

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. MCBE-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.

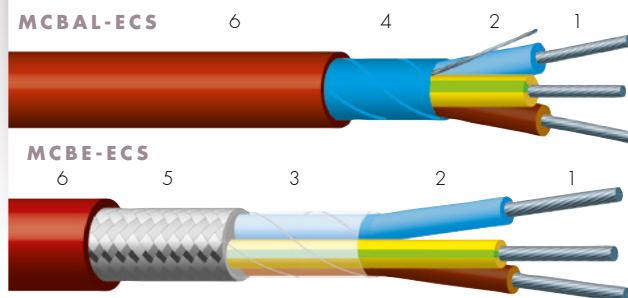
Standard products

- 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 ²)	Nominal stranding	Maximum linear resistance at 20 °C (Ω/km)	INSULATED CONDUCTORS		SHEATHED CABLE	
			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

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	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	-
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].