

# K Halogen-free Cables




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**NEW**

K  
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: especially for use in rail vehicles

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: especially for use in rail vehicles

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: especially for use in rail vehicles



: especially for use in shipbuilding industry

## Applications

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

These single conductors are installed in applications where high flex 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:

<b>SABIX® A 146 FRNC</b> <b>SABIX® A 156 FRNC</b> <b>SABIX® A 170 TW</b> <b>SABIX® A 166 FRNC</b> <b>SABIX® A 147 FRNC</b> <b>SABIX® A 157 FRNC</b>	Production of control cabinets, appliances and devices for communication technologies, household appliances, construction of generators and transformers, machine construction, railway technologies: furthermore, the FRNC type is particularly suitable for internal wiring of rail vehicles
<b>SABIX® A 100 HT</b> <b>SABIX® A 101 HT</b>	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 installation and adjustment as well as inspection of machines. Note: 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 SABIX® cables, in various versions are oil resistance, low temperature flexibility, heat resistance, hot-air resistance, weather resistance, and are also halogen-free.

#### Exemplary applications:

<b>SABIX® A 200 FRNC</b> <b>SABIX® A 205 FRNC</b> <b>SABIX® A 224 FRNC C1</b> <b>SABIX® A 226 C FRNC C1</b>	Automation systems, car manufacturing industry, machine construction, railway technologies
<b>SABIX® A 238 FRNC</b>	Transporting systems, construction of industrial plants, automation technologies
<b>SABIX® A 260 PUR</b>	Automation technologies, steel and iron industries, car manufacturing industry, machine construction, refrigeration and climate technologies, car wash, rising platforms for trucks
<b>SABIX® A 130 HT</b>	Plastics processing, packaging machine construction, smelters, steelworks and hot rolling mills, safety engineering, processing of cement, glass and ceramics, sauna construction, heat, refrigeration and climate technologies
<b>SABIX® A 810 FRNC</b> <b>SABIX® A 812 C FRNC</b>	Automation technologies, car manufacturing industry, machine construction, power supply cable between frequency converter and servo motor
<b>SABIX® CC 625 FRNC M</b>	Automation technologies, car manufacturing industry, machine construction, railway technologies
<b>SABIX® CC 625 S FRNC M</b> <b>SABIX® CC 625 SH FRNC M</b>	Transporting systems, construction of industrial plants, automation technologies

## 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 small cross sections, bending radii, shielding or high flexibility is demanded. The excellent characteristics of these cables, in various versions are oil resistance, low temperature flexibility, heat resistance, weather resistance, flexibility, being halogen-free.

#### Exemplary applications:

<b>SABIX® D 305 FRNC</b>	Communication technologies
<b>SABIX® D 315 FRNC</b> <b>SABIX® D 320 FRNC C1</b>	Electronic data processing systems, weighing installations, office appliances
<b>SABIX® D 345 FRNC TP</b>	Electronic data processing systems, weighing installations, office appliances, for increased requirements on transmission characteristics and near-end cross talk attenuation
<b>SABIX® A 871 TW</b> <b>SABIX® A 872 C TW</b> <b>SABIX® A 876 C TW TP</b>	Cables for internal wiring of rail vehicles acc. to EN 50306, data transmission, information systems

### ■ Application of halogen-free SABIX® Rail Data and Rail Control tested acc. to DIN EN 45545-2

In sensitive areas, such as in public buildings and facilities and rail vehicles, the requirements for the protection of the general security are very high. In addition to halogen-free cables have been put flame-retardant and self extinguishing and must not contribute to fire propagation. All of these requirements, we unite with our registered brand name of SABIX®. The SABIX® -Rail Cables to meet the highest safety standards according to DIN EN 45545-2, certified by the Fire Technology Laboratory Currenta GmbH.

#### Exemplary applications:

<b>SABIX® R 600 FRNC</b> <b>SABIX® R 638 FRNC</b> <b>SABIX® R 605 FRNC</b> <b>SABIX® R 615 FRNC</b> <b>SABIX® R 645 FRNC TP</b> <b>SABIX® A 280 FRNC X</b> <b>SABIX® A 285 FRNC X</b>	Cables for internal wiring of rail vehicles acc. to DIN EN 45545-2
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### ■ Application of halogen-free SABIX® BlueLine data, control and power cables for shipbuilding

The development of the new BlueLine cable series has been advanced in co-operation with customers coming from the shipbuilding field. The new cables are available as halogen-free SABIX® BlueLine cables. All SABIX® BlueLine types are constructed with tinned copper strands in class 5 in order to offer advantages in corrosion resistance and flexibility. The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. Data cables, type SABIX® BlueLine Data, are available with small cross sections beginning with AWG 26. This results in a small outer diameter which offers an outstanding advantage particularly where there is only little space. The types SABIX® BlueLine Control as well as SABIX® BlueLine Power complement the new product series with control and power supply cables for electrical components.

#### Exemplary applications:

<b>SABIX® BL 405 FRNC</b> <b>SABIX® BL 415 C FRNC</b> <b>SABIX® BL 445 C FRNC TP</b> <b>SABIX® BL 400 FRNC</b> <b>SABIX® BL 438 C FRNC</b> <b>SABIX® BL 410 FRNC</b> <b>SABIX® BL 412 C FRNC</b>	Installation and wiring of navigation and bridge electronics as BNWAS, power supply of electrical components
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# HALOGEN-FREE CABLES

## Applications

		Cable type	SABIX® A 146 FRNC	SABIX® A 156 FRNC	SABIX® A 170 TW	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
Basic construction	Single conductors		x	x	x	x	x	x	x							
	Numbered conductors										x		x	x	x	x
	Colored conductors											x				
	Screened													x	x	
	Inner sheath															
	Twisted pairs															
Temperature range static*	+ 220 °C															
	+ 105 °C															
	+ 90 °C															
	+ 85 °C															
	- 30 °C															
	- 40 °C															
	- 50 °C															
Voltage	Nominal voltage 600 V (UL)						x									
	Nominal voltage 1000 V (UL)							x								
	Nominal voltage U <sub>0</sub> 300 V				x											
	Nominal voltage U <sub>0</sub> /U 300/500 V		x				x		x	x	x	x			x	x
	Nominal voltage U <sub>0</sub> /U 450/750 V			x				x					x	x		
	Nominal voltage U <sub>0</sub> /U 0,6/1 kV					x										
	Data cable peak operating voltage max. 350 V or max. 500 V															
	Testing voltage 800 V or 1200 V															
	Testing voltage 2000 V		x						x	x						
	Testing voltage 2500 V			x										x		
	Testing voltage 3000 V					x					x	x	x		x	x
Testing voltage 4000 V				x												
Standards	Burning characteristics: flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2		x	x		x	x	x	x	x	x	x	x	x	x	
	No flame propagation acc. to IEC 60332 and EN 60332 cat. C resp. D acc. to NF C32-070 C1		x	x		x	x	x			x	x	x	x	x	
	Fire protection class 1 - 4 acc. to DIN 5510 part 1												x	x		
	Smoke density acc. to IEC 61034 + EN 61034		x	x		x	x	x			x	x	x	x	x	
	UL acc. to AWMStyle															
Special features	Thin-wall/small outer diameter				x											
	Very good oil resistance acc. to DINVDE															x
	Oil resistant acc. to EN 50306				x											
	Good chemical resistance															x
	Ozone resistant acc. to VDE 0282 part 2															
	Flexibility		x	x		x	x	x	x	x	x	x			x	x
Weather resistance		x	x		x	x	x			x	x			x	x	
Valid for all herein mentioned cables: halogen-free acc. to DINVDE 0472 part 815 and IEC 60754-1 · Corrosiveness of conflagration gases acc. to IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases																

Temperature range:



\*The temperature range for flexing is mentioned on the particular catalog page

# HALOGEN-FREE CABLES

## Selection index

		Cable type												
		SABIX® A 130 HT	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	SABIX® A 871 TW	SABIX® A 872 C TW	SABIX® A 876 C TW TP
Basic construction	Single conductors													
	Numbered conductors	x	x	x	x	x	x					x	x	x
	Colored conductors	x						x	x	x	x			
	Screened			x	x			x	x	x	x		x	x
	Inner sheath				x			x						
	Twisted pairs											x		
Temperature range static*	+ 220 °C													
	+ 105 °C													
	+ 90 °C													
	+ 85 °C													
	- 30 °C													
	- 40 °C													
	- 50 °C													
Voltage	Nominal voltage 600 V (UL)		x	x	x									
	Nominal voltage 1000 V (UL)													
	Nominal voltage Uo 300 V													
	Nominal voltage Uo/U 300/500 V	x	x	x	x							x	x	x
	Nominal voltage Uo/U 450/750 V													
	Nominal voltage Uo/U 0,6/1 kV					x	x							
	Data cable peak operating voltage max. 350 V or max. 500 V							x	x	x	x			
	Testing voltage 800 V or 1200 V							x	x	x	x			
	Testing voltage 2000 V	x										x	x	x
	Testing voltage 2500 V													
	Testing voltage 3000 V		x	x	x									
Testing voltage 4000 V					x	x								
Standards	Burning characteristics: flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2	x	x	x	x	x	x	x	x	x	x	x	x	x
	No flame propagation acc. to IEC 60332 and EN 60332 cat. C resp. D acc. to NF C32-070 C1		x	x	x	x	x	x	x	x	x	x	x	x
	Fire protection class 1 - 4 acc. to DIN 5510 part 1											x	x	x
	Smoke density acc. to IEC 61034 + EN 61034		x	x	x	x	x	x	x	x	x	x	x	x
	UL acc. to AWMStyle		x	x	x									
Special features	Thin-wall/small outer diameter											x	x	x
	Very good oil resistance acc. to DINVDE													
	Oil resistant acc. to EN 50306											x	x	x
	Good chemical resistance													
	Ozone resistant acc. to VDE 0282 part 2											x	x	x
	Flexibility	x	x	x	x	x	x	x	x			x	x	x
Weather resistance					x	x								
Valid for all herein mentioned cables: halogen-free acc. to DINVDE 0472 part 815 and IEC 60754-1 · Corrosiveness of conflagration gases acc. to IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases														

Temperature range:



\*The temperature range for flexing is mentioned on the particular catalog page



# HALOGEN-FREE CABLES

## Selection index

### Cables for railway technology

		Cable type							
		SABIX® R 600 FRNC	SABIX® R 638 FRNC	SABIX® R 605 FRNC	SABIX® R 615 FRNC	SABIX® R 645 FRNC TP	SABIX® A 280 FRNC X	SABIX® A 280 FRNC X	
Applications	Wiring cable						x		
	Data cable			x	x	x			
	Control cable	x	x				x	x	
	Screened		x		x	x		x	
	Cross linked type						x	x	
	Tested acc. to DIN EN 45545-2	x	x	x	x	x	x	x	
Standards	Halogen-free	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.	x	x	x	x	x	x	x
		No flame propagation acc. to DIN EN 60332-3-24	x	x	x	x	x	x	x
	No flame propagation acc. to DIN EN 60332-3-25	x	x	x	x	x	x	x	
	No flame propagation acc. to DIN EN 50305 section 9.1.2	x	x	x	x	x	x	x	
	Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2	x	x	x	x	x	x	x	
	Burning tests acc. to ASTM E 162-09				x	x			
	Toxicity acc. to DIN EN 50305	x	x	x	x	x	x	x	
	Smoke density acc. to DIN EN 61034	x	x	x	x	x	x	x	
	Smoke density acc. to ASTM E 662-09				x	x			
	Absence of harmful substances acc. to RoHS directive of the European Union	x	x	x	x	x	x	x	
	Temperature range fixed laying*	+ 125 °C							
		+ 90 °C							
		+ 40 °C							
- 50 °C									
Voltage	Nominal voltage U <sub>0</sub> /U 300/500 V	x	x				x	x	
	Peak operating voltage: < 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V			x	x	x			

### Cables for shipbuilding

		Cable type						
		SABIX® BL 405 FRNC	SABIX® BL 415 C FRNC	SABIX® BL 445 C FRNC TP	SABIX® BL 400 FRNC	SABIX® BL 438 C FRNC	SABIX® BL 410 FRNC	SABIX® BL 412 C FRNC
Construction	Data cable	x	x	x				
	Control cable				x	x		
	Power cable						x	x
	Screened		x	x		x		x
Temperature range fixed laying*	+ 90 °C							
	- 40 °C							
Voltage range	Peak operating voltage max. 350 V	x	x	x				
	Nominal voltage U <sub>0</sub> /U 300/500 V				x	x		
	Nominal voltage U <sub>0</sub> /U 600/1000 V						x	x
Standards	Halogen-free acc. to IEC 60754-1 + EN 60332-1-2	x	x	x	x	x	x	x
	Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2	x	x	x	x	x	x	x
	No flame propagation acc. to IEC 60332 -3-22 + DIN EN 60332-3-22	x	x	x	x	x	x	x
	Smoke density acc. to IEC 61034 + EN 61034	x	x	x	x	x	x	x
	Corrosiveness of conflagration gases IEC 60754-2 + DIN EN 50267-2-2	x	x	x	x	x	x	x
Type approvals	Germanischer Lloyd	x	x	x	x	x	x	x
	Lloyd's Register	x	x	x	x	x	x	x
	American Bureau of Shipping	x	x	x	x	x	x	x
Characteristics	Flexible conductor stranding	x	x	x	x	x	x	x
	Extended cross section range	x	x	x				

Temperature range:



\*The temperature range for flexing is mentioned on the particular catalog page

On request  
with tinned  
copper strands

# HALOGEN-FREE CABLES



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



BROCKSKES · D-VIERSEN · SABIX® A146 FRNC 300/500 V 0,5 mm<sup>2</sup> CE

Marking for SABIX® A 146 FRNC 61460150:

SAB BROCKSKES · D-VIERSEN · SABIX® A146 FRNC 300/500 V 0,5 mm<sup>2</sup> CE

SABIX® A 146 FRNC is a halogen free single conductor for use in control cabinets, appliances and communication technologies, household appliances, generators and transformers, machine construction, railway technologies and other specific technologies. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

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

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x O.D.
<b>For one single bend:</b>	5 x O.D.
<b>Temperature range</b>	
<i>fixed installation:</i>	-40/+90 °C
<i>flexing:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	mm <sup>2</sup>	AWG	nominal inch	outer-Ø mm	cable weight ≈ lbs/mft
▶ 6146 .. 50*	0.50	20 (≈ 16/32)	0.083	2.1	6
▶ 6146 .. 75*	0.75	19 (≈ 23/32)	0.094	2.4	8
▶ 6146 .. 80*	1.00	18 (≈ 30/32)	0.098	2.5	9

Other dimensions and colors are possible on request.

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

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

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Web site: [www.sabcable.com](http://www.sabcable.com)

# HALOGEN-FREE CABLES

On request  
with tinned  
copper strands

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



Marking for SABIX® A 156 FRNC 61560182:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A156 FRNC 450/750 V 1,5 mm² CE

SABIX® A 156 FRNC is a halogen free single conductor for use in control cabinets, appliances and communication technologies, household appliances, generators and transformers, machine construction, railway technologies and other specific technologies. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 450/750 V
<b>Testing voltage:</b>	2500 V
<b>Min. bending radius:</b>	7.5 x O.D.
<b>For one single bend:</b>	5 x O.D.
<b>Temperature range</b>	
fixed installation:	-40/+90 °C
flexing:	-30/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Outstanding features:

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

item no.	mm <sup>2</sup>	AWG MCM	nominal inch	outer- ø mm	cable weight ≈ lbs/mft
▶ 6156 .. 82*	1.50	16 (≈ 27-29/30)	0.118	3.0	13
▶ 6156 .. 84*	2.50	14 (≈ 46/30)	0.142	3.6	22
▶ 6156 .. 86*	4.00	12 (≈ 52/28)	0.165	4.2	32
▶ 6156 .. 87*	6.00	10 (≈ 78/28)	0.185	4.7	45
▶ 6156 .. 88*	10.00	8 (≈ 77/26)	0.248	6.3	79
▶ 6156 .. 89*	16.00	6 (≈ 122/26)	0.315	8.0	122
▶ 6156 .. 90*	25.00	4 (≈ 190/26)	0.390	9.9	196
▶ 6156 .. 91*	35.00	2 (≈ 272/26)	0.437	11.1	265
▶ 6156 .. 92*	50.00	1 (≈ 400/26)	0.496	12.6	378
▶ 6156 .. 93*	70.00	2/0 (≈ 543/26)	0.583	14.8	505
▶ 6156 .. 94*	95.00	3/0 (≈ 484/24)	0.717	18.2	695
▶ 6156 .. 95*	120.00	4/0 (≈ 589/24)	0.776	19.7	834
▶ 6156 .. 96*	150.00	250 (≈ 740/24)	0.858	21.8	1038
▶ 6156 .. 97*	185.00	350 (≈ 902/24)	0.913	23.2	1254
▶ 6156 .. 98*	240.00	450 (≈ 1220/24)	1.059	26.9	1685
▶ 6156 .. 99*	300.00	550 (≈ 1525/24)	1.181	30.0	2100

Other dimensions and colors are possible on request.

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

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

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Safety by standardized and controlled production

# HALOGEN-FREE CABLES

EN 50306-2



## SABIX® A 170 TW Flexible "Thin-wall" single conductor - space and weight saving



BRÖCKSKES · D-VIERSEN · SABIX® A170 TW Ö EN 50306-2 300 V 1 x 0,5 mm² K CE 

Marking for SABIX® A170 TWS 68700105:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A170 TWÖ  
EN 50306-2 300 V 1 x 0,5 mm² K CE

SABIX® A 170 TW is a halogen free single conductor for use in control cabinets, appliances and communication technologies, household appliances, generators and transformers, machine construction, railway technologies and other specific technologies. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

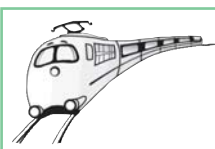
### Construction:

<b>Conductor:</b>	tinned copper strands, fine wires acc. to EN 50306-2
<b>Insulation:</b>	SABIX® 960, thermoplastic high-tech Polymer
<b>Color code:</b>	white

### Outstanding features:

- halogen-free
- flame retardant
- low smoke emission
- smallest outer-diameter
- space-saving installation
- light
- abrasion resistant surface
- standardized safety
- accomplishes the fire protection levels 1 - 4 acc. to DIN 5510

item no.	AWG	min. nominal outer-ø inch	min. nominal outer-ø mm	max. nominal outer-ø inch	max. nominal outer-ø mm	cable weight ≈ lbs/mft	ohmic-resistance at 20 °C max. Ω/km
▶ 68700105	20/1c	0.045	1.15	0.057	1.45	4	40.10
▶ 68700107	19/1c	0.053	1.35	0.065	1.65	5	26.70
▶ 68700110	18/1c	0.057	1.45	0.071	1.80	7	20.00
▶ 68700115	16/1c	0.077	1.95	0.091	2.30	10	13.70
▶ 68700125	14/1c	0.098	2.50	0.112	2.85	16	8.21



Especially for use in rail vehicles

### Technical data:

<b>Nominal voltage U<sub>0</sub>:</b>	300 V	
<b>Testing voltage:</b>	4 kV	
<b>Temperature range:</b>	+105 °C, with short circuit of 5 sec., +160 °C	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28	
<b>Test EN 50306-2</b>	<b>Requirements</b>	<b>SAB results</b>
<b>Voltage test</b>	2000 Va.c., 5 min. 4800 Vd.c., 5 min.	passed ✓
<b>Dielectric strength</b>	4000 V a.c.	passed ✓
<b>D.c.-voltage strength</b>	300 Vd.c., 10 d / 85°C current increase ≤ 10%	passed ✓
<b>Insulation resistance at 20°C</b>	0,5 mm² - 600 MΩ*km	passed ✓
<b>Insulation resistance at 90°C</b>	0,5 mm² - 0,3 MΩ*km	passed ✓
<b>Stripping of insulation</b>	easy	passed ✓
<b>Oil resistance IRM 902 at 100°C / 24h</b>	no tears voltage test at 1,5 kV a.c.	passed ✓
<b>Fuel resistance IRM 903 at 70°C / 168h</b>	no tears voltage test at 1,5 kV a.c.	passed ✓
<b>Resistance against acids N-oxalic acid solution at 23°C / 168h</b>	no tears voltage test at 1,5 kV a.c.	passed ✓
<b>Alkaline resistance N-oxalic acid solution at 23°C / 168h</b>	no tears voltage test at 1,5 kV a.c.	passed ✓
<b>Hot pressure resistance at 125°C / 4h</b>	impression depth ≤ 50%, voltage test at 1,5 kV a.c.	impression depth 0% passed ✓
<b>Dynamic penetration test</b>	0,5 mm² - load 70 N	passed ✓
<b>Resistance to tear propagation</b>	at -15°C / 3h at +23°C / 3h at +85°C / 3h voltage test at 150 V a.c.	passed ✓
<b>Shrinking at 150°C</b>	< 1,5 mm	passed ✓
<b>Blocking of conductors</b>	at 150°C / 6h no adhesion	passed ✓
<b>Cold bend test</b>	at -40°C	passed ✓
<b>Abrasion resistance</b>	0,5 mm² - load 7 N	passed ✓
<b>Elasticity</b>		passed ✓
<b>Ozone resistance</b>	method B no tears voltage test at 1,5 kV a.c.	passed ✓
<b>Stress cracking resistance</b>	168 h at 180°C no tears voltage test at 1,5 kV a.c.	passed ✓
<b>Flame propagation at conductor</b>	flame effect 60 sec. fire trace: < 425 mm	passed fire trace: 70 mm no afterflame period ✓
<b>Flame propagation banded conductors</b>	flame effect 20 min fire trace: < 1,5 m	passed fire trace: 0,8 m no afterflame period ✓
<b>Acidity of corrosive gases</b>	pH min. 4,3 conductivity max. 10,0 µS/mm	passed ✓
<b>Development of corrosive gases</b>	hydrogen chloride max. 0,5%, fluorine max. 0,1%	passed ✓
<b>Smoke density</b>	category 4 ≥ 70%	light transmission Z 80% ✓

E-mail: [info@sabcable.com](mailto:info@sabcable.com)



Web site: [www.sabcable.com](http://www.sabcable.com)

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Safety by standardized and controlled production

# HALOGEN-FREE CABLES

EN 50306-2

**SABIX® A 170 TW** Flexible "Thin-wall" single conductor - space and weight saving

**VDE Prüf- und Zertifizierungsinstitut**


**ZEICHENGENEHMIGUNG  
MARKS LICENCE**

SAB BRÖCKSKES GmbH & Co. KG  
Grefrather Strasse 204-212 b  
41749 Viersen

ist berechtigt, für ihr Produkt /  
is authorized to use for their product

**Kabel und Leitungen für Schienenfahrzeuge mit verbessertem Verhalten  
im Brandfall, reduzierte Isolierwanddicken, einadrig.  
Railway rolling stock cables having special fire  
performance-Thin wall-Single core cables.**

die hier abgebildeten markenrechtlich geschützten Zeichen  
für die ab Blatt 2 aufgeführten Typen zu benutzen /  
the legally protected Marks as shown below for the types referred to on page 2 ff.

 Hersteller - author <VDE> oder/ or <>D<>

Geprüft und zertifiziert nach /  
Tested and certified according to

DIN EN 50306-2 (VDE 0260 Teil 306-2):2003-05


Aktenzeichen: 493200-5730-0002 / 49161  
File ref.:  
Ausweis-Nr. 40012051 Blatt 1  
Licence No. Page

Weitere Bedingungen siehe Rückseite und Folgebögen /  
Further conditions see reverse and following pages

Offenbach, 2004-10-27

VDE Prüf- und Zertifizierungsinstitut  
VDE Testing and Certification Institute  
Zertifizierungsstelle  
Certification

**VDE VERBAND DER ELEKTROTECHNIK  
ELEKTRONIK INFORMATIONSTECHNIK e.V.**



**- und Zertifizierungsinstitut  
enehmigung**

Ausweis-Nr. / Blatt /  
Licence No. page  
40012051 2

Genehmigungs-Inhabers / Name and registered seat of the Licence holder  
SAB BRÖCKSKES GmbH & Co. KG, Grefrather Strasse 204-212 b, 41749 Viersen

Datum / Date  
2004-10-27

ref. 002 / 49161 / FG41 / LR

nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40012051.  
It is only valid in conjunction with page 1 of the Licence No. 40012051.

**Leitungen für Schienenfahrzeuge mit verbessertem Verhalten  
im Brandfall, reduzierte Isolierwanddicken, einadrig.  
Railway rolling stock cables having special fire  
performance-Thin wall-Single core cables.**

Spezifische Angaben:  
Gefahrenniveau K  
Hazard level K

Nennspannung  
300 V


Hersteller  
SAB BRÖCKSKES

Das Zeichengenehmigungs-Ausweis bildet die Grundlage für die EG-Konformitätserklärung und  
die CE-Markierung durch den Hersteller oder dessen Bevollmächtigten und bescheinigt die Konformität  
mit den genannten Normen im Sinne der EG-Niederspannungsrichtlinie 73/23/EWG mit ihren  
Änderungen.  
This Marks Licence is the basis for the EC Declaration of Conformity and the CE Marking by the  
manufacturer or his agent and shows the conformity with the said standards as defined by the EC  
Low-Voltage Directive 73/23/EEC including amendments.

VDE Prüf- und Zertifizierungsinstitut  
VDE Testing and Certification Institute  
Fachgebiet FG41  
Section FG41

*[Signature]* *[Signature]*

VDE Testing and Certification Institute • Institut VDE d'Essais et de Certification  
Morianstrasse 28, D-63069 Offenbach  
Telefon +49 (0) 69 83 06-0  
Telefax +49 (0) 69 83 06-555



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E-mail: [info@sabcable.com](mailto:info@sabcable.com)



Web site: [www.sabcable.com](http://www.sabcable.com)

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



SAB BRÖCKSKES · D-VIERSEN · SABIX® A166 FRNC 0,6/1 kV 1,5 mm<sup>2</sup> CE

Marking for SABIX® A 166 FRNC 61660182:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A166 FRNC 0,6/1 kV 1,5 mm<sup>2</sup> CE

SABIX® A 166 FRNC is a halogen free single conductor for use in control cabinets, appliances and communication technologies, household appliances, generators and transformers, machine construction, railway technologies and other specific technologies. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

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

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0.6/1 kV
<b>Testing voltage:</b>	3000 V
<b>Min. bending radius:</b>	7,5 x O.D.
<b>For one single bend:</b>	5 x O.D.
<b>Temperature range</b>	
<i>fixed installation:</i>	-40/+90 °C
<i>flexing:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	mm <sup>2</sup>	AWG MCM	nominal inch	outer-Ø mm	cable weight ≈ lbs/mft
▶ 6166 .. 82*	1.50	16 (≈ 27-29/30)	0.126	3.2	15
▶ 6166 .. 84*	2.50	14 (≈ 46/30)	0.154	3.9	24
▶ 6166 .. 86*	4.00	12 (≈ 52/28)	0.177	4.5	34
▶ 6166 .. 87*	6.00	10 (≈ 78/28)	0.197	5.0	48
▶ 6166 .. 88*	10.00	8 (≈ 77/26)	0.287	7.3	88
▶ 6166 .. 89*	16.00	6 (≈ 122/26)	0.327	8.3	134
▶ 6166 .. 90*	25.00	4 (≈ 190/26)	0.402	10.2	205
▶ 6166 .. 91*	35.00	2 (≈ 272/26)	0.449	11.4	271

item no.	mm <sup>2</sup>	AWG MCM	nominal inch	outer-Ø mm	cable weight ≈ lbs/mft
▶ 6166 .. 92*	50.00	1 (≈ 400/26)	0.555	14.1	387
▶ 6166 .. 93*	70.00	2/0 (≈ 543/26)	0.594	15.1	514
▶ 6166 .. 94*	95.00	3/0 (≈ 484/24)	0.728	18.5	707
▶ 6166 .. 95*	120.00	4/0 (≈ 589/24)	0.787	20.0	847
▶ 6166 .. 96*	150.00	250 (≈ 740/24)	0.870	22.1	1053
▶ 6166 .. 97*	185.00	350 (≈ 902/24)	0.925	23.5	1271
▶ 6166 .. 98*	240.00	450 (≈ 1220/24)	1.071	27.2	1706

Other dimensions and colors are possible on request.

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

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

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Web site: [www.sabcable.com](http://www.sabcable.com)

# HALOGEN-FREE CABLES

**SABIX® A 147 FRNC** Wiring cable 600 V  
**SABIX® A 157 FRNC** Wiring cable 1000V



300/500V 0,5 mm<sup>2</sup> 20 AWG AWM Style 10528 75°C 600V E172204 CE

Marking for SABIX® A 147 FRNC 61470150:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 147 FRNC 300/500V 0,5 mm<sup>2</sup> 20 AWG AWM Style 10528 75°C 600V E172204 CE

SABIX® A 147 FRNC / SABIX® A 157 FRNC is a halogen free, UL recognized single conductor for use in control cabinets, appliances and communication technologies, household appliances, generators and transformers, machine construction, railway technologies and other specific technologies. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

## Construction:

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

## Technical data:

<b>Voltage UL:</b>	<b>SABIX® A147 FRNC:</b> 20 - 18 AWG: 600 V	<b>SABIX® A157 FRNC:</b> 16 AWG - 550 MCM: 1000 V
<b>Nominal voltage Uo/U:</b>	<b>SABIX® A147 FRNC:</b> 20 - 18 AWG: 300/500 V	<b>SABIX® A157 FRNC:</b> 16 AWG - 550 MCM: 450/750 V
<b>Min. bending radius: For one single bend:</b>	7.5 x O.D. 5 x O.D.	
<b>Temperature range</b> <i>fixed installation:</i> <i>flexing:</i>	DIN/VDE: -40/+90 °C -30/+90 °C	
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1	
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2	
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases	
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034	
<b>Flexibility:</b>	good	
<b>Weather resistance:</b>	good	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28	

## Outstanding features:

- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- UL recognition

## SABIX® A 147 FRNC

item no.	mm <sup>2</sup>	AWG MCM	nominal inch	outer-ø mm	cable weight ≈ lbs/mft
▶ 6147 .. 50*	0.50	20 (≈ 16/32)	0.083	2.1	6
▶ 6147 .. 75*	0.75	19 (≈ 23/32)	0.094	2.4	8
▶ 6147 .. 80*	1.00	18 (≈ 30/32)	0.098	2.5	10

Other dimensions and colors are possible on request.

## SABIX® A 157 FRNC

item no.	mm <sup>2</sup>	AWG MCM	nominal inch	outer-ø mm	cable weight ≈ lbs/mft
▶ 6157 .. 82*	1.50	16 (≈ 27-29/30)	0.118	3.0	13
▶ 6157 .. 84*	2.50	14 (≈ 46/30)	0.142	3.6	22
▶ 6157 .. 86*	4.00	12 (≈ 52/28)	0.165	4.2	32
▶ 6157 .. 87*	6.00	10 (≈ 78/28)	0.185	4.7	45
▶ 6157 .. 88*	10.00	8 (≈ 77/26)	0.248	6.3	79
▶ 6157 .. 89*	16.00	6 (≈ 122/26)	0.315	8.0	122
▶ 6157 .. 90*	25.00	4 (≈ 190/26)	0.390	9.9	196
▶ 6157 .. 91*	35.00	2 (≈ 272/26)	0.437	11.1	265
▶ 6157 .. 92*	50.00	1 (≈ 400/26)	0.543	13.8	378
▶ 6157 .. 93*	70.00	2/0 (≈ 543/26)	0.583	14.8	505
▶ 6157 .. 94*	95.00	3/0 (≈ 484/24)	0.717	18.2	695
▶ 6157 .. 95*	120.00	4/0 (≈ 589/24)	0.776	19.7	834
▶ 6157 .. 96*	150.00	250 MCM (≈ 740/24)	0.858	21.8	1038
▶ 6157 .. 97*	185.00	350 MCM (≈ 902/24)	0.913	23.2	1254
▶ 6157 .. 98*	240.00	450 MCM (≈ 1220/24)	1.059	26.9	1685
▶ 6157 .. 99*	300.00	550 MCM (≈ 1525/24)	1.181	30.0	2100

Other dimensions and colors are possible on request.

### \* Color code for single conductors:

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

E-mail: [info@sabcable.com](mailto:info@sabcable.com)



Web site: [www.sabcable.com](http://www.sabcable.com)

temperature resistant up to +220°C



# HALOGEN-FREE CABLES

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



BRÖCKSKES · D-VIERSEN · SABIX® A100 HT · 220°C · CE

Marking for SABIX® A 100 HT 71000150:  
 SAB BRÖCKSKES · D-VIERSEN · SABIX® A100 HT · 220°C · CE

SABIX® A 100 HT / SABIX® A 101 HT is a halogen free single conductor. This cable is especially made for use for internal wiring at high ambient temperatures in protected rooms. With the special SABIX®-Insulation this cable is useful for temperatures up to 220 °C.

## Construction:

**Conductor:** **SABIX® A 100 HT:** nickel-plated copper strands  
**SABIX® A 101 HT:** silver-plated copper strands  
 fine wires acc. to IEC 60228, EN 60228, VDE 0295, class 5

**Insulation:** SABIX® 722

**Color code:** colored

## Technical data:

**Nominal voltage:** U<sub>0</sub>/U 300/500 V

**Testing voltage:** 2000 V

**Min. bending radius:** 7.5 x O.D.  
 For one single bend: 5 x O.D.

**Temperature range**  
*fixed installation:* -40/+220 °C  
*flexing:* -25/+220 °C

**Zero halogen:** acc. to DIN VDE 0472 part 815 and IEC 60754-1

**Burning characteristics:** flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2

**Corrosivity:** in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases

**Absence of harmful substances:** acc. to RoHS directive of the European Union see page N/28

## Outstanding features:

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

## SABIX® A 100 HT

item no.	mm <sup>2</sup>	AWG MCM	nominal inch	outer-ø mm	cable weight ≈ lbs/mft
▶ 7100 .. 25*	0.25	24 (≈ 14/34)	0.091	2.3	5
▶ 7100 .. 34*	0.34	22 (≈ 7/30)	0.094	2.4	5
▶ 7100 .. 50*	0.50	20 (≈ 16/32)	0.098	2.5	7
▶ 7100 .. 75*	0.75	19 (≈ 23/32)	0.110	2.8	9
▶ 7100 .. 80*	1.00	18 (≈ 30/32)	0.114	2.9	10
▶ 7100 .. 82*	1.50	16 (≈ 27-29/30)	0.134	3.4	14
▶ 7100 .. 84*	2.50	14 (≈ 46/30)	0.157	4.0	22
▶ 7100 .. 86*	4.00	12 (≈ 52/28)	0.181	4.6	32
▶ 7100 .. 87*	6.00	10 (≈ 78/28)	0.201	5.1	45
▶ 7100 .. 88*	10.0	8 (≈ 77/26)	0.291	7.4	81
▶ 7100 .. 89*	16.0	6 (≈ 122/26)	0.331	8.4	118
▶ 7100 .. 90*	25.0	4 (≈ 190/26)	0.406	10.3	190
▶ 7100 .. 91*	35.0	2 (≈ 272/26)	0.453	11.5	259
▶ 7100 .. 92*	50.0	1 (≈ 400/26)	0.559	14.2	369
▶ 7100 .. 93*	70.0	2/0 (≈ 543/26)	0.598	15.2	495
▶ 7100 .. 94*	95.0	3/0 (≈ 484/24)	0.732	18.6	678
▶ 7100 .. 95*	120.0	4/0 (≈ 589/24)	0.791	20.1	816
▶ 7100 .. 96*	150.0	250 (≈ 740/24)	0.874	22.2	1015
▶ 7100 .. 97*	185.0	350 (≈ 902/24)	0.929	23.6	1228
▶ 7100 .. 98*	240.0	450 (≈ 1220/24)	1.075	27.3	1651
▶ 7100 .. 99*	300.0	550 (≈ 1525/24)	1.197	30.4	2058

Other dimensions and colors are possible on request.

## SABIX® A 101 HT

item no.	mm <sup>2</sup>	AWG MCM	nominal inch	outer-ø mm	cable weight ≈ lbs/mft
▶ 7101 .. 25*	0.25	24 (≈ 14/34)	0.091	2.3	5
▶ 7101 .. 34*	0.34	22 (≈ 7/30)	0.094	2.4	5
▶ 7101 .. 50*	0.50	20 (≈ 16/32)	0.098	2.5	7
▶ 7101 .. 75*	0.75	19 (≈ 23/32)	0.110	2.8	9
▶ 7101 .. 80*	1.00	18 (≈ 30/32)	0.114	2.9	10
▶ 7101 .. 82*	1.50	16 (≈ 27-29/30)	0.134	3.4	14
▶ 7101 .. 84*	2.50	14 (≈ 46/30)	0.157	4.0	22
▶ 7101 .. 86*	4.00	12 (≈ 52/28)	0.181	4.6	32
▶ 7101 .. 87*	6.00	10 (≈ 78/28)	0.201	5.1	45
▶ 7101 .. 88*	10.0	8 (≈ 77/26)	0.291	7.4	81
▶ 7101 .. 89*	16.0	6 (≈ 122/26)	0.331	8.4	118
▶ 7101 .. 90*	25.0	4 (≈ 190/26)	0.406	10.3	190
▶ 7101 .. 91*	35.0	2 (≈ 272/26)	0.453	11.5	259
▶ 7101 .. 92*	50.0	1 (≈ 400/26)	0.559	14.2	369
▶ 7101 .. 93*	70.0	2/0 (≈ 543/26)	0.598	15.2	495
▶ 7101 .. 94*	95.0	3/0 (≈ 484/24)	0.732	18.6	678
▶ 7101 .. 95*	120.0	4/0 (≈ 589/24)	0.791	20.1	816
▶ 7101 .. 96*	150.0	250 (≈ 740/24)	0.874	22.2	1015
▶ 7101 .. 97*	185.0	350 (≈ 902/24)	0.929	23.6	1228
▶ 7101 .. 98*	240.0	450 (≈ 1220/24)	1.075	27.3	1651
▶ 7101 .. 99*	300.0	550 (≈ 1525/24)	1.197	30.4	2058

Other dimensions and colors are possible on request.

**\* Color code for single conductors:**

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

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# HALOGEN-FREE CABLES

**SABIX® A 200 FRNC** Control cable with numbered conductors, improved fire performance and extended temperature range



BRÖCKSKES · D-VIERSEN · SABIX® A200 FRNC 12 x 1,5 mm<sup>2</sup>

Marking for SABIX® A 200 FRNC 62001215:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A200 FRNC 12 x 1,5 mm<sup>2</sup> CE

SABIX® A 200 FRNC is a halogen free, multi-conductor, flexible power and control cable designed for use in all electrical equipment in dry, damp and wet conditions. Recommended applications include machinery, data processing equipment, ventilation and air conditioning systems. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

## Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® 230
<b>Jacket color:</b>	gray

## Outstanding features:

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

## Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b>	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
<b>Temperature range</b>	
<i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>					▶ 18 AWG (≈ 27-29/30) • 1.50 mm <sup>2</sup>					▶ 14 AWG (≈ 46/30) • 2.50 mm <sup>2</sup>				
62000205	2	0.197	5.0	25	62000510	5	0.303	7.7	67	62001225	12	0.610	15.5	287
62000305	3	0.209	5.3	29	62000710	7	0.327	8.3	83	62001825	18	0.724	18.4	416
62000405	4	0.224	5.7	34	62001010	10	0.425	10.8	120	62002525	25	0.886	22.5	568
62000505	5	0.252	6.4	42	62001210	12	0.437	11.1	136	▶ 12 AWG (≈ 52/28) • 4.00 mm <sup>2</sup>				
62000705	7	0.272	6.9	52	62001810	18	0.516	13.1	196	62000340	3	0.390	9.9	129
62001005	10	0.346	8.8	73	62002510	25	0.626	15.9	267	62000440	4	0.433	11.0	161
62001205	12	0.366	9.3	85	62003210	32	0.681	17.3	331	62000540	5	0.484	12.3	199
62001805	18	0.429	10.9	121	62004210	42	0.772	19.6	420	62000740	7	0.535	13.6	259
62002505	25	0.516	13.1	161	62006110	61	0.902	22.9	595	▶ 10 AWG (≈ 78/28) • 6.00 mm <sup>2</sup>				
62003205	32	0.559	14.2	200	▶ 16 AWG (≈ 27-29/30) • 1.50 mm <sup>2</sup>					62000360	3	0.457	11.6	183
62004205	42	0.626	15.9	255	62000215	2	0.260	6.6	48	62000460	4	0.508	12.9	230
62006105	61	0.736	18.7	356	62000315	3	0.276	7.0	58	62000560	5	0.567	14.4	284
▶ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>					62000415	4	0.307	7.8	73	62000760	7	0.606	15.4	370
62000207	2	0.220	5.6	32	62000515	5	0.335	8.5	87	▶ 8 AWG (≈ 77/26) • 10.00 mm <sup>2</sup>				
62000307	3	0.232	5.9	38	62000715	7	0.370	9.4	112	62000461	4	0.665	16.9	394
62000407	4	0.260	6.6	47	62001015	10	0.480	12.2	161	62000561	5	0.740	18.8	480
62000507	5	0.283	7.2	56	62001215	12	0.496	12.6	183	62000761	7	0.823	20.9	638
62000707	7	0.315	8.0	71	62001815	18	0.591	15.0	267	▶ 6 AWG (≈ 122/26) • 16.00 mm <sup>2</sup>				
62001007	10	0.402	10.2	101	62002515	25	0.717	18.2	369	62000462	4	0.819	20.8	601
62001207	12	0.421	10.7	117	62003215	32	0.776	19.7	458	62000562	5	0.913	23.2	751
62001807	18	0.496	12.6	167	62004215	42	0.874	22.2	593	62000762	7	1.012	25.7	974
62002507	25	0.602	15.3	228	62006115	61	1.024	26.0	833	▶ 4 AWG (≈ 190/26) • 25.00 mm <sup>2</sup>				
62003207	32	0.654	16.6	282	▶ 14 AWG (≈ 46/30) • 2.50 mm <sup>2</sup>					62000463	4	0.980	24.9	933
62004207	42	0.732	18.6	360	62000225	2	0.315	8.0	73	62000563	5	1.106	28.1	1176
62006107	61	0.858	21.8	504	62000325	3	0.335	8.5	88	▶ 2 AWG (≈ 272/26) • 35.00 mm <sup>2</sup>				
▶ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>					62000425	4	0.370	9.4	110	62000464	4	1.134	28.8	1295
62000210	2	0.228	5.8	36	62000525	5	0.406	10.3	132	62000564	5	1.280	32.5	1622
62000310	3	0.248	6.3	45	62000725	7	0.449	11.4	171	Other dimensions and colors are possible on request.				
62000410	4	0.268	6.8	54	62001025	10	0.591	15.0	251					

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# HALOGEN-FREE CABLES



## SABIX® A 205 FRNC Control cable with colored conductors and improved fire performance and extended temperature range

BRÖCKSKES · D-VIERSEN · SABIX® A205 FRNC 5 x 1,5 mm<sup>2</sup> CE



Marking for SABIX® A 205 FRNC 62050515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A205 FRNC 5 x 1,5 mm<sup>2</sup> CE

SABIX® A 205 FRNC is a halogen free, multi-conductor, flexible power and control cable designed with colored conductors in acc. to HD 308 (VDE 0293 part 308) for use in all electrical equipment in dry, damp and wet conditions. Recommended applications include machinery, data processing equipment, ventilation and air conditioning systems. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	colored acc. to HD 308 (VDE 0293 part 308); green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® 230
<b>Jacket color:</b>	gray

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b>	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
<b>Temperature range</b>	
<i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>				
62050205	2	0.197	5.0	25
62050305	3	0.209	5.3	29
62050405	4	0.224	5.7	34
62050505	5	0.236	6.0	42
62050705	7	0.272	6.9	52
▶ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>				
62050207	2	0.220	5.6	32
62050307	3	0.232	5.9	38
62050407	4	0.260	6.6	47
62050507	5	0.283	7.2	56
62050707	7	0.315	8.0	71
▶ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>				
62050210	2	0.228	5.8	36
62050310	3	0.248	6.3	45
62050410	4	0.268	6.8	54
62050510	5	0.303	7.7	67
62050710	7	0.327	8.3	83

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm <sup>2</sup>				
62050215	2	0.260	6.6	48
62050315	3	0.276	7.0	58
62050415	4	0.307	7.8	73
62050515	5	0.335	8.5	87
62050715	7	0.370	9.4	112
▶ 14 AWG (≈ 46/30) • 2.50 mm <sup>2</sup>				
62050225	2	0.315	8.0	73
62050325	3	0.335	8.5	88
62050425	4	0.370	9.4	110
62050525	5	0.413	10.5	132
62050725	7	0.449	11.4	171
▶ 12 AWG (≈ 52/28) • 4.00 mm <sup>2</sup>				
62050340	3	0.390	9.9	129
62050440	4	0.433	11.0	161
62050540	5	0.520	13.2	199

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 10 AWG (≈ 78/28) • 6.00 mm <sup>2</sup>				
62050360	3	0.457	11.6	184
62050460	4	0.488	12.4	230
62050560	5	0.567	14.4	284
▶ 8 AWG (≈ 77/26) • 10.00 mm <sup>2</sup>				
62050361	3	0.602	15.3	316
62050461	4	0.665	16.9	394
62050561	5	0.740	18.8	481
▶ 6 AWG (≈ 122/26) • 16.00 mm <sup>2</sup>				
62050462	4	0.819	20.8	601
▶ 4 AWG (≈ 190/26) • 25.00 mm <sup>2</sup>				
62050463	4	0.980	24.9	933
▶ 2 AWG (≈ 272/26) • 35.00 mm <sup>2</sup>				
62050464	4	1.134	28.8	1295
▶ 1 AWG (≈ 400/26) • 50.00 mm <sup>2</sup>				
62050465	4	1.311	33.3	1768

Other dimensions and colors are possible on request.

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# HALOGEN-FREE CABLES

acc. to  
NF C32-070 C1

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



D-VIERSEN · SABIX® A224 FRNC C1 50 x 0,5 mm²

Marking for SABIX® A224 FRNC C1 62245005:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A224 FRNC C1 50 x 0,5 mm² CE

SABIX® A 224 FRNC C1 is a halogen free, multi-conductor, flexible power and control cable designed for use in all electrical equipment in dry, damp and wet conditions. Recommended applications include machinery, data processing equipment, ventilation and air conditioning systems. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation :</b>	SABIX® 233
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® 233
<b>Jacket color:</b>	black

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	Uo/U 450/750 V
<b>Testing voltage U:</b>	3000 V
<b>Min. bending radius</b>	
fixed laying:	4 x O.D.
flexible application:	6 x O.D.
<b>Temperature range</b>	
fixed laying:	-30/+90 °C
flexible application:	-20/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2 + NF C32-070 C1
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm²</b>				
62240205	2	0.228	5.8	24
62240305	3	0.248	6.3	33
62240405	4	0.268	6.8	40
62240505	5	0.303	7.7	51
62240705	7	0.327	8.3	63
62241005	10	0.425	10.8	94
62241205	12	0.437	11.1	107
62241805	18	0.516	13.1	153
62242505	25	0.626	15.9	212
62243405	34	0.713	18.1	285
62244205	42	0.772	19.6	345
62246105	61	0.902	22.9	483
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm²</b>				
62240207	2	0.252	6.4	30
62240307	3	0.276	7.0	41
62240407	4	0.307	7.8	53
62240507	5	0.335	8.5	64
62240707	7	0.370	9.4	84
62241007	10	0.480	12.2	124
62241207	12	0.496	12.6	140
62241807	18	0.591	15.0	207
62242507	25	0.717	18.2	285
62243407	34	0.803	20.4	374
62244207	42	0.874	22.2	460
62246107	61	1.024	26.0	643
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm²</b>				
62240210	2	0.268	6.8	36
62240310	3	0.283	7.2	46
62240410	4	0.315	8.0	60

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm²</b>				
62240510	5	0.346	8.8	73
62240710	7	0.382	9.7	95
62241010	10	0.496	12.6	140
62241210	12	0.512	13.0	161
62241810	18	0.610	15.5	237
62242510	25	0.740	18.8	326
62243410	34	0.839	21.3	436
62244210	42	0.906	23.0	529
62246110	61	1.607	27.1	750
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm²</b>				
62240215	2	0.291	7.4	44
62240315	3	0.315	8.0	60
62240415	4	0.343	8.7	75
62240515	5	0.386	9.8	94
62240715	7	0.425	10.8	124
62241015	10	0.551	14.0	181
62241215	12	0.567	14.4	208
62241815	18	0.677	17.2	306
62242515	25	0.827	21.0	432
62243415	34	0.937	23.8	577
62244215	42	1.012	25.7	700
62246115	61	1.189	30.2	995
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm²</b>				
62240225	2	0.346	8.8	65
62240325	3	0.374	9.5	89
62240425	4	0.417	10.6	114
62240525	5	0.457	11.6	140
62240725	7	0.504	12.8	185
62241025	10	0.661	16.8	274

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm²</b>				
62241225	12	0.681	17.3	315
62241825	18	0.819	20.8	470
62242525	25	0.957	25.3	653
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm²</b>				
62240340	3	0.433	11.0	126
62240440	4	0.480	12.2	163
62240540	5	0.535	13.6	204
62240740	7	0.591	15.0	271
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm²</b>				
62240360	3	0.500	12.7	177
62240460	4	0.555	14.1	229
62240560	5	0.618	15.7	286
62240760	7	0.681	17.3	382
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm²</b>				
62240461	4	0.709	18.0	380
62240561	5	0.988	25.1	661
62240761	7	0.988	25.1	753
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm²</b>				
62240462	4	0.992	25.2	690
62240562	5	0.996	25.3	731
62240762	7	1.067	27.1	943
<b>▶ 4 AWG (≈ 190/26) • 25.00 mm²</b>				
62240463	4	0.961	24.4	856
62240563	5	1.071	27.2	1074
<b>▶ 2 AWG (≈ 272/26) • 35.00 mm²</b>				
62240464	4	1.094	27.8	1176
62240564	5	1.228	31.2	1447

Other dimensions and colors are possible on request.

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# HALOGEN-FREE CABLES

acc. to  
NF C32-070 C1



## SABIX® A 226 C FRNC C1

Control cable with numbered conductors, improved fire performance, extended temperature range and overall copper screen



Marking for SABIX® A226 C FRNC C1 62261815:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A226 C FRNC C1 18 x 1,5 mm² CE

SABIX® A 226 C FRNC C1 is a halogen free, multi-conductor, flexible power and control cable designed for use in all electrical equipment in dry, damp and wet conditions. Recommended applications include machinery, data processing equipment, ventilation and air conditioning systems. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation :</b>	SABIX® 233
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 233
<b>Jacket color:</b>	black

### Outstanding features:

- good EMC characteristics
- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- NF C32-070 C1

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 450/750 V
<b>Testing voltage U:</b>	2500 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x O.D.
<i>flexible application:</i>	10 x O.D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-30/+90 °C
<i>flexible application:</i>	-20/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2 + NF C32-070 C1
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ <b>20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>					▶ <b>16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>					▶ <b>10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
62260205	2	0.256	6.5	38	62260315	3	0.335	8.5	76	62260460	4	0.598	15.2	297
▶ <b>19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>					▶ <b>14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>					▶ <b>8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
62260407	4	0.327	8.3	69	62260415	4	0.370	9.4	95	62260560	5	0.661	16.8	351
62260307	3	0.303	7.7	58	62260515	5	0.406	10.3	114	62260760	7	0.724	18.4	455
62260407	4	0.327	8.3	69	62260715	7	0.453	11.5	157	▶ <b>6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
62260507	5	0.362	9.2	85	62261215	12	0.610	15.5	271	62260362	3	0.815	20.7	529
62260707	7	0.390	9.9	103	62261815	18	0.720	18.3	381	62260562	5	1.008	25.6	837
62261207	12	0.531	13.5	183	▶ <b>12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>					▶ <b>4 AWG (≈ 190/26) • 25.00 mm<sup>2</sup></b>				
62261807	18	0.626	15.9	166	62260325	3	0.394	10.0	108	62260563	5	1.232	31.3	1302
▶ <b>18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>					62260425	4	0.445	11.3	159	▶ <b>2 AWG (≈ 272/26) • 35.00 mm<sup>2</sup></b>				
62260310	3	0.311	7.9	63	62260525	5	0.492	12.5	178	62260564	5	1.374	34.9	1646
62260410	4	0.335	8.5	75	62260340	3	0.461	11.7	159	Other dimensions and colors are possible on request.				
62260510	5	0.374	9.5	93	62260440	4	0.508	12.9	200					
62261610	16	0.618	15.7	273	62260540	5	0.571	14.5	255					
62261810	18	0.654	16.6	302										

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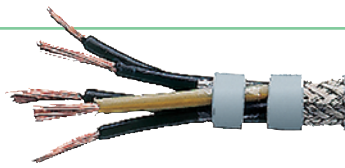
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Web site: [www.sabcable.com](http://www.sabcable.com)

# HALOGEN-FREE CABLES

## SABIX® A 238 FRNC Control cable with numbered conductors, overall copper screen, improved fire performance and extended temperature range



D-VIERSEN · SABIX® A238 FRNC 5 x 1,5 mm<sup>2</sup> CE

Marking for SABIX® A 238 FRNC 62380515:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A238 FRNC 5 x 1,5 mm<sup>2</sup> CE

SABIX® A 238 FRNC is a halogen free, tinned copper braid, multi-conductor, flexible control cable with a smaller OD for tighter installations designed for use in all electrical equipment in dry, damp and wet conditions. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. Recommended applications include machine tools, assembly lines, controls systems, data processing equipment, connections between control panels and machines, CNC machining centers, grinding machines and bottling equipment. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 230
<b>Jacket color:</b>	gray

### Outstanding features:

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

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

### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage U:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 1000 V
<b>Min. bending radius</b>	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b>	
<i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
62380205	2	0.217	5.5	28
62380305	3	0.228	5.8	34
62380405	4	0.252	6.4	42
62380505	5	0.256	6.5	50
62380705	7	0.291	7.4	58
62381205	12	0.386	9.8	96
62381805	18	0.457	11.6	144
62382505	25	0.583	14.8	192
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
62380207	2	0.248	6.3	37
62380307	3	0.260	6.6	44
62380407	4	0.280	7.1	52
62380507	5	0.311	7.9	65
62380707	7	0.335	8.5	79
62381207	12	0.449	11.4	136
62381807	18	0.531	13.5	195
62382507	25	0.646	16.4	275

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
62380210	2	0.256	6.5	41
62380310	3	0.268	6.8	49
62380410	4	0.287	7.3	59
62380510	5	0.323	8.2	75
62380710	7	0.346	8.8	91
62381210	12	0.472	12.0	161
62381810	18	0.551	14.0	223
62382510	25	0.669	17.0	314
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
62380215	2	0.280	7.1	50
62380315	3	0.303	7.7	65
62380415	4	0.327	8.3	78
62380515	5	0.362	9.2	96
62380715	7	0.390	9.9	119
62381215	12	0.531	13.5	210
62381815	18	0.626	15.9	306
62382515	25	0.760	19.3	421

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
62380225	2	0.335	8.5	71
62380325	3	0.362	9.2	93
62380425	4	0.390	9.9	114
62380525	5	0.441	11.2	149
62380725	7	0.484	12.3	192
62381225	12	0.654	16.6	328
62381825	18	0.768	19.5	370
62382525	25	0.929	23.6	637
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
62380440	4	0.461	11.7	173
62380540	5	0.512	13.0	212
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
62380460	4	0.543	13.8	243
62380560	5	0.610	15.5	313
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
62380461	4	0.709	18.0	423
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
62380462	4	0.854	21.7	618

Other dimensions and colors are possible on request.

E-mail: [info@sabcable.com](mailto:info@sabcable.com)



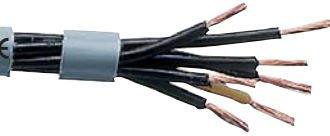
Web site: [www.sabcable.com](http://www.sabcable.com)

# HALOGEN-FREE CABLES



## SABIX® A 260 PUR Cold-flexible, oil resistant control cable with numbered conductors

S · D-VIERSEN · SABIX® A260 PUR 7 x 1,5 mm<sup>2</sup> CE



Marking for SABIX® A 260 PUR 52600715:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A260 PUR 7 x 1,5 mm<sup>2</sup> CE

SABIX® A 260 PUR is a halogen free, multi-conductor, flexible power and control cable with a polyurethane outer jacket designed for use in all electrical equipment in dry, damp and wet conditions. Recommended applications include machinery, data processing equipment. This cable has a very good resistance against acids, alkalines, solvents hydraulic liquids and oil. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Inner jacket:</b>	SABIX® 322 - from 12 AWG
<b>Jacket material:</b>	PUR, TMPU acc. to DIN VDE 0282 part 10 + HD 22.10
<b>Jacket color:</b>	gray

### Outstanding features:

- ▶ halogen-free
- ▶ oil resistant
- ▶ flexible at low temperatures
- ▶ weather resistant

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b>	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>static:</i>	-50/+90 °C
<i>flexing:</i>	-40/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Oil resistance:</b>	very good -TMPU acc. to DIN VDE 0282 part 10 + HD22.10
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Flexibility:</b>	very good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
52600207	2	0.220	5.6	26
52600307	3	0.232	5.9	32
52600407	4	0.252	6.4	38
52600507	5	0.276	7.0	46
52600707	7	0.299	7.6	58
52601007	10	0.378	9.6	80
52601207	12	0.406	10.3	97
52601807	18	0.472	12.0	138
52602507	25	0.579	14.7	191
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
52600210	2	0.228	5.8	30
52600310	3	0.240	6.1	36
52600410	4	0.260	6.6	44
52600510	5	0.287	7.3	54
52600710	7	0.311	7.9	69
52601010	10	0.409	10.4	96
52601210	12	0.421	10.7	116
52601810	18	0.492	12.5	166
52602510	25	0.602	15.3	229

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
52600215	2	0.252	6.4	38
52600315	3	0.268	6.8	48
52600415	4	0.291	7.4	59
52600515	5	0.319	8.1	72
52600715	7	0.346	8.8	93
52601015	10	0.457	11.6	128
52601215	12	0.472	12.0	157
52601815	18	0.551	14.0	226
52602515	25	0.669	17.0	303
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
52600225	2	0.299	7.6	58
52600325	3	0.335	8.5	77
52600425	4	0.346	8.8	91
52600525	5	0.398	10.1	116
52600725	7	0.433	11.0	151
52601025	10	0.551	14.0	209
52601225	12	0.587	14.9	251
52601825	18	0.685	17.4	362
52602525	25	0.854	21.7	507

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
52600340	3	0.461	11.7	133
52600440	4	0.496	12.6	163
52600540	5	0.539	13.7	197
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
52600360	3	0.551	14.0	195
52600460	4	0.594	15.1	240
52600560	5	0.646	16.4	290
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
52600461	4	0.744	18.9	391
52600561	5	0.811	20.6	476
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
52600462	4	0.874	22.2	572
52600562	5	0.961	24.4	700

Other dimensions and colors are possible on request.

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Web site: [www.sabcable.com](http://www.sabcable.com)

# HALOGEN-FREE CABLES

temperature resistant up to +220°C



## SABIX® A 130 HT High temperature resistant control cable with numbered or colored conductors



Marking for SABIX® A 130 HT 71300415:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A130 HT CE

SABIX® A 130 HT is a halogen free, high temperature resistant, multi-conductor, flexible power and control cable designed for use in all electrical equipment in dry, damp and wet conditions. Recommended applications include machinery, data processing equipment, ventilation and air conditioning systems. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	silver-plated copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 722
<b>Color code:</b>	colored acc. to HD 308 (VDE 0293 part 308); from 3 conductors a green-yellow earth wire; from 6 conductors black insulation with consecutive numbers acc. to EN 50334 and a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® 722
<b>Jacket color:</b>	gray

### Outstanding features:

- ▶ halogen-free
- ▶ high temperature resistant
- ▶ flexible

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	2000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b>	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
<b>Temperature range</b>	
<i>static:</i>	-40/+220 °C
<i>flexing:</i>	-25/+220 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

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

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
71300215	2	0.264	6.7	41
71300315	3	0.280	7.1	51
71300415	4	0.311	7.9	65
71300515	5	0.346	8.8	83
71300715	7	0.378	9.6	104
71301015	10	0.496	12.6	150
71301215	12	0.512	13.0	173
71301815	18	0.614	15.6	259
71302515	25	0.740	18.8	351
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
71300225	2	0.323	8.2	64
71300325	3	0.343	8.7	81
71300425	4	0.374	9.5	100
71300525	5	0.425	10.8	129
71300725	7	0.465	11.8	165
71301025	10	0.606	15.4	235
71301225	12	0.626	15.9	273
71301825	18	0.740	18.8	402
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
71300340	3	0.409	10.4	122
71300440	4	0.445	11.3	151
71300540	5	0.500	12.7	192
71300740	7	0.543	13.8	245

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
71300360	3	0.457	11.6	167
71300460	4	0.500	12.7	210
71300560	5	0.551	14.0	261
71300760	7	0.618	15.7	346
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
71300461	4	0.740	18.8	400
71300561	5	0.819	20.8	499
71300761	7	0.913	23.2	669
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
71300462	4	0.850	21.6	607
71300562	5	0.957	24.3	770
71300762	7	1.047	26.6	999
<b>▶ 4 AWG (≈ 190/26) • 25.00 mm<sup>2</sup></b>				
71300263	2	0.882	22.4	560
71300463	4	1.047	26.6	930
71300563	5	1.161	29.5	1160
<b>▶ 2 AWG (≈ 272/26) • 35.00 mm<sup>2</sup></b>				
71300364	3	1.055	26.8	965
71300464	4	1.161	29.5	1222

Other dimensions and colors are possible on request.

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# HALOGEN-FREE CABLES



## SABIX® CC 625 FRNC M Control cable with numbered conductors



Marking for SABIX® CC 625 FRNC M 62521612: SAB BRÖCKSKES · D-VIERSEN ·  
62521215 12 x 1,5 mm<sup>2</sup> SABIX® CC 625 FRNC M 16 AWG/12c 62521612 AWM Style 21089 75°C 600V CSA AWM I/II A/B 80°C 600V FT1 FT2 CE

SABIX® CC 625 FRNC M is a halogen free, multi-conductor, flexible power and control cable designed for use in all electrical equipment in dry, damp, and wet conditions. Recommended applications include machinery, data processing equipment, ventilation and air conditioning systems. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	FRNC
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	<b>UL/CSA:</b> 600 V <b>DIN/VE:</b> U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b> <i>fixed installation:</i>	< 12 mm = 3 x O.D. > 12 mm = 4 x O.D.
<i>free movement:</i>	< 12 mm = 5 x O.D. > 12 mm = 6 x O.D.
<b>Temperature range</b> <i>static:</i> <i>flexing:</i>	<b>DIN VDE:</b> -40/+90 °C -30/+90 °C <b>UL:</b> up to +75 °C <b>CSA:</b> up to +80 °C
<b>Zero halogen:</b>	acc. to DIN/VE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2, CSA FT1
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>					▶ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>					▶ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>				
62522002	2	0.205	5.2	27	62521902	2	0.224	5.7	32	62521802	2	0.232	5.9	36
62522003	3	0.217	5.5	32	62521903	3	0.236	6.0	38	62521803	3	0.248	6.3	44
62522004	4	0.232	5.9	38	62521904	4	0.256	6.5	46	62521804	4	0.268	6.8	54
62522005	5	0.252	6.4	44	62521905	5	0.280	7.1	54	62521805	5	0.295	7.5	65
62522007	7	0.276	7.0	56	62521907	7	0.311	7.9	71	62521807	7	0.323	8.2	83
62522008	8	0.323	8.2	70	62521908	8	0.366	9.3	89	62521808	8	0.378	9.6	102
62522009	9	0.350	8.9	79	62521909	9	0.390	9.9	97	62521809	9	0.413	10.5	116
62522010	10	0.358	9.1	81	62521910	10	0.398	10.1	100	62521810	10	0.421	10.7	120
62522012	12	0.366	9.3	91	62521912	12	0.417	10.6	118	62521812	12	0.433	11.0	137
62522014	14	0.386	9.8	103	62521914	14	0.437	11.1	132	62521814	14	0.453	11.5	155
62522016	16	0.413	10.5	119	62521916	16	0.469	11.9	152	62521818	18	0.512	13.0	198
62522018	18	0.437	11.1	132	62521918	18	0.492	12.5	168	62521825	25	0.622	15.8	271
62522025	25	0.531	13.5	181	62521925	25	0.598	15.2	231	62521830	30	0.654	16.6	321
62522030	30	0.547	13.9	208	62521930	30	0.618	15.7	267	62521834	34	0.709	18.0	365
62522034	34	0.598	15.2	239	62521934	34	0.673	17.1	304	62521840	40	0.768	19.5	429
62522040	40	0.650	16.5	283	62521940	40	0.732	18.6	360	62521841	41	0.768	19.5	454
62522041	41	0.650	16.5	288	62521941	41	0.732	18.6	366	62521861	61	0.902	22.9	626
62522061	61	0.760	19.3	409	62521961	61	0.866	22.0	528					

Continued on next page



# HALOGEN-FREE CABLES

## SABIX® CC 625 FRNC M Control cable with numbered conductors



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

SABIX® CC 625 FRNC M is a halogen free, multi-conductor, flexible power and control cable designed for use in all electrical equipment in dry, damp, and wet conditions. Recommended applications include machinery, data processing equipment, ventilation and air conditioning systems. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	FRNC
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	<b>UL/CSA:</b> 600 V <b>DIN/VE:</b> U <sub>o</sub> /U 300/500 V
<b>Testing voltage:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b> <i>fixed installation:</i>	< 12 mm = 3 x O.D. > 12 mm = 4 x O.D.
<i>free movement:</i>	< 12 mm = 5 x O.D. > 12 mm = 6 x O.D.
<b>Temperature range</b> <i>static:</i>	<b>DIN VDE:</b> -40/+90 °C <b>UL:</b> up to +75 °C <b>CSA:</b> up to +80 °C
<i>flexing:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to DIN/VE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2, CSAFT1
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>					<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>					<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
62521602	2	0.256	6.5	46	62521402	2	0.307	7.8	70	62521003	3	0.449	11.4	182
62521603	3	0.272	6.9	57	62521403	3	0.327	8.3	86	62521004	4	0.500	12.7	230
62521604	4	0.299	7.6	71	62521404	4	0.362	9.2	108	62521005	5	0.559	14.2	286
62521605	5	0.327	8.3	87	62521405	5	0.398	10.1	131	<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
62521607	7	0.366	9.3	112	62521407	7	0.441	11.2	173	62520804	4	0.677	17.2	409
62521608	8	0.429	10.9	136	62521408	8	0.528	13.4	212	62520805	5	0.760	19.3	508
62521609	9	0.465	11.8	153	62521409	9	0.563	14.3	234	<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
62521610	10	0.476	12.1	161	62521409	10	0.583	14.8	252	62520604	4	0.831	21.1	611
62521612	12	0.488	12.4	184	62521412	12	0.602	15.3	290	<b>▶ 4 AWG (≈ 190/26) • 25.00 mm<sup>2</sup></b>				
62521614	14	0.512	13.0	209	62521418	18	0.717	18.2	425	62520404	4	1.043	26.5	991
62521618	18	0.587	14.9	271	62521425	25	0.878	22.3	585	<b>▶ 2 AWG (≈ 272/26) • 35.00 mm<sup>2</sup></b>				
62521625	25	0.713	18.1	375	<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>					62520204	4	1.189	30.2	1347
62521630	30	0.736	18.7	435	62521203	3	0.382	9.7	126	Other dimensions and colors are possible on request.				
62521634	34	0.807	20.5	502	62521204	4	0.425	10.8	160					
62521640	40	0.874	22.2	587	62521205	5	0.476	12.1	198					
62521641	41	0.874	22.2	593	62521207	7	0.528	13.4	261					
62521661	61	1.024	26.0	861										

# HALOGEN-FREE CABLES



## SABIX® CC 625 S FRNC M Control cable with numbered conductors and overall copper screen



Marking for SABIX® CC 625 S FRNC M 62341612: SAB BRÖCKSKES · D-VIERSEN ·  
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 AWM I/II A/B 80°C 600V FT1 CE

SABIX® CC 625 S FRNC M is multi-conductor, shielded, flexible control cable with a smaller OD for tighter installations. It is designed for use in all electrical equipment in dry, damp, and wet conditions. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. Recommended applications include machine tools, assembly lines, control systems, data processing equipment, connections between control panels and machines, CNC machining centers, grinding machines and bottling equipment. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	FRNC
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

- ▶ halogen-free
- ▶ UL recognized, CSA approved
- ▶ no flame propagation
- ▶ good EMC characteristics\*
- ▶ flame retardant and self-extinguishing
- ▶ flexible

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

### Technical data:

<b>Nominal voltage:</b>	<b>UL/CSA:</b> 600 V <b>DIN/VE:</b> Uo/U 300/500 V
<b>Testing voltage:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 1000 V
<b>Min. bending radius</b> <i>fixed installation:</i> <i>free movement:</i>	5 x O.D. 10 x O.D.
<b>Temperature range</b> <i>static:</i> <i>flexing:</i>	<b>DIN VDE:</b> -40/+90 °C <b>UL:</b> up to +75 °C <b>CSA:</b> up to +80 °C -30/+90 °C
<b>Zero halogen:</b>	acc. to DIN/VE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2, CSA FT1
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

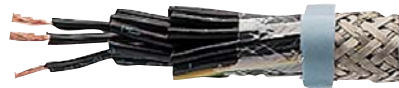
item no.	no. of conductors	nominal outer- $\phi$ inch	nominal outer- $\phi$ mm	cable weight $\approx$ lbs/mft	item no.	no. of conductors	nominal outer- $\phi$ inch	nominal outer- $\phi$ mm	cable weight $\approx$ lbs/mft	item no.	no. of conductors	nominal outer- $\phi$ inch	nominal outer- $\phi$ mm	cable weight $\approx$ lbs/mft
<b>▶ 20 AWG (<math>\approx</math> 16/32) • 0.50 mm<sup>2</sup></b>					<b>▶ 19 AWG (<math>\approx</math> 23/32) • 0.75 mm<sup>2</sup></b>					<b>▶ 18 AWG (<math>\approx</math> 30/32) • 1.00 mm<sup>2</sup></b>				
62342002	2	0.224	5.7	30	62341902	2	0.244	6.2	35	62341802	2	0.252	6.4	39
62342003	3	0.236	6.0	36	62341903	3	0.256	6.5	43	62341803	3	0.268	6.8	49
62342004	4	0.252	6.4	43	62341904	4	0.276	7.0	52	62341804	4	0.287	7.3	58
62342005	5	0.276	7.0	51	62341905	5	0.307	7.8	63	62341805	5	0.315	8.0	72
62342007	7	0.299	7.6	65	62341907	7	0.331	8.4	79	62341807	7	0.350	8.9	93
62342008	8	0.350	8.9	81	62341908	8	0.386	9.8	97	62341808	8	0.398	10.1	111
62342009	9	0.370	9.4	88	62341909	9	0.425	10.8	122	62341809	9	0.441	11.2	134
62342010	10	0.378	9.6	91	62341910	10	0.433	11.0	122	62341810	10	0.449	11.4	141
62342012	12	0.386	9.8	102	62341912	12	0.445	11.3	139	62341812	12	0.469	11.9	162
62342014	14	0.421	10.7	126	62341914	14	0.472	12.0	158	62341814	14	0.488	12.4	180
62342016	16	0.441	11.2	138	62341916	16	0.496	12.6	174	62341818	18	0.547	13.9	228
62342018	18	0.472	12.0	157	62341918	18	0.520	13.2	192	62341825	25	0.665	16.9	325
62342025	25	0.543	13.8	206	62341925	25	0.642	16.3	280	62341830	30	0.697	17.7	374
62342030	30	0.591	15.0	243	62341930	30	0.661	16.8	314	62341834	34	0.752	19.1	423
62342034	34	0.642	16.3	288	62341934	34	0.717	18.2	359	62341840	40	0.811	20.6	491
62342040	40	0.693	17.6	338	62341940	40	0.776	19.7	420	62341841	41	0.811	20.6	499
62342041	41	0.693	17.6	345	62341941	41	0.776	19.7	427	62341861	61	0.945	24.0	700
62342061	61	0.795	20.2	466	62341961	61	0.902	22.9	591					

Continued on next page



# HALOGEN-FREE CABLES

## SABIX® CC 625 S FRNC M Control cable with numbered conductors and overall copper screen



75°C 600V CSA AWM I/II A/B 80°C 600V FT1 FT2

Marking for SABIX® CC 625 S FRNC M 62341612: SAB BRÖCKSKES · D-VIERSEN ·  
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 AWM I/II A/B 80°C 600V FT1 CE

SABIX® CC 625 S FRNC M is multi-conductor, shielded, flexible control cable with a smaller OD for tighter installations. It is designed for use in all electrical equipment in dry, damp, and wet conditions. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. Recommended applications include machine tools, assembly lines, control systems, data processing equipment, connections between control panels and machines, CNC machining centers, grinding machines and bottling equipment. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	FRNC
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

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

### Technical data:

<b>Nominal voltage:</b>	<b>UL/CSA:</b> 600 V <b>DIN/VE:</b> U <sub>o</sub> /U 300/500 V
<b>Testing voltage:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 1000 V
<b>Min. bending radius</b>	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b>	<b>DIN VDE:</b> -40/+90 °C <b>UL:</b> up to +75 °C <b>CSA:</b> up to +80 °C
<i>static:</i>	
<i>flexing:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to DIN/VE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2, CSA FT1
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
62341602	2	0.276	7.0	48
62341603	3	0.295	7.5	62
62341604	4	0.319	8.1	76
62341605	5	0.354	9.0	93
62341607	7	0.386	9.8	120
62341608	8	0.465	11.8	159
62341609	9	0.492	12.5	174
62341610	10	0.504	12.8	183
62341612	12	0.524	13.3	210
62341614	14	0.547	13.9	238
62341618	18	0.622	15.8	312
62341625	25	0.756	19.2	433
62341630	30	0.780	19.8	493
62341634	34	0.843	21.4	561
62341640	40	0.909	23.1	647
62341641	41	0.909	23.1	653
62341661	61	1.067	27.1	943

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
62341402	2	0.327	8.3	68
62341403	3	0.354	9.0	91
62341404	4	0.382	9.7	113
62341405	5	0.433	11.0	148
62341407	7	0.476	12.1	192
62341408	8	0.555	14.1	233
62341409	9	0.598	15.2	259
62341410	10	0.618	15.7	288
62341412	12	0.646	16.4	331
62341418	18	0.760	19.3	478
62341425	25	0.921	23.4	648
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
62341203	3	0.417	10.6	138
62341204	4	0.453	11.5	172
62341205	5	0.504	12.8	212
62341207	7	0.555	14.1	277

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
62341003	3	0.484	12.3	191
62341004	4	0.535	13.6	243
62341005	5	0.594	15.1	302
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
62340804	4	0.720	18.3	427
62340805	5	0.795	20.2	526
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
62340604	4	0.874	22.2	623
<b>▶ 4 AWG (≈ 190/26) • 25.00 mm<sup>2</sup></b>				
62340404	4	1.079	27.4	974
<b>▶ 2 AWG (≈ 272/26) • 35.00 mm<sup>2</sup></b>				
62340204	4	1.232	31.3	1316

Other dimensions and colors are possible on request.

# HALOGEN-FREE CABLES



## SABIX® CC 625 SH FRNC M Control cable with numbered conductors, inner jacket and overall copper screen



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

SABIX® CC 625 SH FRNC M is multi-conductor, shielded, flexible control cable with a smaller OD for tighter installations. It is designed for use in all electrical equipment in dry, damp, and wet conditions. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. Recommended applications include machine tools, assembly lines, control systems, data processing equipment, connections between control panels and machines, CNC machining centers, grinding machines and bottling equipment. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	FRNC
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Inner jacket:</b>	FRNC
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

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

### Technical data:

<b>Nominal voltage:</b>	<b>UL/CSA:</b> 600 V <b>DIN/VE:</b> U <sub>o</sub> /U 300/500 V
<b>Testing voltage:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 1000 V
<b>Min. bending radius</b>	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b>	<b>DIN VDE:</b> -40/+90 °C <b>UL:</b> up to +75 °C <b>CSA:</b> up to +80 °C
<i>static:</i>	
<i>flexing:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to DIN/VE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2, CSA FT1
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>				
62572002	2	0.276	7.0	50
62572003	3	0.287	7.3	55
62572004	4	0.307	7.8	64
62572005	5	0.331	8.4	74
62572007	7	0.358	9.1	90
62572008	8	0.409	10.4	110
62572009	9	0.437	11.1	127
62572010	10	0.445	11.3	132
62572012	12	0.453	11.5	143
62572014	14	0.488	12.4	164
62572016	16	0.508	12.9	180
62572018	18	0.539	13.7	199
62572025	25	0.642	16.3	275
62572030	30	0.657	16.7	303
62572034	34	0.709	18.0	343
62572040	40	0.768	19.5	405
62572041	41	0.768	19.5	409
62572061	61	0.878	22.3	546

item no.	no. of conductors	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>				
62571902	2	0.299	7.6	58
62571903	3	0.311	7.9	65
62571904	4	0.331	8.4	76
62571905	5	0.366	9.3	90
62571907	7	0.390	9.9	108
62571908	8	0.453	11.5	140
62571909	9	0.484	12.3	155
62571910	10	0.500	12.7	164
62571912	12	0.512	13.0	179
62571914	14	0.539	13.7	200
62571916	16	0.563	14.3	220
62571918	18	0.594	15.1	243
62571925	25	0.709	18.0	335
62571930	30	0.736	18.7	378
62571934	34	0.791	20.1	427
62571940	40	0.850	21.6	494
62571941	41	0.850	21.6	501
62571961	61	0.992	25.2	691

item no.	no. of conductors	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>				
62571802	2	0.307	7.8	63
62571803	3	0.323	8.2	73
62571804	4	0.350	8.9	87
62571805	5	0.374	9.5	100
62571807	7	0.409	10.4	123
62571808	8	0.480	12.2	162
62571809	9	0.508	12.9	177
62571810	10	0.524	13.3	186
62571812	12	0.535	13.6	204
62571814	14	0.555	14.1	226
62571818	18	0.622	15.8	289
62571825	25	0.740	18.8	384
62571830	30	0.772	19.6	442
62571834	34	0.827	21.0	492
62571840	40	0.886	22.5	568
62571841	41	0.886	22.5	576
62571861	61	1.035	26.3	800

Continued on next page

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# HALOGEN-FREE CABLES

## SABIX® CC 625 SH FRNC M Control cable with numbered conductors, inner jacket and overall copper screen



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

SABIX® CC 625 SH FRNC M is multi-conductor, shielded, flexible control cable with a smaller OD for tighter installations. It is designed for use in all electrical equipment in dry, damp, and wet conditions. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. Recommended applications include machine tools, assembly lines, control systems, data processing equipment, connections between control panels and machines, CNC machining centers, grinding machines and bottling equipment. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	FRNC
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Inner jacket:</b>	FRNC
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

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

### Technical data:

<b>Nominal voltage:</b>	<b>UL/CSA:</b> 600 V <b>DIN/VE:</b> U <sub>o</sub> /U 300/500 V
<b>Testing voltage:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 1000 V
<b>Min. bending radius</b>	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
<b>Temperature range</b>	<b>DIN VDE:</b> -40/+90 °C <b>flexing:</b> -30/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2, CSA FT1
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm <sup>2</sup>				
62571602	2	0.331	8.4	75
62571603	3	0.354	9.0	91
62571604	4	0.378	9.6	106
62571605	5	0.421	10.7	134
62571607	7	0.453	11.5	163
62571608	8	0.531	13.5	202
62571609	9	0.559	14.2	222
62571610	10	0.579	14.7	235
62571612	12	0.591	15.0	259
62571614	14	0.622	15.8	300
62571618	18	0.697	17.7	374
62571625	25	0.831	21.1	503
62571630	30	0.854	21.7	570
62571634	34	0.925	23.5	644
62571640	40	1.000	25.4	751
62571641	41	1.000	25.4	757
62571661	61	1.157	29.4	1058

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 14 AWG (≈ 46/30) • 2.50 mm <sup>2</sup>				
62571402	2	0.386	9.8	106
62571403	3	0.421	10.7	136
62571404	4	0.449	11.4	160
62571405	5	0.500	12.7	195
62571407	7	0.543	13.8	240
62571408	8	0.638	16.2	305
62571409	9	0.673	17.1	335
62571410	10	0.693	17.6	355
62571412	12	0.720	18.3	401
62571418	18	0.835	21.2	552
62571425	25	1.004	25.5	749
▶ 12 AWG (≈ 52/28) • 4.00 mm <sup>2</sup>				
62571203	3	0.484	12.3	153
62571204	4	0.528	13.4	226
62571205	5	0.579	14.7	272
62571207	7	0.638	16.2	353

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 10 AWG (≈ 78/28) • 6.00 mm <sup>2</sup>				
62571003	3	0.551	14.0	253
62571004	4	0.610	15.5	321
62571005	5	0.669	17.0	386
▶ 8 AWG (≈ 77/26) • 10.00 mm <sup>2</sup>				
62570804	4	0.795	20.2	532
62570805	5	0.878	22.3	645
▶ 6 AWG (≈ 122/26) • 16.00 mm <sup>2</sup>				
62570604	4	0.957	24.3	769
▶ 4 AWG (≈ 190/26) • 25.00 mm <sup>2</sup>				
62570404	4	1.169	29.7	1181
▶ 2 AWG (≈ 272/26) • 35.00 mm <sup>2</sup>				
62570204	4	1.331	33.8	1585

Other dimensions and colors are possible on request.

0.6/1 kV

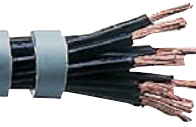
# HALOGEN-FREE CABLES



## SABIX® A 810 FRNC

Motor connection cable with numbered conductors, improved fire performance and extended temperature range

S · D-VIERSEN · SABIX® A810 FRNC rf 0,6/1 kV 7 x 1,5 mm² CE



Marking for SABIX® A 810 FRNC 68100715:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A810 FRNC rf 0,6/1 kV 7 x 1,5 mm² CE

SABIX® A 810 FRNC is a flexible, halogen free, motor power supply cable which has been designed for automation technology, control machinery, machine and industrial factory, motor construction and drive systems.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® 230
<b>Jacket color:</b>	gray

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0.6/1 kV
<b>Testing voltage U:</b>	4000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b>	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
<b>Temperature range</b>	
<i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
68100315	3	0.370	9.4	86
68100415	4	0.402	10.2	103
68100515	5	0.445	11.3	124
68100715	7	0.480	12.2	151
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
68100325	3	0.429	10.9	121
68100425	4	0.465	11.8	144
68100525	5	0.508	12.9	172
68100725	7	0.555	14.1	215
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
68100340	3	0.476	12.1	162
68100440	4	0.524	13.3	198
68100540	5	0.575	14.6	239
68100740	7	0.630	16.0	302

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
68100360	3	0.524	13.3	213
68100460	4	0.571	14.5	259
68100560	5	0.634	16.1	318
68100760	7	0.689	17.5	403
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
68100370	3	0.732	18.6	399
68100470	4	0.799	20.3	486
68100570	5	0.874	22.2	579
68100770	7	0.949	24.1	739

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
68100380	3	0.878	22.3	583
68100480	4	0.961	24.4	712
68100580	5	1.067	27.1	873
68100780	7	1.165	29.6	1109
<b>▶ 4 AWG (≈ 190/26) • 25.00 mm<sup>2</sup></b>				
68100390	3	1.067	27.1	900
68100490	4	1.169	29.7	1106
68100590	5	1.291	32.8	1350
68100790	7	1.413	35.9	1729

Other dimensions and colors are possible on request.

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# HALOGEN-FREE CABLES

**0.6/1 kV**

## SABIX® A 812 C FRNC

Motor connection cable with numbered conductors, improved fire performance, inner jacket, overall copper screen and extended temperature range



Marking for SABIX® A 812 C FRNC 68120715:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A812 C FRNC rf 0,6/1 kV 7 x 1,5 mm² CE

SABIX® A 812 FRNC is a flexible, halogen free, shielded motor power supply cable which has been designed for automation technology, control machinery, machine and industrial factory, motor construction and drive systems. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emission needs to be suppressed.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to DIN VDE 0295 class 5 + IEC 60228 class 5 HD 383 class 5
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Inner jacket:</b>	SABIX® FRNC
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 230
<b>Jacket color:</b>	gray

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	Uo/U 0.6/1 kV
<b>Testing voltage U:</b>	4000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 2000 V
<b>Min. bending radius</b>	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b>	
<i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
68120315	3	0.445	11.3	136
68120415	4	0.472	12.0	152
68120715	7	0.543	13.8	210
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
68120325	3	0.496	12.6	173
68120425	4	0.531	13.5	200
68120525	5	0.591	15.0	251
68120725	7	0.638	16.2	294
▶ 12 AWG (≈ 52/28) • 4.00 mm²				
68120440	4	0.642	16.3	305
68120740	7	0.709	18.0	396

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 10 AWG (≈ 78/28) • 6.00 mm²				
68120360	3	0.594	15.1	286
68120460	4	0.657	16.7	347
68120760	7	0.783	19.9	522
▶ 8 AWG (≈ 77/26) • 10.00 mm²				
68120370	3	0.764	19.4	413
68120470	4	0.827	21.0	501
68120570	5	0.898	22.8	616
68120770	7	0.988	25.1	775

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 6 AWG (≈ 122/26) • 16.00 mm²				
68120380	3	0.882	22.4	556
68120480	4	0.972	24.7	709
68120580	5	1.063	27.0	868
68120780	7	1.169	29.7	1116
▶ 4 AWG (≈ 190/26) • 25.00 mm²				
68120390	3	1.051	26.7	798
68120490	4	1.157	29.4	1015
68120590	5	1.272	32.3	1251

Other dimensions and colors are possible on request.

# HALOGEN-FREE CABLES



## SABIX® D 305 FRNC Flexible data cable with improved fire performance and extended temperature range



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

SABIX® D 305 FRNC is a halogen free, flexible, flame retardant multi-conductor, data cable designed for use in communication technologies. In case of a fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to DIN VDE 0812
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b> <i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b> <i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DINVDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm²</b>					<b>▶ 24 AWG (≈ 14/34) • 0.25 mm²</b>					<b>▶ 22 AWG (≈ 7/30) • 0.34 mm²</b>				
63050214	2	0.130	3.3	11	63050225	2	0.142	3.6	13	63050234	2	0.165	4.2	17
63050314	3	0.138	3.5	12	63050325	3	0.150	3.8	15	63050334	3	0.173	4.4	20
63050414	4	0.146	3.7	13	63050425	4	0.161	4.1	17	63050434	4	0.181	4.6	24
63050514	5	0.154	3.9	15	63050525	5	0.173	4.4	21	63050534	5	0.205	5.2	29
63050714	7	0.169	4.3	19	63050725	7	0.189	4.8	26	63050734	7	0.224	5.7	36
63050814	8	0.205	5.2	24	63050825	8	0.213	5.4	30	63050834	8	0.264	6.7	44
63051214	12	0.217	5.5	28	63051225	12	0.248	6.3	41	63051234	12	0.295	7.5	57
63051414	14	0.224	5.7	32	63051425	14	0.260	6.6	46	63051434	14	0.327	8.3	70
63051614	16	0.244	6.2	37	63051625	16	0.272	6.9	52	63051634	16	0.343	8.7	78
63051814	18	0.256	6.5	41	63051825	18	0.287	7.3	57	63051834	18	0.362	9.2	86
63052114	21	0.280	7.1	48	63052125	21	0.327	8.3	71	63052134	21	0.394	10.0	98
63052414	24	0.295	7.5	54	63052425	24	0.331	8.4	74	63052434	24	0.417	10.6	106
63052714	27	0.319	8.1	61	63052725	27	0.339	8.6	77	63052734	27	0.425	10.8	116
63053014	30	0.327	8.3	65	63053025	30	0.350	8.9	84	63053034	30	0.441	11.2	126
63053214	32	0.339	8.6	69	63053225	32	0.362	9.2	89	63053234	32	0.457	11.6	134
63053614	36	0.350	8.9	76	63053625	36	0.394	10.0	105	63053634	36	0.476	12.1	148
63054014	40	0.374	9.5	83	63054025	40	0.417	10.6	116	63054034	40	0.508	12.9	164
63054414	44	0.390	9.9	89	63054425	44	0.437	11.1	124	63054434	44	0.531	13.5	175
63055014	50	0.406	10.3	95	63055025	50	0.457	11.6	137	63055034	50	0.571	14.5	204
63056114	61	0.429	10.9	111	63056125	61	0.484	12.3	162	63056134	61	0.606	15.4	241

Continued on next page





# HALOGEN-FREE CABLES

## SABIX® D 305 FRNC Flexible data cable with improved fire performance and extended temperature range



BRÖCKSKES · D-VIERSEN · SABIX® D 305 FRNC 32 x

Marking for SABIX® D 305 FRNC 63053250:

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

SABIX® D 305 FRNC is a halogen free, flexible, flame retardant multi-conductor, data cable designed for use in communication technologies. In case of a fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to DIN VDE 0812
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b> <i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b> <i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer- inch	nominal outer- mm	cable weight ≈ lbs/mft
➤ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>				
63050250	2	0.177	4.5	21
63050350	3	0.185	4.7	24
63050450	4	0.201	5.1	29
63050550	5	0.220	5.6	34
63050750	7	0.248	6.3	45
63050850	8	0.287	7.3	55
63051250	12	0.335	8.5	76
63051450	14	0.350	8.9	85
63051650	16	0.370	9.4	95
63051850	18	0.390	9.9	106
63052150	21	0.429	10.9	121
63052450	24	0.453	11.5	131
63052750	27	0.461	11.7	143
63053050	30	0.476	12.1	156
63053250	32	0.496	12.6	167
63053650	36	0.516	13.1	184
63054450	44	0.594	15.1	229
63055050	50	0.618	15.7	276
63056150	61	0.657	16.7	301

item no.	no. of conductors	nominal outer- inch	nominal outer- mm	cable weight ≈ lbs/mft
➤ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>				
63050275	2	0.201	5.1	28
63050375	3	0.213	5.4	33
63050475	4	0.240	6.1	42
63050575	5	0.260	6.6	49
63050775	7	0.283	7.2	61
63050875	8	0.343	8.7	80
63051275	12	0.386	9.8	103
63051475	14	0.406	10.3	114
63051675	16	0.425	10.8	129
63051875	18	0.449	11.4	143
63052175	21	0.492	12.5	167
63052475	24	0.524	13.3	181
63052775	27	0.535	13.6	200
63053075	30	0.571	14.5	228
63053275	32	0.591	15.0	242
63053675	36	0.614	15.6	268
63054075	40	0.657	16.7	298
63054475	44	0.689	17.5	319
63055075	50	0.720	18.3	356
63056175	61	0.780	19.8	435

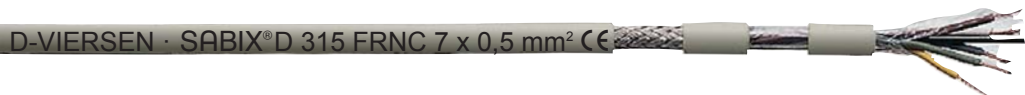
item no.	no. of conductors	nominal outer- inch	nominal outer- mm	cable weight ≈ lbs/mft
➤ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>				
63050280	2	0.209	5.3	32
63050380	3	0.220	5.6	38
63050480	4	0.248	6.3	48
63050580	5	0.272	6.9	58
63050680	6	0.295	7.5	67
63050780	7	0.311	7.9	78
➤ 16 AWG (≈ 27-29/30) • 1.50 mm <sup>2</sup>				
63050285	2	0.240	6.1	43
63050385	3	0.252	6.4	52
63050485	4	0.276	7.0	63
63050585	5	0.319	8.1	82
63050685	6	0.346	8.8	95
63050785	7	0.346	8.8	103

Other dimensions and colors are possible on request.

# HALOGEN-FREE CABLES



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



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

SABIX® D 315 FRNC is a halogen free, flexible, flame retardant, tinned copper shielded, multi-conductor data cable designed for use in electronics of data processing systems, weighing installations and office appliances. In case of a fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to DIN VDE 0812
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b> <i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b> <i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DINVDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2.
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm<sup>2</sup></b>					<b>▶ 24 AWG (≈ 14/34) • 0.25 mm<sup>2</sup></b>					<b>▶ 22 AWG (≈ 7/30) • 0.34 mm<sup>2</sup></b>				
63150214	2	0.150	3.8	15	63150225	2	0.161	4.1	17	63150234	2	0.185	4.7	23
63150314	3	0.157	4.0	17	63150325	3	0.169	4.3	19	63150334	3	0.201	5.1	28
63150414	4	0.165	4.2	18	63150425	4	0.181	4.6	22	63150434	4	0.217	5.5	32
63150514	5	0.177	4.5	22	63150525	5	0.201	5.1	29	63150534	5	0.232	5.9	37
63150714	7	0.189	4.8	26	63150725	7	0.217	5.5	34	63150734	7	0.268	6.8	49
63150814	8	0.220	5.6	31	63150825	8	0.256	6.5	44	63150834	8	0.299	7.6	58
63151014	10	0.236	6.0	34	63151025	10	0.276	7.0	50	63151034	10	0.323	8.2	65
63151214	12	0.260	6.6	43	63151225	12	0.283	7.2	54	63151234	12	0.331	8.4	72
63151414	14	0.268	6.8	46	63151425	14	0.295	7.5	60	63151434	14	0.346	8.8	79
63151614	16	0.280	7.1	51	63151625	16	0.307	7.8	66	63151634	16	0.362	9.2	87
63151814	18	0.291	7.4	55	63151825	18	0.323	8.2	73	63151834	18	0.382	9.7	97
63152114	21	0.315	8.0	56	63152125	21	0.346	8.8	82	63152134	21	0.421	10.7	119
63152414	24	0.315	8.0	60	63152425	24	0.366	9.3	87	63152434	24	0.445	11.3	130
63152714	27	0.339	8.6	70	63152725	27	0.374	9.5	95	63152734	27	0.453	11.5	139
63153014	30	0.346	8.8	75	63153025	30	0.386	9.8	102	63153034	30	0.469	11.9	149
63153214	32	0.358	9.1	79	63153225	32	0.398	10.1	108	63153234	32	0.500	12.7	166
63153614	36	0.370	9.4	86	63153625	36	0.421	10.7	127	63153634	36	0.520	13.2	183
63154014	40	0.394	10.0	95	63154025	40	0.445	11.3	140	63154034	40	0.551	14.0	202
63154414	44	0.417	10.6	109	63154425	44	0.465	11.8	149	63154434	44	0.575	14.6	214
63155014	50	0.433	11.0	118	63155025	50	0.500	12.7	171	63155034	50	0.622	15.8	259
63155214	52	0.433	11.0	120	63155225	52	0.500	12.7	175	63155234	52	0.622	15.8	265
63156114	61	0.457	11.6	136	63156125	61	0.528	13.4	198	63156134	61	0.657	16.7	246

Continued on next page

# HALOGEN-FREE CABLES

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



Marking for SABIX® D 315 FRNC 63150750:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® D 315 FRNC 7 x 0,5 mm<sup>2</sup> CE

SABIX® D 315 FRNC is a halogen free, flexible, flame retardant, tinned copper shielded, multi-conductor data cable designed for use in electronics of data processing systems, weighing installations and office appliances. In case of a fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to DIN VDE 0812
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® FRNC
<b>Jacket color:</b>	gray

### Outstanding features:

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

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b> <i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
<b>Temperature range</b> <i>static:</i>	-40/+85 °C
<i>flexing:</i>	-30/+85 °C
<b>Zero halogen:</b>	acc. to DINVDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2.
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer- inch	nominal outer- mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>				
63150250	2	0.205	5.2	28
63150350	3	0.213	5.4	31
63150450	4	0.228	5.8	36
63150550	5	0.264	6.7	48
63150750	7	0.283	7.2	57
63150850	8	0.323	8.2	69
63151050	10	0.346	8.8	76
63151250	12	0.354	9.0	85
63151450	14	0.370	9.4	93
63151650	16	0.390	9.9	105
63151850	18	0.417	10.6	124
63152150	21	0.457	11.6	148
63152450	24	0.496	12.6	162
63152750	27	0.504	12.8	175
63153050	30	0.520	13.2	190
63153250	32	0.539	13.7	201
63153650	36	0.559	14.2	222
63154450	44	0.646	16.4	284
63155050	50	0.669	17.0	315
63156150	61	0.709	18.0	363

item no.	no. of conductors	nominal outer- inch	nominal outer- mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>				
63150275	2	0.228	5.8	34
63150375	3	0.256	6.5	44
63150475	4	0.276	7.0	52
63150575	5	0.295	7.5	60
63150775	7	0.319	8.1	75
63150875	8	0.362	9.2	89
63151275	12	0.413	10.5	120
63151475	14	0.433	11.0	133
63151675	16	0.453	11.5	151
63151875	18	0.488	12.4	173
63152175	21	0.535	13.6	200
63152475	24	0.567	14.4	218
63152775	27	0.579	14.7	237
63153075	30	0.622	15.8	280
63153275	32	0.642	16.3	296
63153675	36	0.665	16.9	322

item no.	no. of conductors	nominal outer- inch	nominal outer- mm	cable weight ≈ lbs/mft
▶ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>				
63150280	2	0.236	6.0	37
63150380	3	0.264	6.7	49
63150480	4	0.283	7.2	58
63150580	5	0.307	7.8	69
63150680	6	0.331	8.4	80
63150780	7	0.331	8.4	85
▶ 18 AWG (≈ 30/32) • 1.50 mm <sup>2</sup>				
63150285	2	0.276	7.0	52
63150385	3	0.287	7.3	60
63150485	4	0.311	7.9	73
63150585	5	0.339	8.6	87
63150685	6	0.366	9.3	102
63150785	7	0.366	9.3	109

Other dimensions and colors are possible on request.

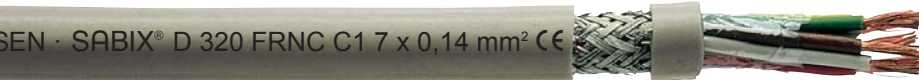
# HALOGEN-FREE CABLES

acc. to  
NF C32-070 C1



## SABIX® D 320 FRNC C1

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



Marking for SABIX® D 320 FRNC C1 63200714:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 320 FRNC C1 7 x 0,14 mm² CE

SABIX® D 320 FRNC C1 is a halogen free, flexible, flame retardant, tinned copper shielded, multi-conductor data cable designed for use in electronics of data processing systems, weighing installations and office appliances. In case of a fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to DIN VDE 0812
<b>Insulation :</b>	SABIX® 233
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 233
<b>Jacket color:</b>	gray

### Outstanding features:

- halogen-free
- good EMC characteristics\*
- no flame propagation
- flame retardant and self-extinguishing
- NF C32-070 C1

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b> <i>fixed laying:</i>	5 x O.D.
<i>flexible application:</i>	10 x O.D.
<b>Temperature range</b> <i>fixed laying:</i>	-30/+90 °C
<i>flexible application:</i>	-20/+90 °C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2 + NF C32-070 C1
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm<sup>2</sup></b>					<b>▶ 24 AWG (≈ 14/34) • 0.25 mm<sup>2</sup></b>					<b>▶ 22 AWG (≈ 7/30) • 0.34 mm<sup>2</sup></b>				
63200214	2	0.157	4.0	16	63200125	1	0.126	3.2	11	63200234	2	0.193	4.9	23
63200314	3	0.165	4.2	17	63200225	2	0.169	4.3	18	63200334	3	0.201	5.1	27
63200414	4	0.173	4.4	19	63200325	3	0.177	4.5	21	63200434	4	0.217	5.5	32
63200514	5	0.185	4.7	24	63200425	4	0.189	4.8	25	63200534	5	0.232	5.9	37
63200614	6	0.197	5.0	26	63200525	5	0.201	5.1	28	63200634	6	0.252	6.4	43
63200714	7	0.197	5.0	27	63200625	6	0.217	5.5	30	63200734	7	0.252	6.4	45
63200814	8	0.220	5.6	32	63200725	7	0.217	5.5	34	63200834	8	0.283	7.2	54
63201014	10	0.236	6.0	35	63200825	8	0.240	6.1	40	63201034	10	0.307	7.8	61
63201214	12	0.244	6.2	39	63201025	10	0.260	6.6	45	63201234	12	0.315	8.0	68
63201414	14	0.252	6.4	42	63201225	12	0.268	6.8	50	63201434	14	0.346	8.8	83
63201614	16	0.264	6.7	47	63201425	14	0.280	7.1	56	63201634	16	0.362	9.2	91
63201814	18	0.276	7.0	51	63201625	16	0.291	7.4	62	63201834	18	0.382	9.7	101
63202014	20	0.287	7.3	56	63201825	18	0.307	7.8	69	63202034	20	0.398	10.1	109
63202114	21	0.299	7.6	59	63202025	20	0.335	8.5	79	63202134	21	0.421	10.7	123
63202414	24	0.315	8.0	63	63202125	21	0.346	8.8	84	63202434	24	0.445	11.3	136
63202714	27	0.339	8.6	74	63202425	24	0.358	9.1	88	63202734	27	0.453	11.5	146
63203014	30	0.346	8.8	80	63202725	27	0.374	9.5	99	63203034	30	0.469	11.9	157
63203214	32	0.358	9.1	84	63203025	30	0.386	9.8	107	63203234	32	0.500	12.7	176
63203614	36	0.370	9.4	91	63203225	32	0.398	10.1	112	63203634	36	0.520	13.2	192
63204014	40	0.394	10.0	101	63203625	36	0.421	10.7	132	63204034	40	0.559	14.2	221
63204414	44	0.417	10.6	115	63204025	40	0.445	11.3	146	63204434	44	0.583	14.8	240
63204814	48	0.425	10.8	122	63204425	44	0.465	11.8	155	63204834	48	0.591	15.0	254
63205014	50	0.433	11.0	128	63204825	48	0.488	12.4	173	63205034	50	0.614	15.8	272
63205214	52	0.433	11.0	130	63205025	50	0.500	12.7	179	63205234	52	0.614	15.8	279
63205614	56	0.445	11.3	138	63205225	52	0.500	12.7	185	63205634	56	0.638	16.2	295
63206114	61	0.457	11.6	146	63205625	56	0.512	13.0	196	63206134	61	0.657	16.7	319
					63166125	61	0.528	13.4	208					

Continued on next page

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# HALOGEN-FREE CABLES

acc. to  
NF C32-070 C1



## SABIX® D 320 FRNC C1

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



D-VIERSEN · SABIX® D 320 FRNC C1 7 x 0,14

Marking for SABIX® D 320 FRNC C1 63200714:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® D 320 FRNC C1 7 x 0,14 mm² CE

SABIX® D 320 FRNC C1 is a halogen free, flexible, flame retardant, tinned copper shielded, multi-conductor data cable designed for use in electronics of data processing systems, weighing installations and office appliances. In case of a fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to DIN VDE 0812
<b>Insulation :</b>	SABIX® 233
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 233
<b>Jacket color:</b>	gray

### Outstanding features:

- halogen-free
- good EMC characteristics\*
- no flame propagation
- flame retardant and self-extinguishing
- NF C32-070 C1

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x O.D.
<i>flexible application:</i>	10 x O.D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-30/+90 °C
<i>flexible application:</i>	-20/+90 °C
<b>Zero halogen:</b>	acc. to DINVDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2 + NF C32-070 C1
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm²</b>				
63200150	1	0.142	3.6	15
63200250	2	0.205	5.2	27
63200350	3	0.213	5.4	30
63200450	4	0.228	5.8	36
63200550	5	0.248	6.3	44
63200650	6	0.268	6.8	50
63200750	7	0.268	6.8	53
63200850	8	0.307	7.8	65
63201050	10	0.346	8.8	79
63201250	12	0.354	9.0	87
63201450	14	0.370	9.4	99
63201650	16	0.390	9.9	110
63201850	18	0.417	10.6	129
63202050	20	0.437	11.1	142
63202150	21	0.457	11.6	149
63202450	24	0.496	12.6	171
63202750	27	0.504	12.8	185
63203050	30	0.520	13.2	199
63203250	32	0.547	13.9	222
63203650	36	0.567	14.4	242
63204050	40	0.622	15.8	279
63204250	42	0.622	15.8	287
63205050	50	0.669	17.0	330
63205250	52	0.669	17.0	338
63206150	61	0.709	18.0	382

item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm²</b>				
63200175	1	0.154	3.9	19
63200275	2	0.228	5.8	33
63200375	3	0.240	6.1	39
63200475	4	0.260	6.6	48
63200575	5	0.280	7.1	56
63200675	6	0.303	7.7	66
63200775	7	0.303	7.7	71
63200875	8	0.362	9.2	89
63201075	10	0.394	10.0	102
63201275	12	0.413	10.5	124
63201475	14	0.433	11.0	140
63201675	16	0.453	11.5	155
63201875	18	0.492	12.5	178
63202175	21	0.543	13.8	216
63202475	24	0.575	14.6	240
63202775	27	0.587	14.9	259
63203075	30	0.622	15.8	290
63203275	32	0.642	16.3	305
63203675	36	0.665	16.9	336

item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm²</b>				
63200180	1	0.157	4.0	20
63200280	2	0.236	6.0	37
63200380	3	0.248	6.3	44
63200480	4	0.268	6.8	54
63200580	5	0.291	7.4	65
63200680	6	0.315	8.0	75
63200780	7	0.315	8.0	81
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm²</b>				
63200185	1	0.169	4.3	24
63200285	2	0.260	6.6	46
63200385	3	0.272	6.9	55
63200485	4	0.295	7.5	68
63200585	5	0.339	8.6	88
63200685	6	0.366	9.3	102
63200785	7	0.366	9.3	111

Other dimensions and colors are possible on request.

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# HALOGEN-FREE CABLES



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



Marking for SABIX® D 345 FRNC TP 63450325:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 345 FRNC TP 3 x 2 x 0,25 mm² CE

SABIX® D 345 FRNC TP is a halogen free, flexible, flame retardant, tinned copper shielded, multi-conductor data cable designed for use in electronics of data processing systems, weighing installations and office appliances, for increased requirements on transmission characteristics and near-end cross talk attenuation. In case of a fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to DIN VDE 0812
<b>Insulation:</b>	SABIX® 336
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	pairwise, pairs in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 230
<b>Jacket color:</b>	gray

### Outstanding features:

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

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b>	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
<b>Temperature range</b>	
static:	-40/+85 °C
flexing:	-30/+85 °C
<b>Zero halogen:</b>	acc. to DINVDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332 + EN 60332 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2.
<b>Corrosivity:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of pairs	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm<sup>2</sup></b>				
63450214	2	0.213	5.4	27
63450314	3	0.232	5.9	32
63450414	4	0.272	6.9	42
63450514	5	0.291	7.4	47
63450614	6	0.299	7.6	50
63450814	8	0.323	8.2	58
63451014	10	0.350	8.9	67
63451214	12	0.382	9.7	77
63451614	16	0.413	10.5	94
63451814	18	0.437	11.1	112
63452414	24	0.504	12.8	142
<b>▶ 24 AWG (≈ 14/34) • 0.25 mm<sup>2</sup></b>				
63450225	2	0.232	5.9	32
63450325	3	0.268	6.8	44
63450425	4	0.299	7.6	49
63450525	5	0.319	8.1	59
63450625	6	0.327	8.3	63
63450825	8	0.354	9.0	76
63451025	10	0.386	9.8	88
63451225	12	0.429	10.9	111
63451625	16	0.469	11.9	136
63451825	18	0.500	12.7	157
63452425	24	0.559	14.2	190

item no.	no. of pairs	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 22 AWG (≈ 7/30) • 0.34 mm<sup>2</sup></b>				
63450234	2	0.283	7.2	46
63450334	3	0.307	7.8	56
63450434	4	0.346	8.8	65
63450534	5	0.374	9.5	77
63450634	6	0.382	9.7	88
63450834	8	0.417	10.6	105
63451234	12	0.528	13.4	151
63451634	16	0.575	14.6	194
63451834	18	0.594	15.1	213
63452434	24	0.693	17.6	273
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
63450250	2	0.299	7.6	52
63450350	3	0.327	8.3	63
63450450	4	0.370	9.4	78
63450550	5	0.402	10.2	87
63450650	6	0.409	10.4	103
63450850	8	0.449	11.4	124
63451050	10	0.520	13.2	156
63451250	12	0.567	14.4	189
63451650	16	0.642	16.3	244
63451850	18	0.665	16.9	263
63452450	24	0.748	19.0	328

item no.	no. of pairs	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
63450275	2	0.335	8.5	66
63450375	3	0.370	9.4	82
63450475	4	0.429	10.9	107
63450575	5	0.461	11.7	122
63450675	6	0.492	12.5	144
63450875	8	0.539	13.7	202
63451275	12	0.673	17.1	263
63451675	16	0.732	18.6	318
63451875	18	0.760	19.3	349
63452475	24	0.858	21.8	433

Other dimensions and colors are possible on request.

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Construction with reference to EN 50306

# HALOGEN-FREE CABLES

Classification of smoke density acc. to NF F 16-101

## SABIX® A 871 TW "Thin-wall" connection and data cable



BRÖCKSKES · D-VIERSEN · SABIX® A 871 TWÖ 18 x 0,75 mm²

Marking for SABIX® A 871 TW 68711807:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 871 TWÖ 18 x 0,75 mm² CE

SABIX® A 871 TW is a very flexible UL recognized halogen free connection and data cable. The cable is designed for use in transportation vehicles and locomotives. The "thin-wall" outer jacket guarantees a high installation standard. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to an extremely high risk of fire.

### Construction:

<b>Conductor:</b>	tinned copper strands fine wires acc. to. EN 50306-2
<b>Insulation :</b>	SABIX® 960
<b>Color code:</b>	white conductors with black numbers acc. to. EN 50334
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	SABIX® 280
<b>Jacket color:</b>	black

### Outstanding features:

- very flexible
- halogen-free
- oil resistant
- flame retardant and self-extinguishing
- classification of smoke density acc. to NF F 16-101
- thin-walled
- high installation comfort

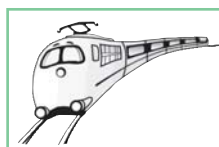
### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius</b>	
fixed laying:	5 x O. D.
flexible application:	10 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+105°C
flexible application:	-25/+105°C
<b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	No flame propagation acc. to IEC 60332 + EN 60332 resp. EN 50305. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034 + index of smoke density acc. to NF F 16-101
<b>Ozone resistance:</b>	acc. to VDE 0282 part 2
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
▶ ≈ 19 AWG • 0.75 mm²				
68710207	2	0.185	4.7	24
68710407	4	0.209	5.3	34
68711007	10	0.331	8.4	78
68711807	18	0.402	10.2	130
▶ ≈ 18 AWG • 1.00 mm²				
68710210	2	0.197	5.0	28
68710310	3	0.205	5.2	34
68710410	4	0.224	5.7	41
68711010	10	0.354	9.0	94
68712510	25	0.504	12.8	207

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
▶ ≈ 16 AWG • 1.50 mm²				
68710515	5	0.295	7.5	76
68710715	7	0.323	8.2	99
▶ ≈ 14 AWG • 2.50 mm²				
68710325	3	0.283	7.2	72

Other dimensions and colors are possible on request.



Especially for use in rail vehicles

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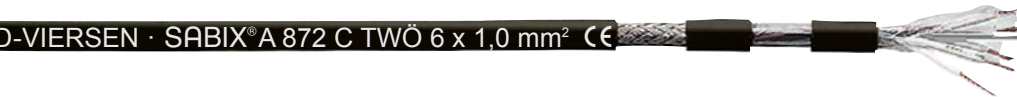
Construction with reference to EN 50306

# HALOGEN-FREE CABLES

Classification of smoke density acc. to NF F 16-101



## SABIX® A 872 C TW "Thin-wall" data cable with overall copper screen



Marking for SABIX® A 872 C TW 68720610:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 872 C TW 6 x 1,0 mm<sup>2</sup> CE

SABIX® A 872 C TW is a very flexible UL recognized halogen free tinned copper shielded data cable. The cable is designed for use in transportation vehicles and locomotives. The "thin-wall" outer jacket guarantees a high installation standard. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	tinned copper strands fine wires acc. to. EN 50306-2
<b>Insulation :</b>	SABIX® 960
<b>Color code:</b>	white conductors with black numbers acc. to. EN 50334
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 280
<b>Jacket color:</b>	black

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+105°C
<i>flexible application:</i>	-25/+105°C
<b>Zero halogen:</b>	acc. to DINVDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	No flame propagation acc. to IEC 60332 + EN 60332 resp. EN 50305. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034 + index of smoke density acc. to NF F 16-101
<b>Ozone resistance:</b>	acc. to VDE 0282 part 2
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

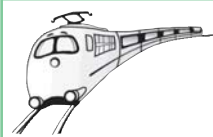
### Outstanding features:

- ▶ very flexible
- ▶ good EMC characteristics\*
- ▶ halogen-free
- ▶ oil resistant
- ▶ flame retardant and self-extinguishing
- ▶ classification of smoke density acc. to NF F 16-101
- ▶ thin-walled
- ▶ high installation comfort

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

item no.	no. of conductors	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ ≈ 20 AWG • 0.50 mm <sup>2</sup>					▶ ≈ 19 AWG • 0.75 mm <sup>2</sup>					▶ ≈ 18 AWG • 1.00 mm <sup>2</sup>				
68720205	2	0.189 ± 0.020	4.8 ± 0.5	23	68720207	2	0.205 ± 0.020	5.2 ± 0.5	28	68720210	2	0.217 ± 0.020	5.5 ± 0.5	32
68720405	4	0.213 ± 0.020	5.4 ± 0.5	32	68720407	4	0.228 ± 0.020	5.8 ± 0.5	41	68720410	4	0.244 ± 0.020	6.2 ± 0.5	48
68720805	8	0.291 ± 0.020	7.4 ± 0.5	56	68720607	6	0.268 ± 0.020	6.8 ± 0.5	56	68720610	6	0.287 ± 0.020	7.3 ± 0.5	69
68721005	10	0.315 ± 0.020	8.0 ± 0.5	68	68720807	8	0.319 ± 0.020	8.1 ± 0.5	75	68720710	7	0.287 ± 0.020	7.3 ± 0.5	73
68721205	12	0.323 ± 0.020	8.2 ± 0.5	76	68721007	10	0.346 ± 0.020	8.8 ± 0.5	88	68720810	8	0.339 ± 0.020	8.6 ± 0.5	87
68721605	16	0.354 ± 0.020	9.0 ± 0.5	94	68721207	12	0.354 ± 0.020	9.0 ± 0.5	99	68721010	10	0.370 ± 0.020	9.4 ± 0.5	104
					68721407	14	0.370 ± 0.020	9.4 ± 0.5	112	▶ ≈ 16 AWG • 1.50 mm <sup>2</sup>				
					68721607	16	0.390 ± 0.020	9.9 ± 0.5	126	68720215	2	0.240 ± 0.020	6.1 ± 0.5	42
					68721807	18	0.409 ± 0.020	10.4 ± 0.5	138	68720415	4	0.276 ± 0.020	7.0 ± 0.5	67
										68720715	7	0.339 ± 0.020	8.6 ± 0.5	108
										68720815	8	0.386 ± 0.020	9.8 ± 0.5	124

Other dimensions and colors are possible on request.



Especially for use in rail vehicles

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Construction with reference to EN 50306

# HALOGEN-FREE CABLES

Classification of smoke density acc. to NF F 16-101

## SABIX® A 876 C TW TP Paired "Thin-wall" connection and data cable with overall copper screen



Marking for SABIX® A 876 C TW TP 68760307:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 876 C TWÖ TP 3 x 2 x 0,75 mm² CE

SABIX® A 876 C TW TP is a very flexible UL recognized halogen free tinned copper shielded data cable, consisting of twisted pairs. The cable is designed for use in transportation vehicles and locomotives. The "thin-wall" outer jacket guarantees a high installation standard. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. In case of fire no corrosive gases are produced. This cable is particularly suitable for use where human life and valuable property are exposed to a extremely high risk of fire.

### Construction:

<b>Conductor:</b>	tinned copper strands fine wires acc. to. EN 50306-2
<b>Insulation :</b>	SABIX® 960
<b>Color code:</b>	white conductors with black numbers acc. to. EN 50334
<b>Stranding:</b>	pairwise, pairs in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	SABIX® 280
<b>Jacket color:</b>	black

### Outstanding features:

- very flexible
- good EMC characteristics\*
- halogen-free
- oil resistant
- flame retardant and self-extinguishing
- classification of smoke density acc. to NF F 16-101
- thin-walled
- high installation comfort

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+105°C
<i>flexible application:</i>	-25/+105°C
<b>Zero halogen:</b>	acc. to DINVDE 0472 part 815 and IEC 60754-1
<b>Burning characteristics:</b>	No flame propagation acc. to IEC 60332 + EN 60332 resp. EN 50305. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034 + index of smoke density acc. to NF F 16-101
<b>Ozone resistance:</b>	acc. to VDE 0282 part 2
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of pairs	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
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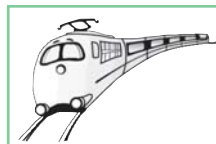
➤ ≈ 20 AWG • 0.50 mm<sup>2</sup>

68760305	3	0.291	7.4	50
68760405	4	0.331	8.4	62

➤ ≈ 19 AWG • 0.75 mm<sup>2</sup>

68760207	2	0.280	7.1	49
68760307	3	0.319	8.1	64

Other dimensions and colors are possible on request.



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# HALOGEN-FREE CABLES

**DIN EN 45545-2**  
edition 2013



## SABIX® R 600 FRNC SABIX® Rail Control with numbered conductors



Marking for SABIX® R 600 FRNC 66001215:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® R 600 FRNC 12 x 1,5 mm<sup>2</sup> CE

Our specially developed for rail vehicles control cable SABIX® R 600 FRNC with suitable external materials tested according to DIN EN 45545-2 are particularly suited for flexible installation in rail vehicles. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX®
<b>Jacket color:</b>	gray

### Outstanding features:

- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x O. D.
<i>flexible application:</i>	6 x O. D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

Tested at reference types.

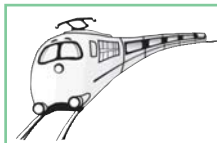
item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>				
66000205	2	0.189	4.8	22
66000305	3	0.201	5.1	26
66000405	4	0.217	5.5	31
66000505	5	0.244	6.2	38
66000705	7	0.264	6.7	46
66001005	10	0.339	8.6	65
66001205	12	0.358	9.1	74
66001805	18	0.421	10.7	114
66002505	25	0.508	12.9	149
66003205	32	0.551	14.0	193
66004205	42	0.618	15.7	245
66006105	61	0.728	18.5	343

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>				
66000207	2	0.213	5.4	30
66000307	3	0.224	5.7	34
66000407	4	0.252	6.4	42
66000507	5	0.276	7.0	52
66000707	7	0.307	7.8	65
66001007	10	0.394	10.0	97
66001207	12	0.413	10.5	110
66001807	18	0.488	12.4	155
66002507	25	0.594	15.1	212
66003207	32	0.646	16.4	261
66004207	42	0.724	18.4	346
66006107	61	0.850	21.6	485

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>				
66000210	2	0.220	5.6	34
66000310	3	0.240	6.1	42
66000410	4	0.260	6.6	51
66000510	5	0.295	7.5	63
66000710	7	0.319	8.1	79
66001010	10	0.417	10.6	116
66001210	12	0.429	10.9	132
66001810	18	0.508	12.9	188
66002510	25	0.618	15.7	256
66003210	32	0.673	17.1	327
66004210	42	0.764	19.4	414
66006110	61	0.894	22.7	587

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# HALOGEN-FREE CABLES



## SABIX® R 600 FRNC SABIX® Rail Control with numbered conductors



Marking for SABIX® R 600 FRNC 66001215:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® R 600 FRNC 12 x 1,5 mm² CE

Our specially developed for rail vehicles control cable SABIX® R 600 FRNC with suitable external materials tested according to DIN EN 45545-2 are particularly suited for flexible installation in rail vehicles. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX®
<b>Jacket color:</b>	gray

### Technical data:

<b>Nominal voltage:</b>	U <sub>o</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x O. D.
<i>flexible application:</i>	6 x O. D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Outstanding features:

- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3

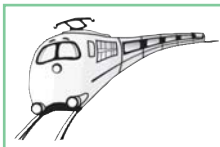
Tested at reference types.

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
66000215	2	0.252	6.4	46
66000315	3	0.268	6.8	54
66000415	4	0.299	7.6	67
66000515	5	0.327	8.3	83
66000715	7	0.362	9.2	114
66001015	10	0.472	12.0	154
66001215	12	0.488	12.4	177
66001815	18	0.583	14.8	194
66002515	25	0.709	18.0	361
66003215	32	0.768	19.5	444
66004215	42	0.866	22.0	583
66006115	61	1.016	25.8	818
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
66000225	2	0.307	7.8	71
66000325	3	0.350	8.9	85
66000425	4	0.362	9.2	104
66000525	5	0.398	10.1	134
66000725	7	0.441	11.2	169
66001025	10	0.583	14.8	243
66001225	12	0.602	15.3	280
66001825	18	0.717	18.2	413
66002525	25	0.878	22.3	562

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
66000340	3	0.382	9.7	124
66000440	4	0.425	10.8	157
66000540	5	0.476	12.1	195
66000740	7	0.528	13.4	252
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
66000360	3	0.449	11.4	181
66000460	4	0.500	12.7	226
66000560	5	0.559	14.2	279
66000760	7	0.618	15.7	366
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
66000461	4	0.657	16.7	389
66000561	5	0.732	18.6	497
66000761	7	0.815	20.7	654

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
66000462	4	0.811	20.6	596
66000562	5	0.906	23.0	743
66000762	7	1.004	25.5	971
<b>▶ 4 AWG (≈ 190/26) • 25.00 mm<sup>2</sup></b>				
66000463	4	0.980	24.9	933
66000563	5	1.106	28.1	1176
<b>▶ 2 AWG (≈ 272/26) • 35.00 mm<sup>2</sup></b>				
66000464	4	1.134	28.8	1295
66000564	5	1.280	32.5	1622

Other dimensions and colors are possible on request.



**Especially for use in rail vehicles**



# HALOGEN-FREE CABLES

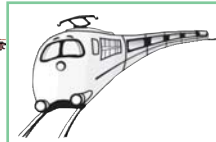
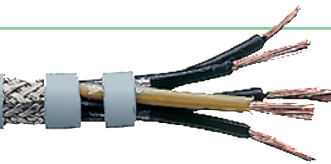
**DIN EN 45545-2**  
edition 2013



## SABIX® R 638 FRNC SABIX® Rail Control with numbered conductors and overall copper screen



D-VIERSEN · SABIX® R 638 FRNC 5 x 1.5 mm<sup>2</sup> CE



**Especially  
for use in  
rail vehicles**

Marking for SABIX® R 638 FRNC 66380515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 638 FRNC 5 x 1.5 mm<sup>2</sup> CE

Our specially developed for rail vehicles control cable SABIX® R 638 FRNC with overall copper screen and suitable external materials tested according to DIN EN 45545-2 are particularly suited for flexible installation in rail vehicles. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX®
<b>Sheath color:</b>	gray

### Outstanding features:

- ▶ halogen-free
- ▶ good EMC characteristics\*\*
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing
- ▶ fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V conductor/screen 2000 V
<b>Min. bending radius</b> <i>fixed laying:</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b> <i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

Tested at reference types.

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
66380205	2	0.209	5.3	26
66380305	3	0.220	5.6	30
66380405	4	0.244	6.0	41
66380505	5	0.264	6.7	47
66380705	7	0.283	7.2	54
66381205	12	0.378	9.6	101
66381805	18	0.449	11.4	138
66382505	25	0.543	13.8	183
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
66380207	2	0.240	6.1	34
66380307	3	0.252	6.4	41
66380407	4	0.272	6.9	49
66380507	5	0.303	7.7	65
66380707	7	0.327	8.3	81
66381207	12	0.441	11.2	130
66381807	18	0.524	13.3	188
66382507	25	0.638	16.2	265

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
66380210	2	0.248	6.3	56
66380310	3	0.260	6.6	68
66380410	4	0.280	7.1	94
66380510	5	0.315	8.0	110
66380710	7	0.339	8.6	138
66381210	12	0.465	11.8	226
66381810	18	0.543	13.8	315
66382510	25	0.661	16.8	454
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
66380215	2	0.272	6.9	42
66380315	3	0.283	7.2	60
66380415	4	0.319	8.1	74
66380515	5	0.354	9.0	91
66380715	7	0.382	9.7	120
66381215	12	0.547	13.9	202
66381815	18	0.618	15.7	305
66382515	25	0.752	19.1	412

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
66380225	2	0.327	8.3	100
66380325	3	0.354	9.0	128
66380425	4	0.382	9.7	163
66380525	5	0.433	11.0	215
66380725	7	0.476	12.1	276
66381225	12	0.646	16.4	466
66381825	18	0.760	19.3	666
66382525	25	0.921	23.4	931
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
66380440	4	0.453	11.5	168
66380540	5	0.504	12.8	208
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
66380460	4	0.535	13.6	237
66380560	5	0.594	15.1	282
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
66380461	4	0.701	17.8	414
66380561	5	0.862	21.9	616

Other dimensions and colors are possible on request.

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# HALOGEN-FREE CABLES



## SABIX® R 605 FRNC SABIX® Rail Data



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

Marking for SABIX® R 605 FRNC 66053250:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0,5 mm² CE

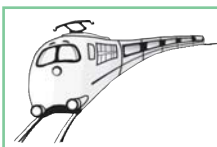
With our specially developed for rail vehicles data cable with colored conductors SABIX® R 605 FRNC we offer our customers maximum planning certainty and comfort for flexible installation in railway vehicles. In addition to high flexibility, these cables to the highest safety standards for the railway industry. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 6028, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX®
<b>Sheath color:</b>	gray

### Outstanding features:

- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3



**Especially for use in rail vehicles**

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b>	
fixed laying:	5 x O. D.
flexible application:	10 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

Tested at reference types.

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm²</b>					<b>▶ 24 AWG (≈ 14/34) • 0.25 mm²</b>					<b>▶ 22 AWG (≈ 7/30) • 0.34 mm²</b>				
66050214	2	0.122	3.1	9	66050225	2	0.134	3.4	11	66050234	2	0.157	4.0	16
66050314	3	0.130	3.3	10	66050325	3	0.142	3.6	13	66050334	3	0.165	4.2	18
66050414	4	0.138	3.5	12	66050425	4	0.154	3.9	16	66050434	4	0.181	4.6	22
66050514	5	0.150	3.8	14	66050525	5	0.165	4.2	19	66050534	5	0.197	5.0	27
66050714	7	0.161	4.1	17	66050725	7	0.181	4.6	24	66050734	7	0.217	5.5	33
66050814	8	0.197	5.0	22	66050825	8	0.205	5.2	29	66050834	8	0.256	6.5	42
66051214	12	0.209	5.3	26	66051225	12	0.240	6.1	38	66051234	12	0.287	7.3	54
66051414	14	0.217	5.5	28	66051425	14	0.252	6.4	43	66051434	14	0.311	7.9	63
66051614	16	0.236	6.0	34	66051625	16	0.264	6.7	48	66051634	16	0.327	8.3	71
66051814	18	0.248	6.3	38	66051825	18	0.280	7.1	54	66051834	18	0.346	8.8	79
66052114	21	0.272	6.9	44	66052125	21	0.311	7.9	65	66052134	21	0.394	10.0	98
66052414	24	0.287	7.3	47	66052425	24	0.331	8.4	70	66052434	24	0.417	10.6	106
66052714	27	0.303	7.7	54	66052725	27	0.339	8.6	77	66052734	27	0.425	10.8	116
66053014	30	0.311	7.9	58	66053025	30	0.350	8.9	84	66053034	30	0.441	11.2	126
66053214	32	0.323	8.2	62	66053225	32	0.362	9.2	89	66053234	32	0.457	11.6	134
66053614	36	0.335	8.5	68	66053625	36	0.394	10.0	105	66053634	36	0.476	12.1	148
66054014	40	0.358	9.1	75	66054025	40	0.417	10.6	116	66054034	40	0.508	12.9	164
66054414	44	0.374	9.5	80	66054425	44	0.437	11.1	124	66054434	44	0.531	13.5	175
66055014	50	0.406	10.3	95	66055025	50	0.457	11.6	137	66055034	50	0.571	14.5	204
66056114	61	0.429	10.9	111	66056125	61	0.484	12.3	162	66056134	61	0.606	15.4	241

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# HALOGEN-FREE CABLES

**DIN EN 45545-2**  
edition 2013



## SABIX® R 605 FRNC SABIX® Rail Data



ES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0,5 mm<sup>2</sup> CE



Marking for SABIX® R 605 FRNC 66053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0,5 mm<sup>2</sup> CE

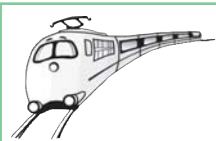
With our specially developed for rail vehicles data cable with colored conductors SABIX® R 605 FRNC we offer our customers maximum planning certainty and comfort for flexible installation in railway vehicles. In addition to high flexibility, these cables to the highest safety standards for the railway industry. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 6028, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX®
<b>Sheath color:</b>	gray

### Outstanding features:

- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3



**Especially for use in rail vehicles**

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b> <i>fixed laying:</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b> <i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

Tested at reference types.

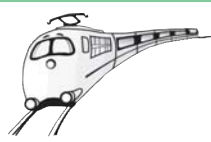
item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>					<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>					<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
66050250	2	0.169	4.3	19	66050275	2	0.193	4.9	26	66050280	2	0.201	5.1	29
66050350	3	0.177	4.5	22	66050375	3	0.205	5.2	30	66050380	3	0.213	5.4	36
66050450	4	0.193	4.9	27	66050475	4	0.232	5.9	39	66050480	4	0.240	6.1	46
66050550	5	0.213	5.4	33	66050575	5	0.252	6.4	47	66050580	5	0.264	6.7	55
66050750	7	0.240	6.1	42	66050775	7	0.276	7.0	58	66050680	6	0.287	7.3	65
66050850	8	0.280	7.1	53	66050875	8	0.327	8.3	75	66050780	7	0.287	7.3	70
66051250	12	0.319	8.1	69	66051275	12	0.370	9.4	95	<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
66051450	14	0.335	8.5	77	66051475	14	0.406	10.3	114	66050285	2	0.220	5.6	37
66051650	16	0.354	9.0	88	66051675	16	0.425	10.8	129	66050385	3	0.240	6.1	48
66051850	18	0.374	9.5	97	66051875	18	0.449	11.4	143	66050485	4	0.264	6.7	58
66052150	21	0.429	10.9	121	66052175	21	0.492	12.5	167	66050585	5	0.303	7.7	76
66052450	24	0.453	11.5	131	66052475	24	0.524	13.3	181	66050685	6	0.331	8.4	90
66052750	27	0.461	11.7	143	66052775	27	0.535	13.6	200	66050785	7	0.331	8.4	97
66053050	30	0.476	12.1	156	66053075	30	0.571	14.5	228	Other dimensions and colors are possible on request.				
66053250	32	0.496	12.6	167	66053275	32	0.591	15.0	242					
66053650	36	0.516	13.1	184	66053675	36	0.614	15.6	268					
66054450	44	0.594	15.1	229	66054075	40	0.657	16.7	298					
66055050	50	0.618	15.7	276	66054475	44	0.689	17.5	319					
66056150	61	0.657	16.7	301	66055075	50	0.720	18.3	356					
					66056175	61	0.780	19.8	435					

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Web site: [www.sabcable.com](http://www.sabcable.com)

## SABIX® R 615 FRNC SABIX® Rail Data with overall copper screen



**Especially  
for use in  
rail vehicles**



Marking for SABIX® R 615 FRNC 66150750:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 615 FRNC 7 x 0,5 mm² CE

With our specially developed for rail vehicles data cable with colored conductors and overall copper screen SABIX® R 615 FRNC we offer our customers maximum planning certainty and comfort for flexible installation in railway vehicles. In addition to high flexibility, these cables to the highest safety standards for the railway industry. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 6028, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX®
<b>Sheath color:</b>	gray

### Outstanding features:

- halogen-free
- good EMC characteristics\*
- no flame propagation
- flame retardant and self-extinguishing
- fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3
- tested acc. to American ASTM standard

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b>	
fixed laying:	5 x O. D.
flexible application:	10 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2. Burning tests acc. to ASTM E 162-09.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034 + ASTM E 662-09
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

Tested at reference types.

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm²</b>				
66150214	2	0.142	3.6	14
66150314	3	0.150	3.8	15
66150414	4	0.157	4.0	16
66150514	5	0.169	4.3	19
66150714	7	0.181	4.6	22
66150814	8	0.213	5.4	29
66151014	10	0.228	5.8	32
66151214	12	0.244	6.2	36
66151414	14	0.252	6.4	40
66151614	16	0.264	6.7	45
66151814	18	0.276	7.0	48
66152114	21	0.299	7.6	56
66152414	24	0.315	8.0	60
66152714	27	0.339	8.6	70
66153014	30	0.346	8.8	75
66153214	32	0.358	9.1	79
66153614	36	0.370	8.4	86
66154014	40	0.394	10.0	95
66154414	44	0.417	10.6	109
66155014	50	0.433	11.0	118
66155214	52	0.433	11.0	120
66156114	61	0.457	11.6	136

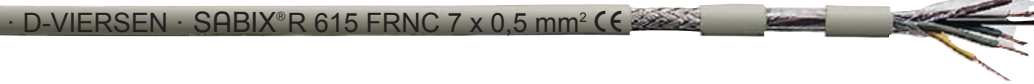
item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 24 AWG (≈ 14/34) • 0.25 mm²</b>				
66150225	2	0.154	3.9	16
66150325	3	0.161	4.1	17
66150425	4	0.173	4.4	21
66150525	5	0.193	4.9	26
66150725	7	0.209	5.3	31
66150825	8	0.240	6.1	39
66151025	10	0.260	6.6	43
66151225	12	0.268	6.8	48
66151425	14	0.280	7.1	54
66151625	16	0.291	7.4	60
66151825	18	0.307	7.8	66
66152125	21	0.346	8.8	82
66152425	24	0.366	9.3	87
66152725	27	0.374	9.5	95
66153025	30	0.386	9.8	102
66153225	32	0.398	10.1	108
66153625	36	0.421	10.7	127
66154025	40	0.445	11.3	140
66154425	44	0.465	11.8	149
66155025	50	0.500	12.7	171
66155225	52	0.500	12.7	175
66156125	61	0.528	13.4	198

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 22 AWG (≈ 7/30) • 0.34 mm²</b>				
66150234	2	0.177	4.5	21
66150334	3	0.193	4.9	24
66150434	4	0.209	5.3	29
66150534	5	0.224	5.7	34
66150734	7	0.252	6.4	42
66150834	8	0.283	7.2	52
66151034	10	0.307	7.8	58
66151234	12	0.315	8.0	65
66151434	14	0.346	8.8	79
66151634	16	0.362	9.2	87
66151834	18	0.382	9.7	97
66152134	21	0.421	10.7	119
66152434	24	0.445	11.3	130
66152734	27	0.453	11.5	139
66153034	30	0.469	11.9	149
66153234	32	0.500	12.7	166
66153634	36	0.520	13.2	183
66154034	40	0.551	14.0	202
66154434	44	0.575	14.6	214
66155034	50	0.622	15.8	259
66155234	52	0.622	15.8	265
66156134	61	0.657	16.7	246

Continued on next page



## SABIX® R 615 FRNC SABIX® Rail Data with overall copper screen



Marking for SABIX® R 615 FRNC 66150750:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® R 615 FRNC 7 x 0,5 mm² C€

With our specially developed for rail vehicles data cable with colored conductors and overall copper screen SABIX® R 615 FRNC we offer our customers maximum planning certainty and comfort for flexible installation in railway vehicles. In addition to high flexibility, these cables to the highest safety standards for the railway industry. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 6028, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX®
<b>Sheath color:</b>	gray

### Outstanding features:

- halogen-free
- good EMC characteristics\*
- no flame propagation
- flame retardant and self-extinguishing
- fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3
- tested acc. to American ASTM standard

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

### Technical data:

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2. Burning tests acc. to ASTM E 162-09.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034 + ASTM E 662-09
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

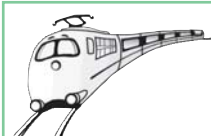
Tested at reference types.

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
66150250	2	0.197	5.0	26
66150350	3	0.205	5.2	28
66150450	4	0.220	5.6	34
66150550	5	0.248	6.3	42
66150750	7	0.268	6.8	51
66150850	8	0.307	7.8	63
66151050	10	0.346	8.8	76
66151250	12	0.354	9.0	85
66151450	14	0.370	9.4	93
66151650	16	0.390	9.9	105
66151850	18	0.417	10.6	124
66152150	21	0.457	11.6	148
66152450	24	0.496	12.6	161
66152750	27	0.504	12.8	175
66153050	30	0.520	13.2	190
66153250	32	0.539	13.7	201
66153650	36	0.559	14.2	222
66154450	44	0.646	16.4	284
66155050	50	0.669	17.0	315
66156150	61	0.709	18.0	363

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
66150275	2	0.220	5.6	32
66150375	3	0.240	6.1	38
66150475	4	0.260	6.6	49
66150575	5	0.280	7.1	54
66150775	7	0.303	7.7	68
66150875	8	0.362	9.2	89
66151275	12	0.413	10.5	120
66151475	14	0.433	11.0	133
66151675	16	0.453	11.5	151
66151875	18	0.488	12.4	173
66152175	21	0.535	13.6	200
66152475	24	0.567	14.4	218
66152775	27	0.579	14.7	237
66153075	30	0.622	15.8	280
66153275	32	0.642	16.3	296
66153675	36	0.665	19.6	322

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
66150285	2	0.228	5.8	36
66150380	3	0.248	6.3	44
66150480	4	0.268	6.8	52
66150585	5	0.291	7.4	64
66150680	6	0.315	8.0	75
66150780	7	0.315	8.0	79
<b>▶ 18 AWG (≈ 30/32) • 1.50 mm<sup>2</sup></b>				
66150285	2	0.260	6.6	48
66150385	3	0.268	6.8	60
66150485	4	0.291	7.4	66
66150585	5	0.339	8.6	87
66150685	6	0.366	9.3	102
66150785	7	0.366	9.3	109

Other dimensions and colors are possible on request.



**Especially for use in rail vehicles**



**SABIX® R 645 FRNC TP** SABIX® Rail Data,  
paired with overall copper screen



Marking for SABIX® R 645 FRNC TP 66450325:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® R 645 FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> CE

With our specially developed for rail vehicles data cable with colored conductors, overall copper screen and twisted pairs SABIX® R 645 FRNC TP we offer our customers maximum planning certainty and comfort for flexible installation in railway vehicles. In addition to high flexibility, these cables to the highest safety standards for the railway industry. For these cables the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

**Construction:**

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, EN 6028, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	pairwise, pairs in layers
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX®
<b>Sheath color:</b>	gray

**Technical data:**

<b>Peak operating voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	< 24 AWG = 800 V ≥ 24 AWG = 1200 V
<b>Min. bending radius</b> <i>fixed laying:</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b> <i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2. Burning tests acc. to ASTM E 162-09.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034 + ASTM E 662-09
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

**Outstanding features:**

- ▶ halogen-free
- ▶ no flame propagation
- ▶ good EMC characteristics\*
- ▶ flame retardant and self-extinguishing
- ▶ fulfils fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3
- ▶ tested acc. to American ASTM standard
- ▶ good transmission rates and crosstalk attenuation

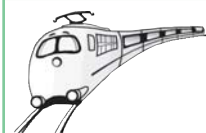
\* Copper braiding should be connected circularly to optimize the EMC characteristics

item no.	no. of pairs	nominal outer-Ø inch	outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm<sup>2</sup></b>				
66450214	2	0.205	5.2	26
66450314	3	0.224	5.7	30
66450414	4	0.256	6.5	36
66450514	5	0.276	7.0	43
66450614	6	0.283	7.2	48
66450814	8	0.307	7.8	56
66451014	10	0.350	8.9	71
66451214	12	0.382	9.7	81
66451614	16	0.413	10.5	99
66451814	18	0.437	11.1	117
66452414	24	0.504	12.8	150
<b>▶ 24 AWG (≈ 14/34) • 0.25 mm<sup>2</sup></b>				
66450225	2	0.224	5.7	31
66450325	3	0.252	6.4	41
66450425	4	0.283	7.2	48
66450525	5	0.303	7.7	56
66450625	6	0.311	7.9	62
66450825	8	0.354	9.0	80
66451025	10	0.386	9.8	93
66451225	12	0.429	10.9	116
66451625	16	0.469	11.9	143
66451825	18	0.500	12.7	165
66452425	24	0.559	14.2	199

item no.	no. of pairs	nominal outer-Ø inch	outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 22 AWG (≈ 7/30) • 0.34 mm<sup>2</sup></b>				
66450234	2	0.268	6.8	42
66450334	3	0.291	7.4	53
66450434	4	0.346	8.8	69
66450534	5	0.374	9.5	81
66450634	6	0.382	9.7	84
66450834	8	0.417	10.6	107
66451234	12	0.528	13.4	167
66451634	16	0.575	14.6	205
66451834	18	0.594	15.1	224
66452434	24	0.693	17.6	302
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
66450250	2	0.283	7.2	48
66450350	3	0.311	7.9	62
66450450	4	0.370	9.4	80
66450550	5	0.402	10.2	95
66450650	6	0.409	10.4	104
66450850	8	0.449	11.4	120
66451050	10	0.520	13.2	169
66451250	12	0.567	14.4	198
66451650	16	0.642	16.3	255
66451850	18	0.665	16.9	293
66452450	24	0.748	19.0	341

item no.	no. of pairs	nominal outer-Ø inch	outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
66450275	2	0.335	8.5	69
66450375	3	0.370	9.4	86
66450475	4	0.429	10.9	112
66450575	5	0.461	11.7	135
66450675	6	0.492	12.5	161
66450875	8	0.539	13.7	187
66451275	12	0.673	17.1	282
66451675	16	0.732	18.6	351
66451875	18	0.760	19.3	390
66452475	24	0.858	21.8	480

Other dimensions and colors are possible on request.



**Especially for use in rail vehicles**

**DIN EN 45545-2**  
edition 2013

# HALOGEN-FREE CABLES

up to  
**+125°C**



## SABIX® A 280 FRNC X Wiring cable / Control cable

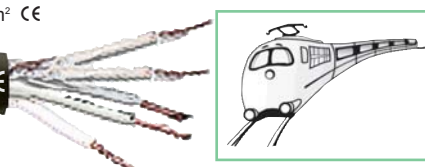


BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 1 x 1,0 mm<sup>2</sup> CE

Marking for SABIX® A 280 FRNC X 62800110:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 1 x 1,0 mm<sup>2</sup> CE

BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 1 x 1,0 mm<sup>2</sup> CE

Marking for SABIX® A 280 FRNC X 628000505:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X 5 x 0,5 mm<sup>2</sup> CE



**Especially  
for use in  
rail vehicles**

Our control cable SABIX® A 280 FRNC X fulfill the requirements of DIN EN 45545-2 and have proven durable in practice.

### Construction:

<b>Conductor:</b>	tinned copper strands fine wires acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Single conductor:</b>	
<b>Color code:</b>	white
<b>Multi-conductor cable:</b>	
<b>Color code:</b>	white conductors with black numbers acc. to. EN 50334
<b>Multi-conductor cable:</b>	
<b>Stranding:</b>	in layers
<b>Multi-conductor cable:</b>	
<b>Jacket material:</b>	special SABIX®
<b>Multi-conductor cable:</b>	
<b>Sheath color:</b>	black

### Outstanding features:

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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	5 x O. D.
<b>Temperature range during protected, fixed laying:</b>	-40/+125 °C (single conductor) -50/+125 °C (multi-core cable)
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx. kWh/km
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>						
62800105	1	0.067	1.7	5	40.1	13
62800305	3	0.185	4.7	24	40.1	115
62800505	5	0.228	5.8	34	40.1	170
62800805	8	0.287	7.3	56	40.1	246
62801005	10	0.319	8.1	65	40.1	275
62801205	12	0.331	8.4	75	40.1	306
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>						
62800607	6	0.283	7.2	58	26.7	237
62800807	8	0.287	7.3	68	26.7	245
62801007	10	0.370	9.4	89	26.7	345

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx. kWh/km
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>						
62800110	1	0.083	2.1	8	20.0	16
62800310	3	0.217	5.5	37	20.0	162
62800410	4	0.244	6.2	48	20.0	186
62800610	6	0.295	7.5	68	20.0	252
62800810	8	0.354	9.0	91	20.0	338
62801010	10	0.398	10.1	110	20.0	402
<b>▶ 18 AWG (≈ 30/32) • 1.50 mm<sup>2</sup></b>						
62800115	1	0.098	2.5	11	13.7	22.5
62800315	3	0.260	6.6	46	13.7	210
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>						
6280125	1	0.122	3.1	18	8.21	34

Other dimensions and colors are possible on request.

E-mail: [info@sabcable.com](mailto:info@sabcable.com)



Web site: [www.sabcable.com](http://www.sabcable.com)

K  
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## SABIX® A 285 FRNC X Control cable with numbered conductors and overall copper screen



Marking for SABIX® A 285 FRNC X 628500505:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® A 285 FRNC X 5 x 0,5 mm² CE

Our control cable SABIX® A 280 FRNC X fulfill the requirements of DIN EN 45545-2 and have proven durable in practice.

### Construction:

<b>Conductor:</b>	tinned copper strands fine wires acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	white conductors with black numbers acc. to. EN 50334
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX®
<b>Sheath color:</b>	black

### Outstanding features:

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

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

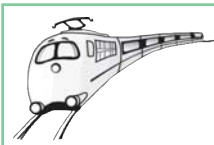
### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	10 x O. D.
<b>Temperature range during protected, fixed laying:</b>	-50/+125 °C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx. kWh/km
▶ 20 AWG (≈ 16/32) • 0.50 mm <sup>2</sup>						
62850305	3	0.205	5.2	30	40.1	99
62850505	5	0.248	6.3	46	40.1	154
62850805	8	0.311	7.9	65	40.1	237
62851005	10	0.339	8.6	77	40.1	258
62851205	12	0.350	8.9	85	40.1	288

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx. kWh/km
▶ 19 AWG (≈ 23/32) • 0.75 mm <sup>2</sup>						
62850607	6	0.303	7.7	68	26.7	231
62850807	8	0.358	9.1	89	26.7	305
62851007	10	0.409	10.4	116	26.7	381
▶ 18 AWG (≈ 30/32) • 1.00 mm <sup>2</sup>						
62850310	3	0.244	6.2	44	20.0	155
62850610	6	0.323	8.2	84	20.0	285
62850810	8	0.386	9.8	108	20.0	366
62851010	10	0.425	10.8	134	20.0	401

Other dimensions and colors are possible on request.



**Especially  
for use in  
rail vehicles**

# HALOGEN-FREE CABLES



## SABIX® BL 405 FRNC Flexible data cable

BL = BlueLine

able 16 x 0,5 mm<sup>2</sup> **ABS Assessed** · Lloyd's Register



Marking for SABIX® BL 405 FRNC 64051650:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 405 FRNC · Data Cable 16 x 0,5 mm<sup>2</sup> **ABS Assessed** · Lloyd's Register and current meter marking

The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. Data cables, type SABIX® BlueLine Data, are available with small cross sections beginning with AWG 26. This results in a small outer diameter which offers an outstanding advantage particularly where there is only little space.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to DIN VDE 0812 resp. IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX® SHF 1 compound acc. to IEC 60092-359
<b>Sheath color:</b>	pigeon blue

### 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:  
Germanischer Lloyd  
Lloyd's Register  
American Bureau of Shipping

### Technical data:

<b>Peak operating voltage:</b>	max. 350 V
<b>Testing voltage:</b>	1500 V
<b>Min. bending radius</b>	
fixed laying:	5 x O. D.
flexible application:	10 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50267-2-1 + IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + DIN EN 50267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Possible on request:

- ▶ bare copper strands
- ▶ alternative color code and sheath color

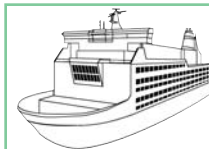


item no.	no. of conductors	nominal outer- $\phi$ inch	nominal outer- $\phi$ mm	cable weight $\approx$ lbs/mft
<b>▶ 26 AWG (<math>\approx</math> 18/38) • 0.14 mm<sup>2</sup></b>				
64050214	2	0.142	3.6	12
64050314	3	0.150	3.8	14
64050414	4	0.161	4.1	16
64050514	5	0.177	4.5	19
64050614	6	0.189	4.8	22
64050714	7	0.189	4.8	24
64050814	8	0.217	5.5	28
64051214	12	0.248	6.3	38
64051614	16	0.276	7.0	47
<b>▶ 24 AWG (<math>\approx</math> 14/34) • 0.25 mm<sup>2</sup></b>				
64050225	2	0.154	3.9	15
64050325	3	0.161	4.1	17
64050425	4	0.177	4.5	21
64050525	5	0.193	4.9	25
64050625	6	0.209	5.3	29
64050725	7	0.209	5.3	31
64050825	8	0.244	6.2	38
64051225	12	0.276	7.0	50
64051625	16	0.303	7.7	62

item no.	no. of conductors	nominal outer- $\phi$ inch	nominal outer- $\phi$ mm	cable weight $\approx$ lbs/mft
<b>▶ 22 AWG (<math>\approx</math> 7/30) • 0.34 mm<sup>2</sup></b>				
64050234	2	0.169	4.3	19
64050334	3	0.181	4.6	22
64050434	4	0.197	5.0	26
64050534	5	0.213	5.4	32
64050634	6	0.240	6.1	39
64050734	7	0.240	6.1	41
64050834	8	0.276	7.0	49
64051234	12	0.307	7.8	64
64051634	16	0.354	9.0	87
<b>▶ 20 AWG (<math>\approx</math> 16/32) • 0.50 mm<sup>2</sup></b>				
64050250	2	0.185	4.7	24
64050350	3	0.197	5.0	28
64050450	4	0.213	5.4	34
64050550	5	0.240	6.1	43
64050650	6	0.264	6.7	50
64050750	7	0.264	6.7	53
64050850	8	0.303	7.7	64
64051250	12	0.354	9.0	89
64051650	16	0.394	10.0	114

item no.	no. of conductors	nominal outer- $\phi$ inch	nominal outer- $\phi$ mm	cable weight $\approx$ lbs/mft
<b>▶ 19 AWG (<math>\approx</math> 23/32) • 0.75 mm<sup>2</sup></b>				
64050275	2	0.205	5.2	29
64050375	3	0.217	5.5	35
64050475	4	0.244	6.2	44
64050575	5	0.268	6.8	53
64050675	6	0.291	7.4	62
64050775	7	0.291	7.4	67
64050875	8	0.346	8.8	85
64051275	12	0.398	10.1	112
64051675	16	0.437	11.1	142

Other dimensions and colors are possible on request.



**especially for use in shipbuilding industry**

E-mail: [info@sabcable.com](mailto:info@sabcable.com)



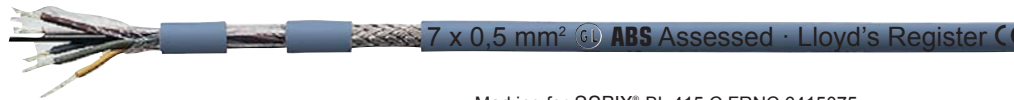
Web site: [www.sabcable.com](http://www.sabcable.com)

# HALOGEN-FREE CABLES

## SABIX® BL 415 C FRNC Flexible data cable with overall copper screen



BL = BlueLine



Marking for SABIX® BL 415 C FRNC 6415075:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 415 C FRNC · Data Cable 7 x 0,5 mm<sup>2</sup> GL ABS Assessed · Lloyd's Register CE and current meter marking

The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. Data cables, type SABIX® BlueLine Data, are available with small cross sections beginning with AWG 26. This results in a small outer diameter which offers an outstanding advantage particularly where there is only little space.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to DIN VDE 0812 resp. IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX® SHF 1 compound acc. to IEC 60092-359
<b>Sheath color:</b>	pigeon blue

### 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: Germanischer Lloyd Lloyd's Register American Bureau of Shipping

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

### Technical data:

<b>Peak operating voltage:</b>	max. 350 V
<b>Testing voltage:</b>	1500 V
<b>Min. bending radius</b>	
fixed laying:	5 x O. D.
flexible application:	10 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50267-2-1 + IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + DIN EN 50267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Possible on request:

- bare copper strands
- alternative color code and sheath color

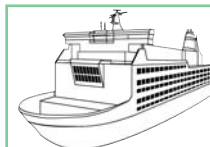


item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>➤ 26 AWG (≈ 18/38) • 0.14 mm<sup>2</sup></b>				
64150214	2	0.161	4.1	17
64150314	3	0.169	4.3	19
64150414	4	0.181	4.6	24
64150514	5	0.197	5.0	27
64150614	6	0.209	5.3	29
64150714	7	0.209	5.3	30
64150814	8	0.244	6.2	38
64151214	12	0.268	5.8	47
64151614	16	0.295	7.5	57
<b>➤ 24 AWG (≈ 14/34) • 0.25 mm<sup>2</sup></b>				
64150225	2	0.173	4.4	22
64150325	3	0.181	4.6	24
64150425	4	0.197	5.0	28
64150525	5	0.213	5.4	33
64150625	6	0.228	5.8	36
64150725	7	0.228	5.8	38
64150825	8	0.264	6.7	48
64151225	12	0.295	7.5	60
64151625	16	0.339	8.6	79

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>➤ 22 AWG (≈ 7/30) • 0.34 mm<sup>2</sup></b>				
64150234	2	0.189	4.8	25
64150334	3	0.201	5.1	28
64150434	4	0.217	5.5	34
64150534	5	0.240	6.1	41
64150634	6	0.260	6.6	48
64150734	7	0.260	6.6	50
64150834	8	0.295	7.5	59
64151234	12	0.343	8.7	81
64151634	16	0.374	9.5	100
<b>➤ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
64150250	2	0.205	5.2	29
64150350	3	0.217	5.5	35
64150450	4	0.240	6.1	43
64150550	5	0.260	6.6	52
64150650	6	0.283	7.2	57
64150750	7	0.283	7.2	60
64150850	8	0.339	8.6	78
64151250	12	0.374	9.5	102
64151650	16	0.421	10.7	135

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>➤ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
64150275	2	0.224	5.7	35
64150375	3	0.244	6.2	44
64150475	4	0.264	6.7	52
64150575	5	0.287	7.3	62
64150675	6	0.311	7.9	71
64150775	7	0.311	7.9	77
64150875	8	0.366	9.3	95
64151275	12	0.425	10.8	130
64151675	16	0.465	11.8	166

Other dimensions and colors are possible on request.



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Web site: [www.sabcable.com](http://www.sabcable.com)

# HALOGEN-FREE CABLES



## SABIX® BL 445 C FRNC TP Flexible paired data cable with overall copper screen

BL = BlueLine

3 x 2 x 0,25 mm<sup>2</sup> **ABS Assessed** · Lloyd's Register



Marking for SABIX® BL 445 C FRNC TP 64450325:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 445 C FRNC TP · Data Cable 3 x 2 x 0,25 mm<sup>2</sup> **ABS Assessed** · Lloyd's Register and current meter marking

The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. Data cables, type SABIX® BlueLine Data, are available with small cross sections beginning with AWG 26. This results in a small outer diameter which offers an outstanding advantage particularly where there is only little space.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to DIN VDE 0812 resp. IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	with reference to DIN 47100
<b>Stranding:</b>	pairwise, pairs in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX® SHF 1 compound acc. to IEC 60092-359
<b>Sheath color:</b>	pigeon blue

### 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:  
Germanischer Lloyd  
Lloyd's Register  
American Bureau of Shipping

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

### Technical data:

<b>Peak operating voltage:</b>	max. 350 V
<b>Testing voltage:</b>	1500 V
<b>Min. bending radius</b>	
fixed laying:	5 x O. D.
flexible application:	10 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50267-2-1 + IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + DIN EN 50267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Possible on request:



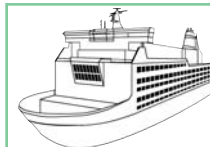
- bare copper strands
- alternative color code and sheath color

item no.	no. of pairs	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 26 AWG (≈ 18/38) • 0.14 mm<sup>2</sup></b>				
64450214	2	0.209	5.3	25
64450314	3	0.228	5.8	30
64450414	4	0.268	6.8	39
64450514	5	0.291	7.4	46
64450614	6	0.299	7.6	51
64450814	8	0.343	8.7	66
64451014	10	0.374	9.5	77
64451214	12	0.417	10.6	95
64451814	18	0.488	12.4	134
<b>▶ 24 AWG (≈ 14/34) • 0.25 mm<sup>2</sup></b>				
64450225	2	0.228	5.8	30
64450325	3	0.256	6.5	38
64450425	4	0.291	7.4	48
64450525	5	0.343	8.7	65
64450625	6	0.343	8.7	70
64450825	8	0.358	9.1	81
64451025	10	0.417	10.6	105
64451225	12	0.457	11.6	121
64451825	18	0.543	13.8	183
64452625	25	0.642	16.3	247

item no.	no. of pairs	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 22 AWG (≈ 7/30) • 0.34 mm<sup>2</sup></b>				
64450234	2	0.252	6.4	38
64450334	3	0.283	7.2	48
64450434	4	0.343	8.7	65
64450534	5	0.370	9.4	77
64450634	6	0.378	9.6	86
64450834	8	0.425	10.8	110
64451034	10	0.465	11.8	130
64451234	12	0.528	13.4	160
64451834	18	0.622	15.8	240
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
64450250	2	0.283	7.2	47
64450350	3	0.311	7.9	59
64450450	4	0.374	9.5	81
64450550	5	0.413	10.5	103
64450650	6	0.425	10.8	115
64450850	8	0.469	11.9	139
64451050	10	0.528	13.4	174
64451250	12	0.591	15.0	216
64451850	18	0.685	17.4	303

item no.	no. of pairs	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
64450275	2	0.311	7.9	58
64450375	3	0.362	9.2	77
64450475	4	0.421	10.7	105
64450575	5	0.457	11.6	125
64450675	6	0.488	12.4	149
64450875	8	0.543	13.8	191
64451075	10	0.598	15.2	227
64451275	12	0.677	17.2	276
64451875	18	0.764	19.4	372

Other dimensions and colors are possible on request.



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# HALOGEN-FREE CABLES

## SABIX® BL 400 FRNC Flexible control cable 300/500 V



BL = BlueLine



Control Cable 12 x 1,5 mm<sup>2</sup> GL ABS Assessed · Lloyd's Register CE

Marking for SABIX® BL 400 FRNC 64001215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 400 FRNC · Control Cable 12 x 1,5 mm<sup>2</sup> GL ABS Assessed · Lloyd's Register CE and current meter marking

The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. The type SABIX® BlueLine Control with a nominal voltage of 300/500 V complement the new product series with control cables for electrical components.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334 green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX® SHF 1 compound acc. to IEC 60092-359
<b>Sheath color:</b>	pigeon blue

### 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:  
Germanischer Lloyd  
Lloyd's Register  
American Bureau of Shipping

### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage U:</b>	2000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b>	
fixed laying:	4 x O. D.
flexible application:	6 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+90°C
flexible application:	-30/+90°C
<b>Zero halogen:</b>	acc. to EN 50267-2-1 + IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + DIN EN 50267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Possible on request:



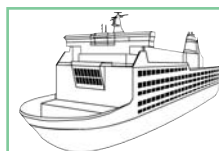
- ▶ bare copper strands
- ▶ alternative color code and sheath color

item no.	no. of conductors incl. ground	nominal outer-ø inch	outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
64000205	2	0.209	5.3	28
64000305	3	0.220	5.6	33
64000405	4	0.236	6.0	40
64000505	5	0.260	6.6	48
64000705	7	0.287	7.3	60
64001205	12	0.378	9.6	99
64001805	18	0.449	11.4	142
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
64000207	2	0.228	5.8	34
64000307	3	0.240	6.1	40
64000407	4	0.264	6.7	50
64000507	5	0.291	7.4	61
64000707	7	0.319	8.1	76
64001207	12	0.429	10.9	126
64001807	18	0.504	12.8	181

item no.	no. of conductors incl. ground	nominal outer-ø inch	outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
64000210	2	0.236	6.0	38
64000310	3	0.248	6.3	46
64000410	4	0.276	7.0	56
64000510	5	0.307	7.8	71
64000710	7	0.331	8.4	88
64001210	12	0.445	11.3	145
64001810	18	0.531	13.5	214
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
64000215	2	0.264	6.7	49
64000315	3	0.276	7.0	60
64000415	4	0.311	7.9	75
64000515	5	0.339	8.6	91
64000715	7	0.374	9.5	117
64001215	12	0.500	12.7	193
64001815	18	0.602	15.3	286

item no.	no. of conductors incl. ground	nominal outer-ø inch	outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
64000225	2	0.319	8.1	75
64000325	3	0.339	8.6	92
64000425	4	0.374	9.5	115
64000525	5	0.417	10.6	142
64000725	7	0.461	11.7	183
64001225	12	0.618	15.7	304
64001825	18	0.744	18.9	450

Other dimensions and colors are possible on request.



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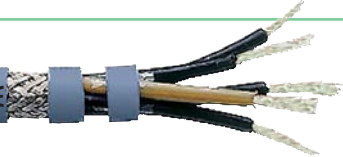
# HALOGEN-FREE CABLES



## SABIX® BL 438 C FRNC Flexible control cable with overall copper screen 300/500 V

BL = BlueLine

5 x 1,5 mm<sup>2</sup> ABS Assessed · Lloyd's Register



Marking for SABIX® BL 438 C FRNC 64380515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 438 C FRNC · Control Cable 5 x 1,5 mm<sup>2</sup> ABS Assessed · Lloyd's Register and current meter marking

The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. The type SABIX® BlueLine Control with a nominal voltage of 300/500 V complement the new product series with control cables for electrical components.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code</b>	black conductors with consecutive numbers acc. to EN 50334 green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX® SHF 1 compound acc. to IEC 60092-359
<b>Sheath color:</b>	pigeon blue

### 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:  
Germanischer Lloyd  
Lloyd's Register  
American Bureau of Shipping

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

### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage U:</b>	2000 V acc. to DIN VDE 0281 part 2 + HD 21.2, conductor/screen 2000 V
<b>Min. bending radius</b> <i>fixed laying:</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b> <i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50267-2-1 + IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + DIN EN 50267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Possible on request:

- bare copper strands
- alternative color code and sheath color

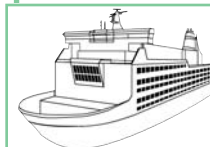


item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>➤ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
64380205	2	0.228	5.8	34
64380305	3	0.240	6.1	38
64380405	4	0.260	6.6	46
64380505	5	0.280	7.1	55
64380705	7	0.311	7.9	70
64381205	12	0.402	10.2	111
64381805	18	0.484	12.3	169
<b>➤ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
64380207	2	0.252	6.4	39
64380307	3	0.264	6.7	46
64380407	4	0.287	7.3	56
64380507	5	0.315	8.0	69
64380707	7	0.343	8.7	85
64381207	12	0.461	11.7	149
64381807	18	0.539	13.7	209

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>➤ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
64380210	2	0.260	6.6	44
64380310	3	0.272	6.9	52
64380410	4	0.295	7.5	62
64380510	5	0.331	8.4	79
64380710	7	0.354	9.0	97
64381210	12	0.476	12.1	168
64381810	18	0.575	14.6	254
<b>➤ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
64380215	2	0.287	7.3	54
64380315	3	0.299	7.6	65
64380415	4	0.331	8.4	81
64380515	5	0.366	9.3	101
64380715	7	0.398	10.1	126
64381215	12	0.531	13.5	217
64381815	18	0.642	16.3	328

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>➤ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
64380225	2	0.343	8.7	77
64380325	3	0.366	9.3	97
64380425	4	0.398	10.1	121
64380525	5	0.453	11.5	159
64380725	7	0.492	12.5	201
64381225	12	0.661	16.8	345
64381825	18	0.791	20.1	506

Other dimensions and colors are possible on request.



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Web site: [www.sabcable.com](http://www.sabcable.com)



# HALOGEN-FREE CABLES

## SABIX® BL 410 FRNC Flexible power cable 0,6/1 kV



BL = BlueLine



Cable 0,6/1 kV 12 x 1,5 mm<sup>2</sup> **ABS** Assessed · Lloyd's Register

Marking for SABIX® BL 410 FRNC 64101215: SAB BRÖCKSKES · D-VIERSEN · SABIX®BL 410 FRNC · Power Cable 0,6/1 kV 12 x 1,5 mm<sup>2</sup> **ABS** Assessed · Lloyd's Register and current meter marking

The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. The type SABIX® BlueLine Power with a nominal voltage of 0,6/1 kV complement the new product series with power supply cables for electrical components.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code</b>	black conductors with consecutive numbers acc. to EN 50334 green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX® SHF 1 compound acc. to IEC 60092-359
<b>Sheath color:</b>	black

### 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: Germanischer Lloyd  
Lloyd's Register  
American Bureau of Shipping

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0,6/1 kV
<b>Testing voltage U:</b>	4000 V acc. to DIN VDE 0281 part 2 + HD 21.2
<b>Min. bending radius</b>	
fixed laying:	4 x O. D.
flexible application:	6 x O. D.
<b>Temperature range</b>	
fixed laying:	-40/+90 °C
flexible application:	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50267-2-1 + IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + DIN EN 50267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Possible on request:



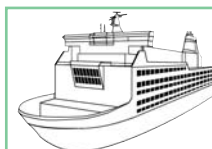
- bare copper strands
- alternative color code and sheath color

item no.	no. of conductors incl. ground	nominal outer-ø inch	outer-ø mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm <sup>2</sup>				
64100215	2	0.350	8.9	81
64100315	3	0.370	9.4	92
64100415	4	0.402	10.2	110
64100515	5	0.449	11.4	138
64100715	7	0.488	12.4	168
64101015	10	0.626	15.9	235
64101215	12	0.654	16.6	274
64101415	14	0.685	17.4	308
64101815	18	0.768	19.5	396
▶ 14 AWG (≈ 46/30) • 2.50 mm <sup>2</sup>				
64100225	2	0.382	9.7	101
64100325	3	0.406	10.3	118
64100425	4	0.449	11.4	147
64100525	5	0.492	12.5	179
64100725	7	0.543	13.8	226
64101025	10	0.697	17.7	317
64101225	12	0.717	18.2	363
64101425	14	0.760	19.3	418
64101825	18	0.854	21.7	536

item no.	no. of conductors incl. ground	nominal outer-ø inch	outer-ø mm	cable weight ≈ lbs/mft
▶ 12 AWG (≈ 52/28) • 4.00 mm <sup>2</sup>				
64100240	2	0.469	11.9	155
64100340	3	0.496	12.6	181
64100440	4	0.551	14.0	224
64100540	5	0.606	15.4	276
64100740	7	0.669	17.0	349
▶ 10 AWG (≈ 78/28) • 6.00 mm <sup>2</sup>				
64100260	2	0.508	12.9	193
64100360	3	0.547	13.9	235
64100460	4	0.598	15.2	287
64100560	5	0.669	17.0	360
64100760	7	0.728	18.5	453
▶ 8 AWG (≈ 77/26) • 10.00 mm <sup>2</sup>				
64100361	3	0.661	16.8	360
64100461	4	0.724	18.4	443
64100561	5	0.807	20.5	554

item no.	no. of conductors incl. ground	nominal outer-ø inch	outer-ø mm	cable weight ≈ lbs/mft
▶ 6 AWG (≈ 122/26) • 16.00 mm <sup>2</sup>				
64100362	3	0.787	20.0	523
64100462	4	0.870	22.1	655
64100562	5	0.972	24.7	818
▶ 4 AWG (≈ 190/26) • 25.00 mm <sup>2</sup>				
64100363	3	0.949	24.1	778
64100463	4	1.051	26.7	976
64100563	5	1.177	29.9	1228
▶ 2 AWG (≈ 272/26) • 35.00 mm <sup>2</sup>				
64100364	3	1.083	27.5	1053
64100464	4	1.197	30.4	1322
▶ 1 AWG (≈ 400/26) • 50.00 mm <sup>2</sup>				
64100365	3	1.224	31.1	1459
64100465	4	1.350	34.3	1840

Other dimensions and colors are possible on request.



especially for use in shipbuilding industry

E-mail: [info@sabcable.com](mailto:info@sabcable.com)



Web site: [www.sabcable.com](http://www.sabcable.com)

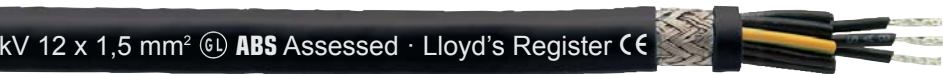
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# HALOGEN-FREE CABLES



## SABIX® BL 412 C FRNC Flexible power cable with overall copper screen 0,6/1 kV

BL = BlueLine



Marking for SABIX® BL 412 C FRNC 64121215: SAB BRÖCKSKES · D-VIERSEN ·  
SABIX®BL 412 C FRNC · Power Cable 0,6/1 kV 12 x 1,5 mm² ABS Assessed · Lloyd's Register and current meter marking

The halogen-free SABIX® BlueLine cables have been approved by GL, LR as well as ABS. Their SABIX® characteristics fulfill the highest safety-related aspects in shipbuilding with regards to both fire performance as well as being halogen-free. The type SABIX® BlueLine Power with a nominal voltage of 0,6/1 kV complement the new product series with power supply cables for electrical components.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334 green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Screen:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX® SHF 1 compound acc. to IEC 60092-359
<b>Sheath color:</b>	black

### 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: Germanischer Lloyd, Lloyd's Register, American Bureau of Shipping

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

### Technical data:

<b>Nominal voltage:</b>	Uo/U 0,6/1 kV
<b>Testing voltage U:</b>	4000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 2000 V
<b>Min. bending radius</b> <i>fixed laying</i>	5 x O. D.
<i>flexible application:</i>	10 x O. D.
<b>Temperature range</b> <i>fixed laying</i>	-40/+90 °C
<i>flexible application:</i>	-30/+90 °C
<b>Zero halogen:</b>	acc. to EN 50267-2-1 + IEC 60754-1
<b>Burning characteristics:</b>	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + DIN EN 50267-2-2 - no development of corrosive conflagration gases
<b>Smoke density:</b>	acc. to IEC 61034 + EN 61034
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

### Possible on request:

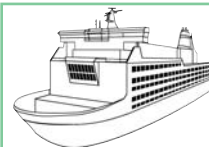
- bare copper strands
- alternative color code and sheath color

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
<b>➤ 16 AWG (≈ 27-29/30) • 1.50 mm²</b>				
64120215	2	0.370	9.4	77
64120315	3	0.390	9.9	95
64120415	4	0.429	11.3	122
64120515	5	0.476	12.3	153
64120715	7	0.516	13.3	185
64121015	10	0.669	17.2	280
64121215	12	0.689	17.7	312
64121415	14	0.720	18.5	347
64121815	18	0.803	20.8	439
<b>➤ 14 AWG (≈ 46/30) • 2.50 mm²</b>				
64120225	2	0.402	10.2	94
64120325	3	0.433	11.4	127
64120425	4	0.476	12.3	159
64120525	5	0.520	13.4	193
64120725	7	0.579	15.1	253
64121025	10	0.732	18.8	353
64121225	12	0.752	19.7	403
64121425	14	0.795	20.6	459
64121825	18	0.890	22.8	581

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
<b>➤ 12 AWG (≈ 52/28) • 4.00 mm²</b>				
64120240	2	0.496	12.8	149
64120340	3	0.524	13.5	185
64120440	4	0.587	14.9	243
64120540	5	0.642	16.7	298
64120740	7	0.705	18.1	376
<b>➤ 10 AWG (≈ 78/28) • 6.00 mm²</b>				
64120260	2	0.543	13.8	187
64120360	3	0.583	15.2	246
64120460	4	0.634	16.5	304
64120560	5	0.705	18.1	382
64120760	7	0.772	20.0	486
<b>➤ 8 AWG (≈ 77/26) • 10.00 mm²</b>				
64120361	3	0.697	17.9	364
64120461	4	0.768	19.5	462
64120561	5	0.843	21.8	573
<b>➤ 6 AWG (≈ 122/26) • 16.00 mm²</b>				
64120362	3	0.823	21.3	517
64120462	4	0.906	23.2	652
64120562	5	1.008	26.0	828

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
<b>➤ 4 AWG (≈ 190/26) • 25.00 mm²</b>				
64120363	3	0.992	25.6	757
64120463	4	1.094	28.0	962
64120563	5	1.213	31.2	1213
<b>➤ 2 AWG (≈ 272/26) • 35.00 mm²</b>				
64120364	3	1.118	28.6	991
64120464	4	1.232	31.7	1276
<b>➤ 1 AWG (≈ 400/26) • 50.00 mm²</b>				
64120365	3	1.260	32.4	1363
64120465	4	1.386	35.4	1760

Other dimensions and colors are possible on request.



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Web site: [www.sabcable.com](http://www.sabcable.com)