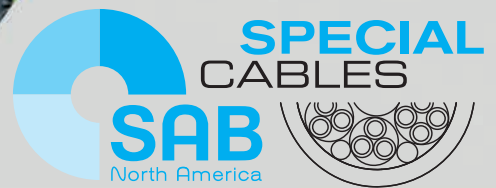


HALOGEN-FREE CABLES

K



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866-722-2974 ■ info@sabcable.com



Halogen-free Cables

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Applications	K/5
Selection tables	K/8



Halogen-free Single Conductors

■ SABIX® A 146 FRNC		Wiring cable with improved fire performance and extended temperature range, 300/500 V	K/13
■ SABIX® A 156 FRNC		Wiring cable with improved fire performance and extended temperature range, 450/750 V	K/14
■ SABIX® A 166 FRNC		Wiring cable with improved fire performance and extended temperature range, 0.6/1 kV	K/15
■ SABIX® A 147 FRNC		Wiring cable 600 V	K/16
■ SABIX® A 157 FRNC		Wiring cable 1000 V	K/16
■ SABIX® A 100 HT		High temperature resistant single conductor wire with nickel-plated strands .	K/17
■ SABIX® A 101 HT		High temperature resistant single conductor wire with silver-plated strands .	K/17



Halogen-free Control Cables

■ SABIX® A 200 FRNC		Control cable with numbered conductors with improved fire performance and extended temperature range	K/18
■ SABIX® A 205 FRNC		Control cable with colored conductors with improved fire performance and extended temperature range	K/19
■ SABIX® A 238 FRNC		Control cable with numbered conductors, overall tinned copper shield, improved fire performance and extended temperature range	K/20
■ SABIX® A 260 PUR		Cold-flexible, oil resistant control cable with numbered conductors	K/21
■ SABIX® A 130 HT		High temperature resistant control cable with numbered or colored conductors	K/22



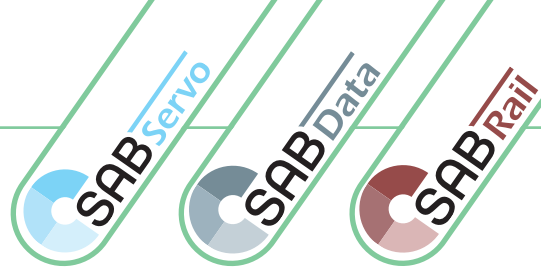
Halogen-free Control Cables with UL Recognition, CSA Approval

■ SABIX® CC 625 FRNC M		Control cable with numbered conductors	K/23
■ SABIX® CC 625 S FRNC M		Control cable with numbered conductors and overall tinned copper shield . .	K/25
■ SABIX® CC 625 SH FRNC M		Control cable with numbered conductors, inner jacket, and overall tinned copper shield	K/27

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Halogen-free Cables

Content

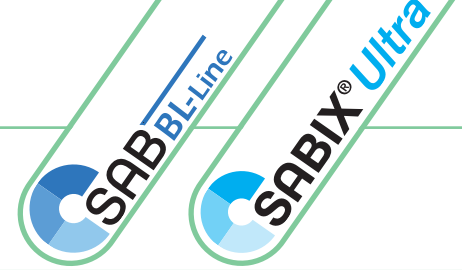


		page
SAB Servo		
Halogen-free Motor Connection Cables 0.6/1 kV		
■ SABIX® A 810 FRNC	Motor connection cable with numbered conductors, improved fire performance, and extended temperature range	K/29
■ SABIX® A 812 C FRNC	Motor connection cable with numbered conductors, improved fire performance, inner jacket, overall tinned copper shield, and extended temperature range	K/30
SAB Data		
Halogen-free Data Cables		
■ SABIX® D 305 FRNC	Flexible data cable with improved fire performance and extended temperature range	K/31
■ SABIX® D 315 FRNC	Flexible data cable with improved fire performance, overall tinned copper shield, and extended temperature range	K/33
■ SABIX® D 345 FRNC TP	Paired data cable with improved fire performance, overall tinned copper shield, and extended temperature range	K/35
SAB Rail		
Halogen-free Cables for Use in Rail Vehicles		
■ SABIX® R 600 FRNC	SABIX® Rail Control cable with numbered conductors tested acc. to EN 45545-2	K/36
■ SABIX® R 638 FRNC	SABIX® Rail Control cable with numbered conductors and overall tinned copper shield, tested acc. to EN 45545-2	K/37
■ SABIX® R 605 FRNC	SABIX® Rail Data cable tested acc. to EN 45545-2	K/38
■ SABIX® R 615 FRNC	SABIX® Rail Data cable with overall tinned copper shield, tested acc. to EN 45545-2	K/40
■ SABIX® R 645 FRNC TP	SABIX® Rail Data cable, paired with overall tinned copper shield, tested acc. to EN 45545-2	K/42
■ SABIX® R flex	Continuous flex SABIX® rail cable with numbered conductors, cross linked, tested acc. to EN 45545-2	K/43
NEW ■ SABIX® RailLine 560	Continuous flex SABIX® rail cable for outdoor use, cross linked, tested acc. to EN45545-2	K/45
■ SABIX® A 280 FRNC X	Wiring cable / control cable with numbered conductors, cross linked, tested acc. to EN45545-2	K/46
■ SABIX® A 285 FRNC X	Control cable with numbered conductors, overall tinned copper shield, cross linked, tested acc. to EN45545-2	K/47
■ SABIX® A 280 FRNC X (FR)	Fire resistant control cable, cross linked, tested acc. to EN45545-2, IEC 60331-21, EN 50200	K/48

You will find halogen-free Ethernet cables especially for use in rail vehicles in chapter J
 You will find Besilen® insulated strands for use in rail vehicles in chapter I


Halogen-free Cables

Content





SABIX® BL - Halogen-free Cables for Maritime Use






SABIX® BL Data

			page
■ SABIX® BL 405 FRNC		Flexible data cable	K/49
■ SABIX® BL 415 C FRNC		Flexible data cable with overall tinned copper shield	K/50
■ SABIX® BL 443 C FRNC TT		Twisted triad data cable with overall tinned copper shield	K/51
■ SABIX® BL 445 C FRNC TT		Flexible paired data cable with overall tinned copper shield	K/52
■ SABIX® BL 446 C FRNC FTP		Flexible paired data cable with aluminum pair shield and overall tinned copper shield	K/53

SABIX® BL Control

■ SABIX® BL 400 FRNC		Flexible control cable, 300/500 V	K/54
■ SABIX® BL 438 C FRNC		Flexible control cable with overall tinned copper shield, 300/500 V	K/55

SABIX® BL Power

■ SABIX® BL 402 FRNC		Flexible wiring cable, 0.6/1 kV	K/56
■ SABIX® BL 408 FRNC		Flexible power cable, 0.6/1 kV	K/57
■ SABIX® BL 409 C FRNC		Flexible power cable with overall tinned copper shield, 0.6/1 kV	K/58
■ SABIX® BL 410 FRNC		Flexible power cable, 0.6/1 kV	K/59
■ SABIX® BL 412 C FRNC		Flexible power cable with overall tinned copper shield, 0.6/1 kV	K/60

BL TA 180 C - You will find FEP connection cable especially for maritime use in chapter L
 You will find Industrial Ethernet Cables especially for maritime use in chapter J

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SABIX® Ultra - Continuous Flex with Higher Fire Protection

■ SABIX® SD 705 FRNC C1		Continuous flex halogen-free data cable with extended temperature range and higher fire protection	K/61
■ SABIX® S 710 FRNC C1		Continuous flex halogen-free control cable with extended temperature range and higher fire protection	K/62
■ SABIX® SD 715 C FRNC C1		Continuous flex halogen-free shielded data cable with extended temperature range and higher fire protection	K/63
■ SABIX® S 712 C FRNC C1		Continuous flex halogen-free shielded control cable with extended temperature range and higher fire protection	K/64
■ SABIX® SD 745 C FRNC C1 TP		Continuous flex halogen-free shielded twisted pairs data cable with extended temperature range and higher fire protection	K/65

Halogen-free Cables

Applications

■ Applications 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, and are halogen-free.

Exemplary applications:

SABIX® A 146 FRNC SABIX® A 156 FRNC SABIX® A 166 FRNC SABIX® A 147FRNC SABIX® A 157 FRNC	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
SABIX® A 100 HT SABIX® A 101 HT	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 an overall tinned copper shield 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:

SABIX® A 200 FRNC SABIX® A 205 FRNC	Automation systems, car manufacturing industry, machine construction, railway technologies
SABIX® A 238 FRNC	Transporting systems, construction of industrial plants, automation technologies
SABIX® A 260 PUR	Automation technologies, steel and iron industries, car manufacturing industry, machine construction, refrigeration and climate technologies, car wash, rising platforms for trucks
SABIX® A 130 HT	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
SABIX® A 810 FRNC SABIX® A 812 C FRNC	Automation technologies, car manufacturing industry, machine construction, power supply cable between frequency converter and servo motor
SABIX® CC 625 FRNC M	Automation technologies, car manufacturing industry, machine construction, railway technologies
SABIX® CC 625 S FRNC M SABIX® CC 625 SH FRNC M	Transporting systems, construction of industrial plants, automation technologies

Halogen-free Cables

Applications

■ Application of halogen-free SABIX® data cables

Data cables are used for the transmission of signals, measuring values and control signals in electronic control appliances, data processing systems, railway technologies, weighing installations, office appliances or wherever 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 and being halogen-free.

Exemplary applications:

SABIX® D 305 FRNC	Communication technologies
SABIX® D 315 FRNC	Electronic data processing systems, weighing installations, office appliances
SABIX® D 345 FRNC TP	Electronic data processing systems, weighing installations, office appliances, for increased requirements on transmission characteristics and near-end cross talk attenuation

■ Application of halogen-free SABIX® Rail Data and Rail Control tested acc. to 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, halogen-free cables must be flame-retardant and self extinguishing and must not contribute to fire propagation. All of these characteristics, can be found in our brand name of SABIX®. Our SABIX® Rail Cables meet the highest safety standards according to EN 45545-2, and are certified by the Fire Technology Laboratory Currenta GmbH.

Exemplary applications:

SABIX® R 600 FRNC SABIX® R 638 FRNC SABIX® R 605 FRNC SABIX® R 615 FRNC SABIX® R 645 FRNC TP SABIX® R flex SAB RailLine 560 SABIX® A 280 FRNC X SABIX® A 285 FRNC X SABIX® A 280 FRNC X (FR)	Cables for internal wiring of rail vehicles acc. to EN 45545-2
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------

SABIX® cables can be fully recycled and in separate components newly supplied to the resource cycle. Cables with FRNC outer sheath avoid flame propagation in case of local flaming and are flame retardant and self-extinguishing acc. to VDE, EN and IEC. They fulfil the smoke

Halogen-free Cables

Applications

■ Application of halogen-free SABIX® BL data, control and power cables for shipbuilding

The development of the BL cable series has been achieved with co-operation from our customers coming from the shipbuilding field. The new cables are available as halogen-free SABIX® BL cables. All SABIX® BL types are constructed with tinned copper strands in class 5 in order to offer advantages in corrosion resistance and flexibility. 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® BL Data, are available with small cross sections beginning with 26 AWG. This results in a small outer diameter which offers an outstanding advantage particularly where there is only a little space. The types SABIX® BL Control as well as SABIX® BL Power complement the new product series with control and power supply cables for electrical components.

Exemplary applications:

SABIX® BL 405 FRNC
SABIX® BL 415 FRNC
SABIX® BL 443 C FRNC TT
SABIX® BL 445 C FRNC TP
SABIX® BL 446 C FRNC FTP

Installation and wiring of navigation and bridge electronics as BNWAS, power supply of electrical components

Data cables

SABIX® BL 400 FRNC
SABIX® BL 438 C FRNC

Control cables

SABIX® BL 402 FRNC
SABIX® BL 408 FRNC
SABIX® BL 409 C FRNC
SABIX® BL 410 FRNC
SABIX® BL 412 C FRNC

Power cables

■ Application of halogen-free SABIX® Ultra - continuous flex with highest fire protection

Fire protection, halogen-free, flexibility and oil resistance are the characteristics united by our new product range SABIX® Ultra. Due to the new jacket material, the cable can be used for flexible applications and shows the highest fire protection features by the standards EN 60332-1-2, EN 60332-3 Cat C or D, IEC 60754-1, IEC 60754-2, EN 61034, NF C 32-070 C1, NF X 70-100.

Exemplary applications:

SABIX® SD 705 FRNC C1
SABIX® SD 715 FRNC C1
SABIX® SD 745 FRNC C1 TP

as festoon cable for polar cranes in nuclear power plants, in rail technology
as sensor cable at the vehicle chassis, cable track applications
with moderate mechanical stress

SABIX® S 710 FRNC C1
SABIX® S 712 C FRNC C1

as festoon cable for polar cranes in nuclear power plants, in rail technology
as sensor cable at the vehicle chassis or as flexible control cable at the train doors,
cable chain applications with moderate mechanical stress

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Halogen-free Cables

Selection Table

		K/13	K/14	K/15	K/16	K/16	K/17	K/17	K/18	K/19	K/20	K/21	K/22
		Cable Type											
		SABIX® A 146 FRNC	SABIX® A 156 FRNC	SABIX® A 166 FRNC	SABIX® A 147 FRNC	SABIX® A 157 FRNC	SABIX® A 100 HT	SABIX® A 101 HT	SABIX® A 200 FRNC	SABIX® A 205 FRNC	SABIX® A 238 FRNC	SABIX® A 260 PUR	SABIX® A 130 HT
Basic construction	Single conductor	●	●	●	●	●	●	●					
	Shielded										●		
	Colored conductors									●			●
	Numbered conductors								●		●	●	●
	Twisted pairs												
	Inner jacket												
Temperature range fixed installation*	+220°C						●	●					●
	+105°C						●	●					●
	+90°C	●	●	●	●	●	●	●	●	●	●	●	●
	+85°C	●	●	●	●	●	●	●	●	●	●	●	●
	+70°C	●	●	●	●	●	●	●	●	●	●	●	●
	-30°C	●	●	●	●	●	●	●	●	●	●	●	●
	-40°C	●	●	●	●	●	●	●	●	●	●	●	●
	-50°C	●	●	●	●	●	●	●	●	●	●	●	●
Voltage	Peak operating voltage max. 350 V												
	Peak operating voltage max. 500 V												
	Nominal voltage Uo/U 300/500 V	●			●		●	●	●	●	●	●	●
	Nominal voltage Uo/U 450/750 V		●			●							
	Nominal voltage Uo/U 0.6/1 kV			●									
	Voltage UL resp. CSA 600 V				●								
	Voltage UL resp. CSA 1000 V					●							
	Testing voltage 1500 V												
	Testing voltage 2000 V	●			●		●	●					●
	Testing voltage 2500 V		●			●							
	Testing voltage 3000 V			●					●	●	●	●	
	Testing voltage 4000 V												
Standards	Halogen-free acc. to IEC 60754-1+ VDE 0482-754-1	●	●	●	●	●	●	●	●	●	●	●	●
	Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D			●	●	●			●	●	●		
	Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2	●	●										
	Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	●	●	●	●	●	●	●	●	●	●		●
	Fire performance acc. to CSA FT1												
	Corrosiveness of conflagration gases: In compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	●	●	●	●	●	●	●	●	●	●		●
	Smoke density acc. to IEC 61034 + EN 61034	●	●	●	●				●	●	●		
	UL resp. CSA				●	●							
Special Features	Very good oil resistance acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2											●	
	Good chemical resistance											●	



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

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Halogen-free Cables

Selection Table

		Cable Type	K/23	K/25	K/27	K/29	K/30	K/31	K/33	K/35
		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 345 FRNC TP								
Basic construction	Single conductor									
	Shielded			●	●		●		●	●
	Colored conductors							●	●	●
	Numbered conductors		●	●	●	●	●			
	Twisted pairs									●
	Inner jacket				●		●			
Temperature range fixed installation*	+220°C									
	+105°C									
	+90°C		●	●	●					
	+85°C		●	●	●	●	●	●	●	●
	+70°C		●	●	●	●	●	●	●	●
	-30°C		●	●	●	●	●	●	●	●
	-40°C		●	●	●	●	●	●	●	●
	-50°C		●	●	●	●	●	●	●	●
Voltage	Peak operating voltage max. 350 V							●	●	●
	Peak operating voltage max. 500 V							●	●	●
	Nominal voltage Uo/U 300/500 V		●	●	●					
	Nominal voltage Uo/U 450/750 V									
	Nominal voltage Uo/U 0.6/1 kV				●	●				
	Voltage UL resp. CSA 600 V		●	●	●					
	Voltage UL resp. CSA 1000 V									
	Testing voltage 1500 V							●	●	●
	Testing voltage 2000 V									
	Testing voltage 2500 V									
	Testing voltage 3000 V		●	●	●					
	Testing voltage 4000 V					●	●			
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1		●	●	●	●	●	●	●	●
	Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D		●	●	●	●	●	●	●	●
	Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2									
	Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2		●	●	●	●	●	●	●	●
	Fire performance acc. to CSA FT1		●	●	●					
	Corrosiveness of conflagration gases: In compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases		●	●	●	●	●	●	●	●
	Smoke density acc. to IEC 61034 + EN 61034		●	●	●	●	●	●	●	●
	UL resp. CSA		●	●	●					
Special Features	Very good oil resistance acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2									
	Good chemical resistance									



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

Halogen-free Cables

Selection Table

Cables for Railway Technology acc. to EN 45545-2



		Cable Type	K/36	K/37	K/38	K/40	K/42	K/43	K/45	K/46	K/47	K/22	
Applications	Single conductor									●			
	Multi-conductor cable	●	●	●	●	●	●	●	●	●	●	●	
	Shielded		●			●	●	●	●		●		
	Wiring cable									●			
	Data cable			●	●	●							
	Control cable	●	●					●	●	●	●	●	
	Cross linked type								●	●	●	●	
Standards	Halogen-free	Tested acc. to EN 45545-2	●	●	●	●	●	●	●	●	●	●	
		acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10.0 μS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2	●	●	●	●	●	●	●	●	●	●	●
	Fire Performance	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	●	●	●	●	●	●	●	●	●	●	●
		Burning test acc. to ASTM E 162-09				●	●						
		Flame retardant ISO 6722 (UN/ECE R118)			●	●	●						
		Insulation integrity in case of fire acc. to EN 50200 PH 30, VDE 0482-200, IEC 60331-21 FE 180 + VDE 0482-331-21											●
		Toxicity acc. to EN 50305 + VDE 0260-305	●	●	●	●	●	●	●	●	●	●	●
		Smoke density acc. to IEC 61034 + VDE 0482-1034	●	●	●	●	●	●	●	●	●	●	●
		Smoke density acc. to ASTM E 662-09				●	●						
		Oil and fuel resistance acc. to EN 50264-1 + VDE 0260-264-1							●	●			
Temperature range fixed installation*	+125 °C		●	●	●	●	●	●	●	●	●	●	
	+ 90 °C		●	●	●	●	●	●	●	●	●	●	
	- 40 °C		●	●	●	●	●	●	●	●	●	●	
	- 50 °C		●	●	●	●	●	●	●	●	●	●	
			●	●	●	●	●	●	●	●	●	●	
Voltage	Peak operating voltage: < 0.25 mm ² = max. 350 V ≥ 0.25 mm ² = max. 500 V			●	●	●							
	Nominal voltage U ₀ /U 300/500 V	●	●					●	●	●	●	●	
	Nominal voltage U ₀ /U 0.6/1 kV								●				
	Testing voltage 1500 V			●	●	●							
	Testing voltage 2000 V							●	●	●	●	●	
	Testing voltage 3000 V	●	●										
	Testing voltage 4000 V								●				

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

Halogen-free Cables

Selection Table

SABIX® BL - Cables for Shipbuilding



		K/49	K/50	K/51	K/52	K/53	K/54	K/55	K/56	K/57	K/58	K/59	K/60
		Cable Type											
		SABIX® BL 405	SABIX® BL 415 C FRNC	SABIX® BL 443 C FRNC TT	SABIX® BL 445 C FRNC TP	SABIX® BL 446 C FRNC TP	SABIX® BL 400 FRNC	SABIX® BL 438 C FRNC	SABIX® BL 402 FRNC	SABIX® BL 408 FRNC	SABIX® BL 409 C FRNC	SABIX® BL 410 FRNC	SABIX® BL 412 C FRNC
Construction	Data cable	●	●	●	●	●							
	Control cable						●	●					
	Power cable								●	●	●	●	●
	Shielded		●	●	●	●		●			●		●
	Twisted pairs				●	●							●
	Twisted triple			●		●							
Temperature range fixed installation*	+ 90 °C	●	●	●	●	●	●	●	●	●	●	●	●
	- 40 °C	●	●	●	●	●	●	●	●	●	●	●	●
Voltage Range	Peak operating voltage max. 300 V			●		●							
	Peak operating voltage max. 350 V	●	●		●								
	Nominal voltage U ₀ /U 300/500 V						●	●					
	Nominal voltage U ₀ /U 0.6/1 kV								●	●	●	●	●
	Testing voltage 1500 V	●	●	●	●	●							
	Testing voltage 2000 V						●	●					
	Testing voltage 4000 V								●	●	●	●	●
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1	●	●	●	●	●	●	●	●	●	●	●	●
	Fire performance: No flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 Cat. A	●	●	●	●	●	●	●	●	●	●	●	●
	Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	●	●	●	●	●	●	●	●	●	●	●	●
	Corrosiveness of conflagration gases: In compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	●	●	●	●	●	●	●	●	●	●	●	●
	Smoke density acc. to IEC 61034 + VDE 0482-1034	●	●	●	●	●	●	●	●	●	●	●	●
Approvals	DNV-GL	●	●	●	●	●	●	●	●	●	●	●	●
Characteristics	flexible conductor stranding	●	●	●	●	●	●					●	●
	extended cross section range	●	●		●								



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

Halogen-free Cables

Selection Table

Continuously flexible with highest fire protection



		K/61	K/62	K/63	K/64	K/65	
		Cable Type	SABIX® SD 705 FRNC C1	SABIX® SD 710 FRNC C1	SABIX® SD 715 FRNC C1	SABIX® SD 712 FRNC C1	SABIX® SD 745 FRNC C1 TP
Construction	Data cable	●		●		●	
	Control cable		●		●		
	Shielded			●	●	●	
	Twisted pairs					●	
Temperature range fixed installation*	+ 90 °C	●	●	●	●	●	
	- 40 °C	●	●	●	●	●	
Voltage Range	Peak operating voltage < 0.25 mm ² = max. 350 V ≥ 0.25 mm ² = max. 500 V	●		●		●	
	Nominal voltage U ₀ /U 0.6/1 kV		●		●		
	Testing voltage 1500 V	●		●		●	
	Testing voltage 4000 V		●		●		
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1	●	●	●	●	●	
	Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D	●	●	●	●	●	
	Flame retardant and self-extinguishing acc. to IEC 60332-1-2, VDE 0482-332-1-2 + NF C 32-070 C1	●	●	●	●	●	
	Corrosiveness of conflagration gases: In compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	●	●	●	●	●	
	Smoke density acc. to IEC 61034 + VDE 0482-1034	●	●	●	●	●	
	Toxicity acc. to NF X 70-100	●	●	●	●	●	
	Oil and fuel resistance acc. to EN 50264-1 + VDE 0260-264-1	●	●	●	●	●	

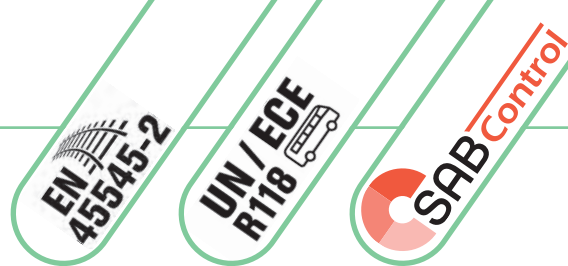


*The temperature range for flexible application is mentioned on the corresponding catalog page

Halogen-free Cables

SABIX® A 146 FRNC

Wiring cable with improved fire performance and extended temperature range, 300/500V



BRÖCKSKES · D-VIERSEN · SABIX® A 146 FRNC 300/500 V 0.5 mm² CE

Marking for SABIX® A 146 FRNC 61460150:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 146 FRNC 300/500 V 0.5 mm² CE

Construction:

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

Technical data:

Nominal voltage:	Uo/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:	
<i>static</i>	-40/+90°C
<i>flexible</i>	-30/+90°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 Flame retardant acc. to ISO 6722 (UN/ECE R118)
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- very good stripping
- flexible
- fulfills fire protection requirements R15 (EL1A)
acc. to EN 45545-2 for hazard levels HL1-3

item no.	mm²	AWG	nominal outer-ø inch ±5%	mm ±5%	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 available on request

Color code for single conductors:

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



On request with
tinned copper strands



Halogen-free Cables

SABIX® A 156 FRNC

Wiring cable with improved fire performance and extended temperature range, 450/750V



BRÖCKSKES · D-VIERSEN · SABIX® A 156 FRNC 450/750 V 1.5 mm² CE

Marking for SABIX® A 156 FRNC 61560182:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 156 FRNC 450/750 V 1.5 mm² CE

Construction:

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

Technical data:

Nominal voltage:	Uo/U 450/750 V
Testing voltage:	2500 V
Min. bending radius:	7.5 x O.D.
For one single bend:	5 x O.D.
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 Flame retardant acc. to ISO 6722 (UN/ECE R118)
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- very good stripping
- flexible
- fulfills fire protection requirements R15 (EL1A)
acc. to EN 45545-2 for hazard levels HL1-3

item no.	mm²	AWG MCM	nominal outer-ø		cable weight ≈lbs/mft
			inch ±5%	mm ±5%	
▶ 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	1037
▶ 6156 .. 97	185.00	350 (≈ 902/24)	0.913	23.2	1254
▶ 6156 .. 98	240.00	450 (≈ 1220/24)	1.059	26.9	1684
▶ 6156 .. 99	300.00	550 (≈ 1525/24)	1.181	30.0	2100

Other dimensions and colors are available on request

Color code for single conductors:

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



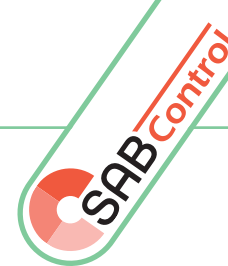
On request with
tinned copper strands

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Halogen-free Cables

SABIX® A 166 FRNC

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



BRÖCKSKES · D-VIERSEN · SABIX® A 166 FRNC 0.6/1 kV 1.5 mm² CE

Marking for SABIX® A 166 FRNC 61660182:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 166 FRNC 0.6/1 kV 1.5 mm² CE

Construction:

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

Technical data:

Nominal voltage:	U ₀ /U 0.6/1 V
Testing voltage:	3000 V
Min. bending radius:	7.5 x O.D.
For one single bend:	5 x O.D.
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- very good stripping
- flexible

item no.	mm ²	AWG MCM	nominal outer-ø		cable weight ≈lbs/mft
			inch ±5%	mm ±5%	
▶ 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
▶ 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	1705

Other dimensions and colors are available on request

Color code for single conductors:

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

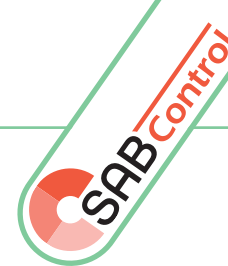


On request with
tinned copper strands

Halogen-free Cables

SABIX® A 147 FRNC Wiring cable 600 V

SABIX® A 157 FRNC Wiring cable 1000 V



A 147 FRNC 300/500V 0.5 mm² 20 AWG AWM Style 10528 75°C 600V CE



Marking for SABIX® A 147 FRNC 61470150:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 147 FRNC 300/500V 0.5 mm² 20 AWG AWM Style 10528 75°C 600V CE

Construction:

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

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- UL recognition

Technical data:

Nominal voltage:	SABIX® A 147 FRNC: 20 - 18 AWG U ₀ /U 300/500 V	SABIX® A 157 FRNC: 16 AWG - 550 MCM U ₀ /U 450/750 V
Voltage UL:	SABIX® A 147 FRNC: 20 - 18 AWG 600 V	SABIX® A 157 FRNC: 16 AWG - 550 MCM 1000 V
Testing voltage:	SABIX® A 147 FRNC: 2000 V	SABIX® A 157 FRNC: 2500 V
Min. bending radius: For one single bend:	7.5 x O.D. 5 x O.D.	
Temperature range:	DIN/VDE: static: flexible:	UL: up to +75°C
	-40/+90°C -30/+90°C	
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1	
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	
Smoke density:	acc. to IEC 61034 + VDE 0482-1034	
Flexibility:	good	
Approvals:	UR AWM, CE, EAC, RoHS	
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30	

SABIX® A 147 FRNC

item no.	mm ²	AWG	nominal outer-ø		cable weight
			inch ±5%	mm ±5%	≈lbs/mft
▶ 6147 .. 50	0.50	20 (≈ 16/32)	0.098	2.5	8
▶ 6147 .. 75	0.75	19 (≈ 23/32)	0.110	2.8	9
▶ 6147 .. 80	1.00	18 (≈ 30/32)	0.114	2.9	11

Other dimensions and colors are available on request

SABIX® A 157 FRNC

item no.	mm ²	AWG MCM	nominal outer-ø		cable weight
			inch ±5%	mm ±5%	≈lbs/mft
▶ 6157 .. 82	1.50	16 (≈ 27-29/30)	0.126	3.2	15
▶ 6157 .. 84	2.50	14 (≈ 46/30)	0.142	3.6	22
▶ 6157 .. 86	4.00	12 (≈ 52/28)	0.169	4.3	31
▶ 6157 .. 87	6.00	10 (≈ 78/28)	0.217	5.5	50
▶ 6157 .. 88	10.00	8 (≈ 77/26)	0.264	6.7	79
▶ 6157 .. 89	16.00	6 (≈ 122/26)	0.346	8.8	129
▶ 6157 .. 90	25.00	4 (≈ 190/26)	0.402	10.2	189
▶ 6157 .. 91	35.00	2 (≈ 272/26)	0.500	12.7	278
▶ 6157 .. 92	50.00	1 (≈ 400/26)	0.547	13.9	385
▶ 6157 .. 93	70.00	2/0 (≈ 543/26)	0.642	16.3	521
▶ 6157 .. 94	95.00	3/0 (≈ 484/24)	0.724	18.4	678
▶ 6157 .. 95	120.00	4/0 (≈ 589/24)	0.823	20.9	839
▶ 6157 .. 96	150.00	250 (≈ 740/24)	0.882	22.4	1029
▶ 6157 .. 97	185.00	350 (≈ 902/24)	0.984	25.0	1269
▶ 6157 .. 98	240.00	450 (≈ 1220/24)	1.114	28.3	1662
▶ 6157 .. 99	300.00	550 (≈ 1525/24)	1.220	31.0	2058

Other dimensions and colors are available on request

Color code for single conductors:

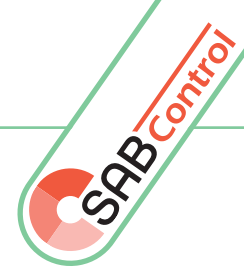
01 = black	07 = violet
02 = blue	08 = white
03 = brown	09 = orange
04 = gray	11 = red
05 = yellow	16 = gentian blue
06 = green	27 = green/yellow

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Halogen-free Cables

SABIX® A 100 HT High temperature resistant single conductor wire with nickel-plated strands

SABIX® A 101 HT High temperature resistant single conductor wire with silver-plated strands



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

Marking for SABIX® A 100 HT 71000150:

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

Construction:

Conductor:	SABIX® A 100 HT: nickel-plated copper strands SABIX® A 101 HT: silver-plated copper strands fine wires acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	colored, see table below

Outstanding features:

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

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	2000 V
Min. bending radius: For one single bend:	7.5 x O.D. 5 x O.D.
Temperature range: static: flexible:	-40/+220°C -25/+220°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

SABIX® A 100 HT

item no.	mm ²	AWG MCM	nominal outer-ø		cable weight ≈lbs/mft	
			inch ±5%	mm ±5%		
▶ 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	2057

Other dimensions and colors are available on request

SABIX® A 101 HT

item no.	mm ²	AWG MCM	nominal outer-ø		cable weight ≈lbs/mft	
			inch ±5%	mm ±5%		
▶ 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	2057

Other dimensions and colors are available on request

Color code for single conductors:

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

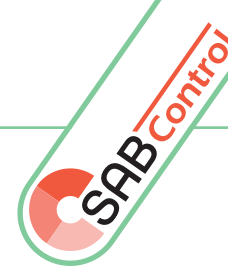


**temperature resistant
up to +220°C**

Halogen-free Cables

SABIX® A 200 FRNC

Control cable with numbered conductors with improved fire performance and extended temperature range



Marking for SABIX® A 200 FRNC 62001215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 200 FRNC 12 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- very flexible
- very good stripping

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 3000 V
Min. bending radius:	<i>fixed installation:</i> 4 x O.D. <i>free movement:</i> 6 x O.D.
Temperature range:	<i>static:</i> -40/+85°C <i>flexible:</i> -30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
62000205	2	0.197	5.0	25
62000305	3	0.209	5.3	29
62000405	4	0.224	5.7	34
62000505	5	0.252	6.4	42
62000705	7	0.272	6.9	52
62001005	10	0.346	8.8	73
62001205	12	0.366	9.3	85
62001805	18	0.429	10.9	121
62002505	25	0.516	13.1	161
62003205	32	0.559	14.2	200
62004205	42	0.626	15.9	255
62006105	61	0.736	18.7	356
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
62000207	2	0.220	5.6	32
62000307	3	0.232	5.9	38
62000407	4	0.260	6.6	47
62000507	5	0.283	7.2	56
62000707	7	0.315	8.0	71
62001007	10	0.402	10.2	101
62001207	12	0.421	10.7	117
62001807	18	0.496	12.6	167
62002507	25	0.602	15.3	228
62003207	32	0.654	16.6	282
62004207	42	0.732	18.6	359
62006107	61	0.858	21.8	504
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
62000210	2	0.228	5.8	36
62000310	3	0.248	6.3	45
62000410	4	0.268	6.8	54

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
62000510	5	0.303	7.7	67
62000710	7	0.327	8.3	83
62001010	10	0.425	10.8	120
62001210	12	0.437	11.1	136
62001810	18	0.516	13.1	196
62002510	25	0.626	15.9	267
62003210	32	0.681	17.3	331
62004210	42	0.772	19.6	420
62006110	61	0.902	22.9	595
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
62000215	2	0.260	6.6	48
62000315	3	0.276	7.0	58
62000415	4	0.307	7.8	73
62000515	5	0.335	8.5	87
62000715	7	0.370	9.4	112
62001015	10	0.480	12.2	161
62001215	12	0.496	12.6	183
62001815	18	0.591	15.0	267
62002515	25	0.717	18.2	369
62003215	32	0.776	19.7	458
62004215	42	0.874	22.2	593
62006115	61	1.024	26.0	833
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
62000225	2	0.315	8.0	73
62000325	3	0.335	8.5	88
62000425	4	0.370	9.4	110
62000525	5	0.406	10.3	132
62000725	7	0.449	11.4	171
62001025	10	0.591	15.0	251
62001225	12	0.610	15.5	287
62001825	18	0.724	18.4	416
62002525	25	0.886	22.5	568

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
62000340	3	0.390	9.9	129
62000440	4	0.433	11.0	161
62000540	5	0.484	12.3	199
62000740	7	0.535	13.6	259
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
62000360	3	0.457	11.6	183
62000460	4	0.508	12.9	230
62000560	5	0.567	14.4	284
62000760	7	0.606	15.4	370
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
62000461	4	0.665	16.9	394
62000561	5	0.740	18.8	480
62000761	7	0.823	20.9	638
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
62000462	4	0.819	20.8	601
62000562	5	0.913	23.2	751
62000762	7	1.012	25.7	974
▶ 4 AWG (≈ 190/26) ▪ 25.00 mm²				
62000463	4	0.980	24.9	933
62000563	5	1.106	28.1	1176
▶ 2 AWG (≈ 272/26) ▪ 35.00 mm²				
62000464	4	1.134	28.8	1295
62000564	5	1.280	32.5	1621

Other dimensions and colors are available on request

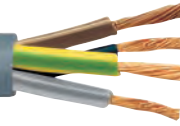
Halogen-free Cables

SABIX® A 205 FRNC

Control cable with colored conductors with improved fire performance and extended temperature range



BRÖCKSKES · D-VIERSEN · SABIX® A 205 FRNC 4 x 1.5 mm² CE



Marking for SABIX® A 205 FRNC 62050415:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 205 FRNC 4 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	colored acc. to HD 308 (VDE 0293-308), see page O/26 green/yellow ground from 3 conductors
Stranding:	in layers
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- very flexible
- very good stripping

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 3000 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
Temperature range:	
<i>static:</i>	-40/+85°C
<i>flexible:</i>	-30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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 mm²				
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 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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 mm²				
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 mm²				
62050340	3	0.390	9.9	129
62050440	4	0.433	11.0	161
62050540	5	0.484	12.3	199

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
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 mm²				
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 mm²				
62050462	4	0.819	20.8	601
▶ 4 AWG (≈ 190/26) ▪ 25.00 mm²				
62050463	4	0.980	24.9	933
▶ 2 AWG (≈ 272/26) ▪ 35.00 mm²				
62050464	4	1.134	28.8	1295
▶ 1 AWG (≈ 400/26) ▪ 50.00 mm²				
62050465	4	1.311	33.3	1768

Other dimensions and colors are available on request

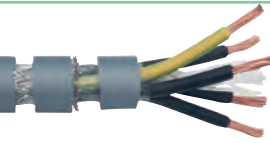
Halogen-free Cables

SABIX® A 238 FRNC

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



SKES · D-VIERSEN · SABIX® A 238 FRNC 5 x 1.5 mm² CE



Marking for SABIX® A 238 FRNC 62380515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 238 FRNC 5 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Outstanding features:

- low smoke halogen-free (LSHF)
- 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:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 3000 V conductor/shielding: 2000 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+85°C <i>flexible:</i> -30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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	191
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
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
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
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	191
62381225	12	0.654	16.6	328
62381825	18	0.768	19.5	370
62382525	25	0.929	23.6	637
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
62380440	4	0.461	11.7	173
62380540	5	0.512	13.0	212
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
62380460	4	0.543	13.8	243
62380560	5	0.610	15.5	313
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
62380461	4	0.709	18.0	423
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
62380462	4	0.854	21.7	617

Other dimensions and colors are available on request

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Halogen-free Cables

SABIX® A 260 PUR

Cold flexible, oil resistant control cable with numbered conductors



Marking for SABIX® A 260 PUR 52601215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 260 PUR 12 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Inner jacket:	SABIX® - from 12 AWG
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2
Jacket color:	gray (RAL 7000)

Outstanding features:

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

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	conductor/conductor: 3000 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
Radiation resistance:	5 x 10 ⁷ cj/kg
Temperature range:	
<i>static:</i>	-50/+90°C
<i>flexible:</i>	-40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Flexibility:	very good
Weather resistance:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
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		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
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		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
52600340	3	0.461	11.7	133
52600440	4	0.496	12.6	163
52600540	5	0.539	13.7	197
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
52600360	3	0.551	14.0	195
52600460	4	0.594	15.1	240
52600560	5	0.646	16.4	290
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
52600461	4	0.744	18.9	391
52600561	5	0.811	20.6	476
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
52600462	4	0.874	22.2	572
52600562	5	0.961	24.4	699

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® A 130 HT

High temperature resistant control cable with numbered or colored conductors



temperature resistant up to +220 °C



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

Construction:

Conductor:	silver-plated copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	up to 5 conductors: colored acc. to HD 308 (VDE 0293-308) see page O/26, more than 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 green/yellow ground from 3 conductors
Stranding:	in layers
Jacket material:	SABIX®
Jacket color:	gray (RAL 7015)

Outstanding features:



- halogen-free
- high temperature resistant
- flexible

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	<i>fixed installation:</i> 4 x O.D. <i>free movement:</i> 6 x O.D.
Temperature range:	<i>static:</i> -40/+220°C <i>flexible:</i> -25/+220°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 20 AWG (≈ 16/32) • 0.50 mm²				
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
► 19 AWG (≈ 23/32) • 0.75 mm²				
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
► 18 AWG (≈ 30/32) • 1.00 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
► 16 AWG (≈ 27-29/30) • 1.50 mm²				
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
► 14 AWG (≈ 46/30) • 2.50 mm²				
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
► 12 AWG (≈ 52/28) • 4.00 mm²				
71300340	3	0.409	10.4	122
71300440	4	0.445	11.3	151
71300540	5	0.500	12.7	191
71300740	7	0.543	13.8	245

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 10 AWG (≈ 78/28) • 6.00 mm²				
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
► 8 AWG (≈ 77/26) • 10.00 mm²				
71300461	4	0.740	18.8	400
71300561	5	0.819	20.8	499
71300761	7	0.913	23.2	669
► 6 AWG (≈ 122/26) • 16.00 mm²				
71300462	4	0.850	21.6	607
71300562	5	0.957	24.3	770
71300762	7	1.047	26.6	998
► 4 AWG (≈ 190/26) • 25.00 mm²				
71300263	2	0.882	22.4	560
71300463	4	1.047	26.6	930
71300563	5	1.161	29.5	1160
► 2 AWG (≈ 272/26) • 35.00 mm²				
71300364	3	1.055	26.8	965
71300464	4	1.161	29.5	1222

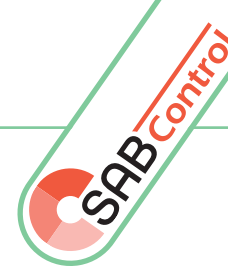
Other dimensions and colors are available on request

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Halogen-free Cables

SABIX® CC 625 FRNC M Control cable with numbered conductors



Marking for SABIX® CC 625 FRNC M 62521215:

SAB BRÖCKSKES · D-VIERSEN · 62521215 12 x 1.5 mm² 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

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Outstanding features:

- low smoke halogen-free (LSHF)
- UL recognized, CSA approved
- no flame propagation
- flame retardant and self-extinguishing
- flexible

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	conductor/conductor: 3000 V
Min. bending radius:	4 x O.D. fixed installation: free movement: 6 x O.D.
Temperature range:	UL: up to +75°C CSA: up to +80°C static DIN VDE: -40/+90°C flexible: -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D acc. to RoHS directive of the European Union Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	UR AWM, CSA AWM, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 20 AWG (≈ 16/32) ▪ 0.50 mm²				
62522002	2	0.205	5.2	27
62522003	3	0.217	5.5	32
62522004	4	0.232	5.9	38
62522005	5	0.252	6.4	44
62522007	7	0.276	7.0	56
62522008	8	0.323	8.2	70
62522009	9	0.350	8.9	79
62522010	10	0.358	9.1	81
62522012	12	0.366	9.3	91
62522014	14	0.386	9.8	103
62522016	16	0.413	10.5	119
62522018	18	0.437	11.1	132
62522025	25	0.531	13.5	181
62522030	30	0.547	13.9	208
62522034	34	0.598	15.2	239
62522040	40	0.650	16.5	283
62522041	41	0.650	16.5	288
62522061	61	0.760	19.3	409

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 19 AWG (≈ 23/32) ▪ 0.75 mm²				
62521902	2	0.224	5.7	32
62521903	3	0.236	6.0	38
62521904	4	0.256	6.5	46
62521905	5	0.280	7.1	54
62521907	7	0.311	7.9	71
62521908	8	0.366	9.3	89
62521909	9	0.390	9.9	97
62521910	10	0.398	10.1	100
62521912	12	0.417	10.6	118
62521914	14	0.437	11.1	132
62521916	16	0.469	11.9	152
62521918	18	0.492	12.5	168
62521925	25	0.598	15.2	231
62521930	30	0.618	15.7	267
62521934	34	0.673	17.1	304
62521940	40	0.732	18.6	359
62521941	41	0.732	18.6	366
62521961	61	0.866	22.0	528

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 18 AWG (≈ 30/32) ▪ 1.00 mm²				
62521802	2	0.232	5.9	36
62521803	3	0.248	6.3	44
62521804	4	0.268	6.8	54
62521805	5	0.295	7.5	65
62521807	7	0.323	8.2	83
62521808	8	0.378	9.6	102
62521809	9	0.413	10.5	116
62521810	10	0.421	10.7	120
62521812	12	0.433	11.0	137
62521814	14	0.453	11.5	155
62521818	18	0.512	13.0	198
62521825	25	0.622	15.8	271
62521830	30	0.654	16.6	320
62521834	34	0.709	18.0	365
62521840	40	0.768	19.5	429
62521841	41	0.768	19.5	454
62521861	61	0.902	22.9	626

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Halogen-free Cables

SABIX® CC 625 FRNC M Control cable with numbered conductors



Marking for SABIX® CC 625 FRNC M 62521215:

SAB BRÖCKSKES · D-VIERSEN · 62521215 12 x 1.5 mm² SABIX® CC 625 FRNC M 16 AWG/12c 62521612 UL AWM Style 21089 75°C 600V CSA AWM I/II A/B 80°C 600V FT1 CE

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
62521602	2	0.256	6.5	46
62521603	3	0.272	6.9	57
62521604	4	0.299	7.6	71
62521605	5	0.327	8.3	87
62521607	7	0.366	9.3	112
62521608	8	0.429	10.9	136
62521609	9	0.465	11.8	153
62521610	10	0.476	12.1	161
62521612	12	0.488	12.4	184
62521614	14	0.512	13.0	209
62521618	18	0.587	14.9	271
62521625	25	0.713	18.1	375
62521630	30	0.736	18.7	435
62521634	34	0.807	20.5	502
62521640	40	0.874	22.2	587
62521641	41	0.874	22.2	593
62521661	61	1.024	26.0	861

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
62521402	2	0.307	7.8	70
62521403	3	0.327	8.3	86
62521404	4	0.362	9.2	108
62521405	5	0.398	10.1	131
62521407	7	0.441	11.2	173
62521408	8	0.528	13.4	212
62521409	9	0.563	14.3	234
62521410	10	0.583	14.8	252
62521412	12	0.602	15.3	290
62521418	18	0.717	18.2	425
62521425	25	0.878	22.3	585
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
62521203	3	0.382	9.7	126
62521204	4	0.425	10.8	160
62521205	5	0.476	12.1	198
62521207	7	0.528	13.4	261

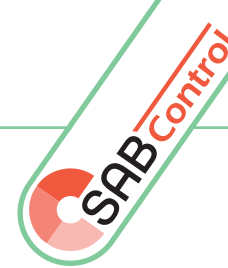
item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
62521003	3	0.449	11.4	182
62521004	4	0.500	12.7	230
62521005	5	0.559	14.2	286
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
62520804	4	0.677	17.2	409
62520805	5	0.760	19.3	508
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
62520604	4	0.831	21.1	611
▶ 4 AWG (≈ 190/26) ▪ 25.00 mm²				
62520404	4	1.043	26.5	991
▶ 2 AWG (≈ 272/26) ▪ 35.00 mm²				
62520204	4	1.189	30.2	1346

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® CC 625 S FRNC M

Control cable with numbered conductors and overall tinned copper shield



Marking for SABIX® CC 625 S FRNC M 62341612:

SAB BRÖCKSKES · D-VIERSEN · 62341215 12 x 1.5 mm² 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

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	conductor/conductor: 3000 V conductor/shielding: 2000 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	UL: up to +75°C CSA: up to +80°C <i>static:</i> DIN VDE: -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D acc. to RoHS directive of the European Union Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	UR AWM, CSA AWM, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
- 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

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	nominal outer-ø mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
62342002	2	0.224	5.7	30
62342003	3	0.236	6.0	36
62342004	4	0.252	6.4	43
62342005	5	0.276	7.0	51
62342007	7	0.299	7.6	65
62342008	8	0.350	8.9	81
62342009	9	0.370	9.4	88
62342010	10	0.378	9.6	91
62342012	12	0.386	9.8	102
62342014	14	0.421	10.7	126
62342016	16	0.441	11.2	138
62342018	18	0.472	12.0	157
62342025	25	0.543	13.8	206
62342030	30	0.591	15.0	243
62342034	34	0.642	16.3	288
62342040	40	0.693	17.6	338
62342041	41	0.693	17.6	345
62342061	61	0.795	20.2	466

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	nominal outer-ø mm ±5%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
62341902	2	0.244	6.2	35
62341903	3	0.256	6.5	43
62341904	4	0.276	7.0	52
62341905	5	0.307	7.8	63
62341907	7	0.331	8.4	79
62341908	8	0.386	9.8	97
62341909	9	0.425	10.8	122
62341910	10	0.433	11.0	122
62341912	12	0.445	11.3	139
62341914	14	0.472	12.0	158
62341916	16	0.496	12.6	174
62341918	18	0.520	13.2	192
62341925	25	0.642	16.3	280
62341930	30	0.661	16.8	314
62341934	34	0.717	18.2	359
62341940	40	0.776	19.7	420
62341941	41	0.776	19.7	427
62341961	61	0.902	22.9	591

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	nominal outer-ø mm ±5%	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
62341802	2	0.252	6.4	39
62341803	3	0.268	6.8	49
62341804	4	0.287	7.3	58
62341805	5	0.315	8.0	72
62341807	7	0.350	8.9	93
62341808	8	0.398	10.1	111
62341809	9	0.441	11.2	134
62341810	10	0.449	11.4	141
62341812	12	0.469	11.9	162
62341814	14	0.488	12.4	180
62341818	18	0.547	13.9	228
62341825	25	0.665	16.9	325
62341830	30	0.697	17.7	374
62341834	34	0.752	19.1	423
62341840	40	0.811	20.6	490
62341841	41	0.811	20.6	499
62341861	61	0.945	24.0	700

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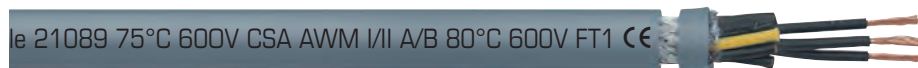
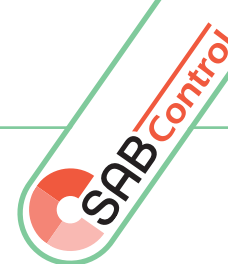
also available with inner jacket



Halogen-free Cables

SABIX® CC 625 S FRNC M

Control cable with numbered conductor and overall tinned copper shield



Marking for SABIX® CC 625 S FRNC M 62341612:

SAB BRÖCKSKES · D-VIERSEN · 62341215 12 x 1.5 mm² 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

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
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	232
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
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
62341003	3	0.484	12.3	191
62341004	4	0.535	13.6	243
62341005	5	0.594	15.1	302
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
62340804	4	0.720	18.3	427
62340805	5	0.795	20.2	526
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
62340604	4	0.874	22.2	623
▶ 4 AWG (≈ 190/26) ▪ 25.00 mm²				
62340404	4	1.079	27.4	974
▶ 2 AWG (≈ 272/26) ▪ 35.00 mm²				
62340204	4	1.232	31.3	1316

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® CC 625 SH FRNC M

Control cable with numbered conductors, inner jacket, and overall tinned copper shield



Marking for SABIX® CC 625 SH FRNC M 62571612:

SAB BRÖCKSKES · D-VIERSEN · 62571215 12 x 1.5 mm² SABIX® CC 625 SH FRNC M 16 AWG/12c 62571612 AWM Style 21089 75°C 600V CSA AWM I/II A/B 80°C 600V FT1

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Inner jacket:	SABIX®
Shielding:	tinned copper braiding
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	conductor/conductor: 3000 V conductor/shielding: 2000 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	UL: up to +75°C CSA: up to +80°C <i>static:</i> DIN VDE: -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	UR AWM, CSA AWM, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
 - 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

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 20 AWG (≈ 16/32) · 0.50 mm²				
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	404
62572041	41	0.768	19.5	409
62572061	61	0.878	22.3	546

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 19 AWG (≈ 23/32) · 0.75 mm²				
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 18 AWG (≈ 30/32) · 1.00 mm²				
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	441
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

Halogen-free Cables

SABIX® CC 625 SH FRNC M

Control cable with numbered conductors, inner jacket and overall tinned copper shield



Marking for SABIX® CC 625 SH FRNC M 62571612:

SAB BRÖCKSKES · D-VIERSEN · 62571215 12 x 1.5 mm² SABIX® CC 625 SH FRNC M 16 AWG/12c 62571612 UL AWM Style 21089 75°C 600V CSA AWM I/II A/B 80°C 600V FT1 CE

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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	234
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
62571402	2	0.386	9.8	105
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	400
62571418	18	0.835	21.2	552
62571425	25	1.004	25.5	749
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
62571003	3	0.551	14.0	253
62571004	4	0.610	15.5	320
62571005	5	0.669	17.0	386
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
62570804	4	0.795	20.2	531
62570805	5	0.878	22.3	645
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
62570604	4	0.957	24.3	769
▶ 4 AWG (≈ 190/26) ▪ 25.00 mm²				
62570404	4	1.169	29.7	1181
▶ 2 AWG (≈ 272/26) ▪ 35.00 mm²				
62570204	4	1.331	33.8	1584

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® A 810 FRNC

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

0.6/1 kV

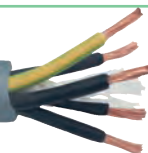
SAB Servo

IES · D-VIERSEN · SABIX® A 810 FRNC rf 0.6/1 kV 5 x 1.5 mm² CE



Marking for SABIX® A 810 FRNC 68100515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 810 FRNC rf 0.6/1 kV 5 x 1.5 mm² CE



Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
Temperature range:	
<i>static:</i>	-40/+85°C
<i>flexible:</i>	-30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) - 1.50 mm²				
68100315	3	0.370	9.4	85
68100415	4	0.398	10.1	100
68100515	5	0.433	11.0	118
68100715	7	0.469	11.9	144
▶ 14 AWG (≈ 46/30) - 2.50 mm²				
68100325	3	0.417	10.6	116
68100425	4	0.453	11.5	138
68100525	5	0.496	12.6	165
68100725	7	0.543	13.8	208
▶ 12 AWG (≈ 52/28) - 4.00 mm²				
68100340	3	0.469	11.9	157
68100440	4	0.520	13.2	192
68100540	5	0.563	14.3	226
68100740	7	0.618	15.7	292

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 10 AWG (≈ 78/28) - 6.00 mm²				
68100360	3	0.524	13.3	207
68100460	4	0.563	14.3	251
68100560	5	0.622	15.8	301
68100760	7	0.677	17.2	389
▶ 8 AWG (≈ 77/26) - 10.00 mm²				
68100370	3	0.720	18.3	392
68100470	4	0.787	20.0	476
68100570	5	0.862	21.9	568
68100770	7	0.941	23.9	727
▶ 6 AWG (≈ 122/26) - 16.00 mm²				
68100380	3	0.846	21.5	553
68100480	4	0.925	23.5	677
68100580	5	1.020	25.9	828
68100780	7	1.114	28.3	1065

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 4 AWG (≈ 190/26) - 25.00 mm²				
68100390	3	1.020	25.9	850
68100490	4	1.118	28.4	1046
68100590	5	1.236	31.4	1262
68100790	7	1.354	34.4	1643

Other dimensions and colors are available on request

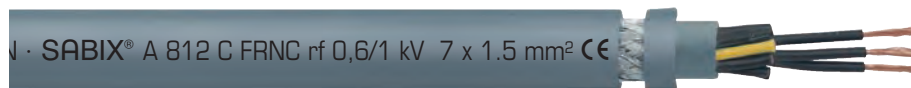
Halogen-free Cables

SABIX® A 812 C FRNC

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

0.6/1 kV

SAB Servo



Marking for SABIX® A 812 C FRNC 68120715:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 812 C FRNC rf 0.6/1 kV 7 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Inner jacket:	SABIX®
Shielding:	tinned copper braiding
Jacket material:	SABIX®
Jacket color:	gray (RAL 7000)

Outstanding features:

- low smoke halogen-free (LSHF)
- good EMC characteristics*
- no flame propagation
- flame retardant and self-extinguishing

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

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+85°C <i>flexible:</i> -30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	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 ±5%	mm ±5%	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	615
68120770	7	0.988	25.1	775

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	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	867
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 available on request

Halogen-free Cables

SABIX® D 305 FRNC

Flexible data cable with improved fire performance and extended temperature range



D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm² CE



Marking for SABIX® D 305 FRNC 63053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm² CE

Construction:

Conductor:	bare copper strands with reference to VDE 0812
Insulation:	SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Jacket material:	SABIX®
Jacket color:	grayish tan (RAL 7015)

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- easy stripping
- low capacitance
- flexible

Technical data:

Peak operating voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V
Min. bending radius:	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Temperature range:	
<i>static:</i>	-40/+85°C
<i>flexible:</i>	-30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 26 AWG (≈ 18/38) ▪ 0.14 mm²				
63050214	2	0.130	3.3	11
63050314	3	0.138	3.5	12
63050414	4	0.146	3.7	13
63050514	5	0.154	3.9	15
63050714	7	0.169	4.3	19
63050814	8	0.205	5.2	24
63051214	12	0.217	5.5	28
63051414	14	0.224	5.7	32
63051614	16	0.244	6.2	37
63051814	18	0.256	6.5	41
63052114	21	0.280	7.1	48
63052414	24	0.295	7.5	54
63052714	27	0.319	8.1	61
63053014	30	0.327	8.3	65
63053214	32	0.339	8.6	69
63053614	36	0.350	8.9	76
63054014	40	0.374	9.5	83
63054414	44	0.390	9.9	89
63055014	50	0.406	10.3	95
63056114	61	0.429	10.9	111

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 24 AWG (≈ 14/34) ▪ 0.25 mm²				
63050225	2	0.142	3.6	13
63050325	3	0.150	3.8	15
63050425	4	0.161	4.1	17
63050525	5	0.173	4.4	21
63050725	7	0.189	4.8	26
63050825	8	0.213	5.4	30
63051225	12	0.248	6.3	41
63051425	14	0.260	6.6	46
63051625	16	0.272	6.9	52
63051825	18	0.287	7.3	57
63052125	21	0.327	8.3	71
63052425	24	0.331	8.4	74
63052725	27	0.339	8.6	77
63053025	30	0.350	8.9	84
63053225	32	0.362	9.2	89
63053625	36	0.394	10.0	105
63054025	40	0.417	10.6	116
63054425	44	0.437	11.1	124
63055025	50	0.457	11.6	137
63056125	61	0.484	12.3	162

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 22 AWG (≈ 7/30) ▪ 0.34 mm²				
63050234	2	0.165	4.2	17
63050334	3	0.173	4.4	20
63050434	4	0.181	4.6	24
63050534	5	0.205	5.2	29
63050734	7	0.224	5.7	36
63050834	8	0.264	6.7	44
63051234	12	0.295	7.5	57
63051434	14	0.327	8.3	70
63051634	16	0.343	8.7	78
63051834	18	0.362	9.2	86
63052134	21	0.394	10.0	98
63052434	24	0.417	10.6	105
63052734	27	0.425	10.8	116
63053034	30	0.441	11.2	126
63053234	32	0.457	11.6	134
63053634	36	0.476	12.1	148
63054034	40	0.508	12.9	164
63054434	44	0.531	13.5	175
63055034	50	0.571	14.5	204
63056134	61	0.606	15.4	241

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Halogen-free Cables

SABIX® D 305 FRNC

Flexible data cable with improved fire performance and extended temperature range



D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm² CE



Marking for SABIX® D 305 FRNC 63053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm² CE

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
► 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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	105
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
► 19 AWG (≈ 23/32) ▪ 0.75 mm²				
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
► 18 AWG (≈ 30/32) ▪ 1.00 mm²				
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 mm²				
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 available on request

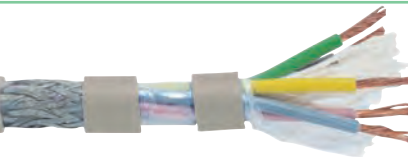
Halogen-free Cables

SABIX® D 315 FRNC

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



SEN · SABIX® D 315 FRNC 7 x 0.5 mm² CE



Marking for SABIX® D 315 FRNC 63150750:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 315 FRNC 7 x 0.5 mm² CE

Construction:

Conductor:	bare copper strands with reference to VDE 0812
Insulation:	SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Jacket material:	SABIX®
Jacket color:	grayish tan (RAL 7032)

Technical data:

Peak operating voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	5 x O.D. 10 x O.D.
Temperature range:	static: -40/+85°C flexible: -30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:



- low smoke halogen-free (LSHF)
- no flame propagation
- good EMC characteristics*
- flame retardant and self-extinguishing

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

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 26 AWG (≈ 18/38) ▪ 0.14 mm²				
63150214	2	0.150	3.8	15
63150314	3	0.157	4.0	17
63150414	4	0.165	4.2	18
63150514	5	0.177	4.5	22
63150714	7	0.189	4.8	26
63150814	8	0.220	5.6	31
63151014	10	0.236	6.0	34
63151214	12	0.260	6.6	43
63151414	14	0.268	6.8	46
63151614	16	0.280	7.1	51
63151814	18	0.291	7.4	55
63152114	21	0.315	8.0	56
63152414	24	0.315	8.0	60
63152714	27	0.339	8.6	70
63153014	30	0.346	8.8	75
63153214	32	0.358	9.1	79
63153614	36	0.370	9.4	86
63154014	40	0.394	10.0	95
63154414	44	0.417	10.6	109
63155014	50	0.433	11.0	118
63155214	52	0.433	11.0	120
63156114	61	0.457	11.6	136

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 24 AWG (≈ 14/34) ▪ 0.25 mm²				
63150225	2	0.161	4.1	17
63150325	3	0.169	4.3	19
63150425	4	0.181	4.6	22
63150525	5	0.201	5.1	29
63150725	7	0.217	5.5	34
63150825	8	0.256	6.5	44
63151025	10	0.276	7.0	50
63151225	12	0.283	7.2	54
63151425	14	0.295	7.5	60
63151625	16	0.307	7.8	66
63151825	18	0.323	8.2	73
63152125	21	0.346	8.8	82
63152425	24	0.366	9.3	87
63152725	27	0.374	9.5	95
63153025	30	0.386	9.8	102
63153225	32	0.398	10.1	108
63153625	36	0.421	10.7	127
63154025	40	0.445	11.3	140
63154425	44	0.465	11.8	148
63155025	50	0.500	12.7	171
63155225	52	0.500	12.7	175
63156125	61	0.528	13.4	198

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 22 AWG (≈ 7/30) ▪ 0.34 mm²				
63150234	2	0.185	4.7	23
63150334	3	0.201	5.1	28
63150434	4	0.217	5.5	32
63150534	5	0.232	5.9	37
63150734	7	0.268	6.8	49
63150834	8	0.299	7.6	58
63151034	10	0.323	8.2	65
63151234	12	0.331	8.4	72
63151434	14	0.346	8.8	79
63151634	16	0.362	9.2	87
63151834	18	0.382	9.7	97
63152134	21	0.421	10.7	119
63152434	24	0.445	11.3	130
63152734	27	0.453	11.5	139
63153034	30	0.469	11.9	149
63153234	32	0.500	12.7	166
63153634	36	0.520	13.2	183
63154034	40	0.551	14.0	202
63154434	44	0.575	14.6	214
63155034	50	0.622	15.8	259
63155234	52	0.622	15.8	265
63156134	61	0.657	16.7	246

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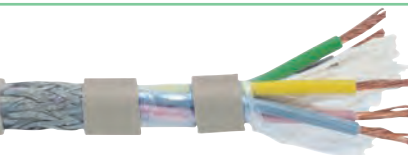
Halogen-free Cables

SABIX® D 315 FRNC

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



SEN · SABIX® D 315 FRNC 7 x 0.5 mm² CE



Marking for SABIX® D 315 FRNC 63150750:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 315 FRNC 7 x 0.5 mm² CE

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
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 incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
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
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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 available on request

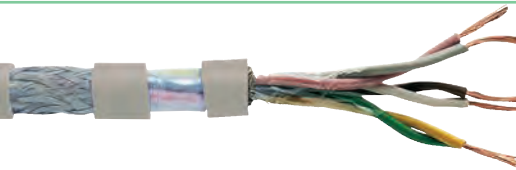
Halogen-free Cables

SABIX® D 345 FRNC TP

Paired data cable with improved fire performance, overall tinned copper shield, and extended temperature range



345 FRNC TP 3 x 2 x 0.25 mm² CE



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

Construction:

Conductor:	bare copper strands with reference to VDE 0812
Insulation:	SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	pairwise, pairs in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Jacket material:	SABIX®
Jacket color:	grayish tan (RAL 7032)

Technical data:

Peak operating voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	5 x O.D. 10 x O.D.
Temperature range:	static: -40/+85°C flexible: -30/+85°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
- 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

item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) ▪ 0.14 mm²				
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	55
63451014	10	0.35	8.9	69
63451214	12	0.382	9.7	75
63451614	16	0.413	10.5	89
63451814	18	0.437	11.1	105
63452414	24	0.504	12.8	137
▶ 24 AWG (≈ 14/34) ▪ 0.25 mm²				
63450225	2	0.232	5.9	30
63450325	3	0.268	6.8	42
63450425	4	0.283	7.2	48
63450525	5	0.319	8.1	56
63450625	6	0.327	8.3	63
63450825	8	0.354	9	70
63451025	10	0.386	9.8	91
63451225	12	0.429	10.9	104
63451625	16	0.469	11.9	130
63451825	18	0.5	12.7	148
63452425	24	0.567	14.4	192

item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 7/30) ▪ 0.34 mm²				
63450234	2	0.283	7.2	44
63450334	3	0.307	7.8	55
63450434	4	0.346	8.8	66
63450534	5	0.374	9.5	76
63450634	6	0.382	9.7	84
63450834	8	0.425	10.8	104
63451234	12	0.528	13.4	151
63451634	16	0.583	14.8	193
63451834	18	0.602	15.3	213
63452434	24	0.693	17.6	271
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
63450250	2	0.299	7.6	50
63450350	3	0.327	8.3	63
63450450	4	0.37	9.4	78
63450550	5	0.402	10.2	87
63450650	6	0.409	10.4	102
63450850	8	0.457	11.6	124
63451050	10	0.52	13.2	156
63451250	12	0.567	14.4	183
63451650	16	0.642	16.3	244
63451850	18	0.665	16.9	263
63452450	24	0.748	19	328

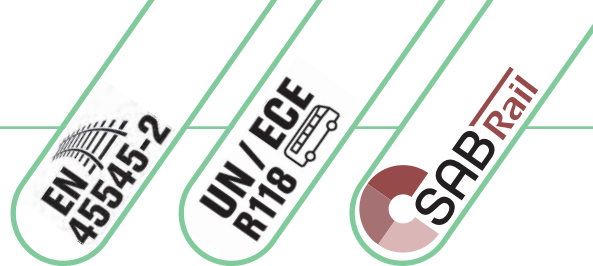
item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
63450275	2	0.335	8.5	66
63450375	3	0.37	9.4	79
63450475	4	0.429	10.9	107
63450575	5	0.461	11.7	122
63450675	6	0.492	12.5	144
63450875	8	0.594	15.1	202
63451275	12	0.673	17.1	262
63451675	16	0.732	18.6	318
63451875	18	0.76	19.3	349
63452475	24	0.858	21.8	433

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® R 600 FRNC

SABIX® Rail - Control cable with numbered conductors



Marking for SABIX® R 600 FRNC 66001215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 600 FRNC 12 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Jacket material:	special SABIX®
Jacket color:	gray (RAL 7000)

Outstanding features:

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

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 3000 V
Min. bending radius:	<i>fixed installation:</i> 4 x O.D. <i>free movement:</i> 6 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24, IEC 60332-3-25 + EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
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	148
66003205	32	0.551	14.0	193
66004205	42	0.618	15.7	245
66006105	61	0.728	18.5	343
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
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	484
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
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

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
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
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
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
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
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

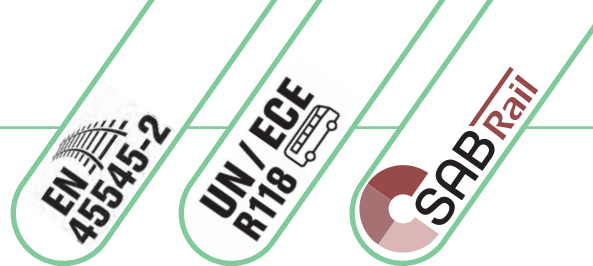
item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 12 AWG (≈ 52/28) • 4.00 mm²				
66000340	3	0.382	9.7	124
66000440	4	0.425	10.8	157
66000540	5	0.476	12.1	195
66000740	7	0.528	13.4	252
▶ 10 AWG (≈ 78/28) • 6.00 mm²				
66000360	3	0.449	11.4	181
66000460	4	0.500	12.7	226
66000560	5	0.559	14.2	279
66000760	7	0.618	15.7	366
▶ 8 AWG (≈ 77/26) • 10.00 mm²				
66000461	4	0.657	16.7	389
66000561	5	0.732	18.6	497
66000761	7	0.815	20.7	645
▶ 6 AWG (≈ 122/26) • 16.00 mm²				
66000462	4	0.811	20.6	596
66000562	5	0.906	23.0	742
66000762	7	1.004	25.5	971
▶ 4 AWG (≈ 190/26) • 25.00 mm²				
66000463	4	0.980	24.9	933
66000563	5	1.106	28.1	1176
▶ 2 AWG (≈ 272/26) • 35.00 mm²				
66000464	4	1.134	28.8	1295
66000564	5	1.280	32.5	1621

Other dimensions and colors are available on request

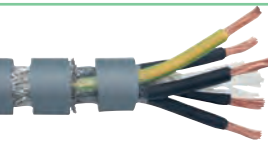
Halogen-free Cables

SABIX® R 638 FRNC

SABIX® Rail - Control cable with numbered conductors and overall tinned copper shield



KES · D-VIERSEN · SABIX® R 638 FRNC 5 x 1.5 mm² CE



Marking for SABIX® R 638 FRNC 66380515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 638 FRNC 5 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	special SABIX®
Jacket color:	gray (RAL 7000)

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 3000 V conductor/shielding: 2000 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24, IEC 60332-3-25 EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:



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

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

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
66380205	2	0.209	5.3	26
66380305	3	0.220	5.6	30
66380405	4	0.244	6.2	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
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
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

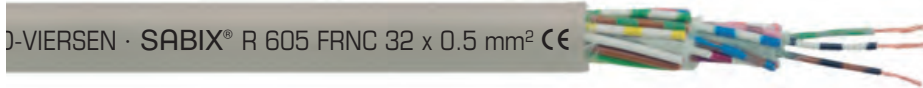
item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
66380210	2	0.248	6.3	38
66380310	3	0.260	6.6	46
66380410	4	0.280	7.1	63
66380510	5	0.315	8.0	74
66380710	7	0.339	8.6	93
66381210	12	0.465	11.8	152
66381810	18	0.543	13.8	212
66382510	25	0.661	16.8	305
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
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		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
66380225	2	0.327	8.3	67
66380325	3	0.354	9.0	86
66380425	4	0.382	9.7	110
66380525	5	0.433	11.0	144
66380725	7	0.476	12.1	185
66381225	12	0.646	16.4	313
66381825	18	0.760	19.3	447
66382525	25	0.921	23.4	626
▶ 12 AWG (≈ 52/28) • 4.00 mm²				
66380440	4	0.453	11.5	168
66380540	5	0.504	12.8	208
▶ 10 AWG (≈ 78/28) • 6.00 mm²				
66380460	4	0.535	13.6	237
66380560	5	0.594	15.1	282
▶ 8 AWG (≈ 77/26) • 10.00 mm²				
66380461	4	0.701	17.8	414
66380561	5	0.862	21.9	616

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® R 605 FRNC SABIX® Rail - Data cable



D-VIERSEN · SABIX® R 605 FRNC 32 x 0.5 mm² CE
 SAB BRÖCKSKES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0.5 mm² CE

Marking for SABIX® R 605 FRNC 66053250:

Construction:

Conductor:	bare copper strands with reference to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Jacket material:	special SABIX®
Jacket color:	grayish tan (RAL 7032)

Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- fulfills fire protection requirements R15 (EL1A)
acc. to EN 45545-2 for hazard levels HL1-3
- fulfills fire protection requirements acc. to NFPA 130 section 8.6.7.1.1 and section 12.2.1 (1) *
- flame retardant acc. to UN/ECE R118

Technical data:

Nominal voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V
Min. bending radius:	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to UL 1685 section 12, FT4/IEEE 1202.* Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

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item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 26 AWG (≈ 18/38) ▪ 0.14 mm²				
66050214	2	0.122	3.1	9
66050314	3	0.130	3.3	10
66050414	4	0.138	3.5	12
66050514	5	0.150	3.8	14
66050714	7	0.161	4.1	17
66050814	8	0.197	5.0	22
66051214	12	0.209	5.3	26
66051414	14	0.217	5.5	28
66051614	16	0.236	6.0	34
66051814	18	0.248	6.3	38
66052114	21	0.272	6.9	44
66052414	24	0.287	7.3	47
66052714	27	0.303	7.7	54
66053014	30	0.311	7.9	58
66053214	32	0.323	8.2	62
66053614	36	0.335	8.5	68
66054014	40	0.358	9.1	75
66054414	44	0.374	9.5	80
66055014	50	0.406	10.3	95
66056114	61	0.429	10.9	111

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 24 AWG (≈ 14/34) ▪ 0.25 mm²				
66050225	2	0.134	3.4	11
66050325	3	0.142	3.6	13
66050425	4	0.154	3.9	16
66050525	5	0.165	4.2	19
66050725	7	0.181	4.6	24
66050825	8	0.205	5.2	29
66051225	12	0.240	6.1	38
66051425	14	0.252	6.4	43
66051625	16	0.264	6.7	48
66051825	18	0.280	7.1	54
66052125	21	0.311	7.9	65
66052425	24	0.331	8.4	70
66052725	27	0.339	8.6	77
66053025	30	0.350	8.9	84
66053225	32	0.362	9.2	89
66053625	36	0.394	10.0	105
66054025	40	0.417	10.6	116
66054425	44	0.437	11.1	124
66055025	50	0.457	11.6	137
66056125	61	0.484	12.3	162

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 22 AWG (≈ 7/30) ▪ 0.34 mm²				
66050234	2	0.157	4.0	16
66050334	3	0.165	4.2	18
66050434	4	0.181	4.6	22
66050534	5	0.197	5.0	27
66050734	7	0.217	5.5	33
66050834	8	0.256	6.5	42
66051234	12	0.287	7.3	54
66051434	14	0.311	7.9	63
66051634	16	0.327	8.3	71
66051834	18	0.346	8.8	79
66052134	21	0.394	10.0	98
66052434	24	0.417	10.6	105
66052734	27	0.425	10.8	116
66053034	30	0.441	11.2	126
66053234	32	0.457	11.6	134
66053634	36	0.476	12.1	148
66054034	40	0.508	12.9	164
66054434	44	0.531	13.5	175
66055034	50	0.571	14.5	204
66056134	61	0.606	15.4	241

* NFPA 130 / FT4 only up to outer-ø < 13 mm (0.512").

Continued on next page

Halogen-free Cables

SABIX® R 605 FRNC

SABIX® Rail - Data cable



D-VIERSEN · SABIX® R 605 FRNC 32 x 0.5 mm² CE



Marking for SABIX® R 605 FRNC 66053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0.5 mm² CE

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 20 AWG (≈ 16/32) ▪ 0.50 mm²				
66050250	2	0.169	4.3	19
66050350	3	0.177	4.5	22
66050450	4	0.193	4.9	27
66050550	5	0.213	5.4	33
66050750	7	0.240	6.1	42
66050850	8	0.280	7.1	53
66051250	12	0.319	8.1	69
66051450	14	0.335	8.5	77
66051650	16	0.354	9.0	88
66051850	18	0.374	9.5	97
66052150	21	0.429	10.9	121
66052450	24	0.453	11.5	131
66052750	27	0.461	11.7	143
66053050	30	0.476	12.1	156
66053250	32	0.496	12.6	167
66053650	36	0.516	13.1	184
66054450	44	0.594	15.1	229
66055050	50	0.618	15.7	276
66056150	61	0.657	16.7	301

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 19 AWG (≈ 23/32) ▪ 0.75 mm²				
66050275	2	0.193	4.9	26
66050375	3	0.205	5.2	30
66050475	4	0.232	5.9	39
66050575	5	0.252	6.4	47
66050775	7	0.276	7.0	58
66050875	8	0.327	8.3	75
66051275	12	0.370	9.4	95
66051475	14	0.406	10.3	114
66051675	16	0.425	10.8	129
66051875	18	0.449	11.4	143
66052175	21	0.492	12.5	167
66052475	24	0.524	13.3	181
66052775	27	0.535	13.6	200
66053075	30	0.571	14.5	228
66053275	32	0.591	15.0	242
66053675	36	0.614	15.6	268
66054075	40	0.657	16.7	298
66054475	44	0.689	17.5	319
66055075	50	0.720	18.3	356
66056175	61	0.780	19.8	435

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 18 AWG (≈ 30/32) ▪ 1.00 mm²				
66050280	2	0.201	5.1	29
66050380	3	0.213	5.4	36
66050480	4	0.240	6.1	46
66050580	5	0.264	6.7	55
66050680	6	0.287	7.3	65
66050780	7	0.287	7.3	70
► 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
66050285	2	0.220	5.6	37
66050385	3	0.240	6.1	48
66050485	4	0.264	6.7	58
66050585	5	0.303	7.7	76
66050685	6	0.331	8.4	90
66050785	7	0.331	8.4	97

Other dimensions and colors are available on request

* NFPA 130 / FT4 only up to outer-ø < 13 mm (0.512").

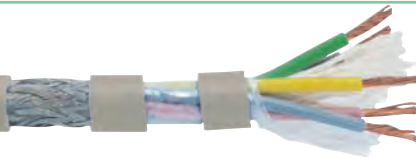
Halogen-free Cables

SABIX® R 615 FRNC

SABIX® Rail - Data cable with overall tinned copper shield



SEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE



Marking for SABIX® R 615 FRNC 66150550:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE

Construction:

Conductor:	bare copper strands with reference to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	special SABIX®
Jacket color:	grayish tan (RAL 7032)

Technical data:

Nominal voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	5 x O.D.
<i>fixed installation:</i>	10 x O.D.
<i>free movement:</i>	
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to UL 1685 section 12, FT4/IEEEE 1202. * Burning tests acc. to ASTM E 162-09. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305 + VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034 + ASTM E 662-09
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
- good EMC characteristics*
- no flame propagation
- flame retardant and self-extinguishing
- fulfills fire protection requirements R15 (EL1A)
acc. to EN 45545-2 for hazard levels HL1-3
- fulfills fire protection requirements
acc. to NFPA 130 section 8.6.7.1.1
and section 12.2.1 (1) *
- tested acc. to American ASTM standard
- flame retardant acc. to UN/ECE R118

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

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item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) ▪ 0.14 mm²				
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	9.4	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 incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 24 AWG (≈ 14/34) ▪ 0.25 mm²				
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	148
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 incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 7/30) ▪ 0.34 mm²				
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

* NFPA 130 / FT4 only up to outer-ø < 13 mm (0.512").

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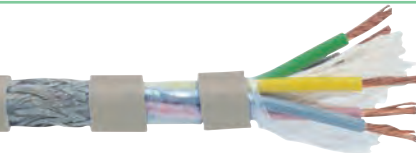
Halogen-free Cables

SABIX® R 615 FRNC

SABIX® Rail - Data cable with overall tinned copper shield



SEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE



Marking for SABIX® R 615 FRNC 66150550:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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 incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
66150275	2	0.220	5.6	32
66150375	3	0.240	6.1	38
66150475	4	0.260	6.6	50
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	16.9	322

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
66150280	2	0.228	5.8	36
66150380	3	0.248	6.3	44
66150480	4	0.268	6.8	52
66150580	5	0.291	7.4	64
66150680	6	0.315	8.0	75
66150780	7	0.315	8.0	79
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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 available on request

* NFPA 130 / FT4 only up to outer-ø < 13 mm (0.512").

Halogen-free Cables

SABIX® R 645 FRNC TP

SABIX® Rail - Data cable, paired with overall tinned copper shield



R 645 FRNC TP 3 x 2 x 0.25 mm² CE



Marking for SABIX® R 645 FRNC TP 66450325:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 645 FRNC TP 3 x 2 x 0.25 mm² CE

Construction:

Conductor:	bare copper strands with reference to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	pairwise, pairs in layers
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	special SABIX®
Jacket color:	grayish tan (RAL 7032)

Technical data:

Nominal voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	5 x O.D.
<i>fixed installation:</i>	10 x O.D.
<i>free movement:</i>	
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to UL 1685 section 12, FT4/IEEE 1202. * Burning tests acc. to ASTM E 162-09. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305+ VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034 + ASTM E 662-09
Flexibility:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

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

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

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item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) • 0.14 mm²				
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
▶ 24 AWG (≈ 14/34) • 0.25 mm²				
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 ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 7/30) • 0.34 mm²				
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
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
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 ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
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

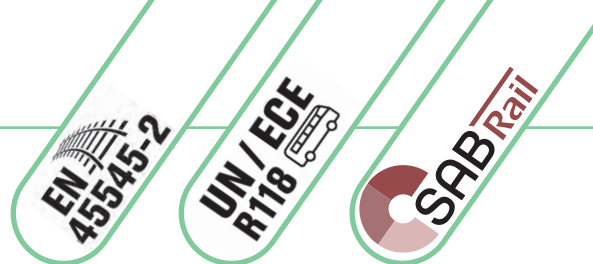
Other dimensions and colors are available on request


* NFPA 130 / FT4 only up to outer-ø < 13 mm (0.512").

Halogen-free Cables

SABIX® R flex

SABIX® Rail - Continuous flex cable with numbered conductors



BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0.75 mm² CE 

Marking for SABIX® R flex 66701105:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0.75 mm² CE

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

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	special polymer
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors Twisted pairs type without green/yellow ground
Stranding:	in layers resp. pairwise
Wrapping:	foil
Shielding:	tinned copper braiding (if existing)
Jacket material:	SABIX® Ultra
Jacket color:	black (RAL 9005)

Outstanding features:

- halogen-free
- continuous flex
- good EMC characteristics*
- no flame propagation
- flame retardant and self-extinguishing
- good ozone, UV and weather resistance
- good oil and fuel resistance
- good acid and alkalines resistance
- fulfills fire protection requirements R15 (EL1A) and R16 (EL1B)
acc. to EN 45545-2 for hazard levels HL1-3

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

Technical data:

Nominal voltage:	U ₀ /U 300/500 V	
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V	
Min. bending radius:	unshielded:	shielded:
<i>fixed installation:</i>	4 x O.D.	5 x O.D.
<i>flexible application:</i>	6 x O.D.	10 x O.D.
<i>continuously flex:</i>	12 x O.D.	15 x O.D.
Temperature range:		
<i>static:</i>	-50/+90°C	
<i>flexible:</i>	-40/+90°C	
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2	
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24, IEC 60332-3-25 EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 Flame retardant acc. to ISO 6722 (UN/ECE R118)	
Toxicity:	acc. to EN 50305+ VDE 0260-305	
Smoke density:	acc. to IEC 61034 + VDE 0482-1034	
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1	
Flexibility:	very good	
Approvals:	CE, EAC, RoHS	
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30	

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
multi-conductor cable unshielded				
▶ 20 AWG (≈ 28/34) ▪ 0.50 mm²				
66700002	2	0.181	4.6	21
66700004	4	0.213	5.4	32
66700007	7	0.272	6.9	51
66700012	12	0.331	8.4	76
66700018	18	0.390	9.9	108
66700032	32	0.504	12.8	179
▶ 19 AWG (≈ 42/34) ▪ 0.75 mm²				
66700103	3	0.220	5.6	34
66700105	5	0.264	6.7	50
66700125	25	0.543	13.8	204
▶ 18 AWG (≈ 56/34) ▪ 1.00 mm²				
66700202	2	0.224	5.7	33
66700273	73	0.906	23.0	665
▶ 16 AWG (≈ 84/34) ▪ 1.50 mm²				
66700303	3	0.260	6.6	54
66700307	7	0.370	9.4	112
66700318	18	0.539	13.7	253

item no.	no. of pairs	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
multi-pair cable shielded				
▶ 20 AWG (≈ 28/34) ▪ 0.50 mm²				
66703002	2	0.276	7.0	46
66703003	3	0.315	8.0	60
66703004	4	0.394	10.0	81
66703006	6	0.409	10.4	108
66703008	8	0.492	12.5	154
66703012	12	0.563	14.3	187
▶ 19 AWG (≈ 42/34) ▪ 0.75 mm²				
66703103	3	0.350	8.9	76
66703108	8	0.575	14.6	206
▶ 18 AWG (≈ 56/34) ▪ 1.00 mm²				
66703202	2	0.350	8.9	75
66703203	3	0.374	9.5	91
66703206	6	0.496	12.6	167
66703208	8	0.594	15.1	240
▶ 16 AWG (≈ 84/34) ▪ 1.50 mm²				
66703302	3	0.406	10.3	105
66703304	4	0.500	12.7	163
66703306	6	0.563	14.3	232

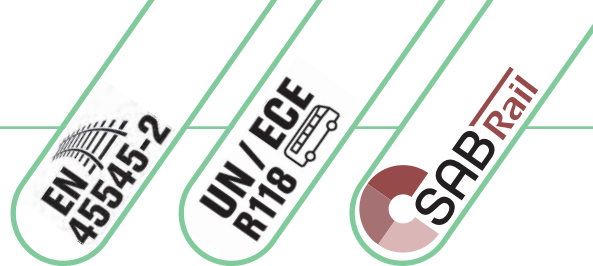
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Halogen-free Cables

SABIX® R flex

SABIX® Rail - Continuous flex cable with numbered conductors



BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0.75 mm² CE



Marking for SABIX® R flex 66701105:

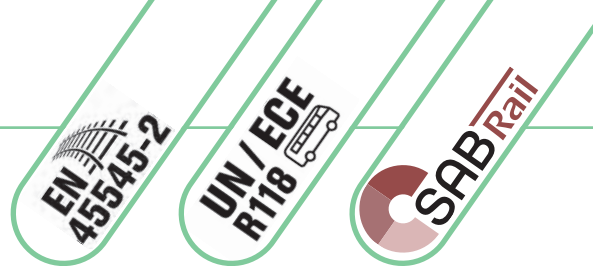
SAB BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0.75 mm² CE


item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
multi-conductor cable shielded														
► 20 AWG (≈ 28/34) ▪ 0.50 mm²														
66701002	2	0.209	5.3	31										
66701003	3	0.217	5.5	34										
66701005	5	0.256	6.5	48										
66701007	7	0.291	7.4	61										
66701018	18	0.425	10.8	134										
66701032	32	0.539	13.7	213										
► 19 AWG (≈ 42/34) ▪ 0.75 mm²														
66701103	3	0.240	6.1	42										
66701104	4	0.264	6.7	51										
66701105	5	0.283	7.2	60										
66701125	25	0.571	14.5	236										
► 18 AWG (≈ 56/34) ▪ 1.00 mm²														
66701204	4	0.272	6.9	58										
66701207	7	0.343	8.7	92										
66701212	12	0.433	11.0	151										
► 16 AWG (≈ 84/34) ▪ 1.50 mm²														
66701303	3	0.280	7.1	62										
66701304	4	0.299	7.6	75										
66701305	5	0.335	8.5	92										
66701318	18	0.567	14.4	280										
► 14 AWG (≈ 140/34) ▪ 2.50 mm²														
66701404	4	0.382	9.7	117										
66701405	5	0.433	11.0	158										
66701407	7	0.520	13.2	218										
66701412	12	0.618	15.7	312										
► 12 AWG (≈ 224/34) ▪ 4.00 mm²														
66701504	4	0.449	11.4	175										
► 10 AWG (≈ 183/32) ▪ 6.00 mm²														
66701604	4	0.547	13.9	255										
► 8 AWG (≈ 320/32) ▪ 10.00 mm²														
66701704	4	0.661	16.8	406										
► 6 AWG (≈ 504/32) ▪ 16.00 mm²														
66701804	4	0.795	20.2	595										
► 4 AWG (≈ 760/32) ▪ 25.00 mm²														
66701904	4	0.949	24.1	869										
Other dimensions and colors are available on request														

Halogen-free Cables

SAB RailLine 560

SABIX® Rail - Continuous flex cable for outdoor use, cross linked



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



Marking for SAB RailLine 560 65601105:

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

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

Construction:

Conductor:	tinned copper strands, extra fine wires
Insulation:	SABIX® X
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers resp. pairwise
Wrapping:	foil
Shielding:	tinned copper braiding (if existing)
Jacket material:	SABIX® X
Jacket color:	black (RAL 9005)

Outstanding features:

- weather resistant
- continuous flex
- good ozone, UV, and weather resistance
- good oil and fuel resistance
- good acid and alkalines resistance
- fulfills fire protection requirements R15 (EL1A) and R16 (EL1B) acc. to EN 45545-2 for hazard levels HL1-3

Technical data:

Nominal voltage:	Uo/U 300/500 V resp. 0.6/1 kV		
Testing voltage:	conductor/conductor:	300/500 V	0.6/1 kV
	conductor/shielding:	2000 V	4000 V
Min. bending radius:			
<i>fixed installation:</i>	4 x O.D.		
<i>flexible application:</i>	6 x O.D.		
<i>continuous flex:</i>	10 x O.D.		
Torsion angle:	± 15°/1m		
Temperature range:			
<i>static:</i>	-50/+90°C		
<i>flexible:</i>	-50/+90°C		
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2		
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24, IEC 60332-3-25 + EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 Flame retardant acc. to ISO 6722 (UN/ECE R118)		
Toxicity:	acc. to EN 50305+ VDE 0260-305		
Smoke density:	acc. to IEC 61034 + VDE 0482-1034		
Weather resistance:	very good		
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1		
Flexibility:	very good		
Approvals:	CE, EAC, RoHS		
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30		

item no.	dimensions AWG	nominal outer-ø		cable weight ≈lbs/mft	nominal voltage
		inch ±5%	mm ±5%		
multi-conductor cable unshielded					
65600002	20 AWG/2c	0.193	4.9	25	300/500 V
65600105	19 AWG/5c	0.252	6.4	49	300/500 V
65600203	18 AWG/1c	0.209	5.3	37	300/500 V
65600205	18 AWG/5c	0.264	6.7	58	300/500 V
65600207	18 AWG/7c	0.311	7.9	85	300/500 V
65600225	18 AWG/25c	0.528	13.4	232	300/500 V
65600304	16 AWG/4c	0.272	6.9	68	300/500 V
65600307	16 AWG/7c	0.366	9.3	118	300/500 V
65609001	2 AWG/5c	1.307	33.2	1545	0.6/1 kV
multi-conductor cable shielded					
65601002	20 AWG/2c	0.193	4.9	28	300/500 V
65601003	20 AWG/3c	0.209	5.3	34	300/500 V
65601005	20 AWG/5c	0.240	6.1	45	300/500 V
65601012	20 AWG/12c	0.335	8.5	89	300/500 V
65601105	19 AWG/5c	0.268	6.8	58	300/500 V
65601204	18 AWG/4c	0.260	6.6	58	300/500 V
65601213	18 AWG/13c	0.425	10.8	158	300/500 V
65601303	16 AWG/3c	0.287	7.3	67	300/500 V
65601305	16 AWG/5c	0.327	8.3	102	300/500 V
65601307	16 AWG/7c	0.382	9.7	131	300/500 V
65609002	2 AWG/5c	1.343	34.1	1650	0.6/1 kV

item no.	dimensions AWG	nominal outer-ø		cable weight ≈lbs/mft	nominal voltage
		inch ±5%	mm ±5%		
multi-pair cable shielded					
65609004	24 AWG/6pr	0.315	8.0	66	300/500 V
65609005	22 AWG/12pr	0.469	11.9	137	300/500 V
65603002	20 AWG/2pr	0.264	6.7	46	300/500 V
65603004	20 AWG/4pr	0.335	8.5	73	300/500 V
65603006	20 AWG/6pr	0.386	9.8	103	300/500 V
65603008	20 AWG/8pr	0.484	12.3	155	300/500 V
65603103	19 AWG/3pr	0.331	8.4	83	300/500 V

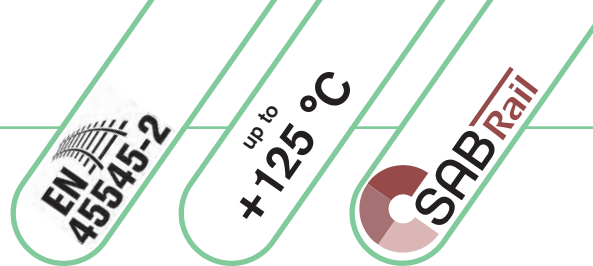
Other dimensions and colors are available on request



Halogen-free Cables

SABIX® A 280 FRNC X

SABIX® Rail - Wiring cable / Control cable
with numbered conductors, cross linked



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

Marking for SABIX® A 280 FRNC X 62800110:

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

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

Marking for SABIX® A 280 FRNC X 62800505:

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

Construction:

Conductor:	tinned copper strands fine wires acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Single conductor Color code:	white (similar RAL 9010)
Multi-conductor Color code:	white conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334
Multi-conductor Stranding:	in layers
Multi-conductor Jacket material:	special SABIX®
Multi-conductor Jacket color:	black (RAL 9005)

Outstanding features:

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

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	5 x O.D.
Temperature range: <i>in conduit:</i> <i>fixed installation:</i>	-40/+125°C (single conductor) -50/+125°C (multi-conductor cable)
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24, IEC 60332-3-25 EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Toxicity:	acc. to EN 50305+ VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

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item no.	no. of conductors	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx KWh/km
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²						
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
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²						
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

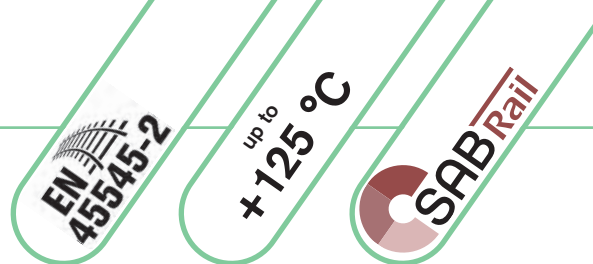
item no.	no. of conductors	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx KWh/km
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²						
62800110	1	0.083	2.1	8	20.0	16
62800310	3	0.217	5.5	37	20.0	162
62800410	4	0.244	6.2	48	20.0	186
62800610	6	0.295	7.5	68	20.0	252
62800810	8	0.354	9.0	91	20.0	338
62801010	10	0.398	10.1	110	20.0	402
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²						
62800115	1	0.098	2.5	11	13.7	22.5
62800315	3	0.260	6.6	46	13.7	210
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²						
62800125	1	0.122	3.1	18	8.21	34

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® A 285 FRNC X

SABIX® Rail - Control cable with numbered conductors, overall tinned copper shield, cross linked



Marking for SABIX® A 285 FRNC X 62850505:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 285 FRNC X 5 x 0.5 mm² CE

Construction:

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

Outstanding features:

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

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

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	10 x O.D.
Temperature range: <i>in conduit,</i> <i>fixed installation:</i>	-50/+125°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24, IEC 60332-3-25 EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Toxicity:	acc. to EN 50305+ VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx. KWh/km
► 20 AWG (≈ 16/32) ▪ 0.50 mm²						
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
► 19 AWG (≈ 23/32) ▪ 0.75 mm²						
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

item no.	no. of conductors	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km	heating value approx. KWh/km
► 18 AWG (≈ 30/32) ▪ 1.00 mm²						
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 available on request

Halogen-free Cables

SABIX® A 280 FRNC X (FR)

SABIX® Rail - Fire resistant control cable, cross linked

EN 45545-2

IEC 60331-21
EN 50200

SAB Rail

CE EAC RoHS

ES · D-VIERSEN · SABIX® A 280 FRNC X (FR) 5 x 0.5 mm² CE



Marking for SABIX® A 280 FRNC X (FR) 62809505:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 280 FRNC X (FR) 5 x 0.5 mm² CE

Construction:

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

Outstanding features:

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

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	10 x O.D.
Temperature range: <i>during protected fixed installation:</i>	-50/+125°C
Halogen-free:	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to IEC 60754-1. pH-value is > 4.3 acc. to IEC 60754-2. Conductivity is < 10.0 µS/mm acc. to IEC 60754-2. Fluoric content < 0.1% acc. to IEC 60684-2
Burning characteristics:	No flame propagation acc. to IEC 60332-3-24, IEC 60332-3-25 + EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Insulation integrity in case of fire:	EN 50200 PH 30, VDE 0482-200, IEC 60331-21 FE 180 + VDE 0482-331
Toxicity:	acc. to EN 50305+ VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
62809502	2	0.228	5.8	32
62809503	3	0.240	6.1	39
62809504	4	0.264	6.7	44
62809505	5	0.291	7.4	53
62809507	7	0.327	8.3	69
62809510	10	0.429	10.9	101
62809512	12	0.441	11.2	116
62809518	18	0.520	13.2	158
62809525	25	0.638	16.2	224
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
62809602	2	0.256	6.5	38
62809603	3	0.260	6.6	47
62809604	4	0.283	7.2	54
62809605	5	0.323	8.2	68
62809607	7	0.350	8.9	85
62809608	8	0.421	10.7	115
62809610	10	0.461	11.7	125
62809612	12	0.476	12.1	143
62809618	18	0.575	14.6	209
62809625	25	0.638	16.2	279

item no.	no. of conductors	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
62809702	2	0.252	6.4	42
62809703	3	0.268	6.8	52
62809704	4	0.291	7.4	60
62809705	5	0.331	8.4	76
62809707	7	0.362	9.2	96
62809710	10	0.476	12.1	141
62809712	12	0.492	12.5	161
62809718	18	0.594	15.1	237
62809725	25	0.713	18.1	317
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
62809802	2	0.283	7.2	56
62809803	3	0.303	7.7	72
62809804	4	0.339	8.6	86
62809805	5	0.386	9.8	110
62809807	7	0.421	10.7	139
62809808	8	0.492	12.5	177
62809810	10	0.539	13.7	196
62809812	12	0.575	14.6	236
62809818	18	0.673	17.1	333
62809825	25	0.827	21.0	461

item no.	no. of conductors	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
62809902	2	0.339	8.6	81
62809903	3	0.358	9.1	105
62809904	4	0.406	10.3	127
62809905	5	0.449	11.4	155
62809907	7	0.492	12.5	200
62809910	10	0.650	16.5	292
62809912	12	0.669	17.0	335
62809918	18	0.807	20.5	491
62809925	25	0.984	25.0	682

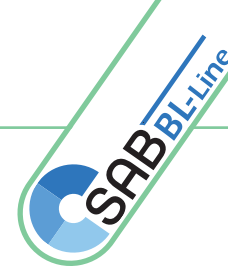
Other dimensions and colors are available on request

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Halogen-free Cables

SABIX® BL 405 FRNC

SABIX® BL - Flexible data cable



Marking for SABIX® BL 405 FRNC 64051650:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 405 FRNC 16 x 0.5mm² - IEC 60332-3-22 - 350V — DNV CE and current meter marking

Construction:

Conductor:	tinned copper strands with reference to VDE 0812 resp. IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Jacket material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Jacket color:	pigeon blue (RAL 5014)

Outstanding features:

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

Technical data:

Peak operating voltage:	max. 350 V
Testing voltage:	conductor/conductor: 1500 V
Min. bending radius:	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) • 0.14 mm²				
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
▶ 24 AWG (≈ 14/34) • 0.25 mm²				
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 incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 7/30) • 1.00 mm²				
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
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
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 incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
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 available on request



Possible on request:

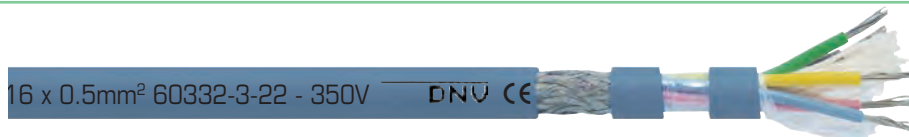
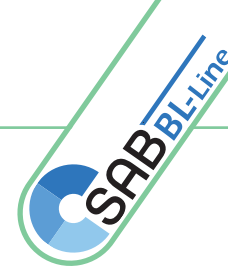
- bare copper strands
- alternative color code and jacket color



Halogen-free Cables

SABIX® BL 415 C FRNC

SABIX® BL - Flexible data cable with overall tinned copper shield



Marking for SABIX® BL 415 C FRNC 64150550:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 415 C FRNC 5 x 0.5mm² - IEC 60332-3-22 - 350V — DNV CE and current meter marking

Construction:

Conductor:	tinned copper strands with reference to VDE 0812 resp. IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Jacket material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Jacket color:	pigeon blue (RAL 5014)

Technical data:

Peak operating voltage:	max. 350 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>flexible movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- low smoke halogen-free (LSHF)
 - asbestos-free
 - good EMC characteristics*
 - no flame propagation
 - flame retardant and self-extinguishing
 - flexible
 - for applications acc. to Hong Kong Convention ingredients tested acc. to the requirements of the Hong Kong Convention (2009) of the IMO
 - approvals: DNV
- *copper braiding should be connected circularly to optimize the EMC characteristics

Possible on request:

- bare copper strands
- alternative color code and jacket color

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item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) • 0.14 mm²				
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	6.8	47
64151614	16	0.295	7.5	57
▶ 24 AWG (≈ 14/34) • 0.25 mm²				
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 incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 7/30) • 1.00 mm²				
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
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
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 incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
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

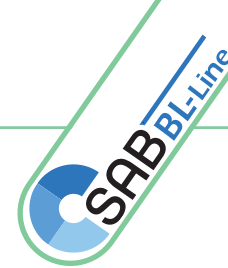
Other dimensions and colors are available on request



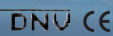
Halogen-free Cables

SABIX® BL 443 C FRNC TT

SABIX® BL - Twisted triad flexible data cable, twisted triad with overall copper shield



TT 7 x 3 x 0.34 mm² - IEC 60332-3-22 - 300V



Marking for SABIX® BL 443 C FRNC TT 64430734:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 443 C FRNC TT 7 x 3 x 0.34 mm² - IEC 60332-3-22 - 300V — DNV CE and current meter marking

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	≤ 0.25 mm ² = DIN 47100, see page O/26 ≥ 0.34 mm ² = white, blue, red with printed triad number
Stranding:	conductors white, blue, red twisted to triads, triads twisted in layers
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Jacket color:	pigeon blue (RAL 5014)

Outstanding features:

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

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

Technical data:

Peak operating voltage:	max. 300 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of triads	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
► 24 AWG (≈ 14/34) ▪ 0.25 mm²				
64430225	2	0.283	7.2	46
64430425	4	0.346	8.8	69
64430725	7	0.417	10.6	108
64431025	10	0.528	13.4	158
► 22 AWG (≈ 7/30) ▪ 1.00 mm²				
64430234	2	0.315	8.0	55
64430434	4	0.386	9.8	85
64430734	7	0.469	11.9	136
64431034	10	0.598	15.2	210

item no.	no. of triads	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
► 20 AWG (≈ 16/32) ▪ 0.50 mm²				
64430250	2	0.354	9.0	71
64430450	4	0.421	10.7	108
64430750	7	0.520	13.2	171
64431050	10	0.665	16.9	263
► 19 AWG (≈ 23/32) ▪ 0.75 mm²				
64430275	2	0.409	10.4	97
64430475	4	0.496	12.6	150
64430775	7	0.598	15.2	235
64431075	10	0.760	19.3	339

Other dimensions and colors are available on request



Possible on request:

- bare copper strands
- alternative color code and jacket color

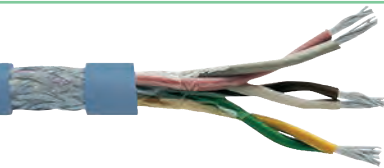
Halogen-free Cables

SABIX® BL 445 C FRNC TP

SABIX® BL - Flexible paired data cable with overall tinned copper shield



25mm² IEC 60332-3-22 - 350V DNV CE



Marking for SABIX® BL 445 C FRNC TP 64450325:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 445 C FRNC TP 3 x 2 x 0.25 mm² - IEC 60332-3-22 - 350V DNV CE and current meter marking

Construction:

Conductor:	tinned copper strands with reference to VDE 0812 resp. IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	pairwise, pairs in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Jacket material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Jacket color:	pigeon blue (RAL 5014)

Technical data:

Peak operating voltage:	max. 350 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:



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

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



Possible on request:

- bare copper strands
- alternative color code and jacket color

item no.	no. of pairs	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) • 0.14 mm²				
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
▶ 24 AWG (≈ 14/34) • 0.25 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 7/30) • 1.00 mm²				
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
64450734	7	0.398	10.1	101
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
64451934	19	0.622	15.8	247
64452734	27	0.717	18.2	321
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
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	148
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 available on request

Halogen-free Cables

SABIX® BL 446 C FRNC TP

SABIX® BL - Flexible paired data cable with aluminum pair shield and overall copper shield



Marking for SABIX® BL 446 C FRNC FTP 64462475:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 446 C FRNC FTP 24 x (2 x 0.75 mm²)ST - IEC 60332-3-22 - 300V DNV CE and current meter marking

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	≤ 0.25 mm² = DIN 47100, see page O/26 ≥ 0.34 mm² = white, blue with printed pair number
Stranding:	white conductors, blue twisted to pairs
Pair screen:	alu foil
Stranding:	pairs together in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Wrapping:	PETP foil
Jacket material:	special SABIX® SHF 1 compound acc. to IEC 60092-360
Jacket color:	pigeon blue (RAL 5014)

Outstanding features:

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

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

Technical data:

Peak operating voltage:	max. 300 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Possible on request:

- bare copper strands
- alternative color code and jacket color

item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 24 AWG (≈ 14/34) ▪ 0.25 mm²				
64460225	2	0.244	6.2	36
64460825	8	0.398	10.1	101
64461225	12	0.500	12.7	159
▶ 22 AWG (≈ 7/30) ▪ 0.34 mm²				
64460234	2	0.303	7.7	49
64460434	4	0.362	9.2	82
64460834	8	0.449	11.4	132
64461234	12	0.587	14.9	204

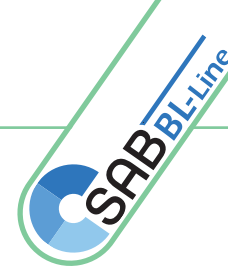
item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
64460475	4	0.445	11.3	122
64462475	24	0.933	23.7	574
▶ 16 AWG (≈ 28/30) ▪ 1.50 mm²				
64461980	19	0.988	25.1	693

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® BL 400 FRNC

SABIX® BL - Flexible control cable 300/500 V



Marking for SABIX® BL 400 FRNC 64001215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 400 FRNC 12 x 1.5 mm² - IEC 60332-3-22 - 300/500V DNV CE and current meter marking

Construction:

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

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	<i>fixed installation:</i> 4 x O.D. <i>free movement</i> 6 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

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

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
► 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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
► 19 AWG (≈ 23/32) ▪ 0.75 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
► 18 AWG (≈ 30/32) ▪ 1.00 mm²				
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
► 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
► 14 AWG (≈ 46/30) ▪ 2.50 mm²				
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 available on request



Possible on request:

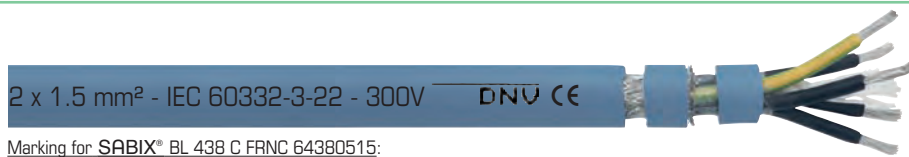
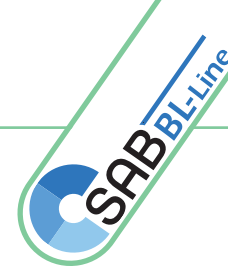
- bare copper strands
- alternative color code and jacket color

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Halogen-free Cables

SABIX® BL 438 C FRNC

SABIX® BL - Flexible control cable with overall tinned copper shield 300/500 V



Marking for SABIX® BL 438 C FRNC 64380515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 438 C FRNC 5 x 1.5 mm² - IEC 60332-3-22 - 300/500V DNV CE and current meter marking

Construction:

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

Outstanding features:

- low smoke halogen-free (LSHF)
 - asbestos-free
 - good EMC characteristics*
 - no flame propagation
 - flame retardant and self-extinguishing
 - flexible
 - for applications
acc. to Hong Kong Convention
ingredients tested acc. to the requirements
of the Hong Kong Convention (2009) of the IMO
 - approvals:
DNV
- *copper braiding should be connected circularly to optimize the EMC characteristics

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
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
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
64380207	2	0.240	6.1	39
64380307	3	0.252	6.4	44
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	148
64381807	18	0.539	13.7	209

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
64380210	1	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
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
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 available on request



Possible on request:

- bare copper strands
- alternative color code and jacket color



Halogen-free Cables

SABIX® BL 402 FRNC

SABIX® BL - Halogen-free flexible wiring cable 0.6/1 kV

0.6/1 kV

SAB BL-Line

® BL 402 FRNC 1.5 mm² - IEC 60332-3-22 - 0.1kV DNV CE



Marking for SABIX® BL 402 FRNC 64020182:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 402 FRNC 1.5 mm² - IEC 60332-3-22 - 0.6/1kV DNV CE and current meter marking

Construction:

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

Outstanding features:

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

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	mm ²	AWG		nominal outer-ø		cable weight ≈lbs/mft
		MCM	(≈)	inch ±5%	mm ±5%	
▶ 64020180	1.00	18	(≈ 30/32)	0.118	3.0	12
▶ 64020182	1.50	16	(≈ 28/30)	0.130	3.3	15
▶ 64020184	2.50	14	(≈ 46/30)	0.146	3.7	22
▶ 64020186	4.00	12	(≈ 52/28)	0.185	4.7	35
▶ 64020187	6.00	10	(≈ 78/28)	0.205	5.2	48
▶ 64020188	10.00	8	(≈ 77/26)	0.252	6.4	81
▶ 64020189	16.00	6	(≈ 122/26)	0.307	7.8	122
▶ 64020190	25.00	4	(≈ 190/26)	0.378	9.6	187
▶ 64020191	35.00	2	(≈ 272/26)	0.433	11.0	257
▶ 64020192	50.00	1	(≈ 400/26)	0.496	12.6	363
▶ 64020193	70.00	2/0	(≈ 543/26)	0.587	14.9	486
▶ 64020194	95.00	3/0	(≈ 484/24)	0.685	17.4	658
▶ 64020195	120.00	4/0	(≈ 589/24)	0.760	19.3	813
▶ 64020196	150.00	250	(≈ 740/24)	0.835	21.2	1014
▶ 64020197	180.00	350	(≈ 902/24)	0.917	23.3	1228
▶ 64020198	240.00	450	(≈ 1220/24)	1.063	27.0	1644

Other dimensions and colors are available on request



Possible on request:

- bare copper strands
- alternative color code and jacket color

Halogen-free Cables

SABIX® BL 408 FRNC

SABIX® BL - Flexible power cable 0.6/1 kV

0.6/1 kV

SAB BL-Line

FRNC 1.5 mm² - IEC 60332-3-22 - 0.6/1kV

DNV CE



Marking for SABIX® BL 408 FRNC 64080182:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 408 FRNC 1.5 mm² - IEC 60332-3-22 - 0.6/1kV DNV CE and current meter marking

Construction:

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

Outstanding features:

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

Technical data:

Nominal voltage:	U ₀ /U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>free movement:</i>	6 x O.D.
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	mm ²	AWG		nominal outer-ø		cable weight ≈ lbs/mft
		MCM	(≈)	inch ±5%	mm ±5%	
▶ 64080180	1.00	18	(≈ 30/32)	0.213	5.4	29
▶ 64080182	1.50	16	(≈ 28/30)	0.224	5.7	34
▶ 64080184	2.50	14	(≈ 46/30)	0.240	6.1	42
▶ 64080186	4.00	12	(≈ 52/28)	0.280	7.1	59
▶ 64080187	6.00	10	(≈ 78/28)	0.299	7.6	74
▶ 64080188	10.00	8	(≈ 77/26)	0.346	8.8	113
▶ 64080189	16.00	6	(≈ 122/26)	0.402	10.2	159
▶ 64080190	25.00	4	(≈ 190/26)	0.472	12.0	232
▶ 64080191	35.00	2	(≈ 272/26)	0.539	13.7	315
▶ 64080192	50.00	1	(≈ 400/26)	0.606	15.4	431
▶ 64080193	70.00	2/0	(≈ 543/26)	0.705	17.9	571
▶ 64080194	95.00	3/0	(≈ 484/24)	0.811	20.6	764
▶ 64080195	120.00	4/0	(≈ 589/24)	0.894	22.7	937
▶ 64080196	150.00	250	(≈ 740/24)	0.972	24.7	1148
▶ 64080197	185.00	350	(≈ 902/24)	1.063	27.0	1389
▶ 64080198	240.00	450	(≈ 1220/24)	1.220	31.0	1845

Other dimensions and colors are available on request



Possible on request:

- bare copper strands
- alternative color code and jacket color

Halogen-free Cables

SABIX® BL 409 C FRNC

SABIX® BL - Flexible power cable with overall copper shield 0.6/1 kV

0.6/1 kV

SAB BL-Line

NC 4.0 mm² - IEC 60332-3-22 - 0.6/1kV

DNV CE



Marking for SABIX® BL 409 C FRNC 64090186:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 409 C FRNC 4,0 mm² - IEC 60332-3-22 - 0.6/1kV DNV CE and current meter marking

Construction:

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

Outstanding features:

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

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

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius:	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
Temperature range:	
static:	-40/+90°C
flexible:	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	mm ²	AWG MCM	nominal outer-ø		cable weight ≈lbs/mft	
			inch ±5%	mm ±5%		
▶ 64090180	1.00	18	(≈ 30/32)	0.228	5.8	37
▶ 64090182	1.50	16	(≈ 28/30)	0.240	6.1	42
▶ 64090184	2.50	14	(≈ 46/30)	0.256	6.5	51
▶ 64090186	4.00	12	(≈ 52/28)	0.295	7.5	70
▶ 64090187	6.00	10	(≈ 78/28)	0.315	8.0	85
▶ 64090188	10.00	8	(≈ 77/26)	0.362	9.2	123
▶ 64090189	16.00	6	(≈ 122/26)	0.417	10.6	169
▶ 64090190	25.00	4	(≈ 190/26)	0.496	12.6	259
▶ 64090191	35.00	2	(≈ 272/26)	0.575	14.6	360
▶ 64090192	50.00	1	(≈ 400/26)	0.642	16.3	481
▶ 64090193	70.00	2/0	(≈ 543/26)	0.740	18.8	628
▶ 64090194	95.00	3/0	(≈ 484/24)	0.846	21.5	834
▶ 64090195	120.00	4/0	(≈ 589/24)	0.925	23.5	1016
▶ 64090196	150.00	250	(≈ 740/24)	1.008	25.6	1233
▶ 64090197	185.00	350	(≈ 902/24)	1.098	27.9	1478
▶ 64090198	240.00	450	(≈ 1220/24)	1.256	31.9	1948

Other dimensions and colors are available on request



Possible on request:

- bare copper strands
- alternative color code and jacket color

Halogen-free Cables

SABIX® BL 410 FRNC

SABIX® BL - Flexible power cable 0.6/1 kV

0.6/1 kV



2 x 1.5 mm² - IEC 60332-3-22 - 300/500V



Marking for SABIX® BL 410 FRNC 64101215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 410 FRNC 12 x 1.5 mm² - IEC 60332-3-22 - 300/500V — DNV CE and current meter marking

Construction:

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

Outstanding features:

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

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>free movement</i>	6 x O.D.
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
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	234
64101215	12	0.654	16.6	273
64101415	14	0.685	17.4	308
64101815	18	0.768	19.5	396
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
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	316
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
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	275
64100740	7	0.669	17.0	349
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
64100260	2	0.508	12.9	193
64100360	3	0.547	13.9	234
64100460	4	0.598	15.2	287
64100560	5	0.669	17.0	359
64100760	7	0.728	18.5	453
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
64100361	3	0.661	16.8	359
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 ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
64100362	3	0.787	20.0	523
64100462	4	0.870	22.1	654
64100562	5	0.972	24.7	818
▶ 4 AWG (≈ 190/26) ▪ 25.00 mm²				
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 mm²				
64100364	3	1.083	27.5	1053
64100464	4	1.197	30.4	1322
▶ 1 AWG (≈ 400/26) ▪ 50.00 mm²				
64100365	3	1.224	31.1	1459
64100465	4	1.350	34.3	1840

Other dimensions and colors are available on request



Possible on request:

- bare copper strands
- alternative color code and jacket color

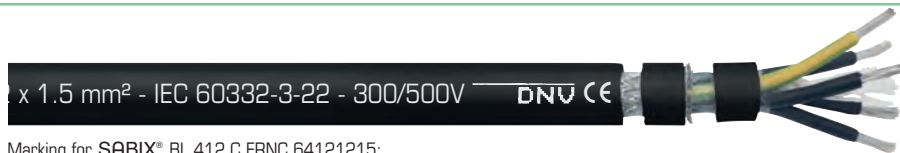
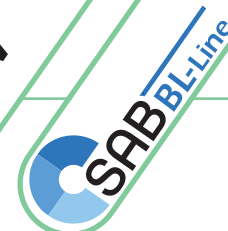


Halogen-free Cables

SABIX® BL 412 C FRNC

SABIX® BL - Flexible power cable with overall tinned copper shield 0.6/1 kV

0.6/1 kV



Marking for SABIX® BL 412 C FRNC 64121215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® BL 412 C FRNC 12 x 1.5mm² - IEC 60332-3-22 - 0.6/1kV DNV CE and current meter marking

Construction:

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

Outstanding features:

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

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

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius:	<i>fixed installation:</i> 4 x O.D. <i>free movement:</i> 6 x O.D.
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Flexibility:	very good
Approvals:	DNV, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
64120215	2	0.370	9.4	83
64120315	3	0.390	9.9	94
64120415	4	0.429	10.9	122
64120515	5	0.476	12.1	152
64120715	7	0.516	13.1	185
64121015	10	0.669	17.0	280
64121215	12	0.689	17.5	312
64121415	14	0.720	18.3	347
64121815	18	0.803	20.4	439
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
64120225	2	0.402	10.2	104
64120325	3	0.433	11.0	128
64120425	4	0.476	12.1	159
64120525	5	0.520	13.2	192
64120725	7	0.579	14.7	253
64121025	10	0.732	18.6	353
64121225	12	0.752	19.1	403
64121425	14	0.795	20.2	459
64121825	18	0.890	22.6	581

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 12 AWG (≈ 52/28) ▪ 4.00 mm²				
64120240	2	0.496	12.6	160
64120340	3	0.524	13.3	186
64120440	4	0.587	14.9	243
64120540	5	0.642	16.3	298
64120740	7	0.705	17.9	380
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm²				
64120260	2	0.543	13.8	204
64120360	3	0.583	14.8	247
64120460	4	0.634	16.1	313
64120560	5	0.705	17.9	381
64120760	7	0.772	19.6	486
▶ 8 AWG (≈ 77/26) ▪ 10.00 mm²				
64120361	3	0.697	17.7	364
64120461	4	0.768	19.5	492
64120561	5	0.843	21.4	573

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 6 AWG (≈ 122/26) ▪ 16.00 mm²				
64120362	3	0.823	20.9	516
64120462	4	0.906	23.0	667
64120562	5	1.008	25.6	827
▶ 4 AWG (≈ 190/26) ▪ 25.00 mm²				
64120363	3	0.992	25.2	757
64120463	4	1.094	27.8	984
64120563	5	1.213	30.8	1213
▶ 2 AWG (≈ 272/26) ▪ 35.00 mm²				
64120364	3	1.118	28.4	1013
64120464	4	1.232	31.3	1329
▶ 1 AWG (≈ 400/26) ▪ 50.00 mm²				
64120365	3	1.260	32.0	1370
64120465	4	1.386	35.2	1799

Other dimensions and colors are available on request



Possible on request:

- bare copper strands
- alternative color code and jacket color

Halogen-free Cables

SABIX® SD 705 FRNC C1

Continuous flex halogen-free data cable with extended temperature range and higher fire protection



ERSEN · SABIX® SD 705 FRNC C1 12 x 0.25 mm² CE



Marking for SABIX® SD 705 FRNC C1 67051225:

SAB BRÖCKSKES · D-VIERSEN · SABIX® SD 705 FRNC C1 12 x 0.25 mm² CE

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Wrapping:	non-woven tape
Jacket material:	SABIX®
Jacket color:	black (RAL 9005)

Outstanding features:

- low smoke halogen-free (LSHF)
- continuous flex
- no flame propagation
- flame retardant and self-extinguishing
- oil and fuel resistant
- good acid and alkalines resistance
- NF C 32-070 C1
- UV resistant jacket

Technical data:

Peak operating voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>flexible application:</i>	6 x O.D.
<i>continuously flexible:</i>	15 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) • 0.14 mm²				
67050214	2	0.126	3.2	9
67050314	3	0.134	3.4	11
67050514	5	0.154	3.9	16
67050714	7	0.177	4.5	22

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 24 AWG (≈ 32/38) • 0.25 mm²				
67050225	2	0.138	3.5	12
67050325	3	0.146	3.7	14
67050425	4	0.157	4.0	17
67051025	10	0.240	6.1	40
67051225	12	0.248	6.3	43
67051425	14	0.260	6.6	48
67051825	18	0.287	7.3	60
67052525	25	0.343	8.7	79

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 42/38) • 0.34 mm²				
67050234	2	0.161	4.1	16
67050534	5	0.209	5.3	29
67050734	7	0.248	6.3	42
67051034	10	0.287	7.3	51
67052534	25	0.437	11.1	121

Other dimensions and colors are available on request

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Halogen-free Cables

SABIX® S 710 FRNC C1

Continuous flex halogen-free control cable with extended temperature range and higher fire protection



Marking for SABIX® S 710 FRNC C1 67101215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® S 710 FRNC C1 12 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Wrapping:	non-woven tape
Jacket material:	SABIX®
Jacket color:	black (RAL 9005)

Outstanding features:

- low smoke halogen-free (LSHF)
- continuous flex
- no flame propagation
- flame retardant and self-extinguishing
- oil and fuel resistant
- good acid and alkalines resistance
- NF C 32-070 C1
- UV resistant jacket

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>flexible application:</i>	6 x O.D.
<i>continuous flex:</i>	15 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
67100205	2	0.252	6.4	42
67100505	5	0.323	8.2	65
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
67100507	5	0.354	9.0	81
67100707	7	0.421	10.7	114
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
67100310	3	0.311	7.9	62
67100510	5	0.366	9.3	92
67100710	7	0.437	11.1	130
67101210	12	0.535	13.6	191
67101810	18	0.634	16.1	273

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
67100215	2	0.339	8.6	75
67100315	3	0.362	9.2	85
67100415	4	0.382	9.7	101
67100515	5	0.429	10.9	127
67100715	7	0.516	13.1	185
67101215	12	0.622	15.8	262
67101815	18	0.736	18.7	378
67102415	24	0.858	21.8	484
67102515	25	0.870	22.1	494
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm²				
67100325	3	0.425	10.8	123
67100425	4	0.476	12.1	161
67100525	5	0.531	13.5	198
67100725	7	0.622	15.8	274
67101225	12	0.756	19.2	392

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
▶ 12 AWG (≈ 224/34) ▪ 4.00 mm²				
67100440	4	0.531	13.5	216
▶ 10 AWG (≈ 183/32) ▪ 6.00 mm²				
67100460	4	0.606	15.4	287
▶ 8 AWG (≈ 320/32) ▪ 10.00 mm²				
67100461	4	0.756	19.2	517
▶ 6 AWG (≈ 504/32) ▪ 16.00 mm²				
67100462	4	0.870	22.1	675
▶ 1 AWG (≈ 703/28) ▪ 50.00 mm²				
67100465	4	1.413	35.9	1846

Other dimensions and colors are available on request

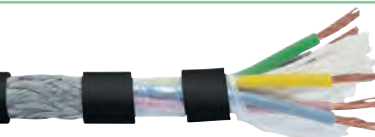
Halogen-free Cables

SABIX® SD 715 FRNC C1

Continuous flex halogen-free shielded data cable with extended temperature range and higher fire protection



SABIX® SD 715 C FRNC C1 7 x 0.25 mm² CE



Marking for SABIX® SD 715 C FRNC C1 67150725:

SAB BRÖCKSKES · D-VIERSEN · SABIX® SD 715 C FRNC C1 7 x 0.25 mm² CE

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	in layers
Wrapping:	non-woven tape
Shielding:	tinned copper braiding, optical coverage ≥ 85%
Wrapping:	non-woven tape
Jacket material:	SABIX®
Jacket color:	black (RAL 9005)

Outstanding features:

- low smoke halogen-free (LSHF)
- continuous flex
- good EMC characteristics*
- no flame propagation
- flame retardant and self-extinguishing
- oil and fuel resistant
- good acid and alkalines resistance
- NF C 32-070 C1
- UV resistant jacket

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

Technical data:

Nominal voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	
<i>fixed installation:</i>	4 x O.D.
<i>flexible application:</i>	6 x O.D.
<i>continuous flex:</i>	15 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range:	
<i>static:</i>	-40/+90°C
<i>flexible:</i>	-30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) • 0.14 mm²				
67150214	2	0.146	3.7	15
67150314	3	0.154	3.9	17
67151214	12	0.272	6.9	46
67151814	18	0.291	7.4	59
67152514	25	0.350	8.9	80
▶ 24 AWG (≈ 32/38) • 0.25 mm²				
67150225	2	0.157	4.0	17
67150425	4	0.177	4.5	24
67150525	5	0.205	5.2	31
67150625	6	0.244	6.2	42
67150725	7	0.260	6.6	48
67150825	8	0.280	7.1	54
67151225	12	0.307	7.8	65
67151825	18	0.378	9.6	103
67152525	25	0.390	9.9	123

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 42/38) • 0.34 mm²				
67150434	4	0.213	5.4	32
67150534	5	0.244	6.2	42
67150734	7	0.276	7.0	54
67151234	12	0.335	8.5	79
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
67150205	2	0.205	5.2	29
67150405	4	0.240	6.1	42
67150505	5	0.260	6.6	50

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
67150475	4	0.268	6.8	53
67150575	5	0.291	7.4	63
67150775	7	0.362	9.2	95
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
67150715	7	0.417	10.6	146

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® S 712 FRNC C1

Continuous flex halogen-free shielded control cable with extended temperature range and higher fire protection



Marking for SABIX® S 712 C FRNC C1 67121215:

SAB BRÖCKSKES · D-VIERSEN · SABIX® S 712 C FRNC C1 12 x 1.5 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	in layers
Wrapping:	non-woven tape
Shielding:	tinned copper braiding optical coverage ≥ 85%
Wrapping:	non-woven tape
Jacket material:	SABIX®
Jacket color:	black (RAL 9005)

Outstanding features:

- low smoke halogen-free (LSHF)
- continuous flex
- good EMC characteristics*
- no flame propagation
- flame retardant and self-extinguishing
- oil and fuel resistant
- good acid and alkalines resistance
- NF C 32-070 C1
- UV resistant jacket

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

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius:	<i>fixed installation:</i> 4 x O.D. <i>flexible application:</i> 6 x O.D. <i>continuous flex:</i> 15 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

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item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
67120205	2	0.280	7.1	54
67120505	5	0.346	8.8	81
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
67120507	5	0.378	9.6	99
67120707	7	0.449	11.4	142
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
67120510	5	0.386	9.8	109
67120710	7	0.480	12.2	168
67121210	12	0.563	14.3	226
67121810	18	0.669	17.0	330

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
67120215	2	0.350	8.9	88
67120315	3	0.374	9.5	100
67120415	4	0.413	10.5	129
67120515	5	0.472	12.0	165
67121215	12	0.657	16.7	319
67121815	18	0.772	19.6	444
67122515	25	0.909	23.1	581
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
67120225	2	0.429	10.9	135
67120325	3	0.453	11.5	153
67120425	4	0.504	12.8	193
67120525	5	0.559	14.2	233
67121225	12	0.795	20.2	468

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
▶ 12 AWG (≈ 224/34) • 4.00 mm²				
67120440	4	0.559	14.2	251
67120540	5	0.634	16.1	323
67120740	7	0.744	18.9	438
▶ 10 AWG (≈ 183/32) • 6.00 mm²				
67120260	2	0.551	14.0	228
67120460	4	0.654	16.6	345
▶ 6 AWG (≈ 504/32) • 16.00 mm²				
67120462	4	0.909	23.1	760
▶ 4 AWG (≈ 760/32) • 25.00 mm²				
67120463	4	1.071	27.2	1085
▶ 2 AWG (≈ 1083/32) • 35.00 mm²				
67120464	4	1.217	30.9	1459

Other dimensions and colors are available on request

Halogen-free Cables

SABIX® SD 745 FRNC C1 TP

Continuous flex halogen-free shielded twisted pairs data cable with extended temperature range and higher fire protection



Marking for SABIX® SD 745 C FRNC C1 TP 67450350:

SAB BRÖCKSKES · D-VIERSEN · SABIX® SD 745 C FRNC C1 TP 3 x 2 x 0.50 mm² CE

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Color code:	DIN 47100, see page O/26
Stranding:	pairwise, pairs in layers
Wrapping:	non-woven tape
Shielding:	tinned copper braiding, optical coverage ≥ 85%
Wrapping:	non-woven tape
Jacket material:	SABIX®
Jacket color:	black (RAL 9005)

Outstanding features:

- low smoke halogen-free (LSHF)
- continuous flex
- good EMC characteristics*
- no flame propagation
- flame retardant and self-extinguishing
- oil and fuel resistant
- good acid and alkalines resistance
- NF C 32-070 C1
- UV resistant jacket

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

Technical data:

Nominal voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	<i>fixed installation</i> 4 x O.D. <i>flexible application:</i> 6 x O.D. <i>continuous flex:</i> 15 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg (100 kGy)
Temperature range:	<i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 + NF C 32-070 C1
Corrosivity:	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Smoke density:	acc. to IEC 61034 + VDE 0482-1034
Toxicity:	acc. to EN 50305
Oil and fuel resistance:	acc. to EN 50264-1 + VDE 0260-264-1
UV, ozone and weather resistance:	good
Mycological resistance:	good
Approvals:	CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 26 AWG (≈ 18/38) ▪ 0.14 mm²				
67450214	2	0.193	4.9	36
67450414	4	0.244	6.2	55
67450514	5	0.264	6.7	65
67450614	6	0.272	6.9	69
67451014	10	0.343	8.7	102
67451414	14	0.402	10.2	143
▶ 24 AWG (≈ 32/38) ▪ 0.25 mm²				
67450225	2	0.213	5.4	43
67450425	4	0.272	6.9	66
67450625	6	0.299	7.6	87
67450725	7	0.362	9.2	115
67450825	8	0.378	9.6	131
67451025	10	0.386	9.8	143
67451225	12	0.421	10.7	167
67451425	14	0.445	11.3	185
67451625	16	0.461	11.7	199

item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 22 AWG (≈ 42/38) ▪ 0.34 mm²				
67450234	2	0.256	6.5	61
67450634	6	0.370	9.4	125
67450734	7	0.394	10.0	154
67451034	10	0.457	11.6	191
67451834	18	0.587	14.9	314
67451934	19	0.587	14.9	329
67452734	27	0.705	17.9	461
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
67450250	2	0.280	7.1	71
67450350	3	0.307	7.8	88
67450450	4	0.366	9.3	115
67451050	10	0.524	13.3	255
67451850	18	0.673	17.1	447
67452550	25	0.764	19.4	568

item no.	no. of pairs	nominal outer-ø inch ±10%	mm ±10%	cable weight ≈lbs/mft
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
67450275	2	0.315	8.0	92
67450475	4	0.425	10.8	166
67450875	8	0.638	16.2	352
67451075	10	0.602	15.3	352

Other dimensions and colors are available on request