



## 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:  
150 °C - load value 100%  
155 °C - load value 91%  
160 °C - load value 82%  
165 °C - load value 71%  
170 °C - load value 58%  
175 °C - load value 41%
- **Minimum bending radius**  
flexing 10x cable  $\varnothing$   
fixed installation 5x cable  $\varnothing$
- **Radiation resistance**  
up to  $20 \times 10^6$  cJ/kg (up to 20 Mrad)

## Cable structure

- Tinned copper conductors fine wire to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Silicone core insulation
- Core colours according DIN VDE 0293-308
- Core colour
  - up to 5 cores one-coloured
  - up 6 and more cores, black with white numbering
  - 3 and above, with green-yellow earth core
  - 2 cores without green-yellow earth core
- Cores stranded in layers with optimal lay-length
- Outer jacket of silicone
- Jacket colour preferably redbrown
- Glass fibre tape over the jacket
- Galvanized steel wire outer braiding

## 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  $SiO_2$
- **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
- **Corrosivity of combustion gases (Halogen-free)**  
according to VDE 0482 part 267/  
DIN EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- **Behaviour in fire**  
no flame propagation  
test according to VDE 0482-332-1-2, DIN EN 60332-1-2/ 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

## Note

- G = with green-yellow earth core;  
x = without green-yellow earth core.

## Application

Silicone cables screened with steel braiding 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.

The screened steel braiding ensures a disturbance-free transmission of signals and impulses.

☞ The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer $\varnothing$ approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer $\varnothing$ approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
23062	2 x 0,75	7,9	14,4	90,0	18	23084	24 G 1,5	21,5	346,0	600,0	16
23063	3 G 0,75	8,3	21,6	101,0	18	23085	2 x 2,5	10,7	48,0	187,0	14
23064	4 G 0,75	9,3	29,0	129,0	18	23086	3 G 2,5	11,2	72,0	205,0	14
23065	5 G 0,75	10,0	36,0	157,0	18	23087	4 G 2,5	12,1	96,0	278,0	14
23067	7 G 0,75	10,7	50,0	177,0	18	23088	5 G 2,5	13,3	120,0	322,0	14
23068	2 x 1	8,0	19,0	97,0	17	23089	6 G 2,5	14,3	144,0	351,0	14
23069	3 G 1	8,9	29,0	122,0	17	23090	7 G 2,5	14,4	168,0	380,0	14
23070	4 G 1	9,4	38,0	141,0	17	23091	2 x 4	12,5	77,0	240,0	12
23071	5 G 1	10,4	48,0	166,0	17	23092	3 G 4	13,0	115,0	311,0	12
23073	7 G 1	11,1	67,0	197,0	17	23093	4 G 4	15,0	154,0	384,0	12
23074	2 x 1,5	9,0	29,0	127,0	16	23094	5 G 4	16,0	192,0	454,0	12
23075	3 G 1,5	9,5	43,0	145,0	16	23095	7 G 4	17,5	269,0	633,0	12
23076	4 G 1,5	10,3	58,0	173,0	16	23096	2 x 6	15,1	115,0	321,0	10
23077	5 G 1,5	11,0	72,0	202,0	16	23097	3 G 6	15,9	173,0	432,0	10
23078	6 G 1,5	12,0	86,0	240,0	16	23098	4 G 6	18,0	230,0	544,0	10
23079	7 G 1,5	12,0	101,0	244,0	16	23099	5 G 6	19,4	288,0	656,0	10
23080	8 G 1,5	13,0	115,0	261,0	16	23100	7 G 6	20,7	403,0	768,0	10
23081	12 G 1,5	15,5	173,0	327,0	16	23101	4 G 10	22,1	384,0	925,0	8
23082	14 G 1,5	16,2	202,0	382,0	16	23102	4 G 16	26,1	614,0	1235,0	6
23083	18 G 1,5	18,7	259,0	440,0	16	23103	4 G 25	30,4	960,0	1700,0	4

Dimensions and specifications may be changed without prior notice. (RE01)