High-temperature fluoropolymer, silicone & HV wires

SiFF 300/500V Class 6

SiFF 300/500 V 180 °C Class 6 Extra-Flex Silicone Wire

Extra-flexible Class 6 tinned copper 180 °C halogen-free silicone wire

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



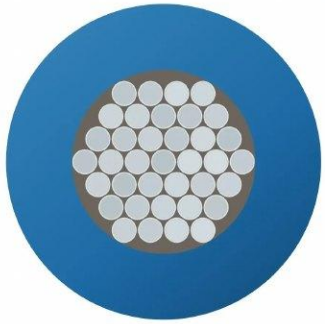
Application

SiFF 300/500 V Class 6 upgrades SiF with ultra-fine IEC 60228 Class 6 tinned copper stranding inside blue 180 °C halogen-free silicone rubber for tight bending, vibration, and thermal cycling in hot machinery.

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 6 flexible tinned annealed copper · IEC 60228 Class 6
2	Extruded insulation	Blue 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.6	Insulation	Blue halogen-free 180 °C silicone rubber
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-60 °C to +180 °C
Temp. range (flexing)	-40 °C to +180 °C	Peak / short-circuit	+220 °C (short-term)
Min. bending radius	5 × OD (fixed)	Flame / fire rating	Class 6 Extra-Flexible
Thermal / chemical	180 °C Continuous Silicone	Mechanical / special	Cold-Flex -60 °C
Outer finish	Blue 180 °C halogen-free silicone rubber		

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 5×D mm
☐ 1×0.5 mm²	2.1	40.09	5	14	10.5
☐ 1×0.75 mm²	2.4	26.73	7	17	12.0
☐ 1×1 mm²	2.5	20.05	10	21	12.0
☐ 1×1.5 mm²	2.8	13.67	14	26	14.0
☐ 1×2.5 mm²	3.7	8.20	24	45	18.0
☐ 1×4 mm²	4.3	5.09	38	69	22.0
☐ 1×6 mm²	4.9	3.39	58	101	24.0
☐ 1×10 mm²	6.2	1.96	96	166	31.0
☐ 1×16 mm²	7.3	1.24	154	259	36.0

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

Standards and approvals

- DIN VDE 0250-502
- IEC 60228 Class 6
- 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/siff-300-500v-180c-class-6-extra-flex-silicone-wire

Typical values for this cable type, based on DIN VDE 0250-502 · IEC 60228 Class 6 · 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.