



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** U₀/U 300/500 V
- **Test voltage** 2000 V
- **Breakdown voltage** min. 5000 V
- **Minimum bending radius**
6x core Ø
- **Radiation resistance**
up to 20 x 10⁶ cJ/kg (up to 20 Mrad)

Cable structure

Type SiF

- Tinned copper-conductor, from 0,5 mm² to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Conductor construction
0,25 mm² = 14x0,15 mm
- Core insulation of silicone

Type SiFF

- Tinned Cu-conductor, to DIN VDE 0295 cl.6, extra fine-wire, BS 6360 cl.6, IEC 60228 cl.6 (single wire Ø 0,07 mm)
- Core insulation of silicone

Properties

• 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
- High flash points
- 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

- Corrosiveness of combustion gases (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

- 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 = 2-colour
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

Application

Special single cores 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 single cores are halogen-free, especially suited for use in power stations.

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

SiF

Part no.	Cross-section mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
232xx	0,25	1,9	2,4	5,5	24
233xx	0,5	2,7	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	5,0	58,0	71,1	10
246xx	10	6,6	96,0	119,4	8
247xx	16	7,4	154,0	187,7	6
248xx	25	9,2	240,0	289,6	4

SiF (wire colour black)

Part no.	Cross-section mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
23953	35	10,3	336,0	398,3	2
23954	50	11,8	480,0	559,7	1
23955	70	13,6	672,0	765,8	2/0
23956	95	15,6	912,0	1091,5	3/0
23957	120	17,6	1152,0	1284,6	4/0
23958	150	19,6	1440,0	1583,4	300 kcmil
23959	185	22,4	1776,0	1858,2	350 kcmil

SiFF

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