

# Highly dynamic cables



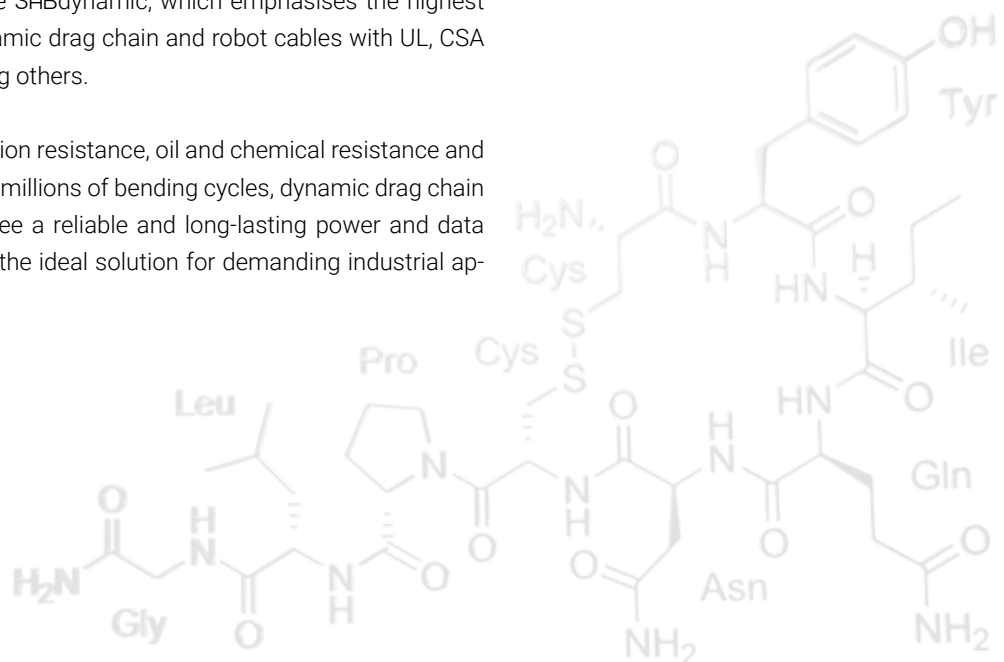
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Cables for dynamic applications are indispensable in industry wherever moving machine and system parts need to be reliably supplied with power, signals or data. They are specially designed for permanent bending and torsional loads. These cables usually have a robust polyurethane (PUR) sheath and are primarily used in industrial environments that require high mechanical loads, continuous movement and demanding conditions.



In order to remain at the cutting edge of technology, SAB Bröckskes continuously develops and optimises its range of dynamic cables together with its customers. These cables are specifically designed for applications with extreme alternating bending stresses. An outstanding product in the SABflex class is the SABdynamic, which emphasises the highest quality standards for dynamic drag chain and robot cables with UL, CSA and VDE approvals, among others.

Thanks to their high abrasion resistance, oil and chemical resistance and exceptional flexibility over millions of bending cycles, dynamic drag chain and robot cables guarantee a reliable and long-lasting power and data supply. This makes them the ideal solution for demanding industrial applications.



### Typical areas of application for dynamic drag chain and robot cables

#### Automation & Robotics

Used in industrial robots, handling systems and assembly and production lines. Also suitable for linear axes and multi-axis movements.

#### Machine tools

Reliable supply in CNC milling and turning machines, grinding and drilling machines as well as for moving spindles and slides.

#### Conveying & storage technology

Indispensable in storage and retrieval machines, high-bay warehouses, automated guided vehicles (AGVs) and conveyor belts with flexible control.

#### Crane & lifting technology

Proven in bridge and gantry cranes, lift and hoist systems as well as in telescopic arms and swivelling systems.

#### Packaging & food industry

Used in highly dynamic packaging machines, filling systems with flexible motion sequences and in washing and cleaning systems with frequent changes of direction.

#### Medical technology & laboratory automation

Can be found in imaging systems (e.g. MRI, CT), high-precision laboratory robots and analysing and dosing systems.

#### Automotive & supplier industry

Used in car body and assembly systems, painting robots and welding cells as well as in test benches with moving components.

#### Wood & plastics processing

Ideal for injection moulding machines with moving moulds, sawing and milling robots and flexible machining centres.



» You will find guidelines for the laying of cables in cable tracks in chapter N  
» You will find further information about the safe application of cables in chapter N



# Highly dynamic cables

## Selection table



			Cable type	SD 99 <i>ECO</i>	S 99 <i>ECO</i>	SAB <i>organic</i> S 1000 Data	SAB <i>organic</i> S 1000 Control	SD 200	S 200	SD 200 C	S 200 C	SD 200 C TP	SABdynamic 900 Data	SABdynamic 900 Control	SABdynamic 910 Data	SABdynamic 910 Control	S 180 HT	S 180 C HT
Application	for robot applications			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	for cable tracks/ <i>short travelling distance</i>			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	for cable tracks/ <i>long travelling distance</i>									●	●	●			●	●		
	for cable tracks/ <i>high dynamic</i>							●	●	●	●	●	●	●				
	Data cables			●		●		●		●		●	●		●			
	Control cables				●		●		●		●			●		●	●	●
	Screened			●	●	●	●			●	●	●	●	●	●	●		●
	Twisted pair stranding			●		●						●	●		●			
Temperature range fixed laying*	+200 °C																	●
	+180 °C																	●
	+125 °C						●	●										●
	+ 90 °C			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	- 50 °C			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Voltage	Peak operating voltage max. 350 V			●		●		●		●		●	●		●			
	Nominal voltage 300/500 V				●		●		●		●			●		●		
	Nominal voltage 0,6/1 kV																●	●
	Voltage UL/cUL 300 V												●		●			
	Voltage UL/cUL 600 V													●		●		
	Testing voltage 1500 V			●		●		●		●		●		●		●		
	Testing voltage 2000 V				●		●		●		●		●	●	●	●		
	Testing voltage 4000 V																●	●
Characteristics, standards and approvals	Anticapacitance			●	●	●	●						●	●	●	●		
	Flexible at low temperature			●	●	●	●	●	●	●	●	●	●	●	●	●		
	PWIS uncritical**			●	●	●	●	●	●	●	●	●	●	●	●	●		
	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1			●	●	●	●	●	●	●	●	●	●	●	●	●		
	Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2					●	●						●	●	●	●		
	Fire performance acc. to UL/cUL FT1, FT2												●	●	●	●		
	UL/cUL recognized												●	●	●	●		
	Very good oil resistance acc. to EN 50363-10-2 + VDE 0207-363-10-2			●	●	●	●	●	●	●	●	●	●	●	●	●		
	Good chemical resistance			●	●	●	●	●	●	●	●	●	●	●	●	●		
	Sunlight resistance acc. to HD 605			●	●	●	●						●	●	●	●		
	Ozone resistance acc. to DIN EN 50396			●	●	●	●						●	●	●	●		
	Salt water resistance acc. to UL 1309			●	●	●	●						●	●	●	●		
	PFAS free			●	●	●	●	●	●	●	●	●	●	●	●	●		
Application	at acceleration values of	up to 05 m/s <sup>2</sup>	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B
		up to 20 m/s <sup>2</sup>	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B
		up to 40 m/s <sup>2</sup>	B	B	A	A	A	A	A	A	A	A	A	A	A	A	C	C
		more than 40 m/s <sup>2</sup>	B	B	B	B	A	A	A	A	A	A	B	B	B	B	C	C
	at path feed rates of	up to 01 m/s	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		up to 03 m/s	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		up to 10 m/s	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B
		more than 10 m/s	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C
	for cable tracks with a length of	up to 05 m	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		up to 10 m	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		up to 25 m	B	B	A	A	A	A	A	A	A	A	A	A	A	A	B	B
		more than 25 m	B	B	B	B	A	A	A	A	A	A	B	B	A	A	C	C

from limited time of use  
 to short-time use

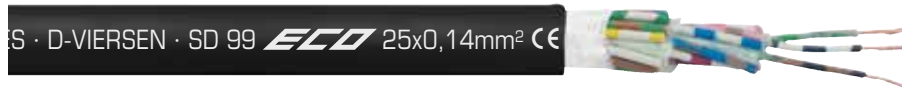
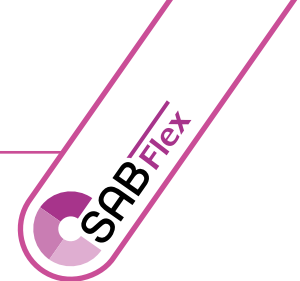
\*\*PWIS = paint-wetting impairment substances

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

# Highly dynamic cables

## SD 99 *ECO*

continuously flexible SABIX®/PUR data cable with coloured cores



marking example:

SAB BRÜCKSKES · D-VIERSEN · SD 99 *ECO* 25x0,14mm² CE

### Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Sheath material:	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » antipacitance
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » high abrasion resistance
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V acc. to VDE 0812
Testing voltage:	core/core 1500 V
Torsion angle:	± 60°/1 m
Min. bending radius fixed laying:	3 x d
flexible application:	7,5 x d
Temperature range fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous Flexibility:	very good
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
SD 99 ECO - multi-core cable unscreened					
09730402	4 x 0,25	0,11	3,6	9,6	18
09730702	7 x 0,25	0,11	4,6	16,8	31
09730203	2 x 0,34	0,11	3,2	6,6	13
09730403	4 x 0,34	0,11	3,9	13,2	22

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
SD 99 C ECO - multi-core cable with overall copper screen					
09830801	8 x 0,14	0,11	4,8	24,4	34
09831201	12 x 0,14	0,11	5,4	31,6	43
09830402	4 x 0,25	0,11	4,1	20,0	27
09830502	5 x 0,25	0,11	4,5	25,9	34
09831202	12 x 0,25	0,11	6,3	46,5	59
09830403	4 x 0,34	0,11	4,4	27,1	33
09830503	5 x 0,34	0,11	4,7	30,3	38
09831803	18 x 0,34	0,11	7,7	83,1	101
09830550	5 x 0,50	0,11	5,5	40,0	51
09830475	4 x 0,75	0,11	6,2	46,4	62

Other dimensions and colours are possible on request.

item no.	no. of pairs x cross section n x 2 x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
SD 99 C TP ECO - multi-pair cable with overall copper screen					
09890314	3 x 2 x 0,14	0,11	4,8	21,8	30
09891014	10 x 2 x 0,14	0,11	7,6	49,7	69
09890225	2 x 2 x 0,25	0,11	4,8	23,6	33
09890425	4 x 2 x 0,25	0,11	6,3	36,9	49
09890525	5 x 2 x 0,25	0,11	6,8	43,7	60
09890625	6 x 2 x 0,25	0,11	7,0	51,1	68
09890434	4 x 2 x 0,34	0,11	6,8	46,1	58
09890250	2 x 2 x 0,50	0,11	6,0	36,9	50
09890350	3 x 2 x 0,50	0,11	6,8	48,5	65

Other dimensions and colours are possible on request.

### The SD 99 *ECO* is available with

- » Multi-core cables:  
Cross sections from 0.14 mm² to 0.75 mm²
- » Number of cores from 2 to 50
- » Number of pairs from 1 to 48

# Highly dynamic cables

## S 99 *ECO*

continuously flexible SABIX®/PUR control cable with numbered cores



marking example:

SAB BRÜCKSKES · D-VIERSEN · S 99 *ECO* 12x1,5mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	SABIX®
<b>Colour code from 2 conductors:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:

- » antipacitance
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » high abrasion resistance
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Torsion angle:</b>	± 60°/1 m
<b>Min. bending radius</b> <i>fixed laying:</i>	3 x d
<i>flexible application:</i>	7,5 x d
<b>Temperature range</b> <i>fixed laying:</i>	-50/+90 °C
<i>flexible application:</i>	-40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Oil resistance:</b>	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Continuous Flexibility:</b>	very good
<b>Sunlight resistance:</b>	acc. to HD 605
<b>Ozone resistance:</b>	acc. to DIN EN 50396
<b>Salt water resistance:</b>	acc. to UL 1309
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>S 99 ECO - multi-core cable unscreened</b>					
09740505	5 x 0,50	0,16	5,4	24,0	43
09740705	7 x 0,50	0,16	6,4	33,6	60
09741205	12 x 0,50	0,16	7,6	57,6	86
09741805	18 x 0,50	0,16	9,0	86,4	125
09742505	25 x 0,50	0,16	11,0	120,0	173
09740207	2 x 0,75	0,16	4,9	14,4	30
09740307	3 x 0,75	0,16	5,2	21,6	37
09740407	4 x 0,75	0,16	5,6	28,8	48
09741807	18 x 0,75	0,16	10,6	129,6	184
09740210	2 x 1,00	0,16	5,1	19,2	35
09741210	12 x 1,00	0,16	9,1	115,2	146
09741810	18 x 1,00	0,16	11,0	172,8	226
09740215	2 x 1,50	0,16	5,7	28,8	47
09740315	3 x 1,50	0,16	6,0	43,2	63
09740415	4 x 1,50	0,16	6,5	57,6	78
09740515	5 x 1,50	0,16	7,3	72,0	99
09740225	2 x 2,50	0,16	6,7	48,0	67
09740525	5 x 2,50	0,16	8,5	120,0	140
09740361	3 x 10,0	0,21	13,6	288,0	394
09740162	1 x 16,0	0,21	7,9	153,6	169
09740163	1 x 25,0	0,21	9,3	240,0	250
09740164	1 x 35,0	0,21	11,1	336,0	356

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
<b>S 99 C ECO - multi-core cable with overall copper screen</b>					
09841205	12 x 0,50	0,16	8,1	81,4	103
09840707	7 x 0,75	0,16	7,7	74,1	98
09842510	25 x 1,00	0,16	14,7	336,9	384
09840315	3 x 1,50	0,16	6,5	60,9	77
09840415	4 x 1,50	0,16	7,0	77,3	93
09845015	50 x 1,50	0,16	21,9	859,9	953
09840325	3 x 2,50	0,16	8,0	95,8	117

Other dimensions and colours are possible on request.

### The S 99 *ECO* is available with

- » Multi-core cables:  
Cross sections from 0.50 mm² to 50.0 mm²
- » Single conductors: Cross sections up to 300,0 mm²
- » Number of cores from 1 to 65

# Highly dynamic cables

## SABorganic S 1000 Data

extremely flexible SABIX®/PUR data cable  
with coloured cores for continuous movement

reduced  
carbon footprint

SABorganic

CE RoHS PFAS  
FREE

SABorganic S 1000 Data 25x0,14mm² 27892501 CE



marking example:

SABorganic S 1000 Data 25x0,14mm² 27892501 CE

**Application:** The data cable SABorganic S 1000 Data is suitable for cable chains and equipped with an outer sheath made of bio-based PUR material that is mainly obtained of sustainable resources. This reduces the carbon footprint by a quarter compared to conventional types. The SABorganic S 1000 Data is particularly suitable for use in cable chains and moveable machine parts. The halogen-free and flame-retardant characteristics of the new sheath material reduce potential fire hazards. The SABorganic S 1000 Data is also resistant against mineral oil-based lubricants and many chemicals.

### Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Sheath material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » reduced carbon footprint
- » antiparacitance
- » sustainable plastic materials
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » flame retardant and self-extinguishing
- » travel > 10 m is possible
- » high abrasion resistance
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Torsion angle:	± 60°/1 m
Min. bending radius	
fixed laying:	3 x d
flexible application:	7,5 x d
Temperature range	
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
limited time of use:	+125 °C (up to 2000h)
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous flexibility:	very good
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable unscreened					
27740402	4 x 0,25	0,11	3,6	9,6	18
27740702	7 x 0,25	0,11	4,6	16,8	31
27740403	4 x 0,34	0,11	3,9	13,2	22

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable with overall copper screen					
27841201	12 x 0,14	0,11	5,4	31,6	43
27840402	4 x 0,25	0,11	4,1	20,0	27
27840502	5 x 0,25	0,11	4,5	25,9	34
27841803	18 x 0,34	0,11	7,7	83,1	101
27840550	5 x 0,50	0,16	5,5	40,0	51
27840475	4 x 0,75	0,16	6,2	46,4	62

Other dimensions and colours are possible on request.

item no.	no. of pairs x cross section n x 2 x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-pair cable with overall copper screen					
27890314	3 x 2 x 0,14	0,11	4,8	21,8	30
27891014	10 x 2 x 0,14	0,11	7,6	49,7	69
27890225	2 x 2 x 0,25	0,11	4,8	23,6	33
27890525	5 x 2 x 0,25	0,11	6,8	43,7	60
27890625	6 x 2 x 0,25	0,11	7,0	50,1	68
27890434	4 x 2 x 0,34	0,11	6,8	46,1	58
27890250	2 x 2 x 0,50	0,16	6,0	36,9	50
27890350	3 x 2 x 0,50	0,16	6,8	48,5	65

Other dimensions and colours are possible on request.



# Highly dynamic cables

## SABorganic S 1000 Control

extremely flexible SABIX®/PUR control cable  
with numbered cores for continuous movement

reduced  
carbon footprint

SABorganic

SABorganic S 1000 Control 12x1,5mm<sup>2</sup> 27741215 CE



marking example:

SABorganic S 1000 Control 12x1,5mm<sup>2</sup> 27741215 CE

**Application:** The control cable SABorganic S 1000 Control is suitable for cable chains and equipped with an outer sheath made of bio-based PUR material that is mainly obtained of sustainable resources. This reduces the carbon footprint by a quarter compared to conventional types. The SABorganic S 1000 Control is particularly suitable for use in cable chains and moveable machine parts. The halogen-free and flame-retardant characteristics of the new sheath material reduce potential fire hazards. The SABorganic S 1000 Control is also resistant against mineral oil-based lubricants and many chemicals.

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Sheath material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	grey (RAL 7000)

### Outstanding features:

- » reduced carbon footprint
- » antipacitance
- » sustainable plastic materials
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » flame retardant and self-extinguishing
- » travel > 10 m is possible
- » high abrasion resistance
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Torsion angle:	± 60°/1 m
Min. bending radius	
fixed laying:	3 x d
flexible application:	7,5 x d
Temperature range	
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
limited time of use:	+125 °C (up to 2000h)
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous flexibility:	very good
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable unscreened					
27740505	5 x 0,50	0,16	5,4	24,0	43
27740705	7 x 0,50	0,16	6,4	33,6	60
27741205	12 x 0,50	0,16	7,6	57,6	86
27741805	18 x 0,50	0,16	9,0	86,4	125
27742505	25 x 0,50	0,16	11,0	120,0	173
27741210	12 x 1,00	0,16	9,1	115,2	148
27741810	18 x 1,00	0,16	11,0	172,8	226
27740315	3 x 1,50	0,16	6,0	43,2	63
27740515	5 x 1,50	0,16	7,3	72,0	99
27740361	3 x 10,0	0,21	13,6	288,0	394

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable with overall copper screen					
27841205	12 x 0,50	0,16	8,1	81,4	103
27840707	7 x 0,75	0,16	7,7	74,1	98
27842510	25 x 1,00	0,16	14,7	336,9	384
27840315	3 x 1,50	0,16	6,5	60,9	77
27840325	3 x 2,50	0,16	8,0	95,8	117

Other dimensions and colours are possible on request.

# Highly dynamic cables

## SD 200

extremely flexible TPE/PUR data cable with coloured cores for continuous movement



BRÜCKSKES · D-VIERSEN · SD 200 25 x 0,14 mm<sup>2</sup> CE



marking example:

SAB BRÜCKSKES · D-VIERSEN · SD 200 25 x 0,14 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	TPE
Colour code:	with reference to DIN 47100
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Sheath material:	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	grey (RAL 7032)

### Outstanding features:

- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » travel > 10 m is possible
- » high abrasion resistance
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V acc. to VDE 0812
Testing voltage:	core/core 1500 V
Min. bending radius <i>continuously flexible:</i>	7,5 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg
Temperature range <i>fixed laying:</i> <i>flexible application:</i>	-50/+90 °C -40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous Flexibility:	very good
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07740201	2 x 0,14	0,11	2,8	2,7	9
07740301	3 x 0,14	0,11	2,9	4,0	11
07740401	4 x 0,14	0,11	3,2	5,4	16
07740501	5 x 0,14	0,11	3,6	6,7	17
07740701	7 x 0,14	0,11	4,2	9,4	22
07741001	10 x 0,14	0,11	4,9	13,4	28
07741201	12 x 0,14	0,11	5,0	16,1	32
07741401	14 x 0,14	0,11	5,2	18,8	36
07741801	18 x 0,14	0,11	5,9	24,2	46
07742501	25 x 0,14	0,11	7,1	33,6	63
07743201	32 x 0,14	0,11	7,6	43,0	78
07740202	2 x 0,25	0,11	3,1	4,8	12
07740302	3 x 0,25	0,11	3,3	7,2	15
07740402	4 x 0,25	0,11	3,7	9,6	19
07740502	5 x 0,25	0,11	4,1	12,0	24
07740702	7 x 0,25	0,11	4,7	16,8	32

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07741202	12 x 0,25	0,11	5,7	28,8	47
07741402	14 x 0,25	0,11	5,9	33,6	54
07741802	18 x 0,25	0,11	6,8	43,2	71
07742502	25 x 0,25	0,11	8,1	60,0	94
07743202	32 x 0,25	0,11	8,9	76,8	120
07740203	2 x 0,34	0,11	3,3	6,5	17
07740303	3 x 0,34	0,11	3,7	9,8	19
07740403	4 x 0,34	0,11	4,0	13,1	23
07740503	5 x 0,34	0,11	4,3	16,3	30
07740703	7 x 0,34	0,11	5,0	22,8	39
07741003	10 x 0,34	0,11	5,9	32,6	50
07741203	12 x 0,34	0,11	6,3	39,2	60
07741403	14 x 0,34	0,11	6,6	45,7	68
07741803	18 x 0,34	0,11	7,3	58,8	84
07742503	25 x 0,34	0,11	8,9	81,6	118
07743203	32 x 0,34	0,11	9,5	104,4	147

Other dimensions and colours are possible on request.

### Possible on request:

In dimensions  
0,50 mm<sup>2</sup> and 0,75 mm<sup>2</sup>

# Highly dynamic cables

## S 200

extremely flexible TPE/PUR control cable with numbered cores for continuous movement



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 1 x 10,0 mm² Cc



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 12 x 1,5 mm² Cc

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code from 2 conductors:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	grey (RAL 7000)

### Outstanding features:

- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » travel > 10 m is possible
- » high abrasion resistance
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius continuously flexible:</b>	7,5 x d
<b>Radiation resistance:</b>	1 x 10 <sup>7</sup> cJ/kg
<b>Temperature range fixed laying:</b>	-50/+90 °C
<b>flexible application:</b>	-40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Oil resistance:</b>	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Continuous Flexibility:</b>	very good
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Also available as hybrid cable for example

3G1,0 + 16 x 0,34 mm <sup>2</sup>	Peak operating voltage
3G1,0 + 8 x 0,34 mm <sup>2</sup>	of data conductors:
1G0,5 + 4 x 0,34 mm <sup>2</sup>	max. 500 V

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07740205	2 x 0,50	0,16	4,9	9,6	28
07740305	3 x 0,50	0,16	5,1	14,4	34
07740405	4 x 0,50	0,16	5,5	19,2	41
07740505	5 x 0,50	0,16	6,0	24,0	51
07740705	7 x 0,50	0,16	6,9	33,6	69
07741205	12 x 0,50	0,16	8,3	57,6	99
07741805	18 x 0,50	0,16	9,9	86,4	143
07742505	25 x 0,50	0,16	11,9	120,0	197
07743605	36 x 0,50	0,16	13,7	172,8	282
07745005	50 x 0,50	0,16	16,1	240,0	381
07746505	65 x 0,50	0,16	18,2	312,0	478
07740207	2 x 0,75	0,16	5,4	14,4	36
07740307	3 x 0,75	0,16	5,7	21,6	44
07740407	4 x 0,75	0,16	6,1	28,8	54
07740507	5 x 0,75	0,16	6,7	36,0	67
07740707	7 x 0,75	0,16	7,9	50,4	93
07741207	12 x 0,75	0,16	9,6	86,4	137

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07741807	18 x 0,75	0,16	11,3	129,6	202
07742507	25 x 0,75	0,16	13,9	180,0	279
07743607	36 x 0,75	0,16	15,4	259,2	384
07745007	50 x 0,75	0,16	18,4	360,0	528
07746507	65 x 0,75	0,16	20,8	468,0	688
07740210	2 x 1,00	0,16	5,8	19,2	45
07740310	3 x 1,00	0,16	6,1	28,8	54
07740410	4 x 1,00	0,16	6,6	38,4	67
07740510	5 x 1,00	0,16	7,2	48,0	82
07740710	7 x 1,00	0,16	8,6	67,2	116
07741210	12 x 1,00	0,16	10,4	115,2	173
07741810	18 x 1,00	0,16	12,3	172,8	256
07742510	25 x 1,00	0,16	15,1	240,0	353
07743610	36 x 1,00	0,16	17,0	345,6	496
07745010	50 x 1,00	0,16	20,3	480,0	682
07746510	65 x 1,00	0,16	22,9	624,0	885

Continued on next page

# Highly dynamic cables

## S 200

extremely flexible TPE/PUR control cable with numbered cores for continuous movement



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 1 x 10,0 mm² Cc



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 12 x 1,5 mm² Cc

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07740115	1 x 1,50	0,16	4,0	14,4	25
07740215	2 x 1,50	0,16	6,4	28,8	57
07740315	3 x 1,50	0,16	6,7	43,2	70
07740415	4 x 1,50	0,16	7,3	57,6	89
07740515	5 x 1,50	0,16	8,0	72,0	110
07740715	7 x 1,50	0,16	9,6	100,8	159
07741215	12 x 1,50	0,16	11,8	172,8	242
07741815	18 x 1,50	0,16	14,2	259,2	362
07742515	25 x 1,50	0,16	17,1	360,0	490
07743615	36 x 1,50	0,16	19,3	518,4	691
07745015	50 x 1,50	0,16	23,0	720,0	950
07746515	65 x 1,50	0,16	26,0	936,0	1240
07740125	1 x 2,50	0,16	4,7	24,0	39
07740225	2 x 2,50	0,16	7,8	48,0	85
07740325	3 x 2,50	0,16	8,3	72,0	110
07740425	4 x 2,50	0,16	9,2	96,0	142
07740525	5 x 2,50	0,16	10,2	120,0	175
07740725	7 x 2,50	0,16	12,2	168,0	256
07741225	12 x 2,50	0,16	15,4	288,0	399
07741825	18 x 2,50	0,16	18,1	432,0	588
07742525	25 x 2,50	0,16	22,1	600,0	802
07743625	36 x 2,50	0,16	24,8	864,0	1128
07740140	1 x 4,00	0,16	5,4	38,4	56
07740240	2 x 4,00	0,16	9,3	76,8	129
07740340	3 x 4,00	0,16	9,8	115,2	172
07740440	4 x 4,00	0,16	10,8	153,6	217
07740540	5 x 4,00	0,16	12,1	192,0	268
07740740	7 x 4,00	0,16	14,6	268,8	394
07740160	1 x 6,00	0,21	6,1	57,6	76

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07740260	2 x 6,00	0,21	10,8	115,2	176
07740360	3 x 6,00	0,21	11,7	172,8	246
07740460	4 x 6,00	0,21	12,8	230,4	316
07740560	5 x 6,00	0,21	14,5	288,0	388
07740760	7 x 6,00	0,21	17,3	403,2	504
07740161	1 x 10,0	0,21	7,1	96,0	120
07740361	3 x 10,0	0,21	14,1	288,0	395
07740461	4 x 10,0	0,21	15,8	384,0	507
07740561	5 x 10,0	0,21	17,2	480,0	610
07740162	1 x 16,0	0,21	8,3	153,6	177
07740362	3 x 16,0	0,21	17,0	460,8	597
07740462	4 x 16,0	0,21	19,0	614,4	782
07740562	5 x 16,0	0,21	21,2	768,0	981
07740163	1 x 25,0	0,21	9,9	240,0	263
07740363	3 x 25,0	0,21	20,6	720,0	848
07740463	4 x 25,0	0,21	22,8	960,0	1155
07740563	5 x 25,0	0,21	25,4	1200,0	1359
07740164	1 x 35,0	0,21	11,5	336,0	367
07740464	4 x 35,0	0,21	26,4	1344,0	1533
07740564	5 x 35,0	0,21	29,8	1680,0	1894
07740165	1 x 50,0	0,31	14,0	480,0	538
07740465	4 x 50,0	0,31	31,8	1920,0	2266
07740166	1 x 70,0	0,31	16,7	672,0	754
07740167	1 x 95,0	0,31	20,5	912,0	1028
07740168	1 x 120,0	0,31	21,5	1152,0	1260
07740169	1 x 150,0	0,31	24,6	1440,0	1618
07740170	1 x 185,0	0,41	26,7	1776,0	1942
07740171	1 x 240,0	0,41	30,1	2304,0	2483

Other dimensions and colours are possible on request.

### Possible on request:

Singlecore with green-yellow insulation  
and black outer sheath or 0,6/1 kV

# Highly dynamic cables

## SD 200 C

continuously flexible TPE/PUR data cable with coloured cores and overall copper screen



marking example:

SAB BRÜCKSKES · D-VIERSEN · SD 200 C 25 x 0,14 mm<sup>2</sup> CE

### Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	TPE
Colour code:	with reference to DIN 47100
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Screen:	tinned copper braiding
Wrapping:	non-woven tape
Sheath material:	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	grey (RAL 7032)

### Outstanding features:

- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » travel > 10 m is possible
- » good EMC characteristics
- » high abrasion resistance
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V acc. to VDE 0812
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius continuously flexible:	7,5 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg
Temperature range fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous Flexibility:	very good
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07840201	2 x 0,14	0,11	3,3	13,0	16
07840301	3 x 0,14	0,11	3,6	14,3	19
07840401	4 x 0,14	0,11	3,9	15,7	24
07840501	5 x 0,14	0,11	4,1	17,1	25
07840701	7 x 0,14	0,11	4,7	23,4	36
07841201	12 x 0,14	0,11	5,5	32,1	44
07841801	18 x 0,14	0,11	6,5	43,8	62
07842501	25 x 0,14	0,11	7,6	57,3	80
07843201	32 x 0,14	0,11	8,1	69,1	97
07840202	2 x 0,25	0,11	3,8	15,1	20
07840302	3 x 0,25	0,11	4,0	17,6	24
07840402	4 x 0,25	0,11	4,2	23,4	29
07840502	5 x 0,25	0,11	4,6	25,9	34
07840702	7 x 0,25	0,11	5,2	32,7	47
07841202	12 x 0,25	0,11	6,4	48,3	63
07841802	18 x 0,25	0,11	7,3	64,7	86
07842502	25 x 0,25	0,11	8,8	86,3	115
07843202	32 x 0,25	0,11	9,3	105,9	140
07840203	2 x 0,34	0,11	4,0	16,9	22
07840303	3 x 0,34	0,11	4,2	23,6	29
07840403	4 x 0,34	0,11	4,5	27,0	33
07840503	5 x 0,34	0,11	4,8	30,3	38

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07840703	7 x 0,34	0,11	5,5	38,9	50
07841203	12 x 0,34	0,11	6,7	58,8	74
07841803	18 x 0,34	0,11	7,8	82,5	103
07842503	25 x 0,34	0,11	9,4	110,7	138
07843203	32 x 0,34	0,11	10,2	152,1	180
07840250	2 x 0,50	0,11	4,6	23,5	30
07840350	3 x 0,50	0,11	4,8	28,4	36
07840450	4 x 0,50	0,11	5,2	35,1	45
07840550	5 x 0,50	0,11	5,6	40,1	51
07840750	7 x 0,50	0,11	6,7	53,3	73
07841250	12 x 0,50	0,11	8,0	81,4	103
07841850	18 x 0,50	0,11	9,5	115,6	149
07842550	25 x 0,50	0,11	11,8	174,4	217
07840275	2 x 0,75	0,11	5,2	30,3	38
07840375	3 x 0,75	0,11	5,5	37,6	47
07840475	4 x 0,75	0,11	5,9	46,5	57
07840575	5 x 0,75	0,11	6,6	55,6	71
07840775	7 x 0,75	0,11	7,7	74,1	97
07841275	12 x 0,75	0,11	9,5	115,6	144
07841875	18 x 0,75	0,11	11,6	183,9	227
07842575	25 x 0,75	0,11	14,3	266,0	321

Other dimensions and colours are possible on request.



# Highly dynamic cables

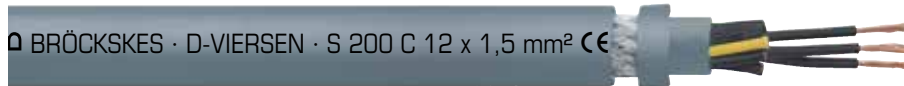
## S 200 C

continuously flexible TPE/PUR control cable with numbered cores and overall copper screen



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 C 1 x 10,0 mm² Cc



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 C 12 x 1,5 mm² Cc

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code from 2 conductors:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Inner sheath:</b>	SABIX®
<b>Wrapping:</b>	non-woven tape
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	grey (RAL 7000)

### Technical Data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius continuously flexible:</b>	7,5 x d
<b>Radiation resistance:</b>	1 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Continuous Flexibility:</b>	very good
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » travel > 10 m is possible
- » good EMC characteristics
- » high abrasion resistance
- » small bending radius
- » small outer diameter
- » PFAS free

Also available as hybrid cable for example

3G1,0 + 16 x 0,34 mm²

3G1,0 + 8 x 0,34 mm²

1G0,5 + 4 x 0,34 mm²

Peak operating voltage  
of data conductors:  
max. 500 V

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07840205	2 x 0,50	0,16	6,8	38,4	55
07840305	3 x 0,50	0,16	7,0	34,0	62
07840405	4 x 0,50	0,16	7,4	51,1	71
07840505	5 x 0,50	0,16	7,9	61,5	83
07840705	7 x 0,50	0,16	9,0	74,1	109
07841205	12 x 0,50	0,16	10,6	108,2	152
07841805	18 x 0,50	0,16	12,2	141,0	214
07842505	25 x 0,50	0,16	14,8	217,0	307
07843605	36 x 0,50	0,16	16,4	275,3	379
07845205	52 x 0,50	0,16	19,2	379,7	524
07846505	65 x 0,50	0,16	21,7	451,5	647

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07840207	2 x 0,75	0,16	7,3	46,3	64
07840307	3 x 0,75	0,16	7,6	54,1	74
07840407	4 x 0,75	0,16	8,0	64,0	86
07840507	5 x 0,75	0,16	8,8	74,3	106
07840707	7 x 0,75	0,16	9,8	92,3	129
07841207	12 x 0,75	0,16	11,9	142,4	204
07841807	18 x 0,75	0,16	14,2	215,3	294
07842507	25 x 0,75	0,16	16,6	289,7	386
07843607	36 x 0,75	0,16	18,7	382,6	520
07845207	52 x 0,75	0,16	21,9	514,3	727
07846507	65 x 0,75	0,16	24,5	639,8	868

Continued on next page

# Highly dynamic cables

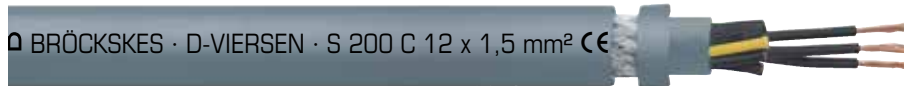
## S 200 C

continuously flexible TPE/PUR control cable with numbered cores and overall copper screen



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 C 1 x 10,0 mm² Cc



marking example:

SAB BRÖCKSKES · D-VIERSEN · S 200 C 12 x 1,5 mm² Cc

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07840210	2 x 1,00	0,16	7,7	56,5	72
07840310	3 x 1,00	0,16	8,0	66,4	86
07840410	4 x 1,00	0,16	8,5	77,3	98
07840510	5 x 1,00	0,16	9,3	89,0	121
07840710	7 x 1,00	0,16	10,7	117,9	174
07841210	12 x 1,00	0,16	12,8	174,9	248
07841810	18 x 1,00	0,16	15,2	270,2	369
07842510	25 x 1,00	0,16	18,4	367,5	497
07843610	36 x 1,00	0,16	20,3	478,7	657
07845210	52 x 1,00	0,16	23,8	668,9	911
07846510	65 x 1,00	0,16	26,8	805,7	1130
07840115	1 x 1,50	0,16	4,6	24,8	35
07840215	2 x 1,50	0,16	8,3	66,8	87
07840315	3 x 1,50	0,16	8,6	81,5	106
07840415	4 x 1,50	0,16	9,4	101,2	131
07840515	5 x 1,50	0,16	10,1	122,2	149
07840715	7 x 1,50	0,16	11,9	156,8	210
07841215	12 x 1,50	0,16	14,7	269,7	351
07841815	18 x 1,50	0,16	16,9	369,2	483
07842515	25 x 1,50	0,16	20,4	493,4	653
07843615	36 x 1,50	0,16	23,0	660,3	889
07845215	52 x 1,50	0,16	26,9	931,0	1189
07846515	65 x 1,50	0,16	29,9	1132,8	1513
07840125	1 x 2,50	0,16	5,3	38,0	49
07840225	2 x 2,50	0,16	9,9	77,2	122
07840325	3 x 2,50	0,16	10,6	119,7	165
07840425	4 x 2,50	0,16	11,5	150,1	204
07840525	5 x 2,50	0,16	12,6	179,6	249
07840725	7 x 2,50	0,16	15,0	265,2	365
07841225	12 x 2,50	0,16	18,5	417,1	542
07841825	18 x 2,50	0,16	21,6	571,4	767
07842525	25 x 2,50	0,16	26,0	780,8	1036
07843625	36 x 2,50	0,16	28,7	1058,0	1390
07845225	52 x 2,50	0,16	33,0	1479,3	1861
07840140	1 x 4,00	0,16	5,9	54,3	67

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07840240	2 x 4,00	0,16	11,6	132,8	181
07840340	3 x 4,00	0,16	12,1	172,9	224
07840440	4 x 4,00	0,16	13,7	216,5	299
07840540	5 x 4,00	0,16	15,0	289,2	357
07840740	7 x 4,00	0,16	18,0	396,3	532
07840160	1 x 6,00	0,21	6,6	75,3	91
07840260	2 x 6,00	0,21	13,7	182,6	251
07840360	3 x 6,00	0,21	14,6	258,8	339
07840460	4 x 6,00	0,21	15,9	328,3	419
07840560	5 x 6,00	0,21	18,0	398,4	523
07840760	7 x 6,00	0,21	20,6	537,3	712
07840161	1 x 10,0	0,21	7,7	117,5	135
07840361	3 x 10,0	0,21	17,4	392,9	517
07840461	4 x 10,0	0,21	18,9	507,7	646
07840561	5 x 10,0	0,21	20,5	615,5	731
07840162	1 x 16,0	0,21	9,1	179,9	208
07840362	3 x 16,0	0,21	20,7	598,4	724
07840462	4 x 16,0	0,21	22,5	758,2	915
07840562	5 x 16,0	0,21	24,7	947,1	1101
07840163	1 x 25,0	0,21	10,7	287,7	300
07840363	3 x 25,0	0,21	23,9	898,2	1039
07840463	4 x 25,0	0,21	25,8	1148,0	1296
07840563	5 x 25,0	0,21	29,1	1400,1	1610
07840164	1 x 35,0	0,21	12,5	390,6	414
07840464	4 x 35,0	0,21	30,1	1546,4	1780
07840564	5 x 35,0	0,21	33,1	1915,1	2119
07840165	1 x 50,0	0,31	15,0	577,2	603
07840465	4 x 50,0	0,31	35,5	2165,3	2613
07840166	1 x 70,0	0,31	17,6	783,1	834
07840167	1 x 95,0	0,31	21,5	1051,2	1139
07840168	1 x 120,0	0,31	22,7	1293,1	1374
07840169	1 x 150,0	0,31	26,2	1611,0	1733
07840170	1 x 185,0	0,41	25,6	1952,4	2086
07840171	1 x 240,0	0,41	31,3	2507,0	2645

Other dimensions and colours are possible on request.

### Possible on request:

Singlecore with green-yellow insulation  
and black outer sheath or 0,6/1 kV

# Highly dynamic cables

## SD 200 C TP

continuously flexible paired TPE/PUR data cable with overall copper screen

with  
coloured cores

SAB Flex

SD 200 C TP 3 x 2 x 0,5 mm<sup>2</sup> €



marking example:

SAB BRÜCKSKES · D-VIERSEN · SD 200 C TP 3 x 2 x 0,5 mm<sup>2</sup> €

### Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	TPE
Colour code:	with reference to DIN 47100
Stranding:	cores twisted to pairs, pairs twisted in specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Screen:	tinned copper braiding
Wrapping:	non-woven tape
Sheath material:	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	grey (RAL 7032)

### Outstanding features:

- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » flexible at low temperatures
- » halogen-free
- » travel > 10 m is possible
- » good EMC characteristics
- » high abrasion resistance
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V acc. to VDE 0812
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius continuously flexible:	7,5 x d
Radiation resistance:	1 x 10 <sup>7</sup> cJ/kg
Temperature range fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous Flexibility:	very good
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07890214	2 x 2 x 0,14	0,11	4,4	17,4	29
07890314	3 x 2 x 0,14	0,11	4,9	20,2	30
07890414	4 x 2 x 0,14	0,11	5,6	24,7	40
07890514	5 x 2 x 0,14	0,11	6,0	28,8	43
07890614	6 x 2 x 0,14	0,11	6,4	31,5	52
07890714	7 x 2 x 0,14	0,11	6,7	35,9	59
07891014	10 x 2 x 0,14	0,11	7,9	47,5	72
07891414	14 x 2 x 0,14	0,11	9,0	62,7	97
07891814	18 x 2 x 0,14	0,11	10,0	89,6	127
07892514	25 x 2 x 0,14	0,11	11,7	114,3	167
07890225	2 x 2 x 0,25	0,11	4,9	21,8	33
07890325	3 x 2 x 0,25	0,11	5,5	28,3	41
07890425	4 x 2 x 0,25	0,11	6,4	36,1	51
07890525	5 x 2 x 0,25	0,11	6,9	41,1	60
07890625	6 x 2 x 0,25	0,11	7,1	47,3	69
07890725	7 x 2 x 0,25	0,11	7,4	54,1	81
07891025	10 x 2 x 0,25	0,11	8,9	70,8	100
07891425	14 x 2 x 0,25	0,11	10,9	108,7	150
07891825	18 x 2 x 0,25	0,11	11,6	133,4	185
07892525	25 x 2 x 0,25	0,11	13,8	171,9	259
07890234	2 x 2 x 0,34	0,11	5,2	20,3	38
07890334	3 x 2 x 0,34	0,11	5,8	34,9	47
07890434	4 x 2 x 0,34	0,11	6,9	43,2	62
07890534	5 x 2 x 0,34	0,11	7,4	53,1	72

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07890734	7 x 2 x 0,34	0,11	8,0	66,4	94
07891034	10 x 2 x 0,34	0,11	9,6	90,5	122
07891434	14 x 2 x 0,34	0,11	11,6	138,3	179
07891834	18 x 2 x 0,34	0,11	12,5	169,2	220
07892534	25 x 2 x 0,34	0,11	14,7	247,3	310
07890250	2 x 2 x 0,50	0,11	6,3	34,6	51
07890350	3 x 2 x 0,50	0,11	6,9	47,3	67
07890450	4 x 2 x 0,50	0,11	7,9	61,4	84
07890550	5 x 2 x 0,50	0,11	8,8	73,1	101
07890750	7 x 2 x 0,50	0,11	9,4	108,4	134
07891050	10 x 2 x 0,50	0,11	11,3	143,3	186
07891450	14 x 2 x 0,50	0,11	13,5	191,7	251
07891850	18 x 2 x 0,50	0,11	14,7	257,8	329
07892550	25 x 2 x 0,50	0,11	17,0	336,5	429
07890275	2 x 2 x 0,75	0,11	7,2	47,4	69
07890375	3 x 2 x 0,75	0,11	7,9	66,2	84
07890475	4 x 2 x 0,75	0,11	8,9	101,0	107
07890575	5 x 2 x 0,75	0,11	10,4	118,8	147
07890775	7 x 2 x 0,75	0,11	11,6	148,0	208
07891075	10 x 2 x 0,75	0,11	13,5	228,0	263
07891475	14 x 2 x 0,75	0,11	16,1	296,9	366
07891875	18 x 2 x 0,75	0,11	17,3	366,1	456
07892575	25 x 2 x 0,75	0,11	20,1	480,5	597

Other dimensions and colours are possible on request.

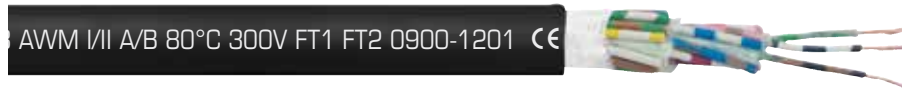
# Highly dynamic cables

## SABdynamic 900 Data

continuously flexible PUR data cable, robust, oil resistant and flame retardant

anticapacitance

SABFlex



Marking example:

SAB BRÖCKSKES · D-VIERSEN · SABdynamic 900 Data 12x0,14mm² cULus AWM Style 20233 AWM I/II A/B 80°C 300V FT1 FT2 0900-1201 CE

### Construction:

Conductor:	bare copper strands with reference to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	specially adjusted layering with non-woven tape over each layer
Sheath material:	PUR with mat surface
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » UL/cUL recognized
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » antipacitance
- » extremely large temperature range
- » halogen-free
- » high abrasion resistance
- » suitable for long travel
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V
Voltage UL/cUL:	300 V
Testing voltage:	core/core 2000 V
Min. bending radius	
fixed laying:	3 x d
flexible application:	7,5 x d
bending cycles:	> 10 million
Temperature range	DIN VDE UL/cUL: up to +80 °C
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cUL FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous Flexibility:	very good
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable unscreened					
09001201	12 x 0,14	0,11	5,5	15,6	36

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-pair cable with overall copper screen					
09010402	4 x 2 x 0,25	0,11	6,7	36,9	55
09010403	4 x 2 x 0,34	0,11	7,2	46,1	64
09010450	4 x 2 x 0,50	0,16	8,4	62,2	93
09010475	4 x 2 x 0,75	0,16	9,2	86,6	113

Other dimensions and colours are possible on request.

# Highly dynamic cables

## SABdynamic 900 Control

continuously flexible PUR control cable, robust, oil resistant and flame retardant

anticapacitance

SABFlex



Marking example:

SAB BRÜCKSKES · D-VIERSEN · SABdynamic 900 Control 25G1,0mm² cULus AWM Style 21223 AWM I/II A/B 80°C 600V FT1 FT2 0900-2510 CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, Klasse 6
<b>Insulation:</b>	SABIX®
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Sheath material:</b>	PUR with mat surface
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:

- » UL/cUL recognized
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » anticapacitance
- » extremely large temperature range
- » halogen-free
- » high abrasion resistance
- » suitable for long travel
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/cUL:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
fixed laying:	3 x d
flexible application:	7,5 x d
bending cycles:	> 10 million
<b>Temperature range</b>	DIN VDE UL/cUL: up to +80 °C
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cUL FT1, FT2
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Continuous Flexibility:</b>	very good
<b>Sunlight resistance:</b>	acc. to HD 605
<b>Ozone resistance:</b>	acc. to DIN EN 50396
<b>Salt water resistance:</b>	acc. to UL 1309
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable unscreened					
09000210	2 x 1,00	0,16	5,3	19,2	37
09002510	25 x 1,00	0,16	13,8	240,0	307
09000315	3 x 1,50	0,16	6,2	43,2	64
09000525	5 x 2,50	0,16	9,3	120,0	160

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable with overall copper screen					
09012510	25 x 1,00	0,16	14,3	336,9	377

Other dimensions and colours are possible on request.



# Highly dynamic cables

## SABdynamic 910 Data

continuously flexible PUR control cable, suitable for robots,  
robust, oil resistant and flame retardant

anticapacitance

SABFlex

AWM I/II A/B 80°C 300V FT1 FT2 0900-1201 CE



Marking example:

SAB BRÜCKSKES · D-VIERSEN · SABdynamic 910 Data 12x0,14mm<sup>2</sup> cULus AWM Style 20233 AWM I/II A/B 80°C 300V FT1 FT2 0910-1201 CE

### Construction:

Conductor:	bare copper strands with reference to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	with reference to DIN 47100
Stranding:	specially adjusted layering with non-woven tape over each layer, from 23 cores twisted to pairs
Sheath material:	PUR with mat surface
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » UL/cUL recognized
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » suitable for robots
- » antipacitance
- » extremely large temperature range
- » halogen-free
- » high abrasion resistance
- » suitable for long travel
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

Peak operating voltage:	max. 350 V
Voltage UL/cUL:	300 V
Testing voltage:	core/core 2000 V
torsion cycles:	up to ± 180°/m > 10 million up to ± 360°/m > 5 million
Min. bending radius	
fixed laying:	3 x d
flexible application:	≤ 5 m 7,5 x d > 5 m 10 x d > 10 million
bending cycles:	
Temperature range	DIN VDE UL/cUL: up to +80 °C
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cUL FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous Flexibility:	very good
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable unscreened					
09101201	12 x 0,14	0,11	5,5	15,6	36

Other dimensions and colours are possible on request.

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-pair cable unscreened					
09102401	12 x 2 x 0,14	0,11	7,9	31,2	65

Other dimensions and colours are possible on request.

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-pair cable with overall copper screen					
09110601	6 x 2 x 0,14	0,11	6,3	30,0	52

Other dimensions and colours are possible on request.

# Highly dynamic cables

## SABdynamic 910 Control

continuously flexible PUR control cable, suitable for robots,  
robust, oil resistant and flame retardant

anticapacitance



Marking example:

SAB BRÖCKSKES · D-VIERSEN · SABdynamic 910 Control 25G1,0mm² cULus AWM Style 21223 AWM I/II A/B 80°C 600V FT1 FT2 0910-2510 CE

### Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, Klasse 6
Insulation:	SABIX®
Colour code:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	specially adjusted layering with non-woven tape over each layer, from 15 cores twisted to bundles
Sheath material:	PUR with mat surface
Sheath colour:	black (RAL 9005)

### Outstanding features:

- » UL/cUL recognized
- » PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- » anticapacitance
- » suitable for robots
- » extremely large temperature range
- » halogen-free
- » high abrasion resistance
- » suitable for long travel
- » small bending radius
- » small outer diameter
- » PFAS free

### Technical Data:

Nominal voltage:	U <sub>0</sub> /U 300/500 V
Voltage UL/cUL:	600 V
Testing voltage:	core/core 2000 V
torsion cycles:	up to ± 180°/m > 10 million up to ± 360°/m > 5 million
Min. bending radius	
fixed laying:	3 x d
flexible application:	≤ 5 m 7,5 x d > 5 m 10 x d
bending cycles:	> 10 million
Temperature range	DIN VDE UL/cUL: up to +80 °C
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cUL FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous Flexibility:	very good
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable unscreened					
09100315	3 x 1,50	0,16	6,2	43,2	64
09101515	15 x 1,50	0,16	15,6	216,0	338

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
multi-core cable with overall copper screen					
09112510	3 x 1,50	0,16	6,5	57,6	76
09111511	15 x 1,50	0,16	16,3	296,2	403

Other dimensions and colours are possible on request.

# Highly dynamic cables

## S 180 HT

continuously flexible high temperature control cable  
with numbered cores and Besilen® outer sheath

+180°C

SAB Flex



**Application:** For use in cable tracks with extremely ambient temperature like for example in steel industry.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	FEP
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Wrapping:</b>	tape
<b>Sheath material:</b>	special Besilen®
<b>Sheath colour:</b>	grey (RAL 7000)

### Technical Data:

<b>Nominal voltage:</b>	Uo/U 0,6/1 kV
<b>Testing voltage:</b>	core/core 4000 V
<b>Min. bending radius</b> <i>continuously flexible:</i>	10 x d
<b>Temperature range</b> <i>fixed laying:</i> <i>flexible application:</i> <i>short-time use:</i>	-25/+180 °C -25/+180 °C +200 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » extreme temperature resistance
- » high notch resistance
- » very good flexibility

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
31800315	3 x 1,50	0,16	7,7	43,2	94
31800415	4 x 1,50	0,16	8,3	57,6	116
31800515	5 x 1,50	0,16	9,2	72,0	147
31800715	7 x 1,50	0,16	10,6	100,8	200
31800325	3 x 2,50	0,16	9,4	72,0	144
31800425	4 x 2,50	0,16	10,1	96,0	177
31800525	5 x 2,50	0,16	11,5	120,0	228
31800625	6 x 2,50	0,16	12,8	144,0	268
31800725	7 x 2,50	0,16	13,5	168,0	320
31801225	12 x 2,50	0,16	16,5	288,0	470
31802025	20 x 2,50	0,16	20,2	480,0	762
31800440	4 x 4,00	0,16	12,2	153,6	263
31800540	5 x 4,00	0,16	13,4	192,0	333
31800740	7 x 4,00	0,16	15,9	268,8	469
31801240	12 x 4,00	0,16	19,6	460,8	707
31800360	3 x 6,00	0,21	13,4	172,8	302
31800460	4 x 6,00	0,21	14,6	230,4	408
31800560	5 x 6,00	0,21	16,4	288,0	495
31800760	7 x 6,00	0,21	19,4	403,2	697
31800361	3 x 10,0	0,21	15,3	288,0	457
31800461	4 x 10,0	0,21	17,0	384,0	609
31800561	5 x 10,0	0,21	18,9	480,0	745
31800462	4 x 16,0	0,21	20,7	614,4	912
31800562	5 x 16,0	0,21	23,2	768,0	1146
31800363	3 x 25,0	0,21	21,5	720,0	999
31800463	4 x 25,0	0,21	24,0	960,0	1312
31800164	1 x 35,0	0,21	12,9	336,0	429
31800464	4 x 35,0	0,21	28,2	1344,0	1800
31800167	1 x 95,0	0,31	21,1	912,0	1116
31800169	1 x 150,0	0,31	25,5	1440,0	1745

Other dimensions and colours are possible on request.

# Highly dynamic cables

## S 180 C HT

continuously flexible high temperature control cable with numbered cores, overall copper screen and Besilen® outer sheath

+180°C

SAB Flex



**Application:** For use in cable tracks with extremely ambient temperature like for example in steel industry.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	FEP
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Wrapping:</b>	tape
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	special Besilen®
<b>Sheath colour:</b>	grey (RAL 7000)

### Technical Data:

<b>Nominal voltage:</b>	Uo/U 0,6/1 kV
<b>Testing voltage:</b>	core/core 4000 V core/screen 4000 V
<b>Min. bending radius continuously flexible:</b>	15 x d
<b>Temperature range</b>	
fixed laying:	-25/+180 °C
flexible application:	-25/+180 °C
short-time use:	+200 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- » very good EMC characteristics
- » extreme temperature resistance
- » high notch resistance
- » very good flexibility

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
31850315	3 x 1,50	0,16	8,1	63,8	110
31850415	4 x 1,50	0,16	8,9	80,4	137
31850515	5 x 1,50	0,16	9,6	98,3	166
31850715	7 x 1,50	0,16	11,4	147,6	240
31850325	3 x 2,50	0,16	9,8	98,5	163
31850425	4 x 2,50	0,16	11,1	142,1	221
31850525	5 x 2,50	0,16	12,1	171,9	268
31850725	7 x 2,50	0,16	14,0	229,2	364
31852025	20 x 2,50	0,16	21,0	612,4	856
31850440	4 x 4,00	0,16	12,7	206,4	304
31850540	5 x 4,00	0,16	14,0	253,2	378
31850740	7 x 4,00	0,16	16,7	368,0	541
31851240	12 x 4,00	0,16	20,3	577,4	790
31850360	3 x 6,00	0,21	14,0	234,0	341
31850460	4 x 6,00	0,21	15,2	297,9	457
31850560	5 x 6,00	0,21	17,2	388,0	568
31850760	7 x 6,00	0,21	20,2	519,5	780
31850461	4 x 10,0	0,21	17,8	485,6	683
31850561	5 x 10,0	0,21	19,7	594,9	828
31850462	4 x 16,0	0,21	21,5	747,7	1007
31850562	5 x 16,0	0,21	24,0	922,4	1256
31850463	4 x 25,0	0,21	25,2	1117,5	1444
31850464	4 x 35,0	0,21	29,0	1532,5	1934
31850167	1 x 95,0	0,31	22,3	1046,6	1228
31850170	1 x 185,0	0,41	28,6	1962,7	2250

Other dimensions and colours are possible on request.