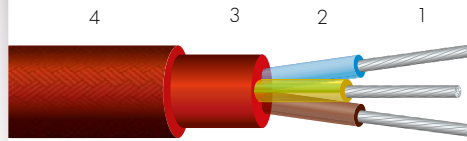


HIGH TEMPERATURE WIRES AND CABLES
FOR THE GENERAL MARKET
SECTION I: CROSS LINKED ELASTOMERS

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

For this product, please contact:

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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.



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).