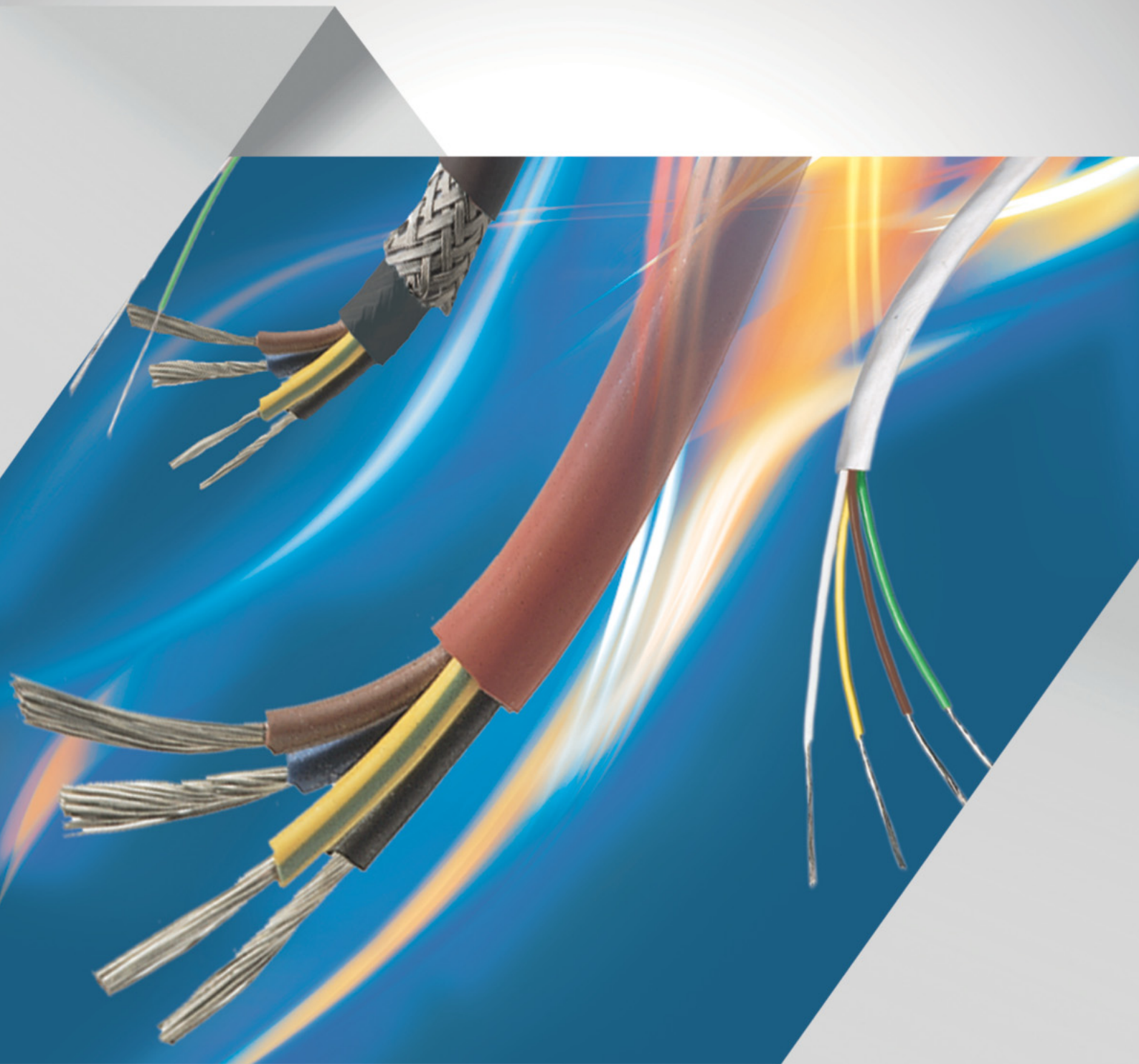


HEAT RESISTANT CABLES



www.sab-cable.com






Heat resistant cables

Content







Who we are 4

operating temperature up to max.

Halogen-free Cables



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Besilen® - Silicone Cables

| | | | |
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Cable Track Cables

| | | | |
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Ethernet and Bus Cables

| | | | |
|---|--|---|----|
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Data Cables

| | | | |
|-------------------|---|---|----|
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Heat resistant cables

Content

| | | | operating temperature up to max. | |
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Connection cables for shipbuilding acc. to DNV, UL and cUL

Family business in the third generation

75 years of experience in cable and wire manufacturing as well as in temperature measurement technology turned a one-man business into a company with more than 550 employees. We prove our strength every year with more than 1500 special products according to customers' requirements. Each product is a new challenge for our creative technical team. We at **SAB** see ourselves as a manufacturer and a service provider – in the sense of true partnership and the greatest possible customer orientation.

Today, the quality of our products is known and appreciated in more than 100 countries around the world. In all product ranges, we are certified according to DIN EN ISO 9001. Furthermore, we have implemented an environmental management system for our company according to DIN EN ISO 14001, an occupational health and safety management system according to NLF/ILO-OSH and DIN ISO 45001, and an energy management system according to DIN EN ISO 50001.

And also for the future, our slogan is: **"WE GO FORWARD!"**

| | |
|-----------------------------|---|
| FOUNDED: | 1947 by Peter Bröckskes sen. an independent, medium-sized company. |
| CEO: | Peter Bröckskes and Sabine Bröckskes-Wetten |
| PLANT/LOCATION: | In Viersen (Lower Rhine) 110.000 m ² company site. Own manufacturing from copper conductor to outer sheath. VDE approved burnchamber and laboratory within the company. |
| EMPLOYEES/WORKERS: | approx. 430 at the plant in Viersen, 550 worldwide |
| YEARLY SALES: | over 134 Mio. € worldwide |
| PRODUCTS: | Special Cables Measurement Technology Cable Harnessing |
| CERTIFICATES AND APPROVALS: | <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  </div> <div style="flex: 2;"> <p>Quality management system acc. to DIN EN ISO 9001 for every manufacturing field</p> <p>Environmental management system acc. to DIN EN ISO 14001</p> <p>Occupational health and safety management acc. to NLF/ILO-OSH and DIN ISO 45001</p> <p>Energy management system acc. to DIN EN ISO 50001</p> </div> </div> |

Halogen-free Cables

SABIX® A 100 HT high temperature resistant single conductor with nickel-plated strands
SABIX® A 101 HT high temperature resistant single conductor with silver-plated strands



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® |
| Colour code: | see table* |

| Technical Data: | |
|---|---|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage: | 2000 V |
| Min. bending radius: For one single bend: | 7,5 x d 5 x d |
| Temperature range fixed laying: flexible application: | -40/+220 °C -25/+220 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |

| Outstanding features: | |
|-----------------------|---|
| | <ul style="list-style-type: none"> ● halogen-free ● high temperature resistant ● flexible ● SABIX® A 101 HT: good solderability |

SABIX® A 100 HT

| item no. | nominal cross-section mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|-------------|---------------------------------------|--------------------------|-----------------|---------------------|----------------------|
| 7100 .. 25* | 0,25 | 0,16 | 2,3 | 2,4 | 7 |
| 7100 .. 34* | 0,34 | 0,16 | 2,4 | 3,3 | 8 |
| 7100 .. 50* | 0,50 | 0,21 | 2,5 | 4,8 | 10 |
| 7100 .. 75* | 0,75 | 0,21 | 2,8 | 7,2 | 13 |
| 7100 .. 80* | 1,00 | 0,21 | 2,9 | 9,6 | 15 |
| 7100 .. 82* | 1,50 | 0,26 | 3,4 | 14,4 | 21 |
| 7100 .. 84* | 2,50 | 0,26 | 4,0 | 24,0 | 32 |
| 7100 .. 86* | 4,00 | 0,31 | 4,6 | 38,4 | 48 |
| 7100 .. 87* | 6,00 | 0,31 | 5,1 | 57,6 | 67 |
| 7100 .. 88* | 10,00 | 0,41 | 7,4 | 96,0 | 121 |
| 7100 .. 89* | 16,00 | 0,41 | 8,4 | 153,6 | 176 |
| 7100 .. 90* | 25,00 | 0,41 | 10,3 | 240,0 | 283 |
| 7100 .. 91* | 35,00 | 0,41 | 11,5 | 336,0 | 385 |
| 7100 .. 92* | 50,00 | 0,41 | 14,2 | 480,0 | 549 |
| 7100 .. 93* | 70,00 | 0,41 | 15,2 | 672,0 | 736 |
| 7100 .. 94* | 95,00 | 0,51 | 18,6 | 912,0 | 1009 |
| 7100 .. 95* | 120,00 | 0,51 | 20,1 | 1152,0 | 1214 |
| 7100 .. 96* | 150,00 | 0,51 | 22,2 | 1440,0 | 1511 |
| 7100 .. 97* | 185,00 | 0,51 | 23,6 | 1776,0 | 1827 |
| 7100 .. 98* | 240,00 | 0,51 | 27,3 | 2304,0 | 2457 |
| 7100 .. 99* | 300,00 | 0,51 | 30,4 | 2880,0 | 3062 |

Other dimensions and colours are possible on request.

SABIX® A 101 HT

| item no. | nominal cross-section mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|-------------|---------------------------------------|--------------------------|-----------------|---------------------|----------------------|
| 7101 .. 25* | 0,25 | 0,16 | 2,3 | 2,4 | 7 |
| 7101 .. 34* | 0,34 | 0,16 | 2,4 | 3,3 | 8 |
| 7101 .. 50* | 0,50 | 0,21 | 2,5 | 4,8 | 10 |
| 7101 .. 75* | 0,75 | 0,21 | 2,8 | 7,2 | 13 |
| 7101 .. 80* | 1,00 | 0,21 | 2,9 | 9,6 | 15 |
| 7101 .. 82* | 1,50 | 0,26 | 3,4 | 14,4 | 21 |
| 7101 .. 84* | 2,50 | 0,26 | 4,0 | 24,0 | 32 |
| 7101 .. 86* | 4,00 | 0,31 | 4,6 | 38,4 | 48 |
| 7101 .. 87* | 6,00 | 0,31 | 5,1 | 57,6 | 67 |
| 7101 .. 88* | 10,00 | 0,41 | 7,4 | 96,0 | 121 |
| 7101 .. 89* | 16,00 | 0,41 | 8,4 | 153,6 | 176 |
| 7101 .. 90* | 25,00 | 0,41 | 10,3 | 240,0 | 283 |
| 7101 .. 91* | 35,00 | 0,41 | 11,5 | 336,0 | 385 |
| 7101 .. 92* | 50,00 | 0,41 | 14,2 | 480,0 | 549 |
| 7101 .. 93* | 70,00 | 0,41 | 15,2 | 672,0 | 736 |
| 7101 .. 94* | 95,00 | 0,51 | 18,6 | 912,0 | 1009 |
| 7101 .. 95* | 120,00 | 0,51 | 20,1 | 1152,0 | 1214 |
| 7101 .. 96* | 150,00 | 0,51 | 22,2 | 1440,0 | 1511 |
| 7101 .. 97* | 185,00 | 0,51 | 23,6 | 1776,0 | 1827 |
| 7101 .. 98* | 240,00 | 0,51 | 27,3 | 2304,0 | 2457 |
| 7101 .. 99* | 300,00 | 0,51 | 30,4 | 2880,0 | 3062 |

Other dimensions and colours are possible on request.

* Colour code for single conductors, position 5 and 6 of the item no.:

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

Halogen-free Cables

SABIX® A 130 HT

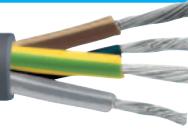
high temperature resistant control cable with numbered or coloured cores

+220 °C

SABControl



SCM 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® |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Stranding: | in layers |
| Sheath material: | SABIX® |
| Sheath colour: | grey (RAL 7015) |

Outstanding features:



- halogen-free
- high temperature resistant
- flexible

Technical Data:

| | |
|--|---|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage: | core/core 2000 V |
| Min. bending radius | |
| <i>fixed laying:</i> | 4 x d |
| <i>flexible application:</i> | 6 x d |
| Temperature range | |
| <i>fixed laying:</i> | -40/+220 °C |
| <i>flexible application:</i> | -25/+220 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 71300205 | 2 x 0,50 | 0,21 | 5,0 | 9,6 | 30 |
| 71300305 | 3 x 0,50 | 0,21 | 5,3 | 14,4 | 36 |
| 71300405 | 4 x 0,50 | 0,21 | 5,7 | 19,2 | 44 |
| 71300505 | 5 x 0,50 | 0,21 | 6,3 | 24,0 | 54 |
| 71300705 | 7 x 0,50 | 0,21 | 6,8 | 33,6 | 67 |
| 71301005 | 10 x 0,50 | 0,21 | 8,8 | 48,0 | 95 |
| 71301205 | 12 x 0,50 | 0,21 | 9,1 | 57,6 | 109 |
| 71301805 | 18 x 0,50 | 0,21 | 10,8 | 86,4 | 161 |
| 71300207 | 2 x 0,75 | 0,21 | 5,6 | 14,4 | 39 |
| 71300307 | 3 x 0,75 | 0,21 | 5,9 | 21,6 | 48 |
| 71300407 | 4 x 0,75 | 0,21 | 6,4 | 28,8 | 58 |
| 71300507 | 5 x 0,75 | 0,21 | 7,1 | 36,0 | 73 |
| 71300707 | 7 x 0,75 | 0,21 | 7,9 | 50,4 | 93 |
| 71301007 | 10 x 0,75 | 0,21 | 10,2 | 72,0 | 132 |
| 71301207 | 12 x 0,75 | 0,21 | 10,5 | 86,4 | 152 |
| 71301807 | 18 x 0,75 | 0,21 | 12,5 | 129,6 | 225 |
| 71300210 | 2 x 1,00 | 0,21 | 5,8 | 19,2 | 45 |
| 71300310 | 3 x 1,00 | 0,21 | 6,1 | 28,8 | 55 |
| 71300410 | 4 x 1,00 | 0,21 | 6,7 | 38,4 | 68 |
| 71300510 | 5 x 1,00 | 0,21 | 7,3 | 48,0 | 85 |
| 71300710 | 7 x 1,00 | 0,21 | 8,2 | 67,2 | 110 |
| 71301010 | 10 x 1,00 | 0,21 | 10,6 | 96,0 | 162 |
| 71301210 | 12 x 1,00 | 0,21 | 10,9 | 115,2 | 180 |
| 71301810 | 18 x 1,00 | 0,21 | 13,0 | 172,8 | 267 |
| 71302510 | 25 x 1,00 | 0,21 | 15,7 | 240,0 | 358 |
| 71300215 | 2 x 1,50 | 0,26 | 6,7 | 28,8 | 61 |
| 71300315 | 3 x 1,50 | 0,26 | 7,1 | 43,2 | 76 |
| 71300415 | 4 x 1,50 | 0,26 | 7,9 | 57,6 | 96 |
| 71300515 | 5 x 1,50 | 0,26 | 8,8 | 72,0 | 123 |
| 71300715 | 7 x 1,50 | 0,26 | 9,6 | 100,8 | 155 |
| 71301015 | 10 x 1,50 | 0,26 | 12,6 | 144,0 | 223 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 71301215 | 12 x 1,50 | 0,26 | 13,0 | 172,8 | 258 |
| 71301815 | 18 x 1,50 | 0,26 | 15,6 | 259,2 | 386 |
| 71302515 | 25 x 1,50 | 0,26 | 18,8 | 360,0 | 523 |
| 71300225 | 2 x 2,50 | 0,26 | 8,2 | 48,0 | 95 |
| 71300325 | 3 x 2,50 | 0,26 | 8,7 | 72,0 | 120 |
| 71300425 | 4 x 2,50 | 0,26 | 9,5 | 96,0 | 149 |
| 71300525 | 5 x 2,50 | 0,26 | 10,8 | 120,0 | 192 |
| 71300725 | 7 x 2,50 | 0,26 | 11,8 | 168,0 | 245 |
| 71301025 | 10 x 2,50 | 0,26 | 15,4 | 240,0 | 350 |
| 71301225 | 12 x 2,50 | 0,26 | 15,9 | 288,0 | 406 |
| 71301825 | 18 x 2,50 | 0,26 | 18,8 | 432,0 | 598 |
| 71300340 | 3 x 4,00 | 0,31 | 10,4 | 115,2 | 181 |
| 71300440 | 4 x 4,00 | 0,31 | 11,3 | 153,6 | 225 |
| 71300540 | 5 x 4,00 | 0,31 | 12,7 | 192,0 | 285 |
| 71300740 | 7 x 4,00 | 0,31 | 13,8 | 268,8 | 365 |
| 71300360 | 3 x 6,00 | 0,31 | 11,6 | 172,8 | 249 |
| 71300460 | 4 x 6,00 | 0,31 | 12,7 | 230,4 | 312 |
| 71300560 | 5 x 6,00 | 0,31 | 14,0 | 288,0 | 389 |
| 71300760 | 7 x 6,00 | 0,31 | 15,7 | 403,2 | 515 |
| 71300461 | 4 x 10,0 | 0,41 | 18,8 | 384,0 | 595 |
| 71300561 | 5 x 10,0 | 0,41 | 20,8 | 480,0 | 743 |
| 71300761 | 7 x 10,0 | 0,41 | 23,2 | 672,0 | 995 |
| 71300462 | 4 x 16,0 | 0,41 | 21,6 | 614,4 | 904 |
| 71300562 | 5 x 16,0 | 0,41 | 24,3 | 768,0 | 1146 |
| 71300762 | 7 x 16,0 | 0,41 | 26,6 | 1075,2 | 1486 |
| 71300263 | 2 x 25,0 | 0,41 | 22,4 | 480,0 | 833 |
| 71300463 | 4 x 25,0 | 0,41 | 26,6 | 960,0 | 1384 |
| 71300563 | 5 x 25,0 | 0,41 | 29,5 | 1200,0 | 1726 |
| 71300364 | 3 x 35,0 | 0,41 | 26,8 | 1008,0 | 1436 |
| 71300464 | 4 x 35,0 | 0,41 | 29,5 | 1344,0 | 1819 |

Other dimensions and colours are possible on request.

Besilen® - Silicone Cables

+180 °C

BiAF

Besilen® insulated strands



Application: For the wiring in the steel industry, plastic processing, cooling, heating and air conditioning technology, in lamp and lightning 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 |

Technical data:

| | |
|--|---|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage: | 2000 V |
| Min. bending radius: | 7.5 x d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -25/+180 °C |
| <i>short-time use:</i> | +250 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |

Outstanding features:



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

| item no. | nominal cross section mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|-----------|---------------------------------------|--------------------------|-----------------|---------------------|----------------------|
| 0113002 * | 0,25 | 0,16 | 1,7 | 2,4 | 5 |
| 0113003 * | 0,34 | 0,26 | 1,8 | 3,3 | 6 |
| 0113005 * | 0,50 | 0,21 | 1,9 | 4,8 | 8 |
| 0113007 * | 0,75 | 0,21 | 2,2 | 7,2 | 10 |
| 0113010 * | 1,00 | 0,21 | 2,3 | 9,6 | 13 |
| 0113015 * | 1,50 | 0,26 | 2,8 | 14,4 | 18 |
| 0113025 * | 2,50 | 0,26 | 3,4 | 24,0 | 29 |
| 0113040 * | 4,00 | 0,31 | 4,0 | 38,4 | 44 |
| 0113060 * | 6,00 | 0,31 | 4,5 | 57,6 | 62 |
| 0113100 * | 10,00 | 0,41 | 6,1 | 96,0 | 107 |
| 0113160 * | 16,00 | 0,41 | 7,5 | 153,6 | 167 |
| 0113250 * | 25,00 | 0,41 | 9,3 | 240,0 | 271 |
| 0113350 * | 35,00 | 0,41 | 10,7 | 336,0 | 376 |
| 0113500 * | 50,00 | 0,41 | 12,3 | 480,0 | 523 |
| 0113700 * | 70,00 | 0,41 | 14,6 | 672,0 | 713 |
| 0113950 * | 95,00 | 0,51 | 17,5 | 912,0 | 961 |
| 0113120 * | 120,00 | 0,51 | 19,0 | 1152,0 | 1177 |
| 0113150 * | 150,00 | 0,51 | 20,9 | 1440,0 | 1462 |
| 0113185 * | 185,00 | 0,51 | 23,0 | 1776,0 | 1785 |
| 0113240 * | 240,00 | 0,51 | 26,9 | 2304,0 | 2404 |
| 0113300 * | 300,00 | 0,51 | 30,0 | 2880,0 | 2998 |

Other dimensions and colours are possible on request.

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

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

Besilen® - Silicone Cables

BiHF-J

Besilen® insulated strands with Besilen® outer sheath

also possible
with extremely notch
resistant sheath

+180 °C



Application: For the wiring in the steel industry, plastic processing, cooling, heating and air conditioning technology, in lamp and lightning 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 |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Stranding: | in layers |
| Sheath material: | Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1 |
| Sheath colour: | 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: | core/core 2000 V |
| Min. bending radius | |
| <i>fixed laying:</i> | 4 x d |
| <i>flexible application:</i> | 6 x d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -25/+180 °C |
| <i>short-time use:</i> | +250 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 01410202 | 2 x 0,25 | 0,16 | 4,3 | 4,8 | 23 |
| 01410402 | 4 x 0,25 | 0,16 | 4,9 | 9,6 | 32 |
| 01410205 | 2 x 0,50 | 0,21 | 4,8 | 9,6 | 31 |
| 01410305 | 3 x 0,50 | 0,21 | 5,1 | 14,4 | 37 |
| 01410405 | 4 x 0,50 | 0,21 | 5,5 | 19,2 | 45 |
| 01410505 | 5 x 0,50 | 0,21 | 6,1 | 24,0 | 53 |
| 01410705 | 7 x 0,50 | 0,21 | 6,6 | 33,6 | 69 |
| 01411205 | 12 x 0,50 | 0,21 | 8,9 | 57,6 | 113 |
| 01411805 | 18 x 0,50 | 0,21 | 10,6 | 86,4 | 164 |
| 01412505 | 25 x 0,50 | 0,21 | 12,9 | 120,0 | 225 |
| 01410207 | 2 x 0,75 | 0,21 | 5,4 | 14,4 | 41 |
| 01410307 | 3 x 0,75 | 0,21 | 5,7 | 21,6 | 49 |
| 01410407 | 4 x 0,75 | 0,21 | 6,2 | 28,8 | 60 |
| 01410507 | 5 x 0,75 | 0,21 | 6,9 | 36,0 | 72 |
| 01410607 | 6 x 0,75 | 0,21 | 7,7 | 43,2 | 86 |
| 01410707 | 7 x 0,75 | 0,21 | 7,7 | 50,4 | 96 |
| 01411007 | 10 x 0,75 | 0,21 | 10,0 | 57,6 | 136 |
| 01411207 | 12 x 0,75 | 0,21 | 10,3 | 86,4 | 157 |
| 01411607 | 16 x 0,75 | 0,21 | 11,5 | 115,2 | 201 |
| 01411807 | 18 x 0,75 | 0,21 | 13,2 | 129,6 | 228 |
| 01412507 | 25 x 0,75 | 0,21 | 14,9 | 180,0 | 314 |
| 01410210 | 2 x 1,00 | 0,21 | 5,6 | 19,2 | 46 |
| 01410310 | 3 x 1,00 | 0,21 | 5,9 | 28,8 | 57 |
| 01410410 | 4 x 1,00 | 0,21 | 6,5 | 38,4 | 70 |
| 01410510 | 5 x 1,00 | 0,21 | 7,1 | 48,0 | 84 |
| 01410610 | 6 x 1,00 | 0,21 | 8,0 | 57,6 | 101 |
| 01410710 | 7 x 1,00 | 0,21 | 8,0 | 67,2 | 113 |
| 01410810 | 8 x 1,00 | 0,21 | 9,3 | 76,8 | 129 |
| 01411010 | 10 x 1,00 | 0,21 | 10,4 | 96,0 | 160 |
| 01411210 | 12 x 1,00 | 0,21 | 10,7 | 115,2 | 185 |
| 01411410 | 14 x 1,00 | 0,21 | 11,3 | 134,4 | 211 |
| 01411610 | 16 x 1,00 | 0,21 | 11,9 | 153,6 | 242 |
| 01411810 | 18 x 1,00 | 0,21 | 12,8 | 172,8 | 270 |
| 01412010 | 20 x 1,00 | 0,21 | 13,5 | 192,0 | 296 |
| 01412510 | 25 x 1,00 | 0,21 | 15,5 | 240,0 | 369 |
| 01410215 | 2 x 1,50 | 0,26 | 6,6 | 28,8 | 62 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 01410315 | 3 x 1,50 | 0,26 | 7,0 | 43,2 | 80 |
| 01410415 | 4 x 1,50 | 0,26 | 7,8 | 57,6 | 102 |
| 01410515 | 5 x 1,50 | 0,26 | 8,6 | 72,0 | 121 |
| 01410615 | 6 x 1,50 | 0,26 | 9,4 | 86,4 | 142 |
| 01410715 | 7 x 1,50 | 0,26 | 9,4 | 100,8 | 158 |
| 01410815 | 8 x 1,50 | 0,26 | 11,2 | 115,2 | 187 |
| 01411215 | 12 x 1,50 | 0,26 | 12,8 | 172,8 | 265 |
| 01411615 | 16 x 1,50 | 0,26 | 14,6 | 230,4 | 352 |
| 01411815 | 18 x 1,50 | 0,26 | 15,4 | 259,2 | 391 |
| 01412015 | 20 x 1,50 | 0,26 | 16,2 | 288,0 | 429 |
| 01412415 | 24 x 1,50 | 0,26 | 18,2 | 345,6 | 520 |
| 01412515 | 25 x 1,50 | 0,26 | 18,6 | 360,0 | 539 |
| 01410225 | 2 x 2,50 | 0,26 | 8,0 | 48,0 | 99 |
| 01410325 | 3 x 2,50 | 0,26 | 8,5 | 72,0 | 123 |
| 01410425 | 4 x 2,50 | 0,26 | 9,3 | 96,0 | 153 |
| 01410525 | 5 x 2,50 | 0,26 | 10,6 | 120,0 | 192 |
| 01410625 | 6 x 2,50 | 0,26 | 11,6 | 144,0 | 224 |
| 01410725 | 7 x 2,50 | 0,26 | 11,6 | 168,0 | 251 |
| 01410925 | 9 x 2,50 | 0,26 | 15,2 | 216,0 | 333 |
| 01411225 | 12 x 2,50 | 0,26 | 15,7 | 288,0 | 417 |
| 01412425 | 24 x 2,50 | 0,26 | 22,4 | 576,0 | 813 |
| 01410240 | 2 x 4,00 | 0,31 | 9,6 | 76,8 | 148 |
| 01410340 | 3 x 4,00 | 0,31 | 10,2 | 115,2 | 186 |
| 01410440 | 4 x 4,00 | 0,31 | 11,1 | 153,6 | 230 |
| 01410540 | 5 x 4,00 | 0,31 | 12,5 | 192,0 | 282 |
| 01410740 | 7 x 4,00 | 0,31 | 13,6 | 230,4 | 371 |
| 01410260 | 2 x 6,00 | 0,31 | 10,8 | 115,2 | 201 |
| 01410360 | 3 x 6,00 | 0,31 | 11,4 | 172,8 | 254 |
| 01410460 | 4 x 6,00 | 0,31 | 12,5 | 230,4 | 317 |
| 01410560 | 5 x 6,00 | 0,31 | 13,8 | 288,0 | 383 |
| 01410461 | 4 x 10,0 | 0,41 | 16,8 | 384,0 | 556 |
| 01410561 | 5 x 10,0 | 0,41 | 18,7 | 480,0 | 679 |
| 01410462 | 4 x 16,0 | 0,41 | 20,3 | 614,4 | 820 |
| 01410463 | 4 x 25,0 | 0,41 | 25,4 | 960,0 | 1330 |
| 01410464 | 4 x 35,0 | 0,41 | 28,8 | 1344,0 | 1800 |

Other dimensions and colours are possible on request.

Besilen® - Silicone Cables

BiHF/Cu/Bi-J

Besilen® insulated strands with Besilen® inner sheath, overall copper screen and Besilen® outer sheath

also possible
with extremely notch
resistant sheath

+180 °C



Application: For the wiring in the steel industry, plastic processing, cooling, heating and air conditioning technology, in lamp and lightning 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 |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Stranding: | in layers |
| Inner sheath: | Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1 |
| Screen: | tinned copper braiding |
| Sheath material: | Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1 |
| Sheath colour: | 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: | U ₀ /U 300/500 V |
| Testing voltage: | core/core 2000 V core/screen 2000 V |
| Min. bending radius | |
| <i>fixed laying:</i> | 5 x d |
| <i>flexible application:</i> | 10 x d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -25/+180 °C |
| <i>short-time use:</i> | +250 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 01900205 | 2 x 0,50 | 0,21 | 7,6 | 29,9 | 83 |
| 01900305 | 3 x 0,50 | 0,21 | 7,9 | 35,0 | 90 |
| 01900405 | 4 x 0,50 | 0,21 | 8,3 | 41,9 | 100 |
| 01900505 | 5 x 0,50 | 0,21 | 8,9 | 50,1 | 115 |
| 01900705 | 7 x 0,50 | 0,21 | 9,4 | 60,1 | 132 |
| 01901005 | 10 x 0,50 | 0,21 | 11,6 | 100,3 | 190 |
| 01901205 | 12 x 0,50 | 0,21 | 11,9 | 110,4 | 211 |
| 01901605 | 16 x 0,50 | 0,21 | 13,5 | 138,2 | 266 |
| 01901805 | 18 x 0,50 | 0,21 | 14,0 | 148,7 | 291 |
| 01900207 | 2 x 0,75 | 0,21 | 8,2 | 37,0 | 99 |
| 01900307 | 3 x 0,75 | 0,21 | 8,5 | 44,4 | 108 |
| 01900407 | 4 x 0,75 | 0,21 | 9,0 | 55,0 | 123 |
| 01900507 | 5 x 0,75 | 0,21 | 9,7 | 62,9 | 139 |
| 01900707 | 7 x 0,75 | 0,21 | 10,7 | 97,1 | 181 |
| 01901007 | 10 x 0,75 | 0,21 | 13,4 | 133,2 | 254 |
| 01901207 | 12 x 0,75 | 0,21 | 13,7 | 148,1 | 281 |
| 01901607 | 16 x 0,75 | 0,21 | 14,9 | 183,2 | 334 |
| 01901807 | 18 x 0,75 | 0,21 | 16,3 | 228,8 | 401 |
| 01900210 | 2 x 1,00 | 0,21 | 8,4 | 42,0 | 107 |
| 01900310 | 3 x 1,00 | 0,21 | 8,7 | 54,7 | 119 |
| 01900410 | 4 x 1,00 | 0,21 | 9,3 | 64,8 | 135 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 01900510 | 5 x 1,00 | 0,21 | 10,1 | 93,8 | 158 |
| 01900710 | 7 x 1,00 | 0,21 | 11,0 | 114,3 | 201 |
| 01901010 | 10 x 1,00 | 0,21 | 14,0 | 157,9 | 283 |
| 01901210 | 12 x 1,00 | 0,21 | 14,1 | 177,6 | 310 |
| 01901610 | 16 x 1,00 | 0,21 | 16,1 | 252,3 | 404 |
| 01901810 | 18 x 1,00 | 0,21 | 16,8 | 273,3 | 448 |
| 01900215 | 2 x 1,50 | 0,26 | 9,4 | 55,3 | 137 |
| 01900315 | 3 x 1,50 | 0,26 | 10,1 | 88,8 | 165 |
| 01900415 | 4 x 1,50 | 0,26 | 10,8 | 104,4 | 191 |
| 01900515 | 5 x 1,50 | 0,26 | 11,6 | 124,3 | 219 |
| 01900715 | 7 x 1,50 | 0,26 | 12,8 | 154,3 | 271 |
| 01901015 | 10 x 1,50 | 0,26 | 16,4 | 243,5 | 406 |
| 01901215 | 12 x 1,50 | 0,26 | 16,8 | 273,3 | 446 |
| 01901615 | 16 x 1,50 | 0,26 | 18,6 | 344,5 | 539 |
| 01901815 | 18 x 1,50 | 0,26 | 19,4 | 375,5 | 601 |
| 01900225 | 2 x 2,50 | 0,26 | 11,0 | 95,1 | 200 |
| 01900325 | 3 x 2,50 | 0,26 | 11,5 | 124,2 | 226 |
| 01900425 | 4 x 2,50 | 0,26 | 12,7 | 156,0 | 274 |
| 01900525 | 5 x 2,50 | 0,26 | 14,0 | 182,3 | 327 |
| 01900725 | 7 x 2,50 | 0,26 | 15,0 | 236,2 | 392 |

Other dimensions and colours are possible on request.

Other dimensions and colours are possible on request.

Besilen® - Silicone Cables

+180 °C

SC 600 C HDTR

Besilen® insulated strands with overall copper screen and Besilen® outer sheath

0°C 600V CSA AWM I/II A 150°C 600V FT1 FT2 CE



Marking for SC 600 C HDTR 01240410:

SAB BRÖCKSKES · D-VIERSEN · SC 600 C 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 |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Stranding: | in layers |
| Inner sheath: | Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1 |
| Screen: | tinned copper braiding |
| Sheath material: | Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1 |
| Sheath colour: | black (similar RAL 9011) |

Outstanding features:



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

Technical data:

| | |
|--|---|
| Nominal voltage: | U ₀ /U 300/500 V |
| Voltage UL/CSA: | 600 V |
| Testing voltage: | core/core 2000 V core/screen 2000 V |
| Min. bending radius | |
| <i>fixed laying:</i> | 4 x d |
| <i>flexible application:</i> | 6 x d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | UL/CSA: up to +150 °C Style 4535 |
| <i>flexible application:</i> | DIN VDE: -40/+180 °C / +200 °C (2000 h) |
| <i>short-time use:</i> | -25/+180 °C +250 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |
| Absence of harmful substances: | acc. to RoHS directive of the European Union |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 01240207 | 2 x 0,75 | 0,21 | 8,2 | 37,0 | 93 |
| 01240307 | 3 x 0,75 | 0,21 | 8,5 | 44,4 | 101 |
| 01240407 | 4 x 0,75 | 0,21 | 9,0 | 55,0 | 123 |
| 01240507 | 5 x 0,75 | 0,21 | 9,7 | 62,9 | 139 |
| 01240210 | 2 x 1,00 | 0,21 | 8,4 | 42,0 | 101 |
| 01240310 | 3 x 1,00 | 0,21 | 8,7 | 54,7 | 120 |
| 01240410 | 4 x 1,00 | 0,21 | 9,3 | 64,8 | 136 |
| 01240510 | 5 x 1,00 | 0,21 | 10,1 | 93,8 | 167 |
| 01240710 | 7 x 1,00 | 0,21 | 11,0 | 114,3 | 202 |
| 01240215 | 2 x 1,50 | 0,26 | 9,4 | 55,3 | 129 |
| 01240315 | 3 x 1,50 | 0,26 | 10,0 | 88,8 | 164 |
| 01240415 | 4 x 1,50 | 0,26 | 10,8 | 104,4 | 192 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 01240515 | 5 x 1,50 | 0,26 | 11,6 | 125,5 | 235 |
| 01240715 | 7 x 1,50 | 0,26 | 12,8 | 161,0 | 277 |
| 01240225 | 2 x 2,50 | 0,26 | 11,2 | 99,8 | 210 |
| 01240325 | 3 x 2,50 | 0,26 | 11,7 | 124,5 | 233 |
| 01240425 | 4 x 2,50 | 0,26 | 12,9 | 156,3 | 282 |
| 01240525 | 5 x 2,50 | 0,26 | 14,3 | 187,0 | 336 |
| 01240340 | 3 x 4,00 | 0,31 | 13,8 | 177,1 | 329 |
| 01240440 | 4 x 4,00 | 0,31 | 14,8 | 221,5 | 384 |
| 01240540 | 5 x 4,00 | 0,31 | 16,7 | 292,3 | 481 |
| 01240360 | 3 x 6,00 | 0,31 | 15,1 | 241,2 | 396 |
| 01240460 | 4 x 6,00 | 0,31 | 16,8 | 330,9 | 524 |
| 01240560 | 5 x 6,00 | 0,31 | 18,1 | 400,8 | 581 |

Other dimensions and colours are possible on request.



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

Besilen® - Silicone Cables

+180 °C

05SJ-K

Besilen® insulated strands with fibre-glass braiding with reference to DIN EN 50525-2-41



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 colour: | nature |
| Braiding: | fibre-glass |
| Impregnation: | impregnating lacquer |

Technical data:

| | |
|--|---|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage: | 2000 V |
| Min. bending radius: | 7.5 x d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -25/+180 °C |
| <i>short-time use:</i> | +250 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |

Outstanding features:



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

| item no. | nominal cross section mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|---------------------------------------|--------------------------|-----------------|---------------------|----------------------|
| 01550059 | 0,50 | 0,21 | 2,7 | 4,8 | 14 |
| 01550079 | 0,75 | 0,21 | 3,0 | 7,2 | 17 |
| 01550109 | 1,00 | 0,21 | 3,1 | 9,6 | 19 |
| 01550159 | 1,50 | 0,26 | 3,5 | 14,4 | 25 |
| 01550259 | 2,50 | 0,26 | 4,2 | 24,0 | 35 |
| 01550409 | 4,00 | 0,31 | 4,8 | 38,4 | 50 |
| 01550609 | 6,00 | 0,31 | 5,3 | 57,6 | 60 |
| 01551009 | 10,00 | 0,41 | 6,4 | 96,0 | 120 |
| 01551609 | 16,00 | 0,41 | 8,3 | 153,6 | 178 |
| 01552509 | 25,00 | 0,41 | 10,1 | 240,0 | 281 |
| 01553509 | 35,00 | 0,41 | 11,5 | 336,0 | 388 |
| 01555009 | 50,00 | 0,41 | 13,1 | 480,0 | 537 |
| 01557009 | 70,00 | 0,41 | 15,4 | 672,0 | 721 |
| 01559509 | 95,00 | 0,51 | 18,0 | 912,0 | 963 |

Other dimensions and colours are possible on request.

Cable Track Cable

S 180 HT

continuously flexible high temperature control cable with numbered cores and Besilen® outer sheath

S 180 C HT

continuously flexible high temperature control cable with numbered cores, overall copper screen and Besilen® outer sheath

+180 °C



Application: For use in cable tracks with extremely ambient temperature like for example in steel industry.

Construction:

| | |
|-------------------------------|--|
| Conductor: | tinned copper strands acc. to IEC 60228, VDE 0295, class 6 |
| Insulation: | FEP |
| Colour code: | black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores |
| Stranding: | specially adjusted layering with non-woven tape over each layer |
| Wrapping: | tape |
| S 180 C HT Screen: | tinned copper braiding |
| Sheath material: | special Besilen® |
| Sheath colour: | grey (similar RAL 7000) |

Technical Data:

| | | |
|---|--|-----------------------------|
| Nominal voltage: | U ₀ /U 0,6/1 kV | |
| Testing voltage: | core/core 4000 V | |
| Min. bending radius continuously flexible: | S 180 HT 10 x d | S 180 C HT 15 x d |
| Temperature range | | |
| <i>fixed laying:</i> | -25/+180 °C | |
| <i>flexible application:</i> | -25/+180 °C | |
| <i>short-time use:</i> | +200 °C | |
| Fire performance: | flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 | |
| Flexibility: | very good | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | |

Outstanding features:



- extreme temperature resistance
- high notch resistance
- very good flexibility
- S 180 C HT: very good EMC characteristics

S 180 HT

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 31800315 | 3 x 1,50 | 0,16 | 7,7 | 43,2 | 94 |
| 31800415 | 4 x 1,50 | 0,16 | 8,3 | 57,6 | 116 |
| 31800515 | 5 x 1,50 | 0,16 | 9,2 | 72,0 | 147 |
| 31800715 | 7 x 1,50 | 0,16 | 10,6 | 100,8 | 200 |
| 31800325 | 3 x 2,50 | 0,16 | 9,4 | 72,0 | 144 |
| 31800425 | 4 x 2,50 | 0,16 | 10,1 | 96,0 | 177 |
| 31800525 | 5 x 2,50 | 0,16 | 11,5 | 120,0 | 228 |
| 31800625 | 6 x 2,50 | 0,16 | 12,8 | 144,0 | 268 |
| 31800725 | 7 x 2,50 | 0,16 | 13,5 | 168,0 | 320 |
| 31801225 | 12 x 2,50 | 0,16 | 16,5 | 288,0 | 470 |
| 31802025 | 20 x 2,50 | 0,16 | 20,2 | 480,0 | 762 |
| 31800440 | 4 x 4,00 | 0,16 | 12,2 | 153,6 | 263 |
| 31800540 | 5 x 4,00 | 0,16 | 13,4 | 192,0 | 333 |
| 31800740 | 7 x 4,00 | 0,16 | 15,9 | 268,8 | 469 |
| 31801240 | 12 x 4,00 | 0,16 | 19,6 | 460,8 | 707 |
| 31800360 | 3 x 6,00 | 0,21 | 13,4 | 172,8 | 302 |
| 31800460 | 4 x 6,00 | 0,21 | 14,6 | 230,4 | 408 |
| 31800560 | 5 x 6,00 | 0,21 | 16,4 | 288,0 | 495 |
| 31800760 | 7 x 6,00 | 0,21 | 19,4 | 403,2 | 697 |
| 31800361 | 3 x 10,0 | 0,21 | 15,3 | 288,0 | 457 |
| 31800461 | 4 x 10,0 | 0,21 | 17,0 | 384,0 | 609 |
| 31800561 | 5 x 10,0 | 0,21 | 18,9 | 480,0 | 745 |
| 31800462 | 4 x 16,0 | 0,21 | 20,7 | 614,4 | 912 |
| 31800562 | 5 x 16,0 | 0,21 | 23,2 | 768,0 | 1146 |
| 31800362 | 3 x 25,0 | 0,21 | 21,5 | 720,0 | 999 |
| 31800463 | 4 x 25,0 | 0,21 | 24,0 | 960,0 | 1312 |
| 31800164 | 1 x 35,0 | 0,21 | 12,9 | 336,0 | 429 |
| 31800464 | 4 x 35,0 | 0,21 | 28,2 | 1344,0 | 1800 |
| 31800167 | 1 x 95,0 | 0,31 | 21,1 | 912,0 | 1116 |
| 31800169 | 1 x 150,0 | 0,31 | 25,5 | 1440,0 | 1745 |

Other dimensions and colours are possible on request.

S 180 C HT

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 31850315 | 3 x 1,50 | 0,16 | 8,1 | 63,8 | 110 |
| 31850415 | 4 x 1,50 | 0,16 | 8,9 | 80,4 | 137 |
| 31850515 | 5 x 1,50 | 0,16 | 9,6 | 98,3 | 166 |
| 31850715 | 7 x 1,50 | 0,16 | 11,4 | 147,6 | 240 |
| 31850325 | 3 x 2,50 | 0,16 | 9,8 | 98,5 | 163 |
| 31850425 | 4 x 2,50 | 0,16 | 11,1 | 142,1 | 221 |
| 31850525 | 5 x 2,50 | 0,16 | 12,1 | 171,9 | 268 |
| 31850725 | 7 x 2,50 | 0,16 | 14,0 | 229,2 | 364 |
| 31852025 | 20 x 2,50 | 0,16 | 21,0 | 612,4 | 856 |
| 31850440 | 4 x 4,00 | 0,16 | 12,7 | 206,4 | 304 |
| 31850540 | 5 x 4,00 | 0,16 | 14,0 | 253,2 | 378 |
| 31850740 | 7 x 4,00 | 0,16 | 16,7 | 368,0 | 541 |
| 31851240 | 12 x 4,00 | 0,16 | 20,3 | 577,4 | 790 |
| 31850360 | 3 x 6,00 | 0,21 | 14,0 | 234,0 | 341 |
| 31850460 | 4 x 6,00 | 0,21 | 15,2 | 297,9 | 457 |
| 31850560 | 5 x 6,00 | 0,21 | 17,2 | 388,0 | 568 |
| 31850760 | 7 x 6,00 | 0,21 | 20,2 | 519,5 | 780 |
| 31850461 | 4 x 10,0 | 0,21 | 17,8 | 485,6 | 683 |
| 31850561 | 5 x 10,0 | 0,21 | 19,7 | 594,9 | 828 |
| 31850462 | 4 x 16,0 | 0,21 | 21,5 | 747,7 | 1007 |
| 31850562 | 5 x 16,0 | 0,21 | 24,0 | 922,4 | 1256 |
| 31850463 | 4 x 25,0 | 0,21 | 25,2 | 1117,5 | 1444 |
| 31850464 | 4 x 35,0 | 0,21 | 29,0 | 1532,5 | 1934 |
| 31850167 | 1 x 95,0 | 0,31 | 22,3 | 1046,6 | 1228 |
| 31850170 | 1 x 185,0 | 0,41 | 28,6 | 1962,7 | 2250 |

Other dimensions and colours are possible on request.

Profibus-DP Cables acc. to IEC 61158-2

S PB 634 HT

S PB 634 HT Hybrid

Profibus-DP cable
for the high temperature range, continuously flexible
combined Profibus-DP cable with supply cores
for the high temperature, continuously flexible

+180 °C



BRÖCKSKES · 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 mm ² | 2 x 0,34 mm ² + supply cores |
| Conductor: | tinned copper strands, extra fine wires | |
| Core insulation: | PFA | |
| Colour code: | red, green | 0,34 mm ² red, green supply cores acc. to HD 308 |
| Stranding: | 0,34 mm ² twisted to pairs | |
| Wrapping: | PTFE foil | |
| Inner sheath: | FEP | special Besilen® |
| Screen 0,34 mm²: | tinned copper braiding | |
| Inner sheath: | --- | FEP |
| Stranding: | --- | element 0,34 mm ² together with supply cores |
| Wrapping: | --- | PTFE foil |
| Outer sheath: | special Besilen® | |
| Sheath colour: | blue lilac (similar RAL 4005) | |

| Technical data: | S PB 634 HT | S PB 634 HT Hybrid |
|---------------------------------------|---|--|
| Item number: | 3634-1000 | see table below |
| Nominal voltage: | --- | U ₀ /U 300/500 V (supply cores) |
| Peak operating voltage: | max. 350 V (0,34 mm ²) | |
| Testing voltage | | 0,34 mm ² supply cores |
| core/core: | 1500 V | 1500 V 2000 V |
| core/screen: | 1200 V | 1200 V 2000 V |
| Temperature range | | |
| fixed laying: | 5 x d | |
| flexible application: | 10 x d | |
| short time use: | 15 x d | |
| Min. bending radius | | |
| fixed laying: | - 40°C / + 180°C | |
| flexible application: | - 25°C / + 180°C | |
| continuously flexible: | + 250°C | |
| Characteristic impedance | 150 Ω ± 10% | |
| PB element (3-20 MHz): | | |
| Fire performance: | flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 | |
| Flexibility: | very good | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | |



Outstanding features:

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

| item no. | type | dimension | outer-ø approx. mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--------------------|---|--------------------|---------------------|----------------------|
| 36341000 | S PB 634 HT | 2 x 0,34 mm ² | 9,4 | 33,3 | 120 |
| 36341307 | S PB 634 HT Hybrid | 2 x 0,34 mm ² + 3 x 0,75 mm ² | 12,0 | 54,9 | 190 |
| 36341407 | S PB 634 HT Hybrid | 2 x 0,34 mm ² + 4 x 0,75 mm ² | 12,0 | 62,1 | 191 |
| 36341510 | S PB 634 HT Hybrid | 2 x 0,34 mm ² + 5 x 1,00 mm ² | 12,2 | 81,3 | 229 |
| 36341315 | S PB 634 HT Hybrid | 2 x 0,34 mm ² + 3 x 1,50 mm ² | 12,6 | 76,5 | 215 |
| 36341415 | S PB 634 HT Hybrid | 2 x 0,34 mm ² + 4 x 1,50 mm ² | 12,6 | 90,9 | 235 |

Other dimensions and colours are possible on request.

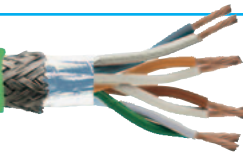
Industrial Ethernet Cables

CATLine CAT 6A HT

Gigabit Ethernet cable – high temperature resistant



6AWG 1631-4631 AWM Style 21618 150°C 600V CE



Marking for CATLine CAT 6A HT 16314631:

SAB BRÖCKSKES · D-VIERSEN · Cat.6A HT 4x2x26AWG 1631-4631 AWM Style 21618 150°C 600V CE

Construction:

| | |
|-------------------------|--|
| Conductor: | bare copper strands, fine wires |
| Insulation: | FEP |
| Colour code: | white/blue, white/orange, white/green, white/brown |
| Stranding: | twisted to pairs |
| Wrapping: | PETP foil |
| Screen: | alu foil and tinned copper braiding |
| Sheath material: | FEP |
| Sheath colour: | green (similar RAL 6018) |

Technical data:

| | |
|---------------------------------------|--|
| Peak operating voltage: | max. 90 V |
| Voltage UL: | 600 V |
| Testing voltage: | core/core 2000 V core/screen 2000 V |
| Min. bending radius | |
| <i>fixed laying:</i> | 5 x d |
| <i>flexible application:</i> | 10 x d |
| Temperature range | UL: up to +150 °C |
| <i>fixed laying:</i> | -90/+180 °C |
| <i>flexible application:</i> | -55/+180 °C |
| Fire performance: | flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW1 |
| Oil resistance: | very good |
| Chemical resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds |
| Characteristic impedance: | 100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 (CAT 6A) |
| UL Style: | 21618 |
| Application: | suitable for EtherCAT and EtherNET/IP applications |
| Absence of harmful substances: | acc. to RoHS directive of the European Union |

Outstanding features:



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

| item no. | type | dimension | max. core-ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈kg/km |
|----------|-------------------|----------------|-------------------|-----------------------|------------------------|------------------------|
| 16314631 | CATLine CAT 6A HT | 4 x 2 x 26 AWG | 1,05 | 5,7 | 30,0 | 52 |

Other dimensions and colours are possible on request.

Also possible
as harnessed cable
with M12 or RJ 45 plug!



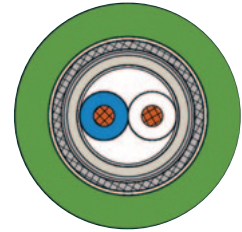
Industrial Ethernet Cables

CATLine SPE HT

Single Pair Ethernet cable, high temperature resistant

+180 °C

SAB CATLine



Marking for CATLine SPE HT 17211620:

SAB BRÖCKSKES · D-VIERSEN · CATLine SPE HT 2xAWG26/7 1721-1620 CE

Construction:

| | |
|-------------------------|-------------------------------------|
| Conductor: | bare copper strands |
| Insulation: | TPFP |
| Colour code: | white, blue |
| Stranding: | twisted to pairs |
| Inner sheath: | TPFP |
| Screen: | alu foil and tinned copper braiding |
| Sheath material: | Besilen® |
| Sheath colour: | green |

Technical data:

| | |
|---------------------------------------|--|
| Peak operating voltage: | max. 90 V |
| Testing voltage: | core/core 2000 V core/screen 2000 V |
| Min. bending radius | |
| <i>fixed laying:</i> | 5 x d |
| <i>flexible application:</i> | 10 x d |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -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. |
| Absence of harmful substances: | acc. to RoHS directive of the European Union |

Outstanding features:



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

| item no. | type | dimension | outer-ø ± 10% mm | copper figure kg/km | cable weight ≈kg/km |
|----------|----------------|--------------|------------------------|---------------------------|---------------------------|
| 17211620 | CATLine SPE HT | 2 x 26/7 AWG | 4,4 | 14,3 | 34 |
| 17211220 | CATLine SPE HT | 2 x 22/7 AWG | 5,3 | 22,6 | 45 |

Other dimensions and colours are possible on request.

Sensor plus 150

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



Marking for Sensor plus 150 38370424:

SAB BRÖCKSKES · D-VIERSEN · Sensor plus 150 4 x AWG 24/7 3837-0424

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 |
| Colour code: | with reference to DIN 47100 |
| Wrapping: | foil |
| Screen: | tinned copper braiding, optical coverage ≥ 85% |
| Sheath material: | PUR 490 with smooth surface |
| Sheath colour: | black (RAL 9005) |

| Technical Data: | |
|---------------------------------------|--|
| Peak operating voltage: | max. 48 V |
| Testing voltage: | core/core 600 V core/screen 600 V |
| Min. bending radius | |
| fixed laying: | 2 x d (one single bend) |
| flexible application: | 10 x d |
| Temperature range cable | |
| fixed laying*: | -50/+150 °C |
| flexible application*: | -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 |
| | *+150 °C – up to 3000 hours |

- 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

| item no. | dimension | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--------------|-----------------|---------------------|----------------------|
| 38370234 | 2 x AWG 34/7 | 2,2 | 5,7 | 8 |
| 38370334 | 3 x AWG 34/7 | 2,3 | 6,0 | 8 |
| 38370434 | 4 x AWG 34/7 | 2,4 | 6,0 | 9 |
| 38370634 | 6 x AWG 34/7 | 2,6 | 8,1 | 11 |
| 38370834 | 8 x AWG 34/7 | 2,9 | 10,2 | 14 |
| 38370232 | 2 x AWG 32/7 | 2,3 | 6,0 | 8 |
| 38370332 | 3 x AWG 32/7 | 2,3 | 6,3 | 9 |
| 38370432 | 4 x AWG 32/7 | 2,5 | 6,5 | 10 |
| 38370632 | 6 x AWG 32/7 | 2,8 | 9,0 | 13 |
| 38370832 | 8 x AWG 32/7 | 3,1 | 11,0 | 16 |
| 38370230 | 2 x AWG 30/7 | 2,4 | 6,4 | 9 |
| 38370330 | 3 x AWG 30/7 | 2,5 | 7,4 | 10 |
| 38370430 | 4 x AWG 30/7 | 2,6 | 9,1 | 12 |
| 38370630 | 6 x AWG 30/7 | 2,9 | 10,9 | 15 |
| 38370830 | 8 x AWG 30/7 | 3,2 | 12,9 | 18 |

| item no. | dimension | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--------------|-----------------|---------------------|----------------------|
| 38370228 | 2 x AWG 28/7 | 2,6 | 8,6 | 11 |
| 38370328 | 3 x AWG 28/7 | 2,7 | 9,8 | 13 |
| 38370428 | 4 x AWG 28/7 | 2,8 | 10,8 | 14 |
| 38370628 | 6 x AWG 28/7 | 3,1 | 14,3 | 19 |
| 38370828 | 8 x AWG 28/7 | 3,8 | 18,1 | 25 |
| 38370226 | 2 x AWG 26/7 | 3,0 | 11,5 | 15 |
| 38370326 | 3 x AWG 26/7 | 3,1 | 12,7 | 17 |
| 38370426 | 4 x AWG 26/7 | 3,3 | 14,6 | 20 |
| 38370626 | 6 x AWG 26/7 | 3,9 | 19,1 | 28 |
| 38370826 | 8 x AWG 26/7 | 4,4 | 25,1 | 35 |
| 38370224 | 2 x AWG 24/7 | 3,2 | 12,8 | 17 |
| 38370324 | 3 x AWG 24/7 | 3,3 | 15,3 | 20 |
| 38370424 | 4 x AWG 24/7 | 3,8 | 18,7 | 26 |
| 38370624 | 6 x AWG 24/7 | 4,4 | 25,3 | 36 |
| 38370824 | 8 x AWG 24/7 | 4,8 | 31,8 | 45 |

Other dimensions and colours are possible on request.

Possible on request:

- random lengths or ready 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

SAB Sensor



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 3839-0432

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 |
| Colour code: | with reference to DIN 47100 |
| Wrapping: | foil |
| Screen: | tinned copper braiding, optical coverage ≥ 85% |
| Sheath material: | PFA |
| Sheath colour: | black (RAL 9005) |

Technical Data:

| | |
|---------------------------------------|--|
| Peak operating voltage: | max. 48 V |
| Testing voltage: | core/core 600 V core/screen 600 V |
| Min. bending radius | |
| fixed laying: | 2 x d (one single bend) |
| flexible application: | 10 x d |
| Temperature range cable | |
| fixed laying: | -90/+250 °C |
| flexible application: | -55/+250 °C |
| Dielectric constant: | approx. 2,1 |
| Fire performance: | 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 |

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. | dimension | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--------------|-----------------------|---------------------------|----------------------------|
| 38390234 | 2 x AWG 34/7 | 1,8 | 5,7 | 8 |
| 38390330 | 3 x AWG 30/7 | 2,1 | 8,7 | 11 |
| 38390432 | 4 x AWG 32/7 | 2,1 | 8,1 | 11 |
| 38390628 | 6 x AWG 28/7 | 2,7 | 16,0 | 20 |

Other dimensions and colours are possible on request.



Possible on request:

- random lengths
or ready harnessed cable
- also available without copper braiding

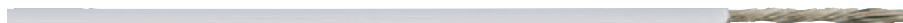
ETFE, FEP, PFA Cables

FEP and PFA insulated stranded hook-up wire

Li6Ybl, Li6Yvz, LiPFAvn - with extended temperature range



375 V
max. +250 °C



Construction:

| | |
|--------------------|---|
| Conductor: | bare, tinned or nickel-plated copper strands acc. to ASTM B 286 |
| Insulation: | FEP, 6Y11 acc. to VDE 0207-6 or PFA, 51Y11 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 ⁶ cJ/kg | |
| Temperature range | FEP: | PFA: | |
| | <i>fixed laying:</i> | -90/+180 °C | -90/+250 °C |
| | <i>flexible application:</i> | -55/+180 °C | -55/+250 °C |
| <i>limited time of use:</i> | +200 °C | +260 °C | |
| UL: | up to +150 °C | up to +250 °C | |
| Fire performance: | 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 | | |
| Chem. resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds | | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | | |

Li6Ybl

| item no. bare copper FEP | AWG | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|--------------------------------|------|--------------------------------|--------------------------|---------------------------|----------------------------|
| 3339 .. 28* | 28/7 | 0,127 | 0,70 | 0,9 | 1,4 |
| 3339 .. 26* | 26/7 | 0,160 | 0,80 | 1,4 | 2,0 |
| 3339 .. 24* | 24/7 | 0,203 | 0,93 | 2,2 | 2,9 |
| 3339 .. 22* | 22/7 | 0,254 | 1,08 | 3,4 | 4,2 |
| 3339 .. 20* | 20/7 | 0,320 | 1,28 | 5,4 | 6,3 |

* ETFE, FEP, PFA colour code, figures 5 and 6 of item no.:

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

Li6Yvz

| item no. tinned copper FEP | AWG | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------------------------------|-------|--------------------------------|--------------------------|---------------------------|----------------------------|
| 3340 .. 28* | 28/7 | 0,127 | 0,70 | 0,9 | 1,4 |
| 3340 .. 26* | 26/7 | 0,160 | 0,80 | 1,4 | 2,0 |
| 3340 .. 24* | 24/7 | 0,203 | 0,93 | 2,1 | 2,9 |
| 3340 .. 22* | 22/7 | 0,254 | 1,08 | 3,4 | 4,2 |
| 3340 .. 20* | 20/7 | 0,320 | 1,28 | 5,4 | 6,3 |
| 3340 .. 16* | 16/19 | 0,287 | 1,79 | 11,8 | 12,7 |

LiPFAvn

| item no. nickel-plated copper PFA | AWG | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|---|------|--------------------------------|--------------------------|---------------------------|----------------------------|
| 3344 .. 28* | 28/7 | 0,127 | 0,71 | 0,9 | 1,4 |
| 3344 .. 26* | 26/7 | 0,160 | 0,80 | 1,4 | 2,0 |
| 3344 .. 24* | 24/7 | 0,203 | 0,93 | 2,2 | 2,9 |
| 3344 .. 22* | 22/7 | 0,254 | 1,08 | 3,4 | 4,2 |
| 3344 .. 20* | 20/7 | 0,320 | 1,28 | 5,4 | 6,3 |

Other dimensions and colours are possible on request.

ETFE insulated strands on request.

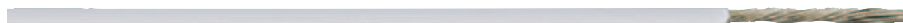
ETFE, FEP, PFA Cables

ETFE, FEP and PFA insulated stranded hook-up wire

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



900 V
max. +250 °C



Construction:

| | |
|--------------------|--|
| Conductor: | bare, tinned or nickel-plated copper strands acc. to ASTM B 286 |
| Insulation: | ETFE, 7Y11 acc. to VDE 0207-6 or FEP, 6Y11 acc. to VDE 0207-6 or 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

FEP + PFA:

UL recognized

Technical data:

| | | | |
|---------------------------------------|---|-----------------------------------|-----------------------------------|
| Peak operating voltage: | max. 900 V | | |
| Voltage UL: | FEP/PFA: 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 | ETFE: | FEP: | PFA: |
| <i>fixed laying:</i> | -90/+135 °C | -90/+180 °C | -90/+250 °C |
| <i>flexible application:</i> | -55/+135 °C | -55/+180 °C | -55/+250 °C |
| <i>limited time of use:</i> | +150 °C | +200 °C | +260 °C |
| UL: | up to +150 °C | | up to +250 °C |
| Fire performance: | 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 | | |
| Chem. resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds | | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | | |

Li7Ybl

| item no. bare copper ETFE | AWG | nominal single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|---------------------------------|-------|--------------------------------|-----------------------|---------------------------|----------------------------|
| 3345 .. 28* | 28/7 | 0,127 | 0,93 | 0,9 | 1,8 |
| 3345 .. 26* | 26/7 | 0,160 | 1,03 | 1,3 | 2,4 |
| 3345 .. 24* | 24/7 | 0,203 | 1,16 | 2,2 | 3,4 |
| 3345 .. 22* | 22/7 | 0,254 | 1,31 | 3,5 | 4,8 |
| 3345 .. 20* | 20/7 | 0,320 | 1,51 | 5,4 | 7,0 |
| 3345 .. 18* | 18/19 | 0,254 | 1,78 | 9,2 | 11,0 |
| 3345 .. 16* | 16/19 | 0,287 | 1,94 | 11,8 | 14,0 |
| 3345 .. 14* | 14/19 | 0,361 | 2,30 | 18,7 | 21,0 |
| 3345 .. 12* | 12/19 | 0,455 | 2,76 | 29,7 | 32,0 |

Li6Yvz

| item no. tinned copper FEP | AWG | nominal single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------------------------------|-------|--------------------------------|-----------------------|---------------------------|----------------------------|
| 3349 .. 28* | 28/7 | 0,127 | 0,93 | 0,9 | 2,0 |
| 3349 .. 26* | 26/7 | 0,160 | 1,03 | 1,3 | 2,7 |
| 3349 .. 24* | 24/7 | 0,203 | 1,16 | 2,2 | 3,7 |
| 3349 .. 22* | 22/7 | 0,254 | 1,31 | 3,5 | 5,2 |
| 3349 .. 20* | 20/7 | 0,320 | 1,51 | 5,4 | 7,5 |
| 3349 .. 18* | 18/19 | 0,254 | 1,78 | 9,2 | 12,0 |
| 3349 .. 16* | 16/19 | 0,287 | 1,94 | 11,8 | 14,0 |
| 3349 .. 14* | 14/19 | 0,361 | 2,30 | 18,7 | 22,0 |
| 3349 .. 12* | 12/19 | 0,455 | 2,76 | 29,7 | 33,0 |

Li6Ybl

| item no. bare copper FEP | AWG | nominal single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|--------------------------------|-------|--------------------------------|-----------------------|---------------------------|----------------------------|
| 3348 .. 28* | 28/7 | 0,127 | 0,93 | 0,9 | 2,0 |
| 3348 .. 26* | 26/7 | 0,160 | 1,03 | 1,3 | 2,7 |
| 3348 .. 24* | 24/7 | 0,203 | 1,16 | 2,2 | 3,7 |
| 3348 .. 22* | 22/7 | 0,254 | 1,31 | 3,5 | 5,2 |
| 3348 .. 20* | 20/7 | 0,320 | 1,51 | 5,4 | 7,5 |
| 3348 .. 18* | 18/19 | 0,254 | 1,78 | 9,2 | 12,0 |
| 3348 .. 16* | 16/19 | 0,287 | 1,94 | 11,8 | 14,0 |
| 3348 .. 14* | 14/19 | 0,361 | 2,30 | 18,7 | 22,0 |
| 3348 .. 12* | 12/19 | 0,455 | 2,76 | 29,7 | 33,0 |

LiPFAvn

| item no. nickel-plated copper PFA | AWG | nominal single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|---|-------|--------------------------------|-----------------------|---------------------------|----------------------------|
| 3353 .. 28* | 28/7 | 0,127 | 0,96 | 0,9 | 2,0 |
| 3353 .. 26* | 26/7 | 0,160 | 1,06 | 1,4 | 2,7 |
| 3353 .. 24* | 24/7 | 0,203 | 1,17 | 2,2 | 3,6 |
| 3353 .. 22* | 22/7 | 0,254 | 1,34 | 3,4 | 5,1 |
| 3353 .. 20* | 20/7 | 0,320 | 1,54 | 5,4 | 7,3 |
| 3353 .. 18* | 18/19 | 0,254 | 1,81 | 9,2 | 11,0 |
| 3353 .. 16* | 16/19 | 0,287 | 1,97 | 11,8 | 14,0 |

Other dimensions and colours are possible on request.

* ETFE, FEP, PFA colour code, figures 5 and 6 of item no.:

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

ETFE, FEP, PFA Cables

+180 °C

TD 801 F

FEP data cable with extended temperature range

AWG 22/3c AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 3801-0322 CE



Marking for TD 801 F 38010322:

SAB BRÖCKSKES · D-VIERSEN · TD 801 F AWG 22/3c AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 3801-0322 CE

Construction:

| | |
|-------------------------|--|
| Conductor: | tinned copper strands acc. to ASTM B 286 |
| Insulation: | FEP, 6YI1 acc. to VDE 0207-6 |
| Colour code: | with reference to DIN 47100 |
| Stranding: | in layers |
| Sheath material: | FEP, 6YM1 acc. to VDE 0207-6 |
| Sheath colour: | white (RAL 1013) |

Technical data:

| | | |
|---------------------------------------|---|------------------------------|
| Peak operating voltage: | max. 375 V | |
| Voltage UL/cUL: | 600 V | |
| Testing voltage: | core/core 2000 V | |
| Min. bending radius: | 7,5 x d | |
| Radiation resistance: | 1 x 10 ⁷ cJ/kg | |
| Temperature range | DIN VDE | UL/cUL: up to +150 °C |
| <i>fixed laying:</i> | -90/+180 °C | |
| <i>flexible application:</i> | -55/+180 °C | |
| <i>limited time of use:</i> | +200 °C | |
| Fire performance: | 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 | |
| Chem. resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | |

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

| item no. | dimension | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--------------|--------------------------|--------------------|---------------------|----------------------|
| 38010228 | 2 x AWG 28/7 | 0,127 | 2,0 | 1,8 | 6,3 |
| 38010226 | 2 x AWG 26/7 | 0,160 | 2,2 | 2,8 | 7,9 |
| 38010224 | 2 x AWG 24/7 | 0,203 | 2,5 | 4,2 | 10,3 |
| 38010222 | 2 x AWG 22/7 | 0,254 | 2,8 | 6,8 | 13,6 |
| 38010220 | 2 x AWG 20/7 | 0,320 | 3,2 | 10,8 | 18,6 |
| 38010328 | 3 x AWG 28/7 | 0,127 | 2,1 | 2,7 | 7,9 |
| 38010326 | 3 x AWG 26/7 | 0,160 | 2,4 | 4,2 | 9,9 |
| 38010324 | 3 x AWG 24/7 | 0,203 | 2,6 | 6,3 | 13,4 |
| 38010322 | 3 x AWG 22/7 | 0,254 | 2,9 | 10,2 | 18,0 |
| 38010320 | 3 x AWG 20/7 | 0,320 | 3,4 | 16,2 | 25,5 |
| 38010428 | 4 x AWG 28/7 | 0,127 | 2,3 | 3,6 | 9,7 |
| 38010426 | 4 x AWG 26/7 | 0,160 | 2,5 | 5,6 | 12,7 |
| 38010424 | 4 x AWG 24/7 | 0,203 | 2,9 | 8,4 | 16,9 |
| 38010422 | 4 x AWG 22/7 | 0,254 | 3,2 | 13,6 | 22,8 |
| 38010420 | 4 x AWG 20/7 | 0,320 | 3,7 | 21,6 | 32,2 |
| 38010528 | 5 x AWG 28/7 | 0,127 | 2,5 | 4,5 | 11,7 |
| 38010526 | 5 x AWG 26/7 | 0,160 | 2,8 | 7,0 | 15,2 |
| 38010524 | 5 x AWG 24/7 | 0,203 | 3,1 | 10,5 | 21,0 |

| item no. | dimension | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|---------------|--------------------------|--------------------|---------------------|----------------------|
| 38010522 | 5 x AWG 22/7 | 0,254 | 3,5 | 17,0 | 28,3 |
| 38010520 | 5 x AWG 20/7 | 0,320 | 4,4 | 27,0 | 42,4 |
| 38010624 | 6 x AWG 24/7 | 0,203 | 3,5 | 12,6 | 25,0 |
| 38010728 | 7 x AWG 28/7 | 0,127 | 2,7 | 6,3 | 14,8 |
| 38010726 | 7 x AWG 26/7 | 0,160 | 3,0 | 9,8 | 19,4 |
| 38010724 | 7 x AWG 24/7 | 0,203 | 3,4 | 14,7 | 26,6 |
| 38010722 | 7 x AWG 22/7 | 0,254 | 4,1 | 23,8 | 38,6 |
| 38010720 | 7 x AWG 20/7 | 0,320 | 4,5 | 37,8 | 54,1 |
| 38011028 | 10 x AWG 28/7 | 0,127 | 3,4 | 9,0 | 20,4 |
| 38011026 | 10 x AWG 26/7 | 0,160 | 4,0 | 14,0 | 27,4 |
| 38011024 | 10 x AWG 24/7 | 0,203 | 4,5 | 21,0 | 39,0 |
| 38011022 | 10 x AWG 22/7 | 0,254 | 5,1 | 34,0 | 55,2 |
| 38011020 | 10 x AWG 20/7 | 0,320 | 5,9 | 54,0 | 78,3 |
| 38011228 | 12 x AWG 28/7 | 0,127 | 3,5 | 10,8 | 23,4 |
| 38011226 | 12 x AWG 26/7 | 0,160 | 4,0 | 16,8 | 32,6 |
| 38011224 | 12 x AWG 24/7 | 0,203 | 4,7 | 25,2 | 45,3 |
| 38011222 | 12 x AWG 22/7 | 0,254 | 5,3 | 40,8 | 64,2 |
| 38011220 | 12 x AWG 20/7 | 0,320 | 6,3 | 64,8 | 92,0 |

Other dimensions and colours are possible on request.

ETFE and PFA are possible on request.

ETFE, FEP, PFA Cables

+180 °C

TD 833 CF

FEP data cable with extended temperature range and overall copper screen

V Style 21618 I/II A/B 150°C 600V FT1 FT2 3833-0320 CE



Marking for TD 833 CF 38330320:

SAB BRÖCKSKES · D-VIERSEN · TD 833 CF AWG 20/3c AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 3833-0320 CE

Construction:

| | |
|-------------------------|--|
| Conductor: | tinned copper strands acc. to ASTM B 286 |
| Insulation: | FEP, 6Y11 acc. to VDE 0207-6 |
| Colour code: | with reference to DIN 47100 |
| Stranding: | in layers |
| Wrapping: | PETP foil |
| Screen: | tinned copper braiding |
| Sheath material: | FEP, 6YM1 acc. to VDE 0207-6 |
| Sheath colour: | 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: | core/core | 2000 V |
| | core/screen | 2000 V |
| Min. bending radius: | 7,5 x d | |
| Radiation resistance: | 1 x 10 ⁷ cJ/kg | |
| Temperature range | DIN VDE | UL/cUL: up to +150 °C |
| <i>fixed laying:</i> | -90/+180 °C | |
| <i>flexible application:</i> | -55/+180 °C | |
| <i>limited time of use:</i> | +200 °C | |
| Fire performance: | 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 | |
| Chem. resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | |

| item no. | dimension | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--------------|--------------------------|--------------------|---------------------|----------------------|
| 38330228 | 2 x AWG 28/7 | 0,127 | 2,4 | 8,8 | 12,3 |
| 38330226 | 2 x AWG 26/7 | 0,160 | 2,7 | 13,0 | 16,1 |
| 38330224 | 2 x AWG 24/7 | 0,203 | 3,1 | 14,5 | 18,8 |
| 38330222 | 2 x AWG 22/7 | 0,254 | 3,3 | 17,1 | 21,9 |
| 38330220 | 2 x AWG 20/7 | 0,320 | 3,7 | 24,6 | 29,3 |
| 38330328 | 3 x AWG 28/7 | 0,127 | 2,6 | 9,7 | 13,9 |
| 38330326 | 3 x AWG 26/7 | 0,160 | 2,8 | 14,4 | 18,2 |
| 38330324 | 3 x AWG 24/7 | 0,203 | 3,1 | 16,6 | 21,6 |
| 38330322 | 3 x AWG 22/7 | 0,254 | 3,5 | 20,6 | 26,6 |
| 38330320 | 3 x AWG 20/7 | 0,320 | 4,0 | 30,1 | 37,5 |
| 38330428 | 4 x AWG 28/7 | 0,127 | 2,8 | 13,8 | 17,8 |
| 38330426 | 4 x AWG 26/7 | 0,160 | 3,1 | 15,9 | 20,6 |
| 38330424 | 4 x AWG 24/7 | 0,203 | 3,3 | 18,4 | 25,0 |
| 38330422 | 4 x AWG 22/7 | 0,254 | 3,8 | 27,4 | 33,4 |
| 38330420 | 4 x AWG 20/7 | 0,320 | 4,3 | 35,6 | 44,5 |
| 38330528 | 5 x AWG 28/7 | 0,127 | 3,0 | 14,8 | 19,9 |
| 38330526 | 5 x AWG 26/7 | 0,160 | 3,5 | 17,4 | 24,5 |
| 38330524 | 5 x AWG 24/7 | 0,203 | 3,8 | 24,4 | 32,0 |
| 38330522 | 5 x AWG 22/7 | 0,254 | 4,2 | 30,9 | 40,5 |
| 38330520 | 5 x AWG 20/7 | 0,320 | 4,8 | 42,9 | 54,4 |

| item no. | dimension | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|---------------|--------------------------|--------------------|---------------------|----------------------|
| 38330622 | 6 x AWG 22/7 | 0,254 | 4,6 | 34,5 | 47,2 |
| 38330620 | 6 x AWG 20/7 | 0,320 | 5,2 | 48,4 | 64,0 |
| 38330728 | 7 x AWG 28/7 | 0,127 | 3,2 | 16,6 | 23,3 |
| 38330726 | 7 x AWG 26/7 | 0,160 | 3,5 | 20,2 | 28,1 |
| 38330724 | 7 x AWG 24/7 | 0,203 | 4,0 | 25,2 | 36,8 |
| 38330722 | 7 x AWG 22/7 | 0,254 | 4,4 | 37,8 | 49,4 |
| 38330720 | 7 x AWG 20/7 | 0,320 | 5,2 | 53,8 | 68,4 |
| 38330820 | 8 x AWG 20/7 | 0,320 | 5,9 | 62,5 | 83,9 |
| 38331028 | 10 x AWG 28/7 | 0,127 | 4,0 | 22,9 | 33,0 |
| 38331026 | 10 x AWG 26/7 | 0,160 | 4,4 | 28,1 | 41,9 |
| 38331024 | 10 x AWG 24/7 | 0,203 | 5,0 | 36,9 | 53,4 |
| 38331022 | 10 x AWG 22/7 | 0,254 | 5,6 | 51,7 | 69,4 |
| 38331020 | 10 x AWG 20/7 | 0,320 | 6,4 | 75,4 | 95,1 |
| 38331228 | 12 x AWG 28/7 | 0,127 | 4,0 | 27,4 | 35,9 |
| 38331226 | 12 x AWG 26/7 | 0,160 | 4,5 | 30,8 | 44,2 |
| 38331224 | 12 x AWG 24/7 | 0,203 | 5,2 | 41,2 | 59,9 |
| 38331222 | 12 x AWG 22/7 | 0,254 | 5,8 | 60,3 | 80,2 |
| 38331220 | 12 x AWG 20/7 | 0,320 | 6,6 | 86,2 | 108,3 |
| 38331426 | 14 x AWG 26/7 | 0,160 | 4,7 | 35,5 | 50,0 |

Other dimensions and colours are possible on request.

ETFE and PFA are possible on request.

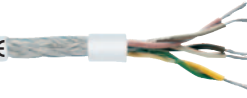
ETFE, FEP, PFA Cables

+180 °C

TD 838 CF TP

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

ipr cULus AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 3838-0326 CE



Marking for TD 838 CF TP 38380326:

SAB BRÖCKSKES · D-VIERSEN · TD 838 CF TP AWG 26/3pr cULus AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 3838-0326 CE

Construction:

| | |
|-------------------------|--|
| Conductor: | tinned copper strands acc. to ASTM B 286 |
| Insulation: | FEP, 6YI1 acc. to VDE 0207-6 |
| Colour code: | with reference to DIN 47100 |
| Stranding: | cores twisted to pairs, pairs together in specially adjusted layering |
| Wrapping: | foil |
| Screen: | tinned copper braiding |
| Sheath material: | FEP, 6YM1 acc. to VDE 0207-6 |
| Sheath colour: | 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: | core/core | 2000 V |
| | core/screen | 2000 V |
| Min. bending radius: | 7,5 x d | |
| Radiation resistance: | 1 x 10 ⁷ cJ/kg | |
| Temperature range | DIN VDE | UL/cUL: up to +150 °C |
| <i>fixed laying:</i> | -90/+180 °C | |
| <i>flexible application:</i> | -55/+180 °C | |
| <i>limited time of use:</i> | +200 °C | |
| Fire performance: | 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 | |
| Chem. resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | |

| item no. | dimension | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|------------------|--------------------------|--------------------|---------------------|----------------------|
| 38380228 | 2 x 2 x AWG 28/7 | 0,127 | 3,2 | 13,9 | 18,7 |
| 38380226 | 2 x 2 x AWG 26/7 | 0,160 | 3,5 | 16,0 | 22,0 |
| 38380224 | 2 x 2 x AWG 24/7 | 0,203 | 4,0 | 22,3 | 30,1 |
| 38380222 | 2 x 2 x AWG 22/7 | 0,254 | 4,6 | 27,7 | 37,1 |
| 38380220 | 2 x 2 x AWG 20/7 | 0,320 | 5,1 | 37,6 | 49,5 |
| 38380328 | 3 x 2 x AWG 28/7 | 0,127 | 3,6 | 19,2 | 24,8 |
| 38380326 | 3 x 2 x AWG 26/7 | 0,160 | 4,1 | 22,3 | 30,7 |
| 38380324 | 3 x 2 x AWG 24/7 | 0,203 | 4,5 | 26,6 | 37,3 |
| 38380322 | 3 x 2 x AWG 22/7 | 0,254 | 5,2 | 36,4 | 50,0 |
| 38380320 | 3 x 2 x AWG 20/7 | 0,320 | 5,9 | 51,9 | 66,8 |
| 38380428 | 4 x 2 x AWG 28/7 | 0,127 | 4,2 | 21,1 | 30,3 |
| 38380426 | 4 x 2 x AWG 26/7 | 0,160 | 4,7 | 25,3 | 36,3 |
| 38380424 | 4 x 2 x AWG 24/7 | 0,203 | 5,5 | 32,6 | 48,6 |

| item no. | dimension | nominal single wire ø mm | approx. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|-------------------|--------------------------|--------------------|---------------------|----------------------|
| 38380422 | 4 x 2 x AWG 22/7 | 0,254 | 5,9 | 46,7 | 62,7 |
| 38380420 | 4 x 2 x AWG 20/7 | 0,320 | 6,8 | 66,8 | 84,8 |
| 38380418 | 4 x 2 x AWG 18/19 | 0,254 | 8,1 | 100,3 | 124,2 |
| 38380528 | 5 x 2 x AWG 28/7 | 0,127 | 4,6 | 24,8 | 36,5 |
| 38380526 | 5 x 2 x AWG 26/7 | 0,160 | 5,2 | 30,0 | 43,9 |
| 38380524 | 5 x 2 x AWG 24/7 | 0,203 | 5,8 | 38,7 | 50,1 |
| 38380522 | 5 x 2 x AWG 22/7 | 0,254 | 6,5 | 55,3 | 76,2 |
| 38380520 | 5 x 2 x AWG 20/7 | 0,320 | 7,5 | 77,5 | 104,5 |
| 38380628 | 6 x 2 x AWG 28/7 | 0,127 | 4,7 | 26,7 | 40,1 |
| 38380626 | 6 x 2 x AWG 26/7 | 0,160 | 5,3 | 34,3 | 52,5 |
| 38380624 | 6 x 2 x AWG 24/7 | 0,203 | 5,9 | 44,7 | 66,6 |
| 38380622 | 6 x 2 x AWG 22/7 | 0,254 | 6,9 | 65,2 | 90,0 |
| 38380620 | 6 x 2 x AWG 20/7 | 0,320 | 7,8 | 92,6 | 123,7 |

Other dimensions and colours are possible on request.

ETFE and PFA are possible on request.

ETFE, FEP, PFA Cables

+180 °C

TA 866 F

FEP connection cable with extended temperature range



Marking for TA 866 F 38660415:

SAB BRÖCKSKES · D-VIERSEN · TA 866 F AWG 16/4c AWM Style 21618 VII A/B 150°C 600V FT1 FT2 3866-0415 CE

Construction:

| | |
|-------------------------|---|
| Conductor: | tinned copper strands acc. to IEC 60228, VDE 0295, class 5 |
| Insulation: | FEP, 6Y11 acc. to VDE 0207-6 |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Stranding: | in layers |
| Sheath material: | FEP, 6YM1 acc. to VDE 0207-6 |
| Sheath colour: | 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: | U ₀ /U 300/500 V | |
| Voltage UL/cUL: | 600 V | |
| Testing voltage: | core/core 2000 V | |
| Min. bending radius: | 7,5 x d | |
| Radiation resistance: | 1 x 10 ⁷ cJ/kg | |
| Temperature range | DIN VDE | UL/cUL: up to +150 °C |
| <i>fixed laying:</i> | -90/+180 °C | |
| <i>flexible application:</i> | -55/+180 °C | |
| Fire performance: | 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 | |
| Chem. resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 38660202 | 2 x 0,25 | 0,16 | 2,9 | 4,8 | 13,0 |
| 38660205 | 2 x 0,50 | 0,21 | 3,5 | 9,6 | 20,6 |
| 38660207 | 2 x 0,75 | 0,21 | 4,1 | 14,4 | 27,5 |
| 38660210 | 2 x 1,00 | 0,21 | 4,3 | 19,2 | 32,3 |
| 38660215 | 2 x 1,50 | 0,26 | 4,9 | 28,8 | 42,5 |
| 38660225 | 2 x 2,50 | 0,26 | 5,8 | 48,0 | 63,4 |
| 38660240 | 2 x 4,00 | 0,31 | 7,0 | 76,8 | 94,1 |
| 38660260 | 2 x 6,00 | 0,31 | 8,7 | 115,2 | 145,6 |
| 38660302 | 3 x 0,25 | 0,16 | 3,1 | 7,2 | 17,2 |
| 38660305 | 3 x 0,50 | 0,21 | 3,7 | 14,4 | 27,7 |
| 38660307 | 3 x 0,75 | 0,21 | 4,4 | 21,6 | 36,9 |
| 38660310 | 3 x 1,00 | 0,21 | 4,8 | 28,8 | 43,8 |
| 38660315 | 3 x 1,50 | 0,26 | 5,3 | 43,2 | 60,3 |
| 38660325 | 3 x 2,50 | 0,26 | 6,2 | 72,0 | 88,6 |
| 38660340 | 3 x 4,00 | 0,31 | 7,6 | 115,2 | 136,1 |
| 38660360 | 3 x 6,00 | 0,31 | 9,4 | 172,8 | 213,3 |
| 38660402 | 4 x 0,25 | 0,16 | 3,4 | 9,6 | 21,6 |
| 38660405 | 4 x 0,50 | 0,21 | 4,2 | 19,2 | 36,9 |
| 38660407 | 4 x 0,75 | 0,21 | 5,3 | 28,8 | 46,9 |
| 38660410 | 4 x 1,00 | 0,21 | 5,5 | 38,4 | 57,8 |
| 38660415 | 4 x 1,50 | 0,26 | 6,1 | 57,6 | 77,2 |
| 38660425 | 4 x 2,50 | 0,26 | 7,5 | 96,0 | 114,4 |
| 38660440 | 4 x 4,00 | 0,31 | 8,3 | 153,6 | 176,1 |
| 38660460 | 4 x 6,00 | 0,31 | 10,4 | 230,4 | 275,0 |
| 38660502 | 5 x 0,25 | 0,16 | 3,7 | 12,0 | 27,1 |
| 38660505 | 5 x 0,50 | 0,21 | 4,6 | 24,0 | 45,9 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 38660507 | 5 x 0,75 | 0,21 | 5,4 | 36,0 | 60,6 |
| 38660510 | 5 x 1,00 | 0,21 | 5,8 | 48,0 | 73,0 |
| 38660515 | 5 x 1,50 | 0,26 | 6,9 | 72,0 | 97,8 |
| 38660525 | 5 x 2,50 | 0,26 | 7,7 | 120,0 | 147,1 |
| 38660540 | 5 x 4,00 | 0,31 | 9,4 | 192,0 | 225,9 |
| 38660560 | 5 x 6,00 | 0,31 | 11,6 | 288,0 | 357,7 |
| 38660702 | 7 x 0,25 | 0,16 | 4,2 | 16,8 | 36,0 |
| 38660705 | 7 x 0,50 | 0,21 | 5,2 | 33,6 | 61,7 |
| 38660707 | 7 x 0,75 | 0,21 | 6,2 | 50,4 | 78,5 |
| 38660710 | 7 x 1,00 | 0,21 | 6,2 | 67,2 | 94,3 |
| 38660715 | 7 x 1,50 | 0,26 | 7,2 | 100,8 | 130,1 |
| 38660725 | 7 x 2,50 | 0,26 | 8,4 | 168,0 | 193,9 |
| 38660740 | 7 x 4,00 | 0,31 | 10,3 | 268,8 | 299,2 |
| 38660760 | 7 x 6,00 | 0,31 | 12,8 | 403,2 | 458,3 |
| 38661002 | 10 x 0,25 | 0,16 | 5,4 | 24,0 | 52,0 |
| 38661005 | 10 x 0,50 | 0,21 | 6,6 | 48,0 | 86,3 |
| 38661007 | 10 x 0,75 | 0,21 | 7,7 | 72,0 | 113,1 |
| 38661010 | 10 x 1,00 | 0,21 | 8,1 | 96,0 | 135,7 |
| 38661015 | 10 x 1,50 | 0,26 | 9,4 | 144,0 | 195,5 |
| 38661025 | 10 x 2,50 | 0,26 | 11,0 | 240,0 | 278,2 |
| 38661202 | 12 x 0,25 | 0,16 | 5,6 | 28,8 | 62,3 |
| 38661205 | 12 x 0,50 | 0,21 | 6,8 | 57,6 | 101,6 |
| 38661207 | 12 x 0,75 | 0,21 | 8,0 | 86,4 | 134,2 |
| 38661210 | 12 x 1,00 | 0,21 | 8,4 | 115,2 | 159,0 |
| 38661215 | 12 x 1,50 | 0,26 | 9,7 | 172,8 | 218,9 |
| 38661225 | 12 x 2,50 | 0,26 | 11,5 | 288,0 | 332,1 |

Other dimensions and colours are possible on request.

ETFE and PFA are possible on request.

ETFE, FEP, PFA Cables

+180 °C

TA 867 CF

FEP connection cable with extended temperature range and overall copper screen

AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 3867-0415 CE



Marking for TA 867 CF 38670415:

SAB BRÖCKSKES · D-VIERSEN · TA 867 CF AWG 16/4c AWM Style 21618 I/II A/B 150°C 600V FT1 FT2 3867-0415 CE

| Construction: | |
|-------------------------|---|
| Conductor: | tinned copper strands acc. to IEC 60228, VDE 0295, class 5 |
| Insulation: | FEP, 6Y11 acc. to VDE 0207-6 |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Stranding: | in layers |
| Wrapping: | foil |
| Screen: | tinned copper braiding |
| Sheath material: | FEP, 6YM1 acc. to VDE 0207-6 |
| Sheath colour: | black (RAL 9005) |

| Technical data: | |
|---------------------------------------|---|
| Peak operating voltage: | U ₀ /U 300/500 V |
| Voltage UL/cUL: | 600 V |
| Testing voltage: | core/core 2000 V core/screen 2000 V |
| Min. bending radius: | 7,5 x d |
| Radiation resistance: | 1 x 10 ⁷ cJ/kg |
| Temperature range | DIN VDE UL/cUL: up to +150 °C |
| <i>fixed laying:</i> | -90/+180 °C |
| <i>flexible application:</i> | -55/+180 °C |
| Fire performance: | 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 |
| Chem. resistance: | very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds |
| Absence of harmful substances: | acc. to RoHS directive of the European Union |

| 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 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 38670202 | 2 x 0,25 | 0,16 | 3,4 | 15,2 | 21,7 |
| 38670205 | 2 x 0,50 | 0,21 | 4,1 | 23,5 | 33,2 |
| 38670207 | 2 x 0,75 | 0,21 | 4,6 | 28,5 | 38,9 |
| 38670210 | 2 x 1,00 | 0,21 | 4,8 | 35,1 | 44,9 |
| 38670215 | 2 x 1,50 | 0,26 | 5,5 | 46,4 | 57,7 |
| 38670225 | 2 x 2,50 | 0,26 | 6,3 | 67,5 | 78,4 |
| 38670240 | 2 x 4,00 | 0,31 | 7,6 | 100,3 | 114,8 |
| 38670302 | 3 x 0,25 | 0,16 | 3,6 | 17,6 | 25,5 |
| 38670305 | 3 x 0,50 | 0,21 | 4,3 | 28,4 | 40,0 |
| 38670307 | 3 x 0,75 | 0,21 | 4,9 | 37,6 | 49,3 |
| 38670310 | 3 x 1,00 | 0,21 | 5,2 | 44,8 | 58,1 |
| 38670315 | 3 x 1,50 | 0,26 | 5,8 | 60,9 | 74,2 |
| 38670325 | 3 x 2,50 | 0,26 | 6,7 | 93,0 | 104,7 |
| 38670340 | 3 x 4,00 | 0,31 | 8,1 | 141,5 | 156,1 |
| 38670360 | 3 x 6,00 | 0,31 | 10,1 | 226,7 | 250,1 |
| 38670402 | 4 x 0,25 | 0,16 | 4,0 | 23,5 | 34,3 |
| 38670405 | 4 x 0,50 | 0,21 | 4,7 | 33,3 | 48,0 |
| 38670407 | 4 x 0,75 | 0,21 | 5,4 | 44,6 | 61,2 |
| 38670410 | 4 x 1,00 | 0,21 | 5,6 | 53,1 | 72,2 |
| 38670415 | 4 x 1,50 | 0,26 | 6,3 | 77,1 | 93,0 |
| 38670425 | 4 x 2,50 | 0,26 | 7,4 | 119,5 | 136,0 |
| 38670440 | 4 x 4,00 | 0,31 | 8,8 | 182,5 | 200,4 |
| 38670502 | 5 x 0,25 | 0,16 | 4,3 | 26,0 | 39,1 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 38670505 | 5 x 0,50 | 0,21 | 5,2 | 39,8 | 60,0 |
| 38670507 | 5 x 0,75 | 0,21 | 5,9 | 55,5 | 75,7 |
| 38670510 | 5 x 1,00 | 0,21 | 6,2 | 67,4 | 88,1 |
| 38670515 | 5 x 1,50 | 0,26 | 7,2 | 95,7 | 118,4 |
| 38670525 | 5 x 2,50 | 0,26 | 8,2 | 146,3 | 167,1 |
| 38670702 | 7 x 0,25 | 0,16 | 4,7 | 30,9 | 47,1 |
| 38670705 | 7 x 0,50 | 0,21 | 5,7 | 51,3 | 75,5 |
| 38670707 | 7 x 0,75 | 0,21 | 6,4 | 70,0 | 93,6 |
| 38670710 | 7 x 1,00 | 0,21 | 6,7 | 88,2 | 110,4 |
| 38670715 | 7 x 1,50 | 0,26 | 7,7 | 126,9 | 150,0 |
| 38670725 | 7 x 2,50 | 0,26 | 8,9 | 196,9 | 216,1 |
| 38671002 | 10 x 0,25 | 0,16 | 5,1 | 43,5 | 64,3 |
| 38671005 | 10 x 0,50 | 0,21 | 6,9 | 71,6 | 102,7 |
| 38671007 | 10 x 0,75 | 0,21 | 8,1 | 98,3 | 133,1 |
| 38671010 | 10 x 1,00 | 0,21 | 8,6 | 125,0 | 158,0 |
| 38671015 | 10 x 1,50 | 0,26 | 10,1 | 197,9 | 235,4 |
| 38671025 | 10 x 2,50 | 0,26 | 11,7 | 299,6 | 327,9 |
| 38671202 | 12 x 0,25 | 0,16 | 6,1 | 48,2 | 75,2 |
| 38671205 | 12 x 0,50 | 0,21 | 7,4 | 81,4 | 121,4 |
| 38671207 | 12 x 0,75 | 0,21 | 8,5 | 115,4 | 155,5 |
| 38671210 | 12 x 1,00 | 0,21 | 8,9 | 144,1 | 181,2 |
| 38671215 | 12 x 1,50 | 0,26 | 10,4 | 226,9 | 260,5 |
| 38671225 | 12 x 2,50 | 0,26 | 12,4 | 348,0 | 377,5 |

Other dimensions and colours are possible on request.

ETFE and PFA are possible on request.

ETFE, FEP, PFA Cables

BL TA 180 C

flexible FEP connection cable with overall copper screen

+180 °C

SAB BL-Line



OV AWM I/II A/B 150°C 600V FT1 FT2



Marking for BL TA 180 C 37530715:

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

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

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 |
| Colour code: | black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 without green-yellow earth wire |
| Stranding: | in layers |
| Inner sheath: | Besilen® |
| Screen: | tinned copper braiding |
| Sheath material: | FEP |
| Sheath colour: | black (RAL 9005) |

Technical data:

| | | |
|---------------------------------------|--|-----------------------|
| Nominal voltage: | U ₀ /U 300/500 V | |
| Voltage UL/cUL: | 600 V | |
| Testing voltage: | core/core 2000 V (AC) | core/screen 2000 V |
| Min. bending radius | | |
| fixed laying | 5 x d | |
| flexible application: | 10 x d | |
| Radiation resistance: | 1 x 10 ⁷ cJ/kg | |
| Temperature range | DIN VDE | UL/cUL: up to +150 °C |
| fixed laying: | -55/+180 °C | |
| flexible application: | -55/+180 °C | |
| Fire performance: | 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 | |
| Chem. 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 | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union | |

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:
DNV
UL/cUL recognized

| item no. | no. of cores x cross section n x mm ² | outer-ø approx. mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|-----------------------|---------------------------|----------------------------|
| 37530207 | 2 x 0,75 | 5,7 | 32,9 | 63 |
| 37530307 | 3 x 0,75 | 6,0 | 40,2 | 68 |
| 37530407 | 4 x 0,75 | 6,2 | 50,3 | 81 |
| 37530507 | 5 x 0,75 | 7,1 | 59,6 | 99 |
| 37530607 | 6 x 0,75 | 7,7 | 67,0 | 116 |
| 37530707 | 7 x 0,75 | 7,7 | 74,2 | 121 |
| 37530807 | 8 x 0,75 | 8,9 | 86,7 | 152 |
| 37531207 | 12 x 0,75 | 10,2 | 134,3 | 203 |
| 37531607 | 16 x 0,75 | 11,4 | 169,8 | 261 |
| 37532007 | 20 x 0,75 | 12,8 | 229,5 | 334 |
| 37530210 | 2 x 1,00 | 5,9 | 37,8 | 64 |
| 37530215 | 2 x 1,50 | 6,6 | 50,4 | 81 |
| 37530315 | 3 x 1,50 | 6,9 | 64,6 | 97 |
| 37530515 | 5 x 1,50 | 8,2 | 98,2 | 145 |
| 37530615 | 6 x 1,50 | 9,0 | 115,5 | 171 |
| 37530715 | 7 x 1,50 | 9,0 | 129,9 | 182 |
| 37531215 | 12 x 1,50 | 12,0 | 232,5 | 309 |
| 37530220 | 2 x 2,00 | 7,5 | 62,2 | 107 |
| 37530320 | 3 x 2,00 | 8,1 | 83,8 | 130 |

Other dimensions and colours are possible on request.



Possible on request:

- without overall copper screen
- alternative colour code and sheath colour

Special Cables

Special single conductor

glass fiber insulated strands with excellent temperature resistance

excellent
temperature
resistance

+400 °C



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 screen |

Technical data:

| | |
|---------------------------------------|---|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage: | 2200 V |
| Min. bending radius: | 5 x d |
| Temperature range | |
| <i>fixed laying:</i> | max. +400°C |
| <i>flexible application:</i> | max. +400°C |
| Fire performance: | 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 |

Outstanding features:



- excellent heat resistance
- flame resistant

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø approx. mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|--------------------------|---------------------------|----------------------------|
| 32869035 | 1 x 185,00 | 0,40 | 23,7 | 1776,0 | 1855 |

Other dimensions and colours are possible on request.



**Single conductor
in other dimensions
on request!**

Special Cables

Special connection cable

connection cable with excellent temperature resistance

excellent
temperature
resistance

+400 °C



CE EAC RoHS 

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

Construction:

| | |
|----------------------|--|
| Conductor: | nickel-plated copper strands |
| Insulation: | glass fiber |
| Impregnation: | PU-lacquer |
| Colour code: | brown, black, grey, green-yellow tracer in glass fiber braiding |
| Stranding: | cores together |
| Braiding: | glass fiber |
| Armouring: | stainless steel wire armouring (VA) |

Technical data:

| | |
|---------------------------------------|--|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage: | 2500 V |
| Min. bending radius: | |
| <i>fixed laying:</i> | 5 x d |
| <i>flexible application:</i> | 10 x d |
| Temperature range: | |
| <i>fixed laying:</i> | max. +400°C |
| <i>flexible application:</i> | max. +400°C |
| Fire performance: | 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 |

Outstanding features:



- halogen-free
- excellent heat resistance
- flame resistant

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | max. outer-ø mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 32869066 | 3 x 2,50 | 0,25 | 9,5 | 72,0 | 190 |
| 32869039 | 4 x 2,50 | 0,25 | 10,4 | 96,0 | 239 |
| 32869040 | 4 x 4,00 | 0,30 | 12,8 | 153,6 | 349 |

Other dimensions and colours are possible on request.



Other dimensions
on request!

Special connection cable

with silicone impregnated fiber-glass braiding



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 |
| Colour code | |
| 450/750 V: | white |
| 3,8/6,6 kV: | grey |
| 8,0/13,8 kV: | black |
| Braiding: | fiber-glass |
| Impregnation: | special silicone |

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 d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -25/+180 °C |
| <i>short-time use:</i> | +250 °C |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 |
| Fire performance: | 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 |

Outstanding features:



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

450/750 V

| item no. | nominal cross-section mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|---------------------|---------------------------------------|--------------------------|-----------------|---------------------|----------------------|
| | 6,00 | 0,31 | 5,3 | 57,6 | 71 |
| | 10,00 | 0,41 | 6,9 | 96,0 | 125 |
| item group 0123 | 16,00 | 0,41 | 7,9 | 153,6 | 179 |
| | 25,00 | 0,41 | 10,1 | 240,0 | 279 |
| | 35,00 | 0,41 | 11,5 | 336,0 | 381 |
| item no. on request | 50,00 | 0,41 | 13,1 | 480,0 | 548 |
| | 70,00 | 0,41 | 15,4 | 672,0 | 722 |
| | 95,00 | 0,51 | 18,3 | 912,0 | 1004 |
| | 120,00 | 0,51 | 20,2 | 1152,0 | 1221 |

Other dimensions and colours are possible on request.

3,8/6,6 kV

| item no. | nominal cross-section mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|---------------------|---------------------------------------|--------------------------|-----------------|---------------------|----------------------|
| | 16,00 | 0,41 | 10,3 | 153,6 | 224 |
| item group 0123 | 25,00 | 0,41 | 12,1 | 240,0 | 325 |
| | 35,00 | 0,41 | 13,5 | 336,0 | 434 |
| | 50,00 | 0,41 | 15,1 | 480,0 | 596 |
| item no. on request | 70,00 | 0,41 | 17,4 | 672,0 | 798 |
| | 95,00 | 0,51 | 19,5 | 912,0 | 1032 |
| | 120,00 | 0,51 | 21,4 | 1152,0 | 1250 |

Other dimensions and colours are possible on request.

8,0/13,8 kV

| item no. | nominal cross-section mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|---------------------|---------------------------------------|--------------------------|-----------------|---------------------|----------------------|
| item group 0123 | 10,00 | 0,41 | 11,9 | 96,0 | 224 |
| | 16,00 | 0,41 | 12,9 | 153,6 | 286 |
| | 25,00 | 0,41 | 14,7 | 240,0 | 386 |
| item no. on request | 50,00 | 0,41 | 17,3 | 480,0 | 663 |
| | 70,00 | 0,41 | 19,6 | 672,0 | 870 |
| | 95,00 | 0,51 | 21,7 | 912,0 | 1109 |

Other dimensions and colours are possible on request.

Festoon Cable

Besilen® insulated connection cable with glass fiber braiding, inner sheath and overall copper screen



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 |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Wrapping: | cores together with mica tape |
| Braiding: | cores together with glass fiber |
| Stranding: | in layers |
| Braiding: | glass fiber |
| Wrapping: | mica tape |
| Braiding: | glass fiber |
| Inner sheath: | Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1 |
| Sheath colour: | reddish brown (similar RAL 3016) |
| Screen: | tinned copper braiding |

Technical data:

| | |
|---------------------------------------|--|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage: | core/core 2000 V core/screen 2000 V |
| Min. bending radius: | 15 x d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -25/+180 °C |
| Fire performance: | 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 |

Outstanding features:



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

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 07479011 | 4 x 1,00 | 0,21 | 13,2 | 139,5 | 254 |
| 07479017 | 5 x 1,00 | 0,21 | 14,7 | 159,7 | 284 |
| 07479018 | 8 x 1,00 | 0,21 | 17,0 | 207,9 | 413 |
| 07479002 | 3 x 1,50 | 0,26 | 13,0 | 139,2 | 243 |
| 07479012 | 4 x 1,50 | 0,26 | 14,4 | 163,5 | 285 |
| 07479010 | 5 x 1,50 | 0,26 | 15,8 | 200,5 | 337 |
| 07479005 | 8 x 1,50 | 0,26 | 19,6 | 256,0 | 545 |
| 07479006 | 12 x 1,50 | 0,26 | 21,8 | 349,7 | 651 |
| 07479008 | 24 x 1,50 | 0,26 | 30,0 | 704,9 | 1197 |
| 07479016 | 25 x 1,50 | 0,26 | 30,0 | 584,5 | 1131 |
| 07479003 | 3 x 2,50 | 0,26 | 14,7 | 196,7 | 302 |
| 07479004 | 4 x 2,50 | 0,26 | 15,8 | 225,8 | 365 |
| 07479015 | 5 x 2,50 | 0,26 | 17,2 | 251,1 | 432 |
| 07479007 | 4 x 4,00 | 0,31 | 17,3 | 288,4 | 443 |
| 07479014 | 4 x 6,00 | 0,31 | 15,1 | 230,4 | 367 |

Other dimensions and colours are possible on request.

Smeltery Cable

Besilen® insulated connection cable with glass fiber braiding and overall copper screen



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 |
| Colour code: | coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire |
| Wrapping: | cores together with mica tape |
| Braiding: | glass fiber |
| Stranding: | in layers |
| Braiding: | glass fiber |
| Wrapping: | mica tape |
| Braiding: | glass fiber |
| Screen: | tinned copper braiding |

Technical data:

| | |
|---------------------------------------|--|
| Nominal voltage: | Uo/U 300/500 V |
| Testing voltage: | core/core 2000 V core/screen 2000 V |
| Min. bending radius: | 15 x d |
| Radiation resistance: | 2 x 10 ⁷ cJ/kg |
| Temperature range | |
| <i>fixed laying:</i> | -40/+180 °C |
| <i>flexible application:</i> | -25/+180 °C |
| Fire performance: | 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 |

Outstanding features:



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

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 07470210 | 2 x 1,00 | 0,21 | 9,2 | 79,9 | 109 |
| 07470310 | 3 x 1,00 | 0,21 | 9,7 | 103,0 | 144 |
| 07470410 | 4 x 1,00 | 0,21 | 10,6 | 115,1 | 173 |
| 07470510 | 5 x 1,00 | 0,21 | 11,7 | 110,1 | 210 |
| 07470710 | 7 x 1,00 | 0,21 | 12,7 | 162,5 | 256 |
| 07470810 | 8 x 1,00 | 0,21 | 14,8 | 202,1 | 335 |
| 07471210 | 12 x 1,00 | 0,21 | 16,7 | 246,8 | 393 |
| 07470315 | 3 x 1,50 | 0,26 | 10,8 | 120,4 | 173 |
| 07470415 | 4 x 1,50 | 0,26 | 11,8 | 151,8 | 209 |
| 07470515 | 5 x 1,50 | 0,26 | 13,0 | 175,2 | 262 |
| 07470815 | 8 x 1,50 | 0,26 | 16,6 | 246,3 | 415 |

| item no. | no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|----------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 07471215 | 12 x 1,50 | 0,26 | 18,8 | 311,5 | 498 |
| 07471915 | 19 x 1,50 | 0,26 | 22,2 | 437,4 | 709 |
| 07472415 | 24 x 1,50 | 0,26 | 26,2 | 540,9 | 884 |
| 07470325 | 3 x 2,50 | 0,26 | 12,1 | 166,2 | 213 |
| 07470425 | 4 x 2,50 | 0,26 | 13,2 | 192,4 | 266 |
| 07470525 | 5 x 2,50 | 0,26 | 14,6 | 230,9 | 322 |
| 07470440 | 4 x 4,00 | 0,31 | 14,7 | 237,1 | 350 |
| 07470461 | 4 x 10,00 | 0,41 | 19,7 | 494,9 | 687 |
| 07470462 | 4 x 16,00 | 0,41 | 22,7 | 800,1 | 954 |
| 07470463 | 4 x 25,00 | 0,41 | 27,2 | 1347,0 | 1332 |
| 07470464 | 4 x 35,00 | 0,41 | 30,5 | 1579,6 | 1814 |

Other dimensions and colours are possible on request.

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

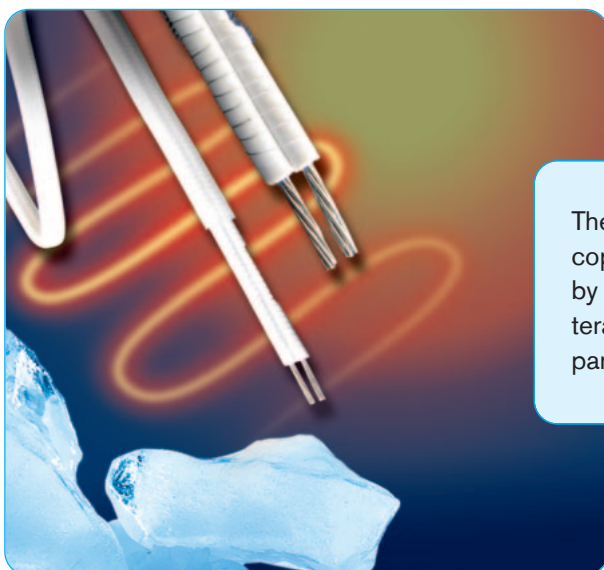
Application: for example in air conditioning units, as anti-freeze protection, defrosting aid in cooling systems.

Construction:

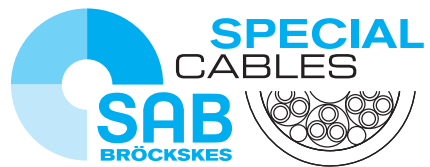
| | |
|--|---|
| Conductor: | tinned copper strands, extra fine wires acc. to IEC 60228 class 2 |
| Dimension: | 2 x 0,75 mm ² |
| Insulation: | Silicone |
| Colour code: | white |
| Stranding: | flat beside each other, separably connected |
| Contact points: | 1 m, 0.5m offset laterally |
| Sheath material: | Silicone / FEP / PVC |
| Sheath colour: | translucent |
| optionally armouring: or additional outer sheath: | tinned copper braiding as mechanical protection or grounding Silicone / FEP / PVC |

Technical data:

| | |
|---|--|
| Allowed surface temperature fixed laying: | PVC: +70 °C Silicone: +200 °C FEP: +200 °C |
| Fire performance: | 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 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.



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