3000V 30123 AWM

### SILICABLE® Style 30123

#### Extra-flexible core

#### INSULATED WIRE OR CABLE

| Part number | Nominal cross-section (mm²) | Nominal diameter of strands (mm) | Minimum nominal insulation thickness (mm) | Nominal external diameter (mm) |      | Max. linear resistance at 20°C (Ω/km) |
|-------------|-----------------------------|----------------------------------|-------------------------------------------|--------------------------------|------|---------------------------------------|
|             |                             |                                  |                                           | min.                           | max. |                                       |
| A0754001    | 35                          | 0.10                             | 1.39                                      | 15.6                           | 18.2 | 0.554                                 |
| A0754002    | 50                          | 0.10                             | 1.39                                      | 17.3                           | 19.9 | 0.386                                 |
| A0754003    | 70                          | 0.10                             | 1.39                                      | 19.6                           | 22.6 | 0.272                                 |
| A0754004    | 95                          | 0.10                             | 1.39                                      | 21.6                           | 24.6 | 0.206                                 |
| A0754005    | 120                         | 0.10                             | 1.39                                      | 23.3                           | 26.3 | 0.161                                 |
| A0754006    | 150                         | 0.10                             | 1.39                                      | 25.1                           | 28.7 | 0.129                                 |
| A0754007    | 185                         | 0.10                             | 1.39                                      | 27.5                           | 31.1 | 0.106                                 |
| A0754008    | 240                         | 0.10                             | 1.39                                      | 30.2                           | 34.2 | 0.0801                                |
| A0754009    | 300                         | 0.10                             | 1.39                                      | 33.1                           | 37.1 | 0.0641                                |

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## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID

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

## SILICABLE® CSV and ECSV -60°C to +220°C



### Approvals - standards

- VERITAS approval certificate No. BV 153552.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances.
  - Production machines.
  - Lighting.
- Industrial cabling in hot atmospheres.

### Options

- Nickel-plated copper core: ref. CNCSV.
- Silver-plated copper core: ref. ACSV.
- Pure nickel core (not described in IEC 60228): ref. NCSV.
  - Outer electrical shielding:
    - > Tin-plated copper braid: ref. CSVBE.
    - Outer flexible armour:
      - > Galvanised steel braid: ref. CSVBG.
      - > Stainless steel braid: ref. CSVBI.
- Solid bare copper (ref. RCSV) or tin-plated (ref. RECSV) core – class 1 as per IEC 60228: See details of the option below.
- Extra-flexible bare copper (ref. CSV-ES) or tin-plated (ref. ECSV-ES) core – class 6 as per IEC 60228.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other options and/or combinations of the options outlined above: contact us.

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## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Flexible bare copper (ref. CSV) or tin-plated (ref. ECSV) core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Reinforcement: Silicone-coated fibreglass braid.

### Characteristics General

- Continuous operating temperatures: -60°C to +220°C.
- Good resistance to thermal shock and UV.

### Electrical

- |                |                                   |                                  |
|----------------|-----------------------------------|----------------------------------|
| Rated voltage: | <b>CS &lt; 6 mm²</b><br>300/500 V | <b>CS ≥ 6 mm²</b><br>600/1000 V. |
| Test voltage:  | 2000 V                            | 3000 V.                          |

### Standard products

- All solid colours, yellow/green or white with coloured spiral markings.

### CSV and ECSV

#### 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) |
|--------------------------------|-------------------|-------------------------------------------------------------------|
| 0.4*                           | 12 x 0.20         | 52.4                                                              |
| 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<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.45                                    | 2.0                      | 7.2                                  |
| 0.45                                    | 2.1                      | 8.4                                  |
| 0.45                                    | 2.2                      | 9.7                                  |
| 0.45                                    | 2.4                      | 11.4                                 |
| 0.45                                    | 2.5                      | 13.6                                 |
| 0.45                                    | 2.8                      | 18.4                                 |
| 0.5                                     | 3.4                      | 28.9                                 |
| 0.6                                     | 4.4                      | 47.4                                 |
| 0.8                                     | 5.3                      | 70.4                                 |
| 1.0                                     | 6.9                      | 117                                  |
| 1.2                                     | 8.3                      | 178                                  |
| 1.4                                     | 10.1                     | 261                                  |
| 1.5                                     | 11.5                     | 370                                  |
| 1.7                                     | 13.7                     | 537                                  |
| 1.7                                     | 15.3                     | 715                                  |
| 2.3                                     | 18.2                     | 961                                  |
| 2.4                                     | 20.1                     | 1222                                 |
| 2.4                                     | 22.0                     | 1500                                 |
| 2.7                                     | 24.6                     | 1844                                 |
| 3.2                                     | 28.6                     | 2503                                 |
| 3.2                                     | 31.0                     | 3082                                 |
| 3.2                                     | 34.6                     | 3862                                 |

### Option • RCSV and RECSV

#### Solid core • class 1 as per IEC 60228

| Nominal cross-section<br>(mm²) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|--------------------------------|--------------------------|--------------------------------------|
| 0.5                            | 1 x 0.80                 | 36.0                                 |
| 0.75                           | 1 x 0.98                 | 24.5                                 |
| 1                              | 1 x 1.13                 | 18.1                                 |
| 1.5                            | 1 x 1.38                 | 12.1                                 |
| 2.5                            | 1 x 1.77                 | 7.41                                 |
| 4**                            | 1 x 2.24                 | 4.61                                 |
| 6**                            | 1 x 2.76                 | 3.08                                 |

#### INSULATED WIRE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.45                                    | 2.0                      | 8.6                                  |
| 0.5                                     | 2.3                      | 11.9                                 |
| 0.5                                     | 2.4                      | 14.4                                 |
| 0.5                                     | 2.8                      | 18.6                                 |
| 0.6                                     | 3.3                      | 31.2                                 |
| 0.8                                     | 4.2                      | 50.1                                 |
| 0.8                                     | 4.8                      | 70.6                                 |

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

\*\* Nominal cross-sections not available with the ref. RECSV.

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

## SILICABLE® CSVRI and ECSVRI -60°C to +220°C



### Approvals - standards

- VERITAS approval certificate No. BV 153552.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances.
  - Street lighting.
- Industrial cabling in hot atmospheres.
- Wire specifically designed to facilitate stripping on automatic machines.

### Options

- Nickel-plated copper core: ref. CNCSVRI.
- Stranded bare copper (ref. CSVRI-SP) or tin-plated (ref. ECSVRI-SP) core - class 2 as per IEC 60228: See details of the option below.
- Solid bare copper (ref. RCSVRI) or tin-plated (ref. RECSVRI) core - class 1 as per IEC 60228: See details of the option below.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options and/or combinations of the options outlined above: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Flexible bare copper (ref. CSVRI) or tin-plated (ref. ECSVRI) core class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Reinforcement: Varnished fibreglass braid.

### Characteristics General

- Continuous operating temperatures: -60°C to +220°C.
- Good resistance to thermal shock and UV.
- Specifically designed for stripping on automatic machines.

### Electrical

- Rated voltage: 450/750 V.
- Test voltage: 2500 V.

### Standard products

- All solid colours, yellow/green or white with coloured spiral markings.

### CSVRI and ECSVRI

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

| Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) (bare copper core) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|-----------------------------|-------------------|-------------------------------------------------------------|--------------------------------------|-----------------------|-----------------------------------|
|                             | Class 5           | Alternative                                                 |                                      |                       |                                   |
| 0.5                         | 16 x 0.20         | -                                                           | 0.4                                  | 2.2                   | 8.5                               |
| 0.75                        | 24 x 0.20         | 11 x 0.30                                                   | 0.4                                  | 2.4                   | 11.0                              |
| 1                           | 32 x 0.20         | 14 x 0.30                                                   | 0.4                                  | 2.5                   | 13.2                              |
| 1.5                         | 30 x 0.25         | 21 x 0.30                                                   | 0.4                                  | 2.9                   | 18.7                              |
| 2.5                         | 50 x 0.25         | 35 x 0.30                                                   | 0.5                                  | 3.5                   | 29.4                              |
| 4                           | 56 x 0.30         | -                                                           | 0.6                                  | 4.3                   | 47.3                              |
| 6                           | 84 x 0.30         | -                                                           | 0.8                                  | 5.3                   | 72.0                              |

#### INSULATED WIRE

#### Option • CSVRI-SP and ECSVRI-SP

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

|       |          |      |     |     |      |
|-------|----------|------|-----|-----|------|
| 0.34* | 7 x 0.25 | 57.5 | 0.4 | 1.7 | 5.7  |
| 0.5   | 7 x 0.30 | 36.0 | 0.4 | 1.9 | 7.9  |
| 0.75  | 7 x 0.37 | 24.5 | 0.4 | 2.1 | 10.6 |
| 1     | 7 x 0.43 | 18.1 | 0.4 | 2.3 | 13.4 |
| 1.5   | 7 x 0.52 | 12.1 | 0.4 | 2.6 | 18.5 |
| 2.5   | 7 x 0.67 | 7.41 | 0.5 | 3.4 | 29.8 |

#### Option • RCSVRI and RECSVRI

##### Solid core • class 1 as per IEC 60228

|      |          |      |      |     |      |
|------|----------|------|------|-----|------|
| 0.5  | 1 x 0.80 | 36.0 | 0.45 | 2.1 | 9.2  |
| 0.75 | 1 x 0.98 | 24.5 | 0.45 | 2.2 | 11.4 |
| 1    | 1 x 1.13 | 18.1 | 0.45 | 2.4 | 14.5 |
| 1.5  | 1 x 1.38 | 12.1 | 0.45 | 2.7 | 19.8 |
| 2.5  | 1 x 1.77 | 7.41 | 0.5  | 3.2 | 30.9 |
| 4**  | 1 x 2.24 | 4.61 | 0.6  | 4.0 | 48.1 |
| 6**  | 1 x 2.76 | 3.08 | 0.8  | 4.8 | 71.8 |

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

\*\* Nominal cross-sections not available with the ref. RECSVRI.

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

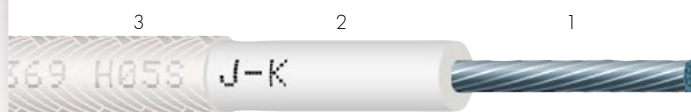
## SILICABLE® H05SJ-K

USE <HAR> Approval

**-60°C to +180°C**

<HAR>

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES WITH REINFORCING BRAID



### Approvals - standards

- USE <HAR> Approval as per NF EN 50525-2-41.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances.
  - Production machines.
  - Lighting.
- Industrial cabling in hot atmospheres.

### Options

- Varnished fibreglass braid: 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: 2000 V (as per NF EN 50525-2-41).

### Standard products

- All solid colours, yellow/green or white with coloured spiral markings.

### H05SJ-K

#### 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>(tin-plated copper core) |
|--------------------------------|-------------------|-------------------------------------------------------------------------|
| 0.5                            | 16 x 0.20         | 40.1                                                                    |
| 0.75                           | 24 x 0.20         | 26.7                                                                    |
| 1                              | 32 x 0.20         | 20.0                                                                    |
| 1.5                            | 30 x 0.25         | 13.7                                                                    |
| 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                             | 192 x 0.40        | 0.795                                                                   |
| 35                             | 259 x 0.40        | 0.565                                                                   |
| 50                             | 377 x 0.40        | 0.393                                                                   |
| 70                             | 340 x 0.50        | 0.277                                                                   |
| 95                             | 444 x 0.50        | 0.210                                                                   |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) |      | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|------|--------------------------------------|
|                                         | min.                     | max. |                                      |
| 0.6                                     | 2.6                      | 3.3  | 11.0                                 |
| 0.6                                     | 2.8                      | 3.5  | 14.5                                 |
| 0.6                                     | 2.9                      | 3.7  | 16.7                                 |
| 0.7                                     | 3.4                      | 4.2  | 20.4                                 |
| 0.8                                     | 4.0                      | 5.0  | 35.0                                 |
| 0.8                                     | 4.5                      | 5.6  | 49.4                                 |
| 0.8                                     | 5.0                      | 6.2  | 73.3                                 |
| 1.0                                     | 6.2                      | 7.8  | 123                                  |
| 1.0                                     | 7.3                      | 9.1  | 182                                  |
| 1.2                                     | 9.0                      | 11.3 | 272                                  |
| 1.2                                     | 10.3                     | 12.8 | 355                                  |
| 1.4                                     | 11.7                     | 14.6 | 502                                  |
| 1.4                                     | 13.8                     | 17.3 | 686                                  |
| 1.6                                     | 15.6                     | 19.6 | 911                                  |

For this product, please contact:

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

# SILICABLE® H05SJ-U

USE  $\triangleleft$ HAR $\triangleright$  Approval

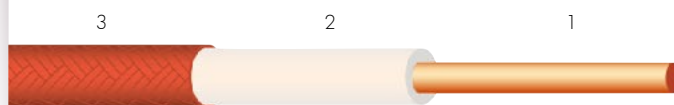
**-60°C to +180°C**

$\triangleleft$ HAR $\triangleright$

- USE HAR Approval as per NF EN 50525-2-41.
- Halogen-free: IEC 60754-1 / EN 60754-1.

- Cabling for household electrical heating appliances.
  - Production machines.
    - Lighting, lights.
  - Industrial cabling in hot atmospheres.
- Varnished fibreglass braid: contact us.

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Solid bare copper or tin-plated core – class 1 as per IEC 60228 / EN 60228.
- 2 • Insulation: Silicone rubber - type EI2 - NF C 32-525-1 / NF EN 50525-1 / EN 50363-1.
- 3 • Reinforcement: Silicone-coated fibreglass braid.

## 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: 2000 V (as per NF EN 50525-2-41).

## Standard products

- All solid colours, yellow/green or white with coloured spiral markings.

### H05SJ-U

#### Solid core • class 1 as per IEC 60228

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km)<br>(tin-plated copper core) |
|---------------------------------------------|-------------------|-------------------------------------------------------------------------|
| 0.5*                                        | 1 x 0.80          | 36.7                                                                    |
| 0.75*                                       | 1 x 0.98          | 24.8                                                                    |
| 1                                           | 1 x 1.13          | 18.2                                                                    |
| 1.5                                         | 1 x 1.38          | 12.2                                                                    |
| 2.5                                         | 1 x 1.77          | 7.56                                                                    |
| 4**                                         | 1 x 2.24          | 4.70                                                                    |
| 6**                                         | 1 x 2.76          | 3.11                                                                    |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) |      | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|------|--------------------------------------|
|                                         | min.                     | max. |                                      |
| 0.6                                     | -                        | 2.5  | 10.5                                 |
| 0.6                                     | -                        | 2.7  | 13.1                                 |
| 0.6                                     | 2.8                      | 3.5  | 17.9                                 |
| 0.7                                     | 3.2                      | 4.0  | 24.4                                 |
| 0.8                                     | 3.8                      | 4.7  | 37.0                                 |
| 0.8                                     | 4.2                      | 5.3  | 51.1                                 |
| 0.8                                     | 4.7                      | 5.9  | 71.7                                 |

\* Ref. 05SJ-U: nominal cross-sections not described in standard NF EN 50525-2-41.

\*\* Nominal cross-sections not available in the solid tin-plated copper core version.

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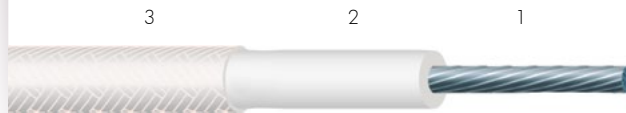
# HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION I: CROSS LINKED ELASTOMERS

## SILICABLE® 150°C

Silicone insulation  
with fibreglass braid  
UL approval



### SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Bare copper, tin-plated, nickel-plated or silver-plated core.
- 2 • Insulation: Silicone rubber.
- 3 • Reinforcement: Coated fibreglass braid.

### Characteristics General

- Continuous operating temperatures: -60°C to +150°C.
- Good resistance to thermal shock and UV.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for household electrical heating appliances, rotating machines, lighting.
- Industrial cabling in hot atmospheres.

### Options

- Approval CSA as per standard C22.2 No. 210 - File no.: LL84986: contact us.
- Fixture wires (Ref. SF-1 or SF-2 or SFF-1 or SFF-2): contact us.
- Other nominal cross-sections: contact us.
- Other style nos. available: style nos. 3100, 3101, 3113, 3127, 3128, 3207, 3208, 3210, 3278.
- Vertical flame test VW-1: contact us.

### Style no. Approval

|                       |       | 3068                                 |                        | 3132                                 |                        | 3069 (26-20 AWG)<br>3070 (18-12 AWG) |                        | 3535                                 |                        |
|-----------------------|-------|--------------------------------------|------------------------|--------------------------------------|------------------------|--------------------------------------|------------------------|--------------------------------------|------------------------|
|                       |       | 150°C - 300 V                        |                        | 150°C - 300 V                        |                        | 150°C - 600 V                        |                        | 150°C - 600 V                        |                        |
| Nominal cross-section |       | Average thickness of insulation (mm) | Nominal diameter* (mm) | Average thickness of insulation (mm) | Nominal diameter* (mm) | Average thickness of insulation (mm) | Nominal diameter* (mm) | Average thickness of insulation (mm) | Nominal diameter* (mm) |
| AWG                   | (mm²) |                                      |                        |                                      |                        |                                      |                        |                                      |                        |
| 26                    | 0.13  | 0.38                                 | 1.5                    | 0.38                                 | 1.5                    | 0.76                                 | 2.3                    | -                                    | -                      |
| 24                    | 0.22  | 0.38                                 | 1.7                    | 0.38                                 | 1.7                    | 0.76                                 | 2.4                    | -                                    | -                      |
| 22                    | 0.34  | 0.38                                 | 1.9                    | 0.38                                 | 1.9                    | 0.76                                 | 2.7                    | -                                    | -                      |
| -                     | 0.5   | 0.38                                 | 2.0                    | 0.38                                 | 2.0                    | 0.76                                 | 2.8                    | -                                    | -                      |
| 20                    | 0.6   | 0.38                                 | 2.1                    | 0.38                                 | 2.1                    | 0.76                                 | 2.9                    | 0.76                                 | 2.9                    |
| -                     | 0.75  | 0.38                                 | 2.2                    | 0.38                                 | 2.2                    | -                                    | -                      | 0.76                                 | 3.0                    |
| 18                    | 0.93  | 0.38                                 | 2.3                    | 0.38                                 | 2.3                    | 0.76                                 | 3.1                    | 0.76                                 | 3.1                    |
| -                     | 1     | 0.38                                 | 2.4                    | 0.38                                 | 2.4                    | 0.76                                 | 3.2                    | 0.76                                 | 3.2                    |
| 16                    | 1.34  | 0.38                                 | 2.6                    | 0.38                                 | 2.6                    | 0.76                                 | 3.6                    | 0.76                                 | 3.6                    |
| -                     | 1.5   | 0.38                                 | 2.7                    | 0.38                                 | 2.7                    | 0.76                                 | 3.7                    | 0.76                                 | 3.7                    |
| 14                    | -     | -                                    | -                      | 0.38                                 | 3.0                    | 0.76                                 | 4.0                    | 0.76                                 | 4.0                    |
| -                     | 2.5   | -                                    | -                      | 0.38                                 | 3.1                    | 0.76                                 | 4.1                    | 0.76                                 | 4.1                    |
| 12                    | -     | -                                    | -                      | 0.38                                 | 3.7                    | 0.76                                 | 4.5                    | 0.76                                 | 4.5                    |
| -                     | 4     | -                                    | -                      | 0.38                                 | 3.9                    | 0.76                                 | 4.7                    | 0.76                                 | 4.7                    |
| 10                    | -     | -                                    | -                      | 0.38                                 | 4.3                    | -                                    | -                      | 1.14                                 | 5.8                    |
| -                     | 6     | -                                    | -                      | 0.38                                 | 4.4                    | -                                    | -                      | 1.14                                 | 6.0                    |
| 8                     | -     | -                                    | -                      | 0.38                                 | 5.1                    | -                                    | -                      | 1.14                                 | 6.6                    |
| -                     | 10    | -                                    | -                      | 0.38                                 | 5.7                    | -                                    | -                      | 1.14                                 | 7.7                    |
| 6                     | -     | -                                    | -                      | 0.38                                 | 6.4                    | -                                    | -                      | 1.52                                 | 8.9                    |
| -                     | 16    | -                                    | -                      | 0.38                                 | 6.8                    | -                                    | -                      | 1.52                                 | 9.5                    |
| 4                     | -     | -                                    | -                      | 0.38                                 | 7.8                    | -                                    | -                      | 1.52                                 | 10.7                   |
| -                     | 25    | -                                    | -                      | 0.38                                 | 8.3                    | -                                    | -                      | 1.52                                 | 11.1                   |
| 2                     | 35    | -                                    | -                      | 0.38                                 | 9.4                    | -                                    | -                      | 1.52                                 | 11.9                   |
| 1                     | -     | -                                    | -                      | 0.38                                 | 10.6                   | -                                    | -                      | 2.03                                 | 14.4                   |
| -                     | 50    | -                                    | -                      | 0.38                                 | 11.0                   | -                                    | -                      | 2.03                                 | 15.1                   |
| 1/0                   | -     | -                                    | -                      | 0.38                                 | 11.7                   | -                                    | -                      | 2.03                                 | 15.6                   |
| 2/0                   | 70    | -                                    | -                      | 0.38                                 | 12.8                   | -                                    | -                      | 2.03                                 | 16.5                   |
| 3/0                   | -     | -                                    | -                      | 0.38                                 | 14.4                   | -                                    | -                      | 2.03                                 | 18.2                   |
| -                     | 95    | -                                    | -                      | 0.38                                 | 14.6                   | -                                    | -                      | 2.03                                 | 18.4                   |
| 4/0                   | -     | -                                    | -                      | 0.38                                 | 16.1                   | -                                    | -                      | 2.41                                 | 20.5                   |
| -                     | 120   | -                                    | -                      | 0.38                                 | 16.4                   | -                                    | -                      | 2.41                                 | 20.9                   |
| 250MCM                | -     | -                                    | -                      | -                                    | -                      | -                                    | -                      | 2.41                                 | 21.7                   |
| -                     | 150   | -                                    | -                      | -                                    | -                      | -                                    | -                      | 2.41                                 | 22.4                   |
| 300MCM                | -     | -                                    | -                      | -                                    | -                      | -                                    | -                      | 2.41                                 | 23.6                   |
| 350MCM                | 185   | -                                    | -                      | -                                    | -                      | -                                    | -                      | 2.41                                 | 24.6                   |
| 400MCM                | -     | -                                    | -                      | -                                    | -                      | -                                    | -                      | 2.41                                 | 25.6                   |
| -                     | 240   | -                                    | -                      | -                                    | -                      | -                                    | -                      | 2.41                                 | 26.9                   |
| 500MCM                | -     | -                                    | -                      | -                                    | -                      | -                                    | -                      | 2.41                                 | 28.2                   |
| -                     | 300   | -                                    | -                      | -                                    | -                      | -                                    | -                      | -                                    | -                      |
| 600MCM                | -     | -                                    | -                      | -                                    | -                      | -                                    | -                      | -                                    | -                      |
| 700MCM                | -     | -                                    | -                      | -                                    | -                      | -                                    | -                      | -                                    | -                      |
| 750MCM                | 400   | -                                    | -                      | -                                    | -                      | -                                    | -                      | -                                    | -                      |
| Conducting metal      |       | BCDEFG                               |                        | BCDEFG                               |                        | BCDEFG                               |                        | BCDF                                 |                        |

### KEY

Conducting metals  
**B** Tin-plated copper  
**B\*** Tin-plated copper (ø > 0.38 mm)  
**C** Nickel-plated copper  
**D** Silver-plated copper  
**E** Nickel  
**F** Bare copper  
**F\*** Bare copper (ø > 0.38 mm)  
**G** Nickel-plated copper 27 %

**AWM I A** Internal wiring, not subject to mechanical abuse  
**AWM I A/B** Internal wiring  
**AWM II A/B** External or Internal wiring

**NS** Not Specified  
**VNS** Voltage Not Specified

For this product, please contact:

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 LES CABLES DE L'EXTREME

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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# SILICABLE® 200°C

**Silicone insulation  
with fibreglass braid  
UL approval**



## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Bare copper, tin-plated, nickel-plated or silver-plated core.
- 2 • Insulation: Silicone rubber.
- 3 • Reinforcement: Coated fibreglass braid.

## Characteristics

## General

- Continuous operating temperatures: -60°C to +200°C.
- Good resistance to thermal shock and UV.

## Electrical

- Rated voltage: as per style no.
- Test voltage:  $10 \times$  Rated voltage.

## Standard products

- All colours including two-coloured.
- Stranding of conducting cores: contact us.

## Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

## Applications

- Cabling for household electrical heating appliances, rotating machines, lighting.
- Industrial cabling in hot atmospheres.

## Options

- Approval CSA as per standard C22.2 No. 210 - File no.: LL84986: contact us.
- Fixture wires (Ref. SF-1 or SF-2 or SFF-1 or SFF-2): contact us.
  - Other nominal cross-sections: contact us.
  - Other style nos. available: style nos. 3074, 3075, 3125, 3126, 3144, 3145, 3172, 3209.
- Vertical flame test VW-1 for style no. 3513 and 3122: contact us.

| Style no.             |       | 3122                            |                   | 3071                            |                   | 3513                            |                   | 3645                            |                   |
|-----------------------|-------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|
| Approval              |       | 200°C – 300 V                   |                   | 200°C – 600 V                   |                   | 200°C – 600 V                   |                   | 200°C – 1000 V                  |                   |
| Nominal cross-section |       | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* | Average thickness of insulation | Nominal diameter* |
| AWG                   | (mm²) | (mm)                            | (mm)              | (mm)                            | (mm)              | (mm)                            | (mm)              | (mm)                            | (mm)              |
| 26                    | 0.13  | 0.38                            | 1.5               | -                               | -                 | -                               | -                 | 1.14                            | 3.1               |
| 24                    | 0.22  | 0.38                            | 1.7               | -                               | -                 | -                               | -                 | 1.14                            | 3.2               |
| 22                    | 0.34  | 0.38                            | 1.9               | -                               | -                 | -                               | -                 | 1.14                            | 3.5               |
| -                     | 0.5   | 0.38                            | 2.0               | -                               | -                 | 0.76                            | 2.8               | 1.14                            | 3.7               |
| 20                    | 0.6   | 0.38                            | 2.1               | -                               | -                 | 0.76                            | 2.9               | 1.14                            | 3.9               |
| -                     | 0.75  | 0.38                            | 2.2               | -                               | -                 | 0.76                            | 3.0               | 1.14                            | 4.0               |
| 18                    | 0.93  | 0.38                            | 2.3               | 0.76                            | 3.1               | 0.76                            | 3.1               | 1.14                            | 4.1               |
| -                     | 1     | 0.38                            | 2.4               | 0.76                            | 3.2               | 0.76                            | 3.2               | 1.14                            | 4.2               |
| 16                    | 1.34  | 0.38                            | 2.6               | 0.76                            | 3.6               | 0.76                            | 3.6               | 1.14                            | 4.3               |
| -                     | 1.5   | 0.38                            | 2.7               | 0.76                            | 3.7               | 0.76                            | 3.7               | 1.14                            | 4.5               |
| 14                    | -     | -                               | -                 | 0.76                            | 4.0               | 0.76                            | 4.0               | 1.14                            | 4.8               |
| -                     | 2.5   | -                               | -                 | 0.76                            | 4.1               | 0.76                            | 4.1               | 1.14                            | 4.9               |
| 12                    | -     | -                               | -                 | -                               | -                 | 0.76                            | 4.5               | 1.14                            | 5.1               |
| -                     | 4     | -                               | -                 | -                               | -                 | 0.76                            | 4.7               | 1.14                            | 5.4               |
| 10                    | -     | -                               | -                 | -                               | -                 | 1.14                            | 5.8               | 1.14                            | 5.8               |
| -                     | 6     | -                               | -                 | -                               | -                 | 1.14                            | 6.0               | 1.14                            | 6.0               |
| 8                     | -     | -                               | -                 | -                               | -                 | 1.14                            | 6.6               | 1.52                            | 7.3               |
| -                     | 10    | -                               | -                 | -                               | -                 | 1.52                            | 8.0               | 1.52                            | 8.0               |
| 6                     | -     | -                               | -                 | -                               | -                 | 1.52                            | 8.9               | 1.52                            | 8.9               |
| -                     | 16    | -                               | -                 | -                               | -                 | 1.52                            | 9.5               | 1.52                            | 9.5               |
| 4                     | -     | -                               | -                 | -                               | -                 | 1.52                            | 10.7              | 1.52                            | 10.7              |
| -                     | 25    | -                               | -                 | -                               | -                 | 1.52                            | 11.1              | 1.52                            | 11.1              |
| 2                     | 35    | -                               | -                 | -                               | -                 | 1.52                            | 11.9              | 1.52                            | 11.9              |
| 1                     | -     | -                               | -                 | -                               | -                 | 2.03                            | 14.4              | 2.03                            | 14.4              |
| -                     | 50    | -                               | -                 | -                               | -                 | 2.03                            | 15.1              | 2.03                            | 15.1              |
| 1/0                   | -     | -                               | -                 | -                               | -                 | 2.03                            | 15.6              | 2.03                            | 15.6              |
| 2/0                   | 70    | -                               | -                 | -                               | -                 | 2.03                            | 16.5              | 2.03                            | 16.5              |
| 3/0                   | -     | -                               | -                 | -                               | -                 | 2.03                            | 18.2              | 2.03                            | 18.2              |
| -                     | 95    | -                               | -                 | -                               | -                 | 2.03                            | 18.4              | 2.03                            | 18.4              |
| 4/0                   | -     | -                               | -                 | -                               | -                 | 2.41                            | 20.5              | 2.03                            | 19.7              |
| -                     | 120   | -                               | -                 | -                               | -                 | 2.41                            | 20.9              | 2.03                            | 20.1              |
| 250MCM                | -     | -                               | -                 | -                               | -                 | 2.41                            | 21.7              | 2.41                            | 21.7              |
| -                     | 150   | -                               | -                 | -                               | -                 | 2.41                            | 22.4              | 2.41                            | 22.4              |
| 300MCM                | -     | -                               | -                 | -                               | -                 | 2.41                            | 23.6              | 2.41                            | 23.6              |
| 350MCM                | 185   | -                               | -                 | -                               | -                 | 2.41                            | 24.6              | 2.41                            | 24.6              |
| 400MCM                | -     | -                               | -                 | -                               | -                 | 2.41                            | 25.6              | 2.41                            | 25.6              |
| -                     | 240   | -                               | -                 | -                               | -                 | 2.41                            | 26.9              | 2.41                            | 26.9              |
| 500MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | 2.41                            | 28.2              |
| -                     | 300   | -                               | -                 | -                               | -                 | -                               | -                 | 2.79                            | 30.7              |
| 600MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | 2.79                            | 31.3              |
| 700MCM                | -     | -                               | -                 | -                               | -                 | -                               | -                 | 2.79                            | 33.2              |
| 750MCM                | 400   | -                               | -                 | -                               | -                 | -                               | -                 | 2.79                            | 34.2              |
| Conducting metal      |       | B*CDEF*G                        |                   | B*CDEF*G                        |                   | B*CD                            |                   | B*CDEF*G                        |                   |

## KEY

### KEY

Conducting metals

B Tin-plated copper  
 B\* Tin-plated copper ( $\phi > 0.38$  mm)  
 C Nickel-plated copper  
 D Silver-plated copper  
 E Nickel  
 F Bare copper  
 F\* Bare copper ( $\phi > 0.38$  mm)  
 G Nickel-plated copper 27 %

**AWM I A** Internal wiring, not subject to mechanical abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

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\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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

## SILICABLE® CSVCS and ECSVCS Reinforced double insulating layer -60°C to +180°C

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
  - Meets the requirements of standard NF EN 60335-1: Safety of household and similar electrical appliances.

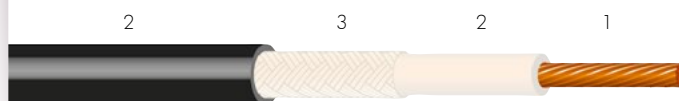
### Applications

- Class 2 lighting equipment and convectors or any other household electrical appliance complying with standard NF EN 60335-1.

### Options

- Nickel-plated copper core: ref. CNCSVCS.
- Silver-plated copper core: ref. ACSVCS.
- Pure nickel core (not described in IEC 60228): ref. NCSVCS.
- Solid bare copper (ref. RCSVCS) or tin-plated (ref. RECSVCS) core – class 1 as per IEC 60228: contact us.
- Extra-flexible bare copper (ref. CSVCS-ES) or tin-plated (ref. ECSVCS-ES) core – class 6 as per IEC 60228: contact us.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other options and/or combinations of the options outlined above: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Flexible bare copper (ref. CSVCS) or tin-plated (ref. ECSVCS) core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Reinforcement: Fibreglass braid.

### 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 solid colours.

### CSVCS and ECSVCS

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

| Nominal cross-section<br>(mm²) |            | Maximum linear resistance<br>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                                                                  |
| 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

| Nominal diameter<br>(mm) |      |      |
|--------------------------|------|------|
| 0.9                      | 2.8  | 10.9 |
| 0.9                      | 2.9  | 13.0 |
| 0.9                      | 3.0  | 15.3 |
| 1.0                      | 3.6  | 22.4 |
| 1.1                      | 4.2  | 33.6 |
| 1.2                      | 4.9  | 51.1 |
| 1.5                      | 6.1  | 77.3 |
| 1.7                      | 7.8  | 130  |
| 2.0                      | 9.4  | 193  |
| 2.2                      | 11.4 | 299  |
| 2.4                      | 12.8 | 396  |
| 2.6                      | 14.8 | 556  |

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

## SILICABLE® CSP and ECSP -60°C to +180°C



### Approvals - standards

- VERITAS approval certificate No. BV 153552.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for rotating machines: motors, alternators, generators.
- Cabling for static machines: transformers, inductors, inverters, choppers.
- Shipbuilding and railway construction.
  - Power cabinets.

### Options

- Solid bare copper (ref. RCSP) or tin-plated (ref. RECSP) core – class 1 as per IEC 60228: contact us.
- Extra-flexible bare copper (ref. CSP-ES) or tin-plated (ref. ECSP-ES) core – class 6 as per IEC 60228: contact us.
- 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 mechanical strength.

#### Electrical

- |                  |                       |                    |
|------------------|-----------------------|--------------------|
|                  | <b>CS &lt; 10 mm²</b> | <b>CS ≥ 10 mm²</b> |
| • Rated voltage: | 450/750 V             | 600/1000 V.        |
| • Test voltage:  | 2500 V                | 3000 V.            |

### Standard products

- All solid colours, yellow/green or white with coloured spiral markings.

### CSP and ECSP

#### 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) |
|--------------------------------|-------------------|--------------------------------------------------------------------|
| 0.25*                          | 8 x 0.20          | 78.9                                                               |
| 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                                                              |
| 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<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.4                                     | 1.8                      | 5.4                                  |
| 0.4                                     | 2.0                      | 7.9                                  |
| 0.4                                     | 2.2                      | 10.3                                 |
| 0.4                                     | 2.3                      | 12.5                                 |
| 0.4                                     | 2.7                      | 17.7                                 |
| 0.5                                     | 3.3                      | 29.6                                 |
| 0.6                                     | 4.1                      | 45.0                                 |
| 0.8                                     | 5.1                      | 68.7                                 |
| 1.0                                     | 7.2                      | 122                                  |
| 1.2                                     | 8.6                      | 180                                  |
| 1.4                                     | 10.4                     | 277                                  |
| 1.6                                     | 11.9                     | 373                                  |
| 1.8                                     | 14.1                     | 542                                  |
| 1.8                                     | 15.9                     | 726                                  |
| 2.2                                     | 18.2                     | 964                                  |
| 2.3                                     | 20.7                     | 1214                                 |
| 2.6                                     | 23.2                     | 1522                                 |
| 2.7                                     | 25.2                     | 1847                                 |
| 3.2                                     | 29.2                     | 2512                                 |
| 3.2                                     | 31.6                     | 3093                                 |
| 3.2                                     | 35.2                     | 3807                                 |

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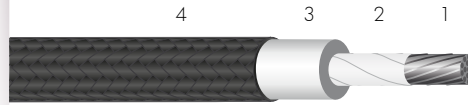
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HIGH TEMPERATURE WIRES AND CABLES  
FOR THE GENERAL MARKET  
SECTION I: CROSS LINKED ELASTOMERS

# SILICABLE® ECSPRI

## -60°C to +180°C

SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Optional separating tape.
- 3 • Insulation: Silicone rubber.
- 4 • Reinforcement: Varnished synthetic fibre braid.

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Cabling for rotating machines: motors, alternators, generators.
- Cabling for static machines: transformers, inductors, inverters, choppers.
  - Power cabinets.

### Options

- Flexible bare copper core (ref. CSPRI) – class 5 as per IEC 60228: contact us.
- 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.
- Bending radius: 5 x D.
- Good resistance to thermal shock and UV.
- Excellent mechanical strength.

#### Electrical

- Rated voltage: 600/1000 V.
- Test voltage: 3000 V.

### Standard products

- All solid colours, yellow/green or white with coloured spiral markings.

### ECSPRI

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 0.5                                         | 16 x 0.20         | 40.1                                        |
| 0.75                                        | 24 x 0.20         | 26.7                                        |
| 1                                           | 32 x 0.20         | 20.0                                        |
| 1.5                                         | 30 x 0.25         | 13.7                                        |
| 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        | 0.393                                       |
| 70                                          | 360 x 0.50        | 0.277                                       |
| 95                                          | 485 x 0.50        | 0.210                                       |
| 120                                         | 608 x 0.50        | 0.164                                       |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.35                                    | 1.9                      | 7.2                                  |
| 0.4                                     | 2.2                      | 10.2                                 |
| 0.4                                     | 2.3                      | 12.3                                 |
| 0.4                                     | 2.7                      | 17.7                                 |
| 0.5                                     | 3.3                      | 28.2                                 |
| 0.6                                     | 4.1                      | 44.6                                 |
| 0.8                                     | 5.1                      | 67.8                                 |
| 0.9                                     | 7.0                      | 121                                  |
| 1.1                                     | 8.4                      | 179                                  |
| 1.3                                     | 10.2                     | 278                                  |
| 1.4                                     | 11.6                     | 372                                  |
| 1.7                                     | 13.8                     | 534                                  |
| 1.7                                     | 15.4                     | 703                                  |
| 2.1                                     | 18.0                     | 942                                  |
| 2.3                                     | 20.0                     | 1217                                 |

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

## SILICABLE® HT Style 3304 and Style 3573

Ignition wires  
UL approval



### Approvals - standards

- UL approval as per standard UL 758 – File no.: E101965.
- Halogen-free: IEC 60754-1 / EN 60754-1.
- "Horizontal flame test" as per UL approval.

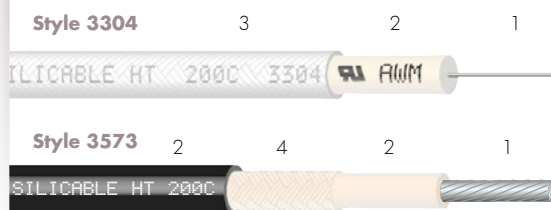
### Applications

- Ignition circuit and creation of an electric arc for:
- > Piezo-electric components in household electrical appliances.
- > Gas or oil burners for boilers and professional appliances.

### Options

- Other nominal cross-sections: contact us.
- Vertical flame test VW-1: contact us.
- Other colours: contact us.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Bare copper, tin-plated, nickel-plated or silver-plated core.
- 2 • Insulation: Silicone rubber.
- 3 • Reinforcement: Silicone-coated fibreglass braid.
- 4 • Reinforcement: Fibreglass braid.

### Characteristics General

- Continuous operating temperatures: -60°C to +200°C.
- Good resistance to thermal shock and UV.

### Electrical

- Pulse voltage: 10 kV AC.

### Standard products

- Standard insulation colours: white, black, brick red and colourless.
- Stranding of conducting cores: contact us.

| Style no.             |       | 3304                              |                        | 3573                              |                        |
|-----------------------|-------|-----------------------------------|------------------------|-----------------------------------|------------------------|
| Approval              |       | 200°C – 10000 V                   |                        | 200°C – 10000 V                   |                        |
| Nominal cross-section |       | Avg thick-ness of insulation (mm) | Nominal diameter* (mm) | Avg thick-ness of insulation (mm) | Nominal diameter* (mm) |
| AWG                   | (mm²) |                                   |                        |                                   |                        |
| 22                    | 0.34  | 1.0                               | 3.1                    | 1.0                               | 3.2                    |
| -                     | 0.5   | 1.0                               | 3.2                    | 1.0                               | 3.4                    |
| 20                    | 0.6   | 1.0                               | 3.4                    | 1.0                               | 3.6                    |
| -                     | 0.75  | 1.0                               | 3.5                    | 1.0                               | 3.7                    |
| 18                    | 0.93  | 1.0                               | 3.5                    | 1.0                               | 3.7                    |
| -                     | 1     | 1.0                               | 3.7                    | 1.0                               | 3.9                    |
| 16                    | 1.34  | 1.0                               | 3.8                    | 1.0                               | 4.1                    |
| -                     | 1.5   | 1.0                               | 4.0                    | 1.0                               | 4.3                    |
| 14                    | -     | 1.0                               | 4.3                    | 1.0                               | 4.6                    |
| -                     | 2.5   | 1.0                               | 4.5                    | 1.0                               | 4.8                    |
| 12                    | -     | 1.0                               | 4.8                    | 1.0                               | 5.0                    |
| -                     | 4     | 1.0                               | 5.0                    | 1.0                               | 5.3                    |
| Conducting metal      |       | B*CDF*G                           |                        | B*CDEF*G                          |                        |

### KEY

Conducting metals  
 B Tin-plated copper  
 B\* Tin-plated copper ( $\phi > 0.38$  mm)  
 C Nickel-plated copper  
 D Silver-plated copper  
 E Nickel  
 F Bare copper  
 F\* Bare copper ( $\phi > 0.38$  mm)  
 G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse  
 AWM I A/B Internal wiring  
 AWM II A/B External or Internal wiring

NS Not Specified  
 VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

For this product, please contact:

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 LES CABLES DE L'EXTREME

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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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 some cases, for production purposes, a separating tape may be added between two successive layers. 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.

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

## SILICABLE® VMC-ECS -60°C to +180°C

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
- Low corrosivity of gas emissions: IEC 60754-2 / EN 60754-2.
- Fire retardant: NF C 32-070 test C1.
- Resistance to vertical flame propagation for an insulated cable: IEC 60332-1-2 / EN 60332-1-2 / NF C 32-070 test C2.
- Tests on electric cables under fire conditions - Circuit integrity: IEC 60331-21.

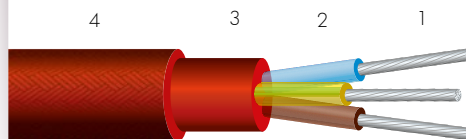
### Applications

- Industrial cabling in hot atmospheres up to 180 °C.
- Cabling in the metallurgical industry, glassworks, etc.
  - Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
  - Lights, spotlights, etc.

### Standard products

- Standard conductor colours: see table below.
- Standard sheath colour: brick red.
- Standard reinforcing braid colour: brick red.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Sheath: Silicone rubber.
- 4 • Reinforcement: Silicone-coated fiberglass braid.

### Characteristics General

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

### Electrical

- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

### Options

- Bare copper core: ref. VMC-CS.
- Nickel-plated copper core: ref. VMC-CNCS.
- Silver-plated copper core: ref. VMC-ACS.
- Pure nickel core (not described in IEC 60228): ref. VMC-NCS.
- Outer electrical shielding: > Tin-plated copper braid: ref. BEVMC-ECS.
- Outer flexible armour: > Galvanised steel braid: ref. BGVMC-ECS.
- > Stainless steel braid: ref. BIVMC-ECS.
- Sheathed electrical shielding: > Tin-plated copper braid: ref. VMCBE-ECS.
- > Aluminium/PET tape + continuity wire: ref. VMCBALECS.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other colours: contact us.
- Other options and/or combinations of the options outlined above: contact us.

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

### INSULATED CONDUCTORS

### SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.1                   | 45.1                              |
| 3 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 6.7                   | 56.8                              |
| 4 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 7.3                   | 68.2                              |
| 5 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.2                   | 84.8                              |
| 6 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.8                   | 93.5                              |
| 7 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 8.8                   | 102                               |
| 10 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 11.5                  | 156                               |
| 12 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.1                  | 183                               |
| 14 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 12.6                  | 204                               |
| 16 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 13.1                  | 223                               |
| 19 x 0.5                                 | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 13.9                  | 259                               |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.6                   | 54.8                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.0                   | 65.6                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.0                   | 85.7                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.9                   | 105                               |
| 6 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.6                   | 116                               |
| 7 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.7                   | 131                               |
| 10 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 12.5                  | 192                               |
| 12 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.3                  | 231                               |
| 14 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 13.6                  | 250                               |
| 16 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 14.4                  | 283                               |
| 19 x 0.75                                | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 15.6                  | 343                               |

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LES CABLES DE L'EXTREME

## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.2                   | 67.3                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.7                   | 82.1                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.4                   | 99.6                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.4                   | 123                               |
| 6 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 10.2                  | 139                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 10.4                  | 158                               |
| 10 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.3                  | 230                               |
| 12 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 13.9                  | 268                               |
| 14 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 14.4                  | 298                               |
| 16 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 15.0                  | 327                               |
| 19 x 1                                   | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 15.9                  | 384                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 7.9                   | 84.7                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 8.3                   | 102                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 9.0                   | 123                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 9.9                   | 147                               |
| 6 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.7                  | 166                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 10.7                  | 185                               |
| 10 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 13.7                  | 265                               |
| 12 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 15.6                  | 358                               |
| 14 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 16.2                  | 400                               |
| 16 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 16.8                  | 438                               |
| 19 x 1.5                                 | 30 x 0.25         | 13.7                                     | 0.6                                  | 2.8                   | 17.6                  | 502                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 9.5                   | 127                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 10.0                  | 154                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 10.9                  | 189                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 11.9                  | 226                               |
| 6 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.9                  | 254                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 12.9                  | 285                               |
| 10 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 17.2                  | 435                               |
| 12 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 18.0                  | 512                               |
| 14 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 18.8                  | 579                               |
| 16 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 19.8                  | 650                               |
| 19 x 2.5                                 | 50 x 0.25         | 8.21                                     | 0.7                                  | 3.4                   | 21.0                  | 760                               |
| 2 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 10.9                  | 177                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 11.9                  | 229                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 13.0                  | 282                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 14.4                  | 343                               |
| 6 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 16.2                  | 410                               |
| 7 x 4                                    | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 16.2                  | 458                               |
| 10 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 20.6                  | 648                               |
| 12 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 21.6                  | 767                               |
| 14 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 23.0                  | 893                               |
| 16 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 24.0                  | 990                               |
| 19 x 4                                   | 56 x 0.30         | 5.09                                     | 0.8                                  | 4.2                   | 25.2                  | 1145                              |
| 2 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 12.9                  | 256                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 13.3                  | 307                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 14.5                  | 378                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 18.0                  | 539                               |
| 6 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 19.4                  | 607                               |
| 7 x 6                                    | 84 x 0.30         | 3.39                                     | 0.8                                  | 4.8                   | 19.4                  | 675                               |
| 2 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 16.0                  | 394                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 18.6                  | 558                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 20.6                  | 698                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 22.6                  | 837                               |
| 6 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 23.4                  | 884                               |
| 7 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 23.4                  | 997                               |
| 2 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 19.6                  | 598                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 21.6                  | 787                               |
| 4 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 23.8                  | 979                               |
| 5 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 26.2                  | 1182                              |
| 6 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 28.4                  | 1332                              |
| 7 x 16                                   | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.8                   | 28.4                  | 1503                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 24.6                  | 953                               |
| 3 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 26.2                  | 1201                              |
| 4 x 25                                   | 196 x 0.40        | 0.795                                    | 1.4                                  | 9.6                   | 29.1                  | 1513                              |

## Standard conductor colours:

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

## • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup>  
(example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

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

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID

# SILICABLE® PMC-ECS

## -60°C to +180°C

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
  - Fire retardant: NF C 32-070 test C1.
- Resistance to vertical flame propagation for an insulated cable: IEC 60332-1-2 / EN 60332-1-2 / NF C 32-070 test C2.
- Tests on electric cables under fire conditions – Circuit integrity: IEC 60331-21.

### Options

- Bare copper core: ref. PMC-CS.
- Nickel-plated copper core: ref. PMC-CNCS.
  - Silver-plated copper core: ref. PMC-ACS.
- Pure nickel core (not described in IEC 60228): ref. PMC-NCS.
  - Sheathed electrical shielding:
    - > Tin-plated copper braid: ref. PMCBE-ECS.
    - > Aluminium/PET tape + continuity wire: ref. PMCBAL-ECS.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
    - Other colours: 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 mechanical strength.

### Electrical

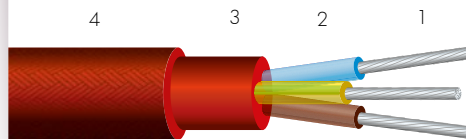
- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

### Standard products

- Standard conductor colours: see table below.
- Standard sheath colour: brick red.
- Standard reinforcing braid colour: brick red.

### Applications

- Cabling for shipbuilding and railway construction.
- Industrial cabling in hot atmospheres up to 180°C.
- Cabling for rotating machines: motors, alternators, generators, etc.
- Cabling for static machines: transformers, inductors, inverters, choppers, etc.
- Power cabinets, lights, welding stations.
- Cabling requiring excellent mechanical strength.



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Sheath: Silicone rubber.
- 4 • Reinforcement: Coated synthetic fibre braid.

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

|                                          |                   |                                           | INSULATED CONDUCTORS                 |                       | SHEATHED CABLE        |                                   |
|------------------------------------------|-------------------|-------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20 °C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
| 2 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 6.2                   | 44.5                              |
| 3 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 6.8                   | 56.1                              |
| 4 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 7.4                   | 67.4                              |
| 5 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 8.3                   | 84.0                              |
| 6 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 8.9                   | 92.5                              |
| 7 x 0.5                                  | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 8.9                   | 101                               |
| 10 x 0.5                                 | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 11.6                  | 154                               |
| 12 x 0.5                                 | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 12.2                  | 181                               |
| 14 x 0.5                                 | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 12.7                  | 202                               |
| 16 x 0.5                                 | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 13.2                  | 220                               |
| 19 x 0.5                                 | 16 x 0.20         | 40.1                                      | 0.6                                  | 2.1                   | 14.0                  | 256                               |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 6.7                   | 54.1                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 7.1                   | 64.9                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 8.1                   | 84.8                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 9.0                   | 104                               |
| 6 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 9.7                   | 115                               |
| 7 x 0.75                                 | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 9.8                   | 130                               |
| 10 x 0.75                                | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 12.6                  | 190                               |
| 12 x 0.75                                | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 13.4                  | 229                               |
| 14 x 0.75                                | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 13.7                  | 248                               |
| 16 x 0.75                                | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 14.5                  | 280                               |
| 19 x 0.75                                | 24 x 0.20         | 26.7                                      | 0.6                                  | 2.4                   | 15.6                  | 337                               |

For this product, please contact:

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20 °C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|-------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 1                                    | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 7.3                   | 66.6                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 7.8                   | 81.3                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 8.5                   | 98.7                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 9.5                   | 122                               |
| 6 x 1                                    | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 10.3                  | 138                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 10.5                  | 157                               |
| 10 x 1                                   | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 13.4                  | 228                               |
| 12 x 1                                   | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 14.0                  | 266                               |
| 14 x 1                                   | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 14.5                  | 295                               |
| 16 x 1                                   | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 15.1                  | 325                               |
| 19 x 1                                   | 32 x 0.20         | 20.0                                      | 0.6                                  | 2.5                   | 15.9                  | 378                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 8.0                   | 83.9                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 8.4                   | 101                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 9.1                   | 122                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 10.0                  | 146                               |
| 6 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 10.8                  | 164                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 10.8                  | 183                               |
| 10 x 1.5                                 | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 13.8                  | 262                               |
| 12 x 1.5                                 | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 15.6                  | 352                               |
| 14 x 1.5                                 | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 16.2                  | 393                               |
| 16 x 1.5                                 | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 16.8                  | 431                               |
| 19 x 1.5                                 | 30 x 0.25         | 13.7                                      | 0.6                                  | 2.8                   | 17.6                  | 495                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 9.6                   | 126                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 10.1                  | 153                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 11.0                  | 188                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 12.0                  | 224                               |
| 6 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 13.0                  | 252                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 13.0                  | 283                               |
| 10 x 2.5                                 | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 17.2                  | 428                               |
| 12 x 2.5                                 | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 18.0                  | 505                               |
| 14 x 2.5                                 | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 18.8                  | 571                               |
| 16 x 2.5                                 | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 20.4                  | 651                               |
| 19 x 2.5                                 | 50 x 0.25         | 8.21                                      | 0.7                                  | 3.4                   | 21.6                  | 761                               |
| 2 x 4                                    | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 11.0                  | 175                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 12.0                  | 227                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 13.1                  | 279                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 14.5                  | 340                               |
| 6 x 4                                    | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 16.2                  | 403                               |
| 7 x 4                                    | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 16.2                  | 452                               |
| 10 x 4                                   | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 21.2                  | 649                               |
| 12 x 4                                   | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 22.2                  | 768                               |
| 14 x 4                                   | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 23.6                  | 894                               |
| 16 x 4                                   | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 24.6                  | 992                               |
| 19 x 4                                   | 56 x 0.30         | 5.09                                      | 0.8                                  | 4.2                   | 25.8                  | 1146                              |
| 2 x 6                                    | 84 x 0.30         | 3.39                                      | 0.8                                  | 4.8                   | 13.0                  | 253                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                      | 0.8                                  | 4.8                   | 13.4                  | 304                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                      | 0.8                                  | 4.8                   | 14.6                  | 375                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                      | 0.8                                  | 4.8                   | 18.0                  | 531                               |
| 6 x 6                                    | 84 x 0.30         | 3.39                                      | 0.8                                  | 4.8                   | 19.4                  | 599                               |
| 7 x 6                                    | 84 x 0.30         | 3.39                                      | 0.8                                  | 4.8                   | 19.4                  | 668                               |
| 2 x 10                                   | 80 x 0.40         | 1.95                                      | 1.0                                  | 6.4                   | 16.0                  | 387                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                      | 1.0                                  | 6.4                   | 18.6                  | 551                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                      | 1.0                                  | 6.4                   | 21.2                  | 699                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                      | 1.0                                  | 6.4                   | 23.2                  | 838                               |
| 6 x 10                                   | 80 x 0.40         | 1.95                                      | 1.0                                  | 6.4                   | 24.0                  | 885                               |
| 7 x 10                                   | 80 x 0.40         | 1.95                                      | 1.0                                  | 6.4                   | 24.0                  | 998                               |
| 2 x 16                                   | 126 x 0.40        | 1.24                                      | 1.2                                  | 7.8                   | 20.2                  | 599                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                      | 1.2                                  | 7.8                   | 22.2                  | 788                               |
| 4 x 16                                   | 126 x 0.40        | 1.24                                      | 1.2                                  | 7.8                   | 24.4                  | 980                               |
| 5 x 16                                   | 126 x 0.40        | 1.24                                      | 1.2                                  | 7.8                   | 26.8                  | 1182                              |
| 6 x 16                                   | 126 x 0.40        | 1.24                                      | 1.2                                  | 7.8                   | 29.0                  | 1342                              |
| 7 x 16                                   | 126 x 0.40        | 1.24                                      | 1.2                                  | 7.8                   | 29.0                  | 1513                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                     | 1.4                                  | 9.6                   | 25.2                  | 955                               |
| 3 x 25                                   | 196 x 0.40        | 0.795                                     | 1.4                                  | 9.6                   | 26.8                  | 1200                              |
| 4 x 25                                   | 196 x 0.40        | 0.795                                     | 1.4                                  | 9.6                   | 29.7                  | 1522                              |

## Standard conductor colours:

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

## • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup>  
(example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X  
(example 3 G 1.5 mm<sup>2</sup>).

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

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID

### SILICABLE® H05SST-F

USE <HAR> Approval

-60°C to +180°C

<HAR>

#### Approvals - standards

- USE <HAR> Approval as per NF EN 50525-2-83.
- Halogen-free: IEC 60754-1 / EN 60754-1.

#### Applications

- Industrial cabling in hot atmospheres up to 180°C.
- Cabling in the metallurgical industry, glassworks, etc.
- Cabling for furnaces, ovens, machines for thermoplastics and rubber, welding stations, etc.
  - Lights, spotlights, etc.
- Cabling requiring excellent mechanical strength.

#### Options

- Other sheath colours: contact us.



- 1 • Flexible bare copper, tin-plated, nickel-plated or silver-plated core - class 5 as per IEC 60228 / EN 60228.
- 2 • Insulation: Silicone rubber - type EI2 - NF C 32-525-1 NF EN 50525-1 / EN 50363-1.
- 3 • Sheath: Silicone rubber - type EM9 - NF C 32-525-1 NF EN 50525-1 / EN 50363-2-1.
- 4 • Reinforcement: Coated synthetic fibre braid.

#### Characteristics General

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

#### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V (as per NF EN 50525-2-83).

#### Standard products

- Standard conductor colours: as per HD 308 (see table below).
- Standard sheath colour: grey.
- Standard reinforcing braid colour: grey.

#### Standard conductor colours (as per HD 308)

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup> (example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

For this product, please contact:

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km)<br>(tin-plated copper core) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal thickness of the sheathing (mm) | Nominal diameter (mm) |      | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|----------------------------------------------------------------------|--------------------------------------|-----------------------|-----------------------------------------|-----------------------|------|-----------------------------------|
|                                          |                   |                                                                      |                                      |                       |                                         | min.                  | max. |                                   |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.8                                     | 6.7                   | 8.4  | 58.7                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.9                                     | 7.2                   | 9.1  | 72.6                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 0.9                                     | 7.8                   | 9.8  | 86.7                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                                                 | 0.6                                  | 2.4                   | 1.0                                     | 8.6                   | 10.9 | 105                               |
| 2 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                     | 7.1                   | 9.0  | 68.2                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                     | 7.5                   | 9.5  | 81.3                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 0.9                                     | 8.1                   | 10.3 | 97.3                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                                                 | 0.6                                  | 2.5                   | 1.0                                     | 9.0                   | 11.3 | 119                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.0                                     | 8.6                   | 10.8 | 103                               |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.0                                     | 9.0                   | 11.4 | 125                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.1                                     | 10.0                  | 12.6 | 165                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                                                 | 0.8                                  | 3.2                   | 1.1                                     | 10.8                  | 13.7 | 183                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.1                                     | 10.0                  | 12.6 | 157                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.1                                     | 10.6                  | 13.4 | 175                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.2                                     | 11.7                  | 14.8 | 236                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                                                 | 0.9                                  | 3.8                   | 1.3                                     | 12.9                  | 16.3 | 339                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                                                 | 1.0                                  | 4.6                   | 1.2                                     | 12.3                  | 15.5 | 277                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                                                 | 1.0                                  | 4.6                   | 1.3                                     | 13.7                  | 17.2 | 331                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                                                 | 1.0                                  | 5.2                   | 1.4                                     | 13.8                  | 17.3 | 355                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                                                 | 1.0                                  | 5.2                   | 1.5                                     | 15.2                  | 19.1 | 432                               |

For this product, please contact:

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

## SILICABLE® PMCBEC-ECS -60°C to +180°C



### Approvals - standards

- Bureau VERITAS approval certificates no. 06466/DO BV: compliance with the tests described as per standards IEC 60092-350/353/360, IEC 60332-1-1/2, IEC 60332-3-22.
- Lloyd's Register approval certificates no. 06/00106: compliance with the tests described as per standards IEC 60228, IEC 60092-350/353/360, IEC 60332-1-1/2, IEC 60332-3-22.

### Options

- Flexible bare copper core – class 5 as per IEC 60228 (ref. PMCBEC-CS): contact us.
- Flexible silver-plated copper core – class 5 as per IEC 60228 (ref. PMCBEC-ACS): contact us.
- Flexible nickel-plated copper core – class 5 as per IEC 60228 (ref. PMCBEC-CNCS): contact us.
- Varnished synthetic fibre reinforcing braid: contact us.
- Very high temperature fibre reinforcing braid: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: 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 mechanical strength.

### Electrical

- Rated voltage: 600/1000 V.
- Test voltage: 3500 V.

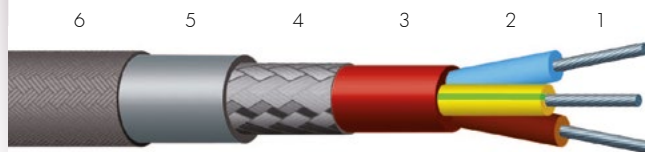
### Standard products

- Standard conductor colours: see table below.
- Standard inner sheath colours: brick red or white.
- Standard outer sheath colours: grey or white.
- Standard reinforcing braid colour: grey.

### Applications

- Industrial cabling in hot atmospheres up to 180°C.
- Cabling for rotating machines: motors, alternators, generators.
- Cabling for static machines: transformers, inductors, inverters, choppers.
- Shipbuilding and railway construction.
- Power cabinets.
- Cabling requiring excellent mechanical strength.

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Inner sheath: Silicone rubber.
- 4 • Electrical shielding: Tin-plated copper braid.
- 5 • Outer sheath: Silicone rubber.
- 6 • Reinforcement: Coated synthetic fibre braid.

For this product, please contact:

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 13.1                  | 224                               |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 13.9                  | 255                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 15.3                  | 339                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 16.5                  | 415                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 17.7                  | 506                               |
| 12 x 1.5                                 | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 23.2                  | 726                               |
| 19 x 1.5                                 | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 26.7                  | 972                               |
| 24 x 1.5                                 | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 31.0                  | 1278                              |
| 27 x 1.5                                 | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 31.6                  | 1378                              |
| 37 x 1.5                                 | 30 x 0.25         | 13.7                                     | 1.0                                  | 3.6                   | 35.2                  | 1726                              |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 14.1                  | 264                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 15.3                  | 351                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 16.4                  | 433                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 17.7                  | 518                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 19.1                  | 601                               |
| 12 x 2.5                                 | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 25.0                  | 883                               |
| 19 x 2.5                                 | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 29.1                  | 1307                              |
| 24 x 2.5                                 | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 33.7                  | 1604                              |
| 27 x 2.5                                 | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 34.4                  | 1728                              |
| 37 x 2.5                                 | 50 x 0.25         | 8.21                                     | 1.0                                  | 4.0                   | 38.7                  | 2338                              |
| 2 x 4                                    | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 15.9                  | 407                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 16.7                  | 492                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 18.0                  | 558                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 19.5                  | 631                               |
| 7 x 4                                    | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 21.6                  | 755                               |
| 12 x 4                                   | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 28.2                  | 1239                              |
| 19 x 4                                   | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 32.6                  | 1716                              |
| 24 x 4                                   | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 37.9                  | 2114                              |
| 27 x 4                                   | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 39.1                  | 2440                              |
| 37 x 4                                   | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 43.5                  | 3091                              |
| 2 x 6                                    | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 17.2                  | 507                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 18.3                  | 586                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 20.3                  | 674                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 22.1                  | 786                               |
| 7 x 6                                    | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 23.9                  | 948                               |
| 12 x 6                                   | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 31.0                  | 1547                              |
| 19 x 6                                   | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 36.0                  | 2195                              |
| 24 x 6                                   | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 42.4                  | 2876                              |
| 27 x 6                                   | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 43.3                  | 3122                              |
| 2 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 20.5                  | 648                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 21.6                  | 766                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 23.5                  | 904                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 25.8                  | 1061                              |
| 7 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 27.8                  | 1376                              |
| 12 x 10                                  | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 36.6                  | 2166                              |
| 19 x 10                                  | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.4                   | 43.0                  | 3264                              |
| 2 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.8                   | 23.6                  | 855                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.8                   | 25.3                  | 1035                              |
| 4 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.8                   | 27.4                  | 1312                              |
| 5 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.8                   | 30.3                  | 1549                              |
| 7 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.8                   | 32.8                  | 1915                              |
| 12 x 16                                  | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.8                   | 43.4                  | 3183                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                    | 1.2                                  | 9.6                   | 27.8                  | 1263                              |
| 3 x 25                                   | 196 x 0.40        | 0.795                                    | 1.2                                  | 9.6                   | 29.8                  | 1536                              |
| 4 x 25                                   | 196 x 0.40        | 0.795                                    | 1.2                                  | 9.6                   | 32.5                  | 1856                              |
| 5 x 25                                   | 196 x 0.40        | 0.795                                    | 1.2                                  | 9.6                   | 35.7                  | 2195                              |
| 7 x 25                                   | 196 x 0.40        | 0.795                                    | 1.2                                  | 9.6                   | 39.2                  | 2894                              |
| 2 x 35                                   | 276 x 0.40        | 0.565                                    | 1.2                                  | 11.0                  | 31.3                  | 1584                              |
| 3 x 35                                   | 276 x 0.40        | 0.565                                    | 1.2                                  | 11.0                  | 33.1                  | 1916                              |
| 4 x 35                                   | 276 x 0.40        | 0.565                                    | 1.2                                  | 11.0                  | 36.4                  | 2336                              |
| 5 x 35                                   | 276 x 0.40        | 0.565                                    | 1.2                                  | 11.0                  | 40.4                  | 2927                              |
| 7 x 35                                   | 276 x 0.40        | 0.565                                    | 1.2                                  | 11.0                  | 44.0                  | 3665                              |
| 2 x 50                                   | 396 x 0.40        | 0.393                                    | 1.4                                  | 13.2                  | 36.2                  | 2100                              |
| 3 x 50                                   | 396 x 0.40        | 0.393                                    | 1.4                                  | 13.2                  | 38.9                  | 2737                              |
| 4 x 50                                   | 396 x 0.40        | 0.393                                    | 1.4                                  | 13.2                  | 42.7                  | 3325                              |
| 2 x 70                                   | 360 x 0.50        | 0.277                                    | 1.4                                  | 14.8                  | 40.3                  | 2782                              |
| 3 x 70                                   | 360 x 0.50        | 0.277                                    | 1.4                                  | 14.8                  | 42.9                  | 3446                              |
| 4 x 70                                   | 360 x 0.50        | 0.277                                    | 1.4                                  | 14.8                  | 47.1                  | 4229                              |

## Standard conductor colours:

Number of conductors

With an earth wire

Without an earth wire

2

-

blue – brown

3

yellow/green – blue – brown

brown – black – grey

4

yellow/green – brown – black – grey

blue – brown – black – grey

5

yellow/green – blue – brown – black – grey

blue – brown – black – grey – black

≥ 6

yellow/green – grey numbered

grey numbered

## • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup>  
(example: 3 X 1.5 mm<sup>2</sup>).Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

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

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID

# SILICABLE® ECSBECSP

## -60°C to +180°C



### Approvals - standards

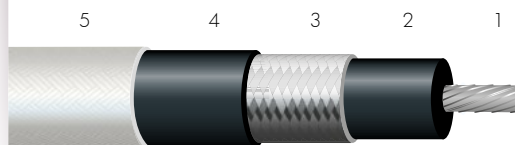
- Bureau VERITAS approval certificates no. 06465/DO BV: compliance with the tests described as per standards IEC 60092-350/353/360, IEC 60332-1-1/2, IEC 60332-3-22.
- Lloyd's Register approval certificates no. 06/00106: compliance with the tests described as per standards IEC 60228, IEC 60092-350/353/360, IEC 60332-1-1/2, IEC 60332-3-22.

### Applications

- Industrial cabling in hot atmospheres up to 180°C.
  - Cabling for rotating machines: motors, alternators, generators.
  - Cabling for static machines: transformers, inductors, inverters, choppers.
  - Shipbuilding and railway construction.
  - Power cabinets.
- Cabling requiring excellent mechanical strength.

### Options

- Flexible bare copper core – class 5 as per IEC 60228 (ref. CSBECSP): contact us.
- Flexible silver-plated copper core – class 5 as per IEC 60228 (ref. ACSBECSP): contact us.
- Flexible nickel-plated copper core – class 5 as per IEC 60228 (ref. CNCSBECSP): contact us.
- Without reinforcing braid (ref. ECSBECSP): contact us.
- Varnished synthetic fibre reinforcing braid: contact us.
- Very high temperature fibre reinforcing braid: contact us.
  - Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options and/or combinations of the options outlined above: contact us.



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Silicone rubber.
- 3 • Electrical shielding: Tin-plated copper braid.
- 4 • Sheath: Silicone rubber.
- 5 • Reinforcement: Coated synthetic fibre braid.

### Characteristics

#### General

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

#### Electrical

- Rated voltage: 600/1000 V.
- Test voltage: 3500 V.

### Standard products

- Standard insulation colour: black.
- Standard sheath colour: black.
- Standard reinforcing braid colour: grey.

### ECSBECSP

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) |
|---------------------------------------------|-------------------|------------------------------------------|
| 1.5                                         | 30 × 0.25         | 13.7                                     |
| 2.5                                         | 50 × 0.25         | 8.21                                     |
| 4                                           | 56 × 0.30         | 5.09                                     |
| 6                                           | 84 × 0.30         | 3.39                                     |
| 10                                          | 80 × 0.40         | 1.95                                     |
| 16                                          | 126 × 0.40        | 1.24                                     |
| 25                                          | 196 × 0.40        | 0.795                                    |
| 35                                          | 276 × 0.40        | 0.565                                    |
| 50                                          | 396 × 0.40        | 0.393                                    |
| 70                                          | 360 × 0.50        | 0.277                                    |
| 95                                          | 485 × 0.50        | 0.210                                    |
| 120                                         | 608 × 0.50        | 0.164                                    |
| 150                                         | 756 × 0.50        | 0.132                                    |
| 185                                         | 944 × 0.50        | 0.108                                    |
| 240                                         | 1221 × 0.50       | 0.0817                                   |
| 300                                         | 1525 × 0.50       | 0.0654                                   |

#### SHEATHED WIRE OR CABLE

| Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|--------------------------|--------------------------------------|
| 7.3                      | 81                                   |
| 7.8                      | 95                                   |
| 8.4                      | 114                                  |
| 9.1                      | 139                                  |
| 10.5                     | 202                                  |
| 11.6                     | 261                                  |
| 13.6                     | 386                                  |
| 14.8                     | 477                                  |
| 16.9                     | 665                                  |
| 19.7                     | 893                                  |
| 21.8                     | 1129                                 |
| 24.1                     | 1460                                 |
| 26.5                     | 1788                                 |
| 28.9                     | 2230                                 |
| 32.4                     | 2859                                 |
| 35.5                     | 3475                                 |

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

## SILICABLE® Style 3779 UL approval -60°C to +180°C



### Approvals - standards

- UL approval as per standard UL 758  
File no.: E101965
- "Horizontal flame test" as per UL approval.
- Resistance to vertical flame propagation  
for a single insulated wire: IEC 60332-1-2.

### Applications

- Internal cabling for electrical appliances

### Options

- AWG American cross-sections  
and other nominal cross-sections: contact us.
- Other nominal stranding: contact us.

### Characteristics

#### General

- Continuous operating temperatures: -60°C to +180°C.
- Halogen-free material.
- Good mechanical resistance, excellent resistance to abrasion

#### Electrical

- Rated voltage: 600 V
- Test voltage: 6,000 V

### Standard products

- All solid colours, yellow/green or white with coloured spiral markings.
- Standard range in metric cross-sections, also available in AWG American cross-sections

## SILICONE INSULATED AND/OR SHEATHED WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Flexible tin-plated or nickel-plated copper core – class 2 or 5 as per IEC 60228
- 2 • Optional separating tape.
- 3 • Insulation: Silicone rubber.
- 4 • Reinforcement: Varnished synthetic fibre braid.

### Style no. 3779

#### Flexible core • class 2 or 5 as per IEC 60228

| Nominal<br>cross-section<br>(mm²) | Nominal<br>stranding |                         | Maximum linear<br>resistance at 20°C<br>(Ω/km) |                         |
|-----------------------------------|----------------------|-------------------------|------------------------------------------------|-------------------------|
|                                   | Tin-plated<br>copper | Nickel-plated<br>copper | Tin-plated<br>copper                           | Nickel-plated<br>copper |
| 0.6                               | -                    | 19 x 0.20               | -                                              | 36.0                    |
| 0.75                              | -                    | 24 x 0.20               | -                                              | 26.7                    |
| 1.0                               | 7 x 0.43             | 32 x 0.20               | 18.2                                           | 20.0                    |
| 1.5                               | 7 x 0.52             | 30 x 0.25               | 12.2                                           | 13.7                    |
| 2.5                               | 19 x 0.40            | 50 x 0.25               | 7.56                                           | 8.21                    |
| 4                                 | 32 x 0.40            | 56 x 0.30               | 4.70                                           | 5.09                    |
| 6                                 | 40 x 0.40            | 84 x 0.30               | 3.11                                           | 3.39                    |
| 10                                | 77 x 0.40            | -                       | 1.95                                           | -                       |
| 16                                | 119 x 0.40           | -                       | 1.24                                           | -                       |
| 25                                | 192 x 0.40           | -                       | 0.795                                          | -                       |
| 35                                | 259 x 0.40           | -                       | 0.565                                          | -                       |
| 50                                | 370 x 0.40           | -                       | 0.393                                          | -                       |
| 70                                | 333 x 0.50           | -                       | 0.277                                          | -                       |
| 95                                | 444 x 0.50           | -                       | 0.210                                          | -                       |
| 120                               | 568 x 0.50           | -                       | 0.164                                          | -                       |
| 150                               | 721 x 0.50           | -                       | 0.132                                          | -                       |
| 185                               | 888 x 0.50           | -                       | 0.108                                          | -                       |
| 240                               | 1184 x 0.50          | -                       | 0.0817                                         | -                       |
| 300                               | 1480 x 0.50          | -                       | 0.0654                                         | -                       |
| 400                               | 1924 x 0.50          | -                       | 0.0495                                         | -                       |

#### INSULATED WIRE OR CABLE

| Nominal<br>diameter<br>(mm) | Approximate<br>linear weight<br>(kg/km) |
|-----------------------------|-----------------------------------------|
| 2.9                         | 9.8                                     |
| 3.1                         | 13.6                                    |
| 3.2                         | 17.6                                    |
| 3.5                         | 22.7                                    |
| 4.0                         | 33.8                                    |
| 4.9                         | 53.2                                    |
| 5.9                         | 72.8                                    |
| 7.0                         | 121                                     |
| 8.4                         | 179                                     |
| 10.4                        | 278                                     |
| 12.8                        | 372                                     |
| 14.5                        | 534                                     |
| 16.7                        | 703                                     |
| 18.1                        | 950                                     |
| 21.7                        | 1217                                    |
| 23.2                        | 1560                                    |
| 25.5                        | 1900                                    |
| 28.0                        | 2400                                    |
| 31.5                        | 3050                                    |
| 34.6                        | 4000                                    |

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

## SILICABLE® Style 30133 -60°C to +150°C



SILICONE INSULATED AND/OR SHEATHED  
WIRES AND CABLES WITH REINFORCING BRAID



- 1 • Extra-flexible bare copper core.
- 2 • Silicone insulation.
- 3 • Coated synthetic fibre braid.

### Approvals - standards

- EN 45545-2.
- UL approval as per standard UL 758 - File no.: E101965.
- Conductor resistance according to IEC 60228 class 6.
- Flame resistance according to IEC 60332-1-2.
- Low smoke toxicity according to IEC 61034-2.
- Halogen free according to IEC 60754.

### Applications

- Switchboards, Power cabinets.
- Battery energy storage.
- Cabling for static machines: transformers, inductors, inverters, choppers.
- Railway Industry (current collector, etc.).

### Options

- Extra-flexible tin-plated, silver-plated or nickel-plated copper core.
- Other markings: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.

### Characteristics

#### General

- High flexibility due to 0.10 mm strand of core.
- Continuous operating temperatures: -60°C to +150°C.
- Good resistance to thermal shock and UV.
- Excellent mechanical resistance.
- Bending radius in fixed installation: 2 x D.

#### Electrical

- Rated voltage: 3 kV.
- Test voltage: 10 kV.

### Standard product

- Colour: black.

### Marking

- OMERIN 369 – SILICABLE 150C 3000V 30133 AWM

### SILICABLE® Style 30133

| Extra-flexible core |                             |                                  | INSULATED WIRE OR CABLE                   |                                |                                       |
|---------------------|-----------------------------|----------------------------------|-------------------------------------------|--------------------------------|---------------------------------------|
| Part number         | Nominal cross-section (mm²) | Nominal diameter of strands (mm) | Minimum nominal insulation thickness (mm) | Nominal external diameter (mm) | Max. linear resistance at 20°C (Ω/km) |
| B1408001            | 35                          | 0.10                             | 1.75                                      | 15.0                           | 0.554                                 |
| B1408002            | 50                          | 0.10                             | 1.75                                      | 16.7                           | 0.386                                 |
| B1408003            | 70                          | 0.10                             | 1.75                                      | 19.2                           | 0.272                                 |
| B1408004            | 95                          | 0.10                             | 1.75                                      | 21.2                           | 0.206                                 |
| B1408005            | 120                         | 0.10                             | 1.75                                      | 22.7                           | 0.161                                 |
| B1408006            | 150                         | 0.10                             | 1.75                                      | 24.7                           | 0.129                                 |
| B1408007            | 185                         | 0.10                             | 1.80                                      | 27.2                           | 0.106                                 |
| B1408008            | 240                         | 0.10                             | 1.80                                      | 31.2                           | 0.0801                                |
| B1408009            | 300                         | 0.10                             | 1.95                                      | 33.7                           | 0.0641                                |

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## VARPREN INSULATED WIRES AND CABLES

| FT No. | PRODUCT REFERENCE                  | APPROVAL                                                                                 | PAGE |
|--------|------------------------------------|------------------------------------------------------------------------------------------|------|
| 1301   | VARPREN ST                         |                                                                                          | 84   |
| 1302   | VARPREN F                          |                                                                                          | 85   |
| 1303   | VARPREN H05Z-K and H07Z-K          | ◁HARD▷                                                                                   | 86   |
| 1304   | VARPREN H05G-K and H07G-K          | ◁HARD▷                                                                                   | 87   |
| 1305   | VARPREN 125                        |                                                                                          | 88   |
| 1306   | VARPREN 155                        |                                                                                          | 89   |
| 1309   | VARPREN 105 UL - 105°C lead wires  | C  US | 90   |
| 1307   | VARPREN 125 UL - Class B lead wire | C  US | 91   |
| 1308   | VARPREN 155 UL - Class F lead wire | C  US | 92   |
| 1310   | VARPREN FLR                        |                                                                                          | 93   |
| 1311   | VARPREN MVA                        |                                                                                          | 94   |
| 1312   | VARPREN H05GG-F                    | ◁HARD▷                                                                                   | 96   |
| 1313   | VARPREN MVA-C-VA                   |                                                                                          | 98   |

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® ST

## -50°C to +155°C

### Approvals - standards

- Halogen-free: EN 60754-1.
  - Fire retardant: NF C 32-070 test C1.
  - Flame retardant: EN 60332-1-2 / NF C 32-070 test C2.
- Test for vertical flame propagation of vertically-mounted bunched wires or cables – Category A: IEC 60332-3-22.
- Low corrosivity of gas emissions: EN 60754-2.
- Low smoke density: EN 61034-2.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.



- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Varpren®.

### Characteristics General

- Continuous operating temperatures: -50°C to +155°C.
- Excellent tearing strength.
- Minimum bending radius: 5 x D.

### Electrical

- Rated voltage: 600/1000 V.
- Test voltage: 3500 V.

### Standard products

- All colours including two-coloured.

### VARPREN® ST

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

| Nominal cross-section<br>(mm²) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|--------------------------------|-------------------|---------------------------------------------|
| 0.5                            | 16 x 0.20         | 40.1                                        |
| 0.75                           | 24 x 0.20         | 26.7                                        |
| 1                              | 32 x 0.20         | 20.0                                        |
| 1.5                            | 30 x 0.25         | 13.7                                        |
| 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        | 0.393                                       |
| 70                             | 360 x 0.50        | 0.277                                       |
| 95                             | 485 x 0.50        | 0.210                                       |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.2                      | 9.0                                  |
| 0.6                                     | 2.4                      | 11.7                                 |
| 0.6                                     | 2.5                      | 13.8                                 |
| 0.6                                     | 3.0                      | 20.2                                 |
| 0.7                                     | 3.6                      | 31.2                                 |
| 0.8                                     | 4.3                      | 47.2                                 |
| 0.8                                     | 4.9                      | 65.9                                 |
| 1.0                                     | 6.6                      | 120                                  |
| 1.0                                     | 7.7                      | 172                                  |
| 1.2                                     | 9.6                      | 270                                  |
| 1.2                                     | 10.7                     | 355                                  |
| 1.4                                     | 12.6                     | 502                                  |
| 1.4                                     | 14.9                     | 693                                  |
| 1.6                                     | 17.2                     | 913                                  |

For this product, please contact:

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® F -50°C to +155°C

### Approvals - standards

- Halogen-free: EN 60754-1.
  - Fire retardant: NF C 32-070 test C1.
  - Flame retardant: EN 60332-1-2 / NF C 32-070 test C2.
- Test for vertical flame propagation of vertically-mounted bunched wires or cables – Category A: IEC 60332-3-22.
- Low corrosivity of gas emissions: EN 60754-2.
- Low smoke density: EN 61034-2.

### Applications

- Class F cabling for electric motors.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

2

1

VARPREN F 1.5 MM<sup>2</sup> HALOGEN FREE

- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Varpren®.

### Characteristics General

- Continuous operating temperatures: -50°C to +155°C.
- Excellent tearing strength.
- Minimum bending radius: 5 x D.

### Electrical

- Rated voltage: 600/1000 V.
- Test voltage: 3500 V.

### Standard products

- All colours including two-coloured.

### VARPREN® F

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 0.5                                         | 16 x 0.20         | 40.1                                        |
| 0.75                                        | 24 x 0.20         | 26.7                                        |
| 1                                           | 32 x 0.20         | 20.0                                        |
| 1.5                                         | 30 x 0.25         | 13.7                                        |
| 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        | 0.393                                       |
| 70                                          | 360 x 0.50        | 0.277                                       |
| 95                                          | 485 x 0.50        | 0.210                                       |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.6                                     | 2.2                      | 9.0                                  |
| 0.6                                     | 2.4                      | 11.7                                 |
| 0.6                                     | 2.5                      | 13.8                                 |
| 0.6                                     | 3.0                      | 20.2                                 |
| 0.7                                     | 3.6                      | 31.2                                 |
| 0.8                                     | 4.3                      | 47.2                                 |
| 0.8                                     | 4.9                      | 65.9                                 |
| 1.0                                     | 6.6                      | 120                                  |
| 1.0                                     | 7.7                      | 172                                  |
| 1.2                                     | 9.6                      | 270                                  |
| 1.2                                     | 10.7                     | 355                                  |
| 1.4                                     | 12.6                     | 502                                  |
| 1.4                                     | 14.9                     | 693                                  |
| 1.6                                     | 17.2                     | 913                                  |

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® H05Z-K and H07Z-K USE <HAR> Approval -15°C to +90°C

&lt;HAR&gt;

### Approvals - standards

- USE <HAR> Approval as per NF EN 50525-3-41.
- Halogen-free: IEC 60754-1 / EN 60754-1.
- Flame retardant: IEC 60332-1-2 / EN 60332-1-2 / NF C 32-070 test C2.
- Low corrosivity of gas emissions: IEC 60754-2 / EN 60754-2.
- Low smoke density: IEC 61034-2 / EN 61034-2.

### Options

- Solid tin-plated copper core – class 1 as per IEC 60228 (ref. H05Z-U and H07Z-U): contact us.
- Stranded tin-plated copper core – class 2 as per IEC 60228 (ref. H05Z-R and H07Z-R): contact us.
- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

### Characteristics General

- Continuous operating temperatures: -15 °C to +90 °C.
- Excellent tearing strength.
- Minimum bending radius: 5 x D.

### Electrical

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

### H05Z-K

### H07Z-K

- 450/750 V.
- 2500 V.

### Standard products

- All colours including two-coloured.

### H05Z-K and H07Z-K

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

#### INSULATED WIRE OR CABLE

| Reference | Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) | Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) |      | Approximate linear weight<br>(kg/km) |
|-----------|---------------------------------------------|-------------------|---------------------------------------------|-----------------------------------------|--------------------------|------|--------------------------------------|
|           |                                             |                   |                                             |                                         | min.                     | max. |                                      |
| H05ZK     | 0.5                                         | 16 x 0.20         | 40.1                                        | 0.6                                     | 2.1                      | 2.6  | 9.0                                  |
| H05ZK     | 0.75                                        | 24 x 0.20         | 26.7                                        | 0.6                                     | 2.2                      | 2.8  | 11.7                                 |
| H05ZK     | 1                                           | 32 x 0.20         | 20.0                                        | 0.6                                     | 2.4                      | 2.9  | 13.8                                 |
| H07ZK     | 1.5                                         | 30 x 0.25         | 13.7                                        | 0.7                                     | 2.8                      | 3.5  | 20.2                                 |
| H07ZK     | 2.5                                         | 50 x 0.25         | 8.21                                        | 0.8                                     | 3.4                      | 4.3  | 31.2                                 |
| H07ZK     | 4                                           | 56 x 0.30         | 5.09                                        | 0.8                                     | 3.9                      | 4.9  | 47.2                                 |
| H07ZK     | 6                                           | 84 x 0.30         | 3.39                                        | 0.8                                     | 4.4                      | 5.5  | 65.9                                 |
| H07ZK     | 10                                          | 80 x 0.40         | 1.95                                        | 1.0                                     | 5.7                      | 7.1  | 120                                  |
| H07ZK     | 16                                          | 126 x 0.40        | 1.24                                        | 1.0                                     | 6.7                      | 8.4  | 172                                  |
| H07ZK     | 25                                          | 196 x 0.40        | 0.795                                       | 1.2                                     | 8.4                      | 10.6 | 265                                  |
| H07ZK     | 35                                          | 276 x 0.40        | 0.565                                       | 1.2                                     | 9.7                      | 12.1 | 355                                  |
| H07ZK     | 50                                          | 396 x 0.40        | 0.393                                       | 1.4                                     | 11.5                     | 14.4 | 506                                  |
| H07ZK     | 70                                          | 360 x 0.50        | 0.277                                       | 1.4                                     | 13.2                     | 16.6 | 679                                  |
| H07ZK     | 95                                          | 485 x 0.50        | 0.210                                       | 1.6                                     | 15.1                     | 18.8 | 897                                  |
| H07ZK     | 120                                         | 608 x 0.50        | 0.164                                       | 1.6                                     | 16.7                     | 20.9 | 1 142                                |
| H07ZK     | 150                                         | 756 x 0.50        | 0.132                                       | 1.8                                     | 18.6                     | 23.3 | 1 354                                |
| H07ZK     | 185                                         | 944 x 0.50        | 0.108                                       | 2.0                                     | 20.6                     | 25.8 | 1 766                                |
| H07ZK     | 240                                         | 1 221 x 0.50      | 0.0817                                      | 2.2                                     | 23.5                     | 29.4 | 2 342                                |

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® H05G-K and H07G-K USE <HAR> Approval -15°C to +110°C

### Approvals - standards

- USE <HAR> Approval as per NF EN 50525-2-42.
- 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.

### Options

- Solid tin-plated copper core – class 1 as per IEC 60228 (ref. H05G-U and H07G-U): contact us.
- Stranded tin-plated copper core – class 2 as per IEC 60228 (ref. H07G-R): contact us.
- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

### <HAR>

### Characteristics General

- Continuous operating temperatures: -15°C to +110°C.
- Excellent tearing strength.
- Minimum bending radius: 5 x D.

### Electrical

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

### H05G-K

### H07G-K

- 450/750 V.
- 2500 V.

### Standard products

- All colours including two-coloured.

### H05G-K and H07G-K

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

| Reference | Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) |
|-----------|-----------------------------|-------------------|------------------------------------------|
| H05G-K    | 0.5                         | 16 x 0.20         | 40.1                                     |
| H05G-K    | 0.75                        | 24 x 0.20         | 26.7                                     |
| H05G-K    | 1                           | 32 x 0.20         | 20.0                                     |

#### INSULATED WIRE OR CABLE

| Reference | Nominal cross-section (mm²) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) |      | Approximate linear weight (kg/km) |
|-----------|-----------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|------|-----------------------------------|
|           |                             |                   |                                          |                                      | min.                  | max. |                                   |
| H05G-K    | 0.5                         | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.1                   | 2.6  | 9.6                               |
| H05G-K    | 0.75                        | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.2                   | 2.8  | 12.0                              |
| H05G-K    | 1                           | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.4                   | 2.9  | 14.5                              |
| H07G-K    | 1.5                         | 30 x 0.25         | 13.7                                     | 0.8                                  | 3.0                   | 3.7  | 22.4                              |
| H07G-K    | 2.5                         | 50 x 0.25         | 8.21                                     | 0.9                                  | 3.6                   | 4.5  | 34.6                              |
| H07G-K    | 4                           | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.3                   | 5.4  | 52.2                              |
| H07G-K    | 6                           | 84 x 0.30         | 3.39                                     | 1.0                                  | 4.8                   | 6.0  | 71.0                              |
| H07G-K    | 10                          | 80 x 0.40         | 1.95                                     | 1.2                                  | 6.0                   | 7.6  | 121                               |
| H07G-K    | 16                          | 126 x 0.40        | 1.24                                     | 1.2                                  | 7.1                   | 8.9  | 175                               |
| H07G-K    | 25                          | 196 x 0.40        | 0.795                                    | 1.4                                  | 8.8                   | 11.0 | 274                               |
| H07G-K    | 35                          | 276 x 0.40        | 0.565                                    | 1.4                                  | 10.1                  | 12.6 | 368                               |
| H07G-K    | 50                          | 396 x 0.40        | 0.393                                    | 1.6                                  | 11.9                  | 14.9 | 522                               |
| H07G-K    | 70                          | 360 x 0.50        | 0.277                                    | 1.6                                  | 13.6                  | 17.0 | 702                               |
| H07G-K    | 95                          | 485 x 0.50        | 0.210                                    | 1.8                                  | 15.5                  | 19.3 | 914                               |
| H07G-K    | 120                         | 608 x 0.50        | 0.164                                    | 1.8                                  | 17.1                  | 21.4 | 1 168                             |
| H07G-K    | 150                         | 756 x 0.50        | 0.132                                    | 2.0                                  | 19.0                  | 23.8 | 1 411                             |
| H07G-K    | 185                         | 944 x 0.50        | 0.108                                    | 2.2                                  | 21.0                  | 26.3 | 1 817                             |
| H07G-K    | 240                         | 1 221 x 0.50      | 0.0817                                   | 2.4                                  | 23.9                  | 29.9 | 2 396                             |

For this product, please contact:

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® 125

## -50°C to +125°C

### Approvals - standards

- Halogen-free: EN 60754-1.
  - Fire retardant: NF C 32-070 test C1.
  - Flame retardant: EN 60332-1-2 / NF C 32-070 test C2.
- Test for vertical flame propagation of vertically-mounted bunched wires or cables – Category A: IEC 60332-3-22.
- Low corrosivity of gas emissions: EN 60754-2.
- Low smoke density: EN 61034-2.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

### Characteristics General

- Continuous operating temperatures: -50°C to +125°C.
- Excellent tearing strength.
- Minimum bending radius: 5 x D.

### Electrical

- Rated voltage: CS ≤ 0.5 mm<sup>2</sup>: 450/750 V.  
CS > 0.5 mm<sup>2</sup>: 600/1000 V.
- Test voltage: CS ≤ 0.5 mm<sup>2</sup>: 2500 V.  
CS > 0.5 mm<sup>2</sup>: 3500 V.

### Standard products

- Standard insulation colour: black.

2

1

600/1000V EC 1025301

- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Varpren®.

### VARPREN® 125

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 0.34*                                       | 19 x 0.16         | 60.6                                        |
| 0.5                                         | 19 x 0.18         | 40.1                                        |
| 0.75                                        | 24 x 0.20         | 26.7                                        |
| 1                                           | 32 x 0.20         | 20.0                                        |
| 1.5                                         | 30 x 0.25         | 13.7                                        |
| 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                                          | 123 x 0.40        | 1.24                                        |
| 25                                          | 189 x 0.40        | 0.795                                       |
| 35                                          | 266 x 0.40        | 0.565                                       |
| 50                                          | 377 x 0.40        | 0.393                                       |
| 70                                          | 340 x 0.50        | 0.277                                       |
| 95                                          | 444 x 0.50        | 0.210                                       |
| 120                                         | 568 x 0.50        | 0.164                                       |
| 150                                         | 721 x 0.50        | 0.132                                       |
| 185                                         | 888 x 0.50        | 0.108                                       |
| 240                                         | 1184 x 0.50       | 0.0817                                      |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.4                                     | 1.6                      | 5.8                                  |
| 0.4                                     | 1.7                      | 7.0                                  |
| 0.5                                     | 2.2                      | 10.6                                 |
| 0.6                                     | 2.5                      | 13.8                                 |
| 0.6                                     | 2.8                      | 18.8                                 |
| 0.7                                     | 3.4                      | 29.5                                 |
| 0.7                                     | 4.0                      | 44.1                                 |
| 0.8                                     | 4.7                      | 63.5                                 |
| 0.8                                     | 6.1                      | 112                                  |
| 0.8                                     | 7.3                      | 164                                  |
| 0.9                                     | 8.9                      | 254                                  |
| 0.9                                     | 10.2                     | 342                                  |
| 1.1                                     | 12.0                     | 484                                  |
| 1.2                                     | 14.2                     | 668                                  |
| 1.3                                     | 16.0                     | 865                                  |
| 1.4                                     | 18.0                     | 1120                                 |
| 1.6                                     | 20.6                     | 1379                                 |
| 1.7                                     | 22.5                     | 1766                                 |
| 1.8                                     | 25.4                     | 2316                                 |

For this product, please contact:

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

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® 155

## -50°C to +155°C

### Approvals - standards

- Halogen-free: EN 60754-1.
- Fire retardant: NF C 32-070 test C1.
- Flame retardant: EN 60332-1-2 / NF C 32-070 test C2.
- Test for vertical flame propagation of vertically-mounted bunched wires or cables – Category A: IEC 60332-3-22.
- Low corrosivity of gas emissions: EN 60754-2.
- Low smoke density: EN 61034-2.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

### Characteristics General

- Continuous operating temperature: -50°C to +155°C.
- Excellent tearing strength.
- Minimum bending radius: 5 x D.

### Electrical

- Rated voltage: CS ≤ 0.5 mm<sup>2</sup>: 450/750 V.  
CS > 0.5 mm<sup>2</sup>: 600/1000 V.
- Test voltage: CS ≤ 0.5 mm<sup>2</sup>: 2500 V.  
CS > 0.5 mm<sup>2</sup>: 3500 V.

### Standard products

- Standard insulation colour: black.

2

1

600/1000V EC 11049201

- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Varpren®.

### VARPREN® 155

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 0.34*                                       | 19 x 0.16         | 60.6                                        |
| 0.5                                         | 19 x 0.18         | 40.1                                        |
| 0.75                                        | 24 x 0.20         | 26.7                                        |
| 1                                           | 32 x 0.20         | 20.0                                        |
| 1.5                                         | 30 x 0.25         | 13.7                                        |
| 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                                          | 123 x 0.40        | 1.24                                        |
| 25                                          | 189 x 0.40        | 0.795                                       |
| 35                                          | 266 x 0.40        | 0.565                                       |
| 50                                          | 377 x 0.40        | 0.393                                       |
| 70                                          | 340 x 0.50        | 0.277                                       |
| 95                                          | 444 x 0.50        | 0.210                                       |
| 120                                         | 568 x 0.50        | 0.164                                       |
| 150                                         | 721 x 0.50        | 0.132                                       |
| 185                                         | 888 x 0.50        | 0.108                                       |
| 240                                         | 1184 x 0.50       | 0.0817                                      |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.4                                     | 1.6                      | 5.8                                  |
| 0.4                                     | 1.7                      | 7.0                                  |
| 0.5                                     | 2.2                      | 10.6                                 |
| 0.6                                     | 2.5                      | 13.8                                 |
| 0.6                                     | 2.8                      | 18.8                                 |
| 0.7                                     | 3.4                      | 29.5                                 |
| 0.7                                     | 4.0                      | 44.1                                 |
| 0.8                                     | 4.7                      | 63.5                                 |
| 0.8                                     | 6.1                      | 112                                  |
| 0.8                                     | 7.3                      | 164                                  |
| 0.9                                     | 8.9                      | 254                                  |
| 0.9                                     | 10.2                     | 342                                  |
| 1.1                                     | 12.0                     | 484                                  |
| 1.2                                     | 14.2                     | 668                                  |
| 1.3                                     | 16.0                     | 865                                  |
| 1.4                                     | 18.0                     | 1120                                 |
| 1.6                                     | 20.6                     | 1379                                 |
| 1.7                                     | 22.5                     | 1766                                 |
| 1.8                                     | 25.4                     | 2316                                 |

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

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® 105 UL

## 105°C lead wires

### UL and cUL approval



### Approvals - standards

- UL approval as per standard UL 758-File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210-File no.: E101965.
- "FT2 flame rating" as per cUL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Internal cabling for electrical appliances.
  - Lights.
- Industrial cabling in hot atmospheres up to +105°C.

### Options

- <HAR> approval = Ref. Style 3781-HAR: contact us.
  - Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other style nos. available: style 1381.
  - Other options: contact us.



- 1 • Flexible bare copper or tin-plated core.
- 2 • Insulation: XLPO.

### Characteristics General

- Continuous operating temperatures: -30°C to +105°C.
- Good resistance to common chemical influences and impregnating varnishes.

### Electrical

- Rated voltage: 1000 V.
- Test voltage: 10 x Rated voltage.

### Standard products

- Standard insulation: all solid colours.

Style no.

3781

Approval

105 °C - 1000 V

| Nominal cross-section |       | Nominal stranding | Avg thickness of insulation (mm) | Nominal diameter* (mm) |
|-----------------------|-------|-------------------|----------------------------------|------------------------|
| AWG                   | (mm²) |                   |                                  |                        |
| 24                    | 0.22  | 7 x 0.20          | 0.48                             | 1.6                    |
| 22                    | 0.34  | 7 x 0.25          | 0.48                             | 1.8                    |
| -                     | 0.5   | 24 x 0.20         | 0.48                             | 2.0                    |
| 20                    | 0.6   | 19 x 0.20         | 0.48                             | 2.1                    |
| -                     | 0.75  | 24 x 0.20         | 0.48                             | 2.2                    |
| 18                    | 0.93  | 19 x 0.25         | 0.48                             | 2.3                    |
| -                     | 1     | 32 x 0.20         | 0.48                             | 2.4                    |
| 16                    | 1.34  | 19 x 0.30         | 0.48                             | 2.5                    |
| -                     | 1.5   | 30 x 0.25         | 0.48                             | 2.65                   |
| 14                    | -     | 19 x 0.37         | 0.48                             | 2.9                    |
| -                     | 2.5   | 50 x 0.25         | 0.48                             | 3.05                   |
| 12                    | -     | 37 x 0.34         | 0.48                             | 3.4                    |
| -                     | 4     | 56 x 0.30         | 0.48                             | 3.6                    |
| 10                    | -     | 37 x 0.43         | 0.48                             | 4.2                    |
| -                     | 6     | 84 x 0.30         | 0.76                             | 5.0                    |
| 8                     | -     | 70 x 0.40         | 0.76                             | 5.6                    |
| -                     | 10    | 77 x 0.40         | 1.14                             | 6.5                    |
| 6                     | -     | 105 x 0.40        | 1.14                             | 7.5                    |
| -                     | 16    | 119 x 0.40        | 1.14                             | 7.8                    |
| 4                     | -     | 168 x 0.40        | 1.14                             | 9.2                    |
| -                     | 25    | 196 x 0.40        | 1.14                             | 9.6                    |
| 2                     | 35    | 259 x 0.40        | 1.14                             | 11.1                   |
| 1                     | -     | 342 x 0.40        | 1.52                             | 12.6                   |
| -                     | 50    | 370 x 0.40        | 1.52                             | 12.9                   |
| 1/0                   | -     | 425 x 0.40        | 1.52                             | 13.7                   |

Conducting metal

BF

### KEY

Conducting metals

- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

- AWM I A Internal wiring, not subject to mechanical abuse
- AWM I A/B Internal wiring
- AWM II A/B External or Internal wiring

- NS Not Specified
- VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® 125 UL

**Class B lead wires  
UL and cUL approval**



### Approvals - standards

- UL approval as per standard UL 758-File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210-File no.: E101965.
- "FT2 flame rating" as per cUL approval.
- Halogen-free: IEC 60754-1 / EN 60754-1.

### Applications

- Class B cabling for electric motors.
- Lights.
- Industrial cabling in hot atmospheres up to +125°C.

### Options

- Nickel-plated copper core: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other style nos. available: style 1505.
- Other options: contact us.

### Characteristics General

- Continuous operating temperatures: -30°C to +125°C.
- Good resistance to common chemical influences and impregnating varnishes.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Standard insulation colours: white, black, blue, brown, red or yellow/green.

2

1

- 1 • Flexible bare copper or tin-plated core.
- 2 • Insulation: Varpren®.

|                       |                   | Style no.  | 3266                              |                        | 3173                              |                        | 3271                              |                        |
|-----------------------|-------------------|------------|-----------------------------------|------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------|
|                       |                   | Approval   | 125 °C - 300 V                    |                        | 125 °C - 600 V                    |                        | 125 °C - 600 V                    |                        |
| Nominal cross-section | Nominal stranding |            | Avg thick-ness of insulation (mm) | Nominal diameter* (mm) | Avg thick-ness of insulation (mm) | Nominal diameter* (mm) | Avg thick-ness of insulation (mm) | Nominal diameter* (mm) |
| AWG                   | (mm²)             |            |                                   |                        |                                   |                        |                                   |                        |
| 22                    | 0.34              | 19 x 0.15  | 0.38                              | 1.6                    | 0.76                              | 2.35                   | 0.76                              | 2.35                   |
| -                     | 0.5               | 19 x 0.18  | 0.38                              | 1.7                    | 0.76                              | 2.5                    | 0.76                              | 2.5                    |
| 20                    | 0.6               | 19 x 0.20  | 0.38                              | 1.75                   | 0.76                              | 2.6                    | 0.76                              | 2.6                    |
| -                     | 0.75              | 24 x 0.20  | 0.38                              | 1.9                    | 0.76                              | 2.7                    | 0.76                              | 2.7                    |
| 18                    | 0.93              | 19 x 0.25  | 0.38                              | 2.05                   | 0.76                              | 2.8                    | 0.76                              | 2.8                    |
| -                     | 1                 | 32 x 0.20  | 0.38                              | 2.15                   | 0.76                              | 2.9                    | 0.76                              | 2.9                    |
| 16                    | 1.34              | 19 x 0.30  | 0.38                              | 2.35                   | 0.76                              | 3.1                    | 0.76                              | 3.1                    |
| -                     | 1.5               | 30 x 0.25  | 0.38                              | 2.45                   | 0.76                              | 3.15                   | 0.76                              | 3.15                   |
| 14                    | -                 | 19 x 0.37  | 0.38                              | 2.7                    | 0.76                              | 3.4                    | 0.76                              | 3.4                    |
| -                     | 2.5               | 50 x 0.25  | 0.38                              | 2.85                   | 0.76                              | 3.6                    | 0.76                              | 3.6                    |
| 12                    | -                 | 37 x 0.34  | 0.38                              | 3.2                    | 0.76                              | 4.0                    | 0.76                              | 4.0                    |
| -                     | 4                 | 52 x 0.30  | 0.38                              | 3.3                    | 0.76                              | 4.1                    | 0.76                              | 4.1                    |
| 10                    | -                 | 37 x 0.43  | 0.38                              | 3.9                    | 0.76                              | 4.7                    | 0.76                              | 4.7                    |
| -                     | 6                 | 84 x 0.30  | -                                 | -                      | 0.76                              | 4.8                    | 0.76                              | 4.8                    |
| 8                     | -                 | 70 x 0.40  | -                                 | -                      | -                                 | -                      | 1.14                              | 6.3                    |
| -                     | 10                | 77 x 0.40  | -                                 | -                      | -                                 | -                      | 1.14                              | 7.0                    |
| 6                     | -                 | 105 x 0.40 | -                                 | -                      | -                                 | -                      | 1.14                              | 7.8                    |
| -                     | 16                | 119 x 0.40 | -                                 | -                      | -                                 | -                      | 1.14                              | 8.4                    |
| 4                     | -                 | 168 x 0.40 | -                                 | -                      | -                                 | -                      | 1.14                              | 9.2                    |
| -                     | 25                | 196 x 0.40 | -                                 | -                      | -                                 | -                      | 1.14                              | 10.0                   |
| 2                     | 35                | 259 x 0.40 | -                                 | -                      | -                                 | -                      | 1.14                              | 11.3                   |
| 1                     | -                 | 342 x 0.40 | -                                 | -                      | -                                 | -                      | 1.40                              | 12.4                   |
| -                     | 50                | 370 x 0.40 | -                                 | -                      | -                                 | -                      | 1.40                              | 12.9                   |
| 1/0                   | -                 | 425 x 0.40 | -                                 | -                      | -                                 | -                      | 1.40                              | 13.6                   |
| 2/0                   | 70                | 340 x 0.50 | -                                 | -                      | -                                 | -                      | 1.40                              | 14.8                   |
| 3/0                   | -                 | 434 x 0.50 | -                                 | -                      | -                                 | -                      | 1.40                              | 16.3                   |
| -                     | 95                | 475 x 0.50 | -                                 | -                      | -                                 | -                      | 1.40                              | 17.1                   |
| 4/0                   | -                 | 546 x 0.50 | -                                 | -                      | -                                 | -                      | 1.40                              | 18.0                   |
| Conducting metal      |                   |            | BCDEFG                            |                        | BCDEFG                            |                        | BCDEFG                            |                        |

### KEY

Conducting metals

- B Tin-plated copper
- B\* Tin-plated copper (ø > 0.38 mm)
- C Nickel-plated copper
- D Silver-plated copper
- E Nickel
- F Bare copper
- F\* Bare copper (ø > 0.38 mm)
- G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse  
 AWM I A/B Internal wiring  
 AWM II A/B External or Internal wiring

NS Not Specified  
 VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® 155 UL

**Class F lead wires  
UL and cUL approval**



### Approvals - standards

- UL approval as per standard UL 758 - File no.: E101965.
- cUL approval (CSA) as per standard C22.2 No. 210 - File no.: E101965.
- "Horizontal flame test" as per UL approval.
- "FT2 flame rating" as per cUL approval.

### Applications

- Class F cabling for electric motors.
- Lights.
- Industrial cabling in hot atmospheres up to +150°C.

### Options

- Nickel-plated copper core: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other options: contact us.

### Characteristics General

- Continuous operating temperatures: -30°C to +150°C.
- Temperature: -55 °C, see PV CP251002-01.
- Good resistance to common chemical influences and impregnating varnishes.

### Electrical

- Rated voltage: as per style no.
- Test voltage: 10 x Rated voltage.

### Standard products

- Standard insulation colours: white, black, blue, brown, red or yellow/green.

|                       |                   | Style no.  | 3398                              |                   | 3289 et 3321                      |                   | 30097                             |                   |
|-----------------------|-------------------|------------|-----------------------------------|-------------------|-----------------------------------|-------------------|-----------------------------------|-------------------|
|                       |                   | Approval   | 150°C - 300 V<br>XLFRPE           |                   | 150°C - 600 V<br>VARPREN®         |                   | 150°C - 750 V<br>VARPREN®         |                   |
| Nominal cross-section | Nominal stranding |            | Avg thick-ness of insulation (mm) | Nominal diameter* | Avg thick-ness of insulation (mm) | Nominal diameter* | Avg thick-ness of insulation (mm) | Nominal diameter* |
| AWG                   | (mm²)             |            |                                   | (mm)              |                                   | (mm)              |                                   | (mm)              |
| -                     | 0.5               | 19 x 0.18  | 0.38                              | 1.7               | 0.76                              | 2.5               | 0.76                              | 2.5               |
| 20                    | 0.6               | 19 x 0.20  | 0.38                              | 1.8               | 0.76                              | 2.6               | 0.76                              | 2.6               |
| -                     | 0.75              | 24 x 0.20  | 0.38                              | 1.9               | 0.76                              | 2.7               | 0.76                              | 2.7               |
| 18                    | 0.93              | 19 x 0.25  | 0.38                              | 2.0               | 0.76                              | 2.8               | 0.76                              | 2.8               |
| -                     | 1                 | 32 x 0.20  | 0.38                              | 2.1               | 0.76                              | 2.9               | 0.76                              | 2.9               |
| 16                    | 1.34              | 19 x 0.30  | 0.38                              | 2.3               | 0.76                              | 3.1               | 0.76                              | 3.1               |
| -                     | 1.5               | 30 x 0.25  | 0.38                              | 2.4               | 0.76                              | 3.15              | 0.76                              | 3.15              |
| 14                    | -                 | 19 x 0.37  | 0.38                              | 2.6               | 0.76                              | 3.4               | 0.76                              | 3.4               |
| -                     | 2.5               | 50 x 0.25  | 0.38                              | 2.8               | 0.76                              | 3.6               | 0.76                              | 3.6               |
| 12                    | -                 | 37 x 0.34  | 0.38                              | 3.2               | 0.76                              | 4.0               | 0.76                              | 4.0               |
| -                     | 4                 | 52 x 0.30  | 0.38                              | 3.3               | 0.76                              | 4.1               | 0.76                              | 4.1               |
| 10                    | -                 | 37 x 0.43  | 0.38                              | 3.9               | 0.76                              | 4.7               | 0.76                              | 4.7               |
| -                     | 6                 | 84 x 0.30  | -                                 | -                 | 0.76                              | 4.8               | 0.76                              | 4.8               |
| 8                     | -                 | 70 x 0.40  | -                                 | -                 | 1.14                              | 6.3               | 1.14                              | 6.3               |
| -                     | 10                | 77 x 0.40  | -                                 | -                 | 1.14                              | 6.5               | 1.14                              | 6.5               |
| 6                     | -                 | 105 x 0.40 | -                                 | -                 | 1.52                              | 8.4               | 1.52                              | 8.4               |
| -                     | 16                | 119 x 0.40 | -                                 | -                 | 1.52                              | 8.6               | 1.52                              | 8.6               |
| 4                     | -                 | 168 x 0.40 | -                                 | -                 | 1.52                              | 9.8               | 1.52                              | 9.8               |
| -                     | 25                | 196 x 0.40 | -                                 | -                 | 1.52                              | 10.0              | 1.52                              | 10.0              |
| 2                     | 35                | 259 x 0.40 | -                                 | -                 | 1.52                              | 11.1              | 1.52                              | 11.1              |
| 1                     | -                 | 342 x 0.40 | -                                 | -                 | 2.04                              | 13.3              | 2.04                              | 13.3              |
| -                     | 50                | 370 x 0.40 | -                                 | -                 | 2.04                              | 14.0              | 2.04                              | 14.0              |
| 1/0                   | -                 | 425 x 0.40 | -                                 | -                 | 2.04                              | 14.6              | 2.04                              | 14.6              |
| 2/0                   | 70                | 340 x 0.50 | -                                 | -                 | 2.04                              | 15.9              | 2.04                              | 15.9              |
| 3/0                   | -                 | 434 x 0.50 | -                                 | -                 | 2.04                              | 17.0              | 2.04                              | 17.0              |
| -                     | 95                | 475 x 0.50 | -                                 | -                 | 2.04                              | 17.5              | 2.04                              | 17.5              |
| Conducting metal      |                   |            | BCDEFG                            |                   | BCDEFG                            |                   | BCDEFG                            |                   |

### KEY

Conducting metals

- B Tin-plated copper  
 B\* Tin-plated copper (ø > 0.38 mm)  
 C Nickel-plated copper  
 D Silver-plated copper  
 E Nickel  
 F Bare copper  
 F\* Bare copper (ø > 0.38 mm)  
 G Nickel-plated copper 27 %

AWM I A Internal wiring, not subject to mechanical abuse

AWM I A/B Internal wiring

AWM II A/B External or Internal wiring

NS Not Specified

VNS Voltage Not Specified

■: UL approved nominal cross-sections only.

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\* The diameter is provided for information purposes as it may vary depending on the stranding of the core. Only the average thickness of insulation should be taken into account.

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® FLR -40°C to +150°C



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.  
2 • Insulation: Varpren®.

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
- Low corrosivity of gas emissions: IEC 60754-2 / EN 60754-2.
- Flame retardant: ISO 6722.
- Low smoke density: IEC 61034-2 / EN 61034-2.

### Applications

- Internal cabling for electrical appliances.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

### Characteristics

#### General

- Continuous operating temperatures: -40°C to +150°C.
- Good resistance to common chemical influences and impregnating varnishes.
- Bending radius: 5 x D.

#### Electrical

- Rated voltage: 60 V.
- Test voltage: CS  $\geq 0.5 \text{ mm}^2$ : 5000 V.

### Standard products

- All colours including two-coloured.

### VARPREN® FLR

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

| Nominal cross-section<br>(mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C<br>(Ω/km) |
|---------------------------------------------|-------------------|---------------------------------------------|
| 0.5                                         | 19 x 0.18         | 40.1                                        |
| 0.75                                        | 24 x 0.20         | 26.7                                        |
| 1                                           | 32 x 0.20         | 20.0                                        |
| 1.5                                         | 30 x 0.25         | 13.7                                        |
| 2*                                          | 28 x 0.30         | 10.3                                        |
| 2.5                                         | 50 x 0.25         | 8.21                                        |
| 3*                                          | 44 x 0.30         | 6.83                                        |
| 4                                           | 52 x 0.30         | 5.09                                        |
| 6                                           | 84 x 0.30         | 3.39                                        |
| 10                                          | 80 x 0.40         | 1.95                                        |
| 16                                          | 123 x 0.40        | 1.24                                        |
| 25                                          | 189 x 0.40        | 0.795                                       |
| 35                                          | 266 x 0.40        | 0.565                                       |
| 50                                          | 377 x 0.40        | 0.393                                       |
| 70                                          | 340 x 0.50        | 0.277                                       |

#### INSULATED WIRE OR CABLE

| Nominal thickness of insulation<br>(mm) | Nominal diameter<br>(mm) | Approximate linear weight<br>(kg/km) |
|-----------------------------------------|--------------------------|--------------------------------------|
| 0.3                                     | 1.6                      | 6.5                                  |
| 0.3                                     | 1.8                      | 9.6                                  |
| 0.3                                     | 2.0                      | 12.4                                 |
| 0.3                                     | 2.3                      | 17.0                                 |
| 0.35                                    | 2.7                      | 21.8                                 |
| 0.35                                    | 2.9                      | 27.6                                 |
| 0.4                                     | 3.2                      | 34.3                                 |
| 0.4                                     | 3.6                      | 41.8                                 |
| 0.4                                     | 4.3                      | 58.3                                 |
| 0.6                                     | 5.8                      | 106                                  |
| 0.65                                    | 7.2                      | 160                                  |
| 0.65                                    | 8.8                      | 250                                  |
| 0.8                                     | 10.0                     | 334                                  |
| 0.9                                     | 11.8                     | 474                                  |
| 1.0                                     | 14.2                     | 662                                  |

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

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® MVA

## -30°C to +150°C



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228.
- 2 • Insulation: Varpren®.
- 3 • Separating tape (Optional).
- 4 • Outer sheath: Varpren®.

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
- Fire retardant: NF C 32-070 test C1.
- Flame retardant: IEC 60332-1-2 / EN 60332-1-2 / NF C 32-070 test C2.
- Low corrosivity of gas emissions: IEC 60754-2 / EN 60754-2.
- Low smoke density: IEC 61034-2 / EN 61034-2.

### Applications

- Class F cabling for electric motors.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.

### Characteristics General

- Continuous operating temperatures: - 30°C to +150°C.
- Excellent tearing strength.
- Minimum bending radius: 10 x D.

### Electrical

- Rated voltage: 450/750 V.
- Test voltage: 2500 V.

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colour: grey.

#### Standard conductor colours:

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup> (example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 5.8                   | 43.7                              |
| 3 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 6.2                   | 51.7                              |
| 4 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 6.9                   | 63.4                              |
| 5 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 7.5                   | 77.2                              |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.3                   | 53.6                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.8                   | 65.4                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.6                   | 81.9                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.4                   | 102                               |
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 6.6                   | 61.0                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.2                   | 76.6                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.8                   | 90.4                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.8                   | 117                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 8.0                   | 90.0                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 8.4                   | 106                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 9.2                   | 128                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 10.1                  | 159                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 9.2                   | 125                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 9.8                   | 152                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 10.7                  | 185                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 11.9                  | 231                               |
| 2 x 4                                    | 56 x 0.30         | 5.09                                     | 0.9                                  | 4.3                   | 10.6                  | 173                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 0.9                                  | 4.3                   | 11.2                  | 211                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 0.9                                  | 4.3                   | 12.6                  | 268                               |
| 5 x 4                                    | 56 x 0.30         | 5.09                                     | 0.9                                  | 4.3                   | 13.8                  | 329                               |
| 2 x 6                                    | 84 x 0.30         | 3.39                                     | 0.9                                  | 4.9                   | 11.8                  | 225                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 0.9                                  | 4.9                   | 12.7                  | 286                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 0.9                                  | 4.9                   | 14.0                  | 353                               |
| 5 x 6                                    | 84 x 0.30         | 3.39                                     | 0.9                                  | 4.9                   | 15.6                  | 447                               |
| 2 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.6                   | 15.6                  | 398                               |
| 3 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.6                   | 16.6                  | 498                               |
| 4 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.6                   | 18.3                  | 618                               |
| 5 x 10                                   | 80 x 0.40         | 1.95                                     | 1.0                                  | 6.6                   | 20.4                  | 782                               |
| 2 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.7                   | 17.8                  | 541                               |
| 3 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.7                   | 19.0                  | 685                               |
| 4 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.7                   | 21.2                  | 869                               |
| 5 x 16                                   | 126 x 0.40        | 1.24                                     | 1.0                                  | 7.7                   | 23.4                  | 1088                              |
| 2 x 25                                   | 196 x 0.40        | 0.795                                    | 1.1                                  | 9.2                   | 21.8                  | 761                               |
| 3 x 25                                   | 196 x 0.40        | 0.795                                    | 1.1                                  | 9.2                   | 23.2                  | 963                               |
| 4 x 25                                   | 196 x 0.40        | 0.795                                    | 1.1                                  | 9.2                   | 25.9                  | 1222                              |
| 5 x 25                                   | 196 x 0.40        | 0.795                                    | 1.1                                  | 9.2                   | 28.7                  | 1530                              |

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

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® H05GG-F

USE <HAR> Approval

-15°C to +110°C

<HAR>

### Approvals - standards

- USE <HAR> approval:  
NF EN 50525-2-21.
- 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.

### Applications

- Class F cabling for electric motors.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
- Other colours: contact us.
- Other nominal cross-sections: contact us.
- Other nominal stranding: contact us.
- Other options: contact us.



- 1 • Flexible tin-plated copper core - class 5 as per IEC 60228 / EN 60228.
- 2 • Insulation: Varpren® – type EI3 – NF C 32-525-1 / NF EN 50525-1 / EN 50363-1.
- 3 • Outer sheath: Varpren® – type EM4 – NF C 32-525-1 / NF EN 50525-1 / EN 50363-2-1.

### Characteristics

#### General

- Continuous operating temperatures: -15°C to +110°C.
- Excellent tearing strength.
- Minimum bending radius: 10 x D.

#### Electrical

- Rated voltage: 300/500 V.
- Test voltage: 2000 V (as per NF EN 50525-2-21).

### Standard products

- Standard conductor colours: as per HD 308 (see table below).
- Standard outer sheath colour: black.

#### Standard conductor colours (as per HD 308):

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm² (example: 3 X 1.5 mm²).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm²).

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) |      | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|------|-----------------------------------|
|                                          |                   |                                          |                                      |                       | min.                  | max. |                                   |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 5.7                   | 7.4  | 52.2                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.2                   | 8.1  | 66.0                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 6.8                   | 8.8  | 78.3                              |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.6                   | 9.9  | 95.7                              |
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 6.1                   | 8.0  | 60.9                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 6.5                   | 8.5  | 73.8                              |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.1                   | 9.3  | 88.3                              |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.0                   | 10.3 | 109                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.8                                  | 3.3                   | 7.6                   | 9.8  | 95.0                              |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.8                                  | 3.3                   | 8.0                   | 10.4 | 114                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.8                                  | 3.3                   | 9.0                   | 11.6 | 144                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.8                                  | 3.3                   | 9.8                   | 12.7 | 168                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.9                                  | 3.9                   | 9.0                   | 11.6 | 135                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.9                                  | 3.9                   | 9.6                   | 12.4 | 162                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.9                                  | 3.9                   | 10.7                  | 13.8 | 204                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.9                                  | 3.9                   | 11.9                  | 15.3 | 246                               |
| 3 x 4                                    | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 11.3                  | 14.5 | 236                               |
| 4 x 4                                    | 56 x 0.30         | 5.09                                     | 1.0                                  | 4.6                   | 12.7                  | 16.2 | 296                               |
| 3 x 6                                    | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 12.8                  | 16.3 | 321                               |
| 4 x 6                                    | 84 x 0.30         | 3.39                                     | 1.0                                  | 5.2                   | 14.2                  | 18.1 | 400                               |

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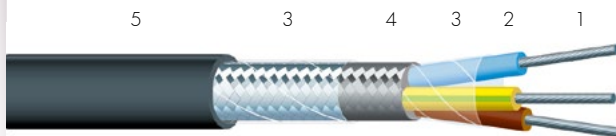
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# HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION I: CROSS LINKED ELASTOMERS

## VARPREN INSULATED WIRES AND CABLES

# VARPREN® MVA-C-VA -30°C to +150°C



- 1 • Flexible tin-plated copper core – class 5 as per IEC 60228.
- 2 • Insulation: Varpren®.
- 3 • Separating tape (Optional).
- 4 • Electrical shielding: Tin-plated copper braid.
- 5 • Outer sheath: Varpren®.

### Approvals - standards

- Halogen-free: IEC 60754-1 / EN 60754-1.
  - Fire retardant: NF C 32-070 test C1.
- Flame retardant: IEC 60332-1-2 / EN 60332-1-2 / NF C 32-070 test C2.
- Low corrosivity of gas emissions: IEC 60754-2 / EN 60754-2.
- Low smoke density: IEC 61034-2 / EN 61034-2.

### Applications

- Class F cabling for electric motors.

### Options

- Bare copper core: contact us.
- Nickel-plated copper core: contact us.
  - Other colours: contact us.
- Other nominal cross-sections: contact us.
  - Other nominal stranding: contact us.
  - Other options: contact us.

### Characteristics General

- Continuous operating temperature: -30°C to +150°C.
- Excellent tearing strength.
- Minimum bending radius: 10 x D.

### Electrical

- Rated voltage: 450/750 V.
- Test voltage: 2500 V.

### Standard products

- Standard conductor colours: see table below.
- Standard outer sheath colour: black.

#### Standard conductor colours:

| Number of conductors | With an earth wire                         | Without an earth wire               |
|----------------------|--------------------------------------------|-------------------------------------|
| 2                    | -                                          | blue – brown                        |
| 3                    | yellow/green – blue – brown                | brown – black – grey                |
| 4                    | yellow/green – brown – black – grey        | blue – brown – black – grey         |
| 5                    | yellow/green – blue – brown – black – grey | blue – brown – black – grey – black |
| ≥ 6                  | yellow/green – grey numbered               | grey numbered                       |

#### • Identification

Multi-conductor cables without an earth wire are identified as follows:

< Number of conductors > X < Cross-section > mm<sup>2</sup> (example: 3 X 1.5 mm<sup>2</sup>).

Multi-conductor cables with an earth wire are identified by the symbol G in the place of the X (example 3 G 1.5 mm<sup>2</sup>).

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## Flexible core • class 5 as per IEC 60228

## INSULATED CONDUCTORS

## SHEATHED CABLE

| Nominal cross-section (mm <sup>2</sup> ) | Nominal stranding | Maximum linear resistance at 20°C (Ω/km) | Nominal thickness of insulation (mm) | Nominal diameter (mm) | Nominal diameter (mm) | Approximate linear weight (kg/km) |
|------------------------------------------|-------------------|------------------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------------------|
| 2 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 6.7                   | 63.6                              |
| 3 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 7.1                   | 73.5                              |
| 4 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 7.8                   | 88.0                              |
| 5 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 8.4                   | 104                               |
| 7 x 0.5                                  | 16 x 0.20         | 40.1                                     | 0.6                                  | 2.2                   | 9.4                   | 131                               |
| 2 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.2                   | 75.0                              |
| 3 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 7.7                   | 89.2                              |
| 4 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 8.5                   | 109                               |
| 5 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 9.3                   | 132                               |
| 7 x 0.75                                 | 24 x 0.20         | 26.7                                     | 0.6                                  | 2.4                   | 10.4                  | 166                               |
| 2 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 7.5                   | 83.4                              |
| 3 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.1                   | 102                               |
| 4 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 8.7                   | 118                               |
| 5 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 9.7                   | 148                               |
| 7 x 1                                    | 32 x 0.20         | 20.0                                     | 0.6                                  | 2.5                   | 11.0                  | 186                               |
| 2 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 8.9                   | 117                               |
| 3 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 9.3                   | 135                               |
| 4 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 10.1                  | 160                               |
| 5 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 11.0                  | 199                               |
| 7 x 1.5                                  | 30 x 0.25         | 13.7                                     | 0.7                                  | 3.0                   | 12.2                  | 251                               |
| 2 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 9.9                   | 151                               |
| 3 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 10.5                  | 181                               |
| 4 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 11.6                  | 226                               |
| 5 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 12.8                  | 278                               |
| 7 x 2.5                                  | 50 x 0.25         | 8.21                                     | 0.8                                  | 3.6                   | 14.2                  | 350                               |

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LES CABLES DE L'EXTREME

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## Notes

[illegible]



## Notes

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. On the left side, there is a vertical margin line, creating a narrow left margin. The paper appears to be from a notebook or a standard ruled document.



## Notes

[illegible]





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