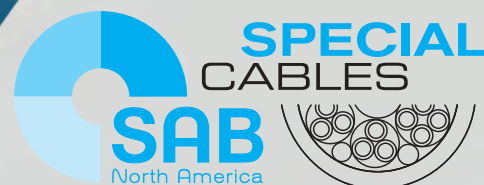


HEAT RESISTANT CABLES



www.sabcable.com
866-722-2974 ■ info@sabcable.com



About Us



SAB North America is a focused supplier for the automation, aerospace, medical, high temperature, and robotics industries, providing cable solutions that meet, exceed, and set new standards in the flexible cable market. In addition to flexible cable products, we offer an extensive inventory of high-quality cable accessories including cord grips, grounding glands and other accessories that complement our flexible control and automation cables.

Whatever the need may be, look to SAB North America for Special Cables that can, for example, help minimize maintenance costs and increase productivity, reduce downtime, and solve specific problems. Here is a small sample of some of the challenges that Special Cables from SAB North America can help address:

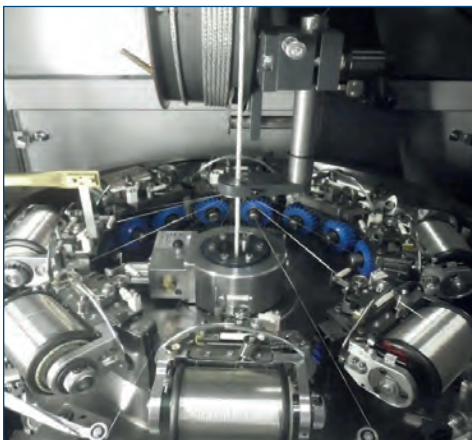
- Hybrid designs for multiple functions
- Harsh environments
- Difficult applications
- Industry-specific requirements.



For application areas with very high temperatures, SAB has developed different heat-resistant cables and fire-resistant cables that can be optimized for use depending on the application. Temperature-resistant cables from SAB are often used in the steel industry, plastics processing, refrigeration, heating, and air conditioning technology, in the lamp and lighting industry or in sauna construction.

Depending on the application, you will find fire-resistant cables from SAB for fixed installation or for highly flexible, moving applications. By using heat-resistant materials such as glass silk, FEP, PFA, ETFE, Besilen® (silicone) and our halogen-free insulation and jacket material SABIX®, our heat-resistant cables can be used up to a temperature range of max. +400°C.

Whether you're a valued distribution partner, an automation house, an integrator, or a contractor to the manufacturer, rest assured that our cables are reliable to maximize production efficiencies. SAB brings world class performance & 75 years of ingenuity to the table.



SAB Service Advantage...We make it Easy

- Engineering & technical assistance
- Cut to length with no cut charges
- Prepaid freight within US for orders over \$2,500
- Specialty cable designs (1500 ft minimum)
- No minimum on orders from stock
- Free drop shipments (no surcharges)
- 24-hour shipments from stock
- Cord Grips for securing and grounding cables

Heat Resistant Cables

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Heat Resistant Cables

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Connection cables for shipbuilding acc. to DNV, UL and cUL



■ BL TA 180 C

FEP with overall copper shielding

180°C 

27

Heat Resistant Special Cables

■ Special single conductor

Glass fiber insulated stranded wire with excellent temperature resistance

400°C 

28

■ Special connection cable

Connection cable with excellent temperature resistance

400°C 

29

■ Special connection cable

Silicone with fiber-glass braiding

180°C 

30

■ Festoon Cable

Silicone insulated connection cable with glass fiber braiding, inner jacket and overall copper shielding

180°C 

31

■ Smeltery Cable

Silicone insulated connection cable with glass fiber braiding and overall copper shielding

180°C 

32

■ SAB Heat

Parallel heating cable made of silicone 50W/m

200°C 

33

Halogen-free Cables

SABIX® A 100 HT

high temperature resistant single conductor wire with nickel-plated strands

SABIX® A 101 HT

high temperature resistant single conductor wire with silver-plated strands

+220°C

SABControl



SCB BRÖCKSKES · D-VIERSEN · SABIX® A 100 HT · 220°C · CE

Marking for SABIX® A 100 HT 71000150:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 100 HT · 220°C · CE

Construction:

Conductor:	SABIX® A 100 HT: nickel-plated copper strands SABIX® A 101 HT: silver-plated copper strands fine wires acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	colored, see table below

Outstanding features:

- halogen-free
- high temperature resistant
- flexible
- SABIX® A 101 HT: good solderability

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2000 V
Min. bending radius: For one single bend:	7.5 x O.D. 5 x O.D.
Temperature range: static: flexible:	-40/+220°C -25/+220°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

SABIX® A 100 HT

item no.	mm ²	AWG MCM	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 7100 .. 25	0.25	24 (≈ 14/34)	0.091	2.3	5
▶ 7100 .. 34	0.34	22 (≈ 7/30)	0.094	2.4	5
▶ 7100 .. 50	0.50	20 (≈ 16/32)	0.098	2.5	7
▶ 7100 .. 75	0.75	19 (≈ 23/32)	0.110	2.8	9
▶ 7100 .. 80	1.00	18 (≈ 30/32)	0.114	2.9	10
▶ 7100 .. 82	1.50	16 (≈ 27-29/30)	0.134	3.4	14
▶ 7100 .. 84	2.50	14 (≈ 46/30)	0.157	4.0	22
▶ 7100 .. 86	4.00	12 (≈ 52/28)	0.181	4.6	32
▶ 7100 .. 87	6.00	10 (≈ 78/28)	0.201	5.1	45
▶ 7100 .. 88	10.0	8 (≈ 77/26)	0.291	7.4	81
▶ 7100 .. 89	16.0	6 (≈ 122/26)	0.331	8.4	118
▶ 7100 .. 90	25.0	4 (≈ 190/26)	0.406	10.3	190
▶ 7100 .. 91	35.0	2 (≈ 272/26)	0.453	11.5	259
▶ 7100 .. 92	50.0	1 (≈ 400/26)	0.559	14.2	369
▶ 7100 .. 93	70.0	2/0 (≈ 543/26)	0.598	15.2	495
▶ 7100 .. 94	95.0	3/0 (≈ 484/24)	0.732	18.6	678
▶ 7100 .. 95	120.0	4/0 (≈ 589/24)	0.791	20.1	816
▶ 7100 .. 96	150.0	250 (≈ 740/24)	0.874	22.2	1015
▶ 7100 .. 97	185.0	350 (≈ 902/24)	0.929	23.6	1228
▶ 7100 .. 98	240.0	450 (≈ 1220/24)	1.075	27.3	1651
▶ 7100 .. 99	300.0	550 (≈ 1525/24)	1.197	30.4	2057

Other dimensions and colors are available on request

SABIX® A 101 HT

item no.	mm ²	AWG MCM	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 7101 .. 25	0.25	24 (≈ 14/34)	0.091	2.3	5
▶ 7101 .. 34	0.34	22 (≈ 7/30)	0.094	2.4	5
▶ 7101 .. 50	0.50	20 (≈ 16/32)	0.098	2.5	7
▶ 7101 .. 75	0.75	19 (≈ 23/32)	0.110	2.8	9
▶ 7101 .. 80	1.00	18 (≈ 30/32)	0.114	2.9	10
▶ 7101 .. 82	1.50	16 (≈ 27-29/30)	0.134	3.4	14
▶ 7101 .. 84	2.50	14 (≈ 46/30)	0.157	4.0	22
▶ 7101 .. 86	4.00	12 (≈ 52/28)	0.181	4.6	32
▶ 7101 .. 87	6.00	10 (≈ 78/28)	0.201	5.1	45
▶ 7101 .. 88	10.0	8 (≈ 77/26)	0.291	7.4	81
▶ 7101 .. 89	16.0	6 (≈ 122/26)	0.331	8.4	118
▶ 7101 .. 90	25.0	4 (≈ 190/26)	0.406	10.3	190
▶ 7101 .. 91	35.0	2 (≈ 272/26)	0.453	11.5	259
▶ 7101 .. 92	50.0	1 (≈ 400/26)	0.559	14.2	369
▶ 7101 .. 93	70.0	2/0 (≈ 543/26)	0.598	15.2	495
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▶ 7101 .. 97	185.0	350 (≈ 902/24)	0.929	23.6	1228
▶ 7101 .. 98	240.0	450 (≈ 1220/24)	1.075	27.3	1651
▶ 7101 .. 99	300.0	550 (≈ 1525/24)	1.197	30.4	2057

Other dimensions and colors are available on request

Color code for single conductors:

01 = black	07 = violet
02 = blue	08 = white
03 = brown	09 = orange
04 = gray	11 = red
05 = yellow	16 = gentian blue
06 = green	27 = green/yellow

Halogen-free Cables

SABIX® A 130 HT

High temperature resistant control cable with numbered or colored conductors

+220°C

SABControl

BRÖCKSKES · D-VIERSEN · SABIX® A 130 HT CE



Marking for SABIX® A 130 HT 71300415:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 130 HT CE

Construction:

Conductor:	silver-plated copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	up to 5 conductors: colored acc. to HD 308 (VDE 0293-308), see below more than 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 green/yellow ground from 3 conductors
Stranding:	in layers
Jacket material:	SABIX®
Jacket color:	gray (RAL 7015)

Outstanding features:

- halogen-free
- high temperature resistant
- flexible

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius: <i>fixed installation:</i> <i>free movement:</i>	4 x O.D. 6 x O.D.
Temperature range: <i>static:</i> <i>flexible:</i>	-40/+220°C -25/+220°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
71300205	2	0.197	5.0	20
71300305	3	0.209	5.3	24
71300405	4	0.224	5.7	30
71300505	5	0.248	6.3	36
71300705	7	0.268	6.8	45
71301005	10	0.346	8.8	64
71301205	12	0.358	9.1	73
71301805	18	0.425	10.8	108
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
71300207	2	0.220	5.6	26
71300307	3	0.232	5.9	32
71300407	4	0.252	6.4	39
71300507	5	0.280	7.1	49
71300707	7	0.311	7.9	62
71301007	10	0.402	10.2	89
71301207	12	0.413	10.5	102
71301807	18	0.492	12.5	151
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
71300210	2	0.228	5.8	30
71300310	3	0.240	6.1	37
71300410	4	0.264	6.7	46
71300510	5	0.287	7.3	57
71300710	7	0.323	8.2	74
71301010	10	0.417	10.6	109
71301210	12	0.429	10.9	121
71301810	18	0.512	13.0	179
71302510	25	0.618	15.7	241

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
71300215	2	0.264	6.7	41
71300315	3	0.280	7.1	51
71300415	4	0.311	7.9	65
71300515	5	0.346	8.8	83
71300715	7	0.378	9.6	104
71301015	10	0.496	12.6	150
71301215	12	0.512	13.0	173
71301815	18	0.614	15.6	259
71302515	25	0.740	18.8	351
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
71300225	2	0.323	8.2	64
71300325	3	0.343	8.7	81
71300425	4	0.374	9.5	100
71300525	5	0.425	10.8	129
71300725	7	0.465	11.8	165
71301025	10	0.606	15.4	235
71301225	12	0.626	15.9	273
71301825	18	0.740	18.8	402
▶ 12 AWG (≈ 52/28) • 4.00 mm²				
71300340	3	0.409	10.4	122
71300440	4	0.445	11.3	151
71300540	5	0.500	12.7	191
71300740	7	0.543	13.8	245

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 10 AWG (≈ 78/28) • 6.00 mm²				
71300360	3	0.457	11.6	167
71300460	4	0.500	12.7	210
71300560	5	0.551	14.0	261
71300760	7	0.618	15.7	346
▶ 8 AWG (≈ 77/26) • 10.00 mm²				
71300461	4	0.740	18.8	400
71300561	5	0.819	20.8	499
71300761	7	0.913	23.2	669
▶ 6 AWG (≈ 122/26) • 16.00 mm²				
71300462	4	0.850	21.6	607
71300562	5	0.957	24.3	770
71300762	7	1.047	26.6	998
▶ 4 AWG (≈ 190/26) • 25.00 mm²				
71300263	2	0.882	22.4	560
71300463	4	1.047	26.6	930
71300563	5	1.161	29.5	1160
▶ 2 AWG (≈ 272/26) • 35.00 mm²				
71300364	3	1.055	26.8	965
71300464	4	1.161	29.5	1222

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

2c: blue, brown

3c: green/yellow, blue, brown

4c: green/yellow, brown, black, gray

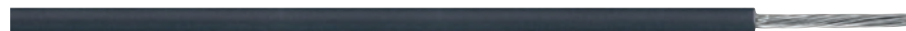
5c: green/yellow, blue, brown, black, gray

Besilen® - Silicone Cables

BiAF

Besilen® (silicone) insulated stranded wire

+180°C



Application: For the wiring in the steel industry, plastic processing, cooling, heating and air conditioning technology, in lamp and lighting industry or in sauna construction.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

Outstanding features:

- halogen-free
- flexible at low temperatures
- heat resistant

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range:	
static:	-40/+180°C
flexible:	-25/+180°C
short-term use:	+250°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	dimensions AWG	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 113002 *	24 AWG/1c	0.067	1.7	3
▶ 113003 *	22 AWG/1c	0.071	1.8	4
▶ 113005 *	20 AWG/1c	0.075	1.9	5
▶ 113007 *	19 AWG/1c	0.087	2.2	7
▶ 113010 *	18 AWG/1c	0.091	2.3	9
▶ 113015 *	16 AWG/1c	0.110	2.8	12
▶ 113025 *	14 AWG/1c	0.134	3.4	19
▶ 113040 *	12 AWG/1c	0.157	4.0	30
▶ 113060 *	10 AWG/1c	0.177	4.5	42
▶ 113100 *	8 AWG/1c	0.240	6.1	72
▶ 113160 *	6 AWG/1c	0.295	7.5	112
▶ 113250 *	4 AWG/1c	0.366	9.3	182
▶ 113350 *	2 AWG/1c	0.421	10.7	253
▶ 113500 *	1 AWG/1c	0.484	12.3	351
▶ 113700 *	2/0 AWG/1c	0.575	14.6	479
▶ 113950 *	3/0 AWG/1c	0.689	17.5	646
▶ 113120 *	4/0 AWG/1c	0.748	19.0	791
▶ 113150 *	250 MCM AWG/1c	0.823	20.9	982
▶ 113185 *	350 MCM AWG/1c	0.906	23.0	1199
▶ 113240 *	450 MCM AWG/1c	1.059	26.9	1615
▶ 113300 *	550 MCM AWG/1c	1.181	30.0	2014

Other dimensions and colors are possible on request.

* Color code for single conductors, position 8 of the item no.:

0 = green-yellow	4 = gray
1 = blue	5 = white
2 = black	6 = reddish brown
3 = brown	7 = red

Besilen® - Silicone Cables

BiHF-J

Besilen® (silicone) insulated conductors with silicone outer jacket

also possible
with extremely notch
resistant jacket

+180°C



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color code:	up to 5 conductors- HD 308, see below from 6 conductors- black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors- a green/yellow ground
Stranding:	in layers
Jacket material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Jacket color:	reddish brown (similar RAL 3016)

Outstanding features:

- halogen-free
- flexible at low temperatures
- heat resistant

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius: <i>fixed installation:</i> <i>free movement:</i>	4 x O.D. 6 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range: <i>static:</i> <i>flexible:</i> <i>short-term use:</i>	-40/+180°C -25/+180°C +250°C
Halogen-free	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Chemical resistance:	see page O/11
Weather resistance:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm ²				
1410205	2	0.189	4.8	21
1410305	3	0.201	5.1	25
1410405	4	0.217	5.5	30
1410505	5	0.240	6.1	36
1410705	7	0.260	6.6	46
1411205	12	0.350	8.9	76
1411805	18	0.417	10.6	110
1412505	25	0.508	12.9	151
▶ 19 AWG (≈ 23/32) • 0.75 mm ²				
1410207	2	0.213	5.4	28
1410307	3	0.224	5.7	33
1410407	4	0.244	6.2	40
1410507	5	0.272	6.9	48
1410607	6	0.303	7.7	58
1410707	7	0.303	7.7	65
1411007	10	0.394	10.0	91
1411207	12	0.406	10.3	105
1411807	18	0.520	13.2	153
1412507	25	0.587	14.9	211
▶ 18 AWG (≈ 30/32) • 1.00 mm ²				
1410210	2	0.220	5.6	31
1410310	3	0.232	5.9	38
1410410	4	0.256	6.5	47
1410510	5	0.280	7.1	56
1410610	6	0.315	8.0	68
1410710	7	0.315	8.0	76
1410810	8	0.366	9.3	87
1411210	12	0.421	10.7	124
1411810	18	0.504	12.8	181
1412510	25	0.610	15.5	248

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm ²				
1410215	2	0.260	6.6	42
1410315	3	0.276	7.0	54
1410415	4	0.307	7.8	69
1410515	5	0.339	8.6	81
1410615	6	0.370	9.4	95
1410715	7	0.370	9.4	106
1410815	8	0.441	11.2	126
1411215	12	0.504	12.8	178
1411815	18	0.606	15.4	263
1412015	20	0.638	16.2	288
1412515	25	0.732	18.6	362
▶ 14 AWG (≈ 46/30) • 2.50 mm ²				
1410225	2	0.315	8.0	67
1410325	3	0.335	8.5	83
1410425	4	0.366	9.3	103
1410525	5	0.417	10.6	129
1410625	6	0.457	11.6	151
1410725	7	0.457	11.6	169
1410925	9	0.598	15.2	224
1411225	12	0.618	15.7	280
1412425	24	0.882	22.4	546
▶ 12 AWG (≈ 52/28) • 4.00 mm ²				
1410240	2	0.378	9.6	99
1410340	3	0.402	10.2	125
1410440	4	0.437	11.1	155
1410540	5	0.492	12.5	189
1410740	7	0.535	13.6	249

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 10 AWG (≈ 78/28) • 6.00 mm ²				
1410260	2	0.425	10.8	135
1410360	3	0.449	11.4	171
1410460	4	0.492	12.5	213
1410560	5	0.543	13.8	257
▶ 8 AWG (≈ 77/26) • 10.00 mm ²				
1410461	4	0.661	16.8	374
1410561	5	0.736	18.7	456
▶ 6 AWG (≈ 122/26) • 16.00 mm ²				
1410462	4	0.799	20.3	551
▶ 4 AWG (≈ 190/26) • 25.00 mm ²				
1410463	4	1.000	25.4	894
▶ 2 AWG (≈ 77/26) • 35.00 mm ²				
1410464	4	1.134	28.8	1209

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

- 2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

Besilen® - Silicone Cables

BiHF/Cu/Bi-J

Shielded Besilen® (silicone) insulated conductors with silicone outer jacket

also possible
with extremely notch
resistant jacket

+180°C



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color code:	up to 5 conductors- HD 308, see below from 6 conductors- black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors- a green/yellow ground
Stranding:	in layers
Inner jacket:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Shielding:	tinned copper braiding
Jacket material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Jacket color:	reddish brown (similar RAL 3016)

Outstanding features:

- good EMC characteristics
- halogen-free
- flexible at low temperatures
- heat resistant
- increased mechanical protection

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	fixed installation: 5 x O.D. free movement: 10 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range:	static: -40/+180°C flexible: -25/+180°C short-term use: +250°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Chemical resistance:	see page O/11
Weather resistance:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm ²				
1900205	2	0.299	7.6	56
1900305	3	0.311	7.9	60
1900405	4	0.327	8.3	67
1900505	5	0.350	8.9	77
1900705	7	0.370	9.4	89
1901005	10	0.457	11.6	128
1901205	12	0.469	11.9	142
1901605	16	0.531	13.5	179
1901805	18	0.551	14.0	196
▶ 19 AWG (≈ 23/32) • 0.75 mm ²				
1900207	2	0.323	8.2	67
1900307	3	0.335	8.5	73
1900407	4	0.354	9.0	83
1900507	5	0.382	9.7	93
1900707	7	0.421	10.7	122
1901007	10	0.528	13.4	171
1901207	12	0.539	13.7	189
1901607	16	0.587	14.9	224
1901807	18	0.642	16.3	269

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) • 1.00 mm ²				
1900210	2	0.331	8.4	72
1900310	3	0.343	8.7	80
1900410	4	0.366	9.3	91
1900510	5	0.398	10.1	106
1900710	7	0.433	11.0	135
1901010	10	0.551	14.0	190
1901210	12	0.555	14.1	208
1901610	16	0.634	16.1	271
1901810	18	0.661	16.8	301
▶ 16 AWG (≈ 27-29/30) • 1.50 mm ²				
1900215	2	0.370	9.4	92
1900315	3	0.398	10.1	111
1900415	4	0.425	10.8	128
1900515	5	0.457	11.6	147
1900715	7	0.504	12.8	182
1901015	10	0.646	16.4	273
1901215	12	0.661	16.8	300
1901615	16	0.732	18.6	362
1901815	18	0.764	19.4	404

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 14 AWG (≈ 46/30) • 2.50 mm ²				
1900225	2	0.433	11.0	134
1900325	3	0.453	11.5	152
1900425	4	0.500	12.7	184
1900525	5	0.551	14.0	220
1900725	7	0.591	15.0	263

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

2c: blue, brown

3c: green/yellow, blue, brown

4c: green/yellow, brown, black, gray

5c: green/yellow, blue, brown, black, gray

Besilen® - Silicone Cables

SC 600 HDTR

Besilen® (silicone) insulated conductors with silicone outer jacket

+180°C

535 150°C 600V CSA AWM I/II A 150°C 600V FT1 FT2 CE

Marking for SC 600 HDTR 1271804:

SAB BRÜCKSKES · D-VIERSEN · SC 600 HDTR AWM Style 4535 150°C 600V CSA AWM I/II A 150°C 600V FT1 FT2 CE



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color code:	up to 5 conductors- HD 308, see below from 6 conductors- black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors- a green/yellow ground
Stranding:	in layers
Jacket material:	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Jacket color:	reddish brown (similar RAL 3016)

Outstanding features:

- halogen-free
- flexible at low temperatures
- heat resistant
- UL recognized and CSA approved

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	
fixed installation:	4 x O.D.
free movement:	6 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range:	
static:	DIN VDE -40/+180°C UL/CSA: up to +150°C Style 4535 +200°C (2000h)
flexible:	-25/+180°C
short-term use:	+250°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
► 20 AWG (≈ 16/32) ▪ 0.50 mm ²				
1272002	2	0.220	5.6	26
1272003	3	0.232	5.9	30
1272004	4	0.248	6.3	36
1272005	5	0.272	6.9	42
1272007	7	0.295	7.5	53
1272008	8	0.339	8.6	61
1272010	10	0.366	9.3	73
1272012	12	0.378	9.6	83
1272016	16	0.417	10.6	105
1272018	18	0.441	11.2	117
1272024	24	0.516	13.1	161
► 19 AWG (≈ 23/32) ▪ 0.75 mm ²				
1271902	2	0.232	5.9	31
1271903	3	0.252	6.4	36
1271904	4	0.272	6.9	44
1271905	5	0.299	7.6	52
1271907	7	0.323	8.2	66
1271908	8	0.374	9.5	76
1271910	10	0.406	10.3	91
1271912	12	0.417	10.6	104
1271916	16	0.465	11.8	132
1271918	18	0.492	12.5	148
1271924	24	0.583	14.8	206
► 18 AWG (≈ 30/32) ▪ 1.00 mm ²				
1271802	2	0.248	6.3	34
1271803	3	0.260	6.6	42
1271804	4	0.283	7.2	50
1271805	5	0.307	7.8	60
1271807	7	0.335	8.5	77
1271808	8	0.386	9.8	89
1271810	10	0.421	10.7	106
1271812	12	0.433	11.0	122
1271816	16	0.480	12.2	157
1271818	18	0.512	13.0	176
1271824	24	0.626	15.9	255

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
► 16 AWG (≈ 27-29/30) ▪ 1.50 mm ²				
1271602	2	0.280	7.1	46
1271603	3	0.295	7.5	56
1271604	4	0.315	8.0	67
1271605	5	0.350	8.9	81
1271607	7	0.382	9.7	105
1271608	8	0.449	11.4	122
1271610	10	0.496	12.6	150
1271612	12	0.512	13.0	173
1271616	16	0.583	14.8	229
1271618	18	0.614	15.6	255
1271624	24	0.724	18.4	339
► 14 AWG (≈ 46/30) ▪ 2.50 mm ²				
1271402	2	0.335	8.5	68
1271403	3	0.354	9.0	85
1271404	4	0.386	9.8	104
1271405	5	0.437	11.1	129
1271407	7	0.476	12.1	168
1271408	8	0.563	14.3	197
1271410	10	0.622	15.8	241
1271412	12	0.642	16.3	279
1271416	16	0.720	18.3	363
1271418	18	0.760	19.3	403
1271424	24	0.913	23.2	597
► 12 AWG (≈ 52/28) ▪ 4.00 mm ²				
1271202	2	0.382	9.7	91
1271203	3	0.417	10.6	124
1271204	4	0.457	11.6	155
1271205	5	0.508	12.9	189
1271207	7	0.555	14.1	248
► 10 AWG (≈ 78/28) ▪ 6.00 mm ²				
1271002	2	0.441	11.2	134
1271003	3	0.461	11.7	167
1271004	4	0.512	13.0	212
1271005	5	0.563	14.3	256
1271007	7	0.630	16.0	348

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
► 8 AWG (≈ 77/26) ▪ 10.00 mm ²				
1270802	2	0.575	14.6	228
1270803	3	0.610	15.5	291
1270804	4	0.669	17.0	363
1270805	5	0.744	18.9	443
1270807	7	0.831	21.1	601
► 6 AWG (≈ 122/26) ▪ 16.00 mm ²				
1270602	2	0.669	17.0	329
1270603	3	0.736	18.7	429
1270604	4	0.807	20.5	537
1270605	5	0.823	20.9	650
1270607	7	1.012	25.7	893
► 4 AWG (≈ 190/26) ▪ 25.00 mm ²				
1270402	2	0.850	21.6	518
1270403	3	0.906	23.0	665
1270404	4	1.008	25.6	849
► 2 AWG (≈ 77/26) ▪ 35.00 mm ²				
1270202	2	0.976	24.8	722
1270203	3	1.039	26.4	935
1270204	4	1.142	29.0	1181

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

2c: blue - brown

3c: green/yellow - blue - brown

4c: green/yellow - brown - black - gray

5c: green/yellow - blue - brown - black - gray



Temperature range
up to +200°C
Style 4511 with nickel
or silver plated
copper strands.

SC 600 C HDTR

Shielded Besilen® (silicone) insulated conductors with silicone outer jacket

+180°C



Marking for SC 600 C HDTR 1241804:

SAB BRÖCKSKES · D-VIERSEN · SC 600 C HDTR  AWM Style 4535 150°C 600V CSA AWM I/II A 150°C 600V FT1 FT2 

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color code:	up to 5 conductors- HD 308, see below from 6 conductors- black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors- a green/yellow ground
Stranding:	in layers
Inner jacket:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Shielding:	tinned copper braiding
Jacket material:	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Jacket color:	black (similar RAL 9011)



Outstanding features:

- good EMC characteristics
- halogen-free
- flexible at low temperatures
- heat resistant
- UL recognized and CSA approved

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius: <i>fixed installation:</i> <i>free movement:</i>	4 x O.D. 6 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range: <i>static:</i> <i>flexible:</i> <i>short-term use:</i>	DIN VDE -40/+180°C +200°C (2000h) UL/CSA: -25/+180°C up to +150°C Style 4535 +250°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
1241902	2	0.323	8.2	62
1241903	3	0.335	8.5	68
1241904	4	0.354	9.0	83
1241905	5	0.382	9.7	93
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
1241802	2	0.331	8.4	68
1241803	3	0.343	8.7	81
1241804	4	0.366	9.3	91
1241805	5	0.398	10.1	112
1241807	7	0.433	11.0	136

item no.	no. of conductors incl. ground	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
1241602	2	0.370	9.4	87
1241603	3	0.394	10.0	110
1241604	4	0.425	10.8	129
1241605	5	0.457	11.6	158
1241607	7	0.504	12.8	186
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
1241402	2	0.441	11.2	141
1241403	3	0.461	11.7	157
1241404	4	0.508	12.9	189
1241405	5	0.563	14.3	226

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
1241203	3	0.543	13.8	221
1241204	4	0.583	14.8	258
1241205	5	0.657	16.7	323
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
1241003	3	0.594	15.1	266
1241004	4	0.661	16.8	352
1241005	5	0.713	18.1	390

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

2c: blue, brown

3c: green/yellow, blue, brown

4c: green/yellow, brown, black, gray

5c: green/yellow, blue, brown, black, gray



Temperature range up to +200°C
Style 4511 with nickel
or silver plated copper strands.

Besilen® - Silicone Cables

05SJ-K

Besilen® (silicone) insulated strands with fiber-glass braiding with reference to DIN EN 50525-2-41

+180°C



Application: For the wiring of lamps, devices, switchboards and distributors at high ambient temperatures.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Standard color:	nature
Braiding:	fiber-glass
Impregnation:	impregnating lacquer

Outstanding features:

- flexible
- halogen-free
- flexible at low temperatures
- heat resistant

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range <i>static:</i>	-40/+180°C
<i>flexible:</i>	-25/+180°C
<i>short-term use:</i>	+250°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG	outer-ø		cable weight ≈lbs/mft
		inch	mm	
▶ 1550059	20 AWG/1c	0.106	2.7	9
▶ 1550079	19 AWG/1c	0.118	3.0	11
▶ 1550109	18 AWG/1c	0.122	3.1	13
▶ 1550159	16 AWG/1c	0.138	3.5	17
▶ 1550259	14 AWG/1c	0.165	4.2	24
▶ 1550409	12 AWG/1c	0.189	4.8	34
▶ 1550609	10 AWG/1c	0.209	5.3	40
▶ 1551009	8 AWG/1c	0.252	6.4	81
▶ 1551609	6 AWG/1c	0.327	8.3	120
▶ 1552509	4 AWG/1c	0.398	10.1	189
▶ 1553509	2 AWG/1c	0.453	11.5	261
▶ 1555009	1 AWG/1c	0.516	13.1	361
▶ 1557009	2/0 AWG/1c	0.606	15.4	484
▶ 1559509	3/0 AWG/1c	0.709	18.0	647

Other dimensions and colors are possible on request.

Besilen® - Silicone Cables

S 180 HT

Continuous flex control cable with Besilen® (silicone) outer jacket for cable tracks

+180°C

SAB Flex



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	FEP
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors- a green/yellow ground
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	tape
Jacket material:	special Besilen®
Jacket color:	gray (similar RAL 7000)

Outstanding features:

- extreme temperature resistance
- high notch resistance
- very good flexibility

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius: <i>continuously flexible:</i>	10 x O.D.
Temperature range: <i>static:</i> <i>flexing:</i> <i>short-term use:</i>	-25/+180°C -25/+180°C +200°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Flexibility:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 16 AWG (≈ 84/34) • 1.50 mm²				
31800315	3	0.303	7.7	63
31800415	4	0.327	8.3	78
31800515	5	0.362	9.2	99
31800715	7	0.417	10.6	134
▶ 14 AWG (≈ 140/34) • 2.50 mm²				
31800325	3	0.370	9.4	97
31800425	4	0.398	10.1	119
31800525	5	0.453	11.5	153
31800625	6	0.504	12.8	180
31800725	7	0.531	13.5	215
31801225	12	0.650	16.5	316
31802025	20	0.795	20.2	512

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 12 AWG (≈ 224/34) • 4.00 mm²				
31800440	4	0.480	12.2	177
31800540	5	0.528	13.4	224
31800740	7	0.626	15.9	315
31801240	12	0.772	19.6	475
▶ 10 AWG (≈ 186/32) • 6.00 mm²				
31800360	3	0.528	13.4	203
31800460	4	0.575	14.6	274
31800560	5	0.646	16.4	333
31800760	7	0.764	19.4	468
▶ 8 AWG (≈ 320/32) • 10.00 mm²				
31800361	3	0.602	15.3	307
31800461	4	0.669	17.0	409
31800561	5	0.744	18.9	501

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 6 AWG (≈ 504/32) • 16.00 mm²				
31800462	4	0.815	20.7	613
31800562	5	0.913	23.2	770
▶ 4 AWG (≈ 760/32) • 25.00 mm²				
31800363	3	0.846	21.5	671
31800463	4	0.945	24.0	882
▶ 2 AWG (≈ 1083/32) • 35.00 mm²				
31800164	1	0.508	12.9	288
31800464	4	1.110	28.2	1209
▶ 3/0 AWG (≈ 1340/28) • 95 mm²				
31800167	1	0.831	21.1	750
▶ 250 MCM (≈ 2122/28) • 150 mm²				
31800169	1	1.004	25.5	1172

Other dimensions and colors are available on request



Application:
for use in cable tracks with
extremely high ambient
temperatures
for example: steel industry

Besilen® - Silicone Cables

S 180 C HT

Continuous flex shielding control cable with
Besilen® (silicone) outer jacket for cable tracks

+180°C

SAB Flex



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	FEP
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors- a green/yellow ground
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	tape
Shielding:	tinned copper braiding
Jacket material:	special Besilen®
Jacket color:	gray (similar RAL 7000)

Outstanding features:

- very good EMC characteristics
- extreme temperature resistance
- high notch resistance
- very good flexibility

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius: continuously flexible:	15 x O.D.
Temperature range: static: flexing: short-term use:	-25/+180°C -25/+180°C +200°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Flexibility:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 16 AWG (≈ 89/34) • 1.50 mm ²				
31850315	3	0.319	8.1	74
31850415	4	0.350	8.9	92
31850515	5	0.378	9.6	112
31850715	7	0.449	11.4	161
▶ 14 AWG (≈ 140/34) • 2.50 mm ²				
31850325	3	0.386	9.8	110
31850425	4	0.437	11.1	148
31850525	5	0.476	12.1	180
31850725	7	0.551	14.0	245
31852025	20	0.827	21.0	575

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 12 AWG (≈ 224/34) • 4.00 mm ²				
31850440	4	0.500	12.7	204
31850540	5	0.551	14.0	254
31850740	7	0.657	16.7	363
31851240	12	0.799	20.3	531
▶ 10 AWG (≈ 186/32) • 6.00 mm ²				
31850360	3	0.551	14.0	229
31850460	4	0.598	15.2	307
31850560	5	0.677	17.2	382
31850760	7	0.795	20.2	524
▶ 8 AWG (≈ 320/32) • 10.00 mm ²				
31850461	4	0.701	17.8	459
31850561	5	0.776	19.7	556

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 6 AWG (≈ 504/32) • 16.00 mm ²				
31850462	4	0.846	21.5	677
31850562	5	0.945	24.0	844
▶ 4 AWG (≈ 760/32) • 25.00 mm ²				
31850463	4	0.992	25.2	970
▶ 2 AWG (≈ 1083/32) • 35.00 mm ²				
31850464	4	1.142	29.0	1299
▶ 3/0 AWG (≈ 1340/28) • 95 mm ²				
31850167	1	0.878	22.3	825
▶ 350 MCM (≈ 1472/26) • 150 mm ²				
31850170	1	1.126	28.6	1512

Other dimensions and colors are available on request



Application:
for use in cable tracks with
extremely high ambient
temperatures
for example: steel industry

Profibus-DP Cables acc. to IEC 61158-2

S PB 634 HT

S PB 634 HT Hybrid

High temperature, Profibus-DP
continuous flex cable

High temperature Profibus-DP
continuous flex cable with supply conductors

+180°C



RÖCKSKES · D-VIERSEN · S PB 634 HT 2x0.34mm² CE



Marking for S PB 634 HT 36341000:

SAB BRÖCKSKES · D-VIERSEN · S PB 634 HT 2x0.34mm² CE

Application: For use in cable tracks with extreme ambient temperatures.

Construction:	S PB 634 HT	S PB 634 HT Hybrid
Dimension:	2 x 0.34 mm²	2 x 0.34 mm² + supply conductors
Conductor:	tinned copper strands, extra fine wires	tinned copper strands, extra fine wires
Conductor insulation:	PFA	PFA
Color code:	red, green	0.34 mm² red, green supply conductors acc. to HD 308 (see below)
Stranding:	0.34 mm² twisted to pairs	0.34 mm² twisted to pairs
Wrapping:	PTFE foil	PTFE foil
Inner jacket:	FEP	special Besilen®
Shielding 0.34 mm²:	tinned copper braiding	tinned copper braiding
Inner jacket:	---	FEP
Stranding:	---	element 0.34 mm² together with supply conductors
Wrapping:	---	PTFE foil
Outer jacket:	special Besilen®	special Besilen®
Jacket color:	blue lilac (similar RAL 4005)	blue lilac (similar RAL 4005)

Technical data:	S PB 634 HT	S PB 634 HT Hybrid
Item number:	36341000	see table below
Nominal voltage:	---	U ₀ /U 300/500 V (supply conductors)
Peak operating voltage:	max. 350 V (0.34 mm²)	max. 350 V (0.34 mm²)
Testing voltage conductor/conductor: conductor/shielding:	1500 V 1200 V	0.34 mm² 1500 V 1200 V supply conductors 2000 V 2000 V
Temperature range static: flexible: short-term use:	5 x O.D. 10 x O.D. 15 x O.D.	5 x O.D. 10 x O.D. 15 x O.D.
Min. bending radius fixed installation: free movement: continuously flexible:	- 40°C / + 180°C - 25°C / + 180°C + 250°C	- 40°C / + 180°C - 25°C / + 180°C + 250°C
Characteristic impedance PB element (3-20 MHz):	150 Ω ± 10%	150 Ω ± 10%
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	
Flexibility:	very good	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union	acc. to RoHS directive of the European Union

item no.	type	AWG	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 36341000	S PB 634 HT	22 AWG/2c	0.370	9.4	81
▶ 36341307	S PB 634 HT Hybrid	22 AWG/2c + 19 AWG/3c	0.472	12.0	128
▶ 36341407	S PB 634 HT Hybrid	22 AWG/2c + 19 AWG/4c	0.472	12.0	128
▶ 36341510	S PB 634 HT Hybrid	22 AWG/2c + 18 AWG/5c	0.480	12.2	154
▶ 36341315	S PB 634 HT Hybrid	22 AWG/2c + 16 AWG/3c	0.496	12.6	144
▶ 36341415	S PB 634 HT Hybrid	22 AWG/2c + 16 AWG/4c	0.496	12.6	158



Outstanding features:

- extreme temperature resistance
- high notch resistance
- very good flexibility

HD 308 color code:

2c: blue - brown; 3c: green/yellow - blue - brown; 4c: green/yellow - brown - black - gray; 5c: green/yellow - blue - brown - black - gray



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Heat Resistant Cables

CATLine CAT 6A HT

Gigabit Ethernet cable – high temperature resistant

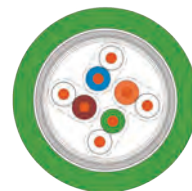


16314631- FEP Version

6AWG 16314631 AWM Style 21618 150°C 600V CE

Marking for CATLine CAT 6A HT 16314631:

SAB BRÖCKSKES · D-VIERSEN · CATLine Cat.6A HT 4x2x26AWG 16314631 AWM Style 21618 150°C 600V CE



16324631- PFA Version

CATLine CAT 6A HT 4x2x26AWG 16324631 CE

Marking for CATLine CAT 6A HT 16324631:

SAB BRÖCKSKES · D-VIERSEN · CATLine Cat.6A HT 4x2x26AWG 16324631 CE



Construction:

Conductor:	
FEP:	bare copper strands, fine wires
PFA:	silver-plated copper strands, fine wires
Insulation:	FEP or PFA
Color code:	white/blue, white/orange, white/green, white/brown
Stranding:	twisted to pairs
Wrapping:	PETP foil
Shielding:	
FEP:	alu. foil + tinned copper braiding
PFA:	alu. foil + silver-plated copper braiding
Jacket material:	FEP or PFA
Jacket color:	green (similar RAL 6018)

Outstanding features:

- high temperature resistant
- low temperature resistant
- flame retardant and self-extinguishing
- oil and chemical resistant
- UL recognized- FEP version only

Technical data:

Peak operating voltage:	max. 90 V		
Voltage UL:	600 V		
Testing voltage:	conductor/conductor: conductor/shielding:	FEP: 2000 V 2000 V	PFA: 750 V 750 V
Min. bending radius: fixed installation: free movement:	5 x O.D. 10 x O.D.		
Temperature range: static: flexible:	FEP: -90/+180°C -55/+180°C UL: up to +150°C	PFA: -90/+250°C -55/+250°C	
Burning characteristics: FEP:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1		
Oil resistance:	very good		
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds		
Character impedance:	100Ω ± 10Ω, accomplishes the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 (CAT 6A)		
Approvals:	FEP: UR AWM Style 21618, CE, RoHS PFA: CE, RoHS		
Application:	suitable for EtherCAT and EtherNET/IP applications		
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30		

item no.	type	dimensions AWG	max. cond.-ø mm	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mt
▶ 16314631	FEP	26 (≈ 7/34)/4pr	1.05	0.228	5.8	36
▶ 16324631	PFA	26 (≈ 7/34)/4pr	1.05	0.217	5.5	33

Other dimensions and colors are available on request

NEW

PFA type
up to +250°C

Also possible as a
cable assembly with
M12 or RJ 45 plug



Heat Resistant Cables

CATLine SPE HT

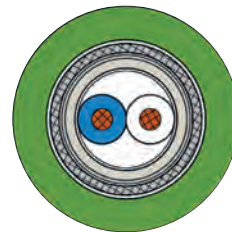
Single-Pair-Ethernet cable, high temperature resistant UL recognition

+180°C

SAB CATLine



SEN · CATLine SPE HT 2xAWG26/7 17211620 CE



Marking for CATLine SPE HT 17211620:

SAB BRÖCKSKES · D-VIERSEN · CATLine SPE HT 2xAWG26/7 17211620 CE

Construction:

Conductor:	bare copper strands, 7 wires
Insulation:	FEP
Color code:	white, blue
Stranding:	twisted to pairs
Wrapping:	PETP foil
Shielding:	alu. foil + tinned copper braiding
Jacket material:	FEP
Jacket color:	green (similar RAL 6018)

Outstanding features:

- high temperature resistant
- flame retardant and self-extinguishing
- very easy installation

Technical data:

Peak operating voltage:	max. 90 V
Voltage UL:	600 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
Temperature range:	UL: up to +150°C
static:	-40/+180°C
flexible:	-25/+180°C
Temperature range conductor:	up to +180°C
Characteristic impedance:	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to IEC 61156-12. Bandwidth 1 - 600 MHz.
Approvals:	UL AWM Style 4535, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	type	AWG	outer-ø		cable weight ≈ lbs/mft
			±10% inch	±10% mm	
▶ 17211620	CATLine SPE HT	26 (7 strand)/1pr	0.173	4.4	23
▶ 17211220	CATLine SPE HT	22 (7 strand)/1pr	0.209	5.3	30

Other dimensions and colors are available on request

Data Cables

Sensor plus 150

High temperature resistant FEP insulated sensor cable up to +150°C

+150°C

RoHS

Sensor plus 150 4 x AWG 24/7

Marking for Sensor plus 150 38370424:

SAB BRÜCKSKES · D-VIERSEN · Sensor plus 150 4 x AWG 24/7 38370424

Application: High temperature resistant sensor cable up to max. +150°C for measuring and testing technology. Supply cable for miniature sensors. Strain gauge supply cable for smallest bending radii. Connecting cable for modular technology.

Construction:

Conductor:	tinned copper strands, silver-plated from AWG 32
Insulation:	FEP
Color code:	DIN 47100, see below
Wrapping:	foil
Shielding:	tinned copper braiding, optical coverage ≥ 85%
Jacket material:	PUR 490 with smooth surface
Jacket color:	black (RAL 9005)

Outstanding features:

- Temperature resistance up to +150 °C (up to 3000 hours)
- high flexibility and high abrasion resistance
- high robustness
- low capacity
- smallest bending radius
- easy harnessing
- small outer diameter
- fuel resistant

Technical Data:

Peak operating voltage:	max. 48 V
Testing voltage:	conductor/conductor: 600 V conductor/shielding: 600 V
Min. bending radius	
fixed installation:	2 x O.D. (one single bend)
free movement:	10 x O.D.
Temperature range cable:	
static*:	-50/+150°C
flexible*:	-45/+150°C
Temperature range conductor:	up to +180°C (short time use up to +205°C)
Oil resistance:	very good - TMPU acc. to EN 50363-10-2
Fuel resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

*+150°C – up to 3000 hours

item no.	no. of conductors	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ AWG 34/7				
38370234	2	0.087	2.2	5
38370334	3	0.091	2.3	5
38370434	4	0.094	2.4	6
38370634	6	0.102	2.6	7
38370834	8	0.114	2.9	9
▶ AWG 32/7				
38370232	2	0.091	2.3	5
38370332	3	0.091	2.3	6
38370432	4	0.098	2.5	7
38370632	6	0.110	2.8	9
38370832	8	0.122	3.1	11

item no.	no. of conductors	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ AWG 30/7				
38370230	2	0.094	2.4	6
38370330	3	0.098	2.5	7
38370430	4	0.102	2.6	8
38370630	6	0.114	2.9	10
38370830	8	0.126	3.2	12
▶ AWG 28/7				
38370228	2	0.102	2.6	7
38370328	3	0.106	2.7	9
38370428	4	0.110	2.8	9
38370628	6	0.122	3.1	13
38370828	8	0.150	3.8	17

item no.	no. of conductors	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ AWG 26/7				
38370226	2	0.118	3.0	10
38370326	3	0.122	3.1	11
38370426	4	0.130	3.3	13
38370626	6	0.154	3.9	19
38370826	8	0.173	4.4	24
▶ AWG 24/7				
38370224	2	0.126	3.2	11
38370324	3	0.130	3.3	13
38370424	4	0.150	3.8	17
38370624	6	0.173	4.4	24
38370824	8	0.189	4.8	30

Other dimensions and colors are available on request

DIN 47100 color code:

#2- brown, #3- green, #4- yellow
#5- gray, #6- pink, #7- blue, #8- red

Possible on request:

- harnessed cable
- also available as HV thermo cable type K (1-channel and 4-channel)
- also available without copper braiding

Data Cables

Sensor plus 250

High temperature resistant PFA insulated sensor cable up to +250°C

+250°C

RoHS

Sensor plus 250 4 x AWG 32/7

Marking for Sensor plus 250 38390432:

SAB BRÜCKSKES · D-VIERSEN · Sensor plus 250 4 x AWG 32/7 38390432

Application: High temperature resistant sensor cable up to max. +250°C for measuring and testing technology. Supply cable for miniature sensors. Strain gauge supply cable for smallest bending radii. Connecting cable for modular technology.

Construction:

Conductor:	silver-plated copper strands
Insulation:	PFA
Color code:	DIN 47100, see below
Wrapping:	foil
Shielding:	tinned copper braiding, optical coverage ≥ 85%
Jacket material:	PFA
Jacket color:	black (RAL 9005)

Outstanding features:

- Temperature resistance up to +250°C
- low capacity
- absolutely weather resistant
- high abrasion resistance
- very good chemical resistance
- small outer diameter

item no.	no. of conductors	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ AWG 34/7 38390234	2	0.071	1.8	5
▶ AWG 32/7 38390432	4	0.083	2.1	7
▶ AWG 30/7 38390330	3	0.083	2.1	7
▶ AWG 28/7 38390628	6	0.106	2.7	13

Other dimensions and colors are available on request

Technical Data:

Peak operating voltage:	max. 48 V
Testing voltage:	conductor/conductor: 600 V conductor/shielding: 600 V
Min. bending radius fixed installation: flexible movement:	2 x O.D. (one single bend) 10 x O.D.
Temperature range: static: flexible:	-90/+250°C -55/+250°C
Dielectric constant:	approx. 2.1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:	very good
Hydraulic oil resistance:	very good
Fuel resistance:	very good
Battery acid resistance:	very good
UV resistance:	very good
Ozone resistance:	very good
Saltwater resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

DIN 47100 color code:

#2- brown, #3- green, #4- yellow, #5- gray, #6- pink



Possible on request:

- harnessed cable
- also available without copper braiding

FEP and PFA Cables

FEP and PFA insulated stranded hook-up wire

Li6Ybl, Li6Yvz, and LiPFAvn with extended temperature range

375 V

max. +250°C



Construction:

Conductor:	
Li6Ybl:	bare tinned copper strands
Li6Yvz:	tinned copper strands
LiPFAvn:	nickel-plated copper strands acc. to ASTM B 286
Insulation:	
Li6Ybl & Li6Yvz:	FEP, 6Y11 acc. to VDE 0207-6
LiPFAvn:	PFA, 5Y11 acc. to VDE 0207-6

Outstanding features:

- excellent resistance against chemicals and solvents
- excellent temperature resistance and flexibility at low temperatures
- excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- UL recognized

Technical data:

Peak operating voltage:	max. 375 V
Voltage UL:	600 V
Testing voltage:	2000 V
Installation:	for one single bend the inner bending radius must not be smaller than 0.5 x outer diameter of the insulated strands
Radiation resistance:	FEP: 1 x 10 ⁷ cJ/kg PFA: 1 x 10 ⁸ cJ/kg
Temperature range:	FEP: -90/+180°C PFA: -90/+250°C
static:	-55/+180°C
flexible:	-55/+250°C
short-term use:	+200°C
UL:	up to +150°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT2
Oil resistance:	very good acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Approvals:	UR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Li6Ybl - bare copper / FEP insulation

item no.	AWG/stranding	outer-ø		cable weight ≈lbs/mft
		approx. inch	approx. mm	
▶ 3339 .. 28	28 AWG/7	0.028	0.70	1
▶ 3339 .. 26	26 AWG/7	0.031	0.80	1
▶ 3339 .. 24	24 AWG/7	0.037	0.93	2
▶ 3339 .. 22	22 AWG/7	0.043	1.08	3
▶ 3339 .. 20	20 AWG/7	0.050	1.28	4

Li6Yvz - tinned copper / FEP insulation

item no.	AWG/stranding	outer-ø		cable weight ≈lbs/mft
		approx. inch	approx. mm	
▶ 3340 .. 28	28 AWG/7	0.028	0.70	1
▶ 3340 .. 26	26 AWG/7	0.031	0.80	1
▶ 3340 .. 24	24 AWG/7	0.037	0.93	2
▶ 3340 .. 22	22 AWG/7	0.043	1.08	3
▶ 3340 .. 20	20 AWG/7	0.050	1.28	4
▶ 3340 .. 16	16 AWG/7	0.070	1.79	9

LiPFAvn - nickel-plated copper / PFA insulation

item no.	AWG/stranding	outer-ø		cable weight ≈lbs/mft
		approx. inch	approx. mm	
▶ 3344 .. 28	28 AWG/7	0.028	0.71	1
▶ 3344 .. 26	26 AWG/7	0.031	0.80	1
▶ 3344 .. 24	24 AWG/7	0.037	0.93	2
▶ 3344 .. 22	22 AWG/7	0.043	1.08	3
▶ 3344 .. 20	20 AWG/7	0.050	1.28	4

Other dimensions and colors are available on request

Color code for single conductors:

01 = black	05 = yellow	09 = orange
02 = blue	06 = green	11 = red
03 = brown	07 = violet	15 = nature
04 = gray	08 = white	



Possible on request:

- ETFE insulated strands

ETFE, FEP, and PFA Cables

ETFE, FEP, and PFA insulated stranded hook-up wire

Li7Ybl, Li6Ybl, Li6Yvz, and LiPFAvn with extended temperature range

900 V

max. +250°C



Construction:

Conductor: <i>Li7Ybl & Li6Ybl:</i> <i>Li6Yvz</i> <i>LiPFAvn:</i>	bare copper strands tinned copper strands nickel-plated copper strands acc. to ASTM B 286
Insulation: <i>Li7Ybl:</i> <i>Li6Ybl & Li6Yvz:</i> <i>LiPFAvn:</i>	ETFE, 7Y11 acc. to VDE 0207-6 FEP, 6Y11 acc. to VDE 0207-6 PFA, 51Y11 acc. to VDE 0207-6

Outstanding features:

- **ETFE:**
 - high resistance against chemicals and solvents
 - low and high temperature resistance
 - good electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- **FEP + PFA:**
 - excellent resistance against chemicals and solvents
 - excellent temperature resistance and flexibility at low temperatures
 - excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
 - UL recognized

Technical data:

Peak operating voltage:	max. 900 V
Voltage UL:	Li6Ybl, Li6Yvz, LiPFAvn: 600 V
Testing voltage:	2500 V
Installation:	for one single bend the inner bending radius must not be smaller than 0.5 x outer diameter of the insulated strands
Radiation resistance:	ETFE: 2 x 10 ⁸ cJ/kg FEP: 1 x 10 ⁷ cJ/kg PFA: 1 x 10 ⁶ cJ/kg
Temperature range: <i>static:</i> <i>flexible:</i> <i>short-term use:</i>	ETFE: -90/+135°C -55/+135°C +150°C FEP: -90/+180°C -55/+180°C +200°C PFA: -90/+250°C -55/+250°C +260°C up to +250°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT2 (FEP and PFA version)
Oil resistance:	very good acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Approvals:	Li6Ybl, Li6Yvz, LiPFAvn: UR AWM, CE, EAC, RoHS Li7Ybl: CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Li7Ybl bare copper / ETFE insulation

item no.	AWG/stranding	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
▶ 3345 .. 28	28 AWG/7	0.037	0.93	1
▶ 3345 .. 26	26 AWG/7	0.041	1.03	2
▶ 3345 .. 24	24 AWG/7	0.046	1.16	2
▶ 3345 .. 22	22 AWG/7	0.052	1.31	3
▶ 3345 .. 20	20 AWG/7	0.059	1.51	5
▶ 3345 .. 18	18 AWG/7	0.070	1.78	7
▶ 3345 .. 16	16 AWG/7	0.076	1.94	9
▶ 3345 .. 14	14 AWG/7	0.091	2.30	14
▶ 3345 .. 12	12 AWG/7	0.109	2.76	22

Li6Ybl bare copper / FEP insulation

item no.	AWG/stranding	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
▶ 3348 .. 28	28 AWG/7	0.037	0.93	1
▶ 3348 .. 26	26 AWG/7	0.041	1.03	2
▶ 3348 .. 24	24 AWG/7	0.046	1.16	2
▶ 3348 .. 22	22 AWG/7	0.052	1.31	3
▶ 3348 .. 20	20 AWG/7	0.059	1.51	5
▶ 3348 .. 18	18 AWG/7	0.070	1.78	8
▶ 3348 .. 16	16 AWG/7	0.076	1.94	9
▶ 3348 .. 14	14 AWG/7	0.091	2.30	15
▶ 3348 .. 12	12 AWG/7	0.109	2.76	22

Color code for single conductors:

01 = black	05 = yellow	09 = orange
02 = blue	06 = green	11 = red
03 = brown	07 = violet	15 = nature
04 = gray	08 = white	

Li6Yvz tinned copper / FEP insulation

item no.	AWG/stranding	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
▶ 3349 .. 28	28 AWG/7	0.037	0.93	1
▶ 3349 .. 26	26 AWG/7	0.041	1.03	2
▶ 3349 .. 24	24 AWG/7	0.046	1.16	2
▶ 3349 .. 22	22 AWG/7	0.052	1.31	3
▶ 3349 .. 20	20 AWG/7	0.059	1.51	5
▶ 3349 .. 18	18 AWG/7	0.070	1.78	8
▶ 3349 .. 16	16 AWG/7	0.076	1.94	9
▶ 3349 .. 14	14 AWG/7	0.091	2.30	15
▶ 3349 .. 12	12 AWG/7	0.109	2.76	22

LiPFAvn nickel-plated copper / PFA insulation

item no.	AWG/stranding	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
▶ 3353 .. 28	28 AWG/7	0.038	0.96	1
▶ 3353 .. 26	26 AWG/7	0.042	1.06	2
▶ 3353 .. 24	24 AWG/7	0.046	1.17	2
▶ 3353 .. 22	22 AWG/7	0.053	1.34	3
▶ 3353 .. 20	20 AWG/7	0.061	1.54	5
▶ 3353 .. 18	18 AWG/7	0.071	1.81	7
▶ 3353 .. 16	16 AWG/7	0.078	1.97	9

Other dimensions and colors are available on request

AWG 22/3c • AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38010322 CE



Marking for TD 801 F 38010322:

SAB BRÜCKSKES · D-VIERSEN · TD 801 F AWG 22/3c • AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38010322 CE

Construction:

Conductor:	tinned copper strands acc. to ASTM B 286
Insulation:	FEP, 6Y11 acc. to VDE 0207-6
Color code:	DIN 47100, see below
Stranding:	in layers
Jacket material:	FEP, 6YM1 acc. to VDE 0207-6
Jacket color:	white (RAL 1013)

Outstanding features:

- excellent resistance against chemicals and solvents
- excellent temperature resistance and flexibility at low temperatures
- excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- UL/cUL recognized

Technical data:

Peak operating voltage:	max. 375 V
Voltage UL/cUL:	600 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg
Temperature range:	DIN VDE UL/cUL: up to +150°C static: -90/+180°C flexible: -55/+180°C short-term use: +200°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, FT2
Oil resistance:	very good acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Approvals:	UR, cUR, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors	outer-ø max inch	max mm	cable weight ≈lbs/mft
▶ 28 AWG (7 strand) • 0.08 mm ²				
38010228	2	0.079	2.0	4
38010328	3	0.083	2.1	5
38010428	4	0.091	2.3	7
38010528	5	0.098	2.5	8
38010728	7	0.106	2.7	10
38011028	10	0.134	3.4	14
38011228	12	0.138	3.5	16
▶ 26 AWG (7 strand) • 0.14 mm ²				
38010226	2	0.087	2.2	5
38010326	3	0.094	2.4	7
38010426	4	0.098	2.5	9
38010526	5	0.110	2.8	10
38010726	7	0.118	3.0	13
38011026	10	0.157	4.0	18
38011226	12	0.157	4.0	22

item no.	no. of conductors	outer-ø max inch	max mm	cable weight ≈lbs/mft
▶ 24 AWG (7 strand) • 0.25 mm ²				
38010224	2	0.098	2.5	7
38010324	3	0.102	2.6	9
38010424	4	0.114	2.9	11
38010524	5	0.122	3.1	14
38010624	6	0.138	3.5	17
38010724	7	0.134	3.4	18
38011024	10	0.177	4.5	26
38011224	12	0.185	4.7	30
▶ 22 AWG (7 strand) • 0.34 mm ²				
38010222	2	0.110	2.8	9
38010322	3	0.114	2.9	12
38010422	4	0.126	3.2	15
38010522	5	0.138	3.5	19
38010722	7	0.161	4.1	26
38011022	10	0.201	5.1	37
38011222	12	0.209	5.3	43

item no.	no. of conductors	outer-ø max inch	max mm	cable weight ≈lbs/mft
▶ 20 AWG (7 strand) • 0.50 mm ²				
38010220	2	0.126	3.2	12
38010320	3	0.134	3.4	17
38010420	4	0.146	3.7	22
38010520	5	0.173	4.4	28
38010720	7	0.177	4.5	36
38011020	10	0.232	5.9	53
38011220	12	0.248	6.3	62

Other dimensions and colors are available on request

DIN 47100 color code:

#1- white, #2- brown, #3- green, #4- yellow, #5- gray, #6- pink, #7- blue, #8- red, #9- black, #10- violet, #11- gray-pink, #12- red-blue



Possible on request:

- ETFE or PFA insulated strands

TD 833 CF

FEP data cable with extended temperature range and overall copper shielding

+180°C

AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38330320 CE



Marking for TD 833 CF 38330320:

SAB BRÜCKSKES · D-VIERSEN · TD 833 CF AWM 20/3c AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38330320 CE

Construction:

Conductor:	tinned copper strands acc. to ASTM B 286
Insulation:	FEP, 6Y11 acc. to VDE 0207-6
Color code:	DIN 47100, see below
Stranding:	in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Jacket material:	FEP, 6YM1 acc. to VDE 0207-6
Jacket color:	white (RAL 1013)

Outstanding features:

- excellent resistance against chemicals and solvents
- excellent temperature resistance and flexibility at low temperatures
- excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- UL/cUL recognized

Technical data:

Peak operating voltage:	max. 375 V
Voltage UL/cUL:	600 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg
Temperature range:	DIN VDE UL/cUL: up to +150°C <i>static:</i> -90/+180°C <i>flexible:</i> -55/+180°C <i>short-term use:</i> +200°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, FT2
Oil resistance:	very good acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Approvals:	UR, cUR, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors	outer-ø approx. inch	approx. mm	cable weight ≈ lbs/mft
► 28 AWG (7 strand) • 0.08 mm ²				
38330228	2	0.094	2.4	8
38330328	3	0.102	2.6	9
38330428	4	0.110	2.8	12
38330528	5	0.118	3.0	13
38330728	7	0.126	3.2	16
38331028	10	0.157	4.0	22
38331228	12	0.157	4.0	24
► 26 AWG (7 strand) • 0.14 mm ²				
38330226	2	0.106	2.7	11
38330326	3	0.110	2.8	12
38330426	4	0.122	3.1	14
38330526	5	0.138	3.5	16
38330726	7	0.138	3.5	19
38331026	10	0.173	4.4	28
38331226	12	0.177	4.5	30
38331426	14	0.185	4.7	34

item no.	no. of conductors	outer-ø approx. inch	approx. mm	cable weight ≈ lbs/mft
► 24 AWG (7 strand) • 0.25 mm ²				
38330224	2	0.122	3.1	13
38330324	3	0.122	3.1	15
38330424	4	0.130	3.3	17
38330524	5	0.150	3.8	22
38330724	7	0.157	4.0	25
38331024	10	0.197	5.0	36
38331224	12	0.205	5.2	40
► 22 AWG (7 strand) • 0.34 mm ²				
38330222	2	0.130	3.3	15
38330322	3	0.138	3.5	18
38330422	4	0.150	3.8	22
38330522	5	0.165	4.2	27
38330622	6	0.181	4.6	32
38330722	7	0.173	4.4	33
38331022	10	0.220	5.6	47
38331222	12	0.228	5.8	54

item no.	no. of conductors	outer-ø approx. inch	approx. mm	cable weight ≈ lbs/mft
► 20 AWG (7 strand) • 0.50 mm ²				
38330220	2	0.146	3.7	20
38330320	3	0.157	4.0	25
38330420	4	0.169	4.3	30
38330520	5	0.189	4.8	37
38330620	6	0.205	5.2	43
38330720	7	0.205	5.2	46
38330820	8	0.232	5.9	56
38331020	10	0.252	6.4	64
38331220	12	0.260	6.6	73

Other dimensions and colors are available on request

DIN 47100 color code:

#1- white, #2- brown, #3- green, #4- yellow, #5- gray, #6- pink, #7- blue, #8- red, #9- black, #10- violet, #11- gray-pink, #12- red-blue, #13- white-green, #14- brown-green



Possible on request:

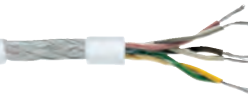
- ETFE or PFA insulated strands

TD 838 CF TP

FEP data cable, twisted pairs with extended temperature range and overall copper shielding

+180°C

or cULus AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38380326 CE



Marking for TD 838 CF TP 38380326:

SAB BRÜCKSKES · D-VIERSEN · TD 838 CF TP AWG 26/3pr cULus AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38380326 CE

Construction:

Conductor:	tinned copper strands acc. to ASTM B 286
Insulation:	FEP, 6Y11 acc. to VDE 0207-6
Color code:	DIN 47100, see below
Stranding:	conductors twisted to pairs, pairs together in specially adjusted layering
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	FEP, 6YM1 acc. to VDE 0207-6
Jacket color:	white (RAL 1013)

Outstanding features:

- excellent resistance against chemicals and solvents
- excellent temperature resistance and flexibility at low temperatures
- excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- UL/cUL recognized

Technical data:

Peak operating voltage:	max. 375 V
Voltage UL/cUL:	600 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg
Temperature range:	DIN VDE UL/cUL: up to +150°C <i>static:</i> -90/+180°C <i>flexible:</i> -55/+180°C <i>short-term use:</i> +200°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, FT2
Oil resistance:	very good acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Approvals:	UR, cUR, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of pairs	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
► 28 AWG (7 strand) • 0.08 mm ²				
38380228	2	0.126	3.2	13
38380328	3	0.142	3.6	17
38380428	4	0.165	4.2	20
38380528	5	0.181	4.6	25
38380628	6	0.185	4.7	27
► 26 AWG (7 strand) • 0.14 mm ²				
38380226	2	0.138	3.5	15
38380326	3	0.161	4.1	21
38380426	4	0.185	4.7	24
38380526	5	0.205	5.2	29
38380626	6	0.209	5.3	35

item no.	no. of pairs	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
► 24 AWG (7 strand) • 0.25 mm ²				
38380224	2	0.157	4.0	20
38380324	3	0.177	4.5	25
38380424	4	0.217	5.5	33
38380524	5	0.228	5.8	34
38380624	6	0.232	5.9	45
► 22 AWG (7 strand) • 0.34 mm ²				
38380222	2	0.181	4.6	25
38380322	3	0.205	5.2	34
38380422	4	0.232	5.9	42
38380522	5	0.256	6.5	51
38380622	6	0.272	6.9	60

item no.	no. of pairs	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
► 20 AWG (7 strand) • 0.50 mm ²				
38380220	2	0.201	5.1	33
38380320	3	0.232	5.9	45
38380420	4	0.268	6.8	57
38380520	5	0.295	7.5	70
38380620	6	0.307	7.8	83
► 18 AWG (7 strand) • 1.00 mm ²				
38380418	4	0.319	8.1	83

Other dimensions and colors are available on request

DIN 47100 color code:

#2- green/yellow, #3- gray/pink, #4- blue/red, #5- black/purple, #6- gray-pink/red-blue



Possible on request:

- ETFE or PFA insulated strands

TA 866 F

FEP connection cable with extended temperature range

+180°C

WM Style 21618 I/II A/B 150°C 600V FT1 FT2 38660415 CE

Marking for TA 866 F 38660415:

SAB BRÜCKSKES · D-VIERSEN · TA 866 F AWG 16/4c  AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38660415 CE



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	FEP, 6Y11 acc. to VDE 0207-6
Color code:	up to 5 conductors- HD 308 (VDE 0293-308) see below, from 6 conductors- black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors a green/yellow ground
Stranding:	in layers
Jacket material:	FEP, 6YM1 acc. to VDE 0207-6
Jacket color:	black (RAL 9005)

Outstanding features:

- excellent resistance against chemicals and solvents
- excellent temperature resistance and flexibility at low temperatures
- excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- UL/cUL recognized

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/cUL:	600 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg
Temperature range:	DIN VDE static: -90/+180°C flexible: -55/+180°C UL/cUL: up to +150°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, FT2
Oil resistance:	very good acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Approvals:	UR AWM, cUR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 24 AWG • 0.25 mm ²				
38660202	2	0.114	2.9	9
38660302	3	0.122	3.1	12
38660402	4	0.134	3.4	15
38660502	5	0.146	3.7	18
38660702	7	0.165	4.2	24
38661002	10	0.213	5.4	35
38661202	12	0.220	5.6	42
▶ 20 AWG • 0.50 mm ²				
38660205	2	0.138	3.5	14
38660305	3	0.146	3.7	19
38660405	4	0.165	4.2	25
38660505	5	0.181	4.6	31
38660705	7	0.205	5.2	41
38661005	10	0.260	6.6	58
38661205	12	0.268	6.8	68
▶ 19 AWG • 0.75 mm ²				
38660207	2	0.161	4.1	18
38660307	3	0.173	4.4	25
38660407	4	0.209	5.3	32
38660507	5	0.213	5.4	41
38660707	7	0.244	6.2	53
38661007	10	0.303	7.7	76
38661207	12	0.315	8.0	90

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 18 AWG • 1.00 mm ²				
38660210	2	0.169	4.3	22
38660310	3	0.189	4.8	29
38660410	4	0.217	5.5	39
38660510	5	0.228	5.8	49
38660710	7	0.244	6.2	63
38661010	10	0.319	8.1	91
38661210	12	0.331	8.4	107
▶ 16 AWG • 1.50 mm ²				
38660215	2	0.193	4.9	29
38660315	3	0.209	5.3	41
38660415	4	0.240	6.1	52
38660515	5	0.272	6.9	66
38660715	7	0.283	7.2	87
38661015	10	0.370	9.4	131
38661215	12	0.382	9.7	147
▶ 14 AWG • 2.50 mm ²				
38660225	2	0.228	5.8	43
38660325	3	0.244	6.2	60
38660425	4	0.295	7.5	77
38660525	5	0.303	7.7	99
38660725	7	0.331	8.4	130
38661025	10	0.433	11.0	187
38661225	12	0.453	11.5	223

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 12 AWG • 4.00 mm ²				
38660240	2	0.276	7.0	63
38660340	3	0.299	7.6	91
38660440	4	0.327	8.3	118
38660540	5	0.370	9.4	152
38660740	7	0.406	10.3	201
▶ 10 AWG • 6.00 mm ²				
38660260	2	0.343	8.7	98
38660360	3	0.370	9.4	143
38660460	4	0.409	10.4	185
38660560	5	0.457	11.6	240
38660760	7	0.504	12.8	308

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

- 1c: natural
- 2c: blue, brown
- 3c: green/yellow, blue, brown
- 4c: green/yellow, brown, black, gray
- 5c: green/yellow, blue, brown, black, gray



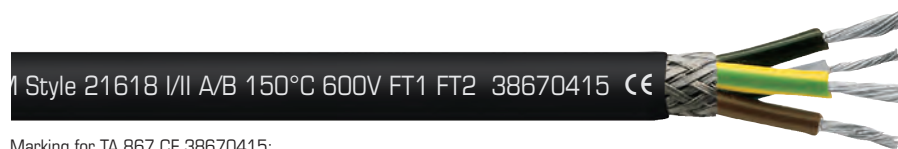
Possible on request:

- ETFE or PFA insulated strands

TA 867 CF

FEP connection cable with extended temperature range and overall copper shielding

+180°C



Marking for TA 867 CF 38670415:

SAB BRÜCKSKES · D-VIERSEN · TA 867 CF AWG 16/4c AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 38670415

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	FEP, 6Y11 acc. to VDE 0207-6
Color code:	up to 5 conductors- HD 308 (VDE 0293-308), see below from 6 conductors- black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors a green/yellow ground
Stranding:	in layers
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	FEP, 6YM1 acc. to VDE 0207-6
Jacket color:	black (RAL 9005)

Outstanding features:

- excellent resistance against chemicals and solvents
- excellent temperature resistance and flexibility at low temperatures
- excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- UL/cUL recognized

Technical data:

Peak operating voltage:	U ₀ /U 300/500 V
Voltage UL/cUL:	600 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg
Temperature range:	DIN VDE UL/cUL: up to +150°C <i>static:</i> -90/+180°C <i>flexible:</i> -55/+180°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, FT2
Oil resistance:	very good acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Approvals:	UR AWM, cUR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 24 AWG • 0.25 mm²				
38670202	2	0.134	3.4	15
38670302	3	0.142	3.6	17
38670402	4	0.157	4.0	23
38670502	5	0.169	4.3	26
38670702	7	0.185	4.7	32
38671002	10	0.201	5.1	43
38671202	12	0.240	6.1	51
▶ 20 AWG • 0.50 mm²				
38670205	2	0.161	4.1	22
38670305	3	0.169	4.3	27
38670405	4	0.185	4.7	32
38670505	5	0.205	5.2	40
38670705	7	0.224	5.7	51
38671005	10	0.272	6.9	69
38671205	12	0.291	7.4	82
▶ 19 AWG • 0.75 mm²				
38670207	2	0.181	4.6	26
38670307	3	0.193	4.9	33
38670407	4	0.213	5.4	41
38670507	5	0.232	5.9	51
38670707	7	0.252	6.4	63
38671007	10	0.319	8.1	89
38671207	12	0.335	8.5	104

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 18 AWG • 1.00 mm²				
38670210	2	0.189	4.8	30
38670310	3	0.205	5.2	39
38670410	4	0.220	5.6	49
38670510	5	0.244	6.2	59
38670710	7	0.264	6.7	74
38671010	10	0.339	8.6	106
38671210	12	0.350	8.9	122
▶ 16 AWG • 1.50 mm²				
38670215	2	0.217	5.5	39
38670315	3	0.228	5.8	50
38670415	4	0.248	6.3	62
38670515	5	0.283	7.2	80
38670715	7	0.303	7.7	101
38671015	10	0.398	10.1	158
38671215	12	0.409	10.4	175
▶ 14 AWG • 2.50 mm²				
38670225	2	0.248	6.3	53
38670325	3	0.264	6.7	70
38670425	4	0.291	7.4	91
38670525	5	0.323	8.2	112
38670725	7	0.350	8.9	145
38671025	10	0.461	11.7	220
38671225	12	0.488	12.4	254

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 12 AWG • 4.00 mm²				
38670240	2	0.299	7.6	77
38670340	3	0.319	8.1	105
38670440	4	0.346	8.8	135
▶ 10 AWG • 6.00 mm²				
38670360	3	0.398	10.1	168

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

- 1c: natural
- 2c: blue, brown
- 3c: green/yellow, blue, brown
- 4c: green/yellow, brown, black, gray
- 5c: green/yellow, blue, brown, black, gray



Possible on request:

- ETFE or PFA insulated strands

FEP Cables

BL TA 180 C

Flexible FEP connection cables with overall tinned copper shielding

+180°C

SAB BL-Line



Marking for BL TA 180 C 37530715:

SAB BRÖCKSKES · D-VIERSEN · BL TA 180 C 7x1.5mm² - IEC 60332-3-22 -

300/500V DNV AWM Style 21618 150°C 600V AWM I/II A/B 150°C 600V FT1 FT2 CE

Application: e.g. as connection cable for the control of marine diesel engines.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	FEP
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground
Stranding:	in layers
Inner jacket:	Besilen®
Shielding:	tinned copper braiding
Jacket material:	FEP
Jacket color:	black (RAL 9005)

Outstanding features:

- no flame propagation
- flame retardant and self-extinguishing
- good EMC characteristics*
- oil and fuel resistant
- good chemical resistance
- high cold and heat resistance
- asbestos-free
- approvals:
UL/cUL recognized
DNV

*copper braiding should be connected circularly to optimize the EMC characteristics

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Voltage UL/cUL:	600 V
Testing voltage:	conductor/conductor: 2000 V (AC) conductor/shielding: 2000 V
Min. bending radius: <i>fixed installation:</i> <i>free movement:</i>	5 x O.D. 10 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg
Temperature range: <i>static:</i> <i>flexible:</i>	DIN VDE -55/+180°C UL/cUL: up to +150°C -55/+180°C
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, FT2
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Oil and fuel resistance:	very good
Flexibility:	good
Halogen-free:	not fulfilled
Approvals:	UR, cUR, DNV, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
37530207	2	0.224	5.7	42
37530307	3	0.236	6.0	46
37530407	4	0.244	6.2	54
37530507	5	0.280	7.1	67
37530607	6	0.303	7.7	78
37530707	7	0.303	7.7	81
37530807	8	0.350	8.9	102
37531207	12	0.402	10.2	136
37531607	16	0.449	11.4	175
37532007	20	0.504	12.8	224
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
37530210	2	0.232	5.9	43

item no.	no. of conductors incl. ground	outer-ø approx. inch	approx. mm	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
37530215	2	0.260	6.6	54
37530315	3	0.272	6.9	65
37530515	5	0.323	8.2	97
37530615	6	0.354	9.0	115
37530715	7	0.354	9.0	122
37531215	12	0.472	12.0	208
▶ 15 AWG (≈ 38/30) ▪ 2.00 mm²				
37530220	2	0.295	7.5	72
37530320	3	0.319	8.1	87

Other dimensions and colors are available on request

Possible on request:

- without overall copper shielding
- alternative color code and jacket color

Special Cables

Special single conductor

Glass fiber insulated stranded wire with excellent temperature resistance

excellent
temperature
resistance

+400°C

CE RoHS 



Application: e.g. in metallurgy and rolling mill technology.

Construction:

Conductor:	nickel-plated copper strands
Wrapping:	multiple wrapping with mica tape
Braiding:	glass fiber
Impregnation:	PTFE impregnating lacquer
Identification:	red tracer thread in external shielding

Outstanding features:



- excellent heat resistance
- flame resistant

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2200 V
Min. bending radius:	5 x O.D.
Temperature range	
static:	max. +400°C
flexible:	max. +400°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG	outer-ø		cable weight ≈lbs/mft
		inch	mm	
▶ 32869035	350 MCM/1c	0.933	23.7	1246

Other dimensions and colors are possible on request.



Single conductor
in other dimensions
on request

Special Cables

Special single conductor

Connection cable with excellent temperature resistance

excellent
temperature
resistance

+400°C



Application: e.g. in metallurgy and rolling mill technology.

Construction:

Conductor:	nickel-plated copper strands
Insulation:	glass fiber
Impregnation:	PU-lacquer
Color code:	brown, black, gray, green-yellow tracer in glass fiber braiding
Stranding:	conductors together
Braiding:	glass fiber
Armoring:	stainless steel wire armor (VA)

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2500 V
Min. bending radius:	
<i>fixed laying:</i>	5 x O.D.
<i>flexible application:</i>	10 x O.D.
Temperature range	
<i>static:</i>	max. +400°C
<i>flexible:</i>	max. +400°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- halogen-free
- excellent heat resistance
- flame resistant

item no.	no. of conductors incl. ground	outer-ø inch	mm	cable weight ≈lbs/mft
▶ 14 AWG ▪ 2.50 mm ²				
32869066	3	0.374	9.5	128
32869039	4	0.409	10.4	161
▶ 12 AWG ▪ 4.00 mm ²				
32869040	4	0.504	12.8	234

Other dimensions and colors are possible on request.



Other dimensions
on request

Special Cables

Special connection cable

Silicone impregnated fiber-glass braiding

+180°C



Application: For the wiring of motors /generators / transformers. Suitable for the potting with impregnating materials for example with epoxy resin. Residues can be easily removed from the silicone impregnated surfaces.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Wrapping:	non-woven tape
Insulation:	special silicone
Color code 450/750 V: 3.8/6.6 kV: 8.0/13.8 kV:	white gray black
Braiding:	fiber-glass
Impregnation:	special silicone

Outstanding features:

- halogen-free
- flexible at low temperatures
- heat resistant
- good mechanical characteristics
- fiber-glass braiding up to +400°C

Technical data:

Nominal voltage:	U _o /U 450/750 V U _o /U 3.8/6.6 V U _o /U 8.0/13.8 V
Testing voltage:	450/750 V = 2500 V 3.8/6.6 kV = 15000 V 8.0/13.8 kV = 30000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range static: flexible: short-term use:	-40/+180°C -25/+180°C +250°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

450/750 V

item no.	AWG	outer-ø		cable weight ≈lbs/mft
		inch	mm	
▶ 0123....	10AWG/1c	0.209	5.3	48
▶ 0123....	8AWG/1c	0.272	6.9	84
▶ 0123....	6AWG/1c	0.311	7.9	120
▶ 0123....	4AWG/1c	0.398	10.1	187
▶ 0123....	2AWG/1c	0.453	11.5	256
▶ 0123....	1AWG/1c	0.516	13.1	368
▶ 0123....	2/0AWG/1c	0.606	15.4	485
▶ 0123....	3/0AWG/1c	0.720	18.3	675
▶ 0123....	4/0AWG/1c	0.795	20.2	820

Other dimensions and colors are possible on request.

3.8/6.6 kV

item no.	AWG	outer-ø		cable weight ≈lbs/mft
		inch	mm	
▶ 0123....	6AWG/1c	0.406	10.3	151
▶ 0123....	4AWG/1c	0.476	12.1	218
▶ 0123....	2AWG/1c	0.531	13.5	292
▶ 0123....	1AWG/1c	0.594	15.1	400
▶ 0123....	2/0AWG/1c	0.685	17.4	536
▶ 0123....	3/0AWG/1c	0.768	19.5	693
▶ 0123....	4/0AWG/1c	0.843	21.4	840

Other dimensions and colors are possible on request.

8.0/13.8 kV

item no.	AWG	outer-ø		cable weight ≈lbs/mft
		inch	mm	
▶ 0123....	8AWG/1c	0.469	11.9	151
▶ 0123....	6AWG/1c	0.508	12.9	192
▶ 0123....	4AWG/1c	0.579	14.7	259
▶ 0123....	1AWG/1c	0.681	17.3	445
▶ 0123....	2/0AWG/1c	0.772	19.6	585
▶ 0123....	3/0AWG/1c	0.854	21.7	745

Other dimensions and colors are possible on request.



**Part #
on request**

Festoon Cable

Besilen® insulated connection cable with glass fiber braiding, inner jacket and overall copper shielding

+180°C



Application: For festoon suspension e.g. in crane systems with very high ambient temperatures.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color code:	colored acc. to HD 308, see below from 6 conductors black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 conductors a green-yellow earth wire
Wrapping:	conductors together with mica tape
Braiding:	conductors together with glass fiber
Stranding:	in layers
Braiding:	glass fiber
Wrapping:	mica tape
Braiding:	glass fiber
Inner jacket:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Jacket color:	reddish brown (similar RAL 3016)
Shielding:	tinned copper braiding

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	15 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range <i>static:</i> <i>flexible:</i>	-40/+180°C -25/+180°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- halogen-free
- flexible at low temperatures
- heat resistant
- good EMC characteristic

HD 308 color code:

- 2c: blue - brown
- 3c: green/yellow - blue - brown
- 4c: green/yellow - brown - black - gray
- 5c: green/yellow - blue - brown - black - gray

item no.	no. of conductors incl. ground	outer-ø inch	mm	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
7479011	4	0.520	13.2	171
7479017	5	0.579	14.7	191
7479018	8	0.669	17.0	277
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
7479002	3	0.512	13.0	163
7479012	4	0.567	14.4	191
7479010	5	0.622	15.8	226
7479005	8	0.772	19.6	366
7479006	12	0.858	21.8	437
7479008	24	1.181	30.0	804
7479016	25	1.181	30.0	760
▶ 14 AWG ▪ 2.50 mm²				
7479003	3	0.579	14.7	203
7479004	4	0.622	15.8	245
7479015	5	0.677	17.2	290
▶ 12 AWG ▪ 4.00 mm²				
7479007	4	0.681	17.3	298
▶ 10 AWG ▪ 6.00 mm²				
7479014	4	0.594	15.1	247

Other dimensions and colors are possible on request.

Smeltery Cable

Besilen® (silicone) insulated connection cable with glass fiber braiding and overall copper shielding

+180°C



Application: Connecting cable in steel processing industry.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color code:	colored acc. to HD 308, see below from 6 conductors black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 conductors a green-yellow earth wire
Wrapping:	conductors together with mica tape
Braiding:	glass fiber
Stranding:	in layers
Braiding:	glass fiber
Wrapping:	mica tape
Braiding:	glass fiber
Shielding:	tinned copper braiding

Outstanding features:

- halogen-free
- flexible at low temperatures
- heat resistant
- good EMC characteristic

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	15 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range <i>static:</i> <i>flexible:</i>	-40/+180°C -25/+180°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±5% inch	outer-ø ±5% mm	cable weight ≈lbs/mft
▶ 18 AWG ▪ 1.00 mm ²				
7470210	2	0.362	9.2	73
7470310	3	0.382	9.7	97
7470410	4	0.417	10.6	116
7470510	5	0.461	11.7	141
7470710	7	0.500	12.7	172
7470810	8	0.583	14.8	225
7471210	12	0.657	16.7	264
▶ 16 AWG ▪ 1.50 mm ²				
7470315	3	0.425	10.8	116
7470415	4	0.465	11.8	140
7470515	5	0.512	13.0	176
7470815	8	0.654	16.6	279
7471215	12	0.740	18.8	335
7471915	19	0.874	22.2	476
7472415	24	1.031	26.2	594

item no.	no. of conductors incl. ground	outer-ø ±5% inch	outer-ø ±5% mm	cable weight ≈lbs/mft
▶ 14 AWG ▪ 2.50 mm ²				
7470325	3	0.476	12.1	143
7470425	4	0.520	13.2	179
7470525	5	0.575	14.6	216
▶ 12 AWG ▪ 4.00 mm ²				
7470440	4	0.579	14.7	235
▶ 8 AWG ▪ 10 mm ²				
7470461	4	0.776	19.7	462
▶ 6 AWG ▪ 16 mm ²				
7470462	4	0.894	22.7	641
▶ 4 AWG ▪ 25 mm ²				
7470463	4	1.071	27.2	895
▶ 2 AWG ▪ 35 mm ²				
7470464	4	1.201	30.5	1219

HD 308 color code:

2c: blue - brown; 3c: green/yellow - blue - brown; 4c: green/yellow - brown - black - gray; 5c: green/yellow - blue - brown - black - gray

Special Cables

SAB Heat

Parallel heating cable made of silicone 50W/m

+200°C

ES · D-VIERSEN · SAB Heat 50W/m 230V

Marking for SAB Heat:

SAB BRÖCKSKES · D-VIERSEN · SAB Heat 50W/m 230V



Marking for SAB Heat:

SAB BRÖCKSKES · D-VIERSEN · SAB Heat 50W/m 230V

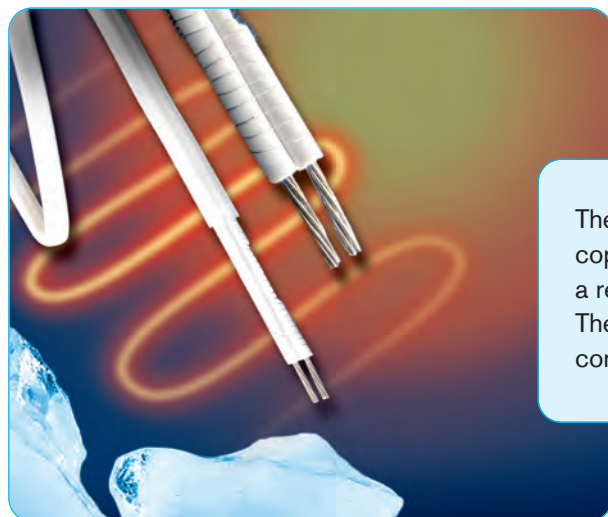
Application: for example in air conditioning units, as anti-freeze protection, defrosting aid in cooling systems.

Construction:

Conductor:	tinned copper strands, extra fine wires acc. to IEC 60228 class 2
Dimension:	2 x 0.75 mm ²
Insulation:	Silicone
Color code:	white
Stranding:	flat beside each other, separably connected
Contact points:	1 m. 0.5m offset laterally
Jacket material:	Silicone / FEP / PVC
Jacket color:	translucent
optionally armoring: or additional outer jacket:	tinned copper braiding as mechanical protection or grounding Silicone / FEP / PVC

Technical data:

Allowed surface temperature static:	PVC: +70°C Silicone: +200°C FEP: +200°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Max. heating circle length:	44 m
Tension range:	Item no. Silicone: 0180-9009 230 V 0180-.... 280 V on request FEP: 0180-.... 230 V on request 0180-.... 280 V on request PVC: 0180-.... 230 V on request 0180-.... 280 V on request
Dimension:	Silicone: approx. 4.5 x 7.3 mm FEP: approx. 4.5 x 6.3 mm PVC: approx. 4.5 x 7.3 mm
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30 Deviating performance categories and dimensions on request!



The parallel heating cable SAB Heat consists of two tinned copper conductors imbedded in silicone and is surrounded by a resistance wire. The contact points are 0.5 m offset laterally. The conductors are flat beside each other and are separably connected to each other.

Special Cables

Production possibilities

Flexible cables and wires "Made in Germany"

As a leading manufacturer we develop and produce cables for industrial purposes.

Our wide range of materials offer a lot of possibilities for your individual product requirement.

The following survey shows an extract of our production possibilities:

Conductor Materials:

- ✓ bare copper
- ✓ tinned copper
- ✓ silver plated copper
- ✓ nickel plated copper
- ✓ nickel
- ✓ nickel pure
- ✓ compensating cable alloys

Insulation and Jacketing Materials:

- ✓ PVC
- ✓ Polyethylene
- ✓ Polypropylene
- ✓ Polyurethane
- ✓ TPE
- ✓ SABIX® (zero halogen)
- ✓ Besilen® - Silicone
- ✓ FEP, ETFE, PFA, PTFE
- ✓ PI foil
- ✓ Fiberglass

Temperature Ranges:

- Thermoplastic Elastomers
- ✓ -50°C up to +145°C
- SABIX®
- ✓ -50°C up to +220°C
- Besilen® - Silicone
- ✓ -40°C up to +220°C
- FEP, ETFE, PFA
- ✓ -90°C up to +260°C
- Fiberglass
- ✓ up to +600°C

Conductors:

- ✓ cross sections 0.055 - 300 mm²
- ✓ unshielded and shielded over 100 conductors

Cable assemblies directly from the manufacturer SAB:

As a full service partner, we are able to offer cable design and production as well as the manufacturing of cable assemblies according to customer's request. Please trust on our experience for decades in the treatment of cables and connectors.

- ✓ cable assemblies according to customer's demands
- ✓ complete cable assemblies
- ✓ UL certified assemblies
- ✓ helix cables
- ✓ HV measuring assemblies

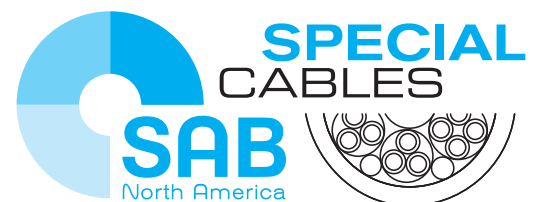
CABLE ASSEMBLIES

MEASUREMENT TECHNOLOGY

Measuring technology for industrial applications

Manufacturer of temperature sensors for industrial applications with 75 years of experience!

- ✓ mineral insulated thermocouples
- ✓ mineral insulated resistance thermometers
- ✓ temperature sensors
- ✓ mobile high voltage measuring technology
- ✓ temperature sensors for vehicle testing



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