



SiHF-C-Si - Silicone Shielded Double Jacket Multi-Core Cable



Product application:

SiHF-C-Si is a special 180 Degree C. silicone multi-core cable for use in high and low temperature areas or whenever the insulation is subject to extreme temperature changes. These cables are mainly found in steel producing industry and aviation industry as well as in ship building, cement, glass and ceramic factories. SiHF-C-Si cables are low-smoke and halogen-free especially suited for use in power stations. The silicone jacket provides added heat, chemical, oil and acidic resistance while the internal tinned copper braid shield protects against electromagnetic interference offering disturbance free signals and impulses. Not permitted for outdoor use.

Product characteristic:

Construction:

- Tinned copper conductor according to DIN VDE 0295 cl.5, BS 6360 cl.5 and IEC 60228 cl.5
- Conductor insulation of silicone
- Conductor identification according to DIN VDE 0293-308, single color, or black conductors with sequential numbering imprinted in white, for 2 conductors brown, blue
- Conductors stranded in layers with optimal lay-length
- Green-yellow grounding (3 conductors)
- Inner jacket of silicone
- Braid of tinned Cu wires, coverage approx. 85%
- Silicone-rubber-insulated common outer jacket
- Jacket preferentially red brown color

Technical:

- Special silicone-insulated cable with higher heat-resistance adapted to DIN VDE 0250 part 1 and part 816
- Temperature range: -60°C to +180°C
- Short time temp up to +220° C
- Temperature limit at the conductor in operation +180°C
- Nominal voltage: 300/500 V



- Test voltage: 2000 V
- Insulation resistance :min. 200 MΩ x km
- Minimum bending radius: flexing 10 x cable Ø
fixed installation 5 x cable Ø
- Coupling resistance :max. 250Ω/km
- Radiation resistance : up to 20x10⁶ cJ/kg (up to 20 Mrad)

Properties:

- Resistant to High molecular oils, fats from vegetables and animals, alcohols, plasticizers and clophenes, diluted acids, lye and salt dissolution, oxidation substances, tropical influences and weather, lake water, oxygen and UV
- Halogen-free
According to DIN VDE 0482 part 267/ EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Burning behavior
No propagation of fire
Testing according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- 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.

Product specification:

AWG	No. of Cores	Conductor cross section mm ²	Nominal OD mm	Copper weight kg/km	Gross Weight kg/km
20	2	0.25	8.7	55.5	101
20	3	0.25	8.9	60.8	118
20	4	0.25	9.4	66.5	131
20	5	0.25	10	81.6	153
20	7	0.25	10.5	92.2	173
20	10	0.25	13.1	124	242
20	12	0.25	13.4	134.4	263
20	16	0.25	14.6	170.2	326
20	18	0.25	15.1	181	351
20	25	0.25	19.4	230.1	348
18	2	0.75	9.2	61.4	124
18	3	0.75	9.5	69.1	136
18	4	0.75	10.1	86.7	159
18	5	0.75	10.8	95.2	180
18	7	0.75	11.6	113.3	212
18	10	0.75	14.4	165.2	306



AWG	No. of Cores	Conductor cross section mm ²	Nominal OD mm	Copper weight kg/km	Gross Weight kg/km
18	12	0.75	14.7	180.3	333
18	16	0.75	16.5	212.2	418
18	18	0.75	17.3	282.1	453
18	25	0.75	22.1	297.4	468
17	2	1	9.5	66.7	132
17	3	1	9.7	86.2	153
17	4	1	10.4	96.8	173
17	5	1	11.3	108.3	202
17	7	1	12	141.2	243
17	10	1	14.9	190	238
17	12	1	15.2	209.8	371
17	16	1	17	251.8	468
17	18	1	17.8	297.4	526
17	25	1	23	329	559
16	2	1.5	10.7	87.7	172
16	3	1.5	11.2	103.5	198
16	4	1.5	11.8	131.7	235
16	5	1.5	13.3	148.5	281
16	7	1.5	14.3	193.4	345
16	10	1.5	17.7	268.5	482
16	12	1.5	18	298.4	531
16	16	1.5	20.1	362.3	662
16	18	1.5	20.9	394	720
16	25	1.5	24.1	488.2	791
14	2	2.5	12.1	122.3	230
14	3	2.5	12.9	147.7	275
14	4	2.5	14.2	188.6	340
14	5	2.5	15.3	214.9	394
14	7	2.5	16.9	265.7	488
12	4	4	17.1	294	520
12	5	4	19.4	374	653
10	4	6	18.8	449	781
10	5	6	21.2	563	982
8	4	10	25.7	759	1294
6	4	16	28.4	1180	1988
4	4	25	35	1810	2995

Other sizes and colours available on request.