



SIHF - Silicone Control Cable



Product application:

Suitable where PVC insulated cables become brittle due to high temperature variations. Silicone insulated single cores are commonly used in the metallurgical industry, steel works, hot rolling mills, coking plants, foundries etc. The insulation consists of silicone rubber. It is resistant to vegetable and animal fat, many types of oil and diluted acids. No decomposition occurs when exposed to alcohol, alkaline solutions etc. The insulation is resistant to oxygen and ozone. Should the cable burn, a silicone dioxide layer will remain on the conductor to render it short circuit proof.

Product characteristic:

Construction:

- Tinned copper conductors to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Silicone conductor insulation
- Conductor identification to DIN VDE 0293-308 color coded or black conductors with continuous white numbers
- For 2-conductors brown, blue
- Conductors stranded in layers with optimal lay-length
- Green-yellow earth-conductor (3 conductors and above)
- Outer jacket of silicone

Technical:

- Special silicone multi conductor cable with higher heat-resistance range adapted to DIN VDE 0250 part 1 and part 816
- Working voltage: 300/500 volts
- Test voltage: 2000 volts
- Bending Radius: flexing 7.5 x cable Ø, fixed installation 4 x cable Ø
- Temp range: -60° C to +180° C
- Short time temp up to +220° C
- Flame retardant: IEC 60332.1
- Insulation resistance: min. 200 MΩ x km
- Radiation resistance: up to 20x10⁶ cJ/kg (up to 20 Mrad)



Properties:

- **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 SiO₂
- **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)
- **Behavior in fire**
No flame propagation
Test 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	0.5	5.5	9.6	42
20	3	0.5	5.8	14.5	44
20	4	0.5	6.2	19.3	58
20	5	0.5	6.8	24	62
20	6	0.5	7.4	28.9	79
20	7	0.5	7.4	33.7	85
20	8	0.5	8.6	38.4	99
20	10	0.5	9.5	48.1	124
20	12	0.5	9.8	57.6	141
20	16	0.5	11	76.7	186
20	18	0.5	11.5	86.5	211
20	25	0.5	13.7	120	271
18	2	0.75	6.4	14.4	53
18	3	0.75	6.8	21.6	63
18	4	0.75	7.8	29	83
18	5	0.75	8.5	36	101
18	6	0.75	9.2	43	115
18	7	0.75	9.2	50	124
18	8	0.75	9.7	57.7	138
18	10	0.75	10.9	72.1	156



AWG	No. of Cores	Conductor cross section mm ²	Nominal OD mm	Copper weight kg/km	Gross Weight kg/km
18	12	0.75	11.1	86.5	185
18	16	0.75	12.6	115.2	218
18	18	0.75	13.3	129.7	260
18	25	0.75	15.6	180	370
17	2	1	6.6	19	59
17	3	1	7.4	29	77
17	4	1	8	38	94
17	5	1	8.8	48	115
17	6	1	9.5	58	134
17	7	1	9.5	67	144
17	8	1	10.4	76.7	175
17	10	1	11.3	96.1	216
17	12	1	11.5	115.2	231
17	16	1	13.1	153.5	302
17	18	1	13.8	172.9	340
17	25	1	16.2	240	431
16	2	1.5	7.6	29	81
16	3	1.5	8	43	98
16	4	1.5	8.8	58	122
16	5	1.5	9.6	72	147
16	6	1.5	10.4	86	173
16	7	1.5	10.4	101	187
16	8	1.5	11.6	114	213
16	10	1.5	13.6	116	263
16	12	1.5	14.6	173	314
16	14	1.5	15.4	202	379
16	16	1.5	16.7	231	445
16	18	1.5	17.6	260	506
16	20	1.5	18.2	288	566
16	24	1.5	20	346	722
14	2	2.5	9.2	48	134
14	3	2.5	9.7	72	152
14	4	2.5	10.6	96	188
14	5	2.5	11.6	120	228
14	6	2.5	12.9	144	304
14	7	2.5	13	168	320
14	8	2.5	14.9	192.2	373
14	10	2.5	16.5	240.1	450
14	12	2.5	17.8	288	502
14	16	2.5	19.1	384	659
14	18	2.5	20	432	761



AWG	No. of Cores	Conductor cross section mm ²	Nominal OD mm	Copper weight kg/km	Gross Weight kg/km
14	25	2.5	24.5	600	1007
12	2	4	10.8	77	180
12	3	4	11.4	115	224
12	4	4	13.1	154	295
12	5	4	14.4	192	359
12	7	4	16.2	269	479
10	2	6	13.4	115	274
10	3	6	14.2	173	338
10	4	6	16.2	230	441
10	5	6	17.7	288	535
10	7	6	19.2	403	685
8	2	10	17.6	192	400
8	3	10	18.7	288	620
8	4	10	20.4	384	707
8	5	10	22.5	480	900
8	7	10	24.4	672.2	1151
6	2	16	20.4	308	400
6	3	16	22	462	500
6	4	16	24.3	616	714
6	5	16	26.7	770	850
6	7	16	27.6	1075.3	1682
4	2	25	24.6	480	700
4	3	25	26.2	720	1100
4	4	25	31.8	960	1500
2	2	35	28.2	672	1100
2	3	35	29.9	1008	1500
2	4	35	32.8	1344	2100

Other sizes and colours available on request.

