

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

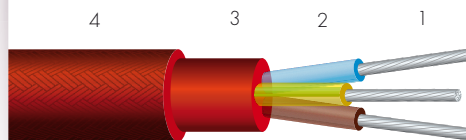
- Rated voltage: up to 600/1000 V.
- Test voltage: up to 3000 V.

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 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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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	-	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 > 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).