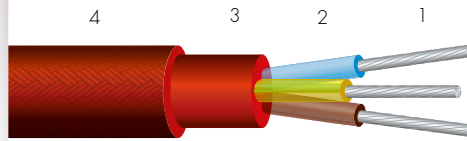


HIGH TEMPERATURE WIRES AND CABLES
FOR THE GENERAL MARKET
SECTION I: CROSS LINKED ELASTOMERS

SILICABLE® PMC-ECS

-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 • Insulation: Silicone rubber.
- 3 • Sheath: Silicone rubber.
- 4 • Reinforcement: Coated synthetic fibre braid.

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.

Flexible core • class 5 as per IEC 60228

INSULATED CONDUCTORS

SHEATHED CABLE

| Nominal cross-section (mm ²) | 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 |

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Flexible core • class 5 as per IEC 60228

INSULATED CONDUCTORS

SHEATHED CABLE

| Nominal cross-section (mm ²) | 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 | - |
| 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 > 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].