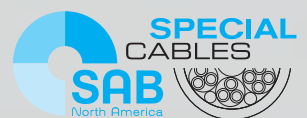


SABIX® ULTRA

CONTINUOUSLY FLEXIBLE
WITH HIGHEST FIRE PROTECTION



www.sabcable.com





Fire protection has never been so flexible

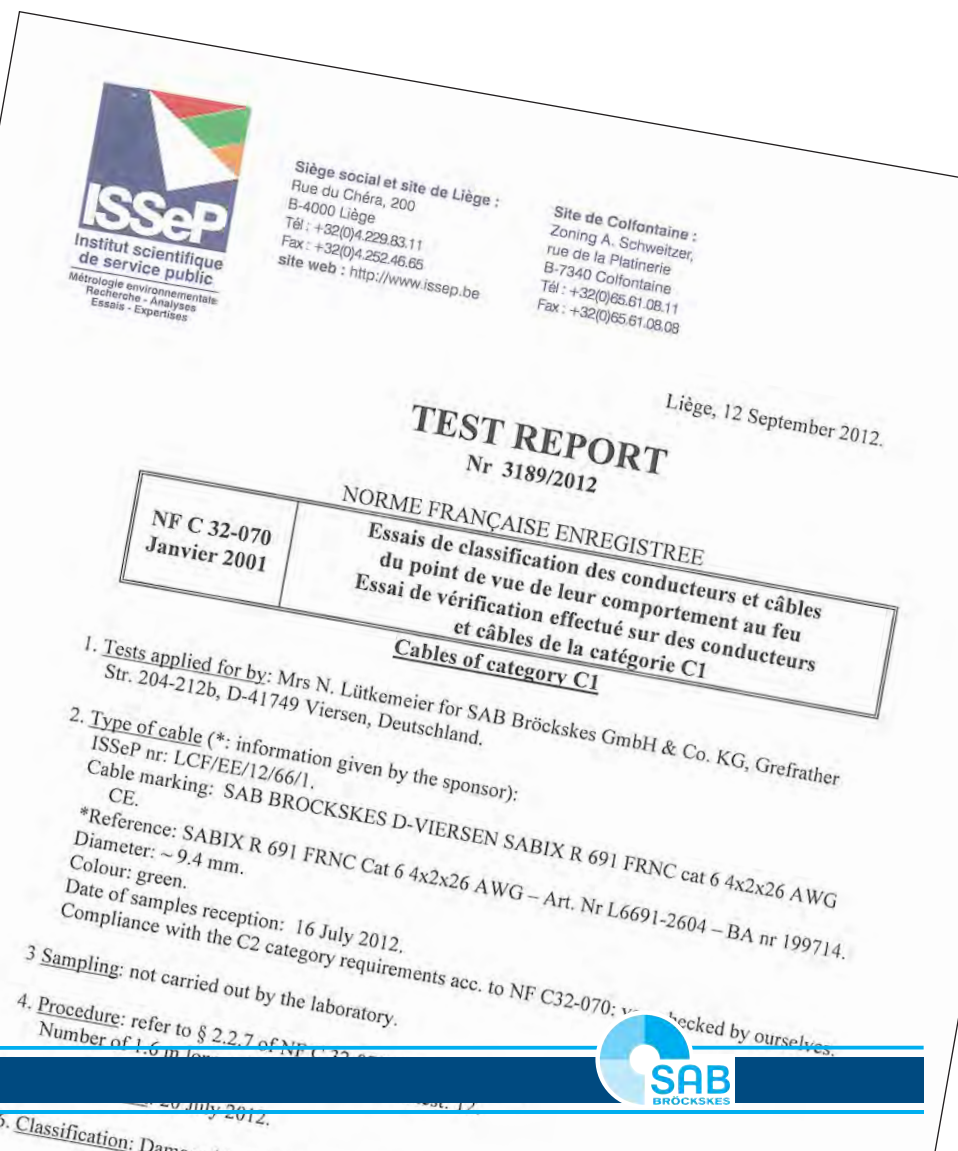
fire protection · halogen-free · flexibility · oil resistance

These are the characteristics united by our new product range SABIX® Ultra. Due to the new sheath material the cable can be used for flexible applications and shows the highest fire protection features such as EN 60332-3 Cat C or D respectively the French standard NF C 32-070 C 1.

The cables are used for example as festoon cable for polar cranes in nuclear power plants. In rail technology these cables are used as sensor cable or as flexible control cable at the train doors. Due to the very good oil and fuel resistance the use in industrial environments is also recommended. The new SABIX® Ultra material can even be used for cable chain applications with moderate mechanical stress.

Standards:

- ☞ EN 60332-1-2
- ☞ EN 60332-3 Cat C or D
- ☞ IEC 60754-1 (halogen-free)
- ☞ IEC 60754-2
+ EN 50267-2-2
(corrosivity of gases)
- ☞ EN 61034 (smoke density)
- ☞ NF C 32-070 C1
(fire performance
acc. to French standard)
- ☞ NF X 70-100
(toxicity
acc. to French standard)



SABIX® SD 705 FRNC C1 Continuously flexible halogen-free data cable with improved fire performance



KES · D-VIERSEN · SABIX SD 705 FRNC C1 2 x 0,25 mm²

Marking for SABIX SD 705 FRNC C1 67050225:
SAB BRÖCKSKES · D-VIERSEN · SABIX SD 705 FRNC C1 2 x 0,25 mm² CE

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	in layers
Wrapping:	non-woven tape
Sheath material:	SABIX® Ultra
Sheath colour:	black (RAL 9005)

Outstanding features:

- 100% halogen-free
- 100% continuously flexible
- 100% no flame propagation
- 100% flame retardant and self-extinguishing
- 100% oil and fuel resistant
- 100% good acid and alkalines resistance
- 100% NF C 32-070 C1
- 100% EAC approval

Technical data:

Peak operating voltage:	< 0,25 mm ² = max. 350 V ≥ 0,25 mm ² = max. 500 V
Testing voltage:	< 0,25 mm ² = 800 V ≥ 0,25 mm ² = 1200 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
continuously flexible:	15 x d
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Fire performance:	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 + NF C 32-070 C1.
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + EN 61034
Toxicity:	acc. to NF X 70-100
Oil and fuel resistance:	acc. to EN 50264-1
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
67050214	2 x 0,14	0,11	3,2	2,7	14
67050314	3 x 0,14	0,11	3,4	4,0	17
67050514	5 x 0,14	0,11	3,9	6,7	24
67050714	7 x 0,14	0,11	4,5	9,4	32
67050225	2 x 0,25	0,11	3,5	4,8	18
67050325	3 x 0,25	0,11	3,7	7,2	21
67050425	4 x 0,25	0,11	4,0	9,6	26
67051025	10 x 0,25	0,11	6,1	24,0	60
67051225	12 x 0,25	0,11	6,3	28,8	64

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
67051425	14 x 0,25	0,11	6,6	33,6	72
67051825	18 x 0,25	0,11	7,3	43,2	90
67052525	25 x 0,25	0,11	8,7	60,0	117
67050234	2 x 0,34	0,11	4,1	6,5	24
67050534	5 x 0,34	0,11	5,3	16,3	43
67050734	7 x 0,34	0,11	6,3	22,8	62
67051034	10 x 0,34	0,11	7,3	32,6	76
67052534	25 x 0,34	0,11	11,1	81,6	180

Other dimensions and colours are possible on request.



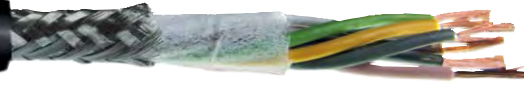
For flexible applications
in areas with highest
fire protection requirements
e.g. power plant technology,
railway applications

SABIX® SD 715 C FRNC C1

Continuously flexible halogen-free data cable with improved fire performance and overall copper screen



VIENNA · SABIX SD 715 C FRNC C1 7 x 0,25 mm² CE



Marking for SABIX SD 715 C FRNC C1 6715725:

SAB BRÖCKSKES · D-VIERSEN · SABIX SD 715 C FRNC C1 7 x 0,25 mm² CE

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	in layers
Wrapping:	non-woven tape
Screen:	tinned copper braiding, optical coverage ≥ 85%
Wrapping:	non-woven tape
Sheath material:	SABIX® Ultra
Sheath colour:	black (RAL 9005)

Outstanding features:

- 100% halogen-free
- 100% continuously flexible
- 100% good EMC characteristics*
- 100% no flame propagation
- 100% flame retardant and self-extinguishing
- 100% oil and fuel resistant
- 100% good acid and alkalines resistance
- 100% NF C 32-070 C1
- 100% EAC approval

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

Technical data:

Peak operating voltage:	< 0,25 mm ² = max. 350 V ≥ 0,25 mm ² = max. 500 V
Testing voltage:	< 0,25 mm ² = 800 V ≥ 0,25 mm ² = 1200 V
Min. bending radius	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<i>continuously flexible:</i>	15 x d
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
Halogen-free:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Fire performance:	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 + NF C 32-070 C1.
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + EN 61034
Toxicity:	acc. to NF X 70-100
Oil and fuel resistance:	acc. to EN 50264-1
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
67150214	2 x 0,14	0,11	3,7	13,5	22
67150314	3 x 0,14	0,11	3,9	15,0	25
67151214	12 x 0,14	0,11	6,9	38,3	69
67151814	18 x 0,14	0,11	7,4	49,4	88
67152514	25 x 0,14	0,11	8,9	62,8	119
67150225	2 x 0,25	0,11	4,0	15,8	25
67150425	4 x 0,25	0,11	4,5	24,7	36
67150525	5 x 0,25	0,11	5,2	27,6	46
67150625	6 x 0,25	0,11	6,2	33,0	63
67150725	7 x 0,25	0,11	6,6	38,1	72
67150825	8 x 0,25	0,11	7,1	41,6	81
67151225	12 x 0,25	0,11	7,8	54,6	96
67151825	18 x 0,25	0,11	9,6	89,7	153

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
67152525	25 x 0,25	0,11	9,9	110,4	183
67150434	4 x 0,34	0,11	5,4	28,9	48
67150534	5 x 0,34	0,11	6,2	35,7	63
67150734	7 x 0,34	0,11	7,0	45,1	81
67151234	12 x 0,34	0,11	8,5	65,0	117
67150250	2 x 0,50	0,11	5,2	25,2	43
67150350	3 x 0,50	0,11	5,4	30,3	49
67150450	4 x 0,50	0,11	6,1	38,5	63
67150550	5 x 0,50	0,11	6,6	45,3	75
67150475	4 x 0,75	0,11	6,8	50,8	79
67150575	5 x 0,75	0,11	7,4	57,7	94
67150775	7 x 0,75	0,11	9,2	79,9	141
67150785	7 x 1,50	0,11	10,6	153,3	218

Other dimensions and colours are possible on request.



For flexible applications
in areas with highest
fire protection requirements
e.g. power plant technology,
railway applications

SABIX® SD 745 C FRNC C1 TP Continuously flexible halogen-free paired data cable with improved fire performance and overall copper screen



VIERSEN · SABIX SD 745 C FRNC C1 TP 2 x 2 x 0,50 mm² C

Marking for SABIX SD 745 C FRNC C1 TP 67450250:
SAB BRÖCKSKES · D-VIERSEN · SABIX SD 745 C FRNC C1 TP 2 x 2 x 0,50 mm² CE

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	pairwise, pairs in layers
Wrapping:	non-woven tape
Screen:	tinned copper braiding, optical coverage ≥ 85%
Wrapping:	non-woven tape
Sheath material:	SABIX® Ultra
Sheath colour:	black (RAL 9005)

Outstanding features:

- 100% halogen-free
- 100% continuously flexible
- 100% good EMC characteristics*
- 100% no flame propagation
- 100% flame retardant and self-extinguishing
- 100% oil and fuel resistant
- 100% good acid and alkalines resistance
- 100% NF C 32-070 C1
- 100% EAC approval

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

Technical data:

Peak operating voltage:	< 0,25 mm ² = max. 350 V ≥ 0,25 mm ² = max. 500 V
Testing voltage:	< 0,25 mm ² = 800 V ≥ 0,25 mm ² = 1200 V
Min. bending radius	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<i>continuously flexible:</i>	15 x d
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
Halogen-free:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Fire performance:	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 + NF C 32-070 C1.
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + EN 61034
Toxicity:	acc. to NF X 70-100
Oil and fuel resistance:	acc. to EN 50264-1
Absence of harmful substances:	acc. to RoHS directive of the European Union

item no.	no. of pairs x cross section n x 2 x mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
67450214	2 x 2 x 0,14	0,11	4,9	18,6	37
67450414	4 x 2 x 0,14	0,11	6,2	27,5	55
67450514	5 x 2 x 0,14	0,11	6,7	32,4	65
67450614	6 x 2 x 0,14	0,11	6,9	35,3	72
67451014	10 x 2 x 0,14	0,11	8,7	52,0	106
67451414	14 x 2 x 0,14	0,11	10,2	83,4	148
67450225	2 x 2 x 0,25	0,11	5,4	23,3	45
67450425	4 x 2 x 0,25	0,11	6,9	38,4	69
67450625	6 x 2 x 0,25	0,11	7,6	50,0	91
67450725	7 x 2 x 0,25	0,11	7,9	53,4	103
67450825	8 x 2 x 0,25	0,11	9,3	63,9	133
67451025	10 x 2 x 0,25	0,11	9,8	88,3	147
67451225	12 x 2 x 0,25	0,11	10,7	105,5	172
67451425	14 x 2 x 0,25	0,11	11,3	118,1	191

item no.	no. of pairs x cross section n x 2 x mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
67451625	16 x 2 x 0,25	0,11	11,7	122,5	205
67450734	7 x 2 x 0,34	0,11	10,0	87,6	159
67451034	10 x 2 x 0,34	0,11	11,6	110,9	191
67451834	18 x 2 x 0,34	0,11	15,1	212,8	348
67450250	2 x 2 x 0,50	0,11	7,1	38,6	74
67450350	3 x 2 x 0,50	0,11	7,8	51,0	90
67450450	4 x 2 x 0,50	0,11	9,3	64,1	119
67451050	10 x 2 x 0,50	0,11	13,3	155,1	263
67451850	18 x 2 x 0,50	0,11	17,1	279,3	447
67452550	25 x 2 x 0,50	0,11	19,4	358,2	568
67450275	2 x 2 x 0,75	0,11	8,0	51,3	92
67450475	4 x 2 x 0,75	0,11	10,8	103,4	171
67450875	8 x 2 x 0,75	0,11	15,0	186,4	335
67451075	10 x 2 x 0,75	0,11	15,3	237,0	361

Other dimensions and colours are possible on request.



For flexible applications
in areas with highest
fire protection requirements
e.g. power plant technology,
railway applications

SABIX® S 710 FRNC C1

Continuously flexible halogen-free control cable with improved fire performance



BRÖCKSKES · D-VIERSEN · SABIX S 710 FRNC C1 4 x 1,5 mm² CE



Marking for SABIX S 710 FRNC C1 67100415:
SAB BRÖCKSKES · D-VIERSEN · SABIX S 710 FRNC C1 4 x 1,5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 cores
Stranding:	in layers
Wrapping:	non-woven tape
Sheath material:	SABIX® Ultra
Sheath colour:	black (RAL 9005)

Outstanding features:

- 100% halogen-free
- 100% continuously flexible
- 100% no flame propagation
- 100% flame retardant and self-extinguishing
- 100% oil and fuel resistant
- 100% good acid and alkalines resistance
- 100% NF C 32-070 C1
- 100% EAC approval

Technical data:

Nominal voltage:	0,6/1 kV
Testing voltage:	4000 V
Min. bending radius	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<i>continuously flexible:</i>	15 x d
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
Halogen-free:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Fire performance:	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 + NF C 32-070 C1.
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + EN 61034
Toxicity:	acc. to NF X 70-100
Oil and fuel resistance:	acc. to EN 50264-1
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
67100205	2 x 0,50	0,16	6,4	9,6	62
67100505	5 x 0,50	0,16	8,2	24,0	97
67100507	5 x 0,75	0,16	9,0	36,0	121
67100707	7 x 0,75	0,16	10,7	50,4	170
67100310	3 x 1,00	0,16	7,9	28,8	92
67100510	5 x 1,00	0,16	9,3	48,0	137
67100710	7 x 1,00	0,16	11,1	67,2	193
67101210	12 x 1,00	0,16	13,6	115,2	284
67101810	18 x 1,00	0,16	16,1	172,8	406
67100215	2 x 1,50	0,16	8,6	28,8	112
67100315	3 x 1,50	0,16	9,2	43,2	127
67100415	4 x 1,50	0,16	9,7	57,6	151
67100515	5 x 1,50	0,16	10,9	72,0	189
67100715	7 x 1,50	0,16	13,1	100,8	276

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
67101215	12 x 1,50	0,16	15,8	172,8	390
67101815	18 x 1,50	0,16	18,7	259,2	562
67102415	24 x 1,50	0,16	21,8	345,6	721
67102515	25 x 1,50	0,16	22,1	360,0	735
67100325	3 x 2,50	0,16	10,8	72,0	183
67100425	4 x 2,50	0,16	12,1	69,0	240
67100525	5 x 2,50	0,16	13,5	120,0	294
67100725	7 x 2,50	0,16	15,8	168,0	408
67101225	12 x 2,50	0,16	19,2	288,0	584
67100440	4 x 4,00	0,16	13,5	153,6	321
67100460	4 x 6,00	0,21	15,4	230,4	427
67100461	4 x 10,0	0,21	19,2	384,0	769
67100462	4 x 16,0	0,21	22,1	614,4	1005
67100465	4 x 50,0	0,31	35,9	1920,0	2747

Other dimensions and colours are possible on request.



For flexible applications
in areas with highest
fire protection requirements
e.g. power plant technology,
railway applications

SABIX® S 712 C FRNC C1 Continuously flexible halogen-free control cable with improved fire performance and overall copper screen



BRÖCKSKES · D-VIERSEN · SABIX S 712 C FRNC C1 3 x 1,5 mm

Marking for SABIX S 712 C FRNC C1 67120315:
SAB BRÖCKSKES · D-VIERSEN · SABIX S 712 C FRNC C1 3 x 1,5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 cores
Wrapping:	non-woven tape
Stranding:	in layers
Screen:	tinned copper braiding, optical coverage ≥ 85%
Wrapping:	non-woven tape
Sheath material:	SABIX® Ultra
Sheath colour:	black (RAL 9005)

Outstanding features:

- 100% halogen-free
- 100% continuously flexible
- 100% good EMC characteristics*
- 100% no flame propagation
- 100% flame retardant and self-extinguishing
- 100% oil and fuel resistant
- 100% good acid and alkalines resistance
- 100% NF C 32-070 C1
- 100% EAC approval

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

Technical data:

Nominal voltage:	0,6/1 kV
Testing voltage:	core/core 4000 V core/screen 2000 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
continuously flexible:	15 x d
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Fire performance:	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 + NF C 32-070 C1.
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + EN 61034
Toxicity:	acc. to NF X 70-100
Oil and fuel resistance:	acc. to EN 50264-1
Absence of harmful substances:	acc. to RoHS directive of the European Union

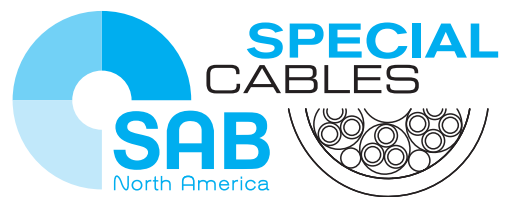
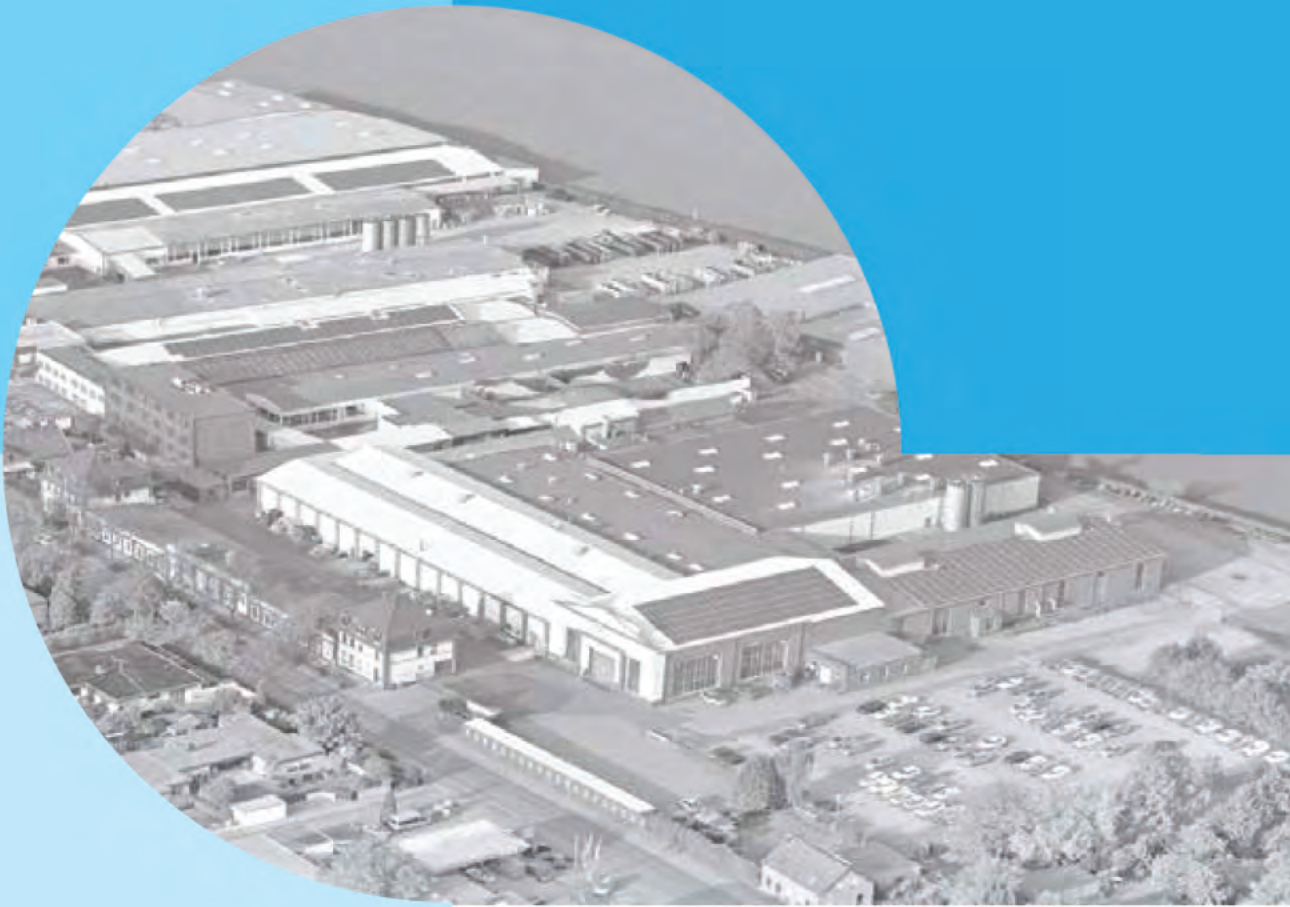
item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
67120205	2 x 0,50	0,16	7,1	29,2	80
67120505	5 x 0,50	0,16	8,8	49,9	121
67120507	5 x 0,75	0,16	9,6	65,4	147
67120707	7 x 0,75	0,16	11,4	103,2	212
67120510	5 x 1,00	0,16	9,8	77,6	162
67120710	7 x 1,00	0,16	12,2	123,6	250
67121210	12 x 1,00	0,16	14,3	184,0	337
67121810	18 x 1,00	0,16	17,0	285,9	491
67120215	2 x 1,50	0,16	8,9	55,7	131
67120315	3 x 1,50	0,16	9,5	72,5	149
67120415	4 x 1,50	0,16	10,5	105,7	192
67120515	5 x 1,50	0,16	12,0	127,9	246
67121215	12 x 1,50	0,16	16,7	285,0	475
67121815	18 x 1,50	0,16	19,6	391,5	661

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
67122515	25 x 1,50	0,16	23,1	527,6	865
67120225	2 x 2,50	0,16	10,9	101,0	201
67120325	3 x 2,50	0,16	11,5	127,7	227
67120425	4 x 2,50	0,16	12,8	155,5	287
67120525	5 x 2,50	0,16	14,2	188,6	347
67121225	12 x 2,50	0,16	20,2	431,5	696
67120440	4 x 4,00	0,16	14,2	222,2	374
67120540	5 x 4,00	0,16	16,1	302,5	481
67120740	7 x 4,00	0,16	18,9	395,6	652
67120260	2 x 6,00	0,21	14,0	183,4	340
67120460	4 x 6,00	0,21	16,6	339,6	513
67120462	4 x 16,0	0,21	23,1	775,6	1131
67120463	4 x 25,0	0,21	27,2	1127,0	1615
67120464	4 x 35,0	0,21	30,9	1541,2	2171

Other dimensions and colours are possible on request.



For flexible applications
in areas with highest
fire protection requirements
e.g. power plant technology,
railway applications



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