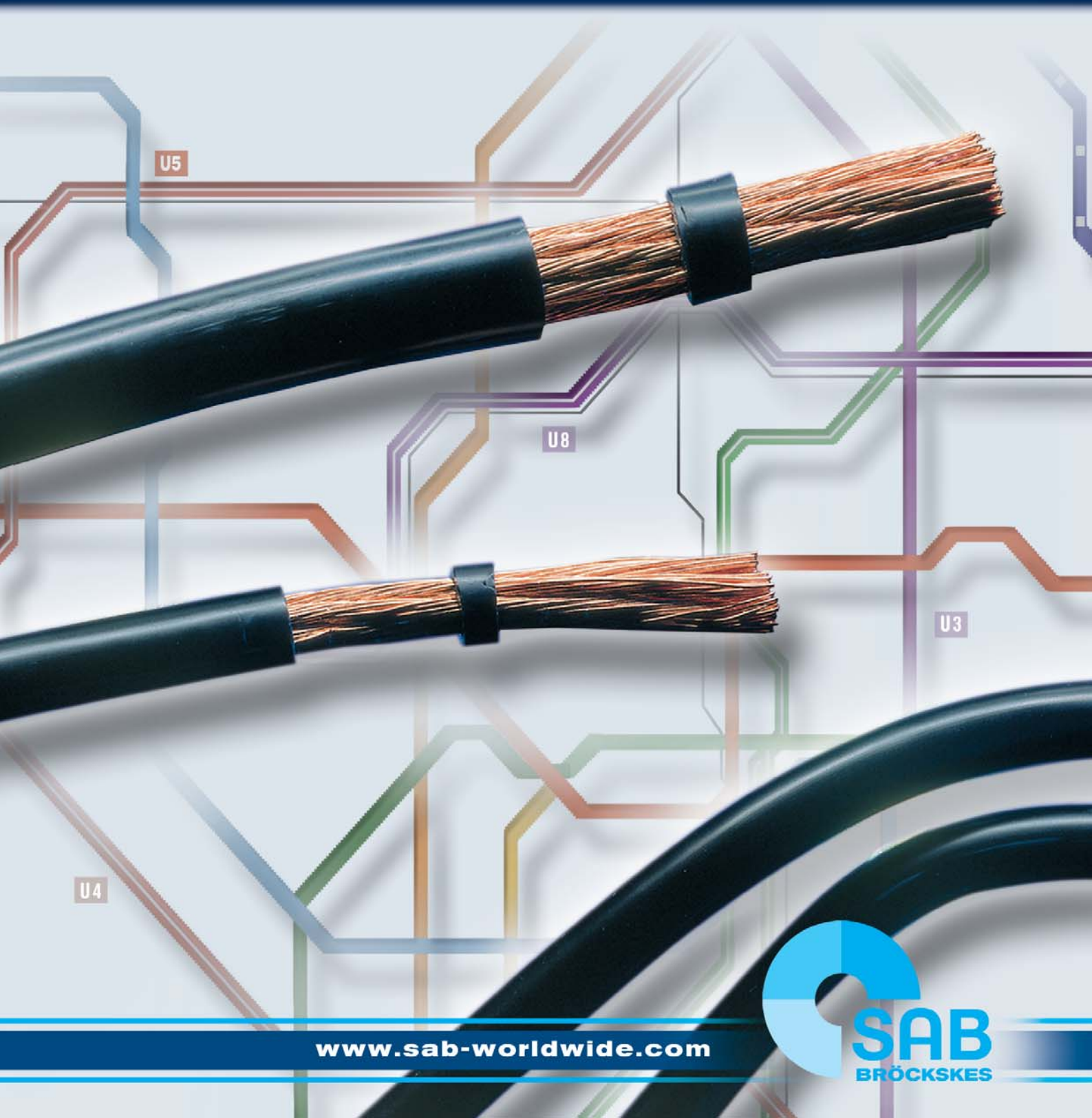


# Cables for Railway Technology



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Picture: Deutsche Bahn AG

with improved fire performance

## SABIX® A 146 FRNC Wiring cable with extended temperature range 300/500V

## SABIX® A 156 FRNC Wiring cable with extended temperature range 450/750V



Marking for SABIX® A 146 FRNC 61460150:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 146 FRNC 300/500V 0,5 mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation</b>	SABIX® FRNC
<b>Colour code:</b>	coloured

### Outstanding features:

- ▶ halogen-free
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ easy stripping
- ▶ flexible

### Technical data:

<b>Nominal voltage:</b>	<b>SABIX® A 146 FRNC:</b> U <sub>0</sub> /U 300/500 V	<b>SABIX® A 156 FRNC:</b> U <sub>0</sub> /U 450/750 V
<b>Testing voltage:</b>	<b>SABIX® A 146 FRNC:</b> 2000 V	<b>SABIX® A 156 FRNC:</b> 2500 V
<b>Min. bending radius:</b> <b>For one single bend:</b>	7,5 x d 5 x d	
<b>Temperature range</b> <i>fixed laying:</i>	-40/+90 °C	
<i>flexible application:</i>	-30/+90 °C	
<b>Halogen-free:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1	
<b>Fire performance:</b>	no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2	
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases	
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034	
<b>Flexibility:</b>	good	
<b>Weather resistance:</b>	good	
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24	

### SABIX® A 146 FRNC

item no.	nominal cross-section mm²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
6146 .. 50*	0,50	0,21	2,1	4,8	9
6146 .. 75*	0,75	0,21	2,4	7,2	12
6146 .. 80*	1,00	0,21	2,5	9,6	14

Other dimensions and colours are possible on request.

#### \*\* Colour code for single conductors:

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

### SABIX® A 156 FRNC

item no.	nominal cross-section mm²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
6156 .. 82*	1,50	0,26	3,0	14,4	20
6156 .. 84*	2,50	0,26	3,6	24,0	32
6156 .. 86*	4,00	0,31	4,2	38,4	48
6156 .. 87*	6,00	0,31	4,7	57,6	67
6156 .. 88*	10,00	0,41	6,3	96,0	117
6156 .. 89*	16,00	0,41	8,0	153,6	181
6156 .. 90*	25,00	0,41	9,9	240,0	292
6156 .. 91*	35,00	0,41	11,1	336,0	394
6156 .. 92*	50,00	0,41	12,6	480,0	563
6156 .. 93*	70,00	0,41	14,8	672,0	751
6156 .. 94*	95,00	0,51	18,2	912,0	1034
6156 .. 95*	120,00	0,51	19,7	1152,0	1241
6156 .. 96*	150,00	0,51	21,8	1440,0	1544
6156 .. 97*	185,00	0,51	23,2	1776,0	1866
6156 .. 98*	240,00	0,51	26,9	2304,0	2507
6156 .. 99*	300,00	0,51	30,0	2880,0	3125

Other dimensions and colours are possible on request.



On request with tinned copper strands

## SABIX® A 280 FRNC X Wiring cable with improved fire performance and extended temperature range



6280 BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 1 x 1,0 mm² CE



Marking for SABIX® A 280 FRNC X 1 x 1,0 mm²:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 1 x 1,0 mm² CE

### Construction:

<b>Conductor:</b>	tinned copper strands, fine wires, acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 280
<b>Colour code:</b>	white (similar RAL 9010)

### Outstanding features:

- ▶ halogen-free
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ good ozone resistance
- ▶ good oil and chemical resistance
- ▶ acc. to NF F 16-101
- ▶ in compliance with fire protection level 1-4 acc. to DIN 5510-1

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	2000 V
<b>Min. bending radius:</b>	5 x d
<b>Temperature range with protected and fixed laying</b>	-40/+125 °C
<b>Fire performance</b>	in compliance with (E) DIN 5510-2 table 6. flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2. acc. to NF C 32-070 C1. no flame propagation acc. to EN 50305 part 9.1.2.
<b>Halogen-free:</b>	in compliance with EN 50267-2-1 + EN 50267-2-2 + IEC 60684-2 - no development of corrosive conflagration gases
<b>Toxicity index:</b>	toxicity index acc. to EN 50305 ITC = max. 6
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Smoke index:</b>	NF F 16-101 < 20 class F1
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 5% mm	copper- figger kg/km	Leitungs- gewicht ≈ kg/km	ohmic resistance at 20°C	fire load approx. kWh/km
6280 . . . .	0,50	0,21	1,7	4,8	7	40,1	13,0
6280 . . . .	1,00	0,21	2,1	9,6	12	20,0	17,0
6280 . . . .	1,50	0,26	2,5	14,4	17	13,7	22,5
6280 . . . .	2,50	0,26	3,1	24,0	27	8,21	34,0

Other dimensions and colours are possible on request.

with extended temperature range

## SABIX® A 200 FRNC Control cable with numbered cores, and improved fire performance



Marking for SABIX® A 200 FRNC 62001215:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 200 FRNC 12 x 1,5 mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 336
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 cores
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	SABIX® 230
<b>Sheath colour:</b>	grey (RAL 7000)

### Outstanding features:

- ▶ halogen-free
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ very flexible
- ▶ easy stripping

### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage U:</b>	3000 V acc. to DIN EN 50395 + VDE 0481-395
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+85 °C
<i>flexible application:</i>	-30/+85 °C
<b>Halogen-free:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Fire performance:</b>	no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62000205	2 x 0,50	0,21	4,8	9,6	33
62000305	3 x 0,50	0,21	5,1	14,4	38
62000405	4 x 0,50	0,21	5,5	19,2	46
62000505	5 x 0,50	0,21	6,2	24,0	57
62000705	7 x 0,50	0,21	6,7	33,6	69
62001005	10 x 0,50	0,21	8,6	48,0	96
62001205	12 x 0,50	0,21	9,1	57,6	110
62001805	18 x 0,50	0,21	10,7	86,4	169
62002505	25 x 0,50	0,21	12,9	120,0	221
62003205	32 x 0,50	0,21	14,0	153,6	287
62004205	42 x 0,50	0,21	15,7	201,6	365
62006105	61 x 0,50	0,21	18,5	292,8	510
62000207	2 x 0,75	0,21	5,4	14,4	44
62000307	3 x 0,75	0,21	5,7	21,6	51
62000407	4 x 0,75	0,21	6,4	28,8	63
62000507	5 x 0,75	0,21	7,0	36,0	77
62000707	7 x 0,75	0,21	7,8	50,4	96
62001007	10 x 0,75	0,21	10,0	72,0	144
62001207	12 x 0,75	0,21	10,5	86,4	163
62001807	18 x 0,75	0,21	12,4	129,6	230
62002507	25 x 0,75	0,21	15,1	180,0	316
62003207	32 x 0,75	0,21	16,4	230,4	388
62004207	42 x 0,75	0,21	18,4	302,4	515
62006107	61 x 0,75	0,21	21,6	439,2	721
62000210	2 x 1,00	0,21	5,6	19,2	50
62000310	3 x 1,00	0,21	6,1	28,8	62
62000410	4 x 1,00	0,21	6,6	38,4	76
62000510	5 x 1,00	0,21	7,5	48,0	94
62000710	7 x 1,00	0,21	8,1	67,2	117
62001010	10 x 1,00	0,21	10,6	96,0	172
62001210	12 x 1,00	0,21	10,9	115,2	196
62001810	18 x 1,00	0,21	12,9	172,8	280
62002510	25 x 1,00	0,21	15,7	240,0	381
62003210	32 x 1,00	0,21	17,1	307,2	486
62004210	42 x 1,00	0,21	19,4	403,2	616
62006110	61 x 1,00	0,21	22,7	585,6	873
62000215	2 x 1,50	0,26	6,4	28,8	69
62000315	3 x 1,50	0,26	6,8	43,2	81

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62000415	4 x 1,50	0,26	7,6	57,6	99
62000515	5 x 1,50	0,26	8,3	72,0	124
62000715	7 x 1,50	0,26	9,2	100,8	170
62001015	10 x 1,50	0,26	12,0	144,0	229
62001215	12 x 1,50	0,26	12,4	172,8	263
62001815	18 x 1,50	0,26	14,8	259,2	289
62002515	25 x 1,50	0,26	18,0	360,0	537
62003215	32 x 1,50	0,26	19,5	460,8	661
62004215	42 x 1,50	0,26	22,0	604,8	867
62006115	61 x 1,50	0,26	25,8	878,4	1217
62000225	2 x 2,50	0,26	7,8	48,0	105
62000325	3 x 2,50	0,26	8,9	72,0	127
62000425	4 x 2,50	0,26	9,2	96,0	155
62000525	5 x 2,50	0,26	10,1	120,0	199
62000725	7 x 2,50	0,26	11,2	168,0	252
62001025	10 x 2,50	0,26	14,8	240,0	362
62001225	12 x 2,50	0,26	15,3	288,0	416
62001825	18 x 2,50	0,26	18,2	432,0	615
62002525	25 x 2,50	0,26	22,3	600,0	837
62000340	3 x 4,00	0,31	9,7	115,2	185
62000440	4 x 4,00	0,31	10,8	153,6	234
62000540	5 x 4,00	0,31	12,1	192,0	290
62000740	7 x 4,00	0,31	13,4	268,8	375
62000360	3 x 6,00	0,31	11,4	172,8	270
62000460	4 x 6,00	0,31	12,7	230,4	336
62000560	5 x 6,00	0,31	14,2	288,0	415
62000760	7 x 6,00	0,31	15,7	403,2	545
62000461	4 x 10,0	0,41	16,7	384,0	579
62000561	5 x 10,0	0,41	18,6	480,0	740
62000761	7 x 10,0	0,41	20,7	672,0	960
62000462	4 x 16,0	0,41	20,6	614,4	887
62000562	5 x 16,0	0,41	23,0	768,0	1105
62000762	7 x 16,0	0,41	25,5	1075,2	1445
62000463	4 x 25,0	0,41	24,9	960,0	1388
62000563	5 x 25,0	0,41	28,1	1200,0	1750
62000464	4 x 35,0	0,41	28,8	1344,0	1927
62000564	5 x 35,0	0,41	32,5	1680,0	2413

Other dimensions and colours are possible on request.

## SABIX® A 224 FRNC C1

Control cable with numbered cores, improved fire performance and extended temperature range



Marking for SABIX A 224 FRNC C1 62245005  
SAB BRÖCKSKES · D-VIERSEN · SABIX A 224 FRNC C1 50 x 0,5 mm<sup>2</sup> CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation :</b>	SABIX® 233
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 cores
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	SABIX® 233
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:

- ▶ halogen-free
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ NF C32-070 C1

### Technical data:

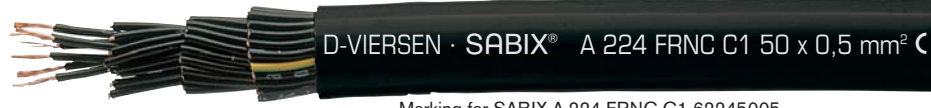
<b>Nominal voltage:</b>	U <sub>0</sub> /U 450/750 V
<b>Testing voltage U:</b>	3000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-30/+90 °C
<i>flexible application:</i>	-20/+90 °C
<b>Fire performance:</b>	no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 + NF C32-070 C1
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62240205	2 x 0,50	0,21	5,8	9,6	36
62240305	3 x 0,50	0,21	6,3	14,4	49
62240405	4 x 0,50	0,21	6,8	19,2	59
62240505	5 x 0,50	0,21	7,7	24,0	76
62240705	7 x 0,50	0,21	8,3	33,6	94
62240805	8 x 0,50	0,21	9,8	38,4	118
62240905	9 x 0,50	0,21	10,6	43,2	135
62241005	10 x 0,50	0,21	10,8	48,0	140
62241205	12 x 0,50	0,21	11,1	57,6	159
62241405	14 x 0,50	0,21	11,6	67,2	179
62241605	16 x 0,50	0,21	12,5	76,8	207
62241805	18 x 0,50	0,21	13,1	86,4	228
62242105	21 x 0,50	0,21	14,6	100,8	271
62242505	25 x 0,50	0,21	15,9	120,0	315
62243005	30 x 0,50	0,21	16,6	144,0	369
62243405	34 x 0,50	0,21	18,1	163,2	424
62244005	40 x 0,50	0,21	19,6	192,0	497
62244205	42 x 0,50	0,21	19,6	201,6	514
62245005	50 x 0,50	0,21	21,4	240,0	602
62246105	61 x 0,50	0,21	22,9	292,8	718
62240207	2 x 0,75	0,21	6,4	14,4	45
62240307	3 x 0,75	0,21	7,0	21,6	61
62240407	4 x 0,75	0,21	7,8	28,8	79
62240507	5 x 0,75	0,21	8,5	36,0	95
62240707	7 x 0,75	0,21	9,4	50,4	125
62240807	8 x 0,75	0,21	11,0	57,6	154
62240907	9 x 0,75	0,21	12,0	64,8	178
62241007	10 x 0,75	0,21	12,2	72,0	184
62241207	12 x 0,75	0,21	12,6	86,4	209
62241407	14 x 0,75	0,21	13,2	100,8	236

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62241607	16 x 0,75	0,21	14,1	115,2	272
62241807	18 x 0,75	0,21	15,0	129,6	308
62242107	21 x 0,75	0,21	16,6	151,2	363
62242507	25 x 0,75	0,21	18,2	180,0	424
62243007	30 x 0,75	0,21	18,8	216,0	487
62243407	34 x 0,75	0,21	20,4	244,8	557
62244007	40 x 0,75	0,21	22,2	288,0	661
62244207	42 x 0,75	0,21	22,2	302,4	685
62245007	50 x 0,75	0,21	24,4	360,0	803
62246107	61 x 0,75	0,21	26,0	439,2	957
62240210	2 x 1,00	0,21	6,8	19,2	53
62240310	3 x 1,00	0,21	7,2	28,8	69
62240410	4 x 1,00	0,21	8,0	38,4	89
62240510	5 x 1,00	0,21	8,8	48,0	108
62240710	7 x 1,00	0,21	9,7	67,2	142
62240810	8 x 1,00	0,21	11,4	76,8	174
62240910	9 x 1,00	0,21	12,4	86,4	200
62241010	10 x 1,00	0,21	12,6	96,0	209
62241210	12 x 1,00	0,21	13,0	115,2	239
62241410	14 x 1,00	0,21	13,8	134,4	277
62241610	16 x 1,00	0,21	14,6	153,6	311
62241810	18 x 1,00	0,21	15,5	172,8	352
62242110	21 x 1,00	0,21	17,2	201,6	415
62242510	25 x 1,00	0,21	18,8	240,0	485
62243010	30 x 1,00	0,21	19,6	288,0	568
62243410	34 x 1,00	0,21	21,3	326,4	649
62244010	40 x 1,00	0,21	23,0	384,0	759
62244210	42 x 1,00	0,21	23,0	403,2	787
62245010	50 x 1,00	0,21	25,4	480,0	953
62246110	61 x 1,00	0,21	27,1	585,6	1116

Continued on next page

## SABIX® A 224 FRNC C1 Control cable with numbered cores, improved fire performance and extended temperature range



Marking for SABIX A 224 FRNC C1 62245005  
SAB BRÖCKSKES · D-VIERSEN · SABIX A 224 FRNC C1 50 x 0,5 mm² C

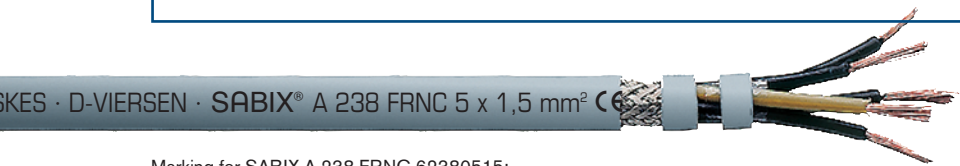
item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62240215	2 x 1,50	0,26	7,4	28,8	65
62240315	3 x 1,50	0,26	8,0	43,2	89
62240415	4 x 1,50	0,26	8,7	57,6	111
62240515	5 x 1,50	0,26	9,8	72,0	140
62240715	7 x 1,50	0,26	10,8	100,8	185
62240815	8 x 1,50	0,26	12,7	115,2	226
62240915	9 x 1,50	0,26	13,7	129,6	258
62241015	10 x 1,50	0,26	14,0	144,0	270
62241215	12 x 1,50	0,26	14,4	172,8	309
62241415	14 x 1,50	0,26	15,3	201,6	358
62241615	16 x 1,50	0,26	16,4	230,4	412
62241815	18 x 1,50	0,26	17,2	259,2	456
62242115	21 x 1,50	0,26	19,3	302,4	547
62242515	25 x 1,50	0,26	21,0	360,0	643
62243015	30 x 1,50	0,26	21,7	432,0	743
62243415	34 x 1,50	0,26	23,8	489,6	859
62244015	40 x 1,50	0,26	25,7	576,0	1004
62244215	42 x 1,50	0,26	25,7	604,8	1041
62245015	50 x 1,50	0,26	28,3	720,0	1239
62246115	61 x 1,50	0,26	30,2	878,4	1480
62240225	2 x 2,50	0,26	8,8	48,0	96
62240325	3 x 2,50	0,26	9,5	72,0	132
62240425	4 x 2,50	0,26	10,6	96,0	170
62240525	5 x 2,50	0,26	11,6	120,0	208
62240725	7 x 2,50	0,26	12,8	168,0	275
62240825	8 x 2,50	0,26	15,2	192,0	340
62240925	9 x 2,50	0,26	16,5	216,0	388
62241025	10 x 2,50	0,26	16,8	240,0	407

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62241225	12 x 2,50	0,26	17,3	288,0	469
62241425	14 x 2,50	0,26	18,4	336,0	543
62241625	16 x 2,50	0,26	19,6	384,0	622
62241825	18 x 2,50	0,26	20,8	432,0	700
62242125	21 x 2,50	0,26	23,0	504,0	824
62242525	25 x 2,50	0,26	25,3	600,0	971
62240340	3 x 4,00	0,31	11,0	115,2	187
62240440	4 x 4,00	0,31	12,2	153,6	243
62240540	5 x 4,00	0,31	13,6	192,0	304
62240740	7 x 4,00	0,31	15,0	268,8	403
62240360	3 x 6,00	0,31	12,7	172,8	263
62240460	4 x 6,00	0,31	14,1	230,4	341
62240560	5 x 6,00	0,31	15,7	288,0	426
62240760	7 x 6,00	0,31	17,3	403,2	568
62240461	4 x 10,0	0,41	18,0	384,0	566
62240561	5 x 10,0	0,41	25,1	480,0	984
62240761	7 x 10,0	0,41	25,1	672,0	1121
62240462	4 x 16,0	0,41	25,2	614,4	1026
62240562	5 x 16,0	0,41	25,3	768,0	1087
62240762	7 x 16,0	0,41	27,1	1075,2	1403
62240463	4 x 25,0	0,41	24,4	960,0	1273
62240563	5 x 25,0	0,41	27,2	1200,0	1598
62240763	7 x 25,0	0,41	30,2	1680,0	2175
62240464	4 x 35,0	0,41	27,8	1344,0	1750
62240564	5 x 35,0	0,41	31,2	1680,0	2153
62240764	7 x 35,0	0,41	34,5	2352,0	2982
62240465	4 x 50,0	0,41	34,6	1920,0	2465

Other dimensions and colours are possible on request.

with extended temperature range

## SABIX® A 238 FRNC Control cables with numbered cores, overall copper screen and improved fire performance



Marking for SABIX A 238 FRNC 62380515:  
SAB BRÖCKSKES · D-VIERSEN · SABIX A 238 FRNC 5 x 1,5 mm<sup>2</sup> CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 336
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 cores
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	SABIX® 230
<b>Sheath colour:</b>	grey (RAL 7000)

### Outstanding features:

- ▶ halogen-free
- ▶ good EMC characteristics\*
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ easy stripping

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V acc. to DIN EN 50395 + VDE 0481-395 core/screen 1000 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Temperature range</b>	
fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
<b>Halogen-free:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Fire performance:</b>	no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0472 Teil 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62380205	2 x 0,50	0,21	5,3	25,5	38
62380305	3 x 0,50	0,21	5,6	30,7	45
62380405	4 x 0,50	0,21	6,2	48,0	61
62380505	5 x 0,50	0,21	6,7	55,9	70
62380705	7 x 0,50	0,21	7,2	71,1	81
62381205	12 x 0,50	0,21	9,6	108,1	150
62381805	18 x 0,50	0,21	11,4	143,5	206
62382505	25 x 0,50	0,21	13,8	189,7	272
62380207	2 x 0,75	0,21	6,1	31,1	50
62380307	3 x 0,75	0,21	6,4	50,6	61
62380407	4 x 0,75	0,21	6,9	61,1	73
62380507	5 x 0,75	0,21	7,7	73,7	96
62380707	7 x 0,75	0,21	8,3	90,9	121
62381207	12 x 0,75	0,21	11,2	142,4	193
62381807	18 x 0,75	0,21	13,3	197,9	280
62382507	25 x 0,75	0,21	16,2	284,6	395
62380210	2 x 1,00	0,21	6,3	48,0	56
62380310	3 x 1,00	0,21	6,6	58,2	68
62380410	4 x 1,00	0,21	7,1	75,7	94
62380510	5 x 1,00	0,21	8,0	86,1	110
62380710	7 x 1,00	0,21	8,6	108,2	138
62381210	12 x 1,00	0,21	11,8	172,1	226
62381810	18 x 1,00	0,21	13,8	242,1	315
62382510	25 x 1,00	0,21	16,8	346,5	454

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
62380215	2 x 1,50	0,26	6,9	60,7	63
62380315	3 x 1,50	0,26	7,2	80,5	90
62380415	4 x 1,50	0,26	8,1	95,6	110
62380515	5 x 1,50	0,26	9,0	113,2	135
62380715	7 x 1,50	0,26	9,7	151,2	178
62381215	12 x 1,50	0,26	13,9	240,8	300
62381815	18 x 1,50	0,26	15,7	362,3	454
62382515	25 x 1,50	0,26	19,1	492,1	613
62380225	2 x 2,50	0,26	8,3	86,3	100
62380325	3 x 2,50	0,26	9,0	113,0	128
62380425	4 x 2,50	0,26	9,7	146,2	163
62380525	5 x 2,50	0,26	11,0	175,0	215
62380725	7 x 2,50	0,26	12,1	225,1	276
62381225	12 x 2,50	0,26	16,4	392,0	466
62381825	18 x 2,50	0,26	19,3	564,1	666
62382525	25 x 2,50	0,26	23,4	770,1	931
62380440	4 x 4,00	0,31	11,5	210,7	250
62380540	5 x 4,00	0,31	12,8	260,0	309
62380460	4 x 6,00	0,31	13,6	298,4	353
62380560	5 x 6,00	0,31	15,1	358,7	420
62380461	4 x 10,00	0,41	17,8	517,1	616
62380462	4 x 16,00	0,41	21,9	756,0	917

Other dimensions and colours are possible on request.

## SABIX® A 280 FRNC X Control cable with numbered cores and improved fire performance and extended temperature range



BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 5 x 0,5 mm<sup>2</sup> CE

Marking for SABIX® A 280 FRNC X 5 x 0,5 mm<sup>2</sup>:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 5 x 0,5 mm<sup>2</sup> CE

### Construction:

<b>Conductor:</b>	tinned copper strands, fine wires, acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 280
<b>Colour code:</b>	white cores with consecutive numbers acc. to EN 50334;
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	SABIX® 280
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:

- ▶ halogen-free
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ good ozone resistance
- ▶ good oil and chemical resistance
- ▶ acc. to NF F 16-101
- ▶ in compliance with fire protection level 1-4 acc. to DIN 5510-1

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	2000 V
<b>Min. bending radius:</b>	5 x d
<b>Temperature range with protected and fixed laying</b>	-40/+125 °C
<b>Fire performance</b>	in compliance with (E) DIN 5510-2 table 6. flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2. acc. to NF C 32-070 C1. no flame propagation acc. to EN 50305 section 9.1.2. <b>&lt; 6 mm cable Ø:</b> no flame propagation acc. to IEC 60332-3-25 + EN 50266-2-5. <b>&gt; 6 up to &lt; 12 mm cable Ø:</b> no flame propagation acc. to IEC 60332-3-24 + EN 50266-2-4.
<b>Halogen-free:</b>	in compliance with EN 50267-2-1 + EN 50267-2-2 + IEC 60684-2 - no development of corrosive conflagration gases
<b>Toxicity index:</b>	toxicity index acc. to EN 50305 ITC = max. 6
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Smoke index:</b>	NF F 16-101 < 20 class F1
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 5% mm	copper- figger kg/km	Leitungs- gewicht ≈ kg/km	ohmic resistance at 20°C	fire load approx. kWh/km
6280 . . . .	3 x 0,50	0,21	4,7	14,4	35	40,1	115
6280 . . . .	5 x 0,50	0,21	5,8	24,0	50	40,1	170
6280 . . . .	8 x 0,50	0,21	7,3	38,4	83	40,1	246
6280 . . . .	10 x 0,50	0,21	8,1	48,0	97	40,1	275
6280 . . . .	12 x 0,50	0,21	8,4	57,6	112	40,1	306
6280 . . . .	3 x 1,00	0,21	5,5	28,8	55	20,0	149
6280 . . . .	4 x 1,00	0,21	6,2	38,4	71	20,0	186
6280 . . . .	3 x 1,50	0,21	6,6	43,2	68	13,7	210

Other dimensions and colours are possible on request.

## SABIX® A 285 FRNC X Control cable with numbered cores, overall copper screen, improved fire performance and extended temperature range



Marking for SABIX® A 285 FRNC X 5 x 0,5 mm²:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 285 FRNC X 5 x 0,5 mm² CE

### Construction:

<b>Conductor:</b>	tinned copper strands, fine wires, acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 280
<b>Colour code:</b>	white cores with consecutive numbers acc. to EN 50334;
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	SABIX® 280
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:

- ▶ halogen-free
- ▶ good EMC characteristics\*
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ good ozone resistance
- ▶ good oil and chemical resistance
- ▶ acc. to NF F 16-101
- ▶ in compliance with fire protection level 1-4 acc. to DIN 5510-1

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

### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage U:</b>	2000 V
<b>Min. bending radius:</b>	5 x d
<b>Temperature range with protected and fixed laying</b>	-40/+125 °C
<b>Fire performance</b>	in compliance with (E) DIN 5510-2 table 6. flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2. acc. to NF C 32-070 C1. no flame propagation acc. to EN 50305 section 9.1.2. no flame propagation acc. to IEC 60332-3-25 + EN 50266-2-5. no flame propagation acc. to IEC 60332-3-24 + EN 50266-2-4.
<b>≤ 6 mm cable Ø:</b>	
<b>&gt;6 up to &lt;12 mm cable Ø:</b>	
<b>≥12 mm cable Ø:</b>	
<b>Halogen-free:</b>	in compliance with EN 50267-2-1 + EN 50267-2-2 + IEC 60684-2 - no development of corrosive conflagration gases
<b>Toxicity index:</b>	toxicity index acc. to EN 50305 ITC = max. 6
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Smoke index:</b>	NF F 16-101 < 20 class F1
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 5% mm	copper- figger kg/km	Leitungs- gewicht ≈ kg/km	ohmic resistance at 20°C	fire load approx. kWh/km
6285 . . . .	3 x 0,50	0,21	5,2	30,3	45	40,1	99
6285 . . . .	5 x 0,50	0,21	6,3	43,5	68	40,1	154
6285 . . . .	8 x 0,50	0,21	7,9	62,2	97	40,1	237
6285 . . . .	10 x 0,50	0,21	8,6	74,3	114	40,1	258
6285 . . . .	12 x 0,50	0,21	8,9	86,6	127	40,1	288
6285 . . . .	3 x 1,00	0,21	6,2	46,5	66	20,0	155

Weitere Abmessungen und Farben auf Anfrage.

## SABIX® D 305 FRNC Flexible data cable with improved fire performance



BRÖCKSKES · D-VIERSEN · SABIX® D 305 FRNC 32 x 0,5 mm²

Marking for SABIX D 305 FRNC 63053250:  
SAB BRÖCKSKES · D-VIERSEN · SABIX D 305 FRNC 32 x 0,5 mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 60228, VDE 0295 class 5
<b>Insulation:</b>	SABIX® 336
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	SABIX® 230
<b>Sheath colour:</b>	grey (RAL 7032)

### Outstanding features:

- ▶ halogen-free
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ easy stripping
- ▶ antiparallelism
- ▶ flexible

### Technical data:

<b>Peak operating voltage:</b>	< 0.25 mm² = max. 350 V ≥ 0.25 mm² = max. 500 V
<b>Testing voltage:</b>	< 0.25 mm² = 800 V ≥ 0.25 mm² = 1200 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+85 °C
<i>flexible application:</i>	-30/+85 °C
<b>Halogen-free:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Fire performance:</b>	no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm²	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63050214	2 x 0,14	3,1	2,7	13
63050314	3 x 0,14	3,3	4,0	15
63050414	4 x 0,14	3,5	5,4	18
63050514	5 x 0,14	3,8	6,7	21
63050714	7 x 0,14	4,1	9,4	25
63050814	8 x 0,14	4,7	10,8	31
63051214	12 x 0,14	5,3	16,1	38
63051414	14 x 0,14	5,5	18,8	42
63051614	16 x 0,14	6,0	21,5	51
63051814	18 x 0,14	6,3	24,2	56
63052114	21 x 0,14	6,9	28,2	65
63052414	24 x 0,14	7,3	32,3	70
63052714	27 x 0,14	7,7	36,3	80
63053014	30 x 0,14	7,9	40,3	86
63053214	32 x 0,14	8,2	43,0	92
63053614	36 x 0,14	8,5	48,4	101
63054014	40 x 0,14	9,1	53,8	112
63054414	44 x 0,14	9,5	59,1	119
63055014	50 x 0,14	10,3	67,2	142
63056114	61 x 0,14	10,9	82,0	165
63050225	2 x 0,25	3,4	4,8	17
63050325	3 x 0,25	3,6	7,2	20
63050425	4 x 0,25	3,9	9,6	24
63050525	5 x 0,25	4,2	12,0	29
63050725	7 x 0,25	4,6	16,8	35
63050825	8 x 0,25	5,2	19,2	43
63051225	12 x 0,25	6,1	28,8	57
63051425	14 x 0,25	6,4	33,6	64
63051625	16 x 0,25	6,7	38,4	72

item no.	no. of cores x cross section n x mm²	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63051825	18 x 0,25	7,1	43,2	80
63052125	21 x 0,25	7,9	50,4	96
63052425	24 x 0,25	8,4	57,6	104
63052725	27 x 0,25	8,6	64,8	114
63053025	30 x 0,25	8,9	72,0	125
63053225	32 x 0,25	9,2	76,8	132
63053625	36 x 0,25	10,0	86,4	156
63054025	40 x 0,25	10,6	96,0	173
63054425	44 x 0,25	11,1	105,6	184
63055025	50 x 0,25	11,6	120,0	204
63056125	61 x 0,25	12,3	146,4	241
63050234	2 x 0,34	4,0	6,5	24
63050334	3 x 0,34	4,2	9,8	27
63050434	4 x 0,34	4,6	13,1	33
63050534	5 x 0,34	5,0	16,3	40
63050734	7 x 0,34	5,5	22,8	49
63050834	8 x 0,34	6,5	26,1	63
63051234	12 x 0,34	7,3	39,2	80
63051434	14 x 0,34	7,9	45,7	94
63051634	16 x 0,34	8,3	52,2	106
63051834	18 x 0,34	8,8	58,8	117
63052134	21 x 0,34	10,0	68,5	146
63052434	24 x 0,34	10,6	78,3	157
63052734	27 x 0,34	10,8	88,1	172
63053034	30 x 0,34	11,2	97,9	187
63053234	32 x 0,34	11,6	104,4	199
63053634	36 x 0,34	12,1	117,5	220
63054034	40 x 0,34	12,9	130,6	244
63054434	44 x 0,34	13,5	143,6	261

Continued on next page

with extended temperature range

## SABIX® D 305 FRNC Flexible data cable with improved fire performance



Marking for SABIX D 305 FRNC 63053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 305 FRNC 32 x 0,5 mm<sup>2</sup> CE

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63055034	50 x 0,34	14,5	163,2	304
63056134	61 x 0,34	15,4	199,1	358
63050250	2 x 0,50	4,3	9,6	28
63050350	3 x 0,50	4,5	14,4	33
63050450	4 x 0,50	4,9	19,2	40
63050550	5 x 0,50	5,4	24,0	49
63050750	7 x 0,50	6,1	33,6	63
63050850	8 x 0,50	7,1	38,4	79
63051250	12 x 0,50	8,1	57,6	102
63051450	14 x 0,50	8,5	67,2	115
63051650	16 x 0,50	9,0	76,8	131
63051850	18 x 0,50	9,5	86,4	145
63052150	21 x 0,50	10,9	100,8	180
63052450	24 x 0,50	11,5	115,2	195
63052750	27 x 0,50	11,7	129,6	213
63053050	30 x 0,50	12,1	144,0	232
63053250	32 x 0,50	12,6	153,6	248
63053650	36 x 0,50	13,1	172,8	274
63054450	44 x 0,50	15,1	211,2	341
63055050	50 x 0,50	15,7	240,0	411
63056150	61 x 0,50	16,7	292,8	448
63050275	2 x 0,75	4,9	14,4	38
63050375	3 x 0,75	5,2	21,6	45
63050475	4 x 0,75	5,9	28,8	58
63050575	5 x 0,75	6,4	36,0	70
63050775	7 x 0,75	7,0	50,4	87
63050875	8 x 0,75	8,3	57,6	111

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63051275	12 x 0,75	9,4	86,4	142
63051475	14 x 0,75	10,3	100,8	170
63051675	16 x 0,75	10,8	115,2	192
63051875	18 x 0,75	11,4	129,6	213
63052175	21 x 0,75	12,5	151,2	248
63052475	24 x 0,75	13,3	172,8	270
63052775	27 x 0,75	13,6	194,4	297
63053075	30 x 0,75	14,5	216,0	339
63053275	32 x 0,75	15,0	230,4	360
63053675	36 x 0,75	15,6	259,2	399
63054075	40 x 0,75	16,7	288,0	443
63054475	44 x 0,75	17,5	316,8	475
63055075	50 x 0,75	18,3	360,0	530
63056175	61 x 0,75	19,8	439,2	648
63050280	2 x 1,00	5,1	19,2	43
63050380	3 x 1,00	5,4	28,8	53
63050480	4 x 1,00	6,1	38,4	68
63050580	5 x 1,00	6,7	48,0	82
63050680	6 x 1,00	7,3	57,6	97
63050780	7 x 1,00	7,3	67,2	104
63050285	2 x 1,50	5,6	28,8	55
63050385	3 x 1,50	6,1	43,2	71
63050485	4 x 1,50	6,7	57,6	87
63050585	5 x 1,50	7,7	72,0	113
63050685	6 x 1,50	8,4	86,4	134
63050785	7 x 1,50	8,4	100,8	144

Other dimensions and colours are possible on request.

## SABIX® D 315 FRNC Flexible data cable with improved fire performance, and overall copper screen



Marking for SABIX D 315 FRNC 63150750:  
SAB BRÖCKSKES · D-VIERSEN · SABIX D 315 FRNC 7 x 0,5 mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 60228, VDE 0295 class 5
<b>Insulation:</b>	SABIX® 336
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	SABIX® 230
<b>Sheath colour:</b>	grey (RAL 7032)

### Outstanding features:

- ▶ halogen-free
  - ▶ good EMC characteristics\*
  - ▶ no flame propagation
  - ▶ flame retardant and self-extinguishing
- \* Copper braiding should be connected circularly to optimize the EMC characteristics

### Technical data:

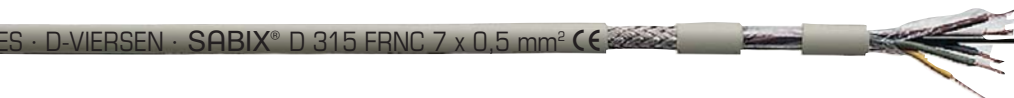
<b>Peak operating voltage:</b>	< 0.25 mm² = max. 350 V ≥ 0.25 mm² = max. 500 V
<b>Testing voltage:</b>	< 0.25 mm² = 800 V ≥ 0.25 mm² = 1200 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Temperature range</b>	
fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
<b>Halogen-free:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Fire performance:</b>	no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of cores x cross section n x mm²	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63150214	2 x 0,14	3,6	12,6	20
63150314	3 x 0,14	3,8	14,1	22
63150414	4 x 0,14	4,0	15,9	24
63150514	5 x 0,14	4,3	19,5	29
63150714	7 x 0,14	4,6	24,0	33
63150814	8 x 0,14	5,4	26,0	43
63151014	10 x 0,14	5,8	29,0	47
63151214	12 x 0,14	6,2	32,0	54
63151414	14 x 0,14	6,4	35,0	60
63151614	16 x 0,14	6,7	49,0	67
63151814	18 x 0,14	7,0	54,0	72
63152114	21 x 0,14	7,6	60,0	84
63152414	24 x 0,14	8,0	74,0	89
63152714	27 x 0,14	8,6	85,0	104
63153014	30 x 0,14	8,8	98,0	112
63153214	32 x 0,14	9,1	108,0	118
63153614	36 x 0,14	9,4	117,0	128
63154014	40 x 0,14	10,0	126,0	141
63154414	44 x 0,14	10,6	138,0	162
63155014	50 x 0,14	11,0	150,0	175
63155214	52 x 0,14	11,0	155,0	179
63156114	61 x 0,14	11,6	176,0	203
63150225	2 x 0,25	3,9	15,0	24
63150325	3 x 0,25	4,1	18,0	26
63150425	4 x 0,25	4,4	22,0	31
63150525	5 x 0,25	4,9	25,0	38
63150725	7 x 0,25	5,3	32,0	46
63150825	8 x 0,25	6,1	35,0	58
63151025	10 x 0,25	6,6	42,0	64

item no.	no. of cores x cross section n x mm²	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63151225	12 x 0,25	6,8	50,0	72
63151425	14 x 0,25	7,1	64,0	80
63151625	16 x 0,25	7,4	71,0	89
63151825	18 x 0,25	7,8	80,0	98
63152125	21 x 0,25	8,8	105,0	122
63152425	24 x 0,25	9,3	115,0	130
63152725	27 x 0,25	9,5	120,0	142
63153025	30 x 0,25	9,8	132,0	152
63153225	32 x 0,25	10,1	138,0	161
63153625	36 x 0,25	10,7	152,0	189
63154025	40 x 0,25	11,3	164,0	209
63154425	44 x 0,25	11,8	180,0	221
63155025	50 x 0,25	12,7	222,0	254
63155225	52 x 0,25	12,7	234,0	260
63156125	61 x 0,25	13,4	287,0	295
63150234	2 x 0,34	4,5	17,0	31
63150334	3 x 0,34	4,9	21,0	36
63150434	4 x 0,34	5,3	25,0	43
63150534	5 x 0,34	5,7	30,0	51
63150734	7 x 0,34	6,4	42,0	63
63150834	8 x 0,34	7,2	45,0	78
63151034	10 x 0,34	7,8	63,0	87
63151234	12 x 0,34	8,0	70,0	97
63151434	14 x 0,34	8,8	78,0	118
63151634	16 x 0,34	9,2	87,0	129
63151834	18 x 0,34	9,7	108,0	144
63152134	21 x 0,34	10,7	127,0	177
63152434	24 x 0,34	11,3	140,0	193
63152734	27 x 0,34	11,5	151,0	207

Continued on next page

## SABIX® D 315 FRNC Flexible data cable with improved fire performance, and overall copper screen



Marking for SABIX D 315 FRNC 63150750:

SAB BRÖCKSKES · D-VIERSEN · SABIX D 315 FRNC 7 x 0,5 mm<sup>2</sup> CE

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63153034	30 x 0,34	11,9	162,0	222
63153234	32 x 0,34	12,7	171,0	247
63153634	36 x 0,34	13,2	188,0	272
63154034	40 x 0,34	14,0	208,0	301
63154434	44 x 0,34	14,6	223,0	319
63155034	50 x 0,34	15,8	248,0	386
63155234	52 x 0,34	15,8	273,0	395
63156134	61 x 0,34	16,7	316,0	366
63150250	2 x 0,50	5,0	23,5	35
63150350	3 x 0,50	5,2	28,4	42
63150450	4 x 0,50	5,6	35,1	50
63150550	5 x 0,50	6,3	41,6	63
63150750	7 x 0,50	6,8	53,1	76
63150850	8 x 0,50	7,8	62,0	94
63151050	10 x 0,50	8,8	74,5	113
63151250	12 x 0,50	9,0	84,2	126
63151450	14 x 0,50	9,4	93,5	139
63151650	16 x 0,50	9,9	105,9	156
63151850	18 x 0,50	10,6	133,9	185
63152150	21 x 0,50	11,6	154,9	220
63152450	24 x 0,50	12,6	169,7	241
63152750	27 x 0,50	12,8	184,2	260
63153050	30 x 0,50	13,2	203,6	283
63153250	32 x 0,50	13,7	213,5	299
63153650	36 x 0,50	14,2	239,0	330
63154450	44 x 0,50	16,4	309,2	422
63155050	50 x 0,50	17,0	349,7	469
63156150	61 x 0,50	18,0	403,7	540

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
63150275	2 x 0,75	5,6	30,3	48
63150375	3 x 0,75	6,1	37,6	56
63150475	4 x 0,75	6,6	46,5	68
63150575	5 x 0,75	7,1	55,7	81
63150775	7 x 0,75	7,7	74,0	101
63150875	8 x 0,75	9,2	83,8	132
63151275	12 x 0,75	10,5	133,9	179
63151475	14 x 0,75	11,0	148,5	198
63151675	16 x 0,75	11,5	169,2	224
63151875	18 x 0,75	12,4	184,0	257
63152175	21 x 0,75	13,6	211,0	297
63152475	24 x 0,75	14,4	239,1	324
63152775	27 x 0,75	14,7	260,9	352
63153075	30 x 0,75	15,8	313,4	417
63153275	32 x 0,75	16,3	328,3	440
63153675	36 x 0,75	16,9	357,8	479
63150280	2 x 1,00	5,8	35,2	53
63150380	3 x 1,00	6,3	46,4	65
63150480	4 x 1,00	6,8	57,9	78
63150580	5 x 1,00	7,4	69,6	95
63150680	6 x 1,00	8,0	81,3	111
63150780	7 x 1,00	8,0	90,9	117
63150285	2 x 1,50	6,5	46,5	69
63150385	3 x 1,50	6,8	62,7	90
63150485	4 x 1,50	7,4	79,2	98
63150585	5 x 1,50	8,6	95,8	130
63150685	6 x 1,50	9,3	112,7	152
63150785	7 x 1,50	9,3	127,1	162

Other dimensions and colours are possible on request.

with extended temperature range

## SABIX® D 345 FRNC TP Paired data cable with improved fire performance and overall copper screen



Marking for SABIX D 345 FRNC TP 63450325:  
SAB BRÖCKSKES · D-VIERSEN · SABIX D 345 FRNC TP 3 x 2 x 0,25 mm² C

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 60228, VDE 0295 class 5
<b>Insulation:</b>	SABIX® 336
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	pairwise, pairs in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	SABIX® 230
<b>Sheath colour:</b>	grey (RAL 7032)

### Outstanding features:

- ▶ halogen-free
- ▶ no flame propagation
- ▶ good EMC characteristics\*
- ▶ flame retardant and self-extinguishing
- ▶ good transmission rates and crosstalk attenuation

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

### Technical data:

<b>Peak operating voltage:</b>	< 0.25 mm² = max. 350 V ≥ 0.25 mm² = max. 500 V
<b>Testing voltage:</b>	< 0.25 mm² = 800 V ≥ 0.25 mm² = 1200 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Temperature range</b>	
fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
<b>Halogen-free:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Fire performance:</b>	no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

item no.	no. of pairs x cross section n x 2 x mm²	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63450214	2 x 2 x 0,14	5,2	19,1	36
63450314	3 x 2 x 0,14	5,7	23,4	42
63450414	4 x 2 x 0,14	6,5	27,8	51
63450514	5 x 2 x 0,14	7,0	31,9	61
63450614	6 x 2 x 0,14	7,2	36,2	68
63450814	8 x 2 x 0,14	7,8	43,4	79
63451014	10 x 2 x 0,14	8,9	50,6	100
63451214	12 x 2 x 0,14	9,7	58,2	115
63451614	16 x 2 x 0,14	10,5	71,4	140
63451814	18 x 2 x 0,14	11,1	92,8	166
63452414	24 x 2 x 0,14	12,8	114,8	212
63450225	2 x 2 x 0,25	5,7	24,9	44
63450325	3 x 2 x 0,25	6,4	31,4	58
63450425	4 x 2 x 0,25	7,2	39,3	69
63450525	5 x 2 x 0,25	7,7	45,8	79
63450625	6 x 2 x 0,25	7,9	50,7	88
63450825	8 x 2 x 0,25	9,0	62,1	113
63451025	10 x 2 x 0,25	9,8	73,9	131
63451225	12 x 2 x 0,25	10,9	101,9	165
63451625	16 x 2 x 0,25	11,9	126,8	203
63451825	18 x 2 x 0,25	12,7	136,6	233
63452425	24 x 2 x 0,25	14,2	170,3	282
63450234	2 x 2 x 0,34	6,8	31,5	60
63450334	3 x 2 x 0,34	7,4	39,7	75
63450434	4 x 2 x 0,34	8,8	49,8	97
63450534	5 x 2 x 0,34	9,5	58,5	115
63450634	6 x 2 x 0,34	9,7	65,1	131

item no.	no. of pairs x cross section n x 2 x mm²	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63450834	8 x 2 x 0,34	10,6	80,7	151
63451234	12 x 2 x 0,34	13,4	133,1	236
63451634	16 x 2 x 0,34	14,6	165,0	290
63451834	18 x 2 x 0,34	15,1	178,3	318
63452434	24 x 2 x 0,34	17,6	255,1	428
63450250	2 x 2 x 0,50	7,2	39,3	69
63450350	3 x 2 x 0,50	7,9	50,1	88
63450450	4 x 2 x 0,50	9,4	64,6	113
63450550	5 x 2 x 0,50	10,2	76,3	134
63450650	6 x 2 x 0,50	10,4	86,0	148
63450850	8 x 2 x 0,50	11,4	126,6	170
63451050	10 x 2 x 0,50	13,2	146,5	240
63451250	12 x 2 x 0,50	14,4	175,6	280
63451650	16 x 2 x 0,50	16,3	241,3	362
63451850	18 x 2 x 0,50	16,9	261,0	415
63452450	24 x 2 x 0,50	19,0	330,4	484
63450275	2 x 2 x 0,75	8,5	52,4	97
63450375	3 x 2 x 0,75	9,4	69,4	122
63450475	4 x 2 x 0,75	10,9	101,9	158
63450575	5 x 2 x 0,75	11,7	121,9	191
63450675	6 x 2 x 0,75	12,5	136,5	228
63450875	8 x 2 x 0,75	13,7	170,1	266
63451275	12 x 2 x 0,75	17,1	261,2	399
63451675	16 x 2 x 0,75	18,6	329,9	497
63451875	18 x 2 x 0,75	19,3	369,3	552
63452475	24 x 2 x 0,75	21,8	469,2	680

Other dimensions and colours are possible on request.



## FLEXIBLE CABLES

- Halogen-free cables   ■ Cable track cables
- Servo motor cables   ■ ETFE, FEP, PFA cables
  - Bus cables   ■ Torsion cables
- Hybrid and special cables   ■ Control and connection cables
  - Data cables   ■ Besilen® (Silicone) cables
- Compensating and extension cables   ■ Tray cables

## TEMPERATURE MEASUREMENT

- Protecting armatures and gauge slides
- Mineral insulated thermocouples and Mineral insulated resistance thermometers
- Temperature measurement in plastic processing industry/Hot runner technique
  - Diesel thermocouples   ■ Probe with stainless steel sleeve
  - Temperature measurement in test vehicles
    - Measurement techniques

## CABLE HARNESSING

- Harnessed cables acc. to customer's specification
  - Harnessed cable track cables
  - Helix cables   ■ Cable harnesses
- Harnessed motor and transmission cables for Siemens and Indramat drives