

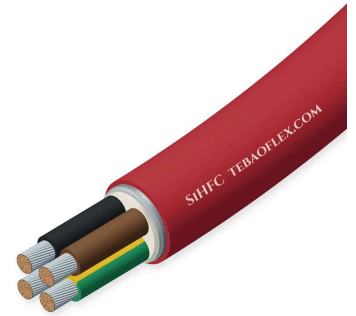


High-temperature wire

SiHFC

Screened Multicore Silicone High-Temperature Cable

300/500 V copper-braid EMC-screened multicore silicone cable for -60 °C to +180 °C



DIN VDE 0250 / EN 50525-2-83

300/500 V

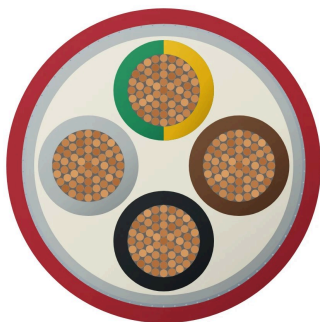
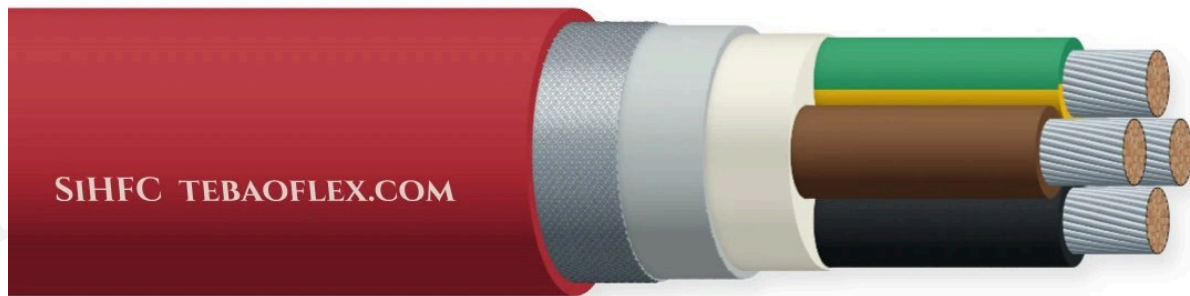
-60 to +180 °C

Application

SiHFC (SiHF-C-Si) halogen-free EMC-screened multicore silicone cable with Class 5 tinned copper conductors, EI2 silicone core insulation, braided tinned copper screen, and red-brown silicone outer sheath for -60 °C to +180 °C.

Typical uses: Steelworks & Rolling Mills, Industrial Furnaces & Kilns, Glass & Ceramic Production, Foundry Automation & Sensors, Thermal Test Chambers

Construction



Cross-section, not to scale

- 1 Fine-stranded tinned copper
- 2 Silicone core insulation
- 3 Core wrapping tape
- 4 Tinned copper EMC braid
- 5 Outer silicone rubber sheath

Technical data

Typical values

Rated voltage U0/U	300/500 V AC	AC test voltage (core/core)	2000 V AC (50 Hz, 5 min)
AC test voltage (core/screen)	2000 V AC	Specific insulation resistance	≥ 200 MΩ·km at +20 °C
EMC braid optical coverage	≥ 85 % tinned copper wire braid	Operating temperature (fixed)	-60 °C to +180 °C
Short-term peak temperature	+220 °C (intermittent thermal excursion)	Min. flexing installation temp.	-25 °C
Combustion silica ash integrity	Forms non-conductive SiO ₂ ash in fire	Conductor stranding	IEC 60228 Class 5 fine-stranded tinned Cu
Min. bending radius (fixed)	6 × overall cable diameter	Min. bending radius (flexing)	15 × overall cable diameter
Ventilation requirement	Keep well-ventilated above +100 °C	Flame retardance	IEC 60332-1-2 vertical flame test
Halogen-free & acid gas	IEC 60754-1 & IEC 60754-2 (0 % halogens)	Smoke density	Low smoke emission per IEC 61034-2
Chemical & oil resistance	Resists animal/vegetable oils, ozone & UV	Standards	DIN VDE 0250-1 / EN 50525-2-83 based

Sizes

20 standard constructions

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

Order designation	Cross-section / size	Conductor build	Wall ≈ mm	Outer Ø ≈ mm	Metal kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard SiHFC configurations 20 sizes							
☐ SiHFC 2×0.75	2×0.75	Class 5 Sn-Cu (0.75 mm ²)	1.50	7.60	43.3	106.8	46
☐ SiHFC 3G0.75	3G0.75	Class 5 Sn-Cu (0.75 mm ²)	1.50	8.00	52.0	122.4	48
☐ SiHFC 4G0.75	4G0.75	Class 5 Sn-Cu (0.75 mm ²)	1.50	8.60	61.5	142.9	52
☐ SiHFC 5G0.75	5G0.75	Class 5 Sn-Cu (0.75 mm ²)	1.50	9.30	71.3	166.4	56
☐ SiHFC 7G0.75	7G0.75	Class 5 Sn-Cu (0.75 mm ²)	1.50	10.00	88.4	198.4	60
☐ SiHFC 2×1	2×1	Class 5 Sn-Cu (1 mm ²)	1.50	8.00	49.6	120.0	48
☐ SiHFC 3G1	3G1	Class 5 Sn-Cu (1 mm ²)	1.50	8.40	60.7	138.3	50
☐ SiHFC 4G1	4G1	Class 5 Sn-Cu (1 mm ²)	1.50	9.00	72.6	161.7	54
☐ SiHFC 5G1	5G1	Class 5 Sn-Cu (1 mm ²)	1.50	9.70	84.9	188.4	58
☐ SiHFC 2×1.5	2×1.5	Class 5 Sn-Cu (1.5 mm ²)	1.50	8.60	61.5	142.9	52
☐ SiHFC 3G1.5	3G1.5	Class 5 Sn-Cu (1.5 mm ²)	1.50	9.00	77.4	166.5	54
☐ SiHFC 4G1.5	4G1.5	Class 5 Sn-Cu (1.5 mm ²)	1.50	9.80	94.8	200.4	59
☐ SiHFC 5G1.5	5G1.5	Class 5 Sn-Cu (1.5 mm ²)	1.50	10.50	111.9	233.2	63
☐ SiHFC 7G1.5	7G1.5	Class 5 Sn-Cu (1.5 mm ²)	1.50	11.40	144.1	287.1	68
☐ SiHFC 12G1.5	12G1.5	Class 5 Sn-Cu (1.5 mm ²)	1.50	14.70	228.7	466.4	88
☐ SiHFC 3G2.5	3G2.5	Class 5 Sn-Cu (2.5 mm ²)	1.50	10.90	113.4	244.1	65
☐ SiHFC 4G2.5	4G2.5	Class 5 Sn-Cu (2.5 mm ²)	1.50	11.90	141.2	297.0	71
☐ SiHFC 5G2.5	5G2.5	Class 5 Sn-Cu (2.5 mm ²)	1.50	12.90	169.0	352.1	77
☐ SiHFC 4G4	4G4	Class 5 Sn-Cu (4 mm ²)	1.90	14.00	206.8	422.4	84
☐ SiHFC 4G6	4G6	Class 5 Sn-Cu (6 mm ²)	1.90	15.50	289.3	553.6	93

– Outer diameters and weights are nominal engineering values for SiHFC subject to standard manufacturing tolerances per DIN VDE 0250-1 / EN 50525-2-83.

Electrical & rating data

20 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Primary rating (A or kV)	Derated / AC rating	Dielectric test V AC rms
2×0.75 mm ²	26.70	12.0	9.0	2,000
3G0.75 mm ²	26.70	12.0	9.0	2,000
4G0.75 mm ²	26.70	12.0	9.0	2,000
5G0.75 mm ²	26.70	12.0	9.0	2,000
7G0.75 mm ²	26.70	12.0	9.0	2,000
2×1 mm ²	20.00	15.0	12.0	2,000
3G1 mm ²	20.00	15.0	12.0	2,000
4G1 mm ²	20.00	15.0	12.0	2,000
5G1 mm ²	20.00	15.0	12.0	2,000
2×1.5 mm ²	13.70	18.0	14.0	2,000
3G1.5 mm ²	13.70	18.0	14.0	2,000
4G1.5 mm ²	13.70	18.0	14.0	2,000
5G1.5 mm ²	13.70	18.0	14.0	2,000
7G1.5 mm ²	13.70	18.0	14.0	2,000
12G1.5 mm ²	13.70	18.0	14.0	2,000
3G2.5 mm ²	8.21	26.0	20.0	2,000
4G2.5 mm ²	8.21	26.0	20.0	2,000
5G2.5 mm ²	8.21	26.0	20.0	2,000
4G4 mm ²	5.09	34.0	27.0	2,000
4G6 mm ²	3.39	44.0	34.0	2,000

– Electrical resistance at +20 °C and dielectric withstand voltages verified per DIN VDE 0250-1 / EN 50525-2-83.

Standards and approvals

- ✓ DIN VDE 0250-1 / EN 50525-2-83
- ✓ CE (2014/35/EU) & RoHS 3 (2015/863/EU) Compliant
- ✓ REACH SVHC & Halogen/Asbestos Compliance Verified

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/sihfc-screened-multicore-silicone-high-temperature-cable



Typical values for this cable type, based on DIN VDE 0250-1 / EN 50525-2-83. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.