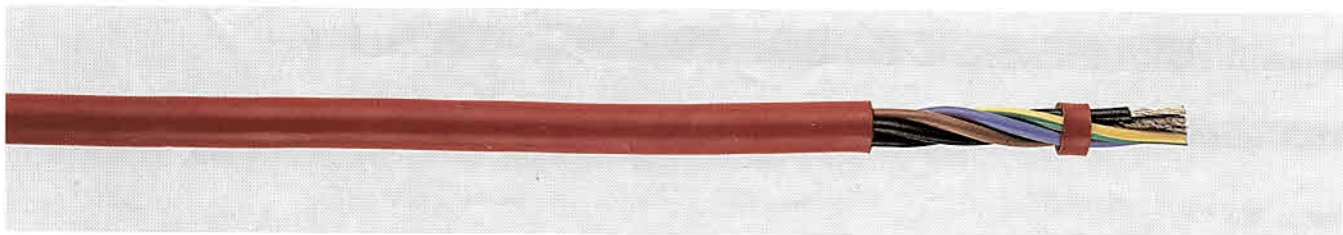


# SiHF-O / SiHF-J Silicone flexible multicore cable temperature-resistant



## Applications

These silicone-insulated multicore cables, resistant to high and low temperatures, are used as mobile connecting cables for equipment where high temperatures can arise as well as for ambient air temperatures between  $-60^{\circ}\text{C}$  and  $+180^{\circ}\text{C}$ . These cables can also withstand temperatures up to  $+250^{\circ}\text{C}$  for short periods.

These cables are used in all areas of low mechanical load where high and low temperatures can have a direct effect, e.g. in ship building, in iron and steel works, in smelting plants, power plants, foundries, coking plants, glass and ceramic works, cement works, for high-power lighting fixtures and spotlights, solarium and sauna installations.

### Characteristic features

- Temperature-resistant from  $-60^{\circ}\text{C}$  to  $+180^{\circ}\text{C}$ , for short periods to  $+250^{\circ}\text{C}$ , flexible at low temperatures down to  $-25^{\circ}\text{C}$  in continuous operation.
- These cables are approved to supply temperature class "H" up to  $180^{\circ}\text{C}$ .
- In the event of fire, no fire support; retention of the insulation and low smoke emission.

### Durability

- The silicone compound is resistant to ozone, oxygen and weathering.
- Resistant to transmission oil, acetone, aniline, boric acid, brake fluids, methanol, engine oil, sulphur dioxide, tartaric and citric acid, sea water as well as vegetable and animal fats.
- Refer also to the Table of Technical Guidelines for other chemical resistance properties of silicone compounds.

## Cable design

Construction designed on the basis of VDE 0250	part 1 and part 816
Conductor	: tinned Cu wires, flexible
Construction of conductor	: according to VDE 0295 Class 5 and IEC 228 Class 5
Insulation	: core insulation of silicone rubber, compound type 2G11 according to VDE 0207 part 20
Core identification	: colour coded or black with imprinted numbers according to VDE 0293
Protective earth conductor	: without green-yellow protective earth conductor for 2 cores, with green-yellow protective earth conductor for 3 or more cores
Type of lay-up	: concentric lay-up of cores in layers
Sheath	: sheath material of silicone rubber, compound type 2GM1 according to VDE 0207 part 21
Sheath colour	: oxbrown-red as the standard colour

### Note

Other core configurations, cross sections and special notch-resistant cable constructions, or resistant to temperatures up to  $+250^{\circ}\text{C}$  for continuous operation, low-voltage cables for halogen lamps and SiY versions manufactured upon request.

## Technical data

Conductor resistance at $20^{\circ}\text{C}$	: according to VDE 0295 Class 5 and IEC 228 Class 5, refer also to the Table of Technical Guidelines
Insulation resistance at $20^{\circ}\text{C}$	min. : $20\text{ M}\Omega \cdot \text{km}$
Temp. at the conductor	max. : $+180^{\circ}\text{C}$ in operation max. : $+200^{\circ}\text{C}$ in the event of a short circuit
Rated voltage	$U_0/U$ : 300/500 V
Test voltage AC, 50 Hz	: 2000 V
Breakdown voltage	min. : $20\text{ kV/mm}$ at $20^{\circ}\text{C}$
Minimum bending radius	: $7,5 \times$ cable diameter
Temperature range	mobile : $-25^{\circ}\text{C}$ to $+180^{\circ}\text{C}$ fixed : $-60^{\circ}\text{C}$ to $+180^{\circ}\text{C}$
Radiation resistance	: $20\text{ Mrad}$ ( $20 \times 10^6\text{ cJ/kg}$ )
Testing according to DIN VDE 0472 and IEC regulations	
Flame test	: test class B and test class C according to VDE 0472 part 804, IEC 332-1 and IEC 332-3 respectively
Insulation retention	: according to VDE 0472 part 814 and IEC 331