

# CABLE SOLUTIONS FOR AUTOMOTIVE AND E-MOBILITY

## HIGH VOLTAGE MULTICORE CABLES

# SILICABLE® FHLR2GCB2G ISO

Shielded multicore

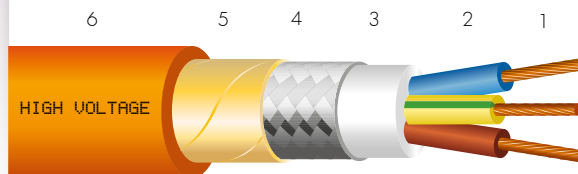
**-40°C to +180°C**

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

**and ISO 19642-9**

**+180°C (3000 h)**

**+205°C (240 h)**



- 1 • Flexible bare copper core according to ISO 6722-1, ISO 19642-9 and EN 13602
- 2 • Silicone insulation
- 3 • Silicone internal sheath
- 4 • Tinned copper braid
- 5 • Aluminium / PET tape
- 6 • External silicone sheath

### Approvals - standards\*

- ISO 19642-9, 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 ISO 19642
- **Cross-sections < 10 mm²:**
  - Voltage rating: 600 VAC / 900 VDC
  - Test voltage: 5 kV 5 minutes
  - Sparktest: 6 kV
- **Cross-sections ≥ 10 mm²:**
  - 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

- Sheath: orange
  - Insulation:
    - 2 cores: red, black
    - ≥ 3 cores: HD308
- (others on request)

### CONSTRUCTION ACCORDING TO ISO 19642-9

| Item code | Number of conductors | Nominal cross section (mm²) | Flexibility  | Nominal stranding (nb. x mm) | Conductor diameter max. (mm) | Insulation thickness min. (mm) | Single core diameter min. max. (mm) |      | Strand diameter screen max. (mm) | Sheath thickness min. (mm) | Cable outer diameter min. max. (mm) |       | Maximum linear resistance at 20°C (Ω/ km) |
|-----------|----------------------|-----------------------------|--------------|------------------------------|------------------------------|--------------------------------|-------------------------------------|------|----------------------------------|----------------------------|-------------------------------------|-------|-------------------------------------------|
| G2501001  | 2                    | 4                           | Flexible (B) | 58 x 0.31                    | 2.8                          | 0.32                           | 3.40                                | 3.70 | 0.21                             | 0.61                       | 9.90                                | 10.60 | 4.710                                     |
| G2501002  | 3                    |                             |              |                              |                              |                                |                                     |      | 0.21                             | 0.62                       | 10.50                               | 11.20 |                                           |
| G2501003  | 4                    |                             |              |                              |                              |                                |                                     |      | 0.21                             | 0.65                       | 11.50                               | 12.30 |                                           |
| G2501004  | 2                    | 6                           | Flexible (B) | 84 x 0.31                    | 3.4                          | 0.32                           | 4.00                                | 4.30 | 0.21                             | 0.64                       | 11.20                               | 11.90 | 3.140                                     |
| G2501005  | 3                    |                             |              |                              |                              |                                |                                     |      | 0.21                             | 0.66                       | 11.90                               | 12.70 |                                           |
| G2501006  | 4                    |                             |              |                              |                              |                                |                                     |      | 0.21                             | 0.68                       | 13.10                               | 13.90 |                                           |
| G2501007  | 2                    | 10                          | Flexible (B) | 80 x 0.41                    | 4.5                          | 0.48                           | 5.70                                | 6.00 | 0.21                             | 0.71                       | 14.80                               | 15.70 | 1.820                                     |
| G2501008  | 3                    |                             |              |                              |                              |                                |                                     |      | 0.26                             | 0.73                       | 15.90                               | 16.90 |                                           |
| G2501009  | 2                    | 16                          | Flexible (B) | 126 x 0.41                   | 6.3                          | 0.52                           | 6.90                                | 7.20 | 0.26                             | 0.75                       | 17.40                               | 18.50 | 1.160                                     |
| G2501010  | 3                    |                             |              |                              |                              |                                |                                     |      | 0.26                             | 0.77                       | 18.60                               | 19.70 |                                           |

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

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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.