



SIF / GL



Product application:

Suitable where PVC insulated cables become brittle due to high temperature variations. Silicone insulated single cores are preferably used in the metallurgical industry, steel works, hot rolling mills, coking plants, foundries etc. 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, an insulation silicone dioxide layer will remain on the conductor to render it short circuit proof. Additional mechanical protection due to the glass fibre braid.

Product characteristic:

Construction:

- Fine strands of tinned copper wire
- Stranding acc. to VDE 0295 class 5
- Core insulation made of silicone rubber
- Glass fibre braiding
- Bending radius: 15x cable Ø

Technical:

- Special silicone single conductor cable with higher heat-resistance range adapted to DIN VDE 0250 part 1 and part 502
- 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
- Minimum bending radius: 15x cable Ø
- Radiation resistance : up to 20×10^6 cJ/kg (up to 20 Mrad)

Properties:

- High ignition or flash point
- 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
- Halogen-free according to DIN VDE 0482 part 267/ EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- 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
24	1	0.25	2.4	2.4	7.9
20	1	0.5	2.6	4.8	12.6
18	1	0.75	2.9	7.2	16
17	1	1	3	9.6	18.4
16	1	1.5	3.3	14.4	23.7
14	1	2.5	3.9	24	35.6
12	1	4	4.7	38	53.3
10	1	6	5.7	58	77.4
8	1	10	7.5	96	129.2
6	1	16	8.9	154	198.4
4	1	25	10.8	240	303
2	1	35	12.1	336	413.2
1	1	50	14.4	480	577.8