



## Technical data

- Spezial-silicon single core with higher heat-resistance range adapted to DIN VDE 0250 Teil 1 and part 502
- **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
- **Minimum bending radius**  
15x cable Ø
- **Radiation resistance**  
up to 20 x 10<sup>6</sup> cJ/kg (up to 20 Mrad)

## Cable structure

### Type SiF

- Tinned copper conductors  
≥0,5 mm<sup>2</sup> to DIN VDE 0295 Kl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5  
for 0,25 mm<sup>2</sup> = 14x0,15 mm
- Silicone core insulation

### Type SiFF

- as SiF but with high flexible copper strands (see content technical information)
- Strand make-up  
0,25 to 1,0 mm<sup>2</sup> - cl. 6 col. 7  
(single wire Ø 0,05 mm)  
1,5 to 10 mm<sup>2</sup> - cl. 6 col. 6  
(single wire Ø 0,07 mm)

## Properties

- **Advantages**  
High ignition or flash point
- **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
- **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

- Please complete the part number for these cables by adding the suffix for the colour required as per the list:  
00 = green, 01 = black, 02 = red,  
03 = blue, 04 = brown, 05 = white,  
06 = grey, 07 = violet, 08 = yellow,  
09 = orange, 10 = transparent,  
11 = pink, 12 = beige, 13 = twin colour

## Application

Special cables for use in high, resp. low temperature areas. They are used mainly in the steel producing industries, in aviation industries as well as in ship building, cement, glas and ceramic factories. As this cables are halogen-free, especially suited for use in power stations.

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

### SiF

Part No.	Cross-section mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
232xx	0,25	1,9	2,4	5,5	24
233xx	0,5	2,1	4,8	8,6	20
234xx	0,75	2,4	7,2	11,8	18
235xx	1	2,5	9,6	13,5	17
236xx	1,5	2,8	14,4	18,5	16
237xx	2,5	3,4	24,0	30,0	14
238xx	4	4,2	38,0	47,3	12
239xx	6	5,2	58,0	71,1	10
246xx	10	7,0	96,0	119,4	8
247xx	16	8,4	154,0	187,7	6
248xx	25	10,3	240,0	289,6	4

### SiFF

Part No.	Cross-section mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
451xx	0,25	1,9	2,4	6,0	24
452xx	0,5	2,1	4,8	10,0	20
453xx	0,75	2,5	7,2	13,0	18
454xx	1	2,7	9,6	15,0	17
455xx	1,5	3,0	14,4	19,0	16
456xx	2,5	3,8	24,0	32,0	14
457xx	4	4,6	38,0	50,0	12
458xx	6	5,7	58,0	73,0	10
459xx	10	7,6	96,0	125,0	8

### SiF (wire colour black)

Part No.	Cross-section mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
23953	35	11,6	336,0	398,3	2
23954	50	13,9	480,0	559,7	1
23955	70	16,0	672,0	765,8	2/0
23956	95	18,4	912,0	1031,5	3/0
23957	120	20,0	1152,0	1284,6	4/0
23958	150	23,0	1440,0	1563,4	300 kcmil
23959	185	24,9	1776,0	1858,2	350 kcmil

Dimensions and specifications may be changed without prior notice. (RK01)