# SID

## Product application:

SID cables are 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. Suitable for fixed installation.

## Product characteristic:

**Construction:**

- Solid tinned copper single wire
- Solid to VDE-0295 Class-1, IEC 60228 Cl-1
- Silicone core insulation
- High ignition and flash point

**Technical:**

- Working voltage: 300/500 volts
- Test voltage: 2000 volts
- Bending Radius: 5 x cable Ø
- Temp range: -60º C to +180º C
- Short time temp up to +220º C
- Flame retardant: IEC 60332.1
- Insulation resistance: 20 MΩ x km

**Properties:**

- Advantages
  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)
- 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 mm² | Nominal OD mm | Copper weight kg / km | Gross Weight kg / km |
|---|---|---|---|---|---|
| - | 1 | 0.2 | 1.7 | 1.9 | 4.2 |
| - | 1 | 0.28 | 1.8 | 2.7 | 5.1 |
| 20 | 1 | 0.5 | 2 | 4.8 | 7.7 |
| 18 | 1 | 0.75 | 2.2 | 7.2 | 10.4 |
| 17 | 1 | 1 | 2.3 | 9.6 | 12.8 |
| 16 | 1 | 1.5 | 2.6 | 14.4 | 18 |
| 14 | 1 | 2.5 | 3.2 | 24 | 28.9 |
| 12 | 1 | 4 | 3.9 | 38 | 45.4 |
| 10 | 1 | 6 | 4.4 | 58 | 64.5 |