High-temperature fluoropolymer, silicone & HV wires

SiF 300/500 V

180 °C Flexible Silicone Single-Core Wire

DIN VDE 0250 Class 5 tinned copper 180 °C halogen-free silicone wire

DIN VDE 0250-502 | **300/500 V · +180 °C** | **LSZH Halogen-Free**



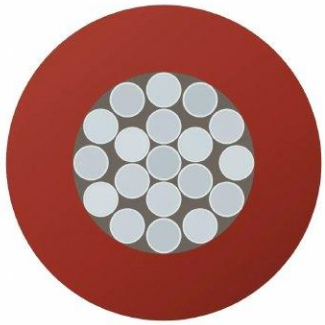
Application

SiF 300/500 V pairs IEC 60228 Class 5 flexible tinned copper with halogen-free red-oxide 180 °C silicone rubber insulation, staying supple from -60 °C to +180 °C in foundries, furnaces, and switchgear.

Typical uses: Industrial ovens, kilns & thermal processing, Aerospace avionics, defence & instrumentation, Steelworks, glassworks & foundry equipment, Switchgear cabinets, motors & heating appliances

Construction





Cross-section, not to scale

1	**Conductor**	IEC 60228 Class 5 flexible tinned annealed copper · IEC 60228 Class 5
2	**Extruded insulation**	Red-oxide halogen-free 180 °C silicone rubber insulation · DIN VDE 0250-502

Technical data

Typical values

Rated voltage	300/500 V	**Test voltage**	2 kV AC
Conductor	Tinned Cu · Cl.5	**Insulation**	Red-oxide halogen-free 180 °C silicone
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	**Temp. range (fixed)**	-60 °C to +180 °C
Temp. range (flexing)	-25 °C to +180 °C	**Peak / short-circuit**	+220 °C (short-term)
Min. bending radius	6 × OD (fixed)	**Flame / fire rating**	180 °C Continuous (200 °C Peak)
Thermal / chemical	Halogen-Free Silicone	**Mechanical / special**	Silica-Ash Fire Barrier
Outer finish	Red-oxide 180 °C halogen-free silicone		

Sizes

9 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Conductor mm²	Outer Ø ≈ mm	Max. R20 Ω/km	Metal index kg/km	Weight ≈ kg/km	Min. bend R 6×D mm
☐ 1×0.5 mm²	2.1	40.09	5	14	13
☐ 1×0.75 mm²	2.4	26.73	7	17	14
☐ 1×1 mm²	2.5	20.05	10	21	15
☐ 1×1.5 mm²	2.8	13.67	14	26	17
☐ 1×2.5 mm²	3.7	8.20	24	45	22
☐ 1×4 mm²	4.3	5.09	38	69	26
☐ 1×6 mm²	4.9	3.39	58	101	29
☐ 1×10 mm²	6.2	1.96	96	166	37
☐ 1×16 mm²	7.3	1.24	154	259	44

- Conductor DC resistance R20 at 20 °C per IEC 60228 Class 5.
- Minimum bending radius calculated at 6 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- DIN VDE 0250-502
- IEC 60228 Class 5
- IEC 60754-1 Halogen-Free
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/sif-300-500v-180c-flexible-silicone-single-core-wire

Typical values for this cable type, based on DIN VDE 0250-502 · IEC 60228 Class 5 · IEC 60754-1 Halogen-Free. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.