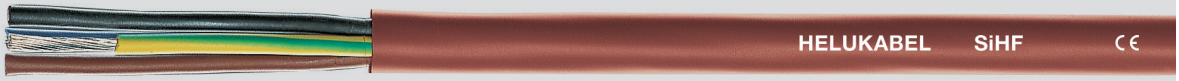
SiHF Silicone Multicore Cable flexible, halogen-free



Technical data

- Special silicone multicore cable with higher heat-resistance range adapted to DIN VDE 0250 part 1 and part 816
- **Temperature range**
  −60° C to +180° C
  (up to +220° C for short time)
- **Temperature limit at the conductor** in operation +180° C
- **Nominal voltage** U_0/U 300/500 V
- **Test voltage** 2000 V
- **Breakdown voltage** min. 5000 V
- **Insulation resistance**
  min. 200 MOhm x km
- **Power rating**
  at ambient temperature up to +145° C to DIN VDE 0100
  for higher temperatures valid:

ambient temperature °C	145	150	155	160	165	170	175
load value %	100	92	85	75	65	53	38

- **Minimum bending radius**
  7,5 x cable ∅
- **Radiation resistance**
  up to 20 x 10^6 cJ/kg (up to 20 Mrad)
- **Corrosiveness of combustion gases**
  (freedom from halogen)
  test method to DIN VDE 0472 part 813 and IEC 60754-2
- **Behaviour in fire**
  no flame propagation
  test method B to DIN VDE 0472 part 804 and IEC 60332-1

Cable structure

- Tinned copper conductors to DIN VDE 0295 cl. 5 and IEC 60228 cl. 5
- Silicone core insulation
- Core identification to DIN VDE 0293 colour coded or black cores with continuous white numbers
- For 2-cores brown, blue
- Cores stranded in layers with optimal lay-length
- Green-yellow earth-core (3 cores and above)
- Outer jacket of silicone
  jacket colour preferably redbrown

Advantages

- Hardly changes of dielectric strength and the insulation resistance also at high temperatures
- High ignition or flash point
- In case of fire, forms an insulating layer of SiO_2

Note

For laying as a fixed installation only in open or ventilated pipe systems as well as in ducts. Otherwise the mechanical properties of the silicon are reduced by the enclosed air at temperatures exceeding 90° C.

Application

Silicone cables were evolved for use wherever insulation is subjected to extreme temperature changes. They are heat-resistant for permanent temperature up to +180° C, for short time operation up to +220° C. The good performance of the environmental resistant properties means that silicone cables can be used at temperatures down to −60° C. Silicone cables are halogen-free cables and are especially suited for installation in power stations. They have also found their uses in the steel producing industries, aviation industry, ship building as well as in ceramic, glass and cement factories.
Due to elastical characteristic of core insulations, these are used as flexible connection cable.

Resistant to

- High molecular oils
- Fats from vegetables and animals
- Alcohols
- Plasticizers and clophenes
- Diluted acids
- Lyes and salt dissolution
- Oxidation substances
- Tropical influences and weather
- Lake water
- Oxygen and UV

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Part No.	No. cores x cross-sec. mm²	Outer ∅ ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no.*)
22989	2 x 0,5	5,5	9,6	42	20
22990	3G0,5	5,8	14,5	44	20
22991	4G0,5	6,2	19,3	58	20
22992	5G0,5	6,8	24,0	62	20
22993	6G0,5	7,4	28,9	79	20
22994	7G0,5	7,4	33,7	85	20
22995	8G0,5	8,6	38,4	99	20
22996	10G0,5	9,5	48,1	124	20
22997	12G0,5	9,8	57,6	141	20
22998	16G0,5	11,0	76,7	186	20
22999	18G0,5	11,5	86,5	211	20
23000	25G0,5	13,7	120,3	271	20
23001	2 x 0,75	6,4	14,4	53	18
23002	3G0,75	6,8	21,6	63	18
23104 OB	3 x 0,75	6,8	21,6	63	18
23003	4G0,75	7,8	29,0	83	18
23105 OB	4 x 0,75	7,8	29,0	83	18
23004	5G0,75	8,5	36,0	101	18
23005	6G0,75	9,2	43,0	115	18
23006	7G0,75	9,2	50,0	124	18
23127	8G0,75	9,7	57,7	138	18
23128	10G0,75	10,9	72,1	156	18
23129	12G0,75	11,1	86,5	185	18
23130	16G0,75	12,6	115,2	218	18

Part No.	No. cores x cross-sec. mm²	Outer ∅ ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no.*)
23131	18G0,75	13,3	129,7	260	18
23132	25G0,75	15,6	180,6	370	18
23007	2 x 1	6,6	19,0	59	17
23008	3G1	7,4	29,0	77	17
23009	4G1	8,0	38,0	94	17
23010	5G1	8,8	48,0	115	17
23011	6G1	9,5	58,0	134	17
23012	7G1	9,5	67,0	144	17
23133	8G1	10,4	76,7	175	17
23134	10G1	11,3	96,1	216	17
23135	12G1	11,5	115,2	231	17
23136	16G1	13,1	153,5	302	17
23137	18G1	13,8	172,9	340	17
23138	25G1	16,2	240,0	431	17
23013	2 x 1,5	7,6	29,0	81	16
23014	3G1,5	8,0	43,0	98	16
23015	4G1,5	8,8	58,0	122	16
23016	5G1,5	9,6	72,0	147	16
23017	6G1,5	10,4	86,0	173	16
23018	7G1,5	10,4	101,0	187	16
23019	8G1,5	11,6	114,0	213	16
23020	10G1,5	13,6	116,0	263	16
23021	12G1,5	14,6	173,0	314	16

*) **Note**
AWG sizes are approximate equivalent values.
The actual cross-section is in mm² – see page T 15.

G = with green-yellow earth core
X = without green-yellow earth core (OB)

Continuation ▶