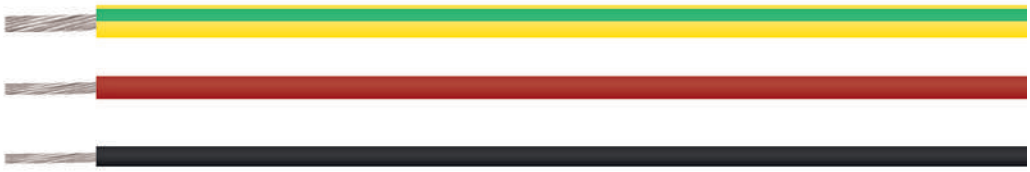
# SiF

**Silicone single core, finely stranded, tinned wire, increased temperature resistance**



## TECHNICAL DATA

**Silicone single core in alignment with DIN VDE 0250-1, DIN VDE 0250-502**

| | |
|---|---|
| **Temperature range** | flexible -25°C to +180°C<br>fixed -60°C to +180°C |
| **Permissible operating temperature of the conductor** | +180°C |
| **Nominal voltage** | AC $U_0$/U 300/500 V |
| **Test voltage** | 2000 V |
| **Breakdown voltage** | 5000 V |
| **Minimum bending radius** | flexible 15x Outer-Ø<br>fixed 6x Outer-Ø |

## CABLE STRUCTURE

- Copper wire tinned, finely stranded, 0.5 - 185 mm²: acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Strand construction:
  0.25 mm²: approx. 8 x 0.2 mm
- Core insulation: silicone
- Core identification: see table

## PROPERTIES

- resistant to: ozone, oxygen, alcohols, dilute acids, alkalis, saline solutions, oxidising agents, high molecular weight oils, vegetable and animal fats, plasticisers and clophen, seawater
- halogen-free
- high flash point

## TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- certifications and approvals:
  EAC

## APPLICATION

Temperature resistant silicone single core for use in iron, steel and rolling mills, foundries, cement, glass and ceramic factories as well as in aircraft construction and ship building.

## NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- for fixed installation, always install in open, ventilated pipe or duct systems; otherwise, a combination of high temperatures above 90°C and the absence of air would affect the mechanical properties of silicone

| Cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. | black Part no. | green-yellow Part no. | blue Part no. | brown Part no. | red Part no. | white Part no. | grey Part no. | violet Part no. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.25 | 24 | 1.6 | 2.4 | 5.5 | **23201** | **23213** | **23203** | **23204** | **23202** | **23205** | **23206** | **23207** |
| 0.5 | 20 | 2.1 | 4.8 | 8.6 | **23301** | **23313** | **23303** | **23304** | **23302** | **23305** | **23306** | **23307** |
| 0.75 | 19 | 2.4 | 7.2 | 11.8 | **23401** | **23413** | **23403** | **23404** | **23402** | **23405** | **23406** | **23407** |
| 1 | 18 | 2.5 | 9.6 | 13.5 | **23501** | **23513** | **23503** | **23504** | **23502** | **23505** | **23506** | **23507** |
| 1.5 | 16 | 2.8 | 14.4 | 18.5 | **23601** | **23613** | **23603** | **23604** | **23602** | **23605** | **23606** | **23607** |
| 2.5 | 14 | 3.4 | 24.0 | 30.0 | **23701** | **23713** | **23703** | **23704** | **23702** | **23705** | **23706** | **23707** |
| 4 | 12 | 4.2 | 38.0 | 47.3 | **23801** | **23813** | **23803** | **23804** | **23802** | **23805** | **23806** | **23807** |
| 6 | 10 | 5.0 | 58.0 | 71.1 | **23901** | **23913** | **23903** | **23904** | **23902** | **23905** | **23906** | **23907** |
| 10 | 8 | 6.6 | 96.0 | 119.4 | **24601** | **24613** | **24603** | **24604** | **24602** | **24605** | **24606** | **24607** |
| 16 | 6 | 7.4 | 154.0 | 187.7 | **24701** | **24713** | **24703** | **24704** | **24702** | **24705** | **24706** | **24707** |
| 25 | 4 | 9.2 | 240.0 | 289.6 | **24801** | **24813** | **24803** | **24804** | **24802** | **24805** | **24806** | **24807** |
| 35 | 2 | 10.3 | 336.0 | 398.0 | **23953** | **451113** | **451103** | **451104** | **451102** | **451105** | **451106** | **451107** |
| 50 | 1 | 12.0 | 480.0 | 560.0 | **23954** | **451213** | **451203** | **451204** | **451202** | **451205** | **451206** | **451207** |
| 70 | 2/0 | 13.8 | 672.0 | 766.0 | **23955** | **451313** | **451303** | **451304** | **451302** | **451305** | **451306** | **451307** |
| 95 | 3/0 | 16.2 | 912.0 | 1032.0 | **23956** | **451413** | **451403** | **451404** | **451402** | **451405** | **451406** | **451407** |
| 120 | 4/0 | 17.6 | 1152.0 | 1285.0 | **23957** | **451513** | **451503** | **451504** | **451502** | **451505** | **451506** | **451507** |
| 150 | 300 kcmil | 19.6 | 1440.0 | 1564.0 | **23958** | **451613** | **451603** | **451604** | **451602** | **451605** | **451606** | **451607** |
| 185 | 350 kcmil | 22.4 | 1776.0 | 1859.0 | **23959** | **451713** | **451703** | **451704** | **451702** | **451705** | **451706** | **451707** |

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## Silicone single core, finely stranded, tinned wire, increased temperature resistance

| Cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. | yellow Part no. | orange Part no. | green Part no. | pink Part no. | beige Part no. | transparent Part no. |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.25 | 24 | 1.6 | 2.4 | 5.5 | **23208** | **23209** | **23200** | **23211** | **23212** | **23210** |
| 0.5 | 20 | 2.1 | 4.8 | 8.6 | **23308** | **23309** | **23300** | **23311** | **23312** | **23310** |
| 0.75 | 19 | 2.4 | 7.2 | 11.8 | **23408** | **23409** | **23400** | **23411** | **23412** | **23410** |
| 1 | 18 | 2.5 | 9.6 | 13.5 | **23508** | **23509** | **23500** | **23511** | **23512** | **23510** |
| 1.5 | 16 | 2.8 | 14.4 | 18.5 | **23608** | **23609** | **23600** | **23611** | **23612** | **23610** |
| 2.5 | 14 | 3.4 | 24.0 | 30.0 | **23708** | **23709** | **23700** | **23711** | **23712** | **23710** |
| 4 | 12 | 4.2 | 38.0 | 47.3 | **23808** | **23809** | **23800** | **23811** | **23812** | **23810** |
| 6 | 10 | 5.0 | 58.0 | 71.1 | **23908** | **23909** | **23900** | **23911** | **23912** | **23910** |
| 10 | 8 | 6.6 | 96.0 | 119.4 | **24608** | **24609** | **24600** | **24611** | **24612** | **24610** |
| 16 | 6 | 7.4 | 154.0 | 187.7 | **24708** | **24709** | **24700** | **24711** | **24712** | **24710** |
| 25 | 4 | 9.2 | 240.0 | 289.6 | **24808** | **24809** | **24800** | **24811** | **24812** | **24810** |
| 35 | 2 | 10.3 | 336.0 | 398.0 | **451108** | **451109** | **451100** | **451111** | **451112** | **451110** |
| 50 | 1 | 12.0 | 480.0 | 560.0 | **451208** | **451209** | **451200** | **451211** | **451212** | **451210** |
| 70 | 2/0 | 13.8 | 672.0 | 766.0 | **451308** | **451309** | **451300** | **451311** | **451312** | **451310** |
| 95 | 3/0 | 16.2 | 912.0 | 1032.0 | **451408** | **451409** | **451400** | **451411** | **451412** | **451410** |
| 120 | 4/0 | 17.6 | 1152.0 | 1285.0 | **451508** | **451509** | **451500** | **451511** | **451512** | **451510** |
| 150 | 300 kcmil | 19.6 | 1440.0 | 1564.0 | **451608** | **451609** | **451600** | **451611** | **451612** | **451610** |
| 185 | 350 kcmil | 22.4 | 1776.0 | 1859.0 | **451708** | **451709** | **451700** | **451711** | **451712** | **451710** |

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