

**Technical data**

- Special silicone multicore cable with higher heat-resistance range adapted to DIN VDE 0250 part 1 and DIN VDE 0285-525-2-83/ DIN EN 50525-2-83
- **Temperature range** -60°C to +180°C (for short time +220°C)
- **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** 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 7,5x cable Ø fixed installation 4x cable Ø
- **Radiation resistance** up to  $20 \times 10^6$  cJ/kg (up to 20 Mrad)

**Cable structure**

- Tinned copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of silicone
- Core identification to DIN VDE 0293-308 - up to 5 cores coloured - from 6 cores, black with continuous white numbering
- GN-YE conductor, 3 cores and above
- Cores stranded in layers with optimal lay-length
- Outer sheath of silicone
- Sheath colour preferably redbrown
- with meter marking

**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<sub>2</sub>
- **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, ozone
- 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.

**Tests**

- Halogen-free acc. to DIN VDE 0482 part 267, DIN EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- **Behaviour in fire** no flame propagation acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

**Note**

- G = with green-yellow conductor  
x = without green-yellow conductor (OB)
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- screened analogue type: **SiHF-C-Si**, confer page 232

**Application**

Silicone cables 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. Due to elastical characteristic of core insulations, these are used as flexible connection cable.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. | Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|--------------------|---------------------|------------------------|---------|----------|--|--------------------|---------------------|------------------------|---------|
| 22989    | 2 x 0,5                                | 5,6                | 9,6                 | 42,0                   | 20      | 23002    | 3 G 0,75                               | 6,8                | 21,6                | 63,0                   | 19      |
| 22990    | 3 G 0,5                                | 5,9                | 14,5                | 44,0                   | 20      | 23104    | 3 x 0,75                               | 6,8                | 21,6                | 63,0                   | 19      |
| 22940    | 3 x 0,5                                | 5,9                | 14,5                | 44,0                   | 20      | 23003    | 4 G 0,75                               | 7,6                | 29,0                | 83,0                   | 19      |
| 22991    | 4 G 0,5                                | 6,4                | 19,3                | 58,0                   | 20      | 23105    | 4 x 0,75                               | 7,6                | 29,0                | 83,0                   | 19      |
| 22941    | 4 x 0,5                                | 6,4                | 19,3                | 58,0                   | 20      | 23004    | 5 G 0,75                               | 8,5                | 36,0                | 101,0                  | 19      |
| 22992    | 5 G 0,5                                | 7,3                | 24,0                | 62,0                   | 20      | 22943    | 5 x 0,75                               | 8,5                | 36,0                | 101,0                  | 19      |
| 22942    | 5 x 0,5                                | 7,3                | 24,0                | 62,0                   | 20      | 23005    | 6 G 0,75                               | 9,2                | 43,0                | 115,0                  | 19      |
| 22993    | 6 G 0,5                                | 8,3                | 28,9                | 79,0                   | 20      | 23006    | 7 G 0,75                               | 9,2                | 50,0                | 124,0                  | 19      |
| 22994    | 7 G 0,5                                | 8,1                | 33,7                | 85,0                   | 20      | 23127    | 8 G 0,75                               | 9,9                | 57,7                | 138,0                  | 19      |
| 22995    | 8 G 0,5                                | 8,9                | 38,4                | 99,0                   | 20      | 23128    | 10 G 0,75                              | 11,1               | 72,1                | 156,0                  | 19      |
| 22996    | 10 G 0,5                               | 10,0               | 48,1                | 124,0                  | 20      | 23129    | 12 G 0,75                              | 12,2               | 86,5                | 185,0                  | 19      |
| 22997    | 12 G 0,5                               | 10,6               | 57,6                | 141,0                  | 20      | 23130    | 16 G 0,75                              | 13,7               | 115,2               | 218,0                  | 19      |
| 22998    | 16 G 0,5                               | 12,1               | 76,7                | 186,0                  | 20      | 23131    | 18 G 0,75                              | 14,6               | 129,7               | 260,0                  | 19      |
| 22999    | 18 G 0,5                               | 12,7               | 86,5                | 211,0                  | 20      | 23132    | 25 G 0,75                              | 17,2               | 180,0               | 370,0                  | 19      |
| 23000    | 25 G 0,5                               | 15,2               | 120,0               | 271,0                  | 20      | 23007    | 2 x 1                                  | 6,6                | 19,0                | 59,0                   | 18      |
| 23001    | 2 x 0,75                               | 6,4                | 14,4                | 53,0                   | 19      | 23008    | 3 G 1                                  | 7,0                | 29,0                | 77,0                   | 18      |

Continuation ▶

# SiHF silicon multicores cable, flexible, halogen-free, meter marking



| Part no. | No.cores x cross-sec. mm <sup>2</sup> | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|---------------------------------------|--------------------|---------------------|------------------------|---------|
| 22944    | 3 x 1                                 | 7,0                | 29,0                | 77,0                   | 18      |
| 23009    | 4 G 1                                 | 7,8                | 38,0                | 94,0                   | 18      |
| 22945    | 4 x 1                                 | 7,8                | 38,0                | 94,0                   | 18      |
| 23010    | 5 G 1                                 | 8,8                | 48,0                | 115,0                  | 18      |
| 22946    | 5 x 1                                 | 8,8                | 48,0                | 115,0                  | 18      |
| 23011    | 6 G 1                                 | 9,5                | 58,0                | 134,0                  | 18      |
| 23012    | 7 G 1                                 | 9,5                | 67,0                | 144,0                  | 18      |
| 23133    | 8 G 1                                 | 10,3               | 76,7                | 175,0                  | 18      |
| 24000    | 9 G 1                                 | 11,5               | 86,0                | 196,0                  | 18      |
| 23134    | 10 G 1                                | 11,5               | 96,1                | 216,0                  | 18      |
| 23135    | 12 G 1                                | 12,5               | 115,2               | 231,0                  | 18      |
| 23136    | 16 G 1                                | 14,2               | 153,5               | 302,0                  | 18      |
| 23137    | 18 G 1                                | 15,1               | 172,9               | 340,0                  | 18      |
| 23138    | 25 G 1                                | 18,0               | 240,0               | 431,0                  | 18      |
| 23013    | 2 x 1,5                               | 7,6                | 29,0                | 81,0                   | 16      |
| 23014    | 3 G 1,5                               | 8,0                | 43,0                | 98,0                   | 16      |
| 22947    | 3 x 1,5                               | 8,0                | 43,0                | 98,0                   | 16      |
| 23015    | 4 G 1,5                               | 8,7                | 58,0                | 122,0                  | 16      |
| 22948    | 4 x 1,5                               | 8,7                | 58,0                | 122,0                  | 16      |
| 23016    | 5 G 1,5                               | 9,6                | 72,0                | 147,0                  | 16      |
| 22949    | 5 x 1,5                               | 9,6                | 72,0                | 147,0                  | 16      |
| 23017    | 6 G 1,5                               | 10,4               | 86,0                | 173,0                  | 16      |
| 23018    | 7 G 1,5                               | 10,4               | 101,0               | 187,0                  | 16      |
| 23019    | 8 G 1,5                               | 11,2               | 114,0               | 213,0                  | 16      |
| 23020    | 10 G 1,5                              | 13,0               | 116,0               | 263,0                  | 16      |
| 23021    | 12 G 1,5                              | 13,9               | 173,0               | 314,0                  | 16      |
| 23022    | 14 G 1,5                              | 14,7               | 202,0               | 379,0                  | 16      |
| 23023    | 16 G 1,5                              | 16,2               | 231,0               | 445,0                  | 16      |
| 23024    | 18 G 1,5                              | 17,0               | 260,0               | 506,0                  | 16      |
| 23025    | 20 G 1,5                              | 17,5               | 288,0               | 566,0                  | 16      |
| 23026    | 24 G 1,5                              | 20,4               | 346,0               | 722,0                  | 16      |
| 23027    | 2 x 2,5                               | 8,8                | 48,0                | 134,0                  | 14      |
| 23028    | 3 G 2,5                               | 9,7                | 72,0                | 152,0                  | 14      |
| 23029    | 4 G 2,5                               | 10,6               | 96,0                | 188,0                  | 14      |
| 23030    | 5 G 2,5                               | 11,6               | 120,0               | 228,0                  | 14      |
| 23139    | 6 G 2,5                               | 12,6               | 144,0               | 304,0                  | 14      |
| 23032    | 7 G 2,5                               | 12,6               | 168,0               | 320,0                  | 14      |
| 23140    | 8 G 2,5                               | 13,6               | 192,2               | 373,0                  | 14      |

| Part no. | No.cores x cross-sec. mm <sup>2</sup> | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|---------------------------------------|--------------------|---------------------|------------------------|---------|
| 23141    | 10 G 2,5                              | 15,5               | 240,1               | 450,0                  | 14      |
| 23033    | 12 G 2,5                              | 17,1               | 288,0               | 502,0                  | 14      |
| 23142    | 16 G 2,5                              | 19,6               | 384,0               | 659,0                  | 14      |
| 23143    | 18 G 2,5                              | 20,6               | 432,2               | 761,0                  | 14      |
| 23144    | 25 G 2,5                              | 24,4               | 600,0               | 1007,0                 | 14      |
| 23034    | 2 x 4                                 | 10,8               | 77,0                | 180,0                  | 12      |
| 23035    | 3 G 4                                 | 11,4               | 115,0               | 224,0                  | 12      |
| 23036    | 4 G 4                                 | 12,5               | 154,0               | 295,0                  | 12      |
| 23037    | 5 G 4                                 | 13,9               | 192,0               | 359,0                  | 12      |
| 23039    | 7 G 4                                 | 15,6               | 269,0               | 479,0                  | 12      |
| 23040    | 2 x 6                                 | 12,4               | 115,0               | 210,0                  | 10      |
| 23041    | 3 G 6                                 | 13,2               | 173,0               | 270,0                  | 10      |
| 23042    | 4 G 6                                 | 14,8               | 230,0               | 341,0                  | 10      |
| 23043    | 5 G 6                                 | 16,5               | 288,0               | 432,0                  | 10      |
| 23045    | 7 G 6                                 | 18,0               | 403,0               | 552,0                  | 10      |
| 23046    | 2 x 10                                | 16,2               | 192,0               | 400,0                  | 8       |
| 23047    | 3 G 10                                | 17,2               | 288,0               | 507,0                  | 8       |
| 23048    | 4 G 10                                | 19,4               | 384,0               | 644,0                  | 8       |
| 23049    | 5 G 10                                | 21,4               | 480,0               | 788,0                  | 8       |
| 23145    | 7 G 10                                | 23,4               | 672,2               | 1151,0                 | 8       |
| 23050    | 2 x 16                                | 18,0               | 308,0               | 591,0                  | 6       |
| 23051    | 3 G 16                                | 19,3               | 462,0               | 749,0                  | 6       |
| 23052    | 4 G 16                                | 21,4               | 616,0               | 950,0                  | 6       |
| 23053    | 5 G 16                                | 24,0               | 770,0               | 1204,0                 | 6       |
| 23146    | 7 G 16                                | 26,4               | 1075,3              | 1682,0                 | 6       |
| 23054    | 2 x 25                                | 22,0               | 480,0               | 700,0                  | 4       |
| 23055    | 3 G 25                                | 23,4               | 720,0               | 1100,0                 | 4       |
| 23056    | 4 G 25                                | 26,3               | 960,0               | 1500,0                 | 4       |
| 23057    | 2 x 35                                | 24,6               | 672,0               | 1100,0                 | 2       |
| 23058    | 3 G 35                                | 26,3               | 1008,0              | 1500,0                 | 2       |
| 23059    | 4 G 35                                | 29,1               | 1344,0              | 2100,0                 | 2       |

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



Suitable accessories can be found in Chapter X.  
• Cable protection tube - HTP