

# Halogen-free Cables



# Halogen-free Cables

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**SABIX®** cables can be fully recycled and in separate components newly supplied to the resource cycle. Cables with **SABIX®** FRNC outer sheath avoid flame propagation

in case of local flaming and are flame retardant and self-extinguishing acc. to VDE, EN and IEC. They fulfil the smoke density acc. to IEC, EN, VDE and BS.

# Halogen-free Cables

## Applications

### Typical areas of application for halogen-free cables

Halogen-free cables are applicable in delicate areas as, for example, public buildings and institutions or railway vehicles and in areas where the general safety requirements for cables are very high.

Besides being halogen free acc. to EN 50306-1 + EN 50264-1 the used cables have to be flame retardant and self extinguishing and are not allowed to enhance flame propagation. This is why halogen-free cables are mandatory in many cases. In addition, flexible application is often desired. All those char-

racteristics are combined in our halogen-free **SABIX®** cables. Halogen-free cables from SAB can be fully recyclable thanks to the **SABIX®** materials used and in separate components newly supplied to there source cycle. Halogen-free cables with FRNC outer sheath avoid flame propagation in case of local flaming and are flame retardant and self-extinguishing acc. to VDE, EN, and IEC. They fulfil the smoke density acc. to IEC, EN, VDE, and BS.

#### Application of halogen-free **SABIX®** single conductors and wiring cables

These single conductors are installed in applications where high flexibility halogen-free cables are required. The various versions of these cables offer excellent characteristics such as oil resistance, low temperature flexibility, heat resistance, hot-air resistance, weather resistance, being halogen-free.

**Exemplary applications** for our halogen-free **SABIX®** single conductors are the production of control cabinets, applian-

ces and devices for communication technologies, household appliances, construction of generators and transformers, machine construction, railway technologies.

The single conductors acc. to EN 45545-2 are excellent suitable for internal wiring in rail vehicles. Our high-temperature-resistant wiring cables are excellent suitable for internal wiring at high ambient temperatures in protected rooms.

#### Application of halogen-free **SABIX®** control and connection cables

These cables are particularly suitable for control panels at tool working machines, assembly lines, transporting systems, production lines, rail technologies etc. Once installed these cables can be moved easily for the installation and adjustment as well as inspection of machines, provided that the cables can not be mechanically overloaded during the movement. If a certain protection against electromagnetic interferences is requested cables with overall copper screen should be used. The excellent characteristics of these cables, in various versions are oil resistance, low temperature flexibility, heat resistance, hot-air resistance, weather resistance, and are also halogen-free.

The high-temperature-resistant type can also be used in smelters, steelworks and hot rolling mills technology, safe-

ty engineering, processing of cement, glass and ceramics, sauna construction, heat, refrigeration and climate technologies. Our halogen-free motor connection cables with 0.6/1 KV are excellent suitable as power supply cable between frequency converter and servo motor.

**SABIX® Rail Cables** meet the highest safety standards acc. to DIN EN 45545-2 and are ideal for use in rail vehicles. The areas of application for our **SABIX®** Rail Cables are very varied, e.g. as control cables for the internal wiring of rail vehicles. The continuously flexible **SABIX®** Rail Cables are suitable for flexible, protected installation in the interior, e.g. in door control or in protecting tubes, for outdoor laying, z.B. at the bogie, railway machines, as connection cable between the wagons

# Halogen-free Cables

## Applications

### Application of halogen-free SABIX® data cables

Data cables are used for the transmission of signals, measuring values and control signals in electronic control appliances, data processing systems, railway technologies, weighing installations, office appliances or wherever smallest cross sections, bending radii, shielding or high flexibility is demanded. The paired, halogen-free **SABIX®** data cables

are designed for increased requirements on transmission characteristics and near-end cross talk attenuation.

The excellent characteristics of these cables, in various versions are oil resistance, low temperature flexibility, heat resistance, weather resistance, flexibility, being halogen-free.

### Application of halogen-free cables for Shipbuilding

Our halogen-free cables are appropriate for flexible use below deck as well as on deck of ships with protected laying without being in permanent contact with oils and fuels. The flexible construction and small diameter enables a comfortable laying even in narrow spaces.

Our halogen-free **SABIX®** cables for shipbuilding are available as data, control or power cables. All cables are DNV approved and the ingredients have been tested acc. to the requirements of the Hong Kong Convention (2009) of the IMO.

### Application of halogen-free SABIX® Ultra Cables

#### - continuously flexible with highest fire protection -

Fire protection, halogen-free, flexibility and oil resistance are the characteristics united by our new product range S Ultra. Due to the new sheath material the cable can be used for flexible applications and shows the highest fire protection features by the standards EN 60332-1-2, EN 60332-3 Cat C or D, IEC 60754-1, IEC 60754-2, EN 61034, NF C 32-070 C1, EN 50305.

**SABIX®** Ultra cables can be used as festoon cables for polar cranes in nuclear power plants or in railway technology as sensor cables at the vehicle chassis. They can be used in cable chain applications with moderate mechanical stress.



» You will find further information about the safe application of cables in chapter N

# Halogen-free Cables

## Selection table

		SABIX® A 146 FRNC	SABIX® A 156 FRNC	SABIX® A 166 FRNC	SABIX® A 147 FRNC	SABIX® A 157 FRNC	SABIX® A 100 HT	SABIX® A 101 HT	SABIX® A 200 FRNC	SABIX® A 205 FRNC	SABIX® A 224 FRNC C1	SABIX® A 226 C FRNC C1	SABIX® A 238 FRNC	SABIX® A 260 PUR	SABIX® A 130 HT
Basic construction	Single conductor screened coloured cores numbered cores twisted pairs inner sheath	●	●	●	●	●	●	●			●	●			●
Temperature range fixed laying*	+220 °C + 90 °C + 85 °C - 30 °C - 40 °C - 50 °C	●	●	●	●	●	●	●			●	●		●	●
Voltage	Peak operating voltage: < 0,25 mm <sup>2</sup> = max. 350 V ≥ 0,25 mm <sup>2</sup> = max. 500 V  Nominal voltage Uo/U 300/500 V Nominal voltage Uo/U 450/750 V Nominal voltage Uo/U 0,6/1 kV Voltage UL resp. CSA 600 V Voltage UL resp. CSA 1000 V Testing voltage 1500 V Testing voltage 2000 V Testing voltage 2500 V Testing voltage 3000 V Testing voltage 4000 V	●		●	●	●	●	●	●	●	●	●	●	●	●
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1  Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 Cat. C resp. D  Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2  Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2  Fire performance acc. to NF C 32-070 C1 Fire performance acc. to CSA FT1  Corrosiveness of conflagration gases: In compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases  Smoke density acc. to IEC 61034 + VDE 0482-1034 UL recognized, CSA approved	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Special features	very good oil resistance acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2 good chemical resistance													●	●



\*The temperature range for flexible application is mentioned on the corresponding catalogue page

# Halogen-free Cables

## Selection table

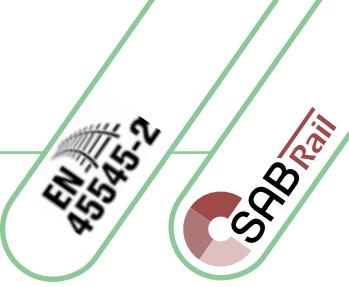
		Cable type
Basic construction	Single conductor screened coloured cores numbered cores twisted pairs inner sheath	SABIX® CC 625 FRNC M SABIX® CC 625 S FRNC M SABIX® CC 625 SH FRNC M SABIX® A 810 FRNC SABIX® A 812 C FRNC SABIX® D 305 FRNC SABIX® D 315 FRNC SABIX® D 320 FRNC C1 SABIX® D 345 FRNC TP
Temperature range fixed laying*	+220 °C + 90 °C + 85 °C – 30 °C – 40 °C – 50 °C	
Voltage	Peak operating voltage: < 0,25 mm² = max. 350 V ≥ 0,25 mm² = max. 500 V  Nominal voltage Uo/U 300/500 V Nominal voltage Uo/U 450/750 V Nominal voltage Uo/U 0,6/1 kV Voltage UL resp. CSA 600 V Voltage UL resp. CSA 1000 V Testing voltage 1500 V Testing voltage 2000 V Testing voltage 2500 V Testing voltage 3000 V Testing voltage 4000 V	
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1  Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 Cat. C resp. D  Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2  Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2  Fire performance acc. to NF C 32-070 C1 Fire performance acc. to CSA FT1  Corrosiveness of conflagration gases: In compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases  Smoke density acc. to IEC 61034 + VDE 0482-1034 UL recognized, CSA approved	
Special features	very good oil resistance acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2 good chemical resistance	



from \*The temperature range for flexible application is mentioned on the corresponding catalogue page

to

## Halogen-free Cables



## Selection table

Cables for Railway Technology acc. to EN 45545-2

		Cable type
Applications	Single conductor	SABIX® R 600 FRNC
	Multi-core cable	SABIX® R 638 FRNC
	screened	SABIX® R 605 FRNC
	Wiring cable	SABIX® R 615 FRNC
	Data cable	SABIX® R 645 FRNC TP
	Control cable	SABIX® R flex
	cross linked type	SABIX® RailLine 560
tested acc. to EN 45545-2	SABIX® A 280 FRNC X	
acc. to EN 50306-1 + EN 50264-1 are fulfilled.	SABIX® A 285 FRNC X	
Development of HCl is < 0,5% acc. to IEC 60754-1.	SABIX® A 280 FRNC X	
pH-value is > 4,3 acc. to IEC 60754-2.	SABIX® A 285 FRNC X	
Conductivity is < 10,0 µS/mm acc. to IEC 60754-2.	SABIX® A 280 FRNC X	
Fluoride content < 0,1% acc. to IEC 60684-2	SABIX® A 285 FRNC X	
Halogen-free	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	SABIX® R 600 FRNC
Standards	Flame retardant acc. to UL 1685 section 12, FT4/IEEE 1202 (NFPA 130) Burning test acc. to ASTM E 162-09 Flame retardant acc. to ISO 6722 (UN/ECE R118) Insulation integrity in case of fire acc. to EN 50200 PH 30, VDE 0482-200, IEC 60331-21 FE 180 + VDE 0482-331-21 Toxicity acc. to EN 50305 + VDE 0260-305 Smoke density acc. to IEC 61034 + VDE 0482-1034 Smoke density acc. to ASTM E 662-09 Oil and fuel resistance acc. to EN 50264-1 + VDE 0260-264-1 Ozone, UV and weather resistance	SABIX® R 638 FRNC
Temperature range fixed laying*	+125 °C + 90 °C - 40 °C - 50 °C	SABIX® R 605 FRNC
Voltage	Peak operating voltage: < 0,25 mm² = max. 350 V ≥ 0,25 mm² = max. 500 V Nominal voltage Uo/U 300/500 V Nominal voltage Uo/U 0,6/1 kV Testing voltage 1500 V Testing voltage 2000 V Testing voltage 3000 V Testing voltage 4000 V	SABIX® R 615 FRNC

from  
to

\*The temperature range for flexible application is mentioned on the corresponding catalogue page

# Halogen-free Cables



## Selection index

## Cables for Shipbuilding

		Cable type
Construction	Data cable Control cable Power cable screened twisted pairs twisted triple	SABIX® BL 405 FRNC SABIX® BL 415 C FRNC SABIX® BL 443 C FRNC TT SABIX® BL 445 C FRNC TP SABIX® BL 446 C FRNC FTP SABIX® BL 400 FRNC SABIX® BL 438 C FRNC SABIX® BL 402 FRNC SABIX® BL 408 FRNC SABIX® BL 409 C FRNC SABIX® BL 410 FRNC SABIX® BL 412 C FRNC
Temperature range fixed laying*	+ 90°C - 40°C	
Voltage range	Peak operating voltage max. 300 V Peak operating voltage max. 350 V Nominal voltage Uo/U 300/500 V Nominal voltage Uo/U 0,6/1 kV Testing voltage 1500 V Testing voltage 2000 V Testing voltage 4000 V	
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1 Fire performance: no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 Cat. A 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 Smoke density acc. to IEC 61034 + VDE 0482-1034	
Type approvals	DNV	
Characteristics	flexible conductor stranding extended cross section range	

from

\*The temperature range for flexible application is mentioned on the corresponding catalogue page.



# Halogen-free Cables

## Selection index

continuously flexible with highest fire protection



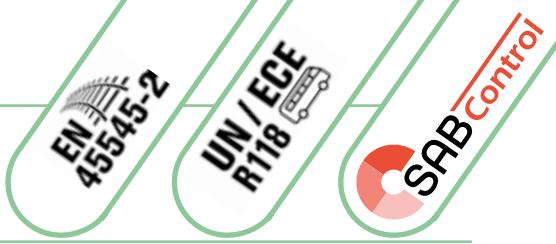
		Cable type
Construction	Data cable Control cable screened twisted pairs	SABIX® SD 705 FRNC C1 SABIX® SD 715 C FRNC C1 SABIX® SD 745 C FRNC C1 TP SABIX® S 710 FRNC C1 SABIX® S 712 C FRNC C1
Temperature range fixed laying*	+ 90 °C - 40 °C	from to
Voltage range	Peak operating voltage < 0,25 mm <sup>2</sup> = max. 350 V ≥ 0,25 mm <sup>2</sup> = max. 500 V Nominal voltage 0,6/1 kV Testing voltage 1500 V Testing voltage 4000 V	from to
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1 No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 Cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2, VDE 0482-332-1-2 Fire performance acc. to NF C 32-070 C1 Corrosiveness of conflagration gases: In compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases Smoke density acc. to IEC 61034 + VDE 0482-1034 Toxicity acc. to EN 50305 Oil and fuel resistance acc. to EN 50264-1 + VDE 0260-264-1 good UV, ozone and weather resistance good mycological resistance	from to



\*The temperature range for flexible application is mentioned on the corresponding catalogue page

# Halogen-free Cables

**SABIX® A 146 FRNC** wiring cable  
300/500 V  
**SABIX® A 156 FRNC** wiring cable  
450/750 V



STW BRÖCKSKES · D-VIERSEN · SABIX® A 146 FRNC 300/500 V 0,5 mm² CE

CE RoHS ✓ PFAS FREE ✓

marking example:

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

## Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	see table*

## Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » very good stripping
- » flexible
- » fulfills fire protection requirements R15 (EL1A)  
acc. to EN 45545-2 for hazard levels HL1-3
- » flame retardant acc. to UN/ECE R118
- » PFAS free

## Technical Data:

Nominal voltage:	<b>SABIX® A 146 FRNC:</b> Uo/U 300/500 V	<b>SABIX® A 156 FRNC:</b> Uo/U 450/750 V
Testing voltage:	<b>SABIX® A 146 FRNC:</b> 2000 V	<b>SABIX® A 156 FRNC:</b> 2500 V
Min. bending radius: For one single bend:	7,5 x d 5 x d	
Temperature range fixed laying:	-40/+90 °C	
flexible application:	-30/+90 °C	
Halogen-free:		acc. to IEC 60754-1 + VDE 0482-754-1
complementary for railway technology:		acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to ISO 6722 (UN/ECE R118)	
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	
Smoke density:	acc. to IEC 61034 + VDE 0482-1034	
Flexibility:	good	
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“	

## SABIX® A 146 FRNC

item no.	nominal cross-section mm²	largest single wire ø mm	outer-ø ± 10% 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,  
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

## SABIX® A 156 FRNC

item no.	nominal cross-section mm²	largest single wire ø mm	outer-ø ± 10% 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

# Halogen-free Cables

## SABIX® A 166 FRNC

wiring cable with improved fire performance and extended temperature range 0.6/1 kV



**SBM** BRÖCKSKES · D-VIERSEN · SABIX® A 166 FRNC 0,6/1 kV 1,5 mm² CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 166 FRNC 0,6/1 kV 1,5 mm² CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	see table*

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » very good stripping
- » flexible
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	3000 V
Min. bending radius:	7,5 x d
For one single bend:	5 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross-section mm²	largest single wire Ø mm	outer Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
6166 .. 82*	1,50	0,26	3,2	14,4	23
6166 .. 84*	2,50	0,26	3,9	24,0	35
6166 .. 86*	4,00	0,31	4,5	38,4	51
6166 .. 87*	6,00	0,31	5,0	57,6	71
6166 .. 88*	10,00	0,41	7,3	96,0	131
6166 .. 89*	16,00	0,41	8,3	153,6	199
6166 .. 90*	25,00	0,41	10,2	240,0	305
6166 .. 91*	35,00	0,41	11,4	336,0	404
6166 .. 92*	50,00	0,41	14,1	480,0	576
6166 .. 93*	70,00	0,41	15,1	672,0	765
6166 .. 94*	95,00	0,51	18,5	912,0	1052
6166 .. 95*	120,00	0,51	20,0	1152,0	1261
6166 .. 96*	150,00	0,51	22,1	1440,0	1567
6166 .. 97*	185,00	0,51	23,5	1776,0	1892
6166 .. 98*	240,00	0,51	27,2	2304,0	2538

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

On request  
with tinned copper strands

# Halogen-free Cables



**SABIX® A 147 FRNC** wiring cable 600 V

**SABIX® A 157 FRNC** wiring cable 1000 V

SABIX® A 147 FRNC 300/500V 0,5 mm<sup>2</sup> 20 AWG AWM Style 10528 75°C 600V CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® A 147 FRNC 300/500V 0,5 mm<sup>2</sup> 20 AWG AWM Style 10528 75°C 600V CE

## Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	see table*

## Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » UL recognized
- » PFAS free

## Technical Data:

Nominal voltage:	<b>SABIX® A 147 FRNC:</b> 0,50 - 1,0 mm <sup>2</sup> : Uo/U 300/500 V	<b>SABIX® A 157 FRNC:</b> 1,50 - 300,0 mm <sup>2</sup> : Uo/U 450/750 V
Voltage UL:	<b>SABIX® A 147 FRNC:</b> 20 - 18 AWG: 600 V	<b>SABIX® A 157 FRNC:</b> 16 AWG - 550 MCM: 1000 V
Testing voltage:	<b>SABIX® A 147 FRNC:</b> 2000 V	<b>SABIX® A 157 FRNC:</b> 2500 V
Min. bending radius: For one single bend:	7,5 x d 5 x d	
Temperature range fixed laying: flexible application:	DIN/VDE: -40/+90 °C	UL: up to + 75 °C -30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1	
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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	
Smoke density:	acc. to IEC 61034 + VDE 0482-1034	
Flexibility:	good	
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“	

## SABIX® A 147 FRNC

item no.	nominal cross-section mm <sup>2</sup>	AWG/ MCM	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
6147 .. 50*	0,50	20 (15/32)	0,21	2,5	4,8	12
6147 .. 75*	0,75	19 (23/32)	0,21	2,8	7,2	14
6147 .. 80*	1,00	18 (30/32)	0,21	2,9	9,6	16

Other dimensions and colours are possible on request.

## SABIX® A 157 FRNC

item no.	nominal cross-section mm <sup>2</sup>	AWG/ MCM	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
6157 .. 82*	1,50	16 (27/30)	0,26	3,2	14,4	22
6157 .. 84*	2,50	14 (46/30)	0,26	3,6	24,0	32
6157 .. 86*	4,00	12 (52/28)	0,31	4,3	38,4	46
6157 .. 87*	6,00	10 (70/20)	0,31	5,5	57,6	75
6157 .. 88*	10,00	8 (77/26)	0,41	6,7	96,0	117
6157 .. 89*	16,00	6 (119/26)	0,41	8,8	153,6	192
6157 .. 90*	25,00	4 (196/26)	0,41	10,2	240,0	282
6157 .. 91*	35,00	2 (280/26)	0,41	12,7	336,0	414
6157 .. 92*	50,00	1 (400/26)	0,41	13,9	480,0	573
6157 .. 93*	70,00	2/0 (554/26)	0,41	16,3	672,0	775
6157 .. 94*	95,00	3/0 (484/24)	0,51	18,4	912,0	1009
6157 .. 95*	120,00	4/0 (589/24)	0,51	20,9	1152,0	1248
6157 .. 96*	150,00	250 MCM (740/24)	0,51	22,4	1440,0	1532
6157 .. 97*	185,00	350 MCM (899/24)	0,51	25,0	1776,0	1889
6157 .. 98*	240,00	450 MCM (1220/24)	0,51	28,3	2304,0	2474
6157 .. 99*	300,00		0,51	31,0	2880,0	3063

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

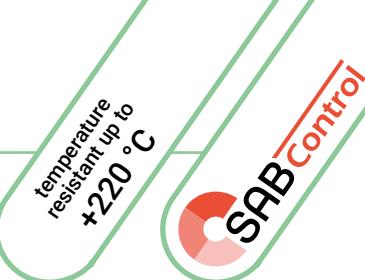
# Halogen-free Cables

**SABIX® A 100 HT**

high temperature resistant single conductor  
with nickel-plated strands

**SABIX® A 101 HT**

high temperature resistant single conductor  
with silver-plated strands



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



marking example:

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

## Construction:

Conductor:	<b>SABIX® A 100 HT:</b> nickel-plated copper strands
	<b>SABIX® A 101 HT:</b> silver-plated copper strands fine wires acc. to IEC 60228, VDE 0295, class 5
Insulation:	<b>SABIX®</b>
Colour code:	see table*

## Outstanding features:

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

## Technical Data:

Nominal voltage:	Uo/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:	-40/+220 °C
flexible application:	-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, see chapter N „Technical data“

## SABIX® A 100 HT

item no.	nominal cross-section mm²	largest single wire Ø mm	outer-Ø ± 10% 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 mm²	largest single wire Ø mm	outer-Ø ± 10% 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 200 FRNC

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



S · D-VIERSEN · SABIX® A 200 FRNC 12 x 1,5 mm² CE



marking example:

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

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » very flexible
- » very good stripping
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 3000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62000205	2 x 0,50	0,21	5,0	9,6	37
62000305	3 x 0,50	0,21	5,3	14,4	43
62000405	4 x 0,50	0,21	5,7	19,2	51
62000505	5 x 0,50	0,21	6,4	24,0	63
62000705	7 x 0,50	0,21	6,9	33,6	77
62001005	10 x 0,50	0,21	8,8	48,0	108
62001205	12 x 0,50	0,21	9,3	57,6	127
62001805	18 x 0,50	0,21	10,9	86,4	180
62002505	25 x 0,50	0,21	13,1	120,0	240
62003205	32 x 0,50	0,21	14,2	153,6	298
62004205	42 x 0,50	0,21	15,9	201,6	380
62006105	61 x 0,50	0,21	18,7	292,8	530
62000207	2 x 0,75	0,21	5,6	14,4	48
62000307	3 x 0,75	0,21	5,9	21,6	56
62000407	4 x 0,75	0,21	6,6	28,8	70
62000507	5 x 0,75	0,21	7,2	36,0	83
62000707	7 x 0,75	0,21	8,0	50,4	106
62001007	10 x 0,75	0,21	10,2	72,0	150
62001207	12 x 0,75	0,21	10,7	86,4	174
62001807	18 x 0,75	0,21	12,6	129,6	248
62002507	25 x 0,75	0,21	15,3	180,0	339
62003207	32 x 0,75	0,21	16,6	230,4	419
62004207	42 x 0,75	0,21	18,6	302,4	535
62006107	61 x 0,75	0,21	21,8	439,2	750
62000210	2 x 1,00	0,21	5,8	19,2	54
62000310	3 x 1,00	0,21	6,3	28,8	67
62000410	4 x 1,00	0,21	6,8	38,4	80
62000510	5 x 1,00	0,21	7,7	48,0	100
62000710	7 x 1,00	0,21	8,3	67,2	123
62001010	10 x 1,00	0,21	10,8	96,0	179
62001210	12 x 1,00	0,21	11,1	115,2	203
62001810	18 x 1,00	0,21	13,1	172,8	291
62002510	25 x 1,00	0,21	15,9	240,0	397
62003210	32 x 1,00	0,21	17,3	307,2	493
62004210	42 x 1,00	0,21	19,6	403,2	625
62006110	61 x 1,00	0,21	22,9	585,6	885
62000215	2 x 1,50	0,26	6,6	28,8	72
62000315	3 x 1,50	0,26	7,0	43,2	86

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62000415	4 x 1,50	0,26	7,8	57,6	108
62000515	5 x 1,50	0,26	8,5	72,0	129
62000715	7 x 1,50	0,26	9,4	100,8	166
62001015	10 x 1,50	0,26	12,2	144,0	239
62001215	12 x 1,50	0,26	12,6	172,8	272
62001815	18 x 1,50	0,26	15,0	259,2	398
62002515	25 x 1,50	0,26	18,2	360,0	549
62003215	32 x 1,50	0,26	19,7	460,8	682
62004215	42 x 1,50	0,26	22,2	604,8	883
62006115	61 x 1,50	0,26	26,0	878,4	1240
62000225	2 x 2,50	0,26	8,0	48,0	109
62000325	3 x 2,50	0,26	8,5	72,0	131
62000425	4 x 2,50	0,26	9,4	96,0	164
62000525	5 x 2,50	0,26	10,3	120,0	196
62000725	7 x 2,50	0,26	11,4	168,0	255
62001025	10 x 2,50	0,26	15,0	240,0	373
62001225	12 x 2,50	0,26	15,5	288,0	427
62001825	18 x 2,50	0,26	18,4	432,0	619
62002525	25 x 2,50	0,26	22,5	600,0	845
62000340	3 x 4,00	0,31	9,9	115,2	192
62000440	4 x 4,00	0,31	11,0	153,6	240
62000540	5 x 4,00	0,31	12,3	192,0	296
62000740	7 x 4,00	0,31	13,6	268,8	385
62000360	3 x 6,00	0,31	11,6	172,8	273
62000460	4 x 6,00	0,31	12,9	230,4	343
62000560	5 x 6,00	0,31	14,4	288,0	422
62000760	7 x 6,00	0,31	15,4	403,2	551
62000461	4 x 10,0	0,41	16,9	384,0	586
62000561	5 x 10,0	0,41	18,8	480,0	715
62000761	7 x 10,0	0,41	20,9	672,0	949
62000462	4 x 16,0	0,41	20,8	614,4	895
62000562	5 x 16,0	0,41	23,2	768,0	1118
62000762	7 x 16,0	0,41	25,7	1075,2	1450
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.

# Halogen-free Cables

## SABIX® A 205 FRNC

control cable with coloured cores, improved fire performance and extended temperature range



BRÖCKSKES · D-VIERSEN · SABIX® A 205 FRNC 4 x 1,5 mm² CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 205 FRNC 4 x 1,5 mm² CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	coloured acc. to HD 308 (VDE 0293-308), green-yellow earth wire from 3 cores
Stranding:	in layers
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » very flexible
- » very good stripping
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 3000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62050205	2 x 0,50	0,21	5,0	9,6	37
62050305	3 x 0,50	0,21	5,3	14,4	43
62050405	4 x 0,50	0,21	5,7	19,2	51
62050505	5 x 0,50	0,21	6,0	24,0	63
62050705	7 x 0,50	0,21	6,9	33,6	77
62050207	2 x 0,75	0,21	5,6	14,4	48
62050307	3 x 0,75	0,21	5,9	21,6	56
62050407	4 x 0,75	0,21	6,6	28,8	70
62050507	5 x 0,75	0,21	7,2	36,0	83
62050707	7 x 0,75	0,21	8,0	50,4	106
62050210	2 x 1,00	0,21	5,8	19,2	54
62050310	3 x 1,00	0,21	6,3	28,8	67
62050410	4 x 1,00	0,21	6,8	38,4	80
62050510	5 x 1,00	0,21	7,7	48,0	100
62050710	7 x 1,00	0,21	8,3	67,2	123
62050215	2 x 1,50	0,26	6,6	28,8	72
62050315	3 x 1,50	0,26	7,0	43,2	86
62050415	4 x 1,50	0,26	7,8	57,6	108
62050515	5 x 1,50	0,26	8,5	72,0	129

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62050715	7 x 1,50	0,26	9,4	100,8	166
62050225	2 x 2,50	0,26	8,0	48,0	109
62050325	3 x 2,50	0,26	8,5	72,0	131
62050425	4 x 2,50	0,26	9,4	96,0	164
62050525	5 x 2,50	0,26	10,5	120,0	196
62050725	7 x 2,50	0,26	11,4	168,0	255
62050340	3 x 4,00	0,31	9,9	115,2	192
62050440	4 x 4,00	0,31	11,0	153,6	240
62050540	5 x 4,00	0,31	12,3	192,0	296
62050360	3 x 6,00	0,31	11,6	172,8	274
62050460	4 x 6,00	0,31	12,4	230,4	343
62050560	5 x 6,00	0,31	14,4	288,0	422
62050361	3 x 10,0	0,41	15,3	288,0	470
62050461	4 x 10,0	0,41	16,9	384,0	587
62050561	5 x 10,0	0,41	18,8	480,0	716
62050462	4 x 16,0	0,41	20,8	614,4	895
62050463	4 x 25,0	0,41	24,9	960,0	1388
62050464	4 x 35,0	0,41	28,8	1334,0	1927
62050465	4 x 50,0	0,41	33,3	1920,0	2631

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 224 FRNC C1

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

NFC acc. to  
32-070 C1

SAB Control

SKES · D-VIERSEN · SABIX® A 224 FRNC C1 14 x 0,5 mm² CE

CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 224 FRNC C1 14 x 0,5 mm² CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Sheath material:	SABIX®
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » NF C 32-070 C1
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 450/750 V
Testing voltage:	core/core 3000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg (100 kGy)
Temperature range	
fixed laying:	-30/+90 °C
flexible application:	-20/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% 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 ± 10% 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

# Halogen-free Cables

## SABIX® A 224 FRNC C1

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

NFC acc. to  
32-070 C1

SAB Control

SKES · D-VIERSEN · SABIX® A 224 FRNC C1 14 x 0,5 mm<sup>2</sup> CE

CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 224 FRNC C1 14 x 0,5 mm<sup>2</sup> CE

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% 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 ± 10% 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.

# Halogen-free Cables

## SABIX® A 226 C FRNC C1

control cable with numbered cores, improved fire performance,  
extended temperature range and overall copper screen

-VIERSEN · SABIX® A 226 C FRNC C1 12 x 1,5 mm<sup>2</sup> CE



NFC acc. to  
32-070 C1

SAB Control

CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 226 C FRNC C1 12 x 1,5 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	black (RAL 9005)

### Technical Data:

Nominal voltage:	Uo/U 450/750 V
Testing voltage:	core/core 2500 V core/screen 2500 V
Min. bending radius <i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg (100 kGy)
Temperature range <i>fixed laying:</i>	-30/+90 °C
<i>flexible application:</i>	-20/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NFC 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » good EMC characteristics
- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » NFC 32-070 C1
- » PFAS free

item no.	no. of cores x cross section mm x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62260205	2 x 0,50	0,21	6,5	27,2	56
62260307	3 x 0,75	0,21	7,7	42,9	86
62260407	4 x 0,75	0,21	8,3	52,5	102
62260507	5 x 0,75	0,21	9,2	62,2	126
62260707	7 x 0,75	0,21	9,9	79,4	154
62261207	12 x 0,75	0,21	13,5	146,1	272
62261807	18 x 0,75	0,21	15,9	227,2	396
62260310	3 x 1,00	0,21	7,9	50,2	93
62260410	4 x 1,00	0,21	8,5	62,2	112
62260510	5 x 1,00	0,21	9,5	74,3	139
62261610	16 x 1,00	0,21	15,7	251,0	406
62261810	18 x 1,00	0,21	16,6	270,9	450
62260315	3 x 1,50	0,26	8,5	67,0	113
62260415	4 x 1,50	0,26	9,4	83,9	142
62260515	5 x 1,50	0,26	10,3	101,2	170
62260715	7 x 1,50	0,26	11,5	154,7	234
62261215	12 x 1,50	0,26	15,5	270,0	403
62261815	18 x 1,50	0,26	18,3	370,1	567
62260325	3 x 2,50	0,26	10,0	101,1	160
62260425	4 x 2,50	0,26	11,3	143,8	236
62260525	5 x 2,50	0,26	12,5	174,4	265
62260340	3 x 4,00	0,31	11,7	169,2	236
62260440	4 x 4,00	0,31	12,9	213,1	297
62260540	5 x 4,00	0,31	14,5	277,7	380
62260460	4 x 6,00	0,31	15,2	327,3	442
62260560	5 x 6,00	0,31	16,8	386,4	522
62260760	7 x 6,00	0,31	18,4	514,3	677
62260461	4 x 10,0	0,41	18,9	495,7	682
62260561	5 x 10,0	0,41	21,2	605,9	847
62260362	3 x 16,0	0,41	20,7	585,9	787
62260562	5 x 16,0	0,41	25,6	936,8	1246
62260563	5 x 25,0	0,41	31,3	1594,7	1938
62260564	5 x 35,0	0,41	34,9	1901,3	2449

Other dimensions and colours are possible on request.

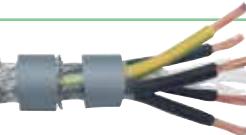
# Halogen-free Cables

## SABIX® A 238 FRNC

control cable with numbered cores, improved fire performance,  
extended temperature range and overall copper screen



SKES · D-VIERSEN · SABIX® A 238 FRNC 5 x 1,5 mm² CE



CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 238 FRNC 5 x 1,5 mm² CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » good EMC characteristics
- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » very good stripping
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 3000 V core/screen 2000 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data”. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data”

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62380205	2 x 0,50	0,21	5,5	25,5	42
62380305	3 x 0,50	0,21	5,8	30,7	51
62380405	4 x 0,50	0,21	6,4	35,3	62
62380505	5 x 0,50	0,21	6,5	43,5	74
62380705	7 x 0,50	0,21	7,4	53,4	87
62381205	12 x 0,50	0,21	9,8	86,6	143
62381805	18 x 0,50	0,21	11,6	140,4	214
62382505	25 x 0,50	0,21	14,8	18,0	285
62380207	2 x 0,75	0,21	6,3	30,5	55
62380307	3 x 0,75	0,21	6,6	39,3	66
62380407	4 x 0,75	0,21	7,1	48,4	78
62380507	5 x 0,75	0,21	7,9	57,4	97
62380707	7 x 0,75	0,21	8,5	74,2	117
62381207	12 x 0,75	0,21	11,4	134,3	202
62381807	18 x 0,75	0,21	13,5	189,3	290
62382507	25 x 0,75	0,21	16,4	277,9	409
62380210	2 x 1,00	0,21	6,5	36,8	61
62380310	3 x 1,00	0,21	6,8	46,5	73
62380410	4 x 1,00	0,21	7,3	58,1	88
62380510	5 x 1,00	0,21	8,2	71,7	111
62380710	7 x 1,00	0,21	8,8	93,3	135
62381210	12 x 1,00	0,21	12,0	169,3	240
62381810	18 x 1,00	0,21	14,0	232,8	332

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62382510	25 x 1,00	0,21	17,0	338,6	467
62380215	2 x 1,50	0,26	7,1	60,7	74
62380315	3 x 1,50	0,26	7,7	69,5	96
62380415	4 x 1,50	0,26	8,3	81,3	116
62380515	5 x 1,50	0,26	9,2	98,2	143
62380715	7 x 1,50	0,26	9,9	129,8	177
62381215	12 x 1,50	0,26	13,5	232,5	312
62381815	18 x 1,50	0,26	15,9	356,8	455
62382515	25 x 1,50	0,26	19,3	472,0	626
62380225	2 x 2,50	0,26	8,5	71,8	106
62380325	3 x 2,50	0,26	9,2	98,2	139
62380425	4 x 2,50	0,26	9,9	132,0	170
62380525	5 x 2,50	0,26	11,2	167,7	222
62380725	7 x 2,50	0,26	12,3	222,3	285
62381225	12 x 2,50	0,26	16,6	386,1	488
62381825	18 x 2,50	0,26	19,5	564,1	550
62382525	25 x 2,50	0,26	23,6	741,1	948
62380440	4 x 4,00	0,31	11,7	207,6	257
62380540	5 x 4,00	0,31	13,0	251,5	316
62380460	4 x 6,00	0,31	13,8	290,2	362
62380560	5 x 6,00	0,31	15,5	385,2	466
62380461	4 x 10,00	0,41	18,0	499,6	629
62380462	4 x 16,00	0,41	21,7	752,6	919

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 260 PUR

cold-flexible, oil resistant control cable with numbered cores



KES · D-VIERSEN · SABIX® A 260 PUR 12 x 1,5 mm² CE



CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 226 C FRNC C1 12 x 1,5 mm² CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Inner sheath:	SABIX® - from 4,0 mm²
Sheath material:	PUR, TMPU acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2
Sheath colour:	grey (RAL 7000)

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 3000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Radiation resistance:	5 x 10⁷ cJ/kg
Temperature range	
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Flexibility:	very good
Weather resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » oil resistant
- » flexible at low temperatures
- » weather resistant
- » PFAS free

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
52600207	2 x 0,75	0,21	5,6	14,4	39
52600307	3 x 0,75	0,21	5,9	21,6	47
52600407	4 x 0,75	0,21	6,4	28,8	57
52600507	5 x 0,75	0,21	7,0	36,0	68
52600707	7 x 0,75	0,21	7,6	50,4	87
52601007	10 x 0,75	0,21	9,6	72,0	119
52601207	12 x 0,75	0,21	10,3	86,4	145
52601807	18 x 0,75	0,21	12,0	129,6	206
52602507	25 x 0,75	0,21	14,7	180,0	284
52600210	2 x 1,00	0,21	5,8	19,2	44
52600310	3 x 1,00	0,21	6,1	28,8	54
52600410	4 x 1,00	0,21	6,6	38,4	66
52600510	5 x 1,00	0,21	7,3	48,0	81
52600710	7 x 1,00	0,21	7,9	67,2	103
52601010	10 x 1,00	0,21	10,4	96,0	143
52601210	12 x 1,00	0,21	10,7	115,2	173
52601810	18 x 1,00	0,21	12,5	172,8	247
52602510	25 x 1,00	0,21	15,3	240,0	341
52600215	2 x 1,50	0,26	6,4	28,8	57
52600315	3 x 1,50	0,26	6,8	43,2	72
52600415	4 x 1,50	0,26	7,4	57,6	88
52600515	5 x 1,50	0,26	8,1	72,0	107
52600715	7 x 1,50	0,26	8,8	100,8	139

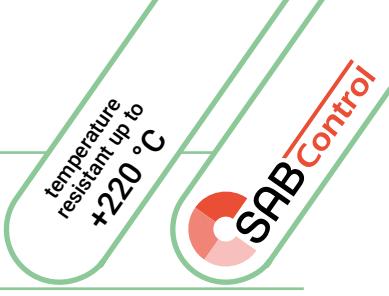
item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
52601015	10 x 1,50	0,26	11,6	144,0	191
52601215	12 x 1,50	0,26	12,0	172,8	233
52601815	18 x 1,50	0,26	14,0	259,2	336
52602515	25 x 1,50	0,26	17,0	360,0	451
52600225	2 x 2,50	0,26	7,6	48,0	86
52600325	3 x 2,50	0,26	8,5	72,0	114
52600425	4 x 2,50	0,26	8,8	96,0	135
52600525	5 x 2,50	0,26	10,1	120,0	172
52600725	7 x 2,50	0,26	11,0	168,0	224
52601025	10 x 2,50	0,26	14,0	240,0	311
52601225	12 x 2,50	0,26	14,9	288,0	373
52601825	18 x 2,50	0,26	17,4	432,0	539
52602525	25 x 2,50	0,26	21,7	600,0	755
52600340	3 x 4,00	0,31	11,7	115,2	198
52600440	4 x 4,00	0,31	12,6	153,6	243
52600540	5 x 4,00	0,31	13,7	192,0	293
52600360	3 x 6,00	0,31	14,0	172,8	290
52600460	4 x 6,00	0,31	15,1	230,4	357
52600560	5 x 6,00	0,31	16,4	288,0	431
52600461	4 x 10,0	0,41	18,9	384,0	582
52600561	5 x 10,0	0,41	20,6	480,0	709
52600462	4 x 16,0	0,41	22,2	614,4	851
52600562	5 x 16,0	0,41	24,4	768,0	1041

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 130 HT

high temperature resistant control cable with numbered or coloured cores



**SIEM** BRÖCKSKES · D-VIERNSEN · SABIX® A 130 HT CE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · 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)

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 2000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+220 °C
flexible application:	-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, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » high temperature resistant
- » flexible
- » PFAS free

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% 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 <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% 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.

# Halogen-free Cables

## SABIX® CC 625 FRNC M

control cable with numbered cores



1 Style 21089 75°C 600V CSA AWM I/II A/B 80°C 600V FT1 CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · 62521215 12 x 1,5 mm<sup>2</sup> SABIX® CC 625 FRNC M  
16 AWG/12c 62521612 UL AWM Style 21089 75°C 600V CSA AVM I/II A/B 80°C 600V FT1 CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	core/core 3000 V
Min. bending radius fixed laying:	4 x d
flexible application:	6 x d
Temperature range fixed laying:	UL: up to +75 °C DIN VDE: -40/+90 °C
flexible application:	CSA: up to +80 °C -30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » UL recognized, CSA approved
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » PFAS free

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62520205	2 x 0,50	0,21	5,2	10,3	40
62520305	3 x 0,50	0,21	5,5	15,4	47
62520405	4 x 0,50	0,21	5,9	20,5	56
62520505	5 x 0,50	0,21	6,4	25,6	65
62520705	7 x 0,50	0,21	7,0	35,9	83
62520805	8 x 0,50	0,21	8,2	41,0	104
62520905	9 x 0,50	0,21	8,9	46,1	118
62521205	12 x 0,50	0,21	9,3	61,5	136
62521605	16 x 0,50	0,21	10,5	82,0	177
62521805	18 x 0,50	0,21	11,1	92,3	196
62522505	25 x 0,50	0,21	13,5	128,2	270
62520207	2 x 0,75	0,21	5,7	14,4	48
62520307	3 x 0,75	0,21	6,0	21,6	57
62520407	4 x 0,75	0,21	6,5	28,8	69
62520507	5 x 0,75	0,21	7,1	36,0	81
62520707	7 x 0,75	0,21	7,9	50,4	106
62520807	8 x 0,75	0,21	9,3	57,6	132
62520907	9 x 0,75	0,21	9,9	64,8	145
62521207	12 x 0,75	0,21	10,6	86,4	175
62521607	16 x 0,75	0,21	11,9	115,2	226
62521807	18 x 0,75	0,21	12,5	129,6	250
62522507	25 x 0,75	0,21	15,2	180,0	344
62520210	2 x 1,00	0,21	5,9	19,2	54
62520310	3 x 1,00	0,21	6,3	28,8	66
62520410	4 x 1,00	0,21	6,8	38,4	80
62520510	5 x 1,00	0,21	7,5	48,0	97
62520710	7 x 1,00	0,21	8,2	67,2	124
62520810	8 x 1,00	0,21	9,6	76,8	152
62520910	9 x 1,00	0,21	10,5	86,4	173
62521210	12 x 1,00	0,21	11,0	115,2	204
62521810	18 x 1,00	0,21	13,0	172,8	294
62522510	25 x 1,00	0,21	15,8	240,0	404

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62520215	2 x 1,50	0,26	6,5	28,8	69
62520315	3 x 1,50	0,26	6,9	43,2	85
62520415	4 x 1,50	0,26	7,6	57,6	105
62520515	5 x 1,50	0,26	8,3	72,0	129
62520715	7 x 1,50	0,26	9,3	100,8	166
62520815	8 x 1,50	0,26	10,9	115,2	202
62520915	9 x 1,50	0,26	11,8	129,6	228
62521215	12 x 1,50	0,26	12,4	172,8	274
62521815	18 x 1,50	0,26	14,9	259,2	404
62522515	25 x 1,50	0,26	18,1	360,0	558
62520225	2 x 2,50	0,26	7,8	48,0	104
62520325	3 x 2,50	0,26	8,3	72,0	128
62520425	4 x 2,50	0,26	9,2	96,0	161
62520525	5 x 2,50	0,26	10,1	120,0	195
62520725	7 x 2,50	0,26	11,2	168,0	257
62520825	8 x 2,50	0,26	13,4	192,0	316
62520925	9 x 2,50	0,26	14,3	216,0	348
62521225	12 x 2,50	0,26	15,3	288,0	431
62521825	18 x 2,50	0,26	18,2	432,0	632
62522525	25 x 2,50	0,26	22,3	600,0	871
62520340	3 x 4,00	0,31	9,7	115,2	188
62520440	4 x 4,00	0,31	10,8	153,6	238
62520540	5 x 4,00	0,31	12,1	192,0	295
62520740	7 x 4,00	0,31	13,4	268,8	388
62520360	3 x 6,00	0,31	11,4	172,8	271
62520460	4 x 6,00	0,31	12,7	230,4	343
62520560	5 x 6,00	0,31	14,2	288,0	425
62520461	4 x 10,0	0,41	17,2	384,0	608
62520561	5 x 10,0	0,41	19,3	480,0	756
62520462	4 x 16,0	0,41	21,1	614,4	909
62520463	4 x 25,0	0,41	26,5	960,0	1475
62520464	4 x 35,0	0,41	30,2	1344,0	2004

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® CC 625 S FRNC M

control cable with numbered cores and overall copper screen



marking example:

SAB BRÖCKSKES · D-VIERNSEN · 62341215 12 x 1,5 mm<sup>2</sup> SABIX® CC 625 S FRNC M  
16 AWG/12c 62341612 AWM Style 21089 75°C 600V CSA AVM I/II A/B 80°C 600V FT1 CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	core/core 3000 V core/screen 2000 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	UL: up to +75 °C DIN VDE: -40/+90 °C -30/+90 °C
flexible application:	CSA: up to +80 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » UL recognized, CSA approved
- » no flame propagation
- » good EMC characteristics
- » flame retardant and self-extinguishing
- » flexible
- » PFAS free

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62340205	2 x 0,50	0,21	5,7	20,8	45
62340305	3 x 0,50	0,21	6,0	26,0	54
62340405	4 x 0,50	0,21	6,4	32,2	64
62340505	5 x 0,50	0,21	7,0	38,7	76
62340705	7 x 0,50	0,21	7,6	50,3	96
62340805	8 x 0,50	0,21	8,9	58,4	121
62340905	9 x 0,50	0,21	9,4	63,6	131
62341205	12 x 0,50	0,21	9,8	80,9	152
62341605	16 x 0,50	0,21	11,2	113,8	206
62341805	18 x 0,50	0,21	12,0	128,3	234
62342505	25 x 0,50	0,21	13,8	168,2	306
62342027	2 x 0,75	0,21	6,2	25,1	52
62340307	3 x 0,75	0,21	6,5	33,3	64
62340407	4 x 0,75	0,21	7,0	41,8	77
62340507	5 x 0,75	0,21	7,8	50,4	94
62340707	7 x 0,75	0,21	8,4	67,8	118
62340807	8 x 0,75	0,21	9,8	76,9	145
62340907	9 x 0,75	0,21	10,8	100,4	181
62341207	12 x 0,75	0,21	11,3	122,2	207
62341607	16 x 0,75	0,21	12,6	151,5	259
62341807	18 x 0,75	0,21	13,2	169,3	286
62342507	25 x 0,75	0,21	16,3	245,1	416
62340210	2 x 1,00	0,21	6,4	30,9	58
62340310	3 x 1,00	0,21	6,8	41,8	73
62340410	4 x 1,00	0,21	7,3	51,5	87
62340510	5 x 1,00	0,21	8,0	63,7	107
62340710	7 x 1,00	0,21	8,9	84,6	139
62340810	8 x 1,00	0,21	10,1	96,2	165
62340910	9 x 1,00	0,21	11,2	118,2	200
62341210	12 x 1,00	0,21	11,9	151,2	241
62341810	18 x 1,00	0,21	13,9	216,7	340
62342510	25 x 1,00	0,21	16,9	312,8	483

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62340215	2 x 1,50	0,26	7,0	41,8	71
62340315	3 x 1,50	0,26	7,5	57,5	92
62340415	4 x 1,50	0,26	8,1	73,4	113
62340515	5 x 1,50	0,26	9,0	89,4	139
62340715	7 x 1,50	0,26	9,8	120,1	178
62340815	8 x 1,50	0,26	11,8	151,1	236
62340915	9 x 1,50	0,26	12,5	165,8	259
62341215	12 x 1,50	0,26	13,3	212,5	313
62341815	18 x 1,50	0,26	15,8	324,1	464
62342515	25 x 1,50	0,26	19,2	441,8	644
62340225	2 x 2,50	0,26	8,3	63,8	101
62340325	3 x 2,50	0,26	9,0	89,4	136
62340425	4 x 2,50	0,26	9,7	115,3	168
62340525	5 x 2,50	0,26	11,0	151,7	220
62340725	7 x 2,50	0,26	12,1	204,1	286
62340825	8 x 2,50	0,26	14,1	236,0	346
62340925	9 x 2,50	0,26	15,2	260,4	386
62341225	12 x 2,50	0,26	16,4	353,1	493
62341825	18 x 2,50	0,26	19,3	513,9	712
62342525	25 x 2,50	0,26	23,4	693,5	965
62340340	3 x 4,00	0,31	10,6	146,8	205
62340440	4 x 4,00	0,31	11,5	189,5	256
62340540	5 x 4,00	0,31	12,8	231,6	316
62340740	7 x 4,00	0,31	14,1	312,8	412
62340860	3 x 6,00	0,31	12,3	208,9	284
62340460	4 x 6,00	0,31	13,6	270,2	362
62340560	5 x 6,00	0,31	15,1	332,3	449
62340461	4 x 10,0	0,31	18,3	457,8	636
62340561	5 x 10,0	0,31	20,2	562,9	783
62340462	4 x 16,0	0,41	22,2	706,7	927
62340463	4 x 25,0	0,41	27,4	1074,8	1450
62340464	4 x 35,0	0,41	31,3	1471,8	1959

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® CC 625 SH FRNC M

control cable with numbered cores, inner sheath and overall copper screen



1089 75°C 600V CSA AWM I/II A/B 80°C 600V FT1 CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · 62571215 12 x 1,5 mm<sup>2</sup> SABIX® CC 625 SH FRNC M  
16 AWG/12c 62571612 UL AWM Style 21089 75°C 600V CSA AVM I/II A/B 80°C 600V FT1 CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Inner Sheath:	SABIX®
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	core/core 3000 V core/screen 2000 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	UL: up to +75 °C DIN VDE: -40/+90 °C -30/+90 °C
flexible application:	CSA: up to +80 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » UL recognized, CSA approved
- » no flame propagation
- » good EMC characteristics
- » flame retardant and self-extinguishing
- » flexible
- » PFAS free

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62570205	2 x 0,50	0,21	7,0	23,3	74
62570305	3 x 0,50	0,21	7,3	28,5	82
62570405	4 x 0,50	0,21	7,8	34,9	95
62570505	5 x 0,50	0,21	8,4	41,5	110
62570705	7 x 0,50	0,21	9,1	53,3	134
62570805	8 x 0,50	0,21	10,4	60,5	164
62570905	9 x 0,50	0,21	11,1	77,9	189
62571205	12 x 0,50	0,21	11,5	97,4	213
62571605	16 x 0,50	0,21	12,9	121,6	268
62571805	18 x 0,50	0,21	13,7	132,1	296
62572505	25 x 0,50	0,21	16,3	193,3	409
62570207	2 x 0,75	0,21	7,6	28,8	87
62570307	3 x 0,75	0,21	7,9	36,1	97
62570407	4 x 0,75	0,21	8,4	46,2	113
62570507	5 x 0,75	0,21	9,3	53,5	134
62570707	7 x 0,75	0,21	9,9	69,8	160
62570807	8 x 0,75	0,21	11,5	93,5	209
62570907	9 x 0,75	0,21	12,3	100,9	230
62571207	12 x 0,75	0,21	13,0	126,0	267
62571607	16 x 0,75	0,21	14,3	159,3	328
62571807	18 x 0,75	0,21	15,1	173,9	361
62572507	25 x 0,75	0,21	18,0	253,5	499
62570210	2 x 1,00	0,21	7,8	33,6	94
62570310	3 x 1,00	0,21	8,2	44,6	108
62570410	4 x 1,00	0,21	8,9	55,8	129
62570510	5 x 1,00	0,21	9,5	67,3	149
62570710	7 x 1,00	0,21	10,4	86,6	183
62570810	8 x 1,00	0,21	12,2	112,9	241
62570910	9 x 1,00	0,21	12,9	126,0	264
62571210	12 x 1,00	0,21	13,6	155,0	304
62571810	18 x 1,00	0,21	15,8	237,7	430
62572510	25 x 1,00	0,21	18,8	314,2	572

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62570215	2 x 1,50	0,26	8,4	44,6	112
62570315	3 x 1,50	0,26	9,0	60,6	135
62570415	4 x 1,50	0,26	9,6	76,9	158
62570515	5 x 1,50	0,26	10,7	103,6	199
62570715	7 x 1,50	0,26	11,5	136,7	243
62570815	8 x 1,50	0,26	13,5	154,9	301
62570915	9 x 1,50	0,26	14,2	173,6	330
62571215	12 x 1,50	0,26	15,0	217,1	385
62571815	18 x 1,50	0,26	17,7	332,5	557
62572515	25 x 1,50	0,26	21,1	443,6	748
62570225	2 x 2,50	0,26	9,8	67,3	157
62570325	3 x 2,50	0,26	10,7	103,6	202
62570425	4 x 2,50	0,26	11,4	131,8	238
62570525	5 x 2,50	0,26	12,7	159,5	290
62570725	7 x 2,50	0,26	13,8	207,9	357
62570825	8 x 2,50	0,26	16,2	257,0	454
62570925	9 x 2,50	0,26	17,1	288,9	498
62571225	12 x 2,50	0,26	18,3	361,8	596
62571825	18 x 2,50	0,26	21,2	515,7	822
62572525	25 x 2,50	0,26	25,5	704,0	1115
62570340	3 x 4,00	0,31	12,3	151,3	228
62570440	4 x 4,00	0,31	13,4	193,3	337
62570540	5 x 4,00	0,31	14,7	236,1	405
62570740	7 x 4,00	0,31	16,2	333,8	526
62570360	3 x 6,00	0,31	14,0	216,7	377
62570460	4 x 6,00	0,31	15,5	295,1	477
62570560	5 x 6,00	0,31	17,0	360,9	575
62570461	4 x 10,0	0,41	20,2	466,9	791
62570561	5 x 10,0	0,41	22,3	572,4	960
62570462	4 x 16,0	0,41	24,3	717,0	1144
62570463	4 x 25,0	0,41	29,7	1079,0	1758
62570464	4 x 35,0	0,41	33,8	1480,9	2358

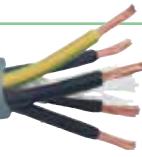
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 810 FRNC

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

KES · D-VIERSEN · SABIX® A 810 FRNC rf 0,6/1 kV 5 x 1,5 mm² CE



CE RoHS PFAS FREE

0,6/1 kV

SAB Servo

marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 810 FRNC rf 0,6/1 kV 5 x 1,5 mm² CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
68100315	3 x 1,50	0,26	9,4	43,2	127
68100415	4 x 1,50	0,26	10,1	57,6	149
68100515	5 x 1,50	0,26	11,0	72,0	176
68100715	7 x 1,50	0,26	11,9	100,8	215
68100325	3 x 2,50	0,26	10,6	72,0	173
68100425	4 x 2,50	0,26	11,5	96,0	206
68100525	5 x 2,50	0,26	12,6	120,0	245
68100725	7 x 2,50	0,26	13,8	168,0	309
68100340	3 x 4,00	0,31	11,9	115,2	234
68100440	4 x 4,00	0,31	13,2	153,6	286
68100540	5 x 4,00	0,31	14,3	192,0	337
68100740	7 x 4,00	0,31	15,7	268,8	435
68100360	3 x 6,00	0,31	13,3	172,8	308
68100460	4 x 6,00	0,31	14,3	230,4	373

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
68100560	5 x 6,00	0,31	15,8	288,0	448
68100760	7 x 6,00	0,31	17,2	403,2	579
68100370	3 x 10,0	0,41	18,3	288,0	583
68100470	4 x 10,0	0,41	20,0	384,0	709
68100570	5 x 10,0	0,41	21,9	480,0	846
68100770	7 x 10,0	0,41	23,9	672,0	1082
68100380	3 x 16,0	0,41	21,5	460,8	823
68100480	4 x 16,0	0,41	23,5	614,4	1007
68100580	5 x 16,0	0,41	25,9	768,0	1232
68100780	7 x 16,0	0,41	28,3	1075,2	1585
68100390	3 x 25,0	0,41	25,9	720,0	1265
68100490	4 x 25,0	0,41	28,4	960,0	1557
68100590	5 x 25,0	0,41	31,4	1200,0	1878
68100790	7 x 25,0	0,41	34,4	1680,0	2445

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 812 C FRNC

motor connection cable with numbered cores, improved fire performance, extended temperature range, inner sheath and overall copper screen

N · SABIX® A 812 C FRNC rf 0,6/1 kV 7 x 1,5 mm<sup>2</sup> CE



CE RoHS PFAS FREE

0,6/1 kV

SAB Servo

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® A 812 C FRNC rf 0,6/1 kV 7 x 1,5 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Inner Sheath:	SABIX®
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7000)

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V core/screen 4000 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » PFAS free

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
68120315	3 x 1,50	0,26	11,3	90,9	202
68120415	4 x 1,50	0,26	12,0	111,7	226
68120715	7 x 1,50	0,26	13,8	160,8	312
68120325	3 x 2,50	0,26	12,6	126,5	258
68120425	4 x 2,50	0,26	13,5	155,8	298
68120525	5 x 2,50	0,26	15,0	216,9	373
68120725	7 x 2,50	0,26	16,2	266,9	437
68120440	4 x 4,00	0,31	16,3	251,6	454
68120740	7 x 4,00	0,31	18,0	379,9	589
68120360	3 x 6,00	0,31	15,1	270,0	426
68120460	4 x 6,00	0,31	16,7	328,8	516
68120760	7 x 6,00	0,31	19,9	528,3	777

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
68120370	3 x 10,0	0,41	19,4	412,3	614
68120470	4 x 10,0	0,41	21,0	522,4	746
68120570	5 x 10,0	0,41	22,8	645,5	916
68120770	7 x 10,0	0,41	25,1	842,0	1154
68120380	3 x 16,0	0,41	22,4	601,9	827
68120480	4 x 16,0	0,41	24,7	783,4	1055
68120580	5 x 16,0	0,41	27,0	942,8	1291
68120780	7 x 16,0	0,41	29,7	1274,0	1661
68120390	3 x 25,0	0,41	26,7	894,0	1188
68120490	4 x 25,0	0,41	29,4	1157,7	1510
68120590	5 x 25,0	0,41	32,3	1413,6	1862

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® D 305 FRNC

flexible data cable with improved fire performance and extended temperature range



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



marking example:

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

### Construction:

Conductor:	bare copper strands with reference to VDE 0812
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	in layers
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7032)

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » easy stripping
- » ant capacitive
- » flexible
- » PFAS free

### Technical Data:

Peak operating voltage:	< 0.25 mm² = max. 350 V ≥ 0.25 mm² = max. 500 V
Testing voltage:	core/core 1500 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63050214	2 x 0,14	3,3	2,7	16
63050314	3 x 0,14	3,5	4,0	18
63050414	4 x 0,14	3,7	5,4	20
63050514	5 x 0,14	3,9	6,7	22
63050714	7 x 0,14	4,3	9,4	28
63050814	8 x 0,14	5,2	10,8	35
63051214	12 x 0,14	5,5	16,1	42
63051414	14 x 0,14	5,7	18,8	47
63051614	16 x 0,14	6,2	21,5	55
63051814	18 x 0,14	6,5	24,2	61
63052114	21 x 0,14	7,1	28,2	72
63052414	24 x 0,14	7,5	32,3	80
63052714	27 x 0,14	8,1	36,3	91
63053014	30 x 0,14	8,3	40,3	97
63053214	32 x 0,14	8,6	43,0	103
63053614	36 x 0,14	8,9	48,4	113
63054014	40 x 0,14	9,5	53,8	123
63054414	44 x 0,14	9,9	59,1	133
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	3,6	4,8	19
63050325	3 x 0,25	3,8	7,2	23
63050425	4 x 0,25	4,1	9,6	26
63050525	5 x 0,25	4,4	12,0	31
63050725	7 x 0,25	4,8	16,8	38
63050825	8 x 0,25	5,4	19,2	45
63051225	12 x 0,25	6,3	28,8	61
63051425	14 x 0,25	6,6	33,6	69
63051625	16 x 0,25	6,9	38,4	77

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63051825	18 x 0,25	7,3	43,2	85
63052125	21 x 0,25	8,3	50,4	106
63052425	24 x 0,25	8,4	57,6	110
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	4,2	6,5	26
63050334	3 x 0,34	4,4	9,8	30
63050434	4 x 0,34	4,6	13,1	36
63050534	5 x 0,34	5,2	16,3	43
63050734	7 x 0,34	5,7	22,8	53
63050834	8 x 0,34	6,7	26,1	66
63051234	12 x 0,34	7,5	39,2	85
63051434	14 x 0,34	8,3	45,7	104
63051634	16 x 0,34	8,7	52,2	116
63051834	18 x 0,34	9,2	58,8	128
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

# Halogen-free Cables

## SABIX® D 305 FRNC

flexible data cable with improved fire performance and extended temperature range



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



marking example:

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

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% 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	4,5	9,6	31
63050350	3 x 0,50	4,7	14,4	36
63050450	4 x 0,50	5,1	19,2	43
63050550	5 x 0,50	5,6	24,0	51
63050750	7 x 0,50	6,3	33,6	67
63050850	8 x 0,50	7,3	38,4	82
63051250	12 x 0,50	8,5	57,6	113
63051450	14 x 0,50	8,9	67,2	127
63051650	16 x 0,50	9,4	76,8	142
63051850	18 x 0,50	9,9	86,4	157
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	5,1	14,4	41
63050375	3 x 0,75	5,4	21,6	49
63050475	4 x 0,75	6,1	28,8	62
63050575	5 x 0,75	6,6	36,0	73
63050775	7 x 0,75	7,2	50,4	91
63050875	8 x 0,75	8,7	57,6	119

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63051275	12 x 0,75	9,8	86,4	153
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	5,3	19,2	47
63050380	3 x 1,00	5,6	28,8	56
63050480	4 x 1,00	6,3	38,4	71
63050580	5 x 1,00	6,9	48,0	86
63050680	6 x 1,00	7,5	57,6	100
63050780	7 x 1,00	7,9	67,2	116
63050285	2 x 1,50	6,1	28,8	64
63050385	3 x 1,50	6,4	43,2	77
63050485	4 x 1,50	7,0	57,6	94
63050585	5 x 1,50	8,1	72,0	122
63050685	6 x 1,50	8,8	86,4	142
63050785	7 x 1,50	8,8	100,8	153

Other dimensions and colours are possible on request.

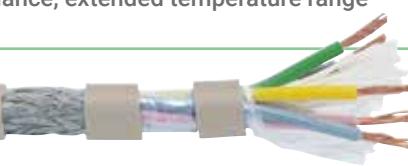
# Halogen-free Cables

## SABIX® D 315 FRNC

flexible data cable with improved fire performance, extended temperature range and overall copper screen



SEN · SABIX® D 315 FRNC 7 x 0,5 mm² CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® D 315 FRNC 7 x 0,5 mm² CE

### Construction:

Conductor:	bare copper strands with reference to VDE 0812
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7032)

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » PFAS free

### Technical Data:

Peak operating voltage:	< 0.25 mm² = max. 350 V ≥ 0.25 mm² = max. 500 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	
fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63150214	2 x 0,14	3,8	13,0	23
63150314	3 x 0,14	4,0	14,4	25
63150414	4 x 0,14	4,2	15,8	27
63150514	5 x 0,14	4,5	20,6	33
63150714	7 x 0,14	4,8	23,4	38
63150814	8 x 0,14	5,6	24,9	46
63151014	10 x 0,14	6,0	29,5	51
63151214	12 x 0,14	6,6	33,7	64
63151414	14 x 0,14	6,8	36,5	69
63151614	16 x 0,14	7,1	41,1	76
63151814	18 x 0,14	7,4	43,9	82
63152114	21 x 0,14	8,0	51,9	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	4,1	15,2	26
63150325	3 x 0,25	4,3	17,6	29
63150425	4 x 0,25	4,6	23,5	33
63150525	5 x 0,25	5,1	26,0	43
63150725	7 x 0,25	5,5	30,9	50
63150825	8 x 0,25	6,5	35,3	66
63151025	10 x 0,25	7,0	43,5	74

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63151225	12 x 0,25	7,2	48,4	81
63151425	14 x 0,25	7,5	53,4	89
63151625	16 x 0,25	7,8	59,8	98
63151825	18 x 0,25	8,2	66,9	108
63152125	21 x 0,25	8,8	76,6	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	4,7	20,4	34
63150334	3 x 0,34	5,1	23,8	41
63150434	4 x 0,34	5,5	27,2	47
63150534	5 x 0,34	5,9	32,3	55
63150734	7 x 0,34	6,8	40,5	73
63150834	8 x 0,34	7,6	47,7	87
63151034	10 x 0,34	8,2	56,3	97
63151234	12 x 0,34	8,4	62,9	107
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

# Halogen-free Cables

## SABIX® D 315 FRNC

flexible data cable with improved fire performance, extended temperature range and overall copper screen



SEN · SABIX® D 315 FRNC 7 x 0,5 mm² CE



CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® D 315 FRNC 7 x 0,5 mm² CE

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% 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	5,2	23,6	41
63150350	3 x 0,50	5,4	28,5	46
63150450	4 x 0,50	5,8	35,2	54
63150550	5 x 0,50	6,7	41,7	71
63150750	7 x 0,50	7,2	53,2	85
63150850	8 x 0,50	8,2	62,1	103
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 ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63150275	2 x 0,75	5,8	30,4	50
63150375	3 x 0,75	6,5	37,7	65
63150475	4 x 0,75	7,0	48,3	78
63150575	5 x 0,75	7,5	55,8	90
63150775	7 x 0,75	8,1	74,1	111
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	6,0	35,3	55
63150380	3 x 1,00	6,7	46,5	73
63150480	4 x 1,00	7,2	58,0	87
63150580	5 x 1,00	7,8	69,4	103
63150680	6 x 1,00	8,4	81,4	119
63150780	7 x 1,00	8,4	91,0	127
63150285	2 x 1,50	7,0	48,3	77
63150385	3 x 1,50	7,3	62,9	90
63150485	4 x 1,50	7,9	71,1	109
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

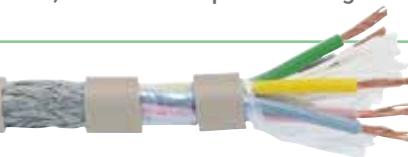
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® D 320 FRNC C1

flexible data cable with improved fire performance, extended temperature range and overall copper screen

SABIX® D 320 FRNC C1 5 x 0,14 mm<sup>2</sup> CE



NFC 32-070 C1  
acc. to

SAB Data

CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® D 320 FRNC C1 5 x 0,14 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands with reference to VDE 0812
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	in layers resp. pairwise, pairs in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7032)

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » NF C 32-070 C1
- » PFAS free

### Technical Data:

Peak operating voltage:	< 0.25 mm <sup>2</sup> = max. 350 V ≥ 0.25 mm <sup>2</sup> = max. 500 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg (100 kGy)
Temperature range fixed laying:	-30/+90 °C
flexible application:	-20/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable screened</b>				
63200614	6 x 0,14	5,0	22,0	39
63200714	7 x 0,14	5,0	23,4	40
63200814	8 x 0,14	5,6	26,7	47
63201014	10 x 0,14	6,0	29,5	52
63201214	12 x 0,14	6,2	33,7	58
63201414	14 x 0,14	6,4	36,5	63
63201614	16 x 0,14	6,7	41,1	70
63201814	18 x 0,14	7,0	43,9	76
63202014	20 x 0,14	7,3	48,3	83
63202114	21 x 0,14	7,6	51,9	88
63202414	24 x 0,14	8,0	56,0	94
63202514	25 x 0,14	8,6	57,4	105
63202714	27 x 0,14	8,6	60,1	110
63203014	30 x 0,14	8,8	66,5	119
63203214	32 x 0,14	9,1	69,3	125
63203614	36 x 0,14	9,4	74,7	135
63204014	40 x 0,14	10,0	83,0	150
63204414	44 x 0,14	10,6	106,8	171
63204814	48 x 0,14	10,8	112,3	181
63205014	50 x 0,14	11,0	121,1	190
63205214	52 x 0,14	11,0	123,8	194
63205614	56 x 0,14	11,3	129,4	205
63206114	61 x 0,14	11,6	136,3	217
63200125	1 x 0,25	3,2	9,3	17
63200225	2 x 0,25	4,3	15,2	27

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable screened</b>				
63200725	7 x 0,25	5,5	30,9	50
63200825	8 x 0,25	6,1	35,3	59
63200925	9 x 0,25	6,5	39,3	65
63201025	10 x 0,25	6,6	43,5	67
63201225	12 x 0,25	6,8	48,4	75
63201425	14 x 0,25	7,1	53,4	83
63201525	15 x 0,25	7,4	57,4	90
63201625	16 x 0,25	7,4	59,8	92
63201825	18 x 0,25	7,8	66,9	102
63202025	20 x 0,25	8,5	71,8	118
63202125	21 x 0,25	8,8	76,6	125
63202425	24 x 0,25	9,1	83,9	131
63202525	25 x 0,25	9,5	89,0	140
63202725	27 x 0,25	9,5	93,8	148
63203025	30 x 0,25	9,8	101,1	159
63203225	32 x 0,25	10,1	106,0	167
63203625	36 x 0,25	10,7	134,1	196
63204025	40 x 0,25	11,3	150,1	217
63204425	44 x 0,25	11,8	160,0	231
63204825	48 x 0,25	12,4	169,8	257
63205025	50 x 0,25	12,7	179,5	267
63205225	52 x 0,25	12,7	184,3	275
63205625	56 x 0,25	13,0	194,1	291
63206125	61 x 0,25	13,4	206,3	310

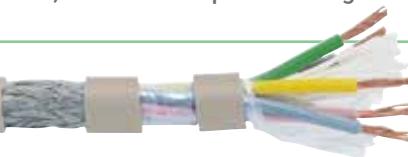
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# Halogen-free Cables

## SABIX® D 320 FRNC C1

flexible data cable with improved fire performance, extended temperature range and overall copper screen

SABIX® D 320 FRNC C1 5 x 0,14 mm<sup>2</sup> CE



NFC 32-070 C1  
acc. to

SAB Data

CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® D 320 FRNC C1 5 x 0,14 mm<sup>2</sup> CE

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable screened</b>				
63200234	2 x 0,34	4,9	20,4	34
63200334	3 x 0,34	5,1	23,8	40
63200434	4 x 0,34	5,5	27,2	47
63200534	5 x 0,34	5,9	32,3	55
63200634	6 x 0,34	6,4	37,3	64
63200734	7 x 0,34	6,4	40,5	67
63200834	8 x 0,34	7,2	47,4	81
63201034	10 x 0,34	7,8	56,3	91
63201234	12 x 0,34	8,0	62,9	101
63201434	14 x 0,34	8,8	71,9	123
63201634	16 x 0,34	9,2	78,5	135
63201834	18 x 0,34	9,7	87,8	150
63202034	20 x 0,34	10,1	94,5	162
63202134	21 x 0,34	10,7	116,3	18
63202434	24 x 0,34	11,3	132,4	202
63202734	27 x 0,34	11,5	142,3	217
63203034	30 x 0,34	11,9	152,4	234
63203234	32 x 0,34	12,7	164,0	262
63203634	36 x 0,34	13,2	177,3	286
63204034	40 x 0,34	14,2	216,4	329
63204234	42 x 0,34	14,2	223,0	339
63204434	44 x 0,34	14,8	240,8	357
63204834	48 x 0,34	15,0	254,1	378
63205034	50 x 0,34	15,8	261,0	405
63205234	52 x 0,34	15,8	267,6	415
63205634	56 x 0,34	16,2	281,0	439
63206134	61 x 0,34	16,7	308,9	474
63200150	1 x 0,50	3,6	11,9	22
63200250	2 x 0,50	5,2	23,6	40
63200350	3 x 0,50	5,4	28,5	45
63200450	4 x 0,50	5,8	35,2	54
63200550	5 x 0,50	6,3	41,7	65
63200650	6 x 0,50	6,8	48,4	75
63200750	7 x 0,50	6,8	53,2	79
63200850	8 x 0,50	7,8	62,1	96
63201050	10 x 0,50	8,8	74,2	117
63201250	12 x 0,50	9,0	83,8	130
63201450	14 x 0,50	9,4	96,2	147
63201650	16 x 0,50	9,9	106,0	163
63201850	18 x 0,50	10,6	134,1	192
63202050	20 x 0,50	11,1	150,0	212
63202150	21 x 0,50	11,6	155,1	221
63202450	24 x 0,50	12,6	174,7	255

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable screened</b>				
63202550	25 x 0,50	12,8	179,6	262
63202750	27 x 0,50	12,8	189,2	275
63203050	30 x 0,50	13,2	203,8	296
63203250	32 x 0,50	13,9	239,2	331
63203650	36 x 0,50	14,4	258,8	360
63204050	40 x 0,50	15,8	289,8	415
63204250	42 x 0,50	15,8	299,4	427
63205050	50 x 0,50	17,0	350,2	491
63205250	52 x 0,50	17,0	359,8	503
63206150	61 x 0,50	18,0	404,3	568
63200175	1 x 0,75	3,9	17,5	28
63200275	2 x 0,75	5,8	30,4	49
63200375	3 x 0,75	6,1	37,7	58
63200475	4 x 0,75	6,6	48,3	71
63200575	5 x 0,75	7,1	55,8	83
63200675	6 x 0,75	7,7	66,9	98
63200775	7 x 0,75	7,7	74,1	105
63200875	8 x 0,75	9,2	83,9	132
63201075	10 x 0,75	10,0	101,2	152
63201275	12 x 0,75	10,5	134,0	184
63201475	14 x 0,75	11,0	154,7	209
63201675	16 x 0,75	11,5	169,4	231
63201875	18 x 0,75	12,5	184,2	265
63202175	21 x 0,75	13,8	236,7	322
63202475	24 x 0,75	14,6	269,8	357
63202775	27 x 0,75	14,9	291,7	386
63203075	30 x 0,75	15,8	313,8	431
63203275	32 x 0,75	16,3	328,8	454
63203675	36 x 0,75	16,9	369,2	500
63200180	1 x 1,00	4,0	19,9	30
63200280	2 x 1,00	6,0	35,3	55
63200380	3 x 1,00	6,3	46,5	66
63200480	4 x 1,00	6,8	58,0	80
63200580	5 x 1,00	7,4	69,4	96
63200680	6 x 1,00	8,0	81,4	112
63200780	7 x 1,00	8,0	91,0	121
63200185	1 x 1,50	4,3	24,8	36
63200285	2 x 1,50	6,6	48,3	68
63200385	3 x 1,50	6,9	62,9	82
63200485	4 x 1,50	7,5	79,1	101
63200585	5 x 1,50	8,6	95,8	131
63200685	6 x 1,50	9,3	112,7	152
63200785	7 x 1,50	9,3	127,1	165

Other dimensions and colours are possible on request.

item no.	no. of pairs x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-pair cable screened</b>				
63210625	6 x 2 x 0,25	7,5	47,4	84
63210825	8 x 2 x 0,25	8,6	59,1	108
63211025	10 x 2 x 0,25	9,4	73,1	132
63210234	2 x 2 x 0,34	6,2	28,4	51
63210434	4 x 2 x 0,34	8,0	46,7	89
63210834	8 x 2 x 0,34	10,2	93,5	155
63210250	2 x 2 x 0,50	6,6	36,2	65
63210350	3 x 2 x 0,50	7,5	47,4	84

item no.	no. of pairs x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-pair cable screened</b>				
63210450	4 x 2 x 0,50	8,8	61,1	105
63210550	5 x 2 x 0,50	9,8	73,2	131
63210275	2 x 2 x 0,75	7,7	49,3	85
63210475	4 x 2 x 0,75	10,5	98,9	159
63210875	8 x 2 x 0,75	13,1	167,1	254
63211075	10 x 2 x 0,75	14,6	228,2	326
63210885	8 x 2 x 1,50	15,8	315,4	401

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® D 345 FRNC TP

paired data cable with improved fire performance, extended temperature range and overall copper screen



345 FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> CE



CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® D 345 FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands with reference to VDE 0812
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	pairwise, pairs in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	SABIX®
Sheath colour:	grey (RAL 7032)

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » good transmission rates and crosstalk attenuation
- » PFAS free

### Technical Data:

Peak operating voltage:	< 0.25 mm <sup>2</sup> = max. 350 V ≥ 0.25 mm <sup>2</sup> = max. 500 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+85 °C
flexible application:	-30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. 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
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63450214	2 x 2 x 0,14	5,4	20,8	40
63450314	3 x 2 x 0,14	5,9	23,7	47
63450414	4 x 2 x 0,14	6,9	28,1	62
63450514	5 x 2 x 0,14	7,4	33,8	70
63450614	6 x 2 x 0,14	7,6	36,6	75
63450814	8 x 2 x 0,14	8,2	43,5	82
63451014	10 x 2 x 0,14	8,9	50,9	103
63451214	12 x 2 x 0,14	9,7	58,4	111
63451614	16 x 2 x 0,14	10,5	71,4	133
63451814	18 x 2 x 0,14	11,1	93,2	157
63452414	24 x 2 x 0,14	12,8	115,3	204
63450225	2 x 2 x 0,25	5,9	25,2	45
63450325	3 x 2 x 0,25	6,8	31,7	62
63450425	4 x 2 x 0,25	7,2	39,6	72
63450525	5 x 2 x 0,25	8,1	45,9	84
63450625	6 x 2 x 0,25	8,3	50,8	94
63450825	8 x 2 x 0,25	9,0	62,4	104
63451025	10 x 2 x 0,25	9,8	76,5	135
63451225	12 x 2 x 0,25	10,9	102,3	155
63451625	16 x 2 x 0,25	11,9	127,3	193
63451825	18 x 2 x 0,25	12,7	137,1	220
63452425	24 x 2 x 0,25	14,4	193,0	286
63450234	2 x 2 x 0,34	7,2	31,8	65
63450334	3 x 2 x 0,34	7,8	40,1	82
63450434	4 x 2 x 0,34	8,8	50,1	98
63450534	5 x 2 x 0,34	9,5	58,8	113
63450634	6 x 2 x 0,34	9,7	65,3	125

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
63450834	8 x 2 x 0,34	10,8	96,9	155
63451234	12 x 2 x 0,34	13,4	133,5	225
63451634	16 x 2 x 0,34	14,8	182,6	287
63451834	18 x 2 x 0,34	15,3	205,5	317
63452434	24 x 2 x 0,34	17,6	256,1	404
63450250	2 x 2 x 0,50	7,6	39,6	74
63450350	3 x 2 x 0,50	8,3	50,8	94
63450450	4 x 2 x 0,50	9,4	64,6	116
63450550	5 x 2 x 0,50	10,2	76,6	130
63450650	6 x 2 x 0,50	10,4	86,3	152
63450850	8 x 2 x 0,50	11,6	127,1	185
63451050	10 x 2 x 0,50	13,2	151,1	232
63451250	12 x 2 x 0,50	14,6	193,2	272
63451650	16 x 2 x 0,50	16,3	242,1	363
63451850	18 x 2 x 0,50	16,9	261,9	392
63452450	24 x 2 x 0,50	19,0	341,3	488
63450275	2 x 2 x 0,75	8,5	52,7	98
63450375	3 x 2 x 0,75	9,4	69,4	118
63450475	4 x 2 x 0,75	10,9	102,3	159
63450575	5 x 2 x 0,75	11,7	122,4	181
63450675	6 x 2 x 0,75	12,5	137,0	215
63450875	8 x 2 x 0,75	15,1	203,0	300
63451275	12 x 2 x 0,75	17,1	271,7	390
63451675	16 x 2 x 0,75	18,6	331,0	473
63451875	18 x 2 x 0,75	19,3	370,5	520
63452475	24 x 2 x 0,75	21,8	470,6	644

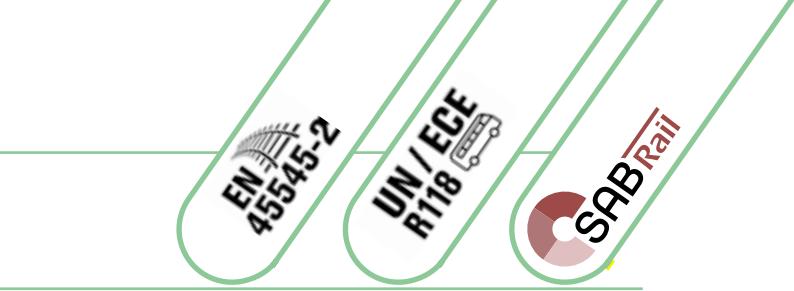
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® R 600 FRNC

SABIX® Rail Control with numbered cores

S · D-VIERSSEN · SABIX® R 600 FRNC 12 x 1,5 mm<sup>2</sup> CE



marking example:  
SAB BRÖCKSKES · D-VIERSSEN · SABIX® R 600 FRNC 12 x 1,5 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Sheath material:	special SABIX®
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » fulfills fire protection requirements R15 (EL1A)  
acc. to EN 45545-2 for hazard levels HL1-3
- » flame retardant acc. to UN/ECE R118
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 3000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Tested at reference types.

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66000205	2 x 0,50	0,21	4,8	9,6	33
66000305	3 x 0,50	0,21	5,1	14,4	38
66000405	4 x 0,50	0,21	5,5	19,2	46
66000505	5 x 0,50	0,21	6,2	24,0	57
66000705	7 x 0,50	0,21	6,7	33,6	69
66001005	10 x 0,50	0,21	8,6	48,0	96
66001205	12 x 0,50	0,21	9,1	57,6	110
66001805	18 x 0,50	0,21	10,7	86,4	169
66002505	25 x 0,50	0,21	12,9	120,0	221
66003205	32 x 0,50	0,21	14,0	153,6	287
66000207	2 x 0,75	0,21	5,4	14,4	44
66000307	3 x 0,75	0,21	5,7	21,6	51
66000407	4 x 0,75	0,21	6,4	28,8	63
66000507	5 x 0,75	0,21	7,0	36,0	77
66000707	7 x 0,75	0,21	7,8	50,4	96
66001007	10 x 0,75	0,21	10,0	72,0	144
66001207	12 x 0,75	0,21	10,5	86,4	163
66001807	18 x 0,75	0,21	12,4	129,6	230
66002507	25 x 0,75	0,21	15,1	180,0	316
66003207	32 x 0,75	0,21	16,4	230,4	388
66000210	2 x 1,00	0,21	5,6	19,2	50
66000310	3 x 1,00	0,21	6,1	28,8	62
66000410	4 x 1,00	0,21	6,6	38,4	76
66000510	5 x 1,00	0,21	7,5	48,0	94
66000710	7 x 1,00	0,21	8,1	67,2	117
66001010	10 x 1,00	0,21	10,6	96,0	172
66001210	12 x 1,00	0,21	10,9	115,2	196
66001810	18 x 1,00	0,21	12,9	172,8	280
66002510	25 x 1,00	0,21	15,7	240,0	381
66003210	32 x 1,00	0,21	17,1	307,2	486
66000215	2 x 1,50	0,26	6,4	28,8	69
66000315	3 x 1,50	0,26	6,8	43,2	81
66000415	4 x 1,50	0,26	7,6	57,6	99
66000515	5 x 1,50	0,26	8,3	72,0	124

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66000715	7 x 1,50	0,26	9,2	100,8	170
66001015	10 x 1,50	0,26	12,0	144,0	229
66001215	12 x 1,50	0,26	12,4	172,8	263
66001815	18 x 1,50	0,26	14,8	259,2	289
66002515	25 x 1,50	0,26	18,0	360,0	537
66003215	32 x 1,50	0,26	19,5	460,8	661
66000225	2 x 2,50	0,26	7,8	48,0	105
66000325	3 x 2,50	0,26	8,9	72,0	127
66000425	4 x 2,50	0,26	9,2	96,0	155
66000525	5 x 2,50	0,26	10,1	120,0	199
66000725	7 x 2,50	0,26	11,2	168,0	252
66001025	10 x 2,50	0,26	14,8	240,0	362
66001225	12 x 2,50	0,26	15,3	288,0	416
66001825	18 x 2,50	0,26	18,2	432,0	615
66002525	25 x 2,50	0,26	22,3	600,0	837
66000340	3 x 4,00	0,31	9,7	115,2	185
66000440	4 x 4,00	0,31	10,8	153,6	234
66000540	5 x 4,00	0,31	12,1	192,0	290
66000740	7 x 4,00	0,31	13,4	268,8	375
66000360	3 x 6,00	0,31	11,4	172,8	270
66000460	4 x 6,00	0,31	12,7	230,4	336
66000560	5 x 6,00	0,31	14,2	288,0	415
66000760	7 x 6,00	0,31	15,7	403,2	545
66000461	4 x 10,0	0,41	16,7	384,0	579
66000561	5 x 10,0	0,41	18,6	480,0	740
66000761	7 x 10,0	0,41	20,7	672,0	960
66000462	4 x 16,0	0,41	20,6	614,4	887
66000562	5 x 16,0	0,41	23,0	768,0	1105
66000762	7 x 16,0	0,41	25,5	1075,2	1445
66000463	4 x 25,0	0,41	24,9	960,0	1388
66000563	5 x 25,0	0,41	28,1	1200,0	1750
66000464	4 x 35,0	0,41	28,8	1344,0	1927
66000564	5 x 35,0	0,41	32,5	1680,0	2413

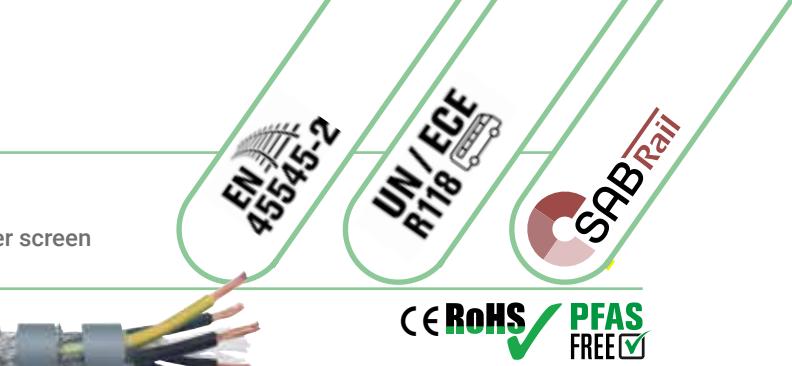
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® R 638 FRNC

SABIX® Rail Control with numbered cores and overall copper screen

SKES · D-VIERSEN · SABIX® R 638 FRNC 5 x 1,5 mm<sup>2</sup> CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 638 FRNC 5 x 1,5 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	special SABIX®
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » fulfills fire protection requirements R15 (EL1A)  
acc. to EN 45545-2 for hazard levels HL1-3
- » flame retardant acc. to UN/ECE R118
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 3000 V core/screen 2000 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Tested at reference types.

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66380205	2 x 0,50	0,21	5,3	25,5	38
66380305	3 x 0,50	0,21	5,6	30,7	45
66380405	4 x 0,50	0,21	6,2	48,0	61
66380505	5 x 0,50	0,21	6,7	55,9	70
66380705	7 x 0,50	0,21	7,2	71,1	81
66381205	12 x 0,50	0,21	9,6	108,1	150
66381805	18 x 0,50	0,21	11,4	143,5	206
66382505	25 x 0,50	0,21	13,8	189,7	272
66380207	2 x 0,75	0,21	6,1	31,1	50
66380307	3 x 0,75	0,21	6,4	50,6	61
66380407	4 x 0,75	0,21	6,9	61,1	73
66380507	5 x 0,75	0,21	7,7	73,7	96
66380707	7 x 0,75	0,21	8,3	90,9	121
66381207	12 x 0,75	0,21	11,2	142,4	193
66381807	18 x 0,75	0,21	13,3	197,9	280
66382507	25 x 0,75	0,21	16,2	284,6	395
66380210	2 x 1,00	0,21	6,3	48,0	56
66380310	3 x 1,00	0,21	6,6	58,2	68
66380410	4 x 1,00	0,21	7,1	75,7	94
66380510	5 x 1,00	0,21	8,0	86,1	110
66380710	7 x 1,00	0,21	8,6	108,2	138
66381210	12 x 1,00	0,21	11,8	172,1	226
66381810	18 x 1,00	0,21	13,8	242,1	315
66382510	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 ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66380215	2 x 1,50	0,26	6,9	60,7	63
66380315	3 x 1,50	0,26	7,2	80,5	90
66380415	4 x 1,50	0,26	8,1	95,6	110
66380515	5 x 1,50	0,26	9,0	113,2	135
66380715	7 x 1,50	0,26	9,7	151,2	178
66381215	12 x 1,50	0,26	13,9	240,8	300
66381815	18 x 1,50	0,26	15,7	362,3	454
66382515	25 x 1,50	0,26	19,1	492,1	613
66380225	2 x 2,50	0,26	8,3	86,3	100
66380325	3 x 2,50	0,26	9,0	113,0	128
66380425	4 x 2,50	0,26	9,7	146,2	163
66380525	5 x 2,50	0,26	11,0	175,0	215
66380725	7 x 2,50	0,26	12,1	225,1	276
66381225	12 x 2,50	0,26	16,4	392,0	466
66381825	18 x 2,50	0,26	19,3	564,1	666
66382525	25 x 2,50	0,26	23,4	770,1	931
66380440	4 x 4,00	0,31	11,5	210,7	250
66380540	5 x 4,00	0,31	12,8	260,0	309
66380460	4 x 6,00	0,31	13,6	298,4	353
66380560	5 x 6,00	0,31	15,1	358,7	420
66380461	4 x 10,00	0,41	17,8	517,1	616
66380462	4 x 16,00	0,41	21,9	756,0	917

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® R 605 FRNC

SABIX® Rail Data



D-VIERSEN · SABIX® R 605 FRNC 32 x 0,5 mm² CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0,5 mm² CE

### Construction:

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

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » fulfills fire protection requirements R15 (EL1A) acc. to EN 45545-2 for hazard levels HL1-3
- » fulfills fire protection requirements acc. to NFPA 130 section 8.6.7.1.1.1 and section 12.2.1 (1)
- » flame retardant acc. to UN/ECE R118
- » PFAS free

### Technical Data:

Peak operating voltage:	< 0.25 mm² = max. 350 V ≥ 0.25 mm² = max. 500 V
Testing voltage:	core/core 1500 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to UL 1685 section 12, FT4/IEEE 1202. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66050214	2 x 0,14	3,1	2,7	13
66050314	3 x 0,14	3,3	4,0	15
66050414	4 x 0,14	3,5	5,4	18
66050514	5 x 0,14	3,8	6,7	21
66050714	7 x 0,14	4,1	9,4	25
66050814	8 x 0,14	5,0	10,8	32
66051214	12 x 0,14	5,3	16,1	38
66051414	14 x 0,14	5,5	18,8	42
66051614	16 x 0,14	6,0	21,5	51
66051814	18 x 0,14	6,3	24,2	56
66052114	21 x 0,14	6,9	28,2	65
66052414	24 x 0,14	7,3	32,3	70
66052714	27 x 0,14	7,7	36,3	80
66053014	30 x 0,14	7,9	40,3	86
66053214	32 x 0,14	8,2	43,0	92
66053614	36 x 0,14	8,5	48,4	101
66054014	40 x 0,14	9,1	53,8	112
66054414	44 x 0,14	9,5	59,1	119
66055014	50 x 0,14	10,3	67,2	142
66056114	61 x 0,14	10,9	82,0	165
66050225	2 x 0,25	3,4	4,8	17
66050325	3 x 0,25	3,6	7,2	20
66050425	4 x 0,25	3,9	9,6	24
66050525	5 x 0,25	4,2	12,0	29
66050725	7 x 0,25	4,6	16,8	35
66050825	8 x 0,25	5,2	19,2	43
66051225	12 x 0,25	6,1	28,8	57
66051425	14 x 0,25	6,4	33,6	64
66051625	16 x 0,25	6,7	38,4	72

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66051825	18 x 0,25	7,1	43,2	80
66052125	21 x 0,25	7,9	50,4	96
66052425	24 x 0,25	8,4	57,6	104
66052725	27 x 0,25	8,6	64,8	114
66053025	30 x 0,25	8,9	72,0	125
66053225	32 x 0,25	9,2	76,8	132
66053625	36 x 0,25	10,0	86,4	156
66054025	40 x 0,25	10,6	96,0	173
66054425	44 x 0,25	11,1	105,6	184
66055025	50 x 0,25	11,6	120,0	204
66056125	61 x 0,25	12,3	146,4	241
66050234	2 x 0,34	4,0	6,5	24
66050334	3 x 0,34	4,2	9,8	27
66050434	4 x 0,34	4,6	13,1	33
66050534	5 x 0,34	5,0	16,3	40
66050734	7 x 0,34	5,5	22,8	49
66050834	8 x 0,34	6,5	26,1	63
66051234	12 x 0,34	7,3	39,2	80
66051434	14 x 0,34	7,9	45,7	94
66051634	16 x 0,34	8,3	52,2	106
66051834	18 x 0,34	8,8	58,8	117
66052134	21 x 0,34	10,0	68,5	146
66052434	24 x 0,34	10,6	78,3	157
66052734	27 x 0,34	10,8	88,1	172
66053034	30 x 0,34	11,2	97,9	187
66053234	32 x 0,34	11,6	104,4	199
66053634	36 x 0,34	12,1	117,5	220
66054034	40 x 0,34	12,9	130,6	244
66054434	44 x 0,34	13,5	143,6	261

NFPA 130 / FT4 only up to outer-Ø < 13 mm.  
Continued on next page

Tested at reference types.

# Halogen-free Cables

## SABIX® R 605 FRNC

SABIX® Rail Data



CE RoHS PFAS FREE

D-VIERSEN · SABIX® R 605 FRNC 32 x 0,5 mm² CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0,5 mm² CE

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66055034	50 x 0,34	14,5	163,2	304
66056134	61 x 0,34	15,4	199,1	358
66050250	2 x 0,50	4,3	9,6	28
66050350	3 x 0,50	4,5	14,4	33
66050450	4 x 0,50	4,9	19,2	40
66050550	5 x 0,50	5,4	24,0	49
66050750	7 x 0,50	6,1	33,6	63
66050850	8 x 0,50	7,1	38,4	79
66051250	12 x 0,50	8,1	57,6	102
66051450	14 x 0,50	8,5	67,2	115
66051650	16 x 0,50	9,0	76,8	131
66051850	18 x 0,50	9,5	86,4	145
66052150	21 x 0,50	10,9	100,8	180
66052450	24 x 0,50	11,5	115,2	195
66052750	27 x 0,50	11,7	129,6	213
66053050	30 x 0,50	12,1	144,0	232
66053250	32 x 0,50	12,6	153,6	248
66053650	36 x 0,50	13,1	172,8	274
66054450	44 x 0,50	15,1	211,2	341
66055050	50 x 0,50	15,7	240,0	411
66056150	61 x 0,50	16,7	292,8	448
66050275	2 x 0,75	4,9	14,4	38
66050375	3 x 0,75	5,2	21,6	45
66050475	4 x 0,75	5,9	28,8	58
66050575	5 x 0,75	6,4	36,0	70
66050775	7 x 0,75	7,0	50,4	87
66050875	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 ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66051275	12 x 0,75	9,4	86,4	142
66051475	14 x 0,75	10,3	100,8	170
66051675	16 x 0,75	10,8	115,2	192
66051875	18 x 0,75	11,4	129,6	213
66052175	21 x 0,75	12,5	151,2	248
66052475	24 x 0,75	13,3	172,8	270
66052775	27 x 0,75	13,6	194,4	297
66053075	30 x 0,75	14,5	216,0	339
66053275	32 x 0,75	15,0	230,4	360
66053675	36 x 0,75	15,6	259,2	399
66054075	40 x 0,75	16,7	288,0	443
66054475	44 x 0,75	17,5	316,8	475
66055075	50 x 0,75	18,3	360,0	530
66056175	61 x 0,75	19,8	439,2	648
66050280	2 x 1,00	5,1	19,2	43
66050380	3 x 1,00	5,4	28,8	53
66050480	4 x 1,00	6,1	38,4	68
66050580	5 x 1,00	6,7	48,0	82
66050680	6 x 1,00	7,3	57,6	97
66050780	7 x 1,00	7,3	67,2	104
66050285	2 x 1,50	5,6	28,8	55
66050385	3 x 1,50	6,1	43,2	71
66050485	4 x 1,50	6,7	57,6	87
66050585	5 x 1,50	7,7	72,0	113
66050685	6 x 1,50	8,4	86,4	134
66050785	7 x 1,50	8,4	100,8	144

NFPA 130 / FT4 only up to outer-Ø < 13 mm.  
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® R 615 FRNC

SABIX® Rail Data with overall copper screen

SEN · SABIX® R 615 FRNC 5 x 0,5 mm<sup>2</sup> CE



CE RoHS ✓ PFAS FREE ✓

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® R 615 FRNC 5 x 0,5 mm<sup>2</sup> CE

### Construction:

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

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » fulfills fire protection requirements R15 (EL1A) acc. to EN 45545-2 for hazard levels HL1-3
- » fulfills fire protection requirements acc. to NFPA 130 section 8.6.7.1.1.1 and section 12.2.1 (1)
- » tested acc. to American ASTM standard
- » flame retardant acc. to UN/ECE R118
- » PFAS free

### Technical Data:

Peak operating voltage:	< 0.25 mm <sup>2</sup> = max. 350 V ≥ 0.25 mm <sup>2</sup> = max. 500 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to UL 1685 section 12, FT4/IEEE 1202. Burning tests acc. to ASTM E 162-09. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034 + ASTM E 662-09
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Tested at reference types.

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66150214	2 x 0,14	3,6	12,6	21
66150314	3 x 0,14	3,8	14,1	22
66150414	4 x 0,14	4,0	15,9	24
66150514	5 x 0,14	4,3	19,5	29
66150714	7 x 0,14	4,6	24,0	33
66150814	8 x 0,14	5,4	26,0	43
66151014	10 x 0,14	5,8	29,0	47
66151214	12 x 0,14	6,2	32,0	54
66151414	14 x 0,14	6,4	35,0	60
66151614	16 x 0,14	6,7	49,0	67
66151814	18 x 0,14	7,0	54,0	72
66152114	21 x 0,14	7,6	60,0	84
66152414	24 x 0,14	8,0	74,0	89
66152714	27 x 0,14	8,6	85,0	104
66153014	30 x 0,14	8,8	98,0	112
66153214	32 x 0,14	9,1	108,0	118
66153614	36 x 0,14	9,4	117,0	128
66154014	40 x 0,14	10,0	126,0	141
66154414	44 x 0,14	10,6	138,0	162
66155014	50 x 0,14	11,0	150,0	175
66155214	52 x 0,14	11,0	155,0	179
66156114	61 x 0,14	11,6	176,0	203

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66150225	2 x 0,25	3,9	15,0	24
66150325	3 x 0,25	4,1	18,0	26
66150425	4 x 0,25	4,4	22,0	31
66150525	5 x 0,25	4,9	25,0	38
66150725	7 x 0,25	5,3	32,0	46
66150825	8 x 0,25	6,1	35,0	58
66151025	10 x 0,25	6,6	42,0	64
66151225	12 x 0,25	6,8	50,0	72
66151425	14 x 0,25	7,1	64,0	80
66151625	16 x 0,25	7,4	71,0	89
66151825	18 x 0,25	7,8	80,0	98
66152125	21 x 0,25	8,8	105,0	122
66152425	24 x 0,25	9,3	115,0	130
66152725	27 x 0,25	9,5	120,0	142
66153025	30 x 0,25	9,8	132,0	152
66153225	32 x 0,25	10,1	138,0	161
66153625	36 x 0,25	10,7	152,0	189
66154025	40 x 0,25	11,3	164,0	209
66154425	44 x 0,25	11,8	180,0	221
66155025	50 x 0,25	12,7	222,0	254
66155225	52 x 0,25	12,7	234,0	260
66156125	61 x 0,25	13,4	287,0	295

NFPA 130 / FT4 only up to outer-Ø < 13 mm.  
Continued on next page

# Halogen-free Cables

## SABIX® R 615 FRNC

SABIX® Rail Data with overall copper screen

SEN · SABIX® R 615 FRNC 5 x 0,5 mm<sup>2</sup> CE



CE RoHS ✓ PFAS FREE ✓

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® R 615 FRNC 5 x 0,5 mm<sup>2</sup> CE

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66150234	2 x 0,34	4,5	17,0	31
66150334	3 x 0,34	4,9	21,0	36
66150434	4 x 0,34	5,3	25,0	43
66150534	5 x 0,34	5,7	30,0	51
66150734	7 x 0,34	6,4	42,0	63
66150834	8 x 0,34	7,2	45,0	78
66151034	10 x 0,34	7,8	63,0	87
66151234	12 x 0,34	8,0	70,0	97
66151434	14 x 0,34	8,8	78,0	118
66151634	16 x 0,34	9,2	87,0	129
66151834	18 x 0,34	9,7	108,0	144
66152134	21 x 0,34	10,7	127,0	177
66152434	24 x 0,34	11,3	140,0	193
66152734	27 x 0,34	11,5	151,0	207
66153034	30 x 0,34	11,9	162,0	222
66153234	32 x 0,34	12,7	171,0	247
66153634	36 x 0,34	13,2	188,0	272
66154034	40 x 0,34	14,0	208,0	301
66154434	44 x 0,34	14,6	223,0	319
66155034	50 x 0,34	15,8	248,0	386
66155234	52 x 0,34	15,8	273,0	395
66156134	61 x 0,34	16,7	316,0	366
66150250	2 x 0,50	5,0	23,5	39
66150350	3 x 0,50	5,2	28,4	42
66150450	4 x 0,50	5,6	35,1	50
66150550	5 x 0,50	6,3	41,6	63
66150750	7 x 0,50	6,8	53,1	76
66150850	8 x 0,50	7,8	62,0	94
66151050	10 x 0,50	8,8	74,5	113
66151250	12 x 0,50	9,0	84,2	126
66151450	14 x 0,50	9,4	93,5	139
66151650	16 x 0,50	9,9	105,9	156
66151850	18 x 0,50	10,6	133,9	185
66152150	21 x 0,50	11,6	154,9	220
66152450	24 x 0,50	12,6	169,7	240

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66152750	27 x 0,50	12,8	184,2	260
66153050	30 x 0,50	13,2	203,6	283
66153250	32 x 0,50	13,7	213,5	299
66153650	36 x 0,50	14,2	239,0	330
66154450	44 x 0,50	16,4	309,2	422
66155050	50 x 0,50	17,0	349,7	469
66156150	61 x 0,50	18,0	403,7	540
66150275	2 x 0,75	5,6	30,3	48
66150375	3 x 0,75	6,1	37,6	56
66150475	4 x 0,75	6,6	48,3	74
66150575	5 x 0,75	7,1	55,7	81
66150775	7 x 0,75	7,7	74,0	101
66150875	8 x 0,75	9,2	83,8	132
66151275	12 x 0,75	10,5	133,9	179
66151475	14 x 0,75	11,0	148,5	198
66151675	16 x 0,75	11,5	169,2	224
66151875	18 x 0,75	12,4	184,0	257
66152175	21 x 0,75	13,6	211,0	297
66152475	24 x 0,75	14,4	239,1	324
66152775	27 x 0,75	14,7	260,9	352
66153075	30 x 0,75	15,8	313,4	417
66153275	32 x 0,75	16,3	328,3	440
66153675	36 x 0,75	16,9	357,8	479
66150280	2 x 1,00	5,8	35,2	53
66150380	3 x 1,00	6,3	46,4	65
66150480	4 x 1,00	6,8	57,9	78
66150580	5 x 1,00	7,4	69,6	95
66150680	6 x 1,00	8,0	81,3	111
66150780	7 x 1,00	8,0	90,9	117
66150285	2 x 1,50	6,6	46,5	71
66150385	3 x 1,50	6,8	62,7	90
66150485	4 x 1,50	7,4	79,2	98
66150585	5 x 1,50	8,6	95,8	130
66150685	6 x 1,50	9,3	112,7	152
66150785	7 x 1,50	9,3	127,1	162

NFPA 130 / FT4 only up to outer-Ø < 13 mm.

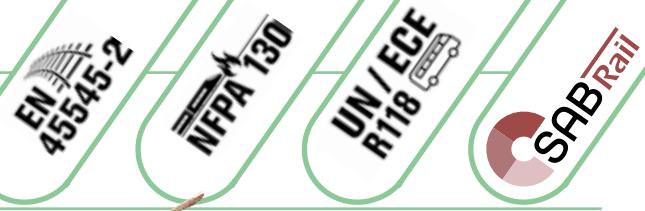
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® R 645 FRNC TP

SABIX® Rail Data paired with overall copper screen

645 FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> CE



CE RoHS PFAS FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® R 645 FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> CE

### Construction:

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

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » fulfills fire protection requirements R15 (EL1A) acc. to EN 45545-2 for hazard levels HL1-3
- » fulfills fire protection requirements acc. to NFPA 130 section 8.6.7.1.1.1 and section 12.2.1 (1)
- » tested acc. to American ASTM standard
- » flame retardant acc. to UN/ECE R118
- » good transmission rates and crosstalk attenuation
- » PFAS free

### Technical Data:

Peak operating voltage:	< 0.25 mm <sup>2</sup> = max. 350 V ≥ 0.25 mm <sup>2</sup> = max. 500 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to UL 1685 section 12, FT4/IEEE 1202. Burning tests acc. to ASTM E 162-09. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034 + ASTM E 662-09
Flexibility:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Tested at reference types.

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66450214	2 x 2 x 0,14	5,2	19,1	38
66450314	3 x 2 x 0,14	5,7	23,4	44
66450414	4 x 2 x 0,14	6,5	27,8	54
66450514	5 x 2 x 0,14	7,0	31,9	64
66450614	6 x 2 x 0,14	7,2	36,2	71
66450814	8 x 2 x 0,14	7,8	43,4	83
66451014	10 x 2 x 0,14	8,9	50,6	105
66451214	12 x 2 x 0,14	9,7	58,2	121
66451614	16 x 2 x 0,14	10,5	71,4	147
66451814	18 x 2 x 0,14	11,1	92,8	174
66452414	24 x 2 x 0,14	12,8	114,8	223
66450225	2 x 2 x 0,25	5,7	24,9	46
66450325	3 x 2 x 0,25	6,4	31,4	61
66450425	4 x 2 x 0,25	7,2	39,3	72
66450525	5 x 2 x 0,25	7,7	45,8	83
66450625	6 x 2 x 0,25	7,9	50,7	92
66450825	8 x 2 x 0,25	9,0	62,1	119
66451025	10 x 2 x 0,25	9,8	73,9	138
66451225	12 x 2 x 0,25	10,9	102,3	173
66451625	16 x 2 x 0,25	11,9	126,8	213
66451825	18 x 2 x 0,25	12,7	136,6	245
66452425	24 x 2 x 0,25	14,2	170,3	296
66450234	2 x 2 x 0,34	6,8	31,5	63
66450334	3 x 2 x 0,34	7,4	39,7	79
66450434	4 x 2 x 0,34	8,8	49,8	102
66450534	5 x 2 x 0,34	9,5	58,5	121
66450634	6 x 2 x 0,34	9,7	65,1	125

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
66450834	8 x 2 x 0,34	10,6	80,7	159
66451234	12 x 2 x 0,34	13,4	133,1	248
66451634	16 x 2 x 0,34	14,6	165,0	305
66451834	18 x 2 x 0,34	15,1	178,3	334
66452434	24 x 2 x 0,34	17,6	255,1	449
66450250	2 x 2 x 0,50	7,2	39,3	72
66450350	3 x 2 x 0,50	7,9	50,1	92
66450450	4 x 2 x 0,50	9,4	64,6	119
66450550	5 x 2 x 0,50	10,2	76,3	141
66450650	6 x 2 x 0,50	10,4	86,0	155
66450850	8 x 2 x 0,50	11,4	126,6	179
66451050	10 x 2 x 0,50	13,2	146,5	252
66451250	12 x 2 x 0,50	14,4	175,6	294
66451650	16 x 2 x 0,50	16,3	241,3	380
66451850	18 x 2 x 0,50	16,9	261,0	436
66452450	24 x 2 x 0,50	19,0	330,4	508
66450275	2 x 2 x 0,75	8,5	52,4	102
66450375	3 x 2 x 0,75	9,4	69,4	128
66450475	4 x 2 x 0,75	10,9	101,9	166
66450575	5 x 2 x 0,75	11,7	121,9	201
66450675	6 x 2 x 0,75	12,5	136,5	239
66450875	8 x 2 x 0,75	13,7	170,1	279
66451275	12 x 2 x 0,75	17,1	261,2	419
66451675	16 x 2 x 0,75	18,6	329,9	522
66451875	18 x 2 x 0,75	19,3	369,3	580
66452475	24 x 2 x 0,75	21,8	469,2	714

NFPA 130 / FT4 only up to outer-Ø < 13 mm.  
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® R flex

continuously flexible SABIX® Rail cable with numbered cores

BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0,75 mm<sup>2</sup> CE 



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0,75 mm<sup>2</sup> CE

**Application:** Suitable for flexible and protected installation in the interior for door control or in protecting tubes for outdoor laying at the bogie, railway machines or as connection cable between the wagons. Appropriate for light and medium mechanical stress.

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	special Polymer
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores. Twisted pairs type without green-yellow earth wire
Stranding:	in layers resp. pairwise
Wrapping:	foil
Screen:	tinned copper braiding (if existing)
Sheath material:	SABIX® Ultra
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » halogen-free
- » continuously flexible
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » good ozone, UV and weather resistance
- » good oil and fuel resistance
- » good acid and alkalines resistance
- » fulfills fire protection requirements R15 (EL1A) and R16 (EL1B)  
acc. to EN 45545-2 for hazard levels HL1-2
- » flame retardant acc. to UN/ECE R118
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V	
Testing voltage:	core/core 2000 V core/screen 2000 V	
Min. bending radius	unshielded fixed laying: 4 x d 6 x d continuously flexible: 12 x d	shielded 5 x d 10 x d 15 x d
Temperature range	-50/+90 °C	
fixed laying: flexible application:	-40/+90 °C	
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2	
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to UL 1685 section 12, FT4/IEEE 1202. Burning tests acc. to ASTM E 162-09. Flame retardant acc. to ISO 6722 (UN/ECE R118)	
Toxicity:	acc. to EN 50305 + VDE 0260-305	
Smoke density:	acc. to IEC 61034 + VDE 0482-1034	
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1	
Flexibility:	very good	
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“	

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable screened</b>					
66701002	2 x 0,50	0,16	5,3	24,8	46
66701003	3 x 0,50	0,16	5,5	29,8	51
66701005	5 x 0,50	0,16	6,5	40,3	71
66701007	7 x 0,50	0,16	7,4	53,8	91
66701018	18 x 0,50	0,16	10,8	132,5	200
66701032	32 x 0,50	0,16	13,7	214,5	317
66701103	3 x 0,75	0,16	6,1	37,7	62
66701104	4 x 0,75	0,16	6,7	46,2	76
66701105	5 x 0,75	0,16	7,2	55,9	90
66701125	25 x 0,75	0,16	14,5	242,3	351
66701204	4 x 1,00	0,16	6,9	56,0	87
66701207	7 x 1,00	0,16	8,7	90,1	137
66701212	12 x 1,00	0,16	11,0	161,6	224
66701303	3 x 1,50	0,16	7,1	61,0	92
66701304	4 x 1,50	0,16	7,6	78,0	111
66701305	5 x 1,50	0,16	8,5	94,8	137
66701318	18 x 1,50	0,16	14,4	321,3	417
66701404	4 x 2,50	0,16	9,7	122,5	174
66701405	5 x 2,50	0,16	11,0	166,4	235
66701407	7 x 2,50	0,16	13,2	288,3	324
66701412	12 x 2,50	0,16	15,7	356,2	465
66701504	4 x 4,00	0,16	11,4	200,6	260
66701604	4 x 6,00	0,21	13,9	291,6	380
66701704	4 x 10,00	0,21	16,8	483,2	605
66701804	4 x 16,00	0,21	20,2	730,4	885
66701904	4 x 25,00	0,21	24,1	1113,6	1293

Other dimensions and colours are possible on request.

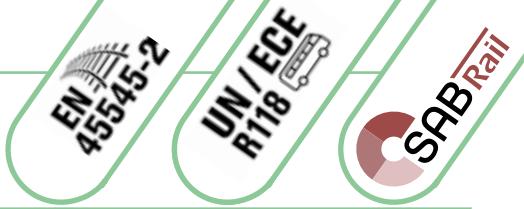
item no.	no. of cores x cross section n x 2 mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-pair cable screened</b>					
66703002	2 x 2 x 0,50	0,16	7,0	36,9	69
66703003	3 x 2 x 0,50	0,16	8,0	49,4	90
66703004	4 x 2 x 0,50	0,16	10,0	65,3	121
66703006	6 x 2 x 0,50	0,16	10,4	103,4	161
66703008	8 x 2 x 0,50	0,16	12,5	129,4	229
66703012	12 x 2 x 0,50	0,16	14,3	177,1	278
66703103	3 x 2 x 0,75	0,16	8,9	69,2	113
66703108	8 x 2 x 0,75	0,16	14,6	177,6	306
66703202	2 x 2 x 1,00	0,16	8,9	64,4	111
66703203	3 x 2 x 1,00	0,16	9,5	83,9	135
66703206	6 x 2 x 1,00	0,16	12,6	168,0	249
66703208	8 x 2 x 1,00	0,16	15,1	220,8	357
66703302	2 x 2 x 1,50	0,16	10,3	103,2	157
66703304	4 x 2 x 1,50	0,16	12,7	168,1	243
66703306	6 x 2 x 1,50	0,16	14,3	234,7	345

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SAB RailLine 560

continuously flexible SABIX® Rail Cable for outdoor use,  
cross linked type



D-VIERSEN · SAB RailLine 560 5x0,75mm² C 6560-1105 CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · SAB RailLine 560 5x0,75mm² C 6560-1105 CE

**Application:** For flexible outdoor installation, e.g. bogies, railway machines. Also for flexible application inside rolling stock, e.g. door systems.

### Construction:

Conductor:	tinned copper strands, extra fine wires
Insulation:	SABIX® X
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers resp. pairwise
Wrapping:	foil
Screen:	tinned copper braiding (if existing)
Sheath material:	SABIX® X
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » weather resistant
- » continuously flexible
- » good ozone, UV and weather resistance
- » good oil and fuel resistance
- » good acid and alkalines resistance
- » fulfills fire protection requirements R15 (EL1A) and R16 (EL1B) acc. to EN 45545-2 for hazard levels HL1-3
- » flame retardant acc. to UN/ECE R118
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V resp. 0.6/1 kV
Testing voltage:	300/500 V 0.6/1 kV core/core 2000 V 4000 V core/screen 2000 V 4000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
continuously flexible:	10 x d
Torsion angle:	± 15°/1 m
Temperature range	-50/+90 °C
fixed laying:	-50/+90 °C
flexible application:	-50/+90 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2.
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Weather resistance:	very good
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	nominal voltage	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable unscreened</b>					
65600002	2 x 0,50	300/500 V	4,9	9,6	37
65600105	5 x 0,75	300/500 V	6,4	36,0	73
65600203	3 x 1,00	300/500 V	5,3	28,8	55
65600205	5 x 1,00	300/500 V	6,7	48,0	86
65600207	7 x 1,00	300/500 V	7,9	67,2	127
65600225	25 x 1,00	300/500 V	13,4	240,0	346
65600304	4 x 1,50	300/500 V	6,9	57,6	101
65600307	7 x 1,50	300/500 V	9,3	100,8	175
65609001	5 x 3,50	0,6/1 kV	33,2	1680,0	2299

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	nominal voltage	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable screened</b>					
65601002	2 x 0,50	300/500 V	4,9	24,7	42
65601003	3 x 0,50	300/500 V	5,3	29,7	51
65601005	5 x 0,50	300/500 V	6,1	40,2	67
65601012	12 x 0,50	300/500 V	8,5	85,9	132
65601105	5 x 0,75	300/500 V	6,8	53,6	87
65601204	4 x 1,00	300/500 V	6,6	57,0	86
65601213	13 x 1,00	300/500 V	10,8	169,2	235
65601303	3 x 1,50	300/500 V	7,3	63,4	99
65601305	5 x 1,50	300/500 V	8,3	94,6	152
65601307	7 x 1,50	300/500 V	9,7	127,4	195
65609002	5 x 3,50	0,6/1 kV	34,1	1885,3	2455

Other dimensions and colours are possible on request.

item no.	no. of pairs x cross section n x 2 x mm²	nominal voltage	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-pair cable screened</b>					
65609004	6 x 2 x 0,25	300/500 V	8,0	46,3	98
65609005	12 x 2 x 0,34	300/500 V	11,9	131,4	204
65603002	2 x 2 x 0,50	300/500 V	6,7	35,5	69
65603004	4 x 2 x 0,50	300/500 V	8,5	60,1	108

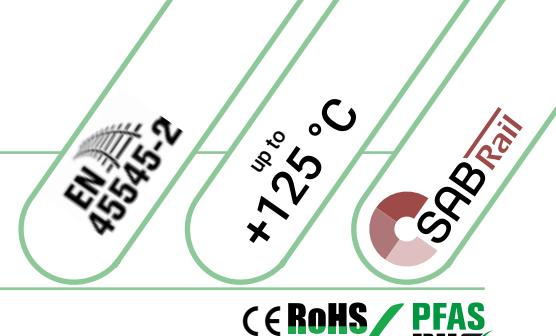
item no.	no. of pairs x cross section n x 2 x mm²	nominal voltage	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-pair cable screened</b>					
65603006	6 x 2 x 0,50	300/500 V	9,8	84,3	153
65603008	8 x 2 x 0,50	300/500 V	12,3	129,3	230
65603103	3 x 2 x 0,75	300/500 V	8,4	65,9	124

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 280 FRNC X

wiring cable / control cable, cross linked type



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



marking example:

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

CKSKES · D-VIERSEN · SABIX® A 280 FRNC X 5 x 0,5 mm² CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 5 x 0,5 mm² CE

### Construction:

**Conductor:** tinned copper strands, extra fine wires acc. to IEC 60228, VDE 0295, class 5

**Insulation:** special SABIX®

**Single conductor:**

Colour code: white (similar RAL 9010)

**Multi-core cable:**

Colour code: white cores with consecutive numbers acc. to EN 50334 + VDE 0293-334

**Multi-core cable:**

Stranding: in layers

**Multi-core cable:**

Sheath material: special SABIX®

**Multi-core cable:**

Sheath colour: black (RAL 9005)

### Technical Data:

**Nominal voltage:** Uo/U 300/500 V

**Testing voltage:** core/core 2000 V

**Min. bending radius:** 5 x d

**Temperature range during protected, fixed laying:** -40/+125 °C (single conductor)  
-50/+125 °C (multi-core cable)

**Halogen-free:**

acc. to EN 50306-1 + EN 50264-1 are fulfilled.  
Development of HCl is < 0,5% acc. to IEC 60754-1.  
pH-value is > 4,3 acc. to IEC 60754-2.  
Conductivity is < 10,0 µS/mm acc. to IEC 60754-2.  
Fluoride content < 0,1% acc. to IEC 60684-2

**Fire performance:** No flame propagation  
acc. to IEC 60332-3-24 + VDE 0482-332-3-24  
resp. IEC 60332-3-25 + VDE 0482-332-3-25  
and EN 50305 + VDE 0260-305 section 9.1.2.  
Flame retardant and self-extinguishing  
acc. to IEC 60332-1-2 + VDE 0482-332-1-2

**Toxicity:**

acc. to EN 50305 + VDE 0260-305

**Smoke density:** acc. to IEC 61034 + VDE 0482-1034

**Absence of harmful substances:** acc. to RoHS directive of the European Union,  
see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » good ozone resistance
- » good oil and chemical resistance
- » fulfills fire protection requirements R15 (EL1A)  
acc. to EN 45545-2 for hazard levels HL1
- » PFAS free

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km	ohmic resistance at 20 °C max. Ω/km	heating value approx. kWh/km
62800105	1 x 0,50	0,21	1,7	4,8	7	40,1	13,0
62800305	3 x 0,50	0,21	4,7	14,4	35	40,1	115
62800505	5 x 0,50	0,21	5,8	24,0	50	40,1	170
62800805	8 x 0,50	0,21	7,3	38,4	83	40,1	246
62801005	10 x 0,50	0,21	8,1	48,0	97	40,1	275
62801205	12 x 0,50	0,21	8,4	57,6	112	40,1	306
62800607	6 x 0,75	0,21	7,2	43,2	86	26,7	237
62800807	8 x 0,75	0,21	7,3	57,6	101	26,7	245
62801007	10 x 0,75	0,21	9,4	72,0	133	26,7	345
62800110	1 x 1,00	0,21	2,1	9,6	12	20,0	16,0
62800310	3 x 1,00	0,21	5,5	28,8	55	20,0	162
62800410	4 x 1,00	0,21	6,2	38,4	71	20,0	186
62800610	6 x 1,00	0,21	7,5	57,6	101	20,0	252
62800810	8 x 1,00	0,21	9,0	76,8	135	20,0	338
62801010	10 x 1,00	0,21	10,1	96,0	164	20,0	402
62800115	1 x 1,50	0,21	2,5	14,4	17	13,7	22,5
62800315	3 x 1,50	0,21	6,6	43,2	68	13,7	210
62800125	1 x 2,50	0,26	3,1	24,0	27	8,21	34,0

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 285 FRNC X

control cable with numbered cores and overall copper screen,  
cross linked type

· D-VIERSEN · SABIX® A 285 FRNC X 5 x 0,5 mm² CE



CE RoHS PFAS  
FREE

marking example:

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

### Construction:

Conductor:	tinned copper strands, fine wires acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	white cores with consecutive numbers acc. to EN 50334 + VDE 0293-334
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	special SABIX®
Sheath colour:	black (RAL 9005)

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius:	10 x d
Temperature range during protected, fixed laying:	-50/+125 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoride content < 0,1% acc. to IEC 60684-2.
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2.
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » good ozone resistance
- » good oil and chemical resistance
- » fulfills fire protection requirements R15 (EL1A)  
acc. to EN 45545-2 for hazard levels HL1-3
- » PFAS free

item no.	no. of cores x cross section n x mm²	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km	ohmic resistance at 20 °C max. Ω/km	heating value approx. kWh/km
62850305	3 x 0,50	0,21	5,2	30,3	45	40,1	99
62850505	5 x 0,50	0,21	6,3	43,5	68	40,1	154
62850805	8 x 0,50	0,21	7,9	62,2	97	40,1	237
62851005	10 x 0,50	0,21	8,6	74,3	114	40,1	258
62851205	12 x 0,50	0,21	8,9	86,6	127	40,1	288
62850607	6 x 0,75	0,21	7,7	67,0	101	26,7	231
62850807	8 x 0,75	0,21	9,1	86,6	132	26,7	305
62851007	10 x 0,75	0,21	10,4	119,7	172	26,7	381
62850310	3 x 1,00	0,21	6,2	46,5	66	20,0	155
62850610	6 x 1,00	0,21	8,2	83,7	125	20,0	285
62850810	8 x 1,00	0,21	9,8	106,0	160	20,0	366
62851010	10 x 1,00	0,21	10,8	149,9	200	20,0	401

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 280 FRNC X (FR)

fire resistant control cable, cross linked type

KES · D-VIERSEN · SABIX® A 280 FRNC X (FR) 5 x 0,5 mm² CE



CE RoHS PFAS FREE

marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X (FR) 5 x 0,5 mm² CE

### Construction:

Conductor:	tinned copper strands, fine wires
Wrapping:	mica tape
Insulation:	special SABIX®
Colour code:	white cores with consecutive numbers acc. to EN 50334 + VDE 0293-334
Stranding:	in layers
Sheath material:	special SABIX®
Sheath colour:	black (RAL 9005)

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 2000 V
Min. bending radius:	10 x d
Temperature range during protected, fixed laying:	-50/+125 °C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoric content < 0,1% acc. to IEC 60684-2.
Fire performance:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2.
Insulation integrity in case of fire:	EN 50200 PH 30, VDE 0482-200, IEC 60331-21 FE 180 + VDE 0482-331-21
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » no flame propagation
- » fire resistant
- » flame retardant and self-extinguishing
- » good ozone resistance
- » good oil and chemical resistance
- » fulfills fire protection requirements R15 (EL1A) acc. to EN 45545-2 for hazard levels HL1-3
- » EN 50200 PH 30 + VDE 0482-200, IEC 60331-21+ VDE 0482-331-21
- » PFAS free

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62809502	2 x 0,50	5,8	9,6	47
62809503	3 x 0,50	6,1	14,4	58
62809504	4 x 0,50	6,7	19,2	65
62809505	5 x 0,50	7,4	24,0	79
62809507	7 x 0,50	8,3	33,6	102
62809510	10 x 0,50	10,9	48,0	151
62809512	12 x 0,50	11,2	57,6	172
62809518	18 x 0,50	13,2	86,4	235
62809525	25 x 0,50	16,2	120,0	333
62809602	2 x 0,75	6,5	14,4	56
62809603	3 x 0,75	6,6	21,6	70
62809604	4 x 0,75	7,2	28,8	80
62809605	5 x 0,75	8,2	36,0	101
62809607	7 x 0,75	8,9	50,4	126
62809608	8 x 0,75	10,7	57,6	171
62809610	10 x 0,75	11,7	72,0	186
62809612	12 x 0,75	12,1	86,4	213
62809618	18 x 0,75	14,6	129,6	311
62809625	25 x 0,75	16,2	180,0	415
62809702	2 x 1,00	6,4	19,2	62
62809703	3 x 1,00	6,8	28,8	78
62809704	4 x 1,00	7,4	38,4	89
62809705	5 x 1,00	8,4	48,0	113
62809707	7 x 1,00	9,2	67,2	143

item no.	no. of cores x cross section n x mm²	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
62809710	10 x 1,00	12,1	96,0	210
62809712	12 x 1,00	12,5	115,2	240
62809718	18 x 1,00	15,1	172,8	353
62809725	25 x 1,00	18,1	240,0	472
62809802	2 x 1,50	7,2	28,8	83
62809803	3 x 1,50	7,7	43,2	107
62809804	4 x 1,50	8,6	57,6	128
62809805	5 x 1,50	9,8	72,0	163
62809807	7 x 1,50	10,7	100,8	207
62809808	8 x 1,50	12,5	115,2	264
62809810	10 x 1,50	13,7	144,0	291
62809812	12 x 1,50	14,6	172,8	351
62809818	18 x 1,50	17,1	259,2	495
62809825	25 x 1,50	21,0	360,0	686
62809902	2 x 2,50	8,6	48,0	121
62809903	3 x 2,50	9,1	72,0	156
62809904	4 x 2,50	10,3	96,0	189
62809905	5 x 2,50	11,4	120,0	230
62809907	7 x 2,50	12,5	168,0	297
62809910	10 x 2,50	16,5	240,0	434
62809912	12 x 2,50	17,0	288,0	498
62809918	18 x 2,50	20,5	432,0	731
62809925	25 x 2,50	25,0	600,0	1015

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® BL 405 FRNC

flexible data cable



RNC 16 x 0,5mm<sup>2</sup> - IEC 60332-3-22 - 350V

DNV CE



CE RoHS PFAS  
DNV FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 405 FRNC 16 x 0,5mm<sup>2</sup> - IEC 60332-3-22 - 350V DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands with reference to VDE 0812 resp. IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	with reference to DIN 47100
Stranding:	in layers
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	pigeon blue (RAL 5014)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V
Testing voltage:	core/core 1500 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64050214	2 x 0,14	3,6	2,7	18
64050314	3 x 0,14	3,8	4,0	21
64050414	4 x 0,14	4,1	5,4	24
64050514	5 x 0,14	4,5	6,7	29
64050614	6 x 0,14	4,8	8,1	33
64050714	7 x 0,14	4,8	9,4	35
64050814	8 x 0,14	5,5	10,8	42
64051214	12 x 0,14	6,3	16,1	56
64051614	16 x 0,14	7,0	21,5	70
64050225	2 x 0,25	3,9	4,8	22
64050325	3 x 0,25	4,1	7,2	26
64050425	4 x 0,25	4,5	9,6	31
64050525	5 x 0,25	4,9	12,0	37
64050625	6 x 0,25	5,3	14,4	43
64050725	7 x 0,25	5,3	16,8	46
64050825	8 x 0,25	6,2	19,2	57
64051225	12 x 0,25	7,0	28,8	74
64051625	16 x 0,25	7,7	38,4	93
64050234	2 x 0,34	4,3	6,5	28
64050334	3 x 0,34	4,6	9,8	33
64050434	4 x 0,34	5,0	13,1	39
64050534	5 x 0,34	5,4	16,3	47
64050634	6 x 0,34	6,1	19,6	58

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64050734	7 x 0,34	6,1	22,8	61
64050834	8 x 0,34	7,0	26,1	73
64051234	12 x 0,34	7,8	39,2	95
64051634	16 x 0,34	9,0	52,5	129
64050250	2 x 0,50	4,7	9,6	35
64050350	3 x 0,50	5,0	14,4	42
64050450	4 x 0,50	5,4	19,2	50
64050550	5 x 0,50	6,1	24,0	64
64050650	6 x 0,50	6,7	28,8	74
64050750	7 x 0,50	6,7	33,6	79
64050850	8 x 0,50	7,7	38,4	95
64051250	12 x 0,50	9,0	57,6	133
64051650	16 x 0,50	10,0	76,8	169
64050275	2 x 0,75	5,2	14,4	43
64050375	3 x 0,75	5,5	21,6	52
64050475	4 x 0,75	6,2	28,8	66
64050575	5 x 0,75	6,8	36,0	79
64050675	6 x 0,75	7,4	43,2	92
64050775	7 x 0,75	7,4	50,4	99
64050875	8 x 0,75	8,8	57,6	126
64051275	12 x 0,75	10,1	86,4	166
64051675	16 x 0,75	11,1	115,2	212

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

## SABIX® BL 415 C FRNC

flexible data cable with overall copper screen



0,5mm<sup>2</sup> - IEC 60332-3-22 - 350V

DNV CE



CE RoHS PFAS FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 415 C FRNC 5 x 0,5mm<sup>2</sup> - IEC 60332-3-22 - 350V — DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands with reference to VDE 0812 resp. IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	with reference to DIN 47100
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	pigeon blue (RAL 5014)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64150214	2 x 0,14	4,1	13,0	25
64150314	3 x 0,14	4,3	14,4	29
64150414	4 x 0,14	4,6	19,3	35
64150514	5 x 0,14	5,0	20,7	40
64150614	6 x 0,14	5,3	22,2	43
64150714	7 x 0,14	5,3	23,5	45
64150814	8 x 0,14	6,2	28,4	57
64151214	12 x 0,14	6,8	35,8	70
64151614	16 x 0,14	7,5	43,0	85
64150225	2 x 0,25	4,4	18,6	32
64150325	3 x 0,25	4,6	21,1	36
64150425	4 x 0,25	5,0	23,6	41
64150525	5 x 0,25	5,4	27,9	49
64150625	6 x 0,25	5,8	30,5	54
64150725	7 x 0,25	5,8	32,9	57
64150825	8 x 0,25	6,7	38,8	71
64151225	12 x 0,25	7,5	50,3	89
64151625	16 x 0,25	8,6	62,2	118
64150234	2 x 0,34	4,8	20,5	37
64150334	3 x 0,34	5,1	23,8	42
64150434	4 x 0,34	5,5	29,0	50
64150534	5 x 0,34	6,1	32,4	61
64150634	6 x 0,34	6,6	39,1	71

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64150734	7 x 0,34	6,6	42,4	75
64150834	8 x 0,34	7,5	47,6	88
64151234	12 x 0,34	8,7	65,3	121
64151634	16 x 0,34	9,5	81,2	149
64150250	2 x 0,50	5,2	23,7	43
64150350	3 x 0,50	5,5	30,3	52
64150450	4 x 0,50	6,1	35,3	64
64150550	5 x 0,50	6,6	43,5	77
64150650	6 x 0,50	7,2	50,1	85
64150750	7 x 0,50	7,2	54,9	90
64150850	8 x 0,50	8,6	62,2	116
64151250	12 x 0,50	9,5	86,6	152
64151650	16 x 0,50	10,7	124,5	201
64150275	2 x 0,75	5,7	30,4	52
64150375	3 x 0,75	6,2	39,2	65
64150475	4 x 0,75	6,7	48,4	78
64150575	5 x 0,75	7,3	57,4	93
64150675	6 x 0,75	7,9	66,9	106
64150775	7 x 0,75	7,9	74,1	114
64150875	8 x 0,75	9,3	83,9	142
64151275	12 x 0,75	10,8	134,2	194
64151675	16 x 0,75	11,8	169,6	247

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables



## SABIX® BL 443 C FRNC TT

flexible data cable, twisted triple with overall copper screen

7 x 3 x 0,34 mm<sup>2</sup> - IEC 60332-3-22 - 300V

DNV CE



DNV

CE

RoHS

PFAS

FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 443 C FRNC TT 7 x 3 x 0,34 mm<sup>2</sup> - IEC 60332-3-22 - 300V — DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	≤ 0,25 mm <sup>2</sup> = DIN 47100 ≥ 0,34 mm <sup>2</sup> = white, blue, red with printed triple number
Stranding:	cores white, blue, red twisted to triples, triples twisted in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	pigeon blue (RAL 5014)

### Technical Data:

Peak operating voltage:	max. 300 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » asbestos-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

item no.	no. of triples x cross section n x 3 x mm <sup>2</sup>	outer ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64430225	2 x 3 x 0,25	7,2	35,7	68
64430425	4 x 3 x 0,25	8,8	55,0	103
64430725	7 x 3 x 0,25	10,6	98,1	161
64431025	10 x 3 x 0,25	13,4	131,9	235
64430234	2 x 3 x 0,34	8,0	43,4	82
64430434	4 x 3 x 0,34	9,8	68,3	127
64430734	7 x 3 x 0,34	11,9	123,0	202
64431034	10 x 3 x 0,34	15,2	195,5	313
64430250	2 x 3 x 0,50	9,0	55,0	105
64430450	4 x 3 x 0,50	10,7	105,3	161
64430750	7 x 3 x 0,50	13,2	160,6	254
64431050	10 x 3 x 0,50	16,9	254,0	391
64430275	2 x 3 x 0,75	10,4	90,8	144
64430475	4 x 3 x 0,75	12,6	145,9	223
64430775	7 x 3 x 0,75	15,2	248,8	350
64431075	10 x 3 x 0,75	19,3	340,6	504

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

## SABIX® BL 445 C FRNC TP

flexible paired data cable with overall copper screen



25 mm<sup>2</sup> - IEC 60332-3-22 - 350V

DNV CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 445 C FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> - IEC 60332-3-22 - 350V — DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands with reference to VDE 0812 resp. IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	with reference to DIN 47100
Stranding:	pairwise, pairs in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	pigeon blue (RAL 5014)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » good EMC characteristics
- » good transmission rates and crosstalk attenuation
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64450214	2 x 2 x 0,14	5,3	19,5	37
64450314	3 x 2 x 0,14	5,8	21,4	44
64450414	4 x 2 x 0,14	6,8	30,4	58
64450514	5 x 2 x 0,14	7,4	34,9	68
64450614	6 x 2 x 0,14	7,6	39,8	76
64450814	8 x 2 x 0,14	8,7	47,6	98
64451014	10 x 2 x 0,14	9,5	55,9	114
64451214	12 x 2 x 0,14	10,6	79,9	142
64451814	18 x 2 x 0,14	12,4	102,9	200
64450225	2 x 2 x 0,25	5,8	25,7	44
64450325	3 x 2 x 0,25	6,5	32,1	57
64450425	4 x 2 x 0,25	7,4	40,6	71
64450525	5 x 2 x 0,25	8,7	50,1	96
64450625	6 x 2 x 0,25	8,7	54,9	104
64450825	8 x 2 x 0,25	9,1	67,4	121
64451025	10 x 2 x 0,25	10,6	95,7	156
64451225	12 x 2 x 0,25	11,6	111,9	180
64451825	18 x 2 x 0,25	13,8	171,9	272
64452625	26 x 2 x 0,25	16,3	223,2	368
64450234	2 x 2 x 0,34	6,4	30,7	56
64450334	3 x 2 x 0,34	7,2	40,9	71
64450434	4 x 2 x 0,34	8,7	52,3	97
64450534	5 x 2 x 0,34	9,4	61,6	115
64450634	6 x 2 x 0,34	9,6	68,2	128
64450734	7 x 2 x 0,34	10,1	93,6	151

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64450834	8 x 2 x 0,34	10,8	100,0	164
64451034	10 x 2 x 0,34	11,8	119,7	194
64451234	12 x 2 x 0,34	13,4	138,2	238
64451834	18 x 2 x 0,34	15,8	215,3	357
64451934	19 x 2 x 0,34	15,8	223,2	367
64452734	27 x 2 x 0,34	18,2	289,0	478
64450250	2 x 2 x 0,50	7,2	40,5	70
64450350	3 x 2 x 0,50	7,9	52,5	88
64450450	4 x 2 x 0,50	9,5	67,4	120
64450550	5 x 2 x 0,50	10,5	95,6	154
64450650	6 x 2 x 0,50	10,8	105,4	171
64450850	8 x 2 x 0,50	11,9	131,3	207
64451050	10 x 2 x 0,50	13,4	155,9	259
64451250	12 x 2 x 0,50	15,0	212,6	322
64451850	18 x 2 x 0,50	17,4	283,5	451
64450275	2 x 2 x 0,75	7,9	52,5	87
64450375	3 x 2 x 0,75	9,2	69,5	115
64450475	4 x 2 x 0,75	10,7	105,3	156
64450575	5 x 2 x 0,75	11,6	126,3	186
64450675	6 x 2 x 0,75	12,4	141,0	221
64450875	8 x 2 x 0,75	13,8	200,7	284
64451075	10 x 2 x 0,75	15,2	241,6	338
64451275	12 x 2 x 0,75	17,2	283,2	411
64451875	18 x 2 x 0,75	19,4	384,0	553

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® BL 446 C FRNC FTP

flexible paired data cable with aluminum pair screen and overall copper screen



24 x (2 x 0,75 mm<sup>2</sup>)ST - IEC 60332-3-22 - 300V

DNV CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 446 C FRNC FTP 24 x (2 x 0,75 mm<sup>2</sup>)ST - IEC 60332-3-22 - 300V — DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	≤ 0,25 mm <sup>2</sup> = DIN 47100 ≥ 0,34 mm <sup>2</sup> = white, blue, red with marking, pairnumber
Stranding:	cores white, blue twisted to pairs
Pairscreen:	alu foil
Stranding:	pairs together in layers
Wrapping:	foil
Screen:	tinned copper braiding
Wrapping:	foil
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	pigeon blue (RAL 5014)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » good EMC characteristics
- » good transmission rates and crosstalk attenuation
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 300 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64460225	2 x (2 x 0,25)ST	6,2	27,8	53
64460825	8 x (2 x 0,25)ST	10,1	84,5	150
64461225	12 x (2 x 0,25)ST	12,7	142,4	236
64460234	2 x (2 x 0,34)ST	7,7	41,0	73
64460434	4 x (2 x 0,34)ST	9,2	61,5	122
64460834	8 x (2 x 0,34)ST	11,4	123,2	196
64461234	12 x (2 x 0,34)ST	14,9	190,8	303
64460475	4 x (2 x 0,75)ST	11,3	124,7	182
64462475	24 x (2 x 0,75)ST	23,7	591,1	854
64461980	19 x (2 x 1,50)ST	25,1	779,7	1031

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

## SABIX® BL 400 FRNC

flexible control cable 300/500 V



12 x 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 300/500V

DNV CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 400 FRNC 12 x 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 300/500V DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 conductors
Stranding:	in layers
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	pigeon blue (RAL 5014)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 2000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64000205	2 x 0,50	5,3	9,6	42
64000305	3 x 0,50	5,6	14,4	49
64000405	4 x 0,50	6,0	19,2	59
64000505	5 x 0,50	6,6	24,0	72
64000705	7 x 0,50	7,3	33,6	90
64001205	12 x 0,50	9,6	57,6	147
64001805	18 x 0,50	11,4	86,4	212
64000207	2 x 0,75	5,8	14,4	51
64000307	3 x 0,75	6,1	21,6	60
64000407	4 x 0,75	6,7	28,8	74
64000507	5 x 0,75	7,4	36,0	91
64000707	7 x 0,75	8,1	50,4	113
64001207	12 x 0,75	10,9	86,4	187
64001807	18 x 0,75	12,8	129,6	269
64000210	2 x 1,00	6,0	19,2	57
64000310	3 x 1,00	6,3	28,8	68
64000410	4 x 1,00	7,0	38,4	84
64000510	5 x 1,00	7,8	48,0	105

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64000710	7 x 1,00	8,4	67,2	131
64001210	12 x 1,00	11,3	115,2	216
64001810	18 x 1,00	13,5	172,8	318
64000215	2 x 1,50	6,7	28,8	73
64000315	3 x 1,50	7,0	43,2	89
64000415	4 x 1,50	7,9	57,6	112
64000515	5 x 1,50	8,6	72,0	136
64000715	7 x 1,50	9,5	100,8	174
64001215	12 x 1,50	12,7	172,8	287
64001815	18 x 1,50	15,3	259,2	426
64000225	2 x 2,50	8,1	48,0	111
64000325	3 x 2,50	8,6	72,0	137
64000425	4 x 2,50	9,5	96,0	171
64000525	5 x 2,50	10,6	120,0	212
64000725	7 x 2,50	11,7	168,0	272
64001225	12 x 2,50	15,7	288,0	452
64001825	18 x 2,50	18,9	432,0	670

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

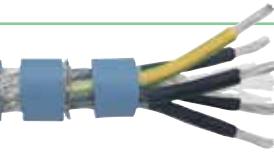
## SABIX® BL 438 C FRNC

flexible control cable with overall copper screen 300/500 V



x 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 300/500V

DNV CE



CE RoHS

PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 438 C FRNC 5 x 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 300/500V — DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 conductors
Stranding:	in layers
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	pigeon blue (RAL 5014)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius fixed laying:	5 x d
flexible application:	10 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64380205	2 x 0,50	5,8	25,5	50
64380305	3 x 0,50	6,1	30,4	57
64380405	4 x 0,50	6,6	36,9	69
64380505	5 x 0,50	7,1	43,6	82
64380705	7 x 0,50	7,9	55,0	104
64381205	12 x 0,50	10,2	86,7	165
64381805	18 x 0,50	12,3	140,7	251
64380207	2 x 0,75	6,4	30,5	58
64380307	3 x 0,75	6,7	39,3	66
64380407	4 x 0,75	7,3	48,5	84
64380507	5 x 0,75	8,0	57,5	102
64380707	7 x 0,75	8,7	74,2	126
64381207	12 x 0,75	11,7	140,4	221
64381807	18 x 0,75	13,7	189,4	311
64380210	2 x 1,00	6,6	36,9	65
64380310	3 x 1,00	6,9	48,3	77
64380410	4 x 1,00	7,5	59,7	93
64380510	5 x 1,00	8,4	71,7	118

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64380710	7 x 1,00	9,0	93,4	145
64381210	12 x 1,00	12,1	169,4	250
64381810	18 x 1,00	14,6	258,5	378
64380215	2 x 1,50	7,3	48,5	80
64380315	3 x 1,50	7,6	64,5	97
64380415	4 x 1,50	8,4	81,3	120
64380515	5 x 1,50	9,3	98,2	150
64380715	7 x 1,50	10,1	129,9	188
64381215	12 x 1,50	13,5	232,5	323
64381815	18 x 1,50	16,3	357,1	488
64380225	2 x 2,50	8,7	71,8	115
64380325	3 x 2,50	9,3	98,2	145
64380425	4 x 2,50	10,1	125,1	180
64380525	5 x 2,50	11,5	167,9	237
64380725	7 x 2,50	12,5	222,4	299
64381225	12 x 2,50	16,8	386,4	513
64381825	18 x 2,50	20,1	556,3	753

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

## SABIX® BL 402 FRNC

flexible wiring cable 0.6/1 kV

0,6/1 kV

SAB MARITIME

X® BL 402 FRNC 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV

DNV CE

CE RoHS PFAS  
DNV FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 402 FRNC 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV

DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black (RAL 9005)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64020180	1,00	3,0	9,6	17
64020182	1,50	3,3	14,4	23
64020184	2,50	3,7	24,0	32
64020186	4,00	4,7	38,4	52
64020187	6,00	5,2	57,6	71
64020188	10,00	6,4	96,0	121
64020189	16,00	7,8	153,6	180
64020190	25,00	9,6	240,0	275
64020191	35,00	11,0	336,0	380
64020192	50,00	12,6	480,0	536
64020193	70,00	14,9	672,0	723
64020194	95,00	17,4	912,0	985
64020195	120,00	19,3	1152,0	1219
64020196	150,00	21,2	1440,0	1500
64020197	185,00	23,3	1776,0	1849
64020198	240,00	27,0	2304,0	2447

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code

# Halogen-free Cables

## SABIX® BL 408 FRNC

flexible power cable 0.6/1 kV

0,6/1 kV

SAB MARITIME

FRNC 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV DNV CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 408 FRNC 1,5 mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black (RAL 9005)
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64080180	1,00	5,4	9,6	43
64080182	1,50	5,7	14,4	50
64080184	2,50	6,1	24,0	62
64080186	4,00	7,1	38,4	88
64080187	6,00	7,6	57,6	110
64080188	10,0	8,8	96,0	168
64080189	16,0	10,2	153,6	236
64080190	25,0	12,0	240,0	345
64080191	35,0	13,7	336,0	469
64080192	50,0	15,4	480,0	641
64080193	70,0	17,9	672,0	850
64080194	95,0	20,6	912,0	1137
64080195	120,0	22,7	1152,0	1394
64080196	150,0	24,7	1440,0	1708
64080197	185,0	27,0	1776,0	2067
64080198	240,0	31,0	2304,0	2746

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code and sheath colour

# Halogen-free Cables

## SABIX® BL 409 C FRNC

flexible power cable with overall copper screen 0.6/1 kV

0,6/1 kV

SAB MARITIME

NC 4,0 mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV

DNV CE



CE RoHS PFAS FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 409 C FRNC 4,0 mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV · DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black (RAL 9005)
Screen:	tinned copper braiding
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	black (RAL 9005)

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » asbestos-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

item no.	nominal cross section mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64090180	1,00	5,8	23,5	55
64090182	1,50	6,1	28,4	63
64090184	2,50	6,5	39,9	76
64090186	4,00	7,5	57,9	104
64090187	6,00	8,0	77,4	126
64090188	10,00	9,2	122,1	183
64090189	16,00	10,6	182,8	252
64090190	25,00	12,6	294,6	385
64090191	35,00	14,6	421,8	536
64090192	50,00	16,3	578,1	716
64090193	70,00	18,8	784,0	935
64090194	95,00	21,5	1050,8	1241
64090195	120,00	23,5	1318,2	1512
64090196	150,00	25,6	1610,8	1835
64090197	185,00	27,9	1352,1	2200
64090198	240,00	31,9	2508,6	2899

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

## SABIX® BL 410 FRNC

flexible power cable 0.6/1 kV

0,6/1 kV

SAB MARITIME

NC 12x1,5mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV

DNV CE



CE RoHS PFAS FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 410 FRNC 12x1,5mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV — DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 conductors
Stranding:	in layers
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64100215	2 x 1,50	8,9	28,8	120
64100315	3 x 1,50	9,4	43,2	137
64100415	4 x 1,50	10,2	57,6	164
64100515	5 x 1,50	11,4	72,0	205
64100715	7 x 1,50	12,4	100,8	250
64101015	10 x 1,50	15,9	144,0	349
64101215	12 x 1,50	16,6	172,8	407
64101415	14 x 1,50	17,4	201,6	459
64101815	18 x 1,50	19,5	259,2	589
64100225	2 x 2,50	9,7	48,0	151
64100325	3 x 2,50	10,3	72,0	176
64100425	4 x 2,50	11,4	96,0	219
64100525	5 x 2,50	12,5	120,0	266
64100725	7 x 2,50	13,8	168,0	337
64101025	10 x 2,50	17,7	240,0	471
64101225	12 x 2,50	18,2	288,0	540
64101425	14 x 2,50	19,3	336,0	622
64101825	18 x 2,50	21,7	432,0	797
64100240	2 x 4,00	11,9	76,8	230
64100340	3 x 4,00	12,6	115,2	269
64100440	4 x 4,00	14,0	153,6	334

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64100540	5 x 4,00	15,4	192,0	410
64100740	7 x 4,00	17,0	268,8	520
64100260	2 x 6,00	12,9	115,2	287
64100360	3 x 6,00	13,9	172,8	349
64100460	4 x 6,00	15,2	230,4	427
64100560	5 x 6,00	17,0	288,0	535
64100760	7 x 6,00	18,5	403,2	674
64100361	3 x 10,0	16,8	288,0	535
64100461	4 x 10,0	18,4	384,0	659
64100561	5 x 10,0	20,5	480,0	825
64100362	3 x 16,0	20,0	460,8	778
64100462	4 x 16,0	22,1	614,4	974
64100562	5 x 16,0	24,7	768,0	1218
64100363	3 x 25,0	24,1	720,0	1158
64100463	4 x 25,0	26,7	960,0	1453
64100563	5 x 25,0	29,9	1200,0	1828
64100364	3 x 35,0	27,5	1008,0	1567
64100464	4 x 35,0	30,4	1344,0	1968
64100365	3 x 50,0	31,1	1440,0	2171
64100465	4 x 50,0	34,3	1920,0	2738

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

## SABIX® BL 412 C FRNC

flexible power cable with overall copper screen 0.6/1 kV

0,6/1 kV

SAB MARITIME

12 x 1,5mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV

DNV CE



DNV

CE RoHS

PFAS FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® BL 412 C FRNC 12 x 1,5mm<sup>2</sup> - IEC 60332-3-22 - 0,6/1kV — DNV CE and current meter marking

### Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Colour code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 conductors
Stranding:	in layers
Screen:	tinned copper braiding
Sheath material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » halogen-free
- » asbestos-free
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » flexible
- » for applications acc. to Hong Kong Convention  
ingredients tested acc. to the requirements  
of the Hong Kong Convention (2009) of the IMO
- » approvals: DNV
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V core/screen 4000 V
Min. bending radius fixed laying:	4 x d
flexible application:	6 x d
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
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
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64120215	2 x 1,50	9,4	55,0	123
64120315	3 x 1,50	9,9	72,2	140
64120415	4 x 1,50	10,9	105,2	181
64120515	5 x 1,50	12,1	126,2	226
64120715	7 x 1,50	13,1	160,4	275
64121015	10 x 1,50	17,0	253,8	417
64121215	12 x 1,50	17,5	283,2	465
64121415	14 x 1,50	18,3	313,1	516
64121815	18 x 1,50	20,4	384,8	654
64120225	2 x 2,50	10,2	77,1	155
64120325	3 x 2,50	11,0	119,6	190
64120425	4 x 2,50	12,1	150,2	236
64120525	5 x 2,50	13,2	179,6	286
64120725	7 x 2,50	14,7	253,9	376
64121025	10 x 2,50	18,6	351,9	525
64121225	12 x 2,50	19,1	411,8	600
64121425	14 x 2,50	20,2	461,2	683
64121825	18 x 2,50	22,6	572,7	865
64120240	2 x 4,00	12,6	131,3	238
64120340	3 x 4,00	13,3	174,9	277
64120440	4 x 4,00	14,9	239,6	361

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
64120540	5 x 4,00	16,3	290,3	443
64120740	7 x 4,00	17,9	379,7	566
64120260	2 x 6,00	13,8	175,0	303
64120360	3 x 6,00	14,8	258,8	368
64120460	4 x 6,00	16,1	328,4	466
64120560	5 x 6,00	17,9	398,9	567
64120760	7 x 6,00	19,6	527,5	723
64120361	3 x 10,0	17,7	398,7	542
64120461	4 x 10,0	19,5	508,1	732
64120561	5 x 10,0	21,4	618,8	853
64120362	3 x 16,0	20,9	598,7	768
64120462	4 x 16,0	23,0	755,9	992
64120562	5 x 16,0	25,6	938,8	1231
64120363	3 x 25,0	25,2	889,8	1126
64120463	4 x 25,0	27,8	1135,9	1465
64120563	5 x 25,0	30,8	1400,7	1805
64120364	3 x 35,0	28,4	1185,4	1508
64120464	4 x 35,0	31,3	1546,6	1978
64120365	3 x 50,0	32,0	1645,3	2039
64120465	4 x 50,0	35,2	2149,1	2678

Other dimensions and colours are possible on request.

### Possible on request:

- » bare copper strands
- » alternative colour code  
and sheath colour

# Halogen-free Cables

## SABIX® SD 705 FRNC C1

continuously flexible data cable with improved fire performance

NFC 32-070 C1  
acc. to

SABIX® Ultra

CE RoHS PFAS  
FREE

ERSEN · SABIX® SD 705 FRNC C1 2 x 0,25 mm² CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® SD 705 FRNC C1 2 x 0,25 mm² CE

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

### 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®
Sheath colour:	black (RAL 9005)

### Technical Data:

Peak operating voltage:	< 0,25 mm² = max. 350 V ≥ 0,25 mm² = max. 500 V
Testing voltage:	core/core 1500 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
continuously flexible:	15 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg (100 kGy)
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NFC 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » continuously flexible
- » no flame propagation
- » flame retardant and self-extinguishing
- » oil and fuel resistant
- » good acid and alkalines resistance
- » NFC 32-070 C1
- » PFAS free

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% 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
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

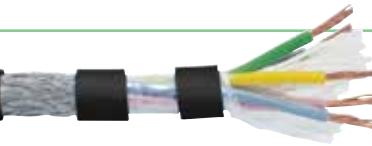
Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® SD 715 C FRNC C1

continuously flexible data cable with improved fire performance and overall copper screen

SABIX® SD 715 C FRNC C1 7 x 0,25 mm<sup>2</sup> CE



NFC acc. to  
32-070 C1

SABIX® Ultra

CE RoHS PFAS  
FREE

marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® SD 715 C FRNC C1 7 x 0,25 mm<sup>2</sup> CE

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

### 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®
Sheath colour:	black (RAL 9005)

### Technical Data:

Peak operating voltage:	< 0,25 mm <sup>2</sup> = max. 350 V ≥ 0,25 mm <sup>2</sup> = max. 500 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius fixed laying:	4 x d
flexible application:	6 x d
continuously flexible:	15 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg (100 kGy)
Temperature range fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NFC 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » continuously flexible
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » oil and fuel resistant
- » good acid and alkalines resistance
- » NF C 32-070 C1
- » PFAS free

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% 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 <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% 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.

# Halogen-free Cables

## SABIX® SD 745 C FRNC C1 TP

paired, continuously flexible data cable with improved fire performance and overall copper screen

45 C FRNC C1 TP 2 x 2 x 0,50 mm<sup>2</sup> CE



marking example:

SAB BRÖCKSKES · D-VIERNSEN · SABIX® SD 745 C FRNC C1 TP 2 x 2 x 0,50 mm<sup>2</sup> CE

NFC acc. to  
32-070 C1

SABIX® Ultra

CE RoHS PFAS  
FREE

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

### 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®
Sheath colour:	black (RAL 9005)

### Technical Data:

Peak operating voltage:	< 0,25 mm <sup>2</sup> = max. 350 V ≥ 0,25 mm <sup>2</sup> = max. 500 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
continuously flexible:	15 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg (100 kGy)
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NFC 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » continuously flexible
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » oil and fuel resistant
- » good acid and alkalines resistance
- » NF C 32-070 C1
- » PFAS free

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	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	36
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	69
67451014	10 x 2 x 0,14	0,11	8,7	52,0	102
67451414	14 x 2 x 0,14	0,11	10,2	83,4	143
67450225	2 x 2 x 0,25	0,11	5,4	23,3	43
67450425	4 x 2 x 0,25	0,11	6,9	38,4	66
67450625	6 x 2 x 0,25	0,11	7,6	50,0	87
67450725	7 x 2 x 0,25	0,11	9,2	53,4	115
67450825	8 x 2 x 0,25	0,11	9,6	64,4	131
67451025	10 x 2 x 0,25	0,11	9,8	88,3	143
67451225	12 x 2 x 0,25	0,11	10,7	105,5	167
67451425	14 x 2 x 0,25	0,11	11,3	118,1	185
67451625	16 x 2 x 0,25	0,11	11,7	122,5	199
67450234	2 x 2 x 0,34	0,11	6,5	30,3	61

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
67450634	6 x 2 x 0,34	0,11	9,4	62,8	125
67450734	7 x 2 x 0,34	0,11	10,0	87,6	154
67451034	10 x 2 x 0,34	0,11	11,6	110,9	191
67451834	18 x 2 x 0,34	0,11	14,9	184,0	314
67451934	19 x 2 x 0,34	0,11	14,9	190,6	329
67452734	27 x 2 x 0,34	0,11	17,9	286,4	461
67450250	2 x 2 x 0,50	0,11	7,1	38,6	71
67450350	3 x 2 x 0,50	0,11	7,8	51,0	88
67450450	4 x 2 x 0,50	0,11	9,3	64,1	115
67451050	10 x 2 x 0,50	0,11	13,3	155,1	255
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	166
67450875	8 x 2 x 0,75	0,11	16,2	189,4	356
67451075	10 x 2 x 0,75	0,11	15,3	237,0	352

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® S 710 FRNC C1

continuously flexible control cable with improved fire performance

NFC acc. to  
32-070 C1

SABIX® Ultra



CE RoHS PFAS  
FREE

marking example:

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

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

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Wrapping:	non-woven tape
Sheath material:	SABIX®
Sheath colour:	black (RAL 9005)

### Outstanding features:

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

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
continuously flexible:	15 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg (100 kGy)
Temperature range	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% 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 <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% 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.

# Halogen-free Cables

## SABIX® S 712 C FRNC C1

continuously flexible control cable with improved fire performance  
and overall copper screen

NFC acc. to  
32-070 C1

SABIX® Ultra



marking example:

SAB BRÖCKSKES · D-VIERSEN · SABIX® S 712 C FRNC C1 3 x 1,5 mm² CE

CE RoHS PFAS  
FREE

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

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	in layers
Wrapping:	non-woven tape
Screen:	tinned copper braiding, optical coverage ≥ 85%
Wrapping:	non-woven tape
Sheath material:	SABIX®
Sheath colour:	black (RAL 9005)

### Technical Data:

Nominal voltage:	Uo/U 0,6/1 kV
Testing voltage:	core/core 4000 V core/screen 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:	$1 \times 10^7$ cJ/kg (100 kGy)
Temperature range <i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter N „Technical data“. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NFC 32-070 C1
Corrosiveness of conflagration gases:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » halogen-free
- » continuously flexible
- » good EMC characteristics
- » no flame propagation
- » flame retardant and self-extinguishing
- » oil and fuel resistant
- » good acid and alkalines resistance
- » NF C 32-070 C1
- » PFAS free

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% 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
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
67122515	25 x 1,50	0,16	23,1	527,6	865

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire Ø mm	outer-Ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
67120225	2 x 2,50	0,16	10,9	101,0	201
67120325	3 x 2,50	0,16	11,5	127,7	227
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
67120340	3 x 4,00	0,16	13,5	175,2	304
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.