

SILICABLE®

FHLR2GCB2G

High voltage automotive cables
For E-mobility applications



- High voltage **until 1000 VAC / 1500 VDC**
- According to the new standard **IEC 19642**
- Available in 2 configurations **Single core and Multicore**
- High temperature **+180°C**
- **Excellent flexibility**
- **Dual shielding**

The **SILICABLE® FHLR2GCB2G** cable has been engineered for the electrical power train of hybrid and electrical vehicles. The silicone material employed led the **SILICABLE® FHLR2GCB2G** cable extremely flexible and offers exceptional insulation capabilities and good resistance to high temperatures and thermal shocks.

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LES CABLES DE L'EXTREME

SILICABLE® FHLR2GCB2G

Construction
according to **ISO 19642-9**



- Compliant with High Voltage requirements

600 VAC / 900 VDC for cross sections < 10 mm²
1000 VAC / 1500 VDC for cross sections ≥ 10 mm²

- High temperature

-40°C to +180°C, Class E (3000 h)

- Excellent flexibility Excellent flexibility by using silicone material (insulation + sheath) and flexible bare copper core

- Dual Shielding with tinned copper braid and aluminium / PET tape

- Halogen Free & Flame Retardant

Shielded single core

Nominal cross section (mm ²)	Nb. & diam. of strands (Type C) (nb. x mm max)	Conductor diameter (mm) max	Single core diameter (mm)		Strand diameter screen (mm) max	Diameter under sheath (mm) max	Wall thickness sheath (mm)		Cable outside diameter (mm)		Linear core resistance at 20°C (Ω / km)
			min	max			nom.	min	min	max	
1,5	76 x 0.16	1.8	2.2	2.4	0.13	2.9	0.4	0.32	3.3	3.7	12.7
2.5	140 x 0.16	2.2	2.7	3.0	0.13	3.5	0.4	0.32	3.9	4.3	7.60
4	224 x 0.16	2.8	3.4	3.7	0.16	4.3	0.4	0.32	4.5	5.1	4.71
6	320 x 0.16	3.4	4.0	4.3	0.16	4.9	0.6	0.48	5.5	6.1	3.14
10	320 x 0.21	4.5	5.3	6.0	0.19	6.8	0.65	0.52	7.5	8.1	1.82
16	512 x 0.21	6.3	6.4	7.2	0.19	8.0	0.8	0.64	9.0	9.6	1.16
25	790 x 0.21	7.8	7.9	8.7	0.21	9.5	0.9	0.72	10.7	11.3	0.743
35	1070 x 0.21	9.0	9.4	10.4	0.21	11.2	1.0	0.80	12.6	13.2	0.527
50	1600 x 0.21	10.5	11.0	12.2	0.21	13.0	1.1	0.88	14.6	15.2	0.368
60	1200 x 0.26	11.6	12.0	13.3	0.21	14.1	1.1	0.88	15.5	16.3	0.315
70	1427 x 0.26	12.5	13.0	14.4	0.21	15.2	1.1	0.88	16.6	17.4	0.259
95	1936 x 0.26	14.8	15.3	16.7	0.26	17.7	1.1	0.88	19.1	19.9	0.196
120*	2450 x 0.26	16.5	17.7	19.7	0.26	20.7	1.7	1.36	23.3	24.1	0.153

*According to 19642-9 in thick wall version (Table A.4), the thin wall version don't precise cable dimension for 120 mm² (Table A.3)

Shielded multi core

Nb of cores (Nb)	Nominal cross section (mm ²)	Conductor diameter (mm) max	Twisted core diameter (mm)		Diameter under braid (mm) max	Strand diameter braid (mm) max	Foil thickness screen (mm) max	Diameter under sheath (mm) max	Wall thickness sheath (mm) max	Cable outside diameter (mm)	
			min	max						min	max
2	1.5	1.8	4.3	4.8	5.2	0.19	0.065	6.2	0.52	6.8	7.4
3	1.5	1.8	4.6	5.2	5.6	0.19	0.065	6.6	0.53	7.3	7.9
4	1.5	1.8	5.2	5.8	6.3	0.19	0.065	7.2	0.56	8.0	8.6
2	2.5	2.2	5.4	6.0	6.5	0.19	0.065	7.5	0.56	8.2	8.9
3	2.5	2.2	5.8	6.5	7.0	0.21	0.065	8.1	0.58	8.8	9.5
4	2.5	2.2	6.5	7.2	7.9	0.21	0.065	8.9	0.60	9.7	10.4
2	4	2.8	6.7	7.4	8.0	0.21	0.065	9.1	0.61	9.9	10.6
3	4	2.8	7.2	8.0	8.6	0.21	0.065	9.7	0.62	10.5	11.2
4	4	2.8	8.1	8.9	9.6	0.21	0.065	10.7	0.65	11.5	12.3
2	6	3.4	7.8	8.6	9.3	0.21	0.065	10.3	0.64	11.2	11.9
3	6	3.4	8.4	9.3	10.0	0.21	0.065	11.0	0.66	11.9	12.7
4	6	3.4	9.4	10.4	11.2	0.21	0.065	12.2	0.68	13.1	13.9
2	10	4.5	10.9	12.0	12.9	0.21	0.065	13.9	0.71	14.8	15.7
3	10	4.5	11.8	12.9	13.8	0.26	0.065	15.1	0.73	15.9	16.9
2	16	6.3	13.1	14.4	15.4	0.26	0.065	16.6	0.75	17.4	18.5
3	16	6.3	14.1	15.5	16.5	0.26	0.065	17.7	0.77	18.6	19.7

Other cross-sections or constructions on request

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