

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

SILICABLE® PMCBEC-ECS

-60°C to +180°C



Approvals - standards

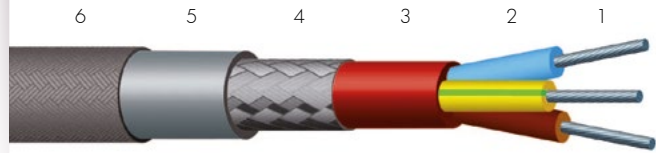
- Bureau VERITAS approval certificates no. 06466/DO BV: compliance with the tests described as per standards IEC 60092-350/353/360, IEC 60332-1-1/2, IEC 60332-3-22.
- Lloyd's Register approval certificates no. 06/00106: compliance with the tests described as per standards IEC 60228, IEC 60092-350/353/360,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

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.

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.

For this product, please contact:

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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.

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 1.5	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	-
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).