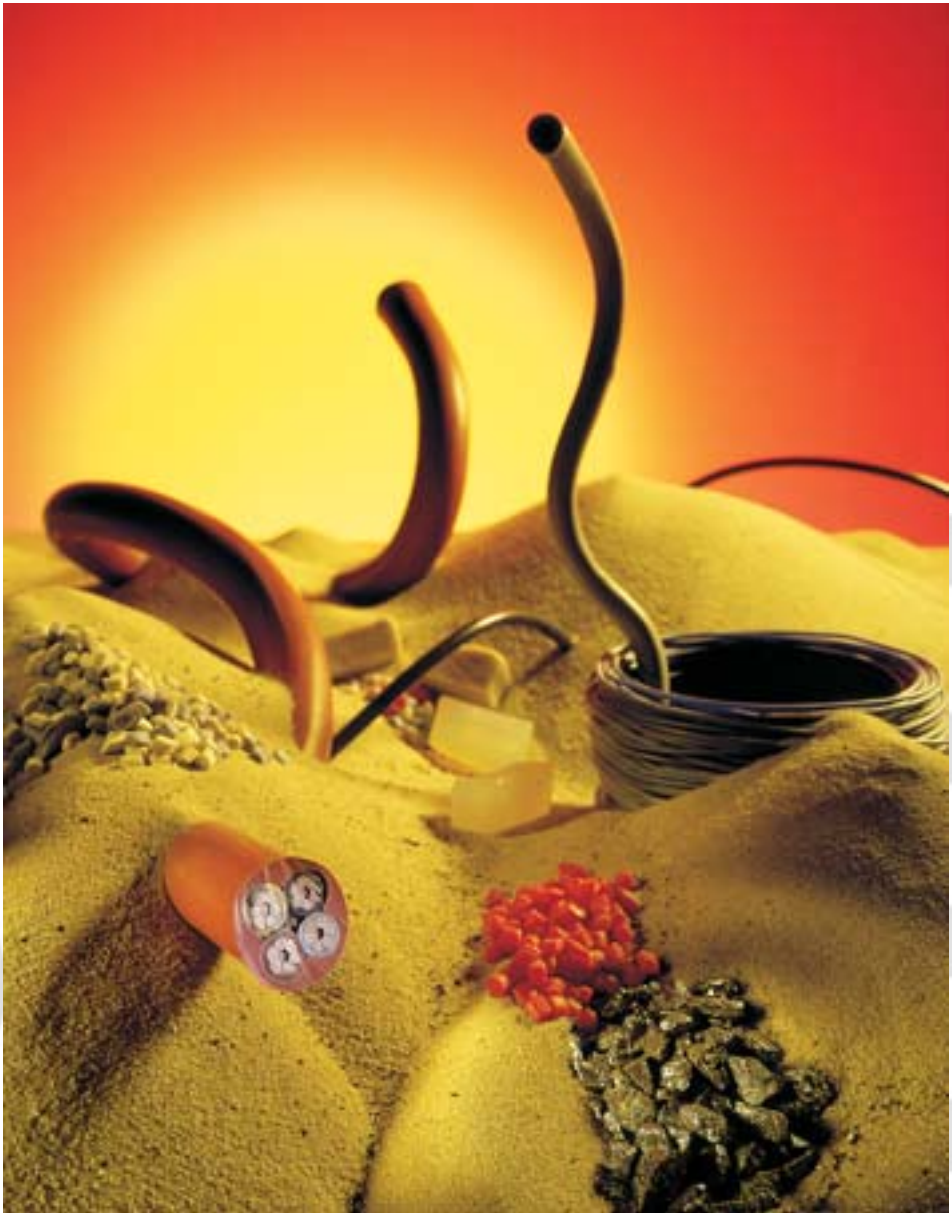




SILICONE INSULATED CABLES AND WIRES



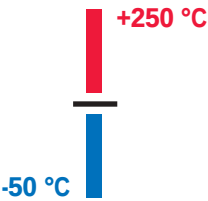
SILICONE INSULATED CABLES AND WIRES

Products

Silicone Rubber
Cables

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Silicone rubber single core, solid

SID

Construction

Conductor: Cu bare, tp, solid, acc. to VDE 0295 class 1
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request

Application

For wiring at high ambient temperatures, e.g.
- Lighting
- Domestic appliances
- Instrumentation engineering
- Mechanical engineering

Technical data

Temperature range: - 50 °C up to +180 °C, Cu bare + 130 °C short-term + 250 °C
Rated voltage U0/U: 300/500 Volt
Test voltage: 2000 Volt
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

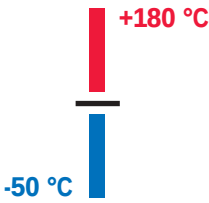
→ On request the itemized SiR cores are also available in various conductor materials
→ SiR cores with solid conductor and VDE approvals see page 56.
→ Stranded SiR cores please refer to page 59.

cross section [mm²]	conductorØ [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,80	2,0	4,8	8
0,75	0,98	2,1	7,2	11
1	1,13	2,3	9,6	13
1,5	1,38	2,5	14,4	18
2,5	1,78	3,1	24	29
4	2,26	3,8	38	45

Products

Silicone Rubber
Cables





SID
*N2GFA resp. (N)2GFA

Silicone rubber single core, solid, with VDE-approval

Construction

Conductor: Cu bare, tp, np, solid acc. to VDE 0295 class 1 or pure nickel
Pure nickel, solid
*N2GFA tpc only
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request
Identification: Printing of VDE registration number

Application

For wiring in electrical appliances and lighting up to an operating temperature of:
130 °C with bare conductor
180 °C with tp conductor
180 °C with np conductor
180 °C with pure nickel conductor taking into consideration reduced conductor conductivity

Technical data

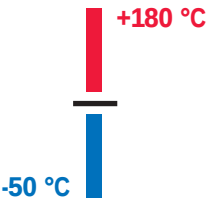
Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/300 V
Test voltage: 2000 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

- SiR cores with stranded conductor and VDE approval see page 60.
- SiR cores of industrial standard quality (without VDE approval) please refer to page 55.
- Manufacturing according to DIN 0250 part 1 and part 502

cross section [mm²]	conductorØ [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight ca. [kg/km]
0,5	0,80	2,0	4,8	8
*0,75	0,98	2,1	7,2	11
1	1,13	2,3	9,6	13
1,5	1,38	2,7	14,4	18
2,5	1,78	3,3	24	29





Silicone rubber single core, solid, to VDE 0282 part 3

SID
H05S-U

Products

Silicone Rubber
Cables

Construction

Conductor: Cu bare, tp sp, np, solid, acc. to VDE 0295 class 1 and HD 383 class 1 resp.
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request
Identification: Print on insulation

Application

For wiring in electrical appliances and lighting up to an operating temperature of:
130 °C with bare copper conductor
180 °C with tpc conductor
180 °C with npc conductor
180 °C with spc conductor

Technical data

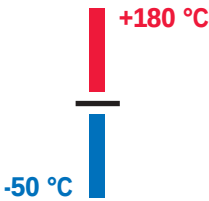
Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ SiR cores with stranded conductors and VDE approval please refer to page 60 (N2GFAF and VDE ÜG) and page 61 (H05S-K)
→ SiR cores of industrial standard quality (without VDE approval) see page 55 (solid) and page 59 (stranded).

cross section [mm²]	conductorØ [mm]	o.d. [mm] + 5 % - 3 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,80	2,4	4,8	11
0,75	0,98	2,5	7,2	14
1	1,13	2,7	9,6	17
1,5	1,38	3,1	14,4	24
2,5	1,78	3,7	24	36





SIDGL
A05SJ-U

Silicone rubber/glass fibre single core, solid, to VDE 0282 part 3

Construction

Conductor: Cu bare, tp sp, np, solid, acc. to VDE 0295 class 1 and HD 383 class 1 resp.
Insulation: SiR E12 to VDE 0282 part 1
Colour: White
Braid: Silicone impregnated glass-fibre acc. to HD 22.1
Identification: Identification tracer

Application

For internal wiring at high ambient temperatures, e.g.
- Lighting
- Domestic appliances
- Mechanical engineering

Technical data

Temperature range: - 50 °C up to +180 °C
Cu bare + 130 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

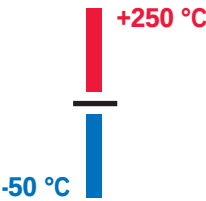
Notes

→ The cross sections (0,5 and 0,75 mm2) itemized in the table below are not included in VDE 0282 T3
→ SiR/glass-fibre cores with stranded copper conductors please refer to page 66 (0,5 - 16 mm2) and page 67 (25 - 185 mm2).

cross section [mm²]	conductorØ [mm]	o.d. [mm] + 5 % - 3 %	copper weight [kg/km]	weight approx. [kg/km]
0,5*	0,8	2,6	4,8	11
0,75*	0,98	2,7	7,2	14
1	1,13	2,9	9,6	18
1,5	1,38	3,8	14,4	24
2,5	1,78	3,9	24	35
4	2,26	4,4	38	52
6	2,78	4,9	59	74
10	3,6	6,3	96	121

* according to VDE 0282 part 3





Silicone rubber single core, stranded

SIF

Products

Silicone Rubber
Cables

Construction

Conductor: Cu bare, tp, sp, np, stranded,
acc. to VDE 0295 class 5 or pure nickel
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request

Application

For wiring at high ambient temperatures, e.g.
- Lighting
- Domestic appliances
- Instrumentation engineering
- Mechanical engineering

Technical data

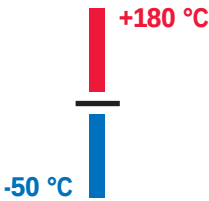
Temperature range: - 50 °C up to +180 °C
Cu bare + 130 °C
short-term + 250 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ VDE-approved SiR cores see page 60 (N2GFAF and VDE ÜG) and
page 61 (H05S-K)
→ For increased mechanical stress we offer SiR cores with glass fibre
braid (page 66+67).

cross section [mm²]	maximumØ of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,25	0,17	0,77	1,8	2,4	6
0,5	0,21	0,98	2,1	4,8	9
0,75	0,21	1,16	2,3	7,2	11
1	0,21	1,35	2,4	9,6	14
1,5	0,26	1,61	2,7	14,4	19
2,5	0,26	2,11	3,2	24	29
4	0,31	2,58	4,0	38	44
6	0,31	3,22	4,6	58	62
10	0,41	4,78	6,5	96	124
16	0,41	6,0	7,7	154	185
25	0,41	7,46	9,5	240	281
35	0,41	8,93	10,9	336	381
50	0,41	10,4	12,7	480	536
70	0,51	12,44	14,6	672	744
95	0,51	14,91	17,4	912	989
120	0,51	16,53	18,9	1152	1221
150	0,51	17,96	20,7	1440	1521
185	0,51	20,48	23,5	1776	1899
240	0,51	23,31	26,6	2304	2600





SIF

*N2GFAF resp. (N)2GFAF

Silicone rubber single core, stranded, with VDE-approval

Construction

Conductor: Cu bare, tp, np, stranded, acc. to VDE 0295 class 5 or pure nickel
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request
Identification: Print on insulation

Application

For wiring in electrical appliances and lighting up to an operating temperature of:
130 °C with bare conductor
180 °C with tp conductor
180 °C with np conductor
180 °C with pure nickel conductor taking into consideration reduced conductor conductivity

Technical data

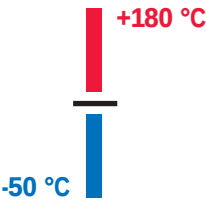
Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/300 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ VDE-approved SiR cores are also available with conductors to VDE 0295 class 2
→ SiR cores with solid conductor and VDE approval see page 56.
→ SiR cores of industrial standard quality (without VDE approval) please refer to page 59.

cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,21	0,98	2,1	4,8	9
*0,75	0,21	1,16	2,3	7,2	11
1	0,21	1,35	2,4	9,6	14
1,5	0,26	1,61	2,9	14,4	20
2,5	0,26	2,11	3,5	24	32





Silicone rubber single core, stranded, to VDE 0282 part 3

SIF
H05S-K

Products

Silicone Rubber
Cables

Construction

Conductor: Cu bare, tp,sp, np, stranded, acc. toVDE 0295 class 5 and HD 383 class 5 resp.
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request
Identification: Print on insulation

Application

For wiring in electrical appliances and lighting up to an operating temperature of:
130 °C with bare conductor
180 °C with tpc conductor
180 °C with npc conductor
180 °C with spc conductor

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ SiR cores with solid conductor and VDE-approval please refer to page 56 (N2GFA and VDE ÜG) and page 57 (H05S-U)
→ SiR cores of industrial standard quality (without VDE-approval) see page 55 (solid) and page 59 (stranded).

cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] - 4 % + 6 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,21	0,98	2,5	4,8	12
0,75	0,21	1,16	2,7	7,2	15
1	0,21	1,35	2,8	9,6	17
1,5	0,26	1,61	3,3	14,4	25
2,5	0,26	2,11	3,9	24	37





SIF
UL file no. E 69837 (M) Silicone single core with UL approval

Construction

Conductor: Conductor construction and material according to table below
Insulation: Silicone to UL 1581, subject 758, class 22
Colour: On request

Application

For internal wiring of appliances taking into consideration corresponding style specifications

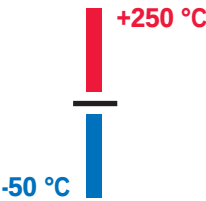
Technical data

Temperature range: - 50 °C up to max. + 250 °C
Rated voltage U0/U: 300/600/1000 V
Test voltage: According to style specifications

Notes

- The itemized cables are also available with combined UL/CSA approval
- Silicone cores with UL approval and glass fibre braid refer to pages 68-69.
- UL/CSA approved cables with additional insulation materials see page 148.

UL Style***	AWG	average wall thickness [mm]	range		conductor construction	
			temperature [°C]	voltage [Volt]	material	solid / stranded
3066	28 - 20	0,8	200	600	WM-NrCrFe	x
3077	≥ 28	0,8	150	300	WM-Alloy	x x
3078	≥ 28	1,6	150	300	WM-Alloy	x x
3099*	20 - 16	0,8	150	300	tpc, spc, npc	x
3122	26 - 16	0,5	200	300	tpc**, spc, npc, pure nickel	x x
3123	30 - 16	0,8	150	600	tpc, spc, npc	x
3132	30 - 16	0,5	150	300	tpc, spc, npc, pure nickel	x x
3133	30 - 16	0,8	150	600	tpc, spc, npc, pure nickel	x x
3134	18 - 12	0,8	150	600	tpc, spc, npc, pure nickel	x x
3135	26 - 12	0,8	200	600	tpc**, spc, npc, pure nickel	x x
3136	26 - 20	1,2	150	300	tpc, spc, npc, pure nickel	x x
3137	26 - 20	1,2	150	600	tpc, spc, npc, pure nickel	x x
3138	18 - 9	1,2	150	600	tpc, spc, npc, pure nickel	x x
3139	26 - 12	1,2	200	600	tpc**, spc, npc, pure nickel	x x
3140	26 - 20	1,6	150	300	tpc, spc, npc, pure nickel	x x
3141	26 - 20	1,6	150	600	tpc, spc, npc, pure nickel	x x
3142	18 - 12	1,6	150	600	tpc, spc, npc, pure nickel	x x
3143	18 - 12	1,6	200	600	tpc**, spc, npc, pure nickel	x x
3147	≥ 28	1,2	150	300	WM-Alloy	x x
3171	22 - 12	0,8	105	600	bare copper, Ø 0,0508 mm	x



Silicone single core with UL approval

SIF
UL file no. E 69837 (M)

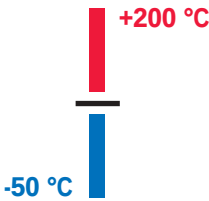
Products

Silicone Rubber
Cables

UL Style***	AWG	average wall thickness [mm]	range		conductor construction		
			temperature [°C]	voltage [Volt]	material	solid / stranded	
3211	26 - 14	0,8	150	300	tpc, spc, npc, pure nickel	x	x
3212	26 - 10	1,2	150	600	tpc, spc, npc, pure nickel	x	x
3213	8 - 2	1,6	150	600	tpc, spc, npc, pure nickel		x
3214	1 - 4/0	2,1	150	600	tpc, spc, npc, pure nickel		x
3215	18 - 16	1,6	150	600	tpc, spc, npc, pure nickel		x
3216	14 - 10	2,1	150	600	tpc, spc, npc, pure nickel		x
3232*	26 - 16	0,5	105	300	tpc, spc, npc		x
3240	26 - 10	1,2	200	600	tpc** , spc, npc, pure nickel	bunched conductor	
3241	26 - 14	0,8	200	300	tpc** , spc, npc, pure nickel	bunched conductor	
3251	30 - 10	1,2	250	600	spc, npc, Fe np	solid	stranded
3253	30 - 12	0,8	250	300	spc, npc, Fe np	x	x
3268	18 - 12	0,8	200	600	Fe np, V2A, V4A	x	x
3512	0,5 - 4 mm²	0,8	200	600	tpc, spc, npc	x	x
	4,1 - 9 mm²	1,2	200	600	tpc, spc, npc	x	x
	9,1 - 35 mm²	1,6	200	600	tpc, spc, npc	x	x
	35,1 - 100 mm²	2,1	200	600	tpc, spc, npc	x	x
	100,1 - 250 mm²	2,4	200	600	tpc, spc, npc	x	x
3513	0,5 - 4 mm²	0,8	200	600	tpc, spc, npc	x	x
	4,1 - 9 mm²	1,2	200	600	tpc, spc, npc	x	x
	9,1 - 35 mm²	1,6	200	600	tpc, spc, npc	x	x
	35,1 - 100 mm²	2,1	200	600	tpc, spc, npc	x	x
	100,1 - 250 mm²	2,4	200	600	tpc, spc, npc	x	x
3580	26 - 9	1,2	150	1000	tpc, spc, npc, pure nickel	x	x
	8 - 2	1,6	150	1000	tpc, spc, npc, pure nickel	x	x
	1 - 4/0	2,1	150	1000	tpc, spc, npc, pure nickel	x	x
	250 - 500 kcmil	2,4	150	1000	tpc, spc, npc, pure nickel	x	x

single wire diameter:
* ≥ 0,0787 mm
** tpc ≥ 0,386 mm
*** pay attention to UL-Style specifications.





SIF

CSA file no. LL 59063

Silicone single core with CSA approval

Construction

Conductor: Cu bare, tp, sp, np to CSA-C22.2 No. 210.2-M90
Insulation: Silicone to CSA-C22.2-M90
Colour: On request (except transparent and clear)

Application

Internal wiring of appliances

Technical data

Temperature range: - 50 °C up to max. + 200 °C
Rated voltage U0/U: 300 / 600 /1000 V
Test voltage: According to CSA standard
Flame test: FT1

Notes

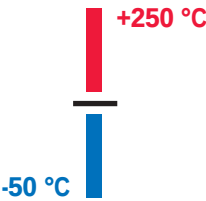
- The itemized cables are also available with combined UL/CSA approval
- Silicone cores with CSA approval and glass fibre braid refer to page 70.
- UL/CSA approved cables with additional insulation materials refer to page 148 onwards.

AWG	conductor material*	average wall thickness (minimum wall thickness) [mm]	range	
			temperature [°C]	voltage [Volt]
32 - 16	bare copper tpc spc npc	0,8 (0,76)	150	300
14 - 12		0,8 (0,76)	150	300
10		1,2 (1,14)	150	300
8 - 2		1,6 (1,52)	150	300
1 - 4/0		2,1 (2,03)	150	300
32 - 16		0,8 (0,76)	150	600
14 - 12		0,8 (0,76)	150	600
10		0,8 (0,76)	150	600
8 - 2		1,6 (1,52)	150	600
1 - 4/0		2,1 (2,03)	150	600
32 - 12		0,8 (0,76)	150	1000
10		1,2 (1,14)	150	1000
8 - 2		1,6 (1,52)	150	1000
1 - 4/0		2,1 (2,03)	150	1000
32 - 16		0,8 (0,76)	200	300
14 - 12		0,8 (0,76)	200	300
10		1,2 (1,14)	200	300
8 - 2		1,6 (1,52)	200	300
1 - 4/0		2,1 (2,03)	200	300
32 - 24		0,8 (0,76)	200	600
22 - 12		0,8 (0,76)	200	600
10		1,2 (1,14)	200	600
8 - 2		1,6 (1,52)	200	600
1 - 4/0		2,1 (2,03)	200	600
32 - 12		0,8 (0,76)	200	1000
10		1,2 (1,14)	200	1000
8 - 2		1,6 (1,52)	200	1000
1 - 4/0		2,1 (2,03)	200	1000

* temperature limits of conductor
(C 22.2 no. 210.2 - M 90)

conductor material	temperature limit [°C]	conductor material	temperature limit [°C]
bare copper, single wire Ø < 0,38 mm	150	spc	200
bare copper, single wire Ø ≥ 0,38 mm	200	npc	250
tpc, single wire Ø < 0,38 mm	150	npc 27 %	450
tpc, single wire Ø ≥ 0,38 mm	200		





Silicone rubber single core, highly flexible

SIFF

Construction

Conductor: Cu bare, tp, highly flexible
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request

Application

For internal wiring at high ambient temperatures, e.g.

- Lighting
- Domestic appliances
- Instrumentation engineering
- Mechanical engineering

Technical data

Temperature range: - 50 °C up to +180 °C,
Cu bare + 130 °C
short-term + 250 °C

Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Note

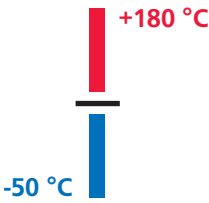
→ For increased mechanical stress we offer highly flexible SiR cores with notch resistant insulation and/or increased wall thickness.

cross section [mm²]	single wireØ [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,25	0,05	0,74	1,8	2,5	6
0,5	0,05	1,05	2,2	5	10
0,75	0,05	1,31	2,4	7,5	12
1	0,05	1,58	2,7	10	16
1,5	0,07	2,0	3,1	15	22
2,5	0,07	2,52	3,8	25	35
4	0,07	3,26	4,7	40	53
6	0,07	3,89	5,2	60	76
10	0,07	5,57	7	100	123
16	0,07	6,83	8,5	160	189
25	0,10	8,82	10,2	255	291
35	0,10	9,66	11,8	360	404

Products

Silicone Rubber
Cables





SIFGL
H05SJ-K

Silicone rubber/glass-fibre single core, stranded, to VDE 0282 part 3

Construction

Conductor: Cu bare, tp, sp, np, stranded, acc. to VDE 0295 class 5 and HD 383 class 5 resp.
Insulation: SiR E12 to VDE 0282 part 1
Colour: White
Braid: Silicone impregnated glass-fibre acc. to HD 22.1
Identification: Identification tracer

Application

For internal wiring at high ambient temperatures, e.g.
- Lighting
- Domestic appliances
- Mechanical engineering

Technical data

Temperature range: - 50 °C up to +180 °C
Cu bare + 130 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

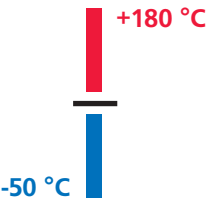
Notes

→ Cross sections >16 mm² see page 67 (A05SJ-K)
→ SiR/glass-fibre cores are also available with different cross sections and various conductor materials, but without VDE-approval.

cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] + 5 % - 2 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,21	0,98	2,7	4,8	12
0,75	0,21	1,16	2,9	7,2	15
1	0,21	1,35	3,0	9,6	18
1,5	0,26	1,61	3,5	14,4	22
2,5	0,26	2,11	4,1	24	35
4	0,31	2,58	4,6	38	49
6	0,31	3,22	5,2	58	68
10	0,41	4,78	7,2	96	131
16	0,41	6,0	8,4	154	197

cross sections > 16 mm² see next page - A05SJ-K





Silicone rubber/glass-fibre single core, stranded, to VDE 0282 part 3

SIFGL
A05SJ-K

Products

Silicone Rubber
Cables

Construction

Conductor: Cu bare, tp, sp, np, stranded, acc. to VDE 0295 class 5 and HD 383 class 5 resp.
Insulation: SiR E12 to VDE 0282 part 1
Colour: White
Braid: Silicone impregnated glass-fibre acc. to HD 22.1
Identification: Identification tracer

Application

For internal wiring at high ambient temperatures, e.g.
- Lighting
- Domestic appliances
- Mechanical engineering

Technical data

Temperature range: - 50 °C up to +180 °C
Cu bare + 130 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ The itemized cross sections (120 mm² - 185 mm²) mentioned in the table below are not included in VDE 0282 T3
→ Cross sections < 25 mm² see page 66 (H05SJ-K)
→ SiR/glass-fibre cores are also available with different cross sections and various conductor materials but without VDE-approval.

cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
25	0,41	7,46	10,2	240	295
35	0,41	8,93	11,6	336	394
50	0,41	10,4	13,4	480	550
70	0,51	12,44	15,3	672	761
95	0,51	14,91	18,1	912	1003
120*	0,51	16,53	19,6	1152	1239
150*	0,51	17,96	21,4	1140	1536
185*	0,51	20,48	24,2	1776	1924

* according to VDE 0282 part 3





SIFGL
UL file no. E 69837 (M) Silicone/glass fibre single core with UL approval

Construction

Conductor: Conductor construction and material according to table below
Insulation: Silicone to UL 1581, subject 758, class 22
Colour: White or on request
Braid: Silicone impregnated glass fibre

Application

For internal wiring of appliances taking into consideration corresponding style specifications

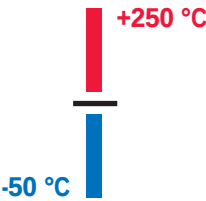
Technical data

Temperature range: - 50 °C up to max. + 250 °C
Rated voltage U0/U: 300 and 600 V resp.
Test voltage: Acc. to style specifications

Notes

- The itemized cables are also available with combined UL/CSA approval
- Silicone cores with UL approval without glass fibre braid refer to pages 62-63.
- UL/CSA approved cables with additional insulation materials see page 148.

UL Style***	AWG	average wall thickness [mm]	range		conductor construction		
			temperature [°C]	voltage [Volt]	material	solid / stranded	
3067	28 - 20	0,8	200	600	Specific resistance material-NrCrFe	x	
3068	30 - 16	0,5	150	300	tpc, spc, npc, pure nickel	x	x
3069	26 - 20	0,8	150	600	tpc, spc, npc, pure nickel	x	x
3070	18 - 12	0,8	150	600	tpc, spc, npc, pure nickel	x	x
3071	18 - 13	0,8	200	600	tpc**, spc, npc, pure nickel	x	x
3074	12	0,8	200	600	tpc**, spc, npc, pure nickel	x	x
3075	10	1,2	200	600	tpc**, spc, npc, pure nickel	x	x
3076	≥ 28	0,8	150	300	Specific resistance material-Alloy	x	x
3100	12	0,8	150	600	tpc*, spc, npc	x	x
3101	10	1,2	150	600	tpc, spc, npc, pure nickel	x	x
3113	18	1,6	150	600	tpc, Ø ≥ 0,254 mm		x
3115	20	0,8	150	300	bare copper, 7x15x0,08 mmØ		x
3125	8 - 2	1,6	200	600	tpc**, spc, npc		x
3126	1 - 4/0	2,1	200	600	tpc**, spc, npc		x
3127	8 - 2	1,6	150	600	tpc**, spc, npc		x
3128	1 - 4/0	2,1	150	600	tpc**, spc, npc		x
3132	30 - 16	0,5	150	300	tpc, spc, npc, pure nickel	x	x



Silicone/glass fibre single core with UL approval

SIFGL
UL file no. E 69837 (M)

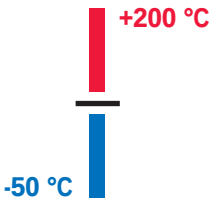
Products

Silicone Rubber
Cables

UL Style***	AWG	average wall thickness [mm]	range		conductor construction		
			temperature [°C]	voltage [Volt]	material	solid / stranded	
3144	26 - 12	1,2	200	600	tpc** , spc, npc, pure nickel	x	x
3145	12	1,6	200	600	tpc** , spc, npc, pure nickel	x	x
3146	≥ 28	1,2	150	300	specific resistance material-Alloy	x	x
3172	26 - 18	0,8	200	600	tpc** , spc, npc	x	x
3207	18	1,6	150	600	tpc, Ø ≥ 0,254 mm		x
3208	18 - 12	1,6	150	600	tpc, spc, npc, pure nickel	x	x
3209	18 - 12	1,6	200	600	tpc** , spc, npc, pure nickel	x	x
3210	18 - 12	1,6	150	600	tpc, spc, npc, pure nickel	x	x
3252	30 - 10	0,8	250	600	spc, npc, Fe np	x	x
3254	30 - 12	0,8	250	300	spc, npc, Fe np	x	x
3278	8 - 2	1,6	150	600	tpc, spc, npc, pure nickel	x	x
	1 - 4/0	2,1	150	600	tpc, spc, npc, pure nickel	x	x

single wire diameter:
* tpc ≥ 0,254 mm
** tpc ≥ 0,386 mm
*** pay attention to UL-Style specifications.





SIFGL
CSA file no. LL 59063

Silicone/glass fibre single core with CSA approval

Construction

Conductor: Cu bare, tp, sp, np to CSA-C22.2 No. 210.2-M90
Insulation: Silicone to CSA-C22.2 No. 210.2-M90
Colour: On request (except transparent and clear)
Braid: Silicone impregnated glass fibre

Application

Internal wiring of appliances

Technical data

Temperature range: - 50 °C up to max. + 200 °C
Rated voltage U0/U: 300 / 600 /1000 V
Test voltage: According to CSA standard
Flame test: FT1

Notes

- The itemized cables are also available with combined UL/CSA approval
- Silicone cores with CSA approval without glass fibre braid see page 64.
- UL/CSA approved cables with additional insulation materials refer to page 148.

AWG	conductor material*	average wall thickness (minimum wall thickness) [mm]	range	
			temperature [°C]	voltage [Volt]
32 - 16	bare copper tpc spc npc	0,8 (0,76)	150	300
14 - 12		0,8 (0,76)	150	300
10		1,2 (1,14)	150	300
8 - 2		1,6 (1,52)	150	300
1 - 4/0		2,1 (2,03)	150	300
32 - 16		0,8 (0,76)	150	600
14 - 12		0,8 (0,76)	150	600
10		0,8 (0,76)	150	600
8 - 2		1,6 (1,52)	150	600
1 - 4/0		2,1 (2,03)	150	600
32 - 12		0,8 (0,76)	150	1000
10		1,2 (1,14)	150	1000
8 - 2		1,6 (1,52)	150	1000
1 - 4/0		2,1 (2,03)	150	1000
32 - 16		0,8 (0,76)	200	300
14 - 12		0,8 (0,76)	200	300
10		1,2 (1,14)	200	300
8 - 2		1,6 (1,52)	200	300
1 - 4/0		2,1 (2,03)	200	300
32 - 24		0,8 (0,76)	200	600
22 - 12		0,8 (0,76)	200	600
10		1,2 (1,14)	200	600
8 - 2		1,6 (1,52)	200	600
1 - 4/0		2,1 (2,03)	200	600
32 - 12		0,8 (0,76)	200	1000
10		1,2 (1,14)	200	1000
8 - 2		1,6 (1,52)	200	1000
1 - 4/0		2,1 (2,03)	200	1000

* temperature limits of conductor
(C 22.2 No. 210.2 - M 90)

conductor material

bare copper, single wire Ø < 0,38 mm
bare copper, single wire Ø ≥ 0,38 mm
tpc, single wire Ø < 0,38 mm
tpc, single wire Ø ≥ 0,38 mm

temperature limit [°C]

150
200
150
200

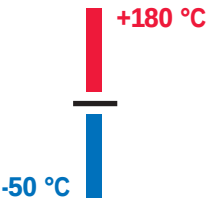
conductor material

spc
npc
npc 27 %

temperature limit [°C]

200
250
450





Silicone single core double insulated, solid, with VDE-approval

SISID
VDE-reg. no. 6574 9049

Products

Silicone Rubber
Cables

Construction

Conductor: Cu bare, tp, np, solid, acc. to VDE 0295 class 1
Pure nickel, solid
1st insulation: SiR E12 to VDE 0282 part 1
2nd insulation: SiR E12 to VDE 0282 part 1
Colour: Black or on request
Identification: Printing of VDE registration number on 2nd insulation

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/300 V
Test voltage: 2000 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Application

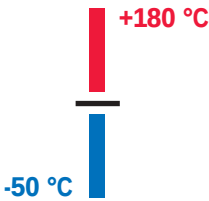
For wiring in electrical appliances and lighting up to an operating temperature of:
130 °C with bare copper conductor
180 °C with tpc conductor
180 °C with npc conductor
180 °C with pure nickel conductor taking into consideration reduced conductor conductivity

Note

→ Double insulated silicone cores with stranded conductors see page 72.

cross section [mm²]	conductor Ø [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,8	3,1	4,8	14
0,75	0,98	3,3	7,2	17
1	1,13	3,5	9,6	20
1,5	1,38	4,1	14,4	28
2,5	1,78	4,9	24	43





SISIF Silicone single core double insulated, stranded, with VDE-approval
VDE-reg. no. 6574 9049

Construction

Conductor: Cu bare, tp, np, stranded, acc. to VDE 0295 class 5 or pure nickel
1st insulation: SiR E12 to VDE 0282 part 1
2nd insulation: SiR E12 to VDE 0282 part 1
Colour: Black or on request
Identification: Printing of VDE registration number on 2nd insulation

Application

For wiring in electrical appliances and lighting up to an operating temperature of:
130 °C with bare copper conductor
180 °C with tpc conductor
180 °C with npc conductor
180 °C with pure nickel conductor taking into consideration reduced conductor conductivity

Technical data

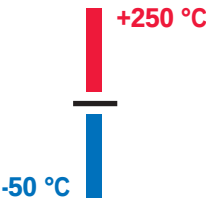
Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/300 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

- On request the itemized cables are also available with rated voltage 300/500 V (ÜG 9869) for use in ignition devices with ignition voltages r.m.s. up to 5kV.
- Double insulated silicone cores with VDE-ÜG are also available with conductors to VDE 0295 class 2.
- Double insulated silicone cores with solid conductor see page 71.

cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,21	0,98	3,3	4,8	15
0,75	0,21	1,16	3,4	7,2	18
1	0,21	1,35	3,6	9,6	20
1,5	0,26	1,61	4,3	14,4	29
2,5	0,26	2,11	5,1	24	46





Silicone ignition cable

SIFZÜ

Products

Silicone Rubber
Cables

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 2 and class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: Black or on request

Application

For wiring at high ambient temperatures, e.g.
- Lighting
- Heating installations
- Mechanical engineering
- Traffic and automotive

Technical data

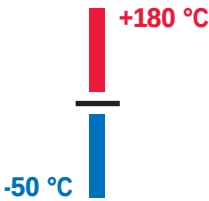
Temperature range: - 50 °C up to +180 °C, short-term + 250 °C
Rated voltage U0/U: 20 kV
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Note

→ For higher ignition voltages we can offer special high voltage silicone cables according to your requirements

cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	ignition voltage [kV]	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,32	0,96	5	6	4,8	29,2
1	0,26	1,35	7	8	9,6	54,9
1,5	0,26	1,61	8	10	14,4	70,9





SIF Silicone single core 0,6/1 kV with VDE-approval
VDE-reg. no. 6574 9835

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request
Identification: Printing of VDE registration number

Application

For wiring in ignition devices and lighting up to an operating temperature of 180°C. This cable can be used in ignition devices with an ignition voltage of up to 5 kV.

Technical data

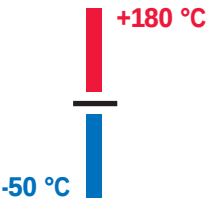
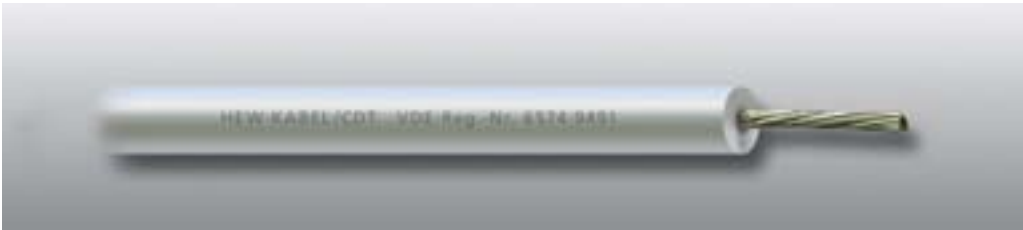
Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 0,6/1 kV
Test voltage: 5 kV
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Note

→ For higher ignition voltages we can offer special high voltage silicone cables according to your requirements.

cross section [mm²]	maximum Ø of single wires [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,21	0,98	3,0	4,8	12
0,75	0,21	1,16	3,2	7,2	15
1	0,21	1,35	3,4	9,6	18
1,5	0,26	1,61	3,6	14,4	23
2,5	0,26	2,11	4,5	24	38





Silicone single core 1,8/3 kV with VDE -approval

SIF
VDE-reg. no. 6574 9491

Products

Construction

Conductor: Cu bare, tp, np, stranded, acc. to VDE 0295 class 5 or pure nickel
Insulation: SiR E12 to VDE 0282 part 1
Colour: White or on request
Identification: Printing of VDE registration number

Application

For wiring in electrical appliances and lighting up to an operating temperature of:
130 °C with bare copper conductor
180 °C with tpc conductor
180 °C with npc conductor
180 °C with pure nickel conductor taking into consideration reduced conductor conductivity
This cable can be used for ignition devices with an ignition voltage of up to 10 kV.

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 1,8/3 kV
Test voltage: 10 kV
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

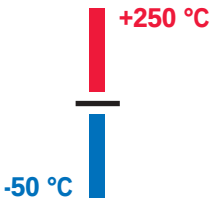
Notes

→ On request the itemized cables are also available with conductors to VDE 0295 class 1 and 2
→ For higher ignition voltages we can offer special high voltage silicone cables according to your requirements.

Silicone Rubber
Cables

cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	0,21	0,98	3,6	4,8	16
0,75	0,21	1,16	3,8	7,2	19
1	0,21	1,35	4,0	9,6	23
1,5	0,26	1,61	4,2	14,4	28
2,5	0,26	2,11	4,7	24	40





SIGLSI

Silicone/glass fibre ignition cable

Construction

Conductor: Cu tp
Insulation: High voltage resistant silicone compound
Braiding: Glass fibre yarn
Sheath: SiR E12 to VDE 0282 part 1
Colour: Black or on request

Application

For wiring of ignition systems at high ambient temperatures, e.g.
- Traffic and automotive
- Mechanical engineering

Technical data

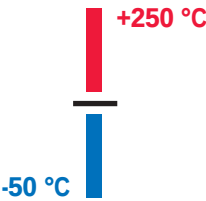
Temperature range: - 50 °C up to +180 °C, short-term + 250 °C
Ignition voltage: 20 kV
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Note

→ On request the itemized ignition cables are also available in different cross sections and various conductor materials.

cross section [mm²]	maximum Ø of single wires [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
1	0,26	1,31	7,0	9,6	54
1,5	0,26	1,61	7,4	14,4	72





Silicone twin flat cable

SIFZW

Construction

Conductor: Cu bare, tp, sp, np, stranded, acc. to VDE 0295 class 5 or pure nickel
Insulation: SiR E12 to VDE 0282 part 1
Colour: On request, also available with coloured stripe on one core

Application

For internal wiring of lighting and appliances at high ambient temperatures

Technical data

Temperature range: - 50 °C up to +180 °C
Cu bare + 130 °C
short-term + 250 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Note

→ VDE-approved silicone twin flat cables see page 79.

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,5	0,21	0,98	2,1 x 4,5	9,6	16
2 x 0,75	0,21	1,16	2,3 x 4,8	14,4	21
2 x 1	0,21	1,35	2,4 x 5,2	19	25
2 x 1,5	0,26	1,61	2,9 x 6,1	29	37

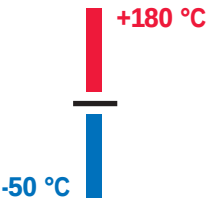
Products

Silicone Rubber Cables



HEW-KABEL / CDT

NOTES
NOTES



Silicone twin flat cable, stranded, with VDE-approval

SIFZW
VDE reg. no. 6574 9246

Products

Silicone Rubber
Cables

Construction

Conductor: Cu bare, tp, np, stranded, acc. to VDE 0295 class 5 or 6 or pure nickel
Insulation: SiR E12 to VDE 0282 part 1
Colour: Red-brown or on request
Identification: Printing of VDE registration number

Application

For internal wiring of lighting or protected installations at ambient temperatures exceeding 55°C
max. 130 °C with bare copper conductor
max. 180 °C with tpc conductor
max. 180 °C with npc conductor
max. 180 °C with pure nickel conductor taking into consideration reduced conductor conductivity

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 230/400 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Note

→ Silicone twin flat cables without VDE-approval see page 77.

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,5	0,21	0,98	2,1 x 4,5	9,6	16
2 x 0,75	0,21	1,16	2,3 x 4,8	14,4	21
2 x 1	0,21	1,35	2,4 x 5,2	19	25
2 x 1,5	0,26	1,61	2,9 x 6,1	29	37





SIHSI Silicone multicore cable

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201),.
> 6 cores: black with printed numbers (also applicable to cables without earth)
Twisting: In layers
Sheath: SiR 2GM1 to VDE 0207 part 21
Colour: Red-brown or on request

Technical data

Temperature range: - 50 °C up to +180 °C, short-term + 250 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

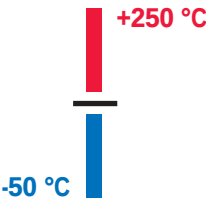
Application

Industrial areas with increased temperature requirements, e.g.
- Mechanical engineering
- Traffic technology
- Lighting industry
- Sauna and solarium
- Glass and ceramic fabrication
- Steel and iron fabrication

Notes

→ Silicone multicore cables are also available with different cross sections and various conductor materials.
→ We recommend our armoured silicone multicore cables (page 88-89) or our glass fibre braided multicore cables (on request only) for increased mechanical stress
→ VDE-approved silicone multicore cables see page 83.

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,75	0,21	1,16	2,26	6,1	14,4	56
3 x 0,75	0,21	1,16	2,26	6,4	21,6	66
4 x 0,75	0,21	1,16	2,26	7,0	29	80
5 x 0,75	0,21	1,16	2,26	8,1	36	109
6 x 0,75	0,21	1,16	2,26	8,7	43	127
7 x 0,75	0,21	1,16	2,26	8,7	50	132
2 x 1	0,21	1,35	2,44	6,4	19	62
3 x 1	0,21	1,35	2,44	6,8	29	81
4 x 1	0,21	1,35	2,44	7,6	38	97
5 x 1	0,21	1,35	2,44	8,5	48	124
6 x 1	0,21	1,35	2,44	9,3	58	144
7 x 1	0,21	1,35	2,44	9,3	67	151
2 x 1,5	0,26	1,61	2,70	7,2	29	87
3 x 1,5	0,26	1,61	2,70	7,6	43	102
4 x 1,5	0,26	1,61	2,70	8,5	58	126
5 x 1,5	0,26	1,61	2,70	9,3	72	159
6 x 1,5	0,26	1,61	2,70	10,1	86	176
7 x 1,5	0,26	1,61	2,70	10,1	101	186
8 x 1,5	0,26	1,61	2,70	11,3	116	235
10 x 1,5	0,26	1,61	2,70	12,6	144	280
12 x 1,5	0,26	1,61	2,70	13,2	173	320
14 x 1,5	0,26	1,61	2,70	14,3	202	370
16 x 1,5	0,26	1,61	2,70	15,7	231	433
18 x 1,5	0,26	1,61	2,70	16,5	260	464
20 x 1,5	0,26	1,61	2,70	16,9	288	507
24 x 1,5	0,26	1,61	2,70	19,0	346	625



Silicone multicore cable

SIHSI

Products

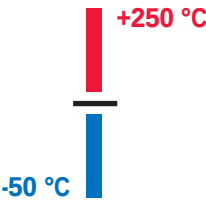
Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
2 x 2,5	0,26	2,05	3,31	8,6	48	131
3 x 2,5	0,26	2,05	3,31	9,1	72	163
4 x 2,5	0,26	2,05	3,31	10,1	96	197
5 x 2,5	0,26	2,05	3,31	11,3	120	242
6 x 2,5	0,26	2,05	3,31	12,3	144	297
7 x 2,5	0,26	2,05	3,31	12,3	168	311
12 x 2,5	0,26	2,05	3,31	16,2	288	492
2 x 4	0,31	2,58	4,01	10,2	77	177
3 x 4	0,31	2,58	4,01	10,8	115	217
4 x 4	0,31	2,58	4,01	12	154	281
5 x 4	0,31	2,58	4,01	13,8	192	373
6 x 4	0,31	2,58	4,01	15	230	428
7 x 4	0,31	2,58	4,01	15	269	443
2 x 6	0,31	3,2	4,61	11,6	115	231
3 x 6	0,31	3,2	4,61	12,3	173	296
4 x 6	0,31	3,2	4,61	13,5	230	369
5 x 6	0,31	3,2	4,61	15,4	288	462
6 x 6	0,31	3,2	4,61	16,8	346	569
7 x 6	0,31	3,2	4,61	16,8	403	605
2 x 10	0,41	4,78	6,51	16	192	422
3 x 10	0,41	4,78	6,51	17	288	540
4 x 10	0,41	4,78	6,51	19,2	384	644
5 x 10	0,41	4,78	6,51	21,1	480	834
2 x 16	0,41	6,0	7,66	18,9	308	604
3 x 16	0,41	6,0	7,66	20,1	462	762
4 x 16	0,41	6,0	7,66	22	616	976
5 x 16	0,41	6,0	7,66	24,8	770	1218
2 x 25	0,41	7,45	9,46	22,5	480	895
3 x 25	0,41	7,45	9,46	24,6	720	1172
4 x 25	0,41	7,45	9,46	27	960	1477
2 x 35	0,41	8,9	10,86	25,9	672	1181
3 x 35	0,41	8,9	10,86	27,6	1008	1616
4 x 35	0,41	8,9	10,86	30,9	1344	2006
2 x 50	0,41	10,4	12,66	30,1	960	1639
3 x 50	0,41	10,4	12,66	32,1	1440	2256
4 x 50	0,41	10,4	12,66	35,9	1920	2715
2 x 70	0,51	12,4	14,61	34,0	1344	2235
3 x 70	0,51	12,4	14,61	36,9	2016	3037
4 x 70	0,51	12,4	14,61	41,2	2688	3778
2 x 95	0,51	14,9	17,36	40,1	1824	3080
3 x 95	0,51	14,9	17,36	43,5	2736	3988
4 x 95	0,51	14,9	17,36	48,4	3648	5007
3 x 120	0,51	16,5	18,91	47,4	3465	4945
4 x 120	0,51	16,5	18,91	52,7	4620	6216



HEW-KABEL/CDT

NOTES
NOTES



Silicone multicore cable to VDE 0250 part 816

SIHSI
N2GMH2G

Products

Silicone Rubber
Cables

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201)
Twisting: In layers
Sheath: SiR 2GM1 to VDE 0207 part 2 1
Colour: Red-brown or on request

Application

Industrial areas with increased temperature requirements and VDE-approval, e.g.

- Mechanical engineering
- Traffic technology
- Lighting industry
- Sauna and solarium
- Glass and ceramic fabrication
- Steel and iron fabrication

Technical data

Temperature range: - 50 °C up to +180 °C, short-term + 250 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ VDE-approved silicone multicore cables are also available with bare copper, npc and spc conductors
→ We recommend our armoured silicone multicore cables (page 88-89) or our glass fibre braided multicore cables (on request only) for increased mechanical stress

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] min - max	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,75	0,21	1,16	2,26	6,0 - 7,2	14,4	50
3 x 0,75	0,21	1,16	2,26	6,6 - 7,8	21,6	62
4 x 0,75	0,21	1,16	2,26	7,2 - 8,4	29	72
5 x 0,75	0,21	1,16	2,26	8,0 - 9,4	36	98
2 x 1	0,21	1,35	2,44	6,4 - 7,8	19	64
3 x 1	0,21	1,35	2,44	6,8 - 8,2	29	73
4 x 1	0,21	1,35	2,44	7,6 - 8,8	38	88
5 x 1	0,21	1,35	2,44	8,4 - 9,8	48	105
2 x 1,5	0,26	1,61	2,90	7,6 - 9,0	29	84
3 x 1,5	0,26	1,61	2,90	8,0 - 9,6	43	101
4 x 1,5	0,26	1,61	2,90	9,0 - 10,5	58	126
5 x 1,5	0,26	1,61	2,90	9,8 - 11,5	72	157
2 x 2,5	0,26	2,05	3,51	9,0 - 10,5	48	124
3 x 2,5	0,26	2,05	3,51	9,6 - 11,5	72	157
4 x 2,5	0,26	2,05	3,51	10,5 - 12,5	96	196
5 x 2,5	0,26	2,05	3,51	12,0 - 14,0	120	238





SIHSI (N)2GMH2G **Silicone multicore cable with VDE-approval, registration no. 6574 9059**

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201)
> 6 cores: black with printed numbers
(also applicable to cables without earth)
Twisting: In layers
Sheath: SiR 2GM1 to VDE 0207 part 21
Colour: Red-brown or on request
Identification: Printing of VDE registration number

Application

Industrial areas with increased temperature requirements and VDE-approval, e.g.
- Mechanical engineering
- Traffic technology
- Lighting industry
- Sauna and solarium
- Glass and ceramic fabrication
- Steel and iron fabrication

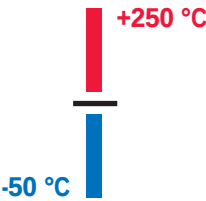
Technical data

Temperature range: - 50 °C up to +180 °C,
short-term + 250 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Note

→ We recommend our armoured silicone multicore cables (page 88-89) or our glass fibre braided multicore cables (on request only) for increased mechanical stress

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
6 x 0,75	0,21	1,16	2,26	8,7	43	111
7 x 0,75	0,21	1,16	2,26	8,7	50	113
8 x 0,75	0,21	1,16	2,26	9,6	58	132
10 x 0,75	0,21	1,16	2,26	10,9	74	162
12 x 0,75	0,21	1,16	2,26	11,4	91	185
14 x 0,75	0,26	1,16	2,26	12,5	103	217
16 x 0,75	0,26	1,16	2,26	13,2	116	248
18 x 0,75	0,26	1,16	2,26	14,1	132	281
20 x 0,75	0,26	1,16	2,26	14,5	147	295
24 x0,75	0,26	1,16	2,26	16,1	177	354
25 x 0,75	0,26	1,16	2,26	17,1	183	386
6 x 1	0,21	1,35	2,44	9,5	58	130
7 x 1	0,21	1,35	2,44	9,5	67	143
8 x 1	0,21	1,35	2,44	10,2	78	160
10 x 1	0,21	1,35	2,44	11,6	98	196
12 x 1	0,21	1,35	2,44	12,3	122	224
14 x 1	0,21	1,35	2,44	13,5	136	262
16 x 1	0,21	1,35	2,44	14,2	145	299
18 x 1	0,21	1,35	2,44	15,2	174	340
20 x 1	0,21	1,35	2,44	15,6	195	360
24 x 1	0,21	1,35	2,44	17,3	230	429
25 x 1	0,21	1,35	2,44	18,4	240	457
6 x 1,5	0,26	1,61	2,90	11,1	86	183
7 x 1,5	0,26	1,61	2,90	11,1	101	192
8 x 1,5	0,26	1,61	2,90	12,2	116	228
10 x 1,5	0,26	1,61	2,90	13,8	144	279



Silicone multicore cable with VDE-approval, registration no. 6574 9059

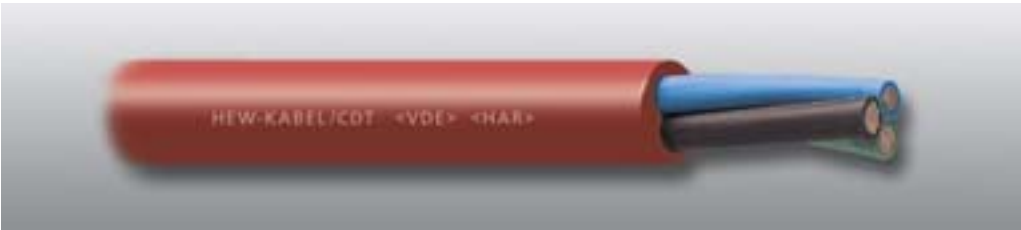
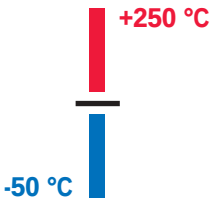
SIHSI
(N)2GMH2G

Products

Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %	copperweight [kg/km]	weight approx. [kg/km]
12 x 1,5	0,26	1,61	2,90	14,4	173	322
14 x 1,5	0,26	1,61	2,90	15,7	202	370
16 x 1,5	0,26	1,61	2,90	16,8	231	423
18 x 1,5	0,26	1,61	2,90	17,7	260	464
20 x 1,5	0,26	1,61	2,90	18,4	288	513
24 x 1,5	0,26	1,61	2,90	20,4	346	615
25 x 1,5	0,26	1,61	2,90	21,6	362	654
6 x 2,5	0,26	2,05	3,51	13,1	144	279
7 x 2,5	0,26	2,05	3,51	13,1	168	290
8 x 2,5	0,26	2,05	3,51	14,4	192	341
10 x 2,5	0,26	2,05	3,51	16,3	242	416
12 x 2,5	0,26	2,05	3,51	17,2	288	494
14 x 2,5	0,26	2,05	3,51	18,8	336	564
16 x 2,5	0,26	2,05	3,51	20,1	384	638
18 x 2,5	0,26	2,05	3,51	21,1	432	668
20 x 2,5	0,26	2,05	3,51	21,9	484	787
24 x 2,5	0,26	2,05	3,51	24,3	578	936
25 x 2,5	0,26	2,05	3,51	25,8	604	970





SIHSI
H05SS-F

Silicone multicore cable to VDE 0282 part 15

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5 and HD 383 class 5 resp.
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201)
Twisting: In layers
Sheath: SiR EM9 to VDE 0282 part 1 and HD 22.1 S3 resp.
Colour: Red-brown or on request
Identification: Printing

Application

Industrial areas with increased temperature requirements and VDE-approval, e.g.
- Mechanical engineering
- Traffic technology
- Lighting industry
- Sauna and solarium
- Glass and ceramic fabrication
- Steel and iron fabrication

Technical data

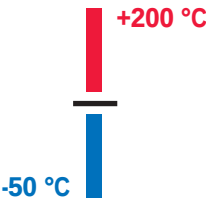
Temperature range: - 50 °C up to +180 °C, short-term + 250 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1
Flame resistance: Acc. to VDE 0472 part 814 test B

Notes

→ VDE-approved silicone multicore cables are also available with bare copper, npc and spc conductors
→ On request the following variations of our silicone multicore cables are available:
- H05SST-F (with braid)
- H05SSD3-K (with strain relief)
- H05SSD3T-K (with strain relief and braid)

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] min - max	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,75	0,21	1,16	2,26	5,7 - 7,4	14,4	50
3 x 0,75	0,21	1,16	2,26	6,2 - 8,1	21,6	62
4 x 0,75	0,21	1,16	2,26	6,8 - 8,8	29	72
5 x 0,75	0,21	1,16	2,26	7,6 - 9,9	36	98
2 x 1	0,21	1,35	2,44	6,1 - 8,0	19	64
3 x 1	0,21	1,35	2,44	6,5 - 8,5	29	73
4 x 1	0,21	1,35	2,44	7,1 - 9,3	38	88
5 x 1	0,21	1,35	2,44	8,0 - 10,3	48	105
2 x 1,5	0,26	1,61	3,10	7,6 - 9,8	29	84
3 x 1,5	0,26	1,61	3,10	8,0 - 10,4	43	101
4 x 1,5	0,26	1,61	3,10	9,0 - 11,6	58	126
5 x 1,5	0,26	1,61	3,10	9,8 - 12,7	72	157
2 x 2,5	0,26	2,05	3,71	9,0 - 11,6	48	124
3 x 2,5	0,26	2,05	3,71	9,6 - 12,4	72	157
4 x 2,5	0,26	2,05	3,71	10,7 - 13,8	96	196
5 x 2,5	0,26	2,05	3,71	11,9 - 15,3	120	238
3 x 4	0,31	2,58	4,41	11,3 - 14,5	115	225
4 x 4	0,31	2,58	4,41	12,7 - 16,2	154	290
3 x 6	0,31	3,22	5,01	12,8 - 16,3	173	305
4 x 6	0,31	3,22	5,01	14,2 - 18,1	230	380





Silicone multicore cable with UL approval

SIHSI
UL style no. 4476

Construction

- Conductor: Cu bare, tp, sp, np, pure nickel to UL 1581
- Core insulation: Silicone to UL 1581, subject 758, class 22, page 89
- Colour: According to UL 1581
- Twisting: In layers
- Sheath: Silicone to UL 1581, subject 758, class 22, page 89
- Colour: Red-brown or on request
- Identification: UL printing on sheath

Technical data

- Temperature range: - 50 °C up to +150/200 °C
- Rated voltage U0/U: 150 V, 300 V, 600 V, 1000 V
- Test voltage: Core/core 2 kV

Application

- For internal wiring of appliances. The cables are not suitable for high mechanical stress requirements.
- External interconnection of appliances and electronic equipment

Notes

- The itemized cables are also available according to UL 4476 without sheath
- Screened silicone multicore cables with UL approval see page 91.

number of cores	cross sections
2 or more	AWG 28 - AWG 4/0

→ Due to the vast variety of combinations please contact our sales office
pay attention to UL-Style specification.

Products

Silicone Rubber
Cables





Silicone multicore cable with steel wire armouring

SIHSIGLP

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201),
> 6 cores: black with printed numbers
Twisting: In layers
Sheath: SiR 2GM1 to VDE 0207 part 21
Wrapping: 1 layer of glass fibre tape
Armouring: Galvanized steel wire braid

Application

Industrial areas with increased temperature and mechanical requirements, e.g.
- Mechanical engineering
- Glass and ceramic fabrication
- Steel and iron fabrication

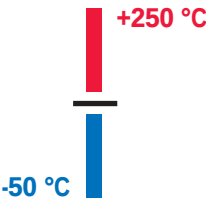
Technical data

Temperature range: - 50 °C up to +180 °C,
short-term + 250 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ Silicone multicore cables with steel wire armouring are also available with different cross sections and various conductor materials.
→ We recommend our silicone multicore cables (page 80-81) or our glass fibre braided multicore cables (on request only) for reduced mechanical stress

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,75	0,21	1,16	2,26	7,2	14,4	88
3 x 0,75	0,21	1,16	2,26	7,6	21,6	99
4 x 0,75	0,21	1,16	2,26	8,1	29	121
5 x 0,75	0,21	1,16	2,26	9,2	36	147
6 x 0,75	0,21	1,16	2,26	9,9	43	169
7 x 0,75	0,21	1,16	2,26	9,9	50	178
2 x 1	0,21	1,35	2,44	7,6	19	98
3 x 1	0,21	1,35	2,44	8,0	29	119
4 x 1	0,21	1,35	2,44	8,8	38	139
5 x 1	0,21	1,35	2,44	9,7	48	167
6 x 1	0,21	1,35	2,44	10,4	58	185
7 x 1	0,21	1,35	2,44	10,4	67	194
2 x 1,5	0,26	1,61	2,70	8,3	29	126
3 x 1,5	0,26	1,61	2,70	8,7	43	143
4 x 1,5	0,26	1,61	2,70	9,6	58	170
5 x 1,5	0,26	1,61	2,70	10,4	72	198
6 x 1,5	0,26	1,61	2,70	11,4	86	245
7 x 1,5	0,26	1,61	2,70	11,4	101	256
8 x 1,5	0,26	1,61	2,70	12,7	116	315
10 x 1,5	0,26	1,61	2,70	14,0	144	370
12 x 1,5	0,26	1,61	2,70	14,5	173	408
14 x 1,5	0,26	1,61	2,70	15,6	202	471
16 x 1,5	0,26	1,61	2,70	17,0	231	541
18 x 1,5	0,26	1,61	2,70	17,8	260	599
20 x 1,5	0,26	1,61	2,70	18,3	288	630
24 x 1,5	0,26	1,61	2,70	20,4	346	760



Silicone multicore cable with steel wire armouring

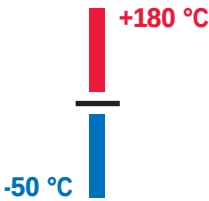
SIHSIGLP

Products

Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
2 x 2,5	0,26	2,05	3,31	9,7	48	165
3 x 2,5	0,26	2,05	3,31	10,2	72	238
4 x 2,5	0,26	2,05	3,31	11,5	96	268
5 x 2,5	0,26	2,05	3,31	12,7	120	315
6 x 2,5	0,26	2,05	3,31	13,7	144	370
7 x 2,5	0,26	2,05	3,31	13,7	168	385
12 x 2,5	0,26	2,05	3,31	17,6	288	608
2 x 4	0,31	2,58	4,01	11,5	77	255
3 x 4	0,31	2,58	4,01	12,2	115	299
4 x 4	0,31	2,58	4,01	13,4	154	365
5 x 4	0,31	2,58	4,01	15,1	192	455
6 x 4	0,31	2,58	4,01	16,4	230	525
7 x 4	0,31	2,58	4,01	16,4	269	556
2 x 6	0,31	3,22	4,61	12,9	115	326
3 x 6	0,31	3,22	4,61	13,7	173	401
4 x 6	0,31	3,22	4,61	14,8	230	485
5 x 6	0,31	3,22	4,61	16,8	288	602
6 x 6	0,31	3,22	4,61	18,2	346	701
7 x 6	0,31	3,22	4,61	18,2	403	736
2 x 10	0,41	4,78	6,51	17,3	192	543
3 x 10	0,41	4,78	6,51	18,4	288	652
4 x 10	0,41	4,78	6,51	20,6	384	825
5 x 10	0,41	4,78	6,51	22,5	480	987
2 x 16	0,41	6,0	7,66	20,2	308	748
3 x 16	0,41	6,0	7,66	21,5	462	909
4 x 16	0,41	6,0	7,66	23,4	616	1183
5 x 16	0,41	6,0	7,66	26,2	770	1393
2 x 25	0,41	7,45	9,46	23,8	480	1046
3 x 25	0,41	7,45	9,46	26	720	1347
4 x 25	0,41	7,45	9,46	28,3	960	1678
2 x 35	0,41	8,93	10,86	27,2	672	1378
3 x 35	0,41	8,93	10,86	29	1008	1846
4 x 35	0,41	8,93	10,86	32,3	1344	2240
2 x 50	0,41	10,4	12,66	31,4	960	1869
3 x 50	0,41	10,4	12,66	33,5	1440	2384
4 x 50	0,41	10,4	12,66	37,2	1920	2702
2 x 70	0,51	12,44	14,61	35,3	1344	2482
3 x 70	0,51	12,44	14,61	38,3	2016	3314
4 x 70	0,51	12,44	14,61	42,5	2688	4074
2 x 95	0,51	14,9	17,36	41,4	1824	3380
3 x 95	0,51	14,9	17,36	44,8	2736	4299
4 x 95	0,51	14,9	17,36	49,8	3648	5339
3 x 120	0,51	16,53	18,91	48,8	3465	5277
4 x 120	0,51	16,53	18,91	54,1	4620	6571





SIHCSI

Silicone cable with copper screen

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201)
> 6 cores: black with printed numbers
Twisting: In layers
Wrapping: 1 layer separator foil
Screen: Braid; tpc, approx. 85% coverage
Sheath: SiR 2GM1 to VDE 0207 part 21
Colour: Red-brown or on request

Application

Industrial areas with increased temperature requirements, e.g.
- Mechanical engineering
- Traffic technology
- Lighting industry
- Glass and ceramic fabrication
- Steel and iron fabrication

Technical data

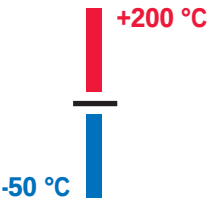
Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/500 V
Test voltage: Core/core 2000 V
Core/screen 1500 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

Notes

→ Due to the copper screen electromagnetic interference is greatly reduced
→ Silicone insulated cables with copper screen are also available in different metric and AWG cross sections as well as with various conductor materials
→ For increased mechanical stress we offer these cables with notch resistant sheath.

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,75	0,21	1,16	2,26	7,3	14,4	91
3 x 0,75	0,21	1,16	2,26	7,6	21,6	109
4 x 0,75	0,21	1,16	2,26	8,2	29	128
5 x 0,75	0,21	1,16	2,26	8,9	36	155
7 x 0,75	0,21	1,16	2,26	9,8	50	190
2 x 1	0,21	1,35	2,44	8,0	19	104
3 x 1	0,21	1,35	2,44	8,4	29	124
4 x 1	0,21	1,35	2,44	9,0	38	143
5 x 1	0,21	1,35	2,44	9,7	48	183
7 x 1	0,21	1,35	2,44	10,7	67	240
2 x 1,5	0,26	1,61	2,70	8,6	29	120
3 x 1,5	0,26	1,61	2,70	9,0	43	145
4 x 1,5	0,26	1,61	2,70	9,9	58	191
5 x 1,5	0,26	1,61	2,70	10,7	72	224
7 x 1,5	0,26	1,61	2,70	11,5	101	270
2 x 2,5	0,26	2,05	3,31	10,0	48	175
3 x 2,5	0,26	2,05	3,31	10,5	72	212
4 x 2,5	0,26	2,05	3,31	11,3	96	262
5 x 2,5	0,26	2,05	3,31	12,3	120	306
7 x 2,5	0,26	2,05	3,31	13,9	168	410
2 x 4	0,31	2,58	4,01	11,4	77	228
3 x 4	0,31	2,58	4,01	12,0	115	289
4 x 4	0,31	2,58	4,01	13,6	154	376
5 x 4	0,31	2,58	4,01	14,8	192	438
7 x 4	0,31	2,58	4,01	16,0	269	556





Silicone cables with copper shield and UL approval

SIHCSI
UL style no. 4476

Products

Silicone Rubber
Cables

Construction

- Conductor: Cu bare, tp, sp, np, pure nickel to UL 1581
- Core insulation: Silicone to UL 1581, subject 758, class 22, page 89
- Colour: According to UL 1581
- Twisting: In layers
- Wrapping: 1 layer separator foil
- Screen: Braid, tpc, spc, npc to UL 1581
- Sheath: Silicone to UL 1581, subject 758, class 22, page 89
- Colour: Red-brown or on request
- Identification: UL printing on sheath

Application

For internal wiring of appliances. The cables are not suitable for high mechanical stress applications.

External interconnection of appliances and electronic equipment.

Technical data

- Temperature range: - 50 °C up to +150/200 °C
- Rated voltage U0/U: 300 V, 600 V, 1000 V
- Test voltage: Core/core 2 kV
Core/screen 1,5 kV

Notes

- The itemized cables are also available according to UL 4476 without sheath
- Unscreened silicone multicore cables with UL approval refer to page 87.

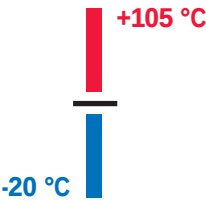
number of cores	cross sections
2 or more	AWG 28 - AWG 4/0

→ Due to the vast variety of combinations please contact our sales office
pay attention to UL-Style specification.



HEW-KABEL/CDT

NOTES
NOTES



Silicone/PVC multicore cable with VDE-approval, flat and circular

SIHY
VDE reg. no. 6574 9310

Products

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: Acc. to VDE 0293 (page 201)
Twisting: Choice of - 2 and 3 cores twisted or - 2 cores flat
Sheath: Heat resistant PVC, type YM4
Colour: On request
Identification: Printing of VDE registration number on one core or sheath

Application

Lighting industry with increased temperature stress at conductor (180 °C) and VDE-approval.

Technical data

Temperature range: - 20 °C up to +90 °C, short-term + 105 °C
Maximum permissible temperature at conductor + 180 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C

Note

→ Silicone/PVC multicore cables are also available with bare copper conductor (no VDE-approval)

Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strand diameter [mm]	core diameter [mm] ± 5 %	o.d. [mm] ± 5 %		copper weight [kg/km]	weight approx. [kg/km]
				flat	circular		
2 x 0,75	0,21	1,16	2,26	3,8 x 6,1	6,1	14,4	56
2 x 1	0,21	1,35	2,44	4,0 x 6,4	6,4	19	67
2 x 1,5	0,26	1,61	2,90	4,5 x 7,4	7,4	29	93
3 x 0,75	0,21	1,16	2,26	-----	6,4	21,6	65
3 x 1	0,21	1,35	2,44	-----	6,8	29	78
3 x 1,5	0,26	1,61	2,90	-----	7,8	43	112





SIHSI
FRNC* L

Silicone FRNC* multicore cable

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201),
> 6 cores: black with printed numbers
Twisting: In layers
Sheath: FRNC-SiR (page 103)
Colour: Black or on request
Identification: Printing HEW-KABEL/CDT FRNC - X

Application

Industrial areas with increased temperature requirements, e.g.
- Railway engineering
- Traffic technology
- Power plant technology
- Mechanical engineering
- Steel and iron fabrication

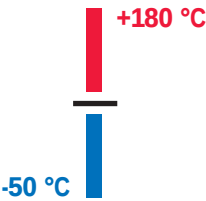
Notes

→The itemized FRNC-cables meet the following requirements acc. to the standards listed on page 103:
- Flame retardance
- Low smoke emission
- Insulation integrity
- Halogenfree
- Low fuel value level
- Cables for power plants
→ We recommend our FRNC-silicone multicore cables - heavy duty (increased thickness of sheath) - for increased mechanical stress. See page 96 - 97.

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 0,75	0,21	1,16	0,6	0,8	6,1	14,4	51	630
3 x 0,75	0,21	1,16	0,6	0,9	6,6	21,6	64	735
4 x 0,75	0,21	1,16	0,6	0,9	7,2	29	77	840
5 x 0,75	0,21	1,16	0,6	1	8,1	36	95	1015
6 x 0,75	0,21	1,16	0,6	1	8,7	43	110	1154
7 x 0,75	0,21	1,16	0,6	1	8,7	50	121	1225
2 x 1	0,21	1,35	0,6	0,9	6,6	19	62	737
3 x 1	0,21	1,35	0,6	0,9	7,0	29	76	805
4 x 1	0,21	1,35	0,6	0,9	7,6	38	91	915
5 x 1	0,21	1,35	0,6	1	8,5	48	112	1115
6 x 1	0,21	1,35	0,6	1,1	9,5	58	135	1320
7 x 1	0,21	1,35	0,6	1,1	9,5	67	147	1400
2 x 1,5	0,26	1,61	0,7	1	7,8	29	86	990
3 x 1,5	0,26	1,61	0,7	1	8,2	43	106	1085
4 x 1,5	0,26	1,61	0,7	1,1	9,1	58	133	1300
5 x 1,5	0,26	1,61	0,7	1,1	10,0	72	159	1400
6 x 1,5	0,26	1,61	0,7	1,2	11,1	86	188	1680
7 x 1,5	0,26	1,61	0,7	1,2	11,1	101	208	1870
8 x 1,5	0,26	1,61	0,7	1,3	12,2	116	254	2410
10 x 1,5	0,26	1,61	0,7	1,4	13,8	144	299	2720
12 x 1,5	0,26	1,61	0,7	1,4	14,4	173	347	3060
14 x 1,5	0,26	1,61	0,7	1,5	15,7	202	400	3485
16 x 1,5	0,26	1,61	0,7	1,6	16,8	231	455	3800
18 x 1,5	0,26	1,61	0,7	1,6	17,7	260	502	4200
20 x 1,5	0,26	1,61	0,7	1,7	18,4	288	554	4700
24 x 1,5	0,26	1,61	0,7	2	20,8	346	680	5900
30 x 1,5	0,26	1,61	0,7	2	22,5	429	815	6840



Silicone FRNC* multicore cable

SIHSI
FRNC* L

Products

Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 2,5	0,26	2,05	0,8	1,1	9,2	48	128	1375
3 x 2,5	0,26	2,05	0,8	1,1	9,7	72	158	1495
4 x 2,5	0,26	2,05	0,8	1,2	10,8	96	198	1795
5 x 2,5	0,26	2,05	0,8	1,3	12,0	120	243	2250
6 x 2,5	0,26	2,05	0,8	1,3	13,1	144	285	2450
7 x 2,5	0,26	2,05	0,8	1,3	13,1	168	313	2565
12 x 2,5	0,26	2,05	0,8	1,6	17,2	288	530	4290
24 x 2,5	0,26	2,05	0,8	2	24,3	572	1010	7784
30 x 2,5	0,26	2,05	0,8	2,3	27,1	715	1254	9600
2 x 4	0,31	2,58	0,8	1,2	10,4	77	177	1740
3 x 4	0,31	2,58	0,8	1,2	11,0	115	222	1885
4 x 4	0,31	2,58	0,8	1,2	12,0	154	275	2145
5 x 4	0,31	2,58	0,8	1,4	13,6	192	350	2700
6 x 4	0,31	2,58	0,8	1,5	15,0	230	422	3200
7 x 4	0,31	2,58	0,8	1,5	15,0	269	453	3285
2 x 6	0,31	3,22	0,8	1,2	11,6	115	234	2080
3 x 6	0,31	3,22	0,8	1,3	12,5	173	304	2320
4 x 6	0,31	3,22	0,8	1,4	13,9	230	383	2720
5 x 6	0,31	3,22	0,8	1,5	15,4	288	479	3150
6 x 6	0,31	3,22	0,8	1,6	17,0	346	578	3860
7 x 6	0,31	3,22	0,8	1,6	17,0	403	623	3960
2 x 10	0,41	4,78	1	1,5	16,0	192	413	3850
3 x 10	0,41	4,78	1	1,6	17,2	288	530	4260
4 x 10	0,41	4,78	1	1,7	19,0	384	665	4985
5 x 10	0,41	4,78	1	1,8	21,1	480	830	5900
2 x 16	0,41	6,0	1	1,7	18,7	308	592	5248
3 x 16	0,41	6,0	1	1,8	20,1	462	768	5435
4 x 16	0,41	6,0	1	1,8	22	616	960	6180
5 x 16	0,41	6,0	1	2,1	24,8	770	1220	7800
2 x 25	0,41	7,45	1,2	2	22,9	480	914	7595
3 x 25	0,41	7,45	1,2	2	24,4	720	1172	8045
4 x 25	0,41	7,45	1,2	2,1	27,0	960	1475	9260
2 x 35	0,41	8,93	1,2	2,1	25,9	672	1190	9110
3 x 35	0,41	8,93	1,2	2,1	27,6	1008	1540	9545
4 x 35	0,41	8,93	1,2	2,4	30,9	1344	1975	11420
2 x 50	0,41	10,4	1,4	2,4	30,1	960	1648	12140
3 x 50	0,41	10,4	1,4	2,4	32,1	1440	2147	12750

* FRNC = Flame Retardant Non Corrosive





SIHSI
FRNC* S

Silicone FRNC*multicore cable, heavy duty

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201),
> 6 cores: black with printed numbers
Twisting: In layers
Sheath: FRNC-SiR (page 103)
Colour: Black or on request
Identification: Printing HEW-KABEL/CDT FRNC - X

Application

Industrial areas with increased temperature requirements, e.g.
- Traffic technology
- Power plant technology
- Mechanical engineering
- Steel and iron fabrication

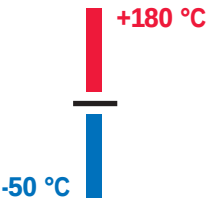
Note

→ The itemized FRNC-cables meet the following requirements acc. to the standards listed on page 103:
- Flame retardance
- Low smoke emission
- Insulation integrity
- Halogenfree
- Low fuel value level
- Cables for power plants
→ We recommend our standard FRNC-silicone multicore cables (page 94 - 95) where mechanical requirements are less demanding.

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 7,5 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

number of cores x cross section [mm²]	maximum Ø of single wires [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	weight approx. [kg/km]	copper aweight [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 0,75	0,21	1,16	0,6	2,5	9,5	105	14,4	1512
3 x 0,75	0,21	1,16	0,6	2,5	9,8	118	21,6	1613
4 x 0,75	0,21	1,16	0,6	2,5	10,4	135	29	1784
5 x 0,75	0,21	1,16	0,6	2,5	11,1	157	36	1867
6 x 0,75	0,21	1,16	0,6	2,5	11,7	180	43	2058
7 x 0,75	0,21	1,16	0,6	2,5	11,7	184	50	2131
2 x 1	0,21	1,35	0,6	2,5	9,8	116	19	1619
3 x 1	0,21	1,35	0,6	2,5	10,2	132	29	1732
4 x 1	0,21	1,35	0,6	2,5	10,8	152	38	1907
5 x 1	0,21	1,35	0,6	2,5	11,5	179	48	2003
6 x 1	0,21	1,35	0,6	2,5	12,3	204	58	2205
7 x 1	0,21	1,35	0,6	2,5	12,3	211	67	2287
2 x 1,5	0,26	1,61	0,7	2,5	10,8	143	29	1942
3 x 1,5	0,26	1,61	0,7	2,5	11,2	165	43	2074
4 x 1,5	0,26	1,61	0,7	2,5	11,9	192	58	2305
5 x 1,5	0,26	1,61	0,7	2,5	12,8	229	72	2569
6 x 1,5	0,26	1,61	0,7	2,5	13,7	251	86	2847
7 x 1,5	0,26	1,61	0,7	2,5	13,7	272	101	2964
8 x 1,5	0,26	1,61	0,7	2,5	14,6	309	116	3259
10 x 1,5	0,26	1,61	0,7	2,5	16,0	366	144	3848
12 x 1,5	0,26	1,61	0,7	2,5	16,6	411	173	4148
14 x 1,5	0,26	1,61	0,7	2,5	17,7	466	202	4624
16 x 1,5	0,26	1,61	0,7	2,5	18,6	520	231	4994
18 x 1,5	0,26	1,61	0,7	2,5	19,5	577	260	5395
20 x 1,5	0,26	1,61	0,7	2,5	20,0	616	288	5763
24 x 1,5	0,26	1,61	0,7	2,5	21,8	721	346	6628
30 x 1,5	0,26	1,61	0,7	2,5	23,5	863	429	7634



Silicone FRNC*multicore cable, heavy duty

SIHSI
FRNC* S

Products

Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wires [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	weight approx. [kg/km]	copper weight [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 2,5	0,26	2,05	0,8	2,5	12,0	187	48	2378
3 x 2,5	0,26	2,05	0,8	2,5	12,5	221	72	2557
4 x 2,5	0,26	2,05	0,8	2,5	13,4	261	96	2850
5 x 2,5	0,26	2,05	0,8	2,5	14,4	312	120	3212
6 x 2,5	0,26	2,05	0,8	2,5	15,5	364	144	3570
7 x 2,5	0,26	2,05	0,8	2,5	15,5	382	168	3733
12 x 2,5	0,26	2,05	0,8	2,5	19,0	597	288	5454
24 x 2,5	0,26	2,05	0,8	2,5	25,3	1061	572	8645
30 x 2,5	0,26	2,05	0,8	2,5	27,5	1227	715	9988
2 x 4	0,31	2,58	0,8	2,5	13,0	239	77	2790
3 x 4	0,31	2,58	0,8	2,5	13,6	288	115	2979
4 x 4	0,31	2,58	0,8	2,5	14,6	346	154	3330
5 x 4	0,31	2,58	0,8	2,5	15,8	422	192	3754
6 x 4	0,31	2,58	0,8	2,5	17,0	489	230	4191
7 x 4	0,31	2,58	0,8	2,5	17,0	518	269	4381
2 x 6	0,31	3,22	0,8	2,5	14,2	303	115	3238
3 x 6	0,31	3,22	0,8	2,5	14,9	371	173	3443
4 x 6	0,31	3,22	0,8	2,5	16,1	449	230	3837
5 x 6	0,31	3,22	0,8	2,5	17,4	554	288	4339
6 x 6	0,31	3,22	0,8	2,5	18,8	647	346	4837
7 x 6	0,31	3,22	0,8	2,5	18,8	682	403	5060
2 x 10	0,41	4,78	1	2,5	18,0	486	192	5053
3 x 10	0,41	4,78	1	2,5	19,0	603	288	5399
4 x 10	0,41	4,78	1	2,5	20,6	738	384	6096
5 x 10	0,41	4,78	1	2,5	22,5	910	480	6913
2 x 16	0,41	6,0	1	2,5	20,3	655	308	6092
3 x 16	0,41	6,0	1	2,5	21,5	828	462	6481
4 x 16	0,41	6,0	1	2,5	23,4	1025	616	7290
5 x 16	0,41	6,0	1	2,5	25,6	1266	770	8290
2 x 25	0,41	7,45	1,2	2,5	23,9	963	480	8540
3 x 25	0,41	7,45	1,2	2,5	25,4	1224	720	9029
4 x 25	0,41	7,45	1,2	2,5	27,8	1522	960	10127
2 x 35	0,41	8,93	1,2	2,5	26,7	1236	672	9800
3 x 35	0,41	8,93	1,2	2,5	28,4	1594	1008	10484
4 x 35	0,41	8,93	1,2	2,5	31,1	1996	1344	11777
2 x 50	0,41	10,4	1,4	2,5	30,3	1663	960	12653
3 x 50	0,41	10,4	1,4	2,5	32,3	2163	1440	13208

*FRNC = Flame Retardant Non Corrosive





SIHGLCSI
FRNC* L

Silicone FRNC* cable screened

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201),
> 6 cores: black with printed numbers
Twisting: In layers
1 layer of glass fibre tape
1 layer of mica tape
Screen: Braid, tpc
Sheath: FRNC-SiR (page 103)
Colour: Black or on request
Identification: Printing HEW-KABEL/CDT FRNC - X

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

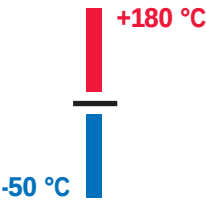
Application

Industrial areas with increased temperature requirements, e.g.
- Railway engineering
- Traffic technology
- Power plant technology
- Mechanical engineering
- Steel and iron fabrication

Notes

→ The itemized FRNC-cables meet the following requirements acc. to the standards listed on page 103:
- Flame retardance
- Low smoke emission
- Insulation integrity
- Halogenfree
- Low fuel value level
- Cables for power plants
→ We recommend our screened FRNC-silicone multicore cables - heavy duty (increased thickness of sheath) - for increased mechanical stress. See page 100 - 101.

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 0,75	0,21	1,16	0,6	1	7,9	43	89	685
3 x 0,75	0,21	1,16	0,6	1	8,3	53	106	795
4 x 0,75	0,21	1,16	0,6	1	8,8	72	134	940
5 x 0,75	0,21	1,16	0,6	1,2	9,9	83	163	1220
6 x 0,75	0,21	1,16	0,6	1,2	10,8	97	187	1370
7 x 0,75	0,21	1,16	0,6	1,2	10,8	104	196	1440
2 x 1	0,21	1,35	0,6	1	8,3	48	99	752
3 x 1	0,21	1,35	0,6	1	8,7	70	128	870
4 x 1	0,21	1,35	0,6	1	9,3	85	151	1010
5 x 1	0,21	1,35	0,6	1,2	10,6	98	184	1310
6 x 1	0,21	1,35	0,6	1,2	11,3	113	210	1500
7 x 1	0,21	1,35	0,6	1,2	11,3	122	221	1560
2 x 1,5	0,26	1,61	0,7	1,2	9,6	59	127	1025
3 x 1,5	0,26	1,61	0,7	1,2	10,3	89	166	1195
4 x 1,5	0,26	1,61	0,7	1,2	11,0	109	198	1385
5 x 1,5	0,26	1,61	0,7	1,2	11,8	128	230	1550
6 x 1,5	0,26	1,61	0,7	1,4	13,1	144	270	1900
7 x 1,5	0,26	1,61	0,7	1,4	13,1	161	293	2110
8 x 1,5	0,26	1,61	0,7	1,5	14,4	183	320	2185
10 x 1,5	0,26	1,61	0,7	1,5	15,8	220	400	2905
12 x 1,5	0,26	1,61	0,7	1,5	16,4	253	457	3295
14 x 1,5	0,26	1,61	0,7	1,7	18,0	309	546	3875
16 x 1,5	0,26	1,61	0,7	1,7	18,8	341	600	4280
18 x 1,5	0,26	1,61	0,7	1,7	19,7	375	657	4670
20 x 1,5	0,26	1,61	0,7	1,8	20,4	416	725	5115
24 x 1,5	0,26	1,61	0,7	2,2	23,0	482	874	6510
30 x 1,5	0,26	1,61	0,7	2,2	24,8	579	1033	7600



Silicone FRNC* cable screened

SIHGLCSI
FRNC* L

Products

Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 2,5	0,26	2,05	0,8	1,2	11,0	101	183	1250
3 x 2,5	0,26	2,05	0,8	1,2	11,6	127	222	1485
4 x 2,5	0,26	2,05	0,8	1,4	12,9	156	277	1920
5 x 2,5	0,26	2,05	0,8	1,5	14,3	186	335	2400
6 x 2,5	0,26	2,05	0,8	1,5	15,3	218	385	2700
7 x 2,5	0,26	2,05	0,8	1,5	15,3	242	416	2820
12 x 2,5	0,26	2,05	0,8	1,8	19,5	410	693	4665
24 x 2,5	0,26	2,05	0,8	2,2	26,6	750	1251	8440
30 x 2,5	0,26	2,05	0,8	2,5	29,3	905	1525	10510
2 x 4	0,31	2,58	0,8	1,4	12,4	134	238	1620
3 x 4	0,31	2,58	0,8	1,4	13,1	177	297	1900
4 x 4	0,31	2,58	0,8	1,4	14,3	222	361	2235
5 x 4	0,31	2,58	0,8	1,6	15,8	287	471	2900
6 x 4	0,31	2,58	0,8	1,6	17,0	336	552	3300
7 x 4	0,31	2,58	0,8	1,6	17,0	374	582	3430
2 x 6	0,31	3,22	0,8	1,4	13,8	181	298	1840
3 x 6	0,31	3,22	0,8	1,5	14,8	258	400	2295
4 x 6	0,31	3,22	0,8	1,6	16,1	324	496	2805
5 x 6	0,31	3,22	0,8	1,6	17,5	395	605	3360
6 x 6	0,31	3,22	0,8	1,8	19,2	460	725	4150
7 x 6	0,31	3,22	0,8	1,8	19,2	517	770	4220
2 x 10	0,41	4,78	1	1,6	18,0	301	492	3070
3 x 10	0,41	4,78	1	1,8	19,5	402	643	3960
4 x 10	0,41	4,78	1	1,8	21,1	515	800	4735
5 x 10	0,41	4,78	1	2	23,4	622	994	5900
2 x 16	0,41	6,0	1	1,8	20,7	435	671	3865
3 x 16	0,41	6,0	1	2	22,4	596	892	4950
4 x 16	0,41	6,0	1	2	24,3	760	1109	5885
5 x 16	0,41	6,0	1	2,2	26,9	930	1386	7500
2 x 25	0,41	7,45	1,2	2,2	25,1	630	980	5795
3 x 25	0,41	7,45	1,2	2,2	26,6	881	1293	6950
4 x 25	0,41	7,45	1,2	2,2	29,0	1150	1636	8315
2 x 35	0,41	8,93	1,2	2,2	27,9	837	1229	6560
3 x 35	0,41	8,93	1,2	2,2	29,7	1200	1661	7900
4 x 35	0,41	8,93	1,2	2,5	33,0	1548	2146	10345
2 x 50	0,41	10,4	1,4	2,5	32,1	1163	1684	8825
3 x 50	0,41	10,4	1,4	2,5	34,2	1648	2261	10630

* FRNC = Flame Retardant Non Corrosive





SIHGLCSI
FRNC* S

Silicone FRNC* cable screened, heavy duty

Construction

Conductor: Cu tp, stranded, acc. to VDE 0295 class 5
Insulation: SiR E12 to VDE 0282 part 1
Colour: To VDE 0293 (page 201),
> 6 cores: black with printed numbers
Twisting: In layers
1 layer of glass fibre tape
1 layer of mica tape
Screen: Braid, tpc
Sheath: FRNC-SiR (page 103)
Colour: Black or on request
Identification: Printing HEW-KABEL/CDT FRNC - X

Application

Industrial areas with increased temperature requirements, e.g.
- Traffic technology
- Power plant technology
- Mechanical engineering
- Steel and iron fabrication

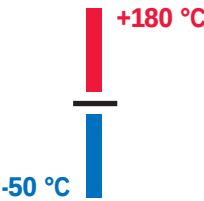
Notes

→ The itemized FRNC-cables meet the following requirements acc. to the standards listed on page 103:
- Flame retardance
- Low smoke emission
- Insulation integrity
- Halogenfree
- Low fuel value level
- Cables for power plants
→ We recommend our standard screened FRNC-silicone multicore cables for reduced mechanical stress. See page 98 - 99.

Technical data

Temperature range: - 50 °C up to +180 °C
Rated voltage U0/U: 300/500 V
Test voltage: 2000 V
Min. bending radius: 10 x diameter
Insulation resistance: Min. 20 MΩ x km at 20 °C
Halogenfree: To VDE 0472 part 813 and IEC 754-1

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 0,75	0,21	1,16	0,6	2,5	10,9	43	135	1532
3 x 0,75	0,21	1,16	0,6	2,5	11,3	53	151	1677
4 x 0,75	0,21	1,16	0,6	2,5	11,8	72	170	1861
5 x 0,75	0,21	1,16	0,6	2,5	12,5	83	193	2069
6 x 0,75	0,21	1,16	0,6	2,5	13,4	97	237	2290
7 x 0,75	0,21	1,16	0,6	2,5	13,4	104	242	2363
2 x 1	0,21	1,35	0,6	2,5	11,3	48	146	1618
3 x 1	0,21	1,35	0,6	2,5	11,7	70	164	1775
4 x 1	0,21	1,35	0,6	2,5	12,3	85	187	1964
5 x 1	0,21	1,35	0,6	2,5	13,2	98	219	2216
6 x 1	0,21	1,35	0,6	2,5	13,9	113	262	2444
7 x 1	0,21	1,35	0,6	2,5	13,9	122	269	2526
2 x 1,5	0,26	1,61	0,7	2,5	12,2	59	185	1975
3 x 1,5	0,26	1,61	0,7	2,5	12,9	89	226	2221
4 x 1,5	0,26	1,61	0,7	2,5	13,6	109	262	2468
5 x 1,5	0,26	1,61	0,7	2,5	14,4	128	303	2764
6 x 1,5	0,26	1,61	0,7	2,5	15,3	144	345	3059
7 x 1,5	0,26	1,61	0,7	2,5	15,3	161	356	3176
8 x 1,5	0,26	1,61	0,7	2,5	16,4	183	426	3520
10 x 1,5	0,26	1,61	0,7	2,5	17,8	220	484	4044
12 x 1,5	0,26	1,61	0,7	2,5	18,4	253	551	4506
14 x 1,5	0,26	1,61	0,7	2,5	19,6	309	606	4901
16 x 1,5	0,26	1,61	0,7	2,5	20,4	341	669	5336
18 x 1,5	0,26	1,61	0,7	2,5	21,3	375	742	5769
20 x 1,5	0,26	1,61	0,7	2,5	21,8	416	784	6121
24 x 1,5	0,26	1,61	0,7	2,5	23,6	482	934	7003
30 x 1,5	0,26	1,61	0,7	2,5	25,4	579	1097	8171



Silicone FRNC* cable screened, heavy duty

SIHGLCSI
FRNC* S

Products

Silicone Rubber
Cables

number of cores x cross section [mm²]	maximum Ø of single wire [mm]	maximum strandØ [mm]	wall thickness [mm]		o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]	fuel value level approx. [kJ/m]
			core	sheath				
2 x 2,5	0,26	2,05	0,8	2,5	13,6	101	246	2345
3 x 2,5	0,26	2,05	0,8	2,5	14,2	127	287	2622
4 x 2,5	0,26	2,05	0,8	2,5	15,1	156	338	2964
5 x 2,5	0,26	2,05	0,8	2,5	16,3	186	423	3391
6 x 2,5	0,26	2,05	0,8	2,5	17,3	218	480	3766
7 x 2,5	0,26	2,05	0,8	2,5	17,3	242	498	3929
12 x 2,5	0,26	2,05	0,8	2,5	20,9	410	754	5666
24 x 2,5	0,26	2,05	0,8	2,5	27,2	750	1301	9036
30 x 2,5	0,26	2,05	0,8	2,5	29,3	905	1573	10688
2 x 4	0,31	2,58	0,8	2,5	14,6	134	278	2493
3 x 4	0,31	2,58	0,8	2,5	15,3	177	338	2796
4 x 4	0,31	2,58	0,8	2,5	16,5	222	428	3236
5 x 4	0,31	2,58	0,8	2,5	17,6	287	510	3675
6 x 4	0,31	2,58	0,8	2,5	18,8	336	581	3994
7 x 4	0,31	2,58	0,8	2,5	18,8	374	618	4316
2 x 6	0,31	3,22	0,8	2,5	16,0	181	365	2823
3 x 6	0,31	3,22	0,8	2,5	16,8	258	444	3180
4 x 6	0,31	3,22	0,8	2,5	17,9	324	531	3650
5 x 6	0,31	3,22	0,8	2,5	19,3	395	648	4156
6 x 6	0,31	3,22	0,8	2,5	20,6	460	751	4699
7 x 6	0,31	3,22	0,8	2,5	20,6	517	791	4922
2 x 10	0,41	4,78	1	2,5	19,8	301	532	3995
3 x 10	0,41	4,78	1	2,5	20,9	402	672	4681
4 x 10	0,41	4,78	1	2,5	22,5	515	832	5492
5 x 10	0,41	4,78	1	2,5	24,4	622	1020	6354
2 x 16	0,41	6,0	1	2,5	22,1	435	695	4622
3 x 16	0,41	6,0	1	2,5	23,4	596	900	5451
4 x 16	0,41	6,0	1	2,5	25,3	760	1117	6418
5 x 16	0,41	6,0	1	2,5	27,5	930	1424	7503
2 x 25	0,41	7,45	1,2	2,5	25,7	630	967	6022
3 x 25	0,41	7,45	1,2	2,5	27,2	881	1326	7219
4 x 25	0,41	7,45	1,2	2,5	29,6	1150	1650	8576
2 x 35	0,41	8,93	1,2	2,5	28,5	837	1263	6841
3 x 35	0,41	8,93	1,2	2,5	30,3	1200	1681	8191
4 x 35	0,41	8,93	1,2	2,5	33,0	1548	2118	9744
2 x 50	0,41	10,4	1,4	2,5	32,1	1163	1644	8276
3 x 50	0,41	10,4	1,4	2,5	34,2	1648	2224	10003

* FRNC = Flame Retardant Non Corrosive



HEW-KABEL/CDT

NOTES
NOTES

SILICONE-FRNC*-CABLES

Halogenfree and Flame retardant

For operation temperatures between - 50 °C up to + 180°C

HEW-KABEL/CDT Silicone-FRNC*-cables offer the benefits of higher tear strength and an improved flame retardant protective sheath.

These cables meet the following requirements:

- 1. **VDE-stipulations for halogenfree and flame retardant cables**
According to VDE 0207 part 23 and part 24, VDE 0266 / 2.85
Additionally for extended temperature range from - 50 °C up to + 180 °C
Short circuit resistance of SiR 350°C (VDE 0298, part 3)
- 2. **Flame retardance:**
VDE 0472 part 804 testing method C
Combustion chamber test
FMPPA-Bauwesen-Stuttgart (test report K 735 19 a and b, dated 12/18/79)
IEEE Std. 383 - 1974 AB. 2.5... 2.5.4.4.4. (test report)
- 3. **Low smoke emission:**
FMPPA-Bauwesen-Stuttgart (test report K 735 19 a and b, dated 12/18/79)
- 4. **Insulation integrity**
IEC 331, VDE 0472 part 814 (test report)
- 5. **Halogenfree**
VDE 0472 part 813
FMPPA-Bauwesen-Stuttgart (test report K 735 19 a and b, dated 12/18/79)
- 6. **Limited fuel value level of insulation and sheath materials**
approx. 16,5 MJ/kg
- 7. **Approved security cables for power plants**
KMV-incidence resistant cables e.g.:
 - 1. TÜV Bayern: Test certificate Nr. KSY 50/318/83
 - 2. TÜV Hannover: Test certificate Nr. KTSK - 501/84
Nr. KTSK - 502/84
Nr. KTSK - 506/84
Nr. KTSK - 507/84
 - 3. TÜV Baden: Test certificate Nr. 116 - 584 - ELA - 84 -3

* FRNC = Flame Retardant Non Corrosive

Products

Silicone Rubber
Cables

TPE-insulated cables

Thermoplastic elastomers combine both the special qualities of elastomers and the processing possibilities of thermoplastics, i.e. the materials behave like elastomers during application and are easily processable on conventional extruders like thermoplastics.

Further characteristics of this material group are:

- wide temperature application range between -60°C up to +150°C
- good mechanical and electrical properties
- good resistance against fuel, oil and detergents
- high flexibility even at low temperatures
- good adhesion to other materials (e.g. moulded connectors)
- further applications by using additives (flame resistant, halogen free)
- due to thin insulation and sheath wall thicknesses as well as low density of materials, lower weight and reduced space demand is possible

In the range of thermoplastic elastomers, HEW-KABEL/CDT distinguishes between different materials. The following table shows the typical properties of these materials and their field of application.

Material	Temperature range	Resistance against		Fields of application
		Oil / Solvents	Acids / Bases	
TPE-E	-40 bis +150 °C	good	good	Automotive and traffic technologies, electrical industry
TPE-S	-40 bis +140 °C	sufficient	good	Automotive and electrical industry
TPE-O	-50 bis +115 °C	sufficient	excellent	Medical equipment, electrical industry, high and low voltage cables, installations in buildings
TPE-U	-60 bis +110 °C	good	good	Automotive and traffic technologies, tool and mechanical engineering, robotics, spiralized cables
TPE-V	-50 bis +115 °C	good	excellent	Automotive and electrical industry