

11

CABLES SOLUTIONS
FOR AUTOMOTIVE AND E-MOBILITY

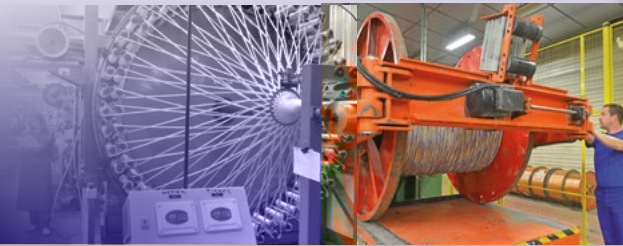
omerin
LES CABLES DE L'EXTREME

- **The world's leading manufacturer of silicone-insulated wires and cables**
- **Europe's leading manufacturer of glass-yarn braids**
- **France's leading manufacturer of fire safety cables**

The Omerin group has been producing electrical cables for extreme conditions since 1959

At Omerin, we use our know-how and technology to develop increasingly high-performance products.

Our expertise is recognized in over 120 countries.



Omerin offers a wide range of high-performance products covering a large number of applications in very diverse industries, including the electrothermal construction, electromechanical, chemical, nuclear energy, railway, automotive, naval, aerospace, heavy industry, power plant and other sectors.

Our product range is further extended by varnished, impregnated and treated braided insulating sleeveings, door seals for ovens, fireproof sleeveings, thermocouple, extension and compensation cables as well as industrial braids.



Men and Women at your service

The technical expertise of our teams is at your disposal, providing responses and solutions to all your requirements.

Our Methods, Quality and Research and Development Departments work permanently together with the aim of constantly improving our products and processes.

All our staff subscribe to this approach with their involvement and constant self-checking at all stages of production.

List of all the available catalogues:

HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION I: CROSS LINKED ELASTOMERS 1

HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION II: FLUOROPOLYMERS AND THERMOPLASTICS 2

HIGH TEMPERATURE WIRES AND CABLES FOR THE GENERAL MARKET SECTION III: COMPOSITE INSULATIONS 3

FIRE RESISTANT SAFETY CABLES 4

CABLE SOLUTIONS FOR ROLLING STOCK 5

CABLES FOR POWER STATIONS AND HIGH-RISK SITES 6

MARINE CABLES 7

PYROMETRY CABLES 8

BRAIDED INSULATING SLEEVINGS 9

HIGH TEMPERATURE MEDIUM VOLTAGE POWER CABLES 10

CABLE SOLUTIONS FOR AUTOMOTIVE AND E-MOBILITY 11

PACKAGING AND TECHNICAL DATA

Ultimately, this catalogue is the result of the passionate endeavours of an entire team, who have displayed great talent in writing it for you.

It is designed to be a simple and concise working tool for you, serving as a reference document that is able to meet the majority of your needs.

This catalogue, as well as eleven others from our collection are available on line with real time updates and much more information at

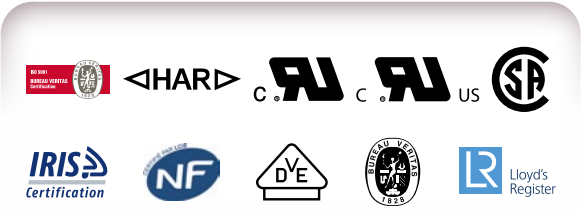
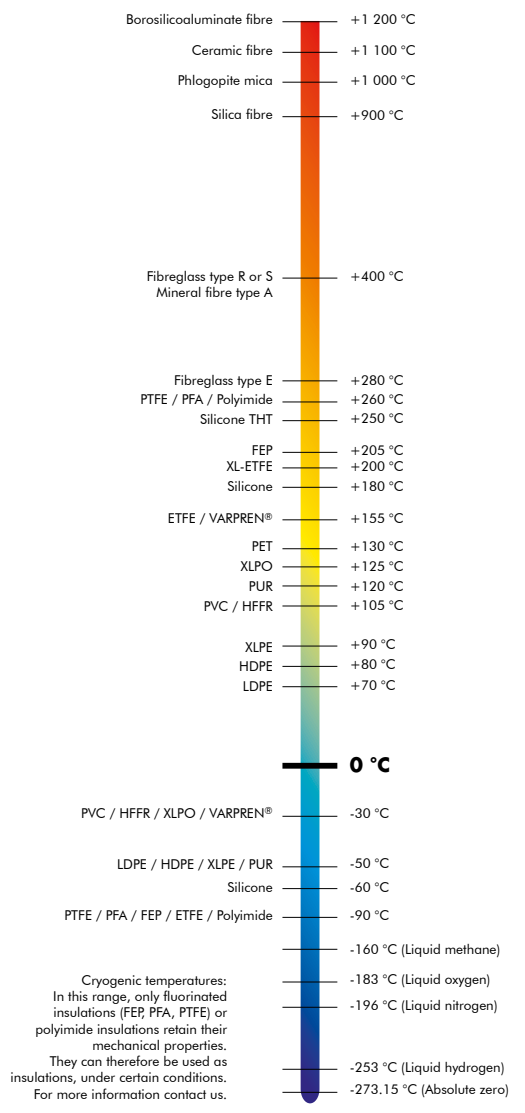
www.omerin.com

All the trademarks listed below are registered trademarks of the **OMERIN Group**.

BIO-HABITAT®	Wires and cables for a home without electromagnetic interference
CERAFIL®	Miniature ceramic insulated wires for very high temperatures
COAXRAIL®	Coaxial cables for railway industry
COAXTHERM®	High temperature coaxial cables
COUPLIX®	Pyrometry cables (thermocouples, extension, compensation cables)
DATARAIL®	Data cables for the railway industry
ELECTROAIR®	Aerospace & Defence wires and cables
ENERSYL®	Electrical cables for power station and high risk sites
FLEXBAT®	Extra flexible battery cables
LUMIPLAST®	Wires and cables for lighting systems
METALTRESSE®	High performance metallic braids
MINOROC®	Very high tensile strength synthetic cables
MULTIMAX®	Power, control and instrumentation cables for the marine industry
MULTI-VX®	Hybrid data and power cables
ODIOSIS®	Sound, amplification and speaker cables
OILPLAST®	Cables for industrial environments and intrinsically safe circuits
OMBILIFLEX®	High performance special multi-function cables
PLASTHERM®	Special thermoplastic insulated wires and cables
POWER CONNECT®	High performance power cords
PROFIPLAST®	Thermoplastic insulated wires and cables
PYRISOL®	Fire resistant power cables for safety circuits
PYRITEL®	Fire resistant communication cables for safety circuits
SILIBOX®	Wire and cables cardboard box packaging system
SILICABLE®	Special high temperature wires and cables
SILICOUL®	Low and medium voltage class H (180°C) power cables
SILIFLAM®	Very high safety cables for extreme temperatures
SILIFLON®	Fluoropolymer insulated high temperature wires and cables
SILIGAINE®	Braided insulating sleeveings
SILIRAD®	Electron beam cross-linked cables
SILITUBE®	Braided or extruded tubes
SOLARPLAST®	Power cables for photovoltaic solar panels
SONDIX®	Platinum resistance temperature sensors connection cables
SPIRFLEX®	High performance spiral cables
TEXALARM®	Cables for safety systems and fire alarms
TS CABLES®	Coaxial and data cables
TS COM 900®	Twisted pair cables for high-speed packet transmission
TS LAN®	Copper LAN cables
TWINLINK®	High temperature controlled impedance twisted pair cables
TWINPLAST®	Extra flexible cables for battery chargers or jump starters
VARPREN®	Wires and cables with special cross-linked Varpren® insulation
VEROX®	Fiberglass braided seals
VIDEOCOAX®	Analogue and digital video cables



Thermal classification of insulations



Coding Chart

Automotive Wires & Cables

1 TYPE CODE	FL FHL FZL	Low voltage automotive cables High voltage automotive cables Ignition automotive cables	
2 CORE CODE	- AL M W	Electrolytic copper core (plain, tinned-copper or silver-plated / nickel-plated copper) Aluminium core Material other than E-Cu, Aluminium and resistance conductors Resistance conductors (for resistance ignition cables)	
3 INSULATION CODE	- R U S	Thick wall of insulation thickness according to ISO 6722 and ISO 19642 Thin wall of insulation thickness according to ISO 6722 and ISO 19642 Ultra-thin wall of insulation thickness according to ISO 6722 and ISO 19642 Special wall of insulation thickness (undefined according to ISO 6722 and ISO 19642)	
4 MATERIAL CODE	Y YK YW 2Y 4Y 5Y 6Y 7Y 9Y 10Y 11Y 12Y 13Y 31Y 51Y 52Y 91Y X 2X 7X 10X 41X 91X 2G 3G 4G 5G	PVC PVC PVC PE PA PTFE FEP ETFE PP PVDF PUR / TPE-U PBT TPE-E TPE-S PFA MFA TPE-O PVC-X PE-X ETFE-X PVDF-X PO-X TPO-X SILICONE EPDM EVA CR	PVC +105°C PVC +105°C with cold resistance according to ISO 6722 and ISO 19642 PVC +125°C with heat resistance according to ISO 6722 and ISO 19642 Polyethylene Polyamide Polytetra fluor ethylene Fluorinated ethylene propylene Ethylene tetrafluoroethylene Polypropylene Polyvinylidenfluorid Polyurethane & Thermoplastic elastomer with polyurethane basis Polybutylenterephthalat Thermoplastic elastomer with polyester ester basis Thermoplastic elastomer with polystyrene basis Perfluoroalkoxy copolymer Copolymer of tetrafluoroethylene and perfluoromethylvinyl ether Thermoplastic elastomer with polyolefin basis PVC crosslinked PE crosslinked ETFE crosslinked Polyvinylidenfluorid crosslinked Special polyolefin crosslinked TPE-O crosslinked Silicone elastomer Ethylene propylene elastomer Ethylene Vinyl acetate with copolymer basis Chloroprene rubber
5 SHIELDING CODE	B C D F G	Taped screen Copper braid shield (plain, tinned, silver-plated, nickel-plated / copper) Copper spiral shield (plain, tinned, silver-plated, nickel-plated - copper) Non metallic tape Textile braid	
6 CODES COMPOSITION	A B C -	Symmetric core composition according to ISO 6722 and ISO 19642 Asymmetric core composition according to ISO 6722 and ISO 19642 Multi-strand composition according to ISO 6722 and ISO 19642 No code – for core composition undefined according to ISO 6722 and ISO 19642	

LOW VOLTAGE CABLES

PAGE

Single core

FT 11101 PLASTHERM® FLRY	6
FT 11102 PLASTHERM® FLRYW	7
FT 11103 PLASTHERM® FLR11Y	8
FT 11108 PLASTHERM® FLR2X	9
FT 11109 PLASTHERM® FLR41X	10
FT 11104 SILIFLON® FLR7Y	11
FT 11105 SILIFLON® FLR6Y	12
FT 11106 SILIFLON® FLR51Y	13
FT 11107 SILICABLE® FL2G	14

Multicore

FT 11110 PLASTHERM® FLRYY	15
--	----

HIGH VOLTAGE CABLES

PAGE

Single core

FT 11201 SILICABLE® FHL2G	18
FT 11205 SILICABLE® FHLR2G-C	19
FT 11206 SILICABLE® FHLR2G LV216	20
FT 11202 SILICABLE® FHLR2GCB2G-C	21
FT 11207 SILICABLE® FHLR2GCB2G LV216	22
FT 11210 SILICABLE® FHLR2GCB2GG	23

Multicore

FT 11208 SILICABLE® FHLR2G2G-C	24
FT 11203 SILICABLE® FHLR2GCB2G-C	25
FT 11209 SILICABLE® FHLR2GCB2G LV216	24
FT 11204 SILICABLE® FHLR6YBCF2G	25

EXTRA FLEXIBLE BATTERY CABLES

PAGE

FT 11301 FLEXBAT® ST	27
FT 11302 FLEXBAT® HT	28
FT 11303 FLEXBAT® THT	29
FT 11304 FLEXBAT® DI LR HT	30
FT 11305 TWINBAT® RN	31

SPECIAL AND CUSTOM MADE CABLES

PAGE

FT 11401 Multicore cables	33
PLASTHERM® Thermoplastic multicore cables	
SILIFLON® High temperature multicore cables	
SILICABLE® High voltage multicore cables	
FT 11401 Cables for specific applications	33

HIGH TEMPERATURE BRAIDED SLEEVINGS

PAGE

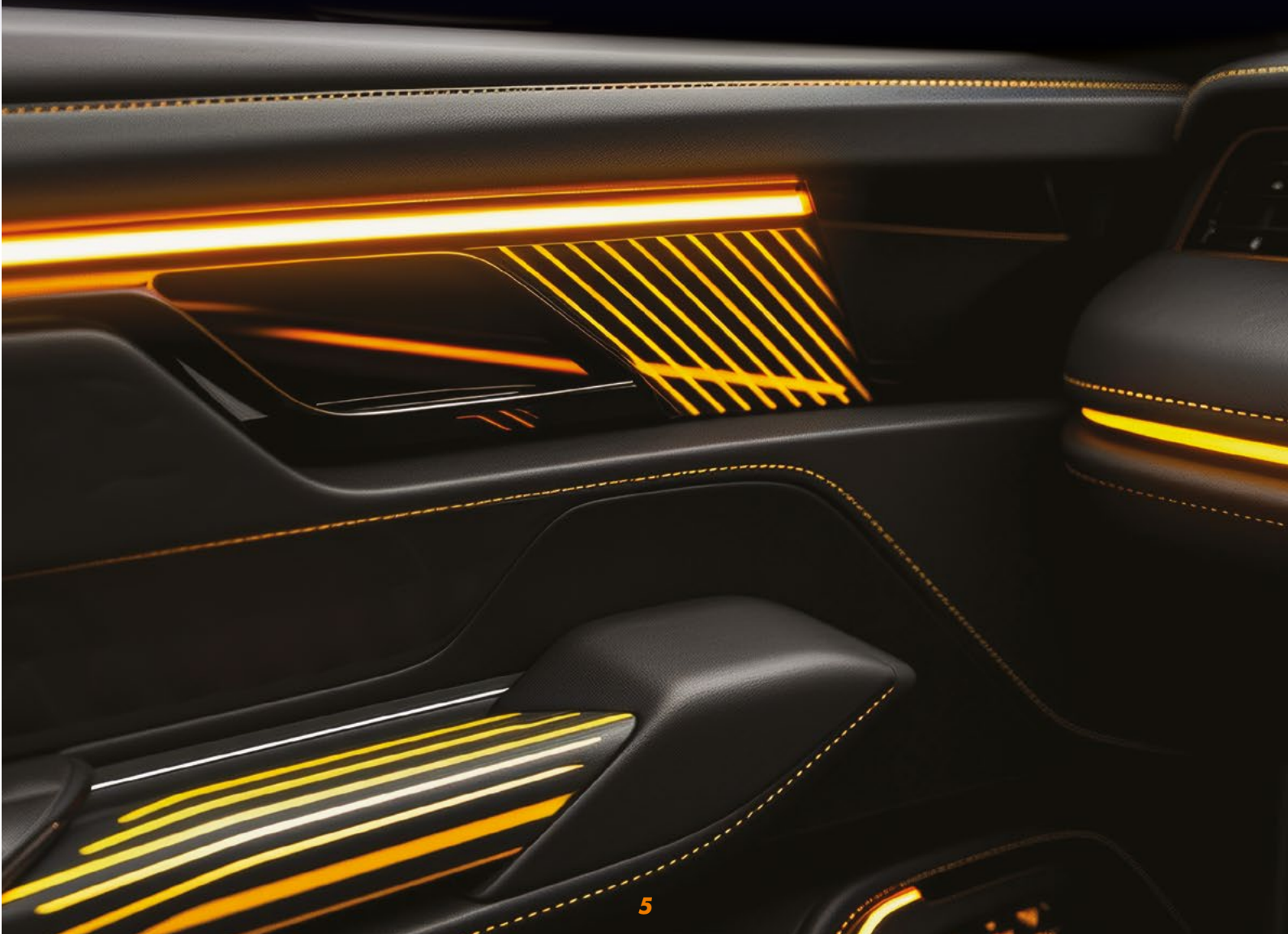
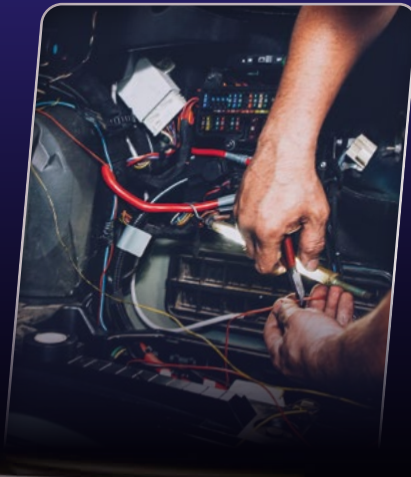
FT 11501 Insulating and protective sleeveings	35
--	----

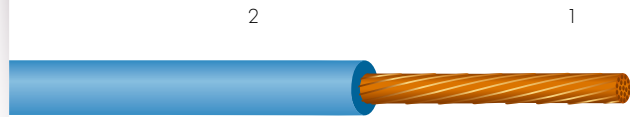


LOW VOLTAGE CABLES

SINGLE CORE CABLES
MULTICORE CABLES

**HIGH TEMPERATURE AREAS
PASSENGER COMPARTMENT**



PLASTHERM® FLRY**-40°C to +105°C****Class B according to ISO 6722-1
and ISO 19642-3**

- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
- 2 • PVC 105°C insulation

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602

Applications

- Low voltage wires for general automotive wiring

Specific characteristics

- Version with a reduced insulation according to ISO 6722-1 and ISO 19642-3

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max. (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.13	7 x 0.16	-	0.25	0.20	1.05	136	140
0.22	7 x 0.21	-	0.25	0.20	1.20	84.8	86.5
0.35	7 x 0.27	12 x 0.21	0.25	0.20	1.40*	54.4	55.5
0.50	19 x 0.19	16 x 0.21	0.28	0.22	1.60	37.1	38.2
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23
8	-	50 x 0.46	0.40	0.32	5.00	2.38	2.52
10	-	80 x 0.41	0.60	0.48	6.00	1.82	1.85
12	-	96 x 0.41	0.60	0.48	6.50	1.52	1.60
16	-	126 x 0.41	0.65	0.52	7.20	1.16	1.18
20	-	152 x 0.41	0.65	0.52	7.80	0.955	0.999
25	-	196 x 0.41	0.65	0.52	8.70	0.743	0.757
30	-	224 x 0.41	0.80	0.64	9.60	0.647	0.684
35	-	276 x 0.41	0.80	0.64	10.40	0.527	0.538
40	-	308 x 0.41	0.90	0.71	11.10	0.473	0.500
50	-	396 x 0.41	0.90	0.71	12.20	0.368	0.375
60	-	296 x 0.51	1.00	0.80	13.30	0.315	0.333
70	-	360 x 0.51	1.00	0.80	14.40	0.259	0.264
95	-	475 x 0.51	1.10	0.90	16.70	0.196	0.200

* The wire outer diameter for 0.35 mm² Type A with 7 strands shall be max 1.30 mm.

For this product, please contact:

OMERIN division principale
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

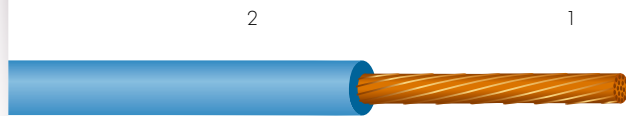
www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

**CABLE SOLUTIONS
FOR AUTOMOTIVE AND E-MOBILITY**
LOW VOLTAGE SINGLE CORE CABLES
PLASTHERM® FLRYW

-40°C to +125°C
Class C according to ISO 6722-1
and ISO 19642-3



- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
- 2 • PVC 125°C insulation

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602

Applications

- Low voltage wires for general automotive wiring

Specific characteristics

- Version with a reduced insulation according to ISO 6722-1 and ISO 19642-3

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal Cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.13	7 x 0.16	-	0.25	0.20	1.05	136	140
0.22	7 x 0.21	-	0.25	0.20	1.20	84.8	86.5
0.35	7 x 0.27	12 x 0.21	0.25	0.20	1.40*	54.4	55.5
0.50	19 x 0.19	16 x 0.21	0.28	0.22	1.60	37.1	38.2
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23
8	-	50 x 0.46	0.40	0.32	5.00	2.38	2.52
10	-	80 x 0.41	0.60	0.48	6.00	1.82	1.85
12	-	96 x 0.41	0.60	0.48	6.50	1.52	1.60
16	-	126 x 0.41	0.65	0.52	7.20	1.16	1.18
20	-	152 x 0.41	0.65	0.52	7.80	0.955	0.999
25	-	196 x 0.41	0.65	0.52	8.70	0.743	0.757
30	-	224 x 0.41	0.80	0.64	9.60	0.647	0.684
35	-	276 x 0.41	0.80	0.64	10.40	0.527	0.538
40	-	308 x 0.41	0.90	0.71	11.10	0.473	0.500
50	-	396 x 0.41	0.90	0.71	12.20	0.368	0.375
60	-	296 x 0.51	1.00	0.80	13.30	0.315	0.333
70	-	360 x 0.51	1.00	0.80	14.40	0.259	0.264
95	-	475 x 0.51	1.10	0.90	16.70	0.196	0.200

* The wire outer diameter for 0.35 mm² Type A with 7 strands shall be max 1.30 mm.

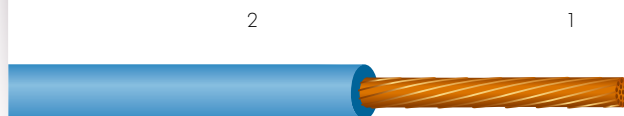
For this product, please contact:

OMERIN division principale
 Zone Industrielle - F 63600 Ambert
 Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

omerin
 LES CABLES DE L'EXTREME

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.

PLASTHERM® FLR11Y**-40°C to +150°C****Class D according to ISO 6722-1
and ISO 19642-3**

- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
2 • TPE-U insulation

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602
- IEC 60754-1 halogen free

Applications

- Low voltage wires for general automotive wiring

Specific characteristics

- Version with a reduced insulation according to ISO 6722-1 and ISO 19642-3
- Flame retardant

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal Cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max. (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.35	7 x 0.27	12 x 0.21	0.25	0.20	1.40*	54.4	55.5
0.50	19 x 0.19	16 x 0.21	0.28	0.22	1.60	37.1	38.2
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23
8	-	50 x 0.46	0.40	0.32	5.00	2.38	2.52
10	-	80 x 0.41	0.60	0.48	6.00	1.82	1.85
12	-	96 x 0.41	0.60	0.48	6.50	1.52	1.60
16	-	126 x 0.41	0.65	0.52	7.20	1.16	1.18
20	-	152 x 0.41	0.65	0.52	7.80	0.955	0.999
25	-	196 x 0.41	0.65	0.52	8.70	0.743	0.757
30	-	224 x 0.41	0.80	0.64	9.60	0.647	0.684
35	-	276 x 0.41	0.80	0.64	10.40	0.527	0.538
40	-	308 x 0.41	0.90	0.71	11.10	0.473	0.500
50	-	396 x 0.41	0.90	0.71	12.20	0.368	0.375
60	-	296 x 0.51	1.00	0.80	13.30	0.315	0.333
70	-	360 x 0.51	1.00	0.80	14.40	0.259	0.264
95	-	475 x 0.51	1.10	0.90	16.70	0.196	0.200

* The wire outer diameter for 0.35 mm² Type A with 7 strands shall be max 1.30 mm.

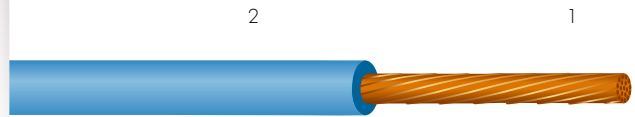
For this product, please contact:

OMERIN division principale 
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

PLASTHERM® FLR2X**-40°C to +125°C****Class C according to ISO 6722-1
and ISO 19642-3**

- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
- 2 • PE-X insulation (radiation crosslinked Polyethylene)

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602
- IEC 60754-1 halogen free

Applications

- Low voltage wires for general automotive wiring

Specific characteristics

- Version with a reduced insulation according to ISO 6722-1 and ISO 19642-3
- Flame retardant

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal Cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23

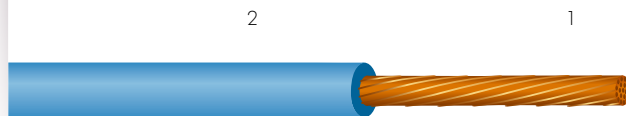
For this product, please contact:

OMERIN division principale
 Zone Industrielle - F 63600 Ambert
 Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

omerin
 LES CABLES DE L'EXTREME

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.

PLASTHERM® FLR41X**-40°C to +150°C****Class D according to ISO 6722-1
and ISO 19642-3**

- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
2 • PO-X insulation (radiation crosslinked Polyolefin)

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602
- IEC 60754-1 halogen free

Applications

- Low voltage wires for general automotive wiring.
Version with a reduced insulation according to ISO 6722-1 and ISO 19642-3

Specific characteristics

- Version with a reduced insulation according to ISO 6722-1 and ISO 19642-3
- Flame retardant

Colour code

Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow
(others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal Cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max. (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.35	7 x 0.27	12 x 0.21	0.25	0.20	1.40*	54.4	55.5
0.50	19 x 0.19	16 x 0.21	0.28	0.22	1.60	37.1	38.2
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23

* The wire outer diameter for 0.35 mm² Type A with 7 strands shall be max 1.30 mm.

For this product, please contact:

OMERIN division principale 
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

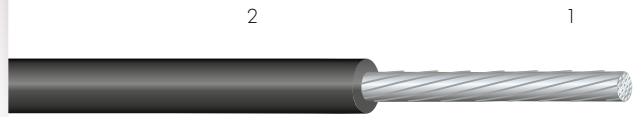
www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

**CABLE SOLUTIONS
FOR AUTOMOTIVE AND E-MOBILITY**
LOW VOLTAGE SINGLE CORE CABLES
SILIFLON® FLR7Y

-40°C to +175°C
Class E according to ISO 6722-1
and ISO 19642-3



- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
- 2 • ETFE insulation

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602

Applications

- Low voltage wires for automotive applications in engine compartment, automotive wiring in high temperature and aggressive environments requiring compact size and excellent mechanical strength

Specific characteristics

- Resistant to pressure at high temperatures
- Excellent resistance to abrasion
- Good chemical resistance to automotive oils and fuels

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal Cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max. (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.13	7 x 0.16	-	0.25	0.20	1.05	136	140
0.22	7 x 0.21	-	0.25	0.20	1.20	84.8	86.5
0.35	7 x 0.27	12 x 0.21	0.25	0.20	1.40*	54.4	55.5
0.50	19 x 0.19	16 x 0.21	0.28	0.22	1.60	37.1	38.2
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23

* The wire outer diameter for 0.35 mm² Type A with 7 strands shall be max 1.30 mm.

For this product, please contact:

OMERIN division principale
 Zone Industrielle - F 63600 Ambert
 Phone: +33 (0)4 73 82 50 00
 omerin@omerin.com

www.omerin.com

omerin
 LES CABLES DE L'EXTREME

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.

SILIFLON® FLR6Y**-40°C to +210°C****Class F according to ISO 6722-1
and ISO 19642-3**

- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
- 2 • FEP insulation

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602

Applications

- Low voltage wires for automotive applications in engine compartment, automotive wiring in high temperature and aggressive environments requiring compact size and excellent mechanical strength

Specific characteristics

- Resistant to pressure at high temperatures
- Excellent resistance to abrasion
- Good chemical resistance to automotive oils and fuels
- Flame retardant

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal Cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max. (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.13	7 x 0.16	-	0.25	0.20	1.05	136	140
0.22	7 x 0.21	-	0.25	0.20	1.20	84.8	86.5
0.35	7 x 0.27	12 x 0.21	0.25	0.20	1.40*	54.4	55.5
0.50	19 x 0.19	16 x 0.21	0.28	0.22	1.60	37.1	38.2
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23

* The wire outer diameter for 0.35 mm² Type A with 7 strands shall be max 1.30 mm.

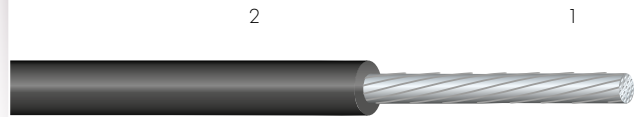
For this product, please contact:

OMERIN division principale 
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SILIFLON® FLR51Y**-40°C to +260°C****Class H according to ISO 6722-1
and ISO 19642-3**

- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
- 2 • PFA insulation

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602

Applications

- Low voltage wires for automotive applications in engine compartment, automotive wiring in high temperature and aggressive environments requiring compact size and excellent mechanical strength

Specific characteristics

- Resistant to pressure at high temperatures
- Excellent resistance to abrasion
- Good chemical resistance to automotive oils and fuels

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

Option

- Extra flexible version with Type C - core according to ISO 6722-1 and ISO 19642-3

CONSTRUCTION SELON ISO 6722-1 ET ISO 19642-3

Nominal Cross section (mm ²)	Type A	Type B	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max. (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.13	7 x 0.16	-	0.25	0.20	1.05	136	140
0.22	7 x 0.21	-	0.25	0.20	1.20	84.8	86.5
0.35	7 x 0.27	12 x 0.21	0.25	0.20	1.40*	54.4	55.5
0.50	19 x 0.19	16 x 0.21	0.28	0.22	1.60	37.1	38.2
0.75	19 x 0.24	24 x 0.21	0.30	0.24	1.90	24.7	25.4
1	19 x 0.27	32 x 0.21	0.30	0.24	2.10	18.5	19.1
1.25	19 x 0.30	16 x 0.33	0.30	0.24	2.30	14.9	15.9
1.5	19 x 0.33	30 x 0.26	0.30	0.24	2.40	12.7	13.0
2	19 x 0.38	28 x 0.31	0.35	0.28	2.80	9.42	9.69
2.5	37 x 0.28	50 x 0.26	0.35	0.28	3.00	7.60	7.82
3	-	44 x 0.31	0.40	0.32	3.40	6.15	6.36
4	-	56 x 0.31	0.40	0.32	3.70	4.71	4.85
5	-	65 x 0.33	0.40	0.32	4.20	3.94	4.02
6	-	84 x 0.31	0.40	0.32	4.30	3.14	3.23

* The wire outer diameter for 0.35 mm² Type A with 7 strands shall be max 1.30 mm.

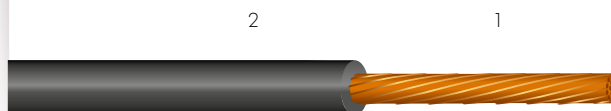
For this product, please contact:

OMERIN division principale
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SILICABLE® FL2G**-40°C to +200°C****Class F according to ISO 6722-1
and ISO 19642-3**

- 1 • Bare or tinned copper core according to ISO 6722-1, ISO 19642-3 and EN 13602
2 • Silicone insulation

Approvals - standards

- ISO 6722-1, ISO 19642-1, ISO 19642-3, EN 13602
- IEC 60754-1 halogen free

Applications

- Low voltage wires for automotive applications in engine compartment, used in areas requiring high flexibility at low temperatures

Specific characteristics

- Flame retardant

Colour code

- Black, Blue, Brown, Green, Orange, Red, Purple, White, Yellow (others on request)

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-3

Nominal Cross section (mm ²)	Type B	Type C	Thin wall			Bare copper	Tinned copper
	Number of strands & strand diameter nom. / max. (nb. x mm)	Number of strands & strand diameter nom. / max. (nb. x mm)	Insulation thickness nom. (mm)	Insulation thickness min. (mm)	Wire outer diameter max. (mm)	Maximum linear resistance at 20°C (Ω/ km)	Maximum linear resistance at 20°C (Ω/ km)
0.50	16 x 0.21	26 x 0.16	0.60	0.48	2.30	37.1	38.2
0.75	24 x 0.21	38 x 0.16	0.60	0.48	2.50	24.7	25.4
1	32 x 0.21	54 x 0.16	0.60	0.48	2.70	18.5	19.1
1.5	30 x 0.26	76 x 0.16	0.60	0.48	3.00	2.7	13.0
2	28 x 0.31	105 x 0.16	0.60	0.48	3.30	9.42	9.69
2.5	50 x 0.26	140 x 0.16	0.70	0.56	3.60	7.6	7.82
3	44 x 0.31	160 x 0.16	0.70	0.56	4.10	6.15	6.36
4	56 x 0.31	224 x 0.16	0.80	0.64	4.40	4.71	4.85
5	65 x 0.33	250 x 0.16	0.80	0.64	4.90	3.94	4.02
6	84 x 0.31	320 x 0.16	0.80	0.64	5.00	3.14	3.23
8	50 x 0.46	240 x 0.21	0.80	0.64	5.90	2.38	2.52
10	80 x 0.41	320 x 0.21	1.00	0.80	6.50	1.82	1.85
12	96 x 0.41	380 x 0.21	1.00	0.80	7.40	1.52	1.60
16	126 x 0.41	512 x 0.21	1.00	0.80	8.30	1.16	1.18
20	152 x 0.41	610 x 0.21	1.10	0.88	9.10	0.955	0.999
25	196 x 0.41	790 x 0.21	1.30	1.04	10.40	0.743	0.757
30	224 x 0.41	900 x 0.21	1.30	1.04	10.90	0.647	0.684
35	276 x 0.41	1 070 x 0.21	1.30	1.04	11.60	0.527	0.538
40	308 x 0.41	1 200 x 0.21	1.40	1.12	12.40	0.473	0.500
50	396 x 0.41	1 600 x 0.21	1.50	1.20	13.50	0.368	0.375
60	296 x 0.51	1 200 x 0.26	1.50	1.20	14.60	0.315	0.333
70	360 x 0.51	1 427 x 0.26	1.50	1.20	15.50	0.259	0.264
95	475 x 0.51	1 936 x 0.26	1.60	1.28	18.00	0.196	0.200
120	608 x 0.51	2 450 x 0.26	1.60	1.28	19.70	0.153	0.156

For this product, please contact:

OMERIN division principale 
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

PLASTHERM® FLRYCY

Multicore

-40°C to +105°C**Class B according to ISO 6722-1
and ISO 19642-1**

- 1 • Bare or tinned copper core Type A or Type B according to ISO 6722-1, ISO 19642-3 and EN 13602
- 2 • PVC insulation 105°C
- 3 • PVC sheath 105°C

Approvals - standards*

- ISO 6722-1, ISO 19642-1, ISO 19642-7, EN 13602

Applications

- Low voltage cables for general automotive wiring

Specific characteristics

- Version with a reduced insulation according to ISO 6722-1 and ISO 19642-7

Colour code

- Sheath : black
- Insulation :
 - 2 conductors : red, black
 - ≥ 3 conductors : HD308 (contact us for any other requests)

Option

- Shielded version ref. FLRYCY

CONSTRUCTION ACCORDING TO ISO 19642-7

Number of conductors	Nominal cross section (mm ²)	Conductor diameter max. (mm)	Single core diameter		Sheath thickness min. (mm)	Cable outer diameter	
			min. (mm)	max. (mm)		min. (mm)	max. (mm)
2	1.5	1.8	2.2	2.4	0.46	5.4	5.9
3	1.5	1.8	2.2	2.4	0.47	5.8	6.4
4	1.5	1.8	2.2	2.4	0.50	6.5	7.0
2	2.5	2.2	2.7	3.0	0.51	6.7	7.3
3	2.5	2.2	2.7	3.0	0.53	7.2	7.8
4	2.5	2.2	2.7	3.0	0.56	8.0	8.6
2	4	2.8	3.4	3.7	0.56	8.1	8.8
3	4	2.8	3.4	3.7	0.58	8.7	9.4
4	4	2.8	3.4	3.7	0.61	9.7	10.4
2	6	3.4	4.0	4.3	0.60	9.4	10.1
3	6	3.4	4.0	4.3	0.61	10.1	10.8
4	6	3.4	4.0	4.3	0.64	11.2	12.0
2	10	4.5	5.7	6.0	0.68	12.8	13.7
3	10	4.5	5.7	6.0	0.69	13.8	14.7
2	16	6.3	6.9	7.2	0.72	15.3	16.2
3	16	6.3	6.9	7.2	0.74	16.4	17.4

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

www.omerin.com



HIGH VOLTAGE CABLES

SINGLE CORE CABLES
MULTICORE CABLES

**E-MOBILITY
APPLICATIONS**



SILICABLE®
FHL2G

Single core

-40°C à +180°C**Class E according to ISO 6722-1
and ISO 19642-1**

+180°C (3000 h)

+205°C (240 h)

Approvals - standards*

- ISO 19642-5, ISO 6722-1, EN 13602
- IEC 60754-1 halogen free

Applications

- Single core silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to ISO 19642
- Voltage rating: 1000 VAC / 1500 VDC
- Test voltage: 10 kV 5 minutes
- Sparktest: 8 kV
- Excellent flexibility
- Flame retardant
- Bending radius: 3 x D

Colour code

- Orange
- (others on request)



- 1 • Flexible bare copper core according to ISO 6722-1, ISO 19642-5 and EN 13602
- 2 • Silicone insulation

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-5

Item code	Nominal cross section (mm ²)	Number & diameter of strands nom. /max. (nb. x mm)	Conductor diameter max. (mm)	Insulation thickness min. (mm)	Cable outer diameter		Maximum linear resistance at 20°C (Ω/ km)
					max. (mm)	min. (mm)	
A2504005	0.5	16 x 0.21	1.1	0.48	2.0	2.3	37.1
A2504001	0.75	24 x 0.21	1.3	0.48	2.2	2.5	24.7
A2504002	1	32 x 0.21	1.5	0.48	2.4	2.7	18.5
A2504003	1.5	30 x 0.26	1.8	0.48	2.7	3.0	12.7
A2504004	2.5	50 x 0.26	2.2	0.56	3.3	3.6	7.60
A2503005	4	224 x 0.16	2.8	0.64	4.0	4.4	4.71
A2503006	6	320 x 0.16	3.4	0.64	4.6	5.0	3.14
A2503007	10	320 x 0.21	4.5	0.80	5.9	6.5	1.82
A2503008	16	512 x 0.21	6.3	0.80	7.7	8.3	1.16
A2503009	25	790 x 0.21	7.8	1.04	9.4	10.4	0.743
A2503010	35	1070 x 0.21	9.0	1.04	9.6	11.6	0.527
A2503002	50	1600 x 0.21	10.5	1.20	11.5	13.5	0.368
A2503004	70	2175 x 0.21	12.5	1.20	13.5	15.5	0.259
A2503011	95	3000 x 0.21	14.8	1.28	16.0	18.0	0.196
A2503012	120	3700 x 0.21	16.5	1.28	17.7	19.7	0.153

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division 
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

www.omerin.com

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.

SILICABLE®
FHLR2G-C

Single core

-40°C to +180°C**Class E according to ISO 6722-1
and ISO 19642-1**

+180°C (3000 h)

+205°C (240 h)

**Approvals - standards***

- ISO 19642-5, ISO 6722-1, EN 13602
- IEC 60754-1 halogen free

Applications

- Single core silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to ISO 19642
- Voltage rating: 1000 VAC / 1500 VDC
- Test voltage: 10 kV 5 minutes
- Sparktest: 8 kV
- Excellent flexibility
- Flame retardant
- Bending radius: 3 x D
- Compatible with SCHUNK Sonosystems ultrasonic welding systems

Colour code

- Orange
- (others on request)



- 1 • Flexible bare copper core according to ISO 6722-1, ISO 19642-5 et EN 13602
- 2 • Silicone insulation

CONSTRUCTION ACCORDING TO ISO 6722-1 AND ISO 19642-5

Item code	Nominal cross section (mm ²)	Number & diameter of strands nom. /max. (nb. x mm)	Conductor diameter max. (mm)	Insulation thickness min. (mm)	Cable outer diameter		Maximum linear resistance at 20°C (Ω/ km)
					max. (mm)	min. (mm)	
A2512001	4	----- Please refer to the SILICABLE® FHLR2G LV216 (FT11206) -----					
A2512002	6	----- Please refer to the SILICABLE® FHLR2G LV216 (FT11206) -----					
A2511003	10	320 x 0.21	4.5	0.48	5.3	6.0	1.82
A2511004	16	512 x 0.21	6.3	0.52	6.4	7.2	1.16
A2511005	25	790 x 0.21	7.8	0.52	7.9	8.7	0.743
A2511006	35	1070 x 0.21	9.0	0.64	9.4	10.4	0.527
A2511007	50	1600 x 0.21	10.5	0.71	11.0	12.2	0.368
A2511008	70	2175 x 0.21	12.5	0.80	13.0	14.4	0.259
A2511009	95	3000 x 0.21	14.8	0.90	15.3	16.7	0.196
A2512010	120	----- Please refer to the SILICABLE® FHLR2G LV216 (FT11206) -----					

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division 
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SILICABLE®
FHLR2G LV216

Single core

-40°C to +180°C**Class E according to ISO 6722-1****LV 216-2 table A2**

+180°C (3000 h)

+205°C (240 h)

**Approvals - standards***

- LV 216-2 table A2, ISO 6722-1, EN 13602
- IEC 60754-1 halogen free

Applications

- Single core silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to LV 216-2
- Voltage rating: 600 VAC / 1000 VDC
- Test voltage: 5 kV 5 minutes
- Sparktest: 8 kV
- Excellent flexibility
- Flame retardant
- Bending radius: 3 x D
- Compatible with SCHUNK Sonosystems ultrasonic welding systems

Colour code

- Orange
- (others on request)

CONSTRUCTION ACCORDING TO LV 216-2 TABLE A2

Item code	Nominal cross section (mm ²)	Number & diameter of strands nom. /max. (nb. x mm)	Conductor diameter max. (mm)	Insulation thickness (mm)		Cable outer diameter (mm)		Maximum linear resistance at 20°C (Ω/ km)
				min.	max.	max.	min.	
A2512001	4	120 x 0.21	2.8	0.32	3.4	3.7	4.71	
A2512002	6	183 x 0.21	3.4	0.32	4.0	4.3	3.14	
A2512003	10	320 x 0.21	4.5	0.48	5.4	6.0	1.82	
A2512004	16	512 x 0.21	5.8	0.52	6.6	7.2	1.16	
A2512005	25	790 x 0.21	7.2	0.64	8.2	8.8	0.743	
A2512006	35	1070 x 0.21	8.5	0.64	9.8	10.5	0.527	
A2512007	50	1600 x 0.21	10.5	0.71	11.5	12.2	0.368	
A2512008	70	2175 x 0.21	12.5	1.20	14.0	15.5	0.259	
A2512009	95	3000 x 0.21	14.8	1.20	16.2	18.0	0.196	
A2512010	120	3700 x 0.21	16.5	1.28	17.9	19.7	0.153	

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division 
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SILICABLE®
FHLR2GCB2G-C

Shielded single core

-40°C to +180°C**Class E according to ISO 6722-1
and ISO 19642-1**

+180°C (3000 h)

+205°C (240 h)

**Approvals - standards***

- ISO 19642-9, ISO 19642-5, ISO 6722-1, EN 13602
 - IEC 60754-1 halogen free
- TUV conformity to UN Regulation No. 118.04 (ECE R-118)

Applications

- Single core silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to ISO 19642
- Voltage rating: 1000 VAC / 1500 VDC
- Test voltage: 10 kV 5 minutes
- Sparktest: 8 kV
- Excellent flexibility
- Flame retardant
- Bending radius: 3 x D
- Compatible with SCHUNK Sonosystems ultrasonic welding systems

Colour code

- Orange (others on request)

CONSTRUCTION ACCORDING TO ISO 19642-9

Item code	Nominal cross section (mm ²)	Number & diameter of strands nom. /max. (nb. x mm)	Conductor diameter max. (mm)	Insulation thickness min. (mm)	Single core outer diameter		Strand diameter screen max. (mm)	Sheath thickness min. (mm)	Cable outer diameter		Maximum linear resistance at 20°C (Ω/ km)
					min. (mm)	max. (mm)			min. (mm)	max. (mm)	
A2510001	4	Please refer to the SILICABLE® FHLR2GCB2G LV216 (FT11207)									
A2510002	6	Please refer to the SILICABLE® FHLR2GCB2G LV216 (FT11207)									
A2507005	10	320 x 0.21	4.5	0.48	5.3	6.0	0.19	0.52	7.5	8.1	1.82
A2507006	16	512 x 0.21	6.3	0.52	6.4	7.2	0.19	0.64	9.0	9.6	1.16
A2507007	25	790 x 0.21	7.8	0.52	7.9	8.7	0.21	0.72	10.7	11.3	0.743
A2507008	35	1070 x 0.21	9.0	0.64	9.4	10.4	0.21	0.80	12.6	13.2	0.527
A2507009	50	1600 x 0.21	10.5	0.71	11.0	12.2	0.21	0.88	14.6	15.2	0.368
A2507010	70	2175 x 0.21	12.5	0.80	13.0	14.4	0.21	0.88	16.6	17.4	0.259
A2507011	95	3000 x 0.21	14.8	0.90	15.3	16.7	0.26	0.88	19.1	19.9	0.196
A2510010	120	Please refer to the SILICABLE® FHLR2GCB2G LV216 (FT11207)									
A2510011	150	Please refer to the SILICABLE® FHLR2GCB2G LV216 (FT11207)									

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division 
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

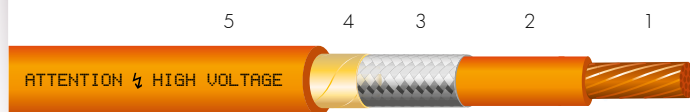
www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SILICABLE®
FHLR2GCB2G LV216

Shielded single core

-40°C to +180°C**Class E according to ISO 6722-1****LV 216-2****+180°C (3000 h)****+205°C (240 h)**

- 1 • Flexible bare copper core according to ISO 6722-1 and EN 13602
- 2 • Silicone insulation
- 3 • Tinned copper braid
- 4 • Aluminium / PET tape
- 5 • Silicone sheath

**Approvals - standards***

- LV 216-2 table A.2, ISO 6722-1, EN 13602
- IEC 60754-1 halogen free

Applications

- Single core silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to LV 216-2
- Voltage rating: 600 VAC / 1000 VDC
- Test voltage: 5 kV 5 minutes
- Sparktest: 8 kV
- Excellent flexibility
- Flame retardant
- Bending radius: 3 x D
- Compatible with SCHUNK Sonosystems ultrasonic welding systems

Colour code

- Orange
- (others on request)

CONSTRUCTION ACCORDING TO LV 216-2 TABLE A.2

Item code	Nominal cross section (mm ²)	Number & diameter of strands nom. /max. (nb. x mm)	Conductor diameter max. (mm)	Insulation thickness min. (mm)	Single core outer diameter (mm)		Strand diameter screen max. (mm)	Sheath thickness (mm)		Cable outer diameter (mm)		Maximum linear resistance at 20°C (Ω/ km)
					min.	max.		min.	max.	min.	max.	
A2510001	4	120 x 0.21	2.8	0.32	3.4	3.7	0.16	0.38	5.3	5.8	4.7	
A2510002	6	183 x 0.21	3.4	0.32	4.0	4.3	0.16	0.46	6.0	6.5	3.1	
A2510003	10	320 x 0.21	4.5	0.48	5.4	6.0	0.16	0.70	8.2	8.8	1.82	
A2510004	16	512 x 0.21	5.8	0.52	6.6	7.2	0.16	0.70	9.6	10.2	1.16	
A2510005	25	790 x 0.21	7.2	0.64	8.2	8.8	0.21	0.75	11.6	12.2	0.743	
A2510006	35	1070 x 0.21	8.5	0.64	9.8	10.5	0.21	0.80	13.8	14.4	0.527	
A2510007	50	1600 x 0.21	10.5	0.71	11.5	12.2	0.21	0.80	15.2	15.8	0.368	
A2510008	70	2175 x 0.21	12.5	1.20	14.0	15.5	0.21	1.16	19.2	20.0	0.259	
A2510009	95	3000 x 0.21	14.8	1.20	16.2	18.0	0.21	1.16	21.5	22.5	0.196	
A2510010	120	3700 x 0.21	16.5	1.28	17.9	19.7	0.21	1.16	22.5	23.5	0.153	
A2510011**	150	4560 x 0.21	17.5	1.28	20.2	22.0	0.21	1.16	24.0	26.0	0.122	

* Standards: our products comply with all or part of the requirements of standards quoted: contact us

** OMERIN Innovation. Not defined in LV 216-2 Table A.2

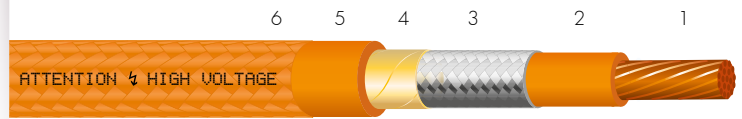
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division 
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

www.omerin.com

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.

SILICABLE®
FHLR2GCB2GGShielded single core
with reinforcing braid**-40°C to +180°C****Class E according to ISO 6722-1****LV 216-2****+180°C (3000 h)****+205°C (240 h)**

- 1 • Flexible bare copper core according to ISO 6722-1 and EN 13602
- 2 • Silicone insulation
- 3 • Tinned copper braid
- 4 • Aluminium / PET tape
- 5 • Silicone sheath
- 6 • Reinforcement : Coated synthetic fibre braid

**Approvals - standards***

- Inspired by LV 216-2 table A.2, ISO 6722-1, EN 13602
- IEC 60754-1 halogen free

Applications

- Reinforced single core silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to LV 216-2
- Voltage rating: 600 VAC / 1000 VDC
- Test voltage: 5 kV 5 minutes
- Sparktest: 8 kV
- Excellent flexibility
- Flame retardant
- Bending radius: 3 x D
- Improved mechanical strength and abrasion resistance thanks to synthetic fiber braid
- Compatible with SCHUNK Sonosystems ultrasonic welding systems

Colour code

- Orange
- (others on request)

CONSTRUCTION INSPIRED BY LV 216-2 TABLE A.2

Item code	Nominal cross section (mm ²)	Number & diameter of strands nom. /max. (nb. x mm)	Conductor diameter max. (mm)	Insulation thickness min. (mm)	Single core outer diameter		Strand diameter screen max. (mm)	Sheath thickness min. (mm)	Cable outer diameter		Maximum linear resistance at 20°C (Ω/ km)
					min. (mm)	max. (mm)			min. (mm)	max. (mm)	
B2501001	4	120 x 0.21	2.8	0.32	3.4	3.7	0.16	0.38	5.8	6.3	4.70
B2501002	6	183 x 0.21	3.4	0.32	4.0	4.3	0.16	0.46	6.5	7.0	3.10
B2501003	10	320 x 0.21	4.5	0.48	5.4	6.0	0.16	0.70	8.7	9.3	1.82
B2501004	16	512 x 0.21	5.8	0.52	6.6	7.2	0.16	0.70	10.1	10.7	1.16
B2501005	25	790 x 0.21	7.2	0.64	8.2	8.8	0.21	0.75	12.7	13.3	0.743
B2501006	35	1070 x 0.21	8.5	0.64	9.8	10.5	0.21	0.80	14.9	15.5	0.527
B2501007	50	1600 x 0.21	10.5	0.71	11.5	12.2	0.21	0.80	16.3	16.9	0.368
B2501008	70	2175 x 0.21	12.5	1.20	14.0	15.5	0.21	1.16	20.3	21.1	0.259
B2501009	95	3000 x 0.21	14.8	1.20	16.2	18.0	0.21	1.16	22.6	23.6	0.199
B2501010	120	3700 x 0.21	16.5	1.28	19.1	19.7	0.21	1.16	23.6	24.6	0.153
B2501011	150	4560 x 0.21	17.5	1.28	20.2	22.0	0.21	1.16	25.1	27.1	0.122

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SILICABLE®
FHLR2GCB2G LV216

Shielded multicore

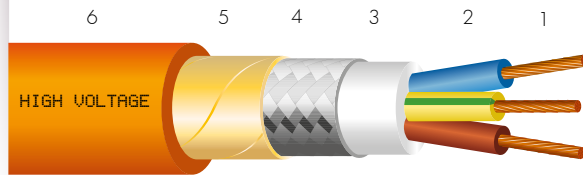
-40°C to +180°C

Class E according to ISO 6722-1

LV 216-2 table A.5

+180°C (3000 h)

+205°C (240 h)



- 1 • Flexible bare copper core according to ISO 6722-1, LV 216-2 et EN 13602
- 2 • Silicone insulation
- 3 • Silicone internal sheath
- 4 • Tinned copper braid
- 5 • Aluminium / PET tape
- 6 • External silicone sheath

Approvals - standards*

- LV 216-2 table A.5, ISO 6722-1, EN 13602
- IEC 60754-1 halogen free

Applications

- Multicore silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to LV 216-2
- Voltage rating: 600 VAC / 1000 VDC
- Test voltage: 5 kV 5 minutes
- Sparktest: 8 kV
- Excellent flexibility
- Flame retardant
- Bending radius: 3 x D

Colour code

- Sheath: orange
- Insulation:
 - 2 cores: red, black
 - ≥ 3 cores: LV216-2 (others on request)

CONSTRUCTION ACCORDING TO LV 216-2 TABLE A.5

Item code	Number of conductors	Nominal cross section (mm ²)	Conductor diameter max. (mm)	Single core diameter		Under screen diameter max. (mm)	Strand diameter screen max. (mm)	Sheath thickness min. (mm)	Cable outer diameter	
				min. (mm)	max. (mm)				min. (mm)	max. (mm)
G2505009	2	4	2.8	3.4	3.7	8.3	0.16	0.76	10.7	11.3
G2505010	3	4	2.8	3.4	3.7	8.9	0.16	0.76	11.5	12.1
G2505011	4	4	2.8	3.4	3.7	9.8	0.21	0.82	12.7	13.3
G2505012	5	4	2.8	3.4	3.7	11	0.21	0.9	13.9	14.5
G2505013	2	6	3.4	4.0	4.3	9.7	0.16	0.82	12.2	12.8
G2505014	3	6	3.4	4.0	4.3	10.5	0.21	0.9	13.5	14.1
G2505015	4	6	3.4	4.0	4.3	11.4	0.21	0.9	14.5	15.1
G2505016	5	6	3.4	4.0	4.3	12.6	0.21	0.9	15.7	16.3

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division 
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SILICABLE® FHRLR6YBCF2G

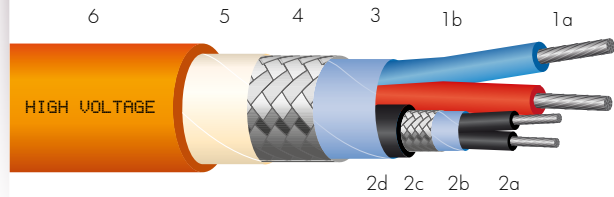
Shielded multicore

-40°C to +180°C

**Class E according to ISO 6722-1
and ISO 19642-1**

+180°C (3000 h)

+205°C (240 h)



2 x 4 mm² conductors

- 1a • Tinned copper cores 4 mm² according to ISO 6722-1, ISO 19642-5 and EN 13602
- 1b • FEP insulation

2 x 0.5 mm² shielded twisted pair

- 2a • Tinned copper cores 0.5 mm² according to ISO 6722-1, ISO 19642-5 and EN 13602
- 2b • FEP insulation
- 2c • Double shielding: aluminium / PET tape and tinned copper braid
- 2d • FEP sheath

- 3 • Aluminium / PET tape
- 4 • Tinned copper braid
- 5 • PET tape
- 6 • External silicone sheath

Approvals - standards*

- ISO 19642-9, ISO 19642-5, ISO 6722-1, EN 13602

Applications

- Multicore silicone power cables for use in hybrid and electrical vehicles

Specific characteristics

- High Voltage requirements according to ISO 19642
- Voltage rating: 600 VAC / 900 VDC
- Test voltage: 5 kV 5 minutes
- Sparktest: 6 kV
- Excellent flexibility
- Flame retardant

Colour code

- Orange (others on request)

CONSTRUCTION ACCORDING TO ISO 19642-9

Item code	Composition (mm ²)	Wire outer diameter		Cable outer diameter (mm)	Maximum linear resistance at 20°C (Ω / km)	
		4 mm ²	0.5 mm ²		4 mm ²	0.5 mm ²
G2504001	2 x 4 + 2 x 0.5	3.55	1.45	11.2	4.85	38.2

* Standards: our products comply with all or part of the requirements of standards quoted: contact us
Other cross-sections available on request

For this product, please contact:

OMERIN eMobility division 
9 allée des acacias - F 63190 Orléat
Phone: +33 (0)4 73 82 75 60
emobility@omerin.com

www.omerin.com

EXTRA FLEXIBLE BATTERY
CABLES

**BATTERY
CHARGERS**



FLEXBAT® ST
-15°C to +70°C

- 1 • Extra flexible bare copper core - class 6 according to IEC 60228
- 2 • Extra flexible PVC insulation

Approvals - standards

- IEC 60228
- Flame retardant:
IEC 60332-1-2

Applications

- Extra flexible cables
for car battery and battery chargers

Characteristics

- Voltage rating: 450 / 750 V
- Excellent flexibility

Colour code

- Red and black
(others on request)

Option

- Extra flexible tinned copper core

Nominal Cross section (mm ²)	Class 6	Specific wall	Bare copper	Approx. linear weight (kg / km)
	Number of strands & strand diameter nom. / nom. (nb. x mm)	Cable outer diameter nom. (mm)	Maximum linear resistance at 20°C (Ω / km)	
4	224 x 0.15	4.3	4.95	47
6	192 x 0.20	4.8	3.30	65
10	318 x 0.20	6.2	1.91	114
16	516 x 0.20	7.4	1.21	170
25	798 x 0.20	9.6	0.780	296
35	1 120 x 0.20	10.6	0.554	340
50	1 628 x 0.20	13.0	0.386	520
70	2 257 x 0.20	14.8	0.272	775

For this product, please contact:

OMERIN division polycable 
9 rond-point Auguste Colonna
F 42160 Andrézieux-Bouthéon
Phone: +33 (0)4 77 36 07 00
polycable@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

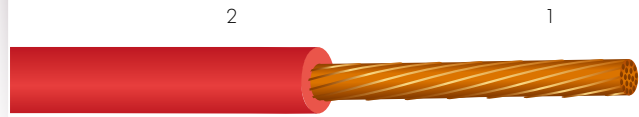
The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In some cases, for production purposes, a separating tape may be added between 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.

CABLE SOLUTIONS
FOR AUTOMOTIVE AND E-MOBILITY

EXTRA FLEXIBLE BATTERY CABLES

FLEXBAT® HT

-25°C to +105°C



- 1 • Extra flexible bare copper core - class 6 according to IEC 60228
- 2 • Extra flexible 105°C PVC insulation

Approvals - standards

- IEC 60228
- Flame retardant:
IEC 60332-1-2

Applications

- Extra flexible cables for car battery and battery chargers in hot environment

Characteristics

- Voltage rating: 450 / 750 V
- Excellent flexibility

Colour code

- Red and black
(others on request)

Option

- Extra flexible tinned copper core

Nominal Cross section (mm ²)	Class 6	Specific wall	Bare copper	Approx. linear weight (kg / km)
	Number of strands & strand diameter nom. / nom. (nb. x mm)	Cable outer diameter nom. (mm)	Maximum linear resistance at 20°C (Ω / km)	
16	504 x 0.20	7.4	1.21	170
25	792 x 0.20	9.5	0.780	296
35	1 121 x 0.20	10.6	0.554	340
50	1 628 x 0.20	12.9	0.386	520
70	2 294 x 0.20	14.8	0.272	775

For this product, please contact:

OMERIN division polycable 
9 rond-point Auguste Colonna
F 42160 Andrézieux-Bouthéon
Phone: +33 (0)4 77 36 07 00
polycable@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

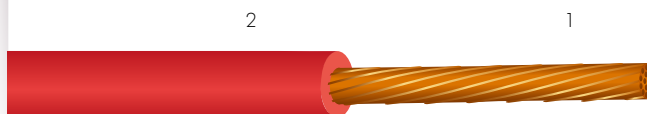
The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In some cases, for production purposes, a separating tape may be added between 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.

**CABLE SOLUTIONS
FOR AUTOMOTIVE AND E-MOBILITY**

EXTRA FLEXIBLE BATTERY CABLES

FLEXBAT® THT

-50°C to +125°C



- 1 • Extra flexible bare copper core - class 6 according to IEC 60228
- 2 • 125°C thermoplastic elastomer insulation

Approvals - standards

- IEC 60228
- Flame retardant:
IEC 60332-1-2

Applications

- Extra flexible cables
for car battery and battery chargers
in hot environment

Characteristics

- Voltage rating: 450 / 750 V
- Excellent flexibility

Colour code

- Red and black
(others on request)

Option

- Extra flexible tinned copper core

Nominal Cross section (mm ²)	Class 6	Specific wall	Bare copper	Approx. linear weight (kg / km)
	Number of strands & strand diameter nom. / nom. (nb. x mm)	Cable outer diameter nom. (mm)	Maximum linear resistance at 20°C (Ω / km)	
16	504 x 0.20	7.4	1.21	170
25	792 x 0.20	9.5	0.780	296
35	1 121 x 0.20	10.6	0.554	340
50	1 628 x 0.20	12.9	0.386	520
70	2 294 x 0.20	14.8	0.272	775

For this product, please contact:

OMERIN division polycable 
9 rond-point Auguste Colonna
F 42160 Andrézieux-Bouthéon
Phone: +33 (0)4 77 36 07 00
polycable@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

FLEXBAT® DI LR HT**Double insulating layer**
Thin wall thickness**-40°C to +105°C****Class B according to ISO 6722**

- 1 • Flexible or extra flexible bare copper core according to ISO 6722-1 and EN 13602
- 2 • Extra flexible 105°C PVC insulation
- 3 • Extra flexible 105°C PVC outer sheath

Approvals - standards

- ISO 6722-1, EN 13602
 - Flame retardant: IEC 60332-1-2
- Max. permissible current according to IEC 60287
- Permanent immersion AD8 according to NF C32-102-16

Applications

- Extra flexible cables for car battery and battery chargers

Characteristics

- Voltage rating: 600 / 600 V
- Excellent flexibility
- Minimum static internal bending radius $5 \times D$
- Cold-resistant according to ISO 6722
- Good chemical resistance to engine oils and fuels

Colour code

- Red, Black, Blue, Brown, Yellow with green marking (others on request)

Option

- Flexible or extra flexible tinned copper core

Nominal Cross section (mm ²)	Type B	Type C	Specific wall		Bare copper	Approx. linear weight (kg / km)
	Number of strands & strand diameter nom. / nom. (nb. x mm)	Number of strands & strand diameter nom. / nom. (nb. x mm)	Wire outer diameter nom. (mm)	Cable outer diameter nom. (mm)	Maximum linear resistance at 20°C (Ω / km)	
10	-	357 x 0.20	5.5	6.4	1.82	160
16	-	540 x 0.20	6.8	7.9	1.16	220
25	-	828 x 0.20	8.7	9.9	0.743	290
35	-	1 178 x 0.20	9.9	11.2	0.527	410
50	-	1 679 x 0.20	11.6	13.0	0.368	570
70	558 x 0.40	-	13.5	15.0	0.259	815
95	740 x 0.40	-	15.5	17.5	0.196	1 208
120	-	2 590 x 0.25	17.2	19.2	0.193	1 550

For this product, please contact:

OMERIN division principale 
 Zone Industrielle - F 63600 Ambert
 Tél.: +33 (0)4 73 82 50 00
 omerin@omerin.com

www.omerin.com

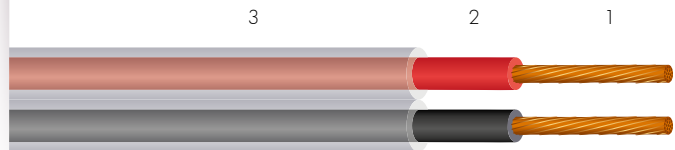
The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In some cases, for production purposes, a separating tape may be added between 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.

TWINBAT® RN

2-conductor cable

Under crystal sheath

-15°C to +70°C



- 1 • Extra flexible bare copper core - class 6 according to IEC 60228
- 2 • PVC insulation type T12 – EN 50363-3
- 3 • PVC outer sheath type TM2 – EN 50363-4-1

Approvals - standards

- IEC 60228
- Flame retardant:
IEC 60332-1-2

Applications

- Extra flexible cables for battery chargers and fixed or portable jump starters
Red (+) and black (-) conductors under a crystal sheath to provide easier use

Characteristics

- Voltage rating: 450 / 750 V
- Excellent flexibility

Colour code

- Insulation: Red and Black
- Outer sheath: Crystal
(others on request)

Option

- Extra flexible tinned copper core

Nominal Cross section (mm ²)	Class 6		Specific wall		Bare copper	
	Number of strands & strand diameter nom. / nom. (nb. x mm)	Wire outer diameter nom. (mm)	Cable outer diameter nom. (mm)	Maximum linear resistance at 20°C (Ω / km)	Approx. linear weight (kg / km)	
2 x 2.5	140 x 0.15	3.6	5.3 x 12.6	7.98	115	
2 x 4	224 x 0.15	4.2	6.0 x 13.0	4.95	185	
2 x 6	200 x 0.20	4.8	6.5 x 14.0	3.30	250	
2 x 10	322 x 0.20	6.2	8.0 x 17.0	1.91	400	
2 x 16	504 x 0.20	7.3	9.0 x 19.0	1.21	500	
2 x 25	792 x 0.20	9.4	11.5 x 25.0	0.780	750	
2 x 35	1 121 x 0.20	10.5	13.0 x 28.0	0.554	810	
2 x 50	1 628 x 0.20	12.8	15.0 x 32.0	0.386	1 165	
2 x 70	2 294 x 0.20	14.7	17.0 x 36.0	0.272	1 550	

For this product, please contact:

OMERIN division polycable
9 Rond-point Auguste Colonna,
F 42160 Andrézieux-Bouthéon
Tél.: +33 (0)4 77 36 07 00
polycable@omerin.com

OMERIN division principale
Zone Industrielle - F 63600 Ambert
Tél.: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

omerin
LES CABLES DE L'EXTREME

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.

SPECIAL AND CUSTOM MADE
CABLES

**SPECIFIC
APPLICATIONS**



Multicore cables

HIGH PERFORMANCE

Our cables are tested extensively at all production stages to ensure top quality and to meet your requirements. Our laboratory has the resources to test and validate the physical, mechanical, chemical, electrical and fire performance of the cables we produce.

PLASTHERM® FLR2X11Y-A

4 x 0.35 mm² CuA1

-40°C to +125°C, Class B according to ISO 6722

Low voltage cable, unscreened
XLPE insulation and PUR sheath
High mechanical strength & Abrasion resistance
ABS System application

SILIFLON® FLR7Y2G-C

2 x 0.5 mm² CuSn

-40°C to +150°C, Class D according to ISO 6722

Low voltage cable
ETFE insulation and Silicone sheath
High temperature resistance & High flexibility
Engine application

Cables for specific applications

SILISOL® 1G et 2G

0.75 mm² CuA1

-60°C to +350°C, Class H according to ISO 6722

Application: sensor's cable for brake pad wear

CUSTOMISED SOLUTION

Our Design Office is made up of experienced engineers who are specialists in metallurgy, plastics manufacture, electromagnetic compatibility, micromechanics, data transmission, etc. It will provide you with a fast, precise response by developing an specific automotive solution in line with the miscellaneous and complex constraints of your applications (temperature / mechanical / chemical environments).

SILICABLE® FHLR2GCB2G-B

3 x 2.5 mm² CuA1

-60°C to +180°C, Class E according to ISO 6722

High voltage cable 600 VAC / 900 VDC, screened
Silicone insulation and sheath
High flexibility
E-mobility application

Our special multicore cables are designed with Automotive wires compliant ISO 6722

► **Contact us to define with our sales engineers the product best suited to your application.**

SILICABLE® ECS-HT, CS-HT

1.5 mm² CuSn ou CuA1

-60°C to +180°C, Class E according to ISO 6722

Application: ignition cables

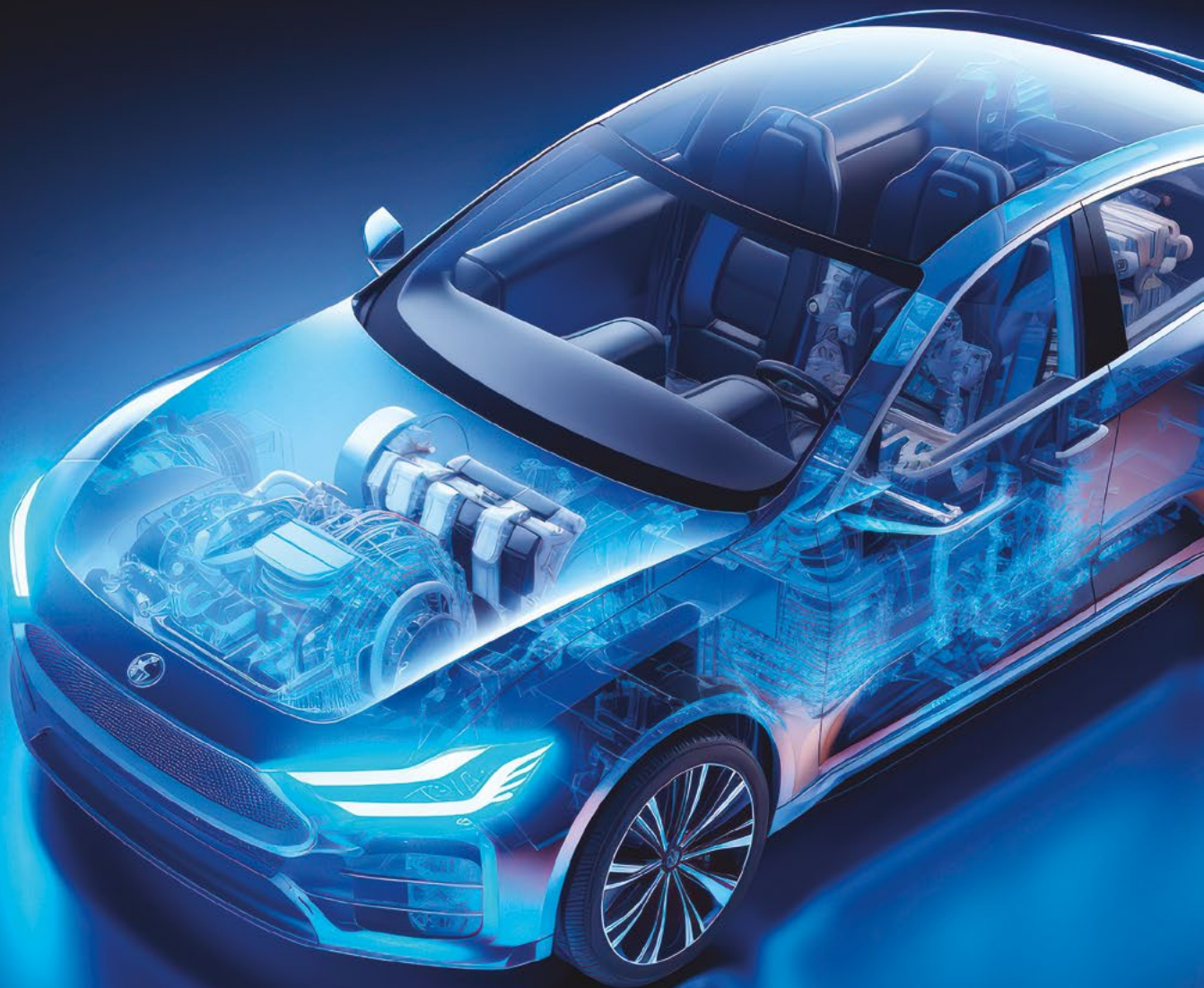
For this product, please contact:

OMERIN division principale ✓
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

www.omerin.com

HIGH TEMPERATURE BRAIDED SLEEVINGS

**MECHANICAL
& HIGH TEMPERATURE
PROTECTIONS**



Insulating and protective sleeveings

OUR PRODUCTS RANGE

SILIGAINÉ® 13F

Electric insulating sleeveings
Fibreglass braided sleeveings
with Polyurethane coating
Class F



SILIGAINÉ® 16F

Electric insulating sleeveings
Fibreglass braided sleeveings
with Acrylic coating
Class F



SILIGAINÉ® 15C

Electric insulating sleeveings
Fibreglass braided sleeveings
with Silicone rubber coating
Class H and C



SILITUBE® X

Fireproof sleeveings
Mineral fibre braided sleeveings
with Silicone rubber coating



APPLICATIONS

Class F alternator
winding outputs
insulation, gearbox hoses
protection

Thermal and mechanical
insulation of cable harnesses
inside confined space,
connector protection, brake
fluid tube insulation, hoses
insulation

Improved thermal insulation,
fireproof protection

MAIN CHARACTERISTICS & OPTION

Please see details for each reference in
catalogue n°9
«Braided insulating sleeveings».

- **Temperature**
-30°C / +155°C
-60°C / +250°C
-60°C / +280°C
- **Fire performance**
Self-extinguishing
VW-1 version according to UL 1441
- **Electrical**
Dielectric strength: 1 kV to 10 kV
- **Chemical**
Good resistance to common
chemical environments
Good resistance to humidity, ozone
and UV
- **Mechanical**
Good flexibility
Good mechanical strength
Resistance to brasion
Expandable version

OUR PACKAGING



- **Cuts to length**
Delivered in bulk in a
cardbox



- **Spool kit**
Some sleeveings can be
supplied in kit spool
form. The flanges are
made of
cardboard and metal.



- **Roll**
Delivered with or without
cardboard support.
The product is maintained by
adhesive tapes.



For this product, please contact:

OMERIN division principale ✓
Zone Industrielle - F 63600 Ambert
Phone: +33 (0)4 73 82 50 00
omerin@omerin.com

► For further information about our High temperature sleeveings

**Please download catalogue N°9
BRAIDED INSULATING SLEEVINGS**

www.omerin.com

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.





omerin
division principale

Headquarters and main division
Zone industrielle - 63600 AMBERT - France

Phone: 33 (0)4 73 82 50 00

Fax: 33 (0)4 73 82 50 10

e-mail: omerin@omerin.com

www.omerin.com