REELING, LIFT & SPECIALTY
CABLES

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SPECIAL CABLES
SAB North America

Content

Content

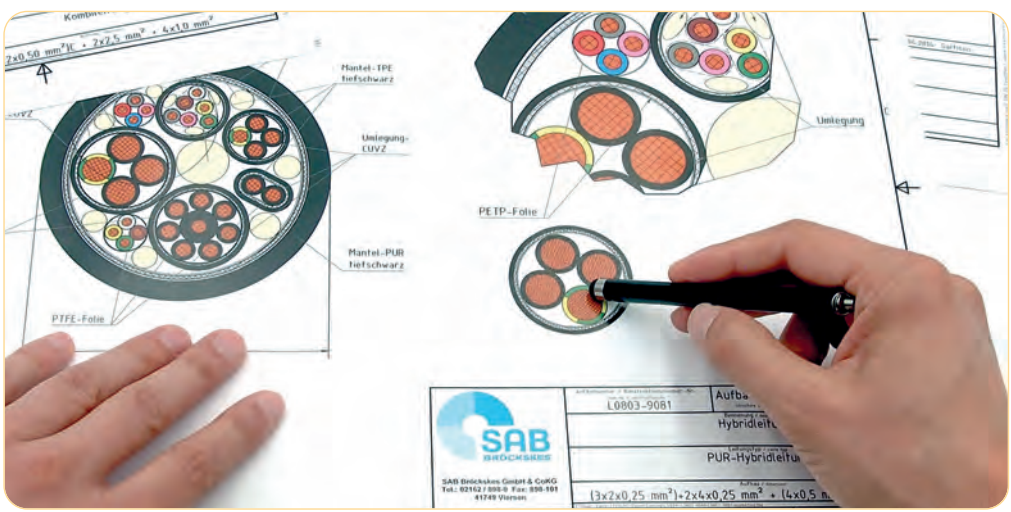
Applications

Technical problems often arise that can not be solved properly with standard cables. At SAB North America, we believe the customer deserves the best possible solution and we are proud to be your source for special cable requirements. If we must modify one of our existing standard products or completely design a new construction, we will work together with you to meet all of your cable requirements. Whether you choose one of our standard cables from stock or require a completely new design you will find that our variety of cable styles and our flexibility as a specialty cable manufacturer are among our company's strengths.

We produce nearly every type of specialty cable, with minimums as low as 1500 feet - and in some cases even lower - to your exact construction specifications. Please provide us with the following details:

- conductor materials
- number of conductors
- cross sections
- colors
- outer diameter
- flexibility
- low and high temperature resistance
- materials
- types of shielding
- combined cables
- technical specifications
- optical waveguide
- number of fibers
- POF (polymeric optical fibers)

Of course we can also meet other requirements not listed above. Your special cable requests are always a priority and our highly motivated team will meet and exceed all of your special needs. By applying our comprehensive know-how, you will surely be able to improve the efficiency of your machines.



Selection Table

	Cable Type	D/8 SAB Lift	D/9 SAB Lift ST	D/10 SABIX® Lift	D/11 SABIX® Lift ST	D/12 H05VVH6-F	D/13 H07VVH6-F	D/14 DR 717 P Highflex	D/15 DR 718 CP High flex	D/16 DR 721 P	D/17 DR 720 P Highflex	D/18 DR 730 P Highflex	D/19 DR 750 P Offshore	D/20 DR 724 P Spreader	D/21 Spreader 722	D/22 Festoon 715 P	D/23 Festoon 716 CP	D/24 MR 460	D/25 SAB 755 - Exploration	D/26 SAB S 745 - Exploration	D/27 SL 851 C - Exploration	D/28 BB 380 Boarding Bridge
Application	Single conductors															●	●					
	Colored conductors						●	●	●	●	●	●	●	●		●	●		●		●	
	Numbered conductors	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●
	Copper shielded								●								●		●	●	●	
	Inner jacket							●	●	●	●	●	●	●						●		
Temperature range fixed aying*	+ 90°C																					
	+ 70°C																					
	+ 60°C																					
	- 20°C																					
	- 30°C																					
	- 40°C																					
	- 50°C																					
Voltage	Nominal voltage Uo/U: 300/500 V	●	●	●	●	●		●	●						●			●		●		●1
	Nominal voltage Uo/U: 450/750 V						●															
	Nominal voltage Uo/U: 0.6/1 k V									●	●	●	●	●		●	●		●		●	●2
	Voltage UL / cUL: 1000 V																		●		●	
	Voltage UL: 1000 V											●										
	Voltage cUL: 600 V											●										
	Test voltage conductor/conductor: 2000 V	●	●	●	●			●	●						●			●		●		
	Test voltage conductor/conductor: 3000 V																					●1
	Test voltage conductor/conductor: 4000 V									●	●	●	●	●		●	●		●		●	●2
	Test voltage conductor/shielding: 2000 V								●											●		
	Test voltage conductor/shielding: 4000 V																●		●		●	
Standards & Approvals	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1			●	●			●	●		●	●		●		●	●	●	●	●	●	●
	Halogen-free + fluorine content acc. to IEC/EN												●									
	no flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25			●	●																	
	Flame retardant and self-extinguishing acc. to IEC 603332-1-2 and VDE 0482-332-1-2	●	●			●	●	●	●	●	●	●	●	●					●	●	●	●
	Flame retardant and self-extinguishing acc. to cUL FT1 FT2											●							●	●	●	
	UL / cUL approval												●						●	●	●	
Characteristics	Tensile strength							●	●	●	●	●	●		●				●			
	Oil resistant acc. to internal standard					●	●															
	Oil resistant acc. acc. to EN 50363-10-2 + VDE 0207-363-10-2							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Mud resistance acc. to IEC 630092-350, IEC 61892-4, NEK TS 606												●						●	●	●	
	Chemical resistance							●	●	●	●	●	●	●		●	●	●				●
	Weather resistance									●	●	●	●	●	●	●	●					●
	Sunlight resistance							●	●	●	●	●	●	●				●	●	●	●	●
	Ozone & salt water resistance																		●	●	●	
	Reeling applications							●	●	●	●	●	●	●								
	Continuous flex applications															●	●			●		

from

to

1 = up to 22 AWG
2 = from 20 AWG

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

Selection Table

	Cable Type	D29 GP 400 Sy	D/30 GP 400 SC	D/31 GP 400 QF	D/32 GP 400 7F	D/33 GP 400 SF	D/34 GP 400 SF S Supply	D/35 GP 400 SF S Control	D/36 GP 400 SC DC	D/37 GP 400 SF 28 V DC
Application	Single core		●						●	
	Symmetrical	●		●	●	●	●	●		
	TripleFlex									
	QuadFlex			●						
	SevenFlex				●					
	Fixed installation	●								
	Flexible application		●	●	●	●	●	●	●	●
Temperature range fixed laying*	+ 90°C		●	●	●		●	●	●	●
	+ 70°C	●				●				
	- 30°C									
	- 40°C									
	- 50°C									
Voltage	Nominal voltage 28 V DC								●	●
	Nominal voltage 300/500 V							●		
	Nominal voltage Uo/U 0.6/1 k V	●			●	●	●			
	Nominal voltage Uo/U 115/200 V		●	●						
	Test voltage conductor/conductor: 600 V AC								●	●
	Test voltage conductor/conductor: 4000 V AC	●	●	●	●			●		
Standards & Approvals	Halogen-free		●	●	●			●	●	
	Oil resistant		●	●	●		●	●	●	●
	Weather resistance		●	●	●		●		●	
	Cold flexible		●	●				●	●	

Selection Table

	Cable Type	D/40 HV 1000 C - SC	D/41 HV 1000 C - MC	D/42 HV Measuring Cable (DC)	D/43 HV Measuring Cable (AC)	D/44 B 107 HV	D/45 B 110 C	D/46 B 110 C Sense
Application	Single conductors	●				●	●	
	Colored conductors		●	●	●			●
	Alu foil & tinned copper braiding	●	●	●	●		●	●
	Inner jacket			●	●			
Temperature range fixed laying*	+250°C					●	●	●
	+180°C					▮	▮	▮
	+150°C			●	●			
	+125°C	●	●	▮	▮			
	+ 90°C	▮	▮					
	- 40°C							
	- 50°C							
Voltage	Nominal voltage Uo/U: 0.6/1 k V	●	●					
	Nominal voltage Uo/U: 2.7/5.4 k DC					●	●	●
	Nominal voltage Uo/U: 1.8/3.0 k V AC					●	●	●
	Nominal voltage: 1500 V AC							
	Nominal voltage: 2200 V DC							
	Operating Voltage: 1000 V DC							
	Operating Voltage: 1800 V DC			●	●			
	Operating Voltage: 2200 V DC							
	Operating Voltage: 1000 V AC				●			
	Voltage cURus: 3000 V					●	●	●
	Scoop proof- 1000 V DC over the blue inner jacket			●	●			
	Test voltage: 4000 V							●
	Test voltage: 6500 V					●	●	
	Test voltage conductor/conductor: 5000 V	●	●					
	Test voltage conductor/shielding: 5000 V		●					
	Test voltage conductor/conductor: 5000 V AC			●	●			
	Test voltage conductor/shielding: 5000 V AC			●	●			
Fire Performance	Flame retardant and self-extinguishing acc. to IEC 603332-1-2 and VDE 0482-332-1-2	●	●			●	●	●
	cURus FT 1, FT 2					●	●	●
Characteristics	Tensile strength	●	●					
	Halogen-free- acc. to IEC 60754-1 + VDE 0482-754-1					●	●	●
	Oil resistant- very good TMPU acc to EN 50363-10-2 + VDE 0207-363-10-2	●	●		●			
	Mud resistance acc. to IEC 630092-360, IEC 61892-4, NEK TS 606	●	●					
	Weather resistance- very good					●	●	●
	UV resistance acc. to HD 605	●	●					
	Ozone resistance acc. to EN 50396	●	●					
	Salt water resistance acc, to UL 1309	●	●					

▮ from / to ● short-term use

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

SAB Lift

PVC Lift control cable with sisal cord as supporting member

with improved fire performance

SAB Control

CE RoHS

Marking for SAB Lift 37902410:
SAB BRÖCKSKES · D-VIERSEN · SAB Lift 24 x 1.0 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	special PVC
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground from 3 conductors
Strain relief:	sisal cord
Stranding:	sisal cord as core, optimized twisting of the conductors in layers
Wrapping:	non-woven tape on each layer with overlap wrapping
Torsion protecting:	special braid
Jacket material:	special PVC
Jacket color:	black (RAL 9005)

Outstanding features:

- **long service life**
- **elevated economic efficiency**
- **flame retardant and self-extinguishing**

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	15 x O.D.
Temperature range: *static:* *flexible:*	 -30/+70°C -15/+70°C
Burning characteristics:	flame retardant and self extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Suspended height:	up to 60 m
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
► 18 AWG (≈ 56/34) • 1.00 mm²					
37900510	5	0.437	11.1	101	19.5
37900710	7	0.457	11.6	120	19.5
37900910	9	0.512	13.0	152	19.5
37901210	12	0.606	15.4	207	19.5
37901810	18	0.815	20.7	323	19.5
37902410	24	0.815	20.7	369	19.5
37903010	30	0.862	21.9	439	19.5
► 16 AWG (≈ 27-29/30) • 1.50 mm²					
37901215	12	0.717	18.2	282	19.5
37905215	52	1.350	34.3	1150	19.5
► 14 AWG (≈ 46/30) • 2.50 mm²					
37901225	12	0.921	23.4	462	19.5

Other dimensions and colors are available on request

Possible on request:

- **with overall tinned copper braiding**
- **with different conductor and jacket colors**

SAB Lift ST

PVC Lift control cable with steel center as supporting member

highest hanging lengths

SAB Control

CE RoHS

Marking for SAB Lift ST 37912410:
SAB BRÖCKSKES · D-VIERSEN · SAB Lift ST 24 x 1.0 mm² CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	special PVC
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground from 3 conductors
Strain relief:	steel rope in the center
Stranding:	steel rope as core, optimized twisting of the conductors in layers
Wrapping:	non-woven tape on each layer with overlap wrapping
Torsion protecting:	special braid
Jacket material:	special PVC
Jacket color:	black (RAL 9005)

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	15 x O.D.
Temperature range: *static:* *flexible:*	 -30/+70°C -15/+70°C
Burning characteristics:	flame retardant and self-extinguising acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Suspended height:	up to 200 m
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- **highest hanging lengths**
- **long service life**
- **flame retardant and self-extinguishing**

item no.	no. of conductors incl. ground	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
▶ **19 AWG (≈ 23/32) ▪ 0.75 mm²**					
37912407	24	0.673	17.1	280	19.5
▶ **18 AWG (≈ 56/34) ▪ 1.00 mm²**					
37910510	5	0.366	9.3	89	19.5
37910710	7	0.409	10.4	117	19.5
37910910	9	0.469	11.9	179	19.5
37911210	12	0.583	14.8	252	19.5
37911810	18	0.685	17.4	309	19.5
37912410	24	0.693	17.6	360	19.5
37913010	30	0.811	20.6	484	19.5

Other dimensions and colors are available on request

Possible on request:

- **with overall tinned copper braiding**
- **with different conductor and jacket colors**

D
9

SABIX® Lift

Lift control cable with sisal cord as supporting member

with improved fire performance

SAB Control

Marking for SABIX® Lift 53902410:
SAB BRÖCKSKES · D-VIERSEN · SABIX® Lift 24 x 1.0 mm² CE

Application: Our halogen-free lift cables are used whenever there are highest safety requirements, especially in public buildings and institutions as for example department stores, hospitals, railway and airport institutions, etc.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	special SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground
Strain relief:	sisal cord
Stranding:	sisal cord as core, optimized twisting of the conductors in layers
Wrapping:	non-woven tape on each layer with overlap wrapping
Torsion protecting:	special braid
Jacket material:	thermoplastic special elastomer
Jacket color:	black (RAL 9005)

Outstanding features:

- **halogen-free**
- **long service life**
- **elevated economic efficiency**
- **flame retardant and self-extinguishing**

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	15 x O.D.
Temperature range: *static:* *flexible:*	 -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 cat. C resp. D, see chapter O
Suspended height:	up to 60 m
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
▶ **18 AWG (≈ 56/34) • 1.00 mm²**					
53900510	5	0.421	10.7	89	19.5
53900710	7	0.421	10.7	89	19.5
53900910	9	0.488	12.4	134	19.5
53901210	12	0.567	14.4	175	19.5
53901810	18	0.783	19.9	283	19.5
53902410	24	0.783	19.9	330	19.5
53903010	30	0.823	20.9	390	19.5

Other dimensions and colors are available on request

Possible on request:

- **with overall tinned copper braiding**
- **with different conductor and jacket colors**

- **Please pay attention to the installation instructions on page O/13**
- **You will find a life cycle test SABIX® Lift on page O/38**

SABIX® Lift ST

Lift control cable with steel center as supporting member

highest hanging lengths

SAB Control

CE RoHS

Marking for SABIX® Lift 53902410:
SAB BRÖCKSKES · D-VIERSEN · SABIX® Lift 24 x 1.0 mm² CE

Application: Our halogen-free lift cables are used whenever there are highest safety requirements, especially in public buildings and institutions as for example department stores, hospitals, railway and airport institutions, etc.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	special SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground
Strain relief:	steel rope in the center
Stranding:	steel rope as core, optimized twisting of the conductors in layers
Wrapping:	non-woven tape on each layer with overlap wrapping
Torsion protecting:	special braid
Jacket material:	thermoplastic special elastomer
Jacket color:	black (RAL 9005)

Outstanding features:

- **halogen-free**
- **highest hanging lengths**
- **long service life**
- **flame retardant and self-extinguishing**

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius:	15 x O.D.
Temperature range: *static:* *flexible:*	 -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 cat. C resp. D, see chapter O
Suspended height:	up to 200 m
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
▶ **18 AWG (≈ 56/34) • 1.00 mm²**					
53910510	5	0.343	8.7	77	19.5
53910710	7	0.386	9.8	103	19.5
53910910	9	0.453	11.5	165	19.5
53911210	12	0.551	14.0	227	19.5
53911810	18	0.654	16.6	279	19.5
53912410	24	0.661	16.8	332	19.5
53913010	30	0.780	19.8	452	19.5

Other dimensions and colors are available on request

Possible on request:

- **with overall tinned copper braiding**
- **with different conductor and jacket colors**

- **Please pay attention to the installation instructions on page O/13**
- **You will find a life cycle test SABIX® Lift on page O/38**

H05VVH6-F

PVC flat festoon power and control cable with black conductors, 300/500V

Marking for H05VVH6-F 2142407:
SAB BRÖCKSKES · D-VIERSEN · ◁VDE▷ ◁HAR▷ H05VVH6-F 24G0.75 mm² CE

Application: H05VVH6-F is a flexible, flame retardant, PVC festoon power and control cable designed for use on overhead crane and material handling systems. The flat construction allows cables to be stacked for applications where space is limited.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	PVC
Color code:	black conductors with white numbers and a green/yellow ground
Stranding:	conductors parallel side by side in groups
Jacket material:	PVC
Jacket color:	black (RAL 9005)

Outstanding features:

smaller bending radius in contrast to round cables

Technical data:

Nominal voltage:	Uo/U 300/500 V
Min. bending radius:	10 x height
Temperature range: *static:* *flexible:*	 -40/+70°C 0/+70°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:	acc. to internal standard, see page O/29
Approvals:	VDE, HAR, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

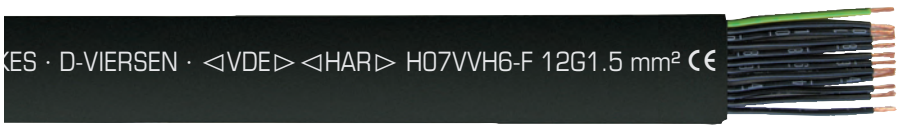
item no.	no. of conductors incl. ground	dimension width x height inch	dimension width x height mm	cable weight ≈lbs/mft
► **19 AWG (≈ 23/32) • 0.75 mm²**				
2140607	6	0.701 x 0.165	17.8 x 4.2	92
2140907	9	1.016 x 0.165	25.8 x 4.2	134
2141207	12	1.539 x 0.165	39.1 x 4.2	175
2141607	16	1.712 x 0.165	43.5 x 4.2	230
2141807	18	1.906 x 0.165	48.4 x 4.2	257
2142007	20	2.122 x 0.165	53.9 x 4.2	286
2142407	24	2.531 x 0.165	64.3 x 4.2	342
► **18 AWG (≈ 30/32) • 1.00 mm²**				
2140410	4	0.500 x 0.169	12.7 x 4.3	71
2140510	5	0.602 x 0.169	15.3 x 4.3	87
2140610	6	0.724 x 0.169	18.4 x 4.3	103
2140910	9	1.051 x 0.169	26.7 x 4.3	151
2141210	12	1.350 x 0.169	34.3 x 4.3	196
2141610	16	1.776 x 0.169	45.1 x 4.3	259
2141810	18	1.976 x 0.169	50.2 x 4.3	289
2142010	20	2.201 x 0.169	55.9 x 4.3	322
2142410	24	2.626 x 0.169	66.7 x 4.3	384

Other dimensions and colors are available on request

Application example: in elevators up to 35 m freely suspended or in fitted vehicles for cranes and hoisting systems with one level bending

H07VVH6-F

PVC flat festoon power and control cable with colored or black conductors, 450/750V



Marking for H07VVH6-F 2491215:
SAB BRÖCKSKES · D-VIERSEN · ◁VDE▷ ◁HAR▷ H07VVH6-F 12G1.5 mm² CE

Application: H07VVH6-F is a flexible, flame retardant, PVC festoon power and control cable designed for use on overhead crane and material handling systems. The flat construction allows cables to be stacked for applications where space is limited.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	PVC
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow ground
Stranding:	conductors parallel side by side in groups
Jacket material:	PVC
Jacket color:	black (RAL 9005)

Outstanding features:

smaller bending radius in contrast to round cables

Technical data:

Nominal voltage:	Uo/U 450/750 V
Min. bending radius:	10 x height
Temperature range: *static:* *flexible:*	 -40/+70°C 0/+70°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:	acc. to internal standard, see page O/29
Approvals:	VDE, HAR, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	dimension width x height inch	dimension width x height mm	cable weight ≈lbs/mft
▶ **16 AWG (≈ 27-29/30) • 1.50 mm²**				
2490415	4	0.602 x 0.205	15.3 x 5.2	97
2490715	7	1.008 x 0.205	25.6 x 5.2	168
2490815	8	1.126 x 0.205	28.6 x 5.2	190
2491215	12	1.650 x 0.205	41.9 x 5.2	283
▶ **14 AWG (≈ 46/30) • 2.50 mm²**				
2490425	4	0.720 x 0.228	18.3 x 5.8	138
2491225	12	1.996 x 0.228	50.7 x 5.8	406
▶ **12 AWG (≈ 52/28) • 4.00 mm²**				
2491240	12	2.260 x 0.268	57.4 x 6.8	576
▶ **10 AWG (≈ 78/28) • 6.00 mm²**				
2490460	4	0.894 x 0.287	22.7 x 7.3	253
2490560	5	1.083 x 0.287	27.5 x 7.3	295
▶ **8 AWG (≈ 77/26) • 10.00 mm²**				
2490570	5	1.406 x 0.366	35.7 x 9.3	542
▶ **4 AWG (≈ 190/26) • 25.00 mm²**				
2490490	4	1.673 x 0.508	42.5 x 12.9	945

Other dimensions and colors are available on request

Application example: in elevators up to 35 m freely suspended or in fitted vehicles for cranes and hoisting systems with one level bending

HD 308 color code: up to 5 conductors
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

DR 717 P Highflex

PUR reeling cable

Marking for DR 717 P Highflex 7170425:
SAB BRÖCKSKES · D-VIERSEN · DR 717 P Highflex 4 G 2.5 mm² CE

Application: The DR 717 P Highflex is used for spring cables reels on stages and theaters.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow ground *DMX-bus:* white/brown, green/yellow *IE Cat 5:* white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
Stranding:	specially adjusted layering around a central suspension unit
Inner jacket:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Supporting screen:	high-tech yarn
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **reeling length up to 60 m**
- **extremely high winding and unwinding strength**
- **corresponds to low voltage guideline 73/23/EWG CE**
- **small outer diameter**
- **lighter cable weight**

Technical data:

Peak operating voltage:	**item no. 7179001:** max. 500 V (DMX-bus) **item no. 7179002:** max. 125 V (IE Cat 5)
Nominal voltage:	Uo/U 300/500 V (supply conductors)
Testing voltage:	conductor/conductor: 2000 V
Current-carrying capacity:	acc. to VDE 0298-4, see chapter O/20 & 21
Min. bending radius: *for laying and installation (fixed installation):* *for repeated winding action (flexible):* *guided on pulleys (flexible):*	≤ 12 mm: 3 x O.D. >12 mm: 4 x O.D. 6 x O.D. 7.5 x O.D.

Temperature range:	**item no. 7179001**	**item no. 7179002**
with installation:		0/+50°C
static:	-50/+90°C	-40/+70°C -20/+60°C
flexible:	-40/+90°C	-40/+70°C -20/+60°C

Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Sunlight resistance:	very good - enhanced due to black jacket color
Tensile strength:	with reference to VDE 0298-3 section 7.1
Mechanical characteristics:	the main mechanical characteristics accomplished by the PUR outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	tensile strength max. N	min breaking load of suspension unit N
▶ 7170425	14 AWG (≈ 46/30) / 4c	0.382	9.7	96	150	1345
▶ 7170440	12 AWG (≈ 52/28) / 4c	0.461	11.7	154	240	1690
▶ 7171440	12 AWG (≈ 52/28) / 14c	0.823	20.9	538	840	3200
▶ 7172040	12 AWG (≈ 52/28) / 20c	0.917	23.3	768	1200	3700
▶ 7172540	12 AWG (≈ 52/28) / 25c	1.114	28.3	960	1500	4200
▶ 7170460	10 AWG (≈ 78/28) / 4c	0.528	13.4	230	360	1860
▶ 7171360	10 AWG (≈ 78/28) / 13c	0.957	24.3	749	1170	3400
▶ 7171860	10 AWG (≈ 78/28) / 18c	1.012	25.7	1037	1620	6000
▶ 7170470	8 AWG (≈ 77/26) / 4c	0.673	17.1	384	600	2300
▶ 7170480	6 AWG (≈ 122/26) / 4c	0.839	21.3	614	960	2800
▶ 7179001	12 AWG (≈ 52/28) / 14c + 24 AWG (≈ 14/34) / 2pr	0.882	22.4	533	840	2500
▶ 7179002	6 AWG (≈ 122/26) / 5c + 26 AWG (≈ 18/38) / 4pr	1.039	26.4	781	1200	3000
▶ 7179013	12 AWG (≈ 52/28) / 25c	0.984 1.102	min. 25.0 max. 28.0	867	1500	2600

Other dimensions and colors are available on request
Please mention the required winding length when placing the order.

● **Please pay attention to the installation instructions on page O/13**

HD 308 color code: up to 5 conductors
2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

DR 718 CP Highflex

PUR shielded reeling cable

Marking for DR 718 CP Highflex 7180425:
SAB BRÖCKSKES · D-VIERSEN · DR 718 CP Highflex 4 x 2.5 mm² CE

Application: The DR 718 CP Highflex is shielded and is used for spring loaded cable reels on stages in theaters as well as control cable in crane arms.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow ground
Stranding:	specially adjusted layering around a central suspension unit
Inner jacket:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Shielding:	tinned copper braiding
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **extremely high winding and unwinding strength**
- **lighter cable weight**
- **good EMC characteristics**

Also possible without inner jacket

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Current-carrying capacity:	acc. to VDE 0298-4, see chapter O/20 & 21
Min. bending radius:	
for laying and installation (fixed installation):	5 x O.D.
for repeated winding action (flexible):	7.5 x O.D.
guided on pulleys (flexible):	10 x O.D.
Temperature range:	
static:	-50/+90°C
flexible:	-40/+90°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
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Sunlight resistance:	very good - enhanced due to black jacket color
Tensile strength:	with reference to VDE 0298-3 section 7.1
Mechanical characteristics:	the main mechanical characteristics accomplished by the PUR outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

D
15

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft	tensile strength max. N	min breaking load of suspension unit N
▶ 7182005	20 AWG (≈ 16/32) / 20c	0.504	12.8	173	150	1600
▶ 7182505	20 AWG (≈ 16/32) / 25c	0.587	14.9	222	187	1700
▶ 7182507	19 AWG (≈ 23/32) / 25c	0.665	16.9	297	281	2000
▶ 7180410	18 AWG (≈ 30/32) / 4c	0.315	8.0	69	60	1100
▶ 7181210	18 AWG (≈ 30/32) / 12c	0.591	15.0	213	180	2000
▶ 7181810	18 AWG (≈ 30/32) / 18c	0.571	14.5	234	270	2200
▶ 7182510	18 AWG (≈ 30/32) / 25c	0.701	17.8	351	375	2400
▶ 7182610	18 AWG (≈ 30/32) / 26c	0.701	17.8	358	390	2400
▶ 7180415	16 AWG (≈ 27-29/30) / 4c	0.350	8.9	89	90	1340
▶ 7180515	16 AWG (≈ 27-29/30) / 5c	0.402	10.2	118	112	1690
▶ 7180715	16 AWG (≈ 27-29/30) / 7c	0.469	11.9	159	157	2150
▶ 7181215	16 AWG (≈ 27-29/30) / 12c	0.665	16.9	282	270	2600
▶ 7181415	16 AWG (≈ 27-29/30) / 14c	0.642	16.3	295	315	2600
▶ 7181615	16 AWG (≈ 27-29/30) / 16c	0.642	16.3	303	360	2600
▶ 7181815	16 AWG (≈ 27-29/30) / 18c	0.646	16.4	325	405	2600
▶ 7182415	16 AWG (≈ 27-29/30) / 24c	0.717	18.2	415	540	2800
▶ 7183015	16 AWG (≈ 27-29/30) / 30c	0.921	23.4	565	675	2900
▶ 7183715	16 AWG (≈ 27-29/30) / 37c	0.874	22.2	600	832	3200
▶ 7180425	14 AWG (≈ 46/30) / 4c	0.425	10.8	135	150	1345
▶ 7180525	14 AWG (≈ 46/30) / 5c	0.469	11.9	167	187	2100
▶ 7180725	14 AWG (≈ 46/30) / 7c	0.539	13.7	223	262	2500

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft	tensile strength max. N	min breaking load of suspension unit N
▶ 7181225	14 AWG (≈ 46/30) / 12c	0.783	19.9	410	450	2900
▶ 7181825	14 AWG (≈ 46/30) / 18c	0.768	19.5	476	675	3450
▶ 7182425	14 AWG (≈ 46/30) / 24c	0.929	23.6	638	900	2600
▶ 7183025	14 AWG (≈ 46/30) / 30c	1.055	26.8	798	1125	4200
▶ 7183625	14 AWG (≈ 46/30) / 36c	1.028	26.1	860	1350	5000
▶ 7184825	14 AWG (≈ 46/30) / 48c	1.209	30.7	1160	1800	6500
▶ 7185625	14 AWG (≈ 46/30) / 56c	1.283	32.6	1283	2100	7900
▶ 7180440	12 AWG (≈ 52/28) / 4c	0.484	12.3	191	240	1690
▶ 7180540	12 AWG (≈ 52/28) / 5c	0.539	13.7	232	300	2200
▶ 7180740	12 AWG (≈ 52/28) / 7c	0.642	16.3	336	420	2600
▶ 7180460	10 AWG (≈ 78/28) / 4c	0.539	13.7	261	360	1860
▶ 7180560	10 AWG (≈ 78/28) / 5c	0.618	15.7	331	450	2300
▶ 7180760	10 AWG (≈ 78/28) / 7c	0.744	18.9	464	630	2600
▶ 7180470	8 AWG (≈ 77/26) / 4c	0.713	18.1	441	600	2900
▶ 7180570	8 AWG (≈ 77/26) / 5c	0.799	20.3	543	750	3000
▶ 7180480	6 AWG (≈ 122/26) / 4c	0.878	22.3	662	960	2800
▶ 7180580	6 AWG (≈ 122/26) / 5c	0.980	24.9	811	1200	3000
▶ 7180490	4 AWG (≈ 190/26) / 4c	1.063	27.0	972	1500	3300
▶ 7180495	2 AWG (≈ 272/26) / 4c	1.213	30.8	1324	2100	3300
▶ 7180496	1 AWG (≈ 400/26) /4c	1.390	35.3	1855	3000	3800

Other dimensions and colors are available on request
Please mention the required winding length when placing the order.

HD 308 color code: up to 5 conductors
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

Please pay attention to the installation instructions on page O/13

DR 721 P

Reeling cable

Marking for DR 721 P 7210425:
SAB BRÖCKSKES · D-VIERSEN · DR 721 P 4 G 2.5 mm²

Application: The DR 721 P is used for spring cable and motor cable reels, hoists, transport systems and farm vehicles with medium mechanical stress.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow ground
Stranding:	specially adjusted layering
Inner jacket:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Supporting screen:	high-tech yarn
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **high winding and unwinding strength**
- **small outer diameter**
- **lighter cable weight**
- **correspond to low voltage guideline 73/23/EWG CE**

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Current-carrying capacity:	acc. to VDE 0298-4, see chapter O 20 & 21
Min. bending radius: *for laying and installation (fixed installation):* *for repeated winding action (flexible):* *guided on pulleys (flexible):*	 6 x O.D. 10 x O.D. 12 x O.D.
Temperature range: *static:* *flexible:*	 -50/+90°C -40/+90°C
Burning characteristics:	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
Chemical resistance:	very good against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Sunlight resistance:	very good - enhanced due to black jacket color
Tensile strength:	with reference to VDE 0298-3 section 7.1
Mechanical characteristics:	the main mechanical characteristics accomplished by the PUR outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ 7210415	16 AWG (≈ 27-29/30) / 4c	0.346	8.8	78
▶ 7210515	16 AWG (≈ 27-29/30) / 5c	0.378	9.6	94
▶ 7210715	16 AWG (≈ 27-29/30) / 7c	0.461	11.7	136
▶ 7211215	16 AWG (≈ 27-29/30) / 12c	0.646	16.4	228
▶ 7211815	16 AWG (≈ 27-29/30) / 18c	0.642	16.3	287
▶ 7212415	16 AWG (≈ 27-29/30) / 24c	0.772	19.6	384
▶ 7213615	16 AWG (≈ 27-29/30) / 36c	0.870	22.1	536
▶ 7210425	14 AWG (≈ 46/30) / 4c	0.402	10.2	113
▶ 7210525	14 AWG (≈ 46/30) / 5c	0.441	11.2	138
▶ 7210725	14 AWG (≈ 46/30) / 7c	0.535	13.6	200
▶ 7211225	14 AWG (≈ 46/30) / 12c	0.764	19.4	341
▶ 7211825	14 AWG (≈ 46/30) / 18c	0.764	19.4	426
▶ 7212425	14 AWG (≈ 46/30) / 24c	0.929	23.6	574
▶ 7213625	14 AWG (≈ 46/30) / 36c	1.039	26.4	804

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ 7210440	12 AWG (≈ 52/28) / 4c	0.488	12.4	172
▶ 7210460	10 AWG (≈ 78/28) / 4c	0.567	14.4	244
▶ 7210560	10 AWG (≈ 78/28) / 5c	0.614	15.6	294
▶ 7210470	8 AWG (≈ 77/26) / 4c	0.705	17.9	393
▶ 7210480	6 AWG (≈ 122/26) / 4c	0.882	22.4	608
▶ 7210580	6 AWG (≈ 122/26) / 5c	0.984	25.0	760
▶ 7210390	4 AWG (≈ 190/26) / 3c + 10 AWG (≈ 78/28) / 3c	0.953	24.2	791
▶ 7210395	2 AWG (≈ 272/26) / 3c + 10 AWG (≈ 78/28) / 3c	1.102	28.0	1054
▶ 7210396	1 AWG (≈ 400/26) / 3c + 8 AWG (≈ 77/26) / 3c	1.252	31.8	1511

Other dimensions and colors are available on request
Please mention the required winding length when placing the order.

HD 308 color code: up to 5 conductors
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

Please pay attention to the installation instructions on page O/13

DR 720 P Highflex

PUR reeling cable

Marking for DR 720 P Highflex 7200425:
SAB BRÖCKSKES · D-VIERSEN · DR 720 P Highflex 4 G 2.5 mm² CE

Application: The DR 720 P Highflex is used for heavy applications, for example, motor cable reels hoists, transport systems, movable motors and farm vehicles with high mechanical stress.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow ground
Stranding:	specially adjusted layering around central suspension unit
Inner jacket:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Supporting screen:	high-tech yarn
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **path feed rate up to 120 m/min.**
- **extremely high winding and unwinding strength**
- **small outer diameter**
- **lighter cable weight**
- **correspond to low voltage guideline 73/23/EWG CE**

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Current-carrying capacity:	acc. to VDE 0298-4, see chapter O/20 & 21
Min. bending radius:	
for laying and installation (fixed installation):	≤ 12 mm: 3 x O.D. >12 mm: 4 x O.D.
for repeated winding action (flexible):	6 x O.D.
guided on pulleys (flexible):	7.5 x O.D.
Temperature range:	
static:	-50/+90°C
flexible:	-40/+90°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
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Sunlight resistance:	very good - enhanced due to black jacket color
Tensile strength:	acc. to VDE 0298-3 section 7.1
Mechanical characteristics:	the main mechanical characteristics accomplished by the PUR outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

D
17

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	min breaking load of suspension unit N
▶ 7200415	16 AWG (≈ 27-29/30) / 4c	0.354	9.0	80	1340
▶ 7200515	16 AWG (≈ 27-29/30) / 5c	0.386	9.8	95	1690
▶ 7200715	16 AWG (≈ 27-29/30) / 7c	0.465	11.8	137	2150
▶ 7201215	16 AWG (≈ 27-29/30) / 12c	0.654	16.6	241	2600
▶ 7201815	16 AWG (≈ 27-29/30) / 18c	0.646	16.4	289	2600
▶ 7200425	14 AWG (≈ 46/30) / 4c	0.409	10.4	114	1345
▶ 7200525	14 AWG (≈ 46/30) / 5c	0.457	11.6	143	2100
▶ 7200725	14 AWG (≈ 46/30) / 7c	0.543	13.8	201	2500
▶ 7201225	14 AWG (≈ 46/30) / 12c	0.772	19.6	357	2900
▶ 7201825	14 AWG (≈ 46/30) / 18c	0.776	19.7	431	3450
▶ 7202425	14 AWG (≈ 46/30) / 24c	0.937	23.8	591	2700
▶ 7203025	14 AWG (≈ 46/30) / 30c	1.047	26.6	738	4200
▶ 7205025	14 AWG (≈ 46/30) / 50c	1.276	32.4	1168	6750

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	min breaking load of suspension unit N
▶ 7200440	12 AWG (≈ 52/28) / 4c	0.488	12.4	171	1690
▶ 7201240	12 AWG (≈ 52/28) / 12c	0.945	24.0	561	5000
▶ 7200460	10 AWG (≈ 78/28) / 4c	0.583	14.8	248	1860
▶ 7200470	8 AWG (≈ 77/26) / 4c	0.717	18.2	398	2300
▶ 7200480	6 AWG (≈ 122/26) / 4c	0.894	22.7	615	2800
▶ 7200390	4 AWG (≈ 190/26) / 3c + 10 AWG (≈ 78/28) / 3c	0.957	24.3	798	3300
▶ 7200490	4 AWG (≈ 190/26 / 4	1.059	26.9	908	3300
▶ 7200395	2 AWG (≈ 272/26) / 3c + 10 AWG (≈ 78/28) / 3c	1.106	28.1	1060	3300
▶ 7200495	2 AWG (≈ 272/26) / 4	1.240	31.5	1272	3300
▶ 7200396	1 AWG (≈ 400/26) / 3c + 8 AWG (≈ 77/26) / 3c	1.256	31.9	1521	3800

Other dimensions and colors are available on request
Please mention the required winding length when placing the order.

HD 308 color code: up to 5 conductors
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

Please pay attention to the installation instructions on page O/13

DR 730 P Highflex

PUR reeling cable

Marking for DR 730 P Highflex 7300425:
SAB BRÖCKSKES · D-VIERSEN · DR 730 P Highflex 4 G 2.5 mm² AWM Style 21897 80°C c AWM I/II A/B 80°C 600V FT1 FT2 CE

Application: The DR 730 P Highflex is a UL AWM approved polyurethane cable. It is used for heavy applications, for example, motor cable reels hoists, transport systems, movable motors and farm vehicles with high mechanical stress.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow
ground**Stranding:**	specially adjusted layering around central suspension unit
Inner jacket:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Supporting screen:	high-tech yarn
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **UL recognized - Style 21897**
- **cUL recognized**
- **path feed rate up to 120 m/min.**
- **extremely high winding and unwinding strength**
- **small outer diameter**
- **small cable weight**
- **correspond to low voltage guideline 73/23/EWG CE**

Hybrid cable on request

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Voltage UL:	1000 V
Voltage cUL:	600 V
Testing voltage:	conductor/conductor: 4000 V
Current-carrying capacity:	acc. to VDE 0298-4, see chapter O/20 & 21
Min. bending radius: *for laying and installation (fixed installation):* *for repeated winding action (flexible):* *guided on pulleys (flexible):*	≤ 12 mm: 3 x O.D. >12 mm: 4 x O.D. 6 x O.D. 7.5 x O.D.
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/cUL:** up to +80°C -50/+90°C -40/+90°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 cUL FT1 FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Sunlight resistance:	very good - enhanced due to black jacket color
Tensile strength:	acc. to VDE 0298-3 section 7.1
Mechanical characteristics:	the main mechanical characteristics accomplished by the PUR outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance
Approvals:	UR AWM, cUR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	min breaking load of suspension unit N
▶ 7300415	16 AWG (≈ 27-29/30) / 4c	0.402	10.2	98	1340
▶ 7300515	16 AWG (≈ 27-29/30) / 5c	0.433	11.0	114	1690
▶ 7300715	16 AWG (≈ 27-29/30) / 7c	0.492	12.5	151	2150
▶ 7301215	16 AWG (≈ 27-29/30) / 12c	0.665	16.9	256	2600
▶ 7301815	16 AWG (≈ 27-29/30) / 18c	0.673	17.1	306	2600
▶ 7300425	14 AWG (≈ 46/30) / 4c	0.445	11.3	130	1345
▶ 7300525	14 AWG (≈ 46/30) / 5c	0.484	12.3	154	2100
▶ 7300725	14 AWG (≈ 46/30) / 7c	0.551	14.0	207	2500
▶ 7301225	14 AWG (≈ 46/30) / 12c	0.772	19.6	368	2900
▶ 7301825	14 AWG (≈ 46/30) / 18c	0.772	19.6	437	3450
▶ 7302425	14 AWG (≈ 46/30) / 24c	0.941	23.9	599	2700
▶ 7303625	14 AWG (≈ 46/30) / 36c	1.059	26.9	822	4200

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	min breaking load of suspension unit N
▶ 7300440	12 AWG (≈ 52/28) / 4c	0.508	12.9	181	1690
▶ 7301240	12 AWG (≈ 52/28) / 12c	0.945	24.0	561	5000
▶ 7300460	10 AWG (≈ 78/28) / 4c	0.579	14.7	249	1860
▶ 7300470	8 AWG (≈ 77/26) / 4c	0.709	18.0	409	2300
▶ 7300480	6 AWG (≈ 122/26) / 4c	0.929	23.6	661	2800
▶ 7300390	4 AWG (≈ 190/26) / 3c + 10 AWG (≈ 78/28) / 3c	0.984	25.0	836	3300
▶ 7300395	2 AWG (≈ 272/26) / 3c + 10 AWG (≈ 78/28) / 3c	1.114	28.3	1088	3300
▶ 7300495	2 AWG (≈ 272/26) / 4c	1.240	31.5	1272	3300

Other dimensions and colors are available on request
Please mention the required winding length when placing the order.

Please pay attention to the installation instructions on page O/13

DR 750 P Offshore

Reeling cable for offshore applications

Marking for DR 750 P Offshore 7500425:
SAB BRÖCKSKES · D-VIERSEN · DR 750 P Offshore 4 G 2.5 mm² 0.6/1 kV CE

Application: The DR 750 P Offshore is a reeling cable for offshore areas. It is designed for spring loaded and motor driven cable reels in lifting and handling equipment on offshore platforms or ships

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow
ground**Stranding:**	specially adjusted layering
Inner jacket:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Supporting screen:	high-tech yarn
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005) matte

Outstanding features:

- **suitable for offshore applications**
- **extremely high winding and unwinding strength**
- **small outer diameter**
- **lighter cable weight**
- **flame retardant and self-extinguishing**
- **halogen-free**
- **asbestos-free**

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.
flexible:	10 x O.D.
for repeated winding action (flexible):	10 x O.D.
guided on deflection pulleys (flexible):	15 x O.D.
Temperature range:	
flexible:	-40/+90°C lower temperatures on request
Halogen and fluorine content:	acc. to IEC 60754-1 + EN 60754-1
Burning characteristics:	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
MUD resistance:	very good - acc. to IEC 630092-350, IEC 61892-4, NEK TS 606
Chemical resistance:	very good against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Sunlight resistance:	very good - enhanced due to black jacket color
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

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19

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	min breaking load of suspension unit N
▶ 7500210	18 AWG (≈ 56/34) / 2c	0.406	10.3	79	500
▶ 7500410	18 AWG (≈ 56/34) / 4c	0.429	10.9	94	1100
▶ 7501210	18 AWG (≈ 56/34) / 12c	0.732	18.6	275	2000
▶ 7500315	16 AWG (≈ 84/34) / 3c	0.429	10.9	97	1000
▶ 7500415	16 AWG (≈ 84/34) / 4c	0.457	11.6	112	1340
▶ 7500715	16 AWG (≈ 84/34) / 7c	0.579	14.7	183	2150
▶ 7501215	16 AWG (≈ 84/34) / 12c	0.787	20.0	343	2600
▶ 7501815	16 AWG (≈ 84/34) / 18c	0.787	20.0	351	3375
▶ 7500325	14 AWG (≈ 140/34) / 3c	0.461	11.7	122	1200
▶ 7500425	14 AWG (≈ 140/34) / 4c	0.512	13.0	148	1345

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	min breaking load of suspension unit N
▶ 7500440	12 AWG (≈ 224/34) / 4c	0.567	14.4	199	2000
▶ 7500460	10 AWG (≈ 186/32) / 4c	0.622	15.8	262	3000
▶ 7500461	8 AWG (≈ 320/32) /4c	0.748	19.0	411	5000
▶ 7500462	6 AWG (≈ 504/32) / 4c	0.902	22.9	609	8000
▶ 7500463	4 AWG (≈ 760/32) /4c	1.063	27.0	915	12500
▶ 7500464	2 AWG (≈ 1083/32) / 4c	1.213	30.8	1212	17500
▶ 7500465	1 AWG (≈ 703/28) / 4c	1.362	34.6	1712	25000
▶ 7500466	2/0 AWG (≈ 988/28) /4c	1.622	41.2	2317	35000

Other dimensions and colors are available on request
Please mention the required winding length when placing the order.

HD 308 color code: up to 5 conductors
2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

Please pay attention to the installation instructions on page O/13

DR 724 P Spreader

PUR reeling cable for spreader applications

Marking for DR 724 P Spreader 7244610:
SAB BRÖCKSKES · D-VIERSEN · DR 724 P Spreader 46 G 1.0 mm² CE

Application: The DR 724 P Spreader is for use in reeling applications with heavy duty mechanical stress e.g. in motor driven drums on container cranes.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	up to 5 conductors: HD 308 (VDE 0293-308), see below from 6 conductors: black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors: green/yellow ground
Stranding:	specially adjusted layering around central Aramid suspension unit
Inner jacket:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Torsion protecting net:	Aramid
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **path feed rate up to 240 m/min.**
- **high winding and unwinding strength**
- **for high mechanical stress in reeling processes**
- **flame retardant and self-extinguishing**
- **small outer diameter**
- **lighter cable weight**

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Current-carrying capacity:	acc. to VDE 0298-4, see chapter O/20 & 21
Min. bending radius: *for laying and installation (fixed installation):* *for repeated winding action (flexible):* *guided on pulleys (flexible):*	 5 x O.D. 7.5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:*	 -50/+90°C -40/+90°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
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Sunlight resistance:	very good - enhanced due to black jacket color
Tensile strength:	acc. to VDE 0298-3 section 7.1
Mechanical characteristics:	the main mechanical characteristics accomplished by the PUR outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft	tensile strength central suspension unit max. N
▶ 7244610	18 AWG (≈ 30/32) / 46c	1.110	28.2	667	25
▶ 7244910	18 AWG (≈ 30/32) / 49c	1.209	30.7	759	25
▶ 7242425	14 AWG (≈ 46/30) / 24c	0.957	24.3	610	25
▶ 7243025	14 AWG (≈ 46/30) / 30c	1.106	28.1	806	25
▶ 7243625	14 AWG (≈ 46/30) / 36c	1.280	32.5	990	25
▶ 7244225	14 AWG (≈ 46/30) / 42c	1.409	35.8	1189	25
▶ 7244425	14 AWG (≈ 46/30) / 44c	1.457	37.0	1261	25
▶ 7245625	14 AWG (≈ 46/30) / 56c	1.799	45.7	1791	25

Other dimensions and colors are available on request
Please mention the required winding length when placing the order.

HD 308 color code: up to 5 conductors
2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

Please pay attention to the installation instructions on page O/13

Spreader 722

PUR control cable for basket operation

Marking for Spreader 722 7224225:
SAB BRÖCKSKES · D-VIERSEN · Spreader 722 42 G 2.5 mm²

Application: The Spreader 722 is used for load-lift equipment, e.g. spreader with high mechanical stress in gravity-fed vertical basket operation.

Construction:

Conductor:	bare copper strands
Insulation:	PVC
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground
Suspension unit	Armid braided with lead, 50 m of the suspended cable are supported by a 5 times safety calculation
Stranding:	conductors are twisted to bundles with lead cord in the center
Wrapping:	overlapping non-woven tape
Stranding	bundle and lead cords twisted, suspension unit in the center
Wrapping:	overlapping non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **for basket applications**
- **high tensile load of supporting unit**
- **oil resistant**
- **weather resistant**

Technical data:

Nominal voltage:	Uo/U 300/500V
Testing voltage:	conductor/conductor: 2000 V
Temperature range:	
fixed installation:	-20/+60°C
flexible	-20/+60°C
max. allowed operating temperature at conductor:	+70°C
short circuit temperature at conductor:	+150°C
Tensile strength:	max. 15 N/mm² x sum of all cable sections
Recommended cage dimensions:	cage diameter min. 30 x O.D. cage height approx. 45 x O.D.
Travel speed hoisting gear:	max. 160m/min.
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Weather resistance:	appropriate for applications in dry, damp, and wet rooms as well as in the open-air with a very good resistance against ozone, UV radiation and humidity

Due to the lead cord, this cable isn't free of harmful substances acc. to RoHS directive of the European Union

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **18 AWG (≈ 56/34) ▪ 1.00 mm²**				
7224810	48	1.264	32.1	1311
▶ **14 AWG (≈ 140/34) ▪ 2.50 mm²**				
7222425	24	1.169	29.7	1115
7223025	30	1.295	32.9	1355
7223625	36	1.425	36.2	1725
7224225	42	1.543	39.2	2135
7224825	48	1.650	41.9	2389
▶ **12 AWG (≈ 70/24) ▪ 3.50 mm²**				
7222035	20	1.217	30.9	1157
7222435	24	1.307	33.2	1393
7223035	30	1.457	37.0	1723
7223635	36	1.583	40.2	2162

Other dimensions and colors are available on request

Festoon 715 P

PUR cable for flexible application in festoon systems

CE RoHS

Marking for Festoon 715 P 7150162:
SAB BRÖCKSKES · D-VIERSEN · Festoon 715 P 1x16.0 mm² CE *and current meter marking*

Marking for Festoon 715 P 7151825:
SAB BRÖCKSKES · D-VIERSEN · Festoon 715 P 18 G 2.5 mm² CE *and current meter marking*

Application: The Festoon 715 P cable is designed for high mechanical stress. It is particularly suitable for use in cable roller assemblies.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	TPE
Color code:	single conductor: black; from 2 conductors: HD 308 (VDE 0293-308) see below; from 6 conductors: black with consecutive numbers acc. to EN 50334 + VDE 0293-334; from 3 conductors a green/yellow ground
Stranding:	specially adjusted layering with a suspension unit (single conductor cables without a suspension unit)
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V
Min. bending radius:	6 x O.D.
Continuous tensile load:	max. 15 n/mm2 acc. to DIN VDE 0298 part 3 section 7.1
Temperature range: *static:* *flexible:*	 -50/+90°C -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 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Continuous flexibility:	very good
Weather resistance:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- **halogen-free**
- **high abrasion resistance**
- **small outer diameter**
- **path feed rate in cable roller assemblies up to 240 m/min.**
- **simple reeling operation permitted**

HD 308 color code: up to 5 conductors
2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **16 AWG (≈ 27-29/30) • 1.50 mm²**				
7150315	3	0.287	7.3	51
7150415	4	0.311	7.9	63
7150515	5	0.346	8.8	79
7150715	7	0.409	10.4	112
7151215	12	0.492	12.5	165
7151815	18	0.594	15.1	247
7152415	24	0.689	17.5	343
7153015	30	0.736	18.7	398
▶ **14 AWG (≈ 46/38) • 2.50 mm²**				
7150325	3	0.319	8.1	71
7150425	4	0.346	8.8	90
7150525	5	0.398	10.1	114
7150725	7	0.472	12.0	163
7151225	12	0.571	14.5	247
7151825	18	0.681	17.3	365
7152425	24	0.795	20.2	536
7153025	30	0.843	21.4	579
▶ **12 AWG (≈ 52/28) • 4.00 mm²**				
7150440	4	0.421	10.7	138

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **10 AWG (≈ 78/28) • 6.00 mm²**				
7150460	4	0.476	12.1	193
▶ **8 AWG (≈ 77/26) • 10.00 mm²**				
7150361	3	0.563	14.3	256
7150461	4	0.622	15.8	331
7150561	5	0.681	17.3	406
▶ **6 AWG (≈ 122/26) • 16.00 mm²**				
7150162	1	0.343	8.7	120
7150362	3	0.689	17.5	379
7150462	4	0.752	19.1	507
7150562	5	0.858	21.8	633
▶ **4 AWG (≈ 190/26) • 25.00 mm²**				
7150163	1	0.398	10.1	177
7150463	4	0.933	23.7	763
7150563	5	1.035	26.3	953
▶ **2 AWG (≈ 272/26) • 35.00 mm²**				
7150164	1	0.476	12.1	253
7150464	4	1.091	27.7	1069

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **1 AWG (≈ 400/26) • 50.00 mm²**				
7150165	1	0.531	13.5	358
7150465	4	1.240	31.5	1520
▶ **2/0 AWG (≈ 543/26) • 70.00 mm²**				
7150166	1	0.630	16.0	482
▶ **3/0 AWG (≈ 484/24) • 95.00 mm²**				
7150167	1	0.744	18.9	665
▶ **4/0 AWG (≈ 589/24) • 120.00 mm²**				
7150168	1	0.819	20.8	808
▶ **250 MCM (≈ 740/24) • 150.00 mm²**				
7150169	1	0.894	22.7	1008
▶ **350 MCM (≈ 902/24) • 185.00 mm²**				
7150170	1	0.976	24.8	1222
▶ **450 MCM (≈ 1220/24) • 240.00 mm²**				
7150171	1	1.122	28.5	1635
▶ **1 AWG (≈ 400/26) x 8 AWG (≈ 77/26) 50.00 mm² + 10.00 mm²**				
715....	3 + 3	1.102	28.0	1728

Other dimensions and colors are available on request

Festoon 716 CP

Shielded PUR cable for flexible application in festoon systems

Marking for Festoon 716 CP 7160162:
SAB BRÖCKSKES · D-VIERSEN · Festoon 716 CP 1x25.0 mm² CE *and current meter marking*

Marking for Festoon 716 CP 7161825:
SAB BRÖCKSKES · D-VIERSEN · Festoon 716 CP 18 G 2.5 mm² CE *and current meter marking*

Application: The Festoon 716 CP cable is designed for high mechanical stress. It is particularly suitable for use in cable roller assemblies. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	TPE
Color code:	single conductor: black; from 2 conductors: HD 308 (VDE 0293-308) see below, from 6 conductors: black with consecutive numbers acc. to EN 50334 + VDE 0293-334; from 3 conductors a green/yellow ground
Stranding:	specially adjusted layering with a suspension unit (single conductor cables without a suspension unit)
Wrapping:	non-woven tape
Shielding:	tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius:	7.5 x O.D.
Continuous tensile load:	max. 15 n/mm2 acc. to DIN VDE 0298 part 3 section 7.1
Temperature range: *static:* *flexible:*	 -50/+90°C -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 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Continuous flexibility:	very good
Weather resistance:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- **very good EMC characteristics**
- **halogen-free**
- **high abrasion resistance**
- **small outer diameter**
- **path feed rate in cable roller assemblies up to 240 m/min.**
- **simple reeling operation permitted**

HD 308 color code: up to 5 conductors
2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **16 AWG (≈ 27-29/30) ▪ 1.50 mm²**				
7160215	2	0.295	7.5	54
7160715	7	0.441	11.2	136
7161215	12	0.524	13.3	192
7161815	18	0.642	16.3	298
▶ **14 AWG (≈ 46/30) ▪ 2.50 mm²**				
7160425	4	0.402	10.2	119
7160525	5	0.437	11.1	138
7161225	12	0.618	15.7	285
7161825	18	0.748	19.0	432
▶ **12 AWG (≈ 52/28) ▪ 4.00 mm²**				
7160440	4	0.476	12.1	174
▶ **10 AWG (≈ 78/28) ▪ 6.00 mm²**				
7160460	4	0.559	14.2	246
▶ **8 AWG (≈ 77/26) ▪ 10.00 mm²**				
7160461	4	0.697	17.7	403
▶ **6 AWG (≈ 122/26) ▪ 16.00 mm²**				
7160462	4	0.866	22.0	607
▶ **4 AWG (≈ 190/26) ▪ 25.00 mm²**				
7160163	1	0.433	11.0	206
7160463	4	1.016	25.8	875
▶ **2 AWG (≈ 272/26) ▪ 35.00 mm²**				
7160464	4	1.173	29.8	1203
▶ **1 AWG (≈ 400/26) ▪ 50.00 mm²**				
7160165	1	0.575	14.6	408
7160465	4	1.315	33.4	1653
▶ **2/0 AWG (≈ 543/26) ▪ 70.00 mm²**				
7160166	1	0.673	17.1	539
▶ **3/0 AWG (≈ 484/24) ▪ 95.00 mm²**				
7160167	1	0.787	20.0	736
▶ **4/0 AWG (≈ 589/24) ▪ 120.00 mm²**				
7160168	1	0.862	21.9	881

Other dimensions and colors are available on request

MR 460

PUR control cable with fiber-reinforced jacket

Marking for MR 460 34601207:
SAB BRÖCKSKES · D-VIERSEN · MR 460 12 x 0.75 mm² 34601207 CE

Application: The MR 460 cable is intended for unprotected usage with high mechanical stress e.g. in the forest and agriculture industry.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	TPE
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 from 3 conductors a green/yellow ground
Stranding:	specially adjusted layering
Wrapping:	non-woven tape
Supporting screen:	high-tech yarn
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (similar RAL 9005)

Outstanding features:

- **halogen-free**
- **reinforced outer jacket for high mechanical stress**
- **notch resistant abrasion resistant**
- **good flexibility also at low temperatures**
- **weather resistant**
- **oil resistance**
- **good chemical resistance**
- **sunlight resistance**

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius: *fixed installation:* *flexible application:*	 5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:*	 -50/+90°C -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 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
UV resistance:	very good - enhanced due to black jacket color
Mechanical characteristics:	the main mechanical characteristics accomplished by the PUR outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance - high transverse strength
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **20 AWG (≈ 28/34) • 0.50 mm²**				
84600305	3	0.252	6.4	34
84600405	4	0.264	6.7	38
84600505	5	0.287	7.3	44
84600705	7	0.323	8.2	59
84601205	12	0.386	9.8	86
84601805	18	0.441	11.2	118
84602505	25	0.520	13.2	157
▶ **19 AWG (≈ 42/34) • 0.75 mm²**				
84600307	3	0.276	7.0	42
84600407	4	0.291	7.4	48
84600507	5	0.315	8.0	59
84600707	7	0.354	9.0	74
84601207	12	0.429	10.9	106
84601807	18	0.508	12.9	159
84602507	25	0.598	15.2	217

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **18 AWG (≈ 56/34) • 1.00 mm²**				
84600310	3	0.291	7.4	48
84600410	4	0.311	7.9	60
84600510	5	0.335	8.5	70
84600710	7	0.390	9.9	92
84601210	12	0.469	11.9	141
84601810	18	0.535	13.6	190
84602510	25	0.654	16.6	273
▶ **16 AWG (≈ 84/34) • 1.50 mm²**				
84600315	3	0.315	8.0	65
84600415	4	0.339	8.6	76
84600515	5	0.366	9.3	89
84600715	7	0.429	10.9	138
84601215	12	0.516	13.1	186
84601815	18	0.610	15.5	271
84602515	25	0.724	18.4	363

item no.	no. of conductors incl. ground	outer-ø inch ± 5%	outer-ø mm ± 5%	cable weight ≈lbs/mft
▶ **14 AWG (≈ 140/34) • 2.50 mm²**				
84600325	3	0.386	9.8	94
84600425	4	0.413	10.5	114
84600525	5	0.453	11.5	138
84600725	7	0.531	13.5	184
84601225	12	0.657	16.7	300
84601825	18	0.764	19.4	443
84602525	25	0.921	23.4	583

Other dimensions and colors are available on request

SAB 755 - Exploration

Highly flexible PUR control and power supply cable

Marking for SAB 755 - Exploration 7550715:
SAB BRÖCKSKES · D-VIERSEN · SAB 755-Exploration 7x1.5mm² cULus AWM Style 21233 80°C 1000V AWM I/II A/B 80°C 1000V FT1 FT2 0755-0715 CE

Application: Halogen-free, shielded connection and control cable applied for drilling equipment, compressors or pumps in especially rough and wet environments of machine tools and production lines.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	up to 4 conductors: HD 308 (VDE 0293-308) see below; from 5 conductors: black with consecutive numbers acc. to EN 50334 + VDE 0293-334; and a green/yellow ground
Shielding:	tinned copper braiding
Supporting screen:	high-tech yarn
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **UL/cUL recognized**
- **extremely large temperature range**
- **small outer diameter**
- **lighter cable weight**
- **application in Topside drilling loop**

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Voltage UL/cUL:	1000 V
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Current-carrying capacity:	acc. to VDE 0298-4
Min. bending radius: *fixed installation:* *flexible application:*	 6 x O.D. 15 x O.D.
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/cUL:** up to +80°C -50/+90°C -45/+90°C
Cold resistance:	-50°C acc. to DIN EN 60811-506
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 cUL FT1 FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
MUD resistance:	very good - acc. to IEC 60992-360, IEC 61892-4 NEK TS 606
Tensile strength:	max. 20 N/mm²
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc.to UL 1309
Approvals:	UR AWM, cUR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **16 AWG • 1.50 mm²**				
7550715	7	0.445	11.3	140
7551215	12	0.520	13.2	194
7551515	15	0.598	15.2	260
7551815	18	0.626	15.9	293
7552515	25	0.748	19.0	386
▶ **14 AWG • 2.50 mm²**				
7550525	5	0.433	11.0	148
7550725	7	0.512	13.0	198
7551225	12	0.622	15.8	304
▶ **12 AWG • 4.00 mm²**				
7550340	3	0.437	11.1	136
7550440	4	0.480	12.2	182
7550540	5	0.524	13.3	216
▶ **10 AWG • 6.00 mm²**				
7550360	3	0.520	13.2	205
7550460	4	0.563	14.3	260
7550560	5	0.618	15.7	316
▶ **8 AWG • 10.00 mm²**				
7550361	3	0.630	16.0	323
7550461	4	0.654	16.6	377
7550561	5	0.752	19.1	480

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **6 AWG • 16.00 mm²**				
7550362	3	0.768	19.5	466
7550462	4	0.835	21.2	577
7550562	5	0.921	23.4	713
▶ **4 AWG • 25.00 mm²**				
7550363	3	0.902	22.9	683
7550463	4	0.984	25.0	857
7550563	5	1.087	27.6	1054
▶ **2 AWG • 35.00 mm²**				
7550164	1	0.610	15.5	314
7550364	3	1.035	26.3	958
7550464	4	1.134	28.8	1185
7550564	5	1.232	31.3	1451
▶ **1 AWG • 50.00 mm²**				
7550165	1	0.681	17.3	434
7550365	3	1.154	29.3	1299
7550465	4	1.268	32.2	1641
7550565	5	1.398	35.5	2020

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **2/0 AWG • 70.00 mm²**				
7550166	1	0.780	19.8	579
▶ **3/0 AWG • 95.00 mm²**				
7550167	1	0.909	23.1	792
▶ **4/0 AWG • 120.00 mm²**				
7550168	1	0.969	24.6	954
▶ **250 MCM • 150.00 mm²**				
7550169	1	1.063	27.0	1174
▶ **350 MCM • 185.00 mm²**				
7550170	1	1.142	29.0	1396
▶ **450 MCM • 240.00 mm²**				
7550171	1	1.350	34.3	1885
▶ **550 MCM • 300.00 mm²**				
7550172	1	1.476	37.5	2315

Other dimensions and colors are available on request

Hybrid cable on request!

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SAB S 745 - Exploration

Continuous flex oil resistant PUR control cable

Marking for SAB S 745 - Exploration 7451815:
SAB BRÖCKSKES · D-VIERSEN · SAB S 745 - Exploration 18x1.5mm² c us AWM Style 21233 80°C 1000V AWM I/II A/B 80°C 1000V FT1 FT2 745-0715 CE

Application: Halogen-free, shielded control cable for continuous flexible use in cable chains in rough environments for example drilling equipment or wet areas of machine tools and production lines. Appropriate for outdoor and indoor areas.

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; and a green/yellow ground
Inner jacket:	SABIX® (only for multi-conductor cables)
Shielding:	tinned copper braiding
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **UL/cUL recognized**
- **extremely large temperature range**
- **small outer diameter**
- **lighter cable weight**
- **long travels possible**
- **very good EMC characteristics**

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/cUL:	600 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius: *continuously flexible:*	10 x O.D.
Temperature range: *fixed installation:* *flexible application*:*	**DIN VDE** **UL/cUL:** up to +80°C -50/+90°C -45/+90°C
Cold resistance:	-50°C acc. to DIN EN 60811-506
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 cUL FT1 FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
MUD resistance:	very good - acc. to IEC 60992-360, IEC 61892-4 NEK TS 606
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc.to UL 1309
Approvals:	UR AWM, cUR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

*protected installation

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **16 AWG ▪ 1.50 mm²**				
7450315	3	0.307	7.8	65
7450515	5	0.358	9.1	91
7451815	18	0.610	15.5	270
7452515	25	0.748	19.0	409
▶ **14 AWG ▪ 2.50 mm²**				
7450325	3	0.398	10.1	105
7450525	5	0.445	11.3	157
7451825	18	0.717	18.2	472
7452525	25	0.850	21.6	665

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **12 AWG ▪ 4.00 mm²**				
7450440	4	0.492	12.5	182
▶ **10 AWG ▪ 6.00 mm²**				
7450160	1	0.252	6.4	59
7450460	4	0.602	15.3	284
▶ **8 AWG ▪ 10.00 mm²**				
7450161	1	0.291	7.4	91

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
▶ **6 AWG ▪ 16.00 mm²**				
7450162	1	0.339	8.6	133
7450462	4	0.878	22.3	656
▶ **4 AWG ▪ 25.00 mm²**				
7450163	1	0.417	10.6	204
▶ **1 AWG ▪ 50.00 mm²**				
7450165	1	0.579	14.7	406

Other dimensions and colors are available on request

Hybrid cable on request!

SL 851 C - Exploration

PUR shielded motor connection cable, 0.6/1 kV

0.6/1 kV

Marking for SL 851 C - Exploration 8510425:

SAB BRÖCKSKES · D-VIERSEN · SL 851 C - Exploration 4x2.5mm² AWM Style 21223 80°C 1000V cULus AWM I/II A/B 80°C 1000V FT1 FT2 CE

Application: Motor connection cable for the electrical hook-up of drilling equipment, compressors, generators as well as pumps in rough environments.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	HD 308 (VDE 0293-308), see below and a green/yellow ground
Shielding:	double shield: alu. foil and tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **UL/cUL recognized**
- **Extremely large temperature range**
- **Low surface transfer impedance**
- **Low mutual capacitance**
- **Very good oil resistance**
- **Very good EMC characteristics**
- **Halogen-free**

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Voltage UL/cUL:	1000 V
Maximum operating voltage:	*in three-phase current and single phase current operation:* Uo/U 0.7/1.2 kV *in D.C. current operation:* Uo/U 0,9/1.8 kV *peak value of AC voltage:* U^ 1.7 kV
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius:	**≤ 12 mm** / **> 12 mm up to ≤ 20 mm** / **> 20 mm** *fixed installation:* 5 x O.D. / 7.5 x O.D / 10 x O.D *flexible application:* 10 x O.D / 15 x O.D / 20 x O.D
Temperature range:	**DIN VDE** **UL/cUL:** up to +80°C *static:* -50/+90°C *flexible*:* -45/+90°C
Cold resistance:	-50°C acc. to DIN EN 60811-506
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; cUL FT1 FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
MUD resistance:	very good - acc. to IEC 60992-360, IEC 61892-4, NEK TS 606
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc.to UL 1309
Approvals:	UR AWM, cUR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30 *protected installation

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
► **14 AWG • 2.50 mm²**				
8510425	4	0.394	10.0	113
► **12 AWG • 4.00 mm²**				
8510440	4	0.484	12.3	178
► **10 AWG • 6.00 mm²**				
8510460	4	0.551	14.0	259
► **8 AWG • 10.00 mm²**				
8510470	4	0.669	17.0	425
► **6 AWG • 16.00 mm²**				
8510480	4	0.870	22.1	626
► **4 AWG • 25.00 mm²**				
8510490	4	1.020	25.9	474
► **2 AWG • 35.00 mm²**				
8510495	4	1.173	29.8	1216
► **1 AWG • 50.00 mm²**				
8510496	4	1.311	33.3	1670
► **2/0 AWG • 70.00 mm²**				
8510498	4	1.563	39.7	2319

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

small shielding capacitances for your frequency controlled drives and motors (VFD) U^ 1.7 kV

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BB 380 Boarding Bridge

Cables for the flexible applications in passenger bridges

Marking for BB 380 Boarding Bridge 53800410:
SAB BRÖCKSKES · D-VIERSEN · BB 380 Boarding Bridge 300/500V 4 G 1.0 mm2 CE

Application: The BB 380 Boarding Bridge is ideally suitable for use in passenger boarding bridges. In addition to halogen-free, this cable has further advantages such as oil resistance, weather resistance and UV resistance.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, EN 60228 VDE 0295, class 5
Insulation:	special SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334, from 3 conductors a green/yellow ground
Stranding:	in layers
Wrapping:	non-woven tape
Jacket material:	PUR
Jacket color:	black (RAL 9005)

Outstanding features:

- **halogen-free**
- **oil resistant**
- **weather resistant**
- **sunlight resistant**

Technical data:

Nominal voltage:	up to AWG 18: Uo/U 300/500 V up to AWG 16: Uo/U 0.6/1 kV
Testing voltage:	300/500 V: 3000 V 0.6/1 kV: 4000 V
Min. bending radius: *fixed installation:* *flexible application:*	 4 x O.D. 7.5 x O.D.
Radiation resistance:	5 x 10^7 cJ/kg
Temperature range: *static:* *flexible:*	 -40/+90°C -30/+90°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
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Flexibility:	very good
Weather resistance:	good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

300/500 V

item no.	no. of conductors incl. ground	outer-ø inch ± 5%	outer-ø mm ± 5%	cable weight ≈lbs/mft
► **20 AWG (≈ 16/32) • 0.50 mm²**				
53800205	2	0.201	5.1	20
53800305	3	0.213	5.4	26
53800405	4	0.228	5.8	31
53800505	5	0.248	6.3	37
53800705	7	0.287	7.3	50
53801205	12	0.358	9.1	78
► **19 AWG (≈ 23/32) • 0.75 mm²**				
53800207	2	0.224	5.7	26
53800307	3	0.236	6.0	33
53800407	4	0.256	6.5	40
53800507	5	0.280	7.1	49
53800707	7	0.327	8.3	67
53801207	12	0.406	10.3	107
► **18 AWG (≈ 30/32) • 1.00 mm²**				
53800210	2	0.232	5.9	30
53800310	3	0.244	6.2	38
53800410	4	0.264	6.7	47
53800510	5	0.291	7.4	58
53800710	7	0.339	8.6	78
53801210	12	0.421	10.7	126

0.6/1 kV

item no.	no. of conductors incl. ground	outer-ø inch ± 5%	outer-ø mm ± 5%	cable weight ≈lbs/mft
► **16 AWG (≈ 27-29/30) • 1.50 mm²**				
53800215	2	0.320	8.1	52
53800315	3	0.339	8.6	67
53800415	4	0.374	9.5	40
53800515	5	0.409	10.4	103
► **14 AWG (≈ 46/30) • 2.50 mm²**				
53800225	2	0.374	9.5	75
53800325	3	0.394	10.0	98
53800425	4	0.429	10.9	120
53800525	5	0.480	12.2	151
► **12 AWG (≈ 52/28) • 4.00 mm²**				
53800240	2	0.421	10.7	102
53800340	3	0.453	11.5	136
53800440	4	0.496	12.6	171
53800540	5	0.559	14.2	216

0.6/1 kV

item no.	no. of conductors incl. ground	outer-ø inch ± 5%	outer-ø mm ± 5%	cable weight ≈lbs/mft
► **10 AWG (≈ 78/28) • 6.00 mm²**				
53800260	2	0.469	11.9	136
53800360	3	0.496	12.6	179
53800460	4	0.559	14.2	234
53800560	5	0.614	15.6	286
► **8 AWG (≈ 77/26) • 10.00 mm²**				
53800261	2	0.626	15.9	222
53800361	3	0.661	16.8	303
53800461	4	0.732	18.6	380
53800561	5	0.815	20.7	475

Other dimensions and colors are available on request

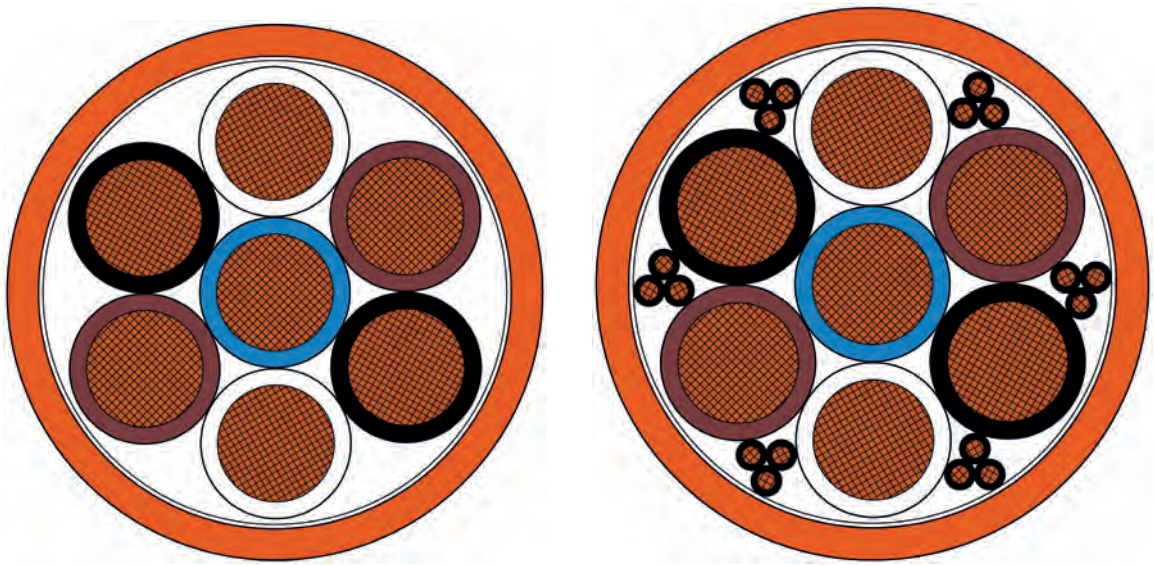
Shielded version on request

GP 400 Sy

400 Hz Ground Power Supply Cable - Symmetrical

for fixed installation

CE RoHS



Application: For use as fixed installed cable in 400 Hz systems, e.g. between 400 Hz generator and cable dispenser

Construction:

Conductor:	bare copper strands
Insulation:	2 AWG: PVC 18 AWG: SABIX®
Color code:	control conductors: black with numbers 1 - 18 neutral conductor: blue phase conductor: white, brown, black (two conductors of the same color for the phase)
Stranding:	phase conductors concentrically around the neutral conductor, control conductor as triple in the interstices
Jacket material:	PVC
Jacket color:	orange
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 Sy 7x35.0mm²+6x3x1.0mm² 3400-7213 CE and current meter marking

Outstanding features:

reduced outer diameter

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius:	
fixed installation:	4 x O.D
flexible application:	8 x O.D
Temperature range:	
static:	-40/+70°C
flexible:	+5/+70°C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km		voltage drop [mV/(A*m)]	
▶ 34007210	2 AWG / 7c	1.457	37	2018	2 AWG:	0.554	2 AWG:	1.108
▶ 34007213	2 AWG / 7c + 18 AWG / 6x3	1.457	37	2100	2 AWG:	0.554	2 AWG:	1.108
					18 AWG:	19.500	18 AWG:	39.0

Other dimensions and colors are available on request

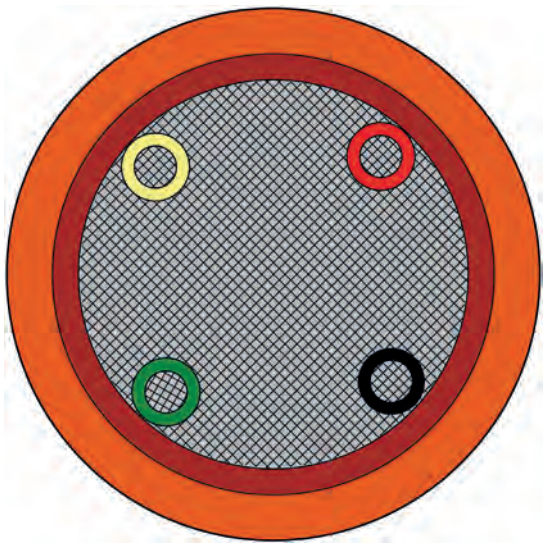
Also avaliable with 24 control conductors

GP 400 SC

400 Hz Ground Power Supply Cable - SingleCore

for flexible application

CE RoHS



Application: For use in flexible applications, e.g. on mobile generators, in cable dispensers in the ground or on the passenger bridge.

Construction:

Conductor:	tinned copper strands
Insulation:	SABIX®
Color code:	control conductors: red, black, green, yellow power supply conductor: red
Stranding:	control conductors within the power supply conductor
Jacket material:	PUR
Jacket color:	orange
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 SC 50mm²+4x1.0mm² 34001321 CE and current meter marking

Outstanding features:

- **low capacity insulation**
- **abrasion-resistant PUR jacket**
- **control conductors symmetrically arranged inside power supply conductor**
- **cold flexible**
- **halogen-free**
- **oil resistant**
- **weather resistant**

Technical data:

Nominal voltage:	Uo/U 115/200 V
Max. permissible operating voltage*:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius: *fixed installation:* *flexible application:*	 4 x O.D 6 x O.D
Temperature range: *static:* *flexible*:*	 -50/+90°C -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 + VDE 0207-363-10-2
Weather resistance:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

* using all wires on one potential

item no.	AWG/c	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km	voltage drop [mV/(A*m)]
► 34001321	2 AWG / 1c + 18 AWG/ 4c	0.614	15.6	394	2 AWG: 0.393 18 AWG: 20.000	2 AWG: 0.786 18 AWG: 40.0
► 34001421	2/0 AWG / 1c + 18 AWG/ 4c	0.697	17.7	538	2/0 AWG: 0.277 18 AWG: 20.000	2/0 AWG: 0.554 18 AWG: 40.0
► 34001521	3/0 AWG / 1c + 18 AWG/ 4c	0.772	19.6	693	3/0 AWG: 0.210 18 AWG: 20.000	3/0 AWG: 0.420 18 AWG: 40.0

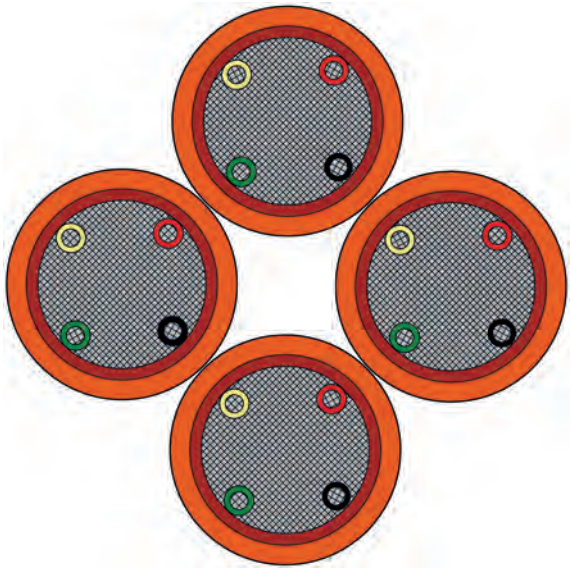
Other dimensions and colors are available on request

GP 400 QF

400 Hz Ground Power Supply Cable - QuadFlex

for flexible application

CE RoHS



Application: For use in flexible applications, e.g. on mobile generators, in cable dispensers in the ground or on the passenger bridge.

Construction:

Conductor:	tinned copper strands
Insulation:	SABIX®
Color code:	control conductors: red, black, green, yellow power conductor: red
Stranding:	control conductors within the power supply conductor
Jacket material:	PUR
Jacket color:	orange
Stranding:	openly stranded
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 QF 4x(50mm²+4x1.0mm²) 34004321 L1 resp. L2 resp. L3 resp. N CE and current meter marking

Outstanding features:

- **low capacity insulation**
- **abrasion-resistant PUR jacket**
- **control conductors symmetrically arranged inside power supply conductor**
- **cold flexible**
- **halogen-free**
- **oil resistant**
- **weather resistant**

Technical data:

Nominal voltage:	Uo/U 115/200 V
Max. permissable operating voltage*:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius: *fixed installation:* *flexible application:*	 4 x O.D 6 x O.D
Temperature range: *static:* *flexible*:* *short-term use:*	 -50/+90°C -40/+90°C +110°C (7,500 h)
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Weather resistance:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

* using all wires on one potential

item no.	AWG/c	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km		voltage drop [mV/(A*m)]	
► 34004321	4 x (2 AWG + 4 x 18 AWG)	1.476	37.5	1613	2 AWG: 18 AWG:	0.393 20.000	2 AWG: 18 AWG:	0.786 40.0
► 34004421	4 x (2/0 AWG + 4 x 18 AWG)	1.673	42.5	2193	2/0 AWG: 18 AWG:	0.277 20.000	2/0 AWG: 18 AWG:	0.554 40.0

Other dimensions and colors are available on request

GP 400 7F

400 Hz Ground Power Supply Cable - SevenFlex

for flexible application

CE RoHS

Application: Symmetrical cable with high flexibility. Minimum bending radius (easy to coil even in tight spaces) and high quality electrical performance (low voltage drop and low voltage unbalance). Can be used in long lengths.

Construction:

Conductor:	tinned copper strands
Insulation:	SABIX®
Color code:	control conductors: red, black, green, yellow power supply conductor: red
Stranding:	control conductors within the power supply conductor
Jacket material:	PUR
Jacket color:	orange
Stranding:	openly stranded
Marking:	SAB BRÖCKSKES · D-VIERSEN · Special GP 400 35.0mm²+4x1.0mm² 34009006 CE *and current meter marking*

Outstanding features:

- **low capacity insulation**
- **abrasion-resistant PUR jacket**
- **control conductors symmetrically arranged inside power supply conductor**
- **cold flexible**
- **halogen-free**
- **oil resistant**
- **weather resistant**

Technical data:

Nominal voltage:	Uo/U 0.6/1kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius: *fixed installation:* *flexible application:*	 4 x O.D 6 x O.D
Temperature range: *static:* *flexible*:*	 -50/+90°C -40/+90°C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km	voltage drop [mV/(A*m)]
▶ 34009006	2 AWG / 7c + 18 AWG/ 4c	1.58	40.2	1995	2 AWG: 0.554 18 AWG: 19.5	2 AWG: 1.108 18 AWG: 39.0

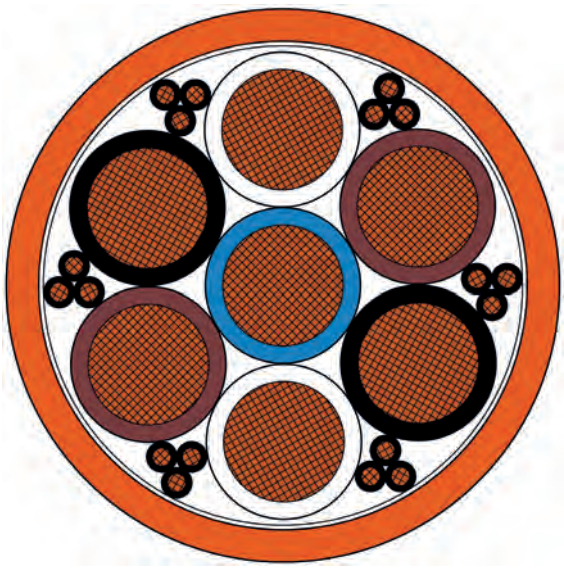
Other dimensions and colors are available on request

GP 400 SF

400 Hz Ground Power Supply Cable - SymmetricalFlex

for flexible application

CE RoHS



Application: For use as fixed cable with particularly good laying ability or for flexible use without high mechanical stress, e.g. in slow moving drag chains on passenger boarding bridges. Optimized flexibility due to flexible core and jacket materials, thus easy installation and easy handling in the cable dispenser. Depending on the operating conditions, it can also be used as a direct supply line to the aircraft with a connector.

Construction:

Conductor:	bare copper strands
Insulation:	SABIX®
Color code:	control conductors: black with numbers 1 - 18 neutral conductor: blue phase conductor: white, brown, black (two conductors of the same color for the phase)
Stranding:	Phase conductors concentrically around neutral core, control cores as tripple in the interstices, triple wrapped with non-woven tape, all elements twisted in specially adjusted layers, non-woven tape overlapping wrapped
Jacket material:	special compound
Jacket color:	orange
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 SF 7x35.0mm²+6x3x1.0mm² 34007223 CE and current meter marking

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius: *fixed installation:* *flexible application:*	 4 x O.D 6 x O.D
Temperature range: *static:* *flexible:*	 -40/+70°C -20/+70°C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- **low capacity insulation**
- **very smooth handling**
- **also usable as a supply cable directly on the aircraft**
- **very good installation in the smallest possible space**

Also available with 24 control conductors

item no.	AWG/c	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km	voltage drop [mV/(A*m)]
► 34007123	7 x 4 AWG + (6x3 x 18 AWG)	1.276	32.4	1509	4 AWG: 0.780 18 AWG: 19.500	4 AWG: 1.560 18 AWG: 39.0
► 34007223	7 x 2 AWG + (6x3 x 18 AWG)	1.661	42.2	1972	2 AWG: 0.544 18 AWG: 19.500	2 AWG: 1.108 18 AWG: 39.0

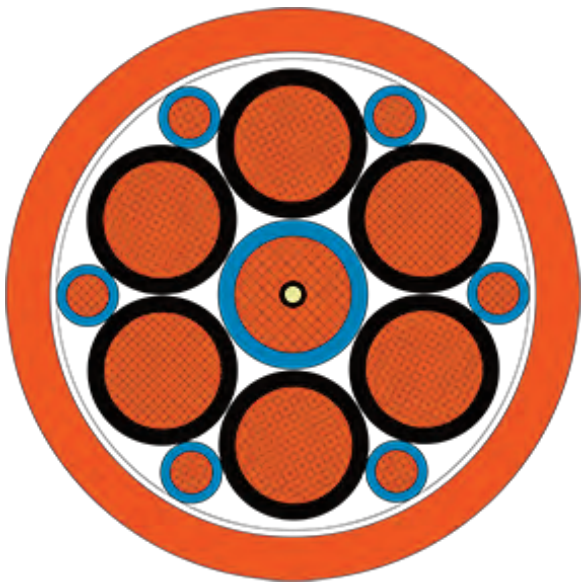
Other dimensions and colors are available on request

GP 400 SF S Supply

400 Hz Ground Power Supply Cable

for flexible application

CE RoHS



Application: For the application as cable track cables in energy supply chains or as Festoon cable on passenger boarding bridges.

Construction:

Conductor:	tinned copper strands
Insulation:	SABIX®
Color code:	16 AWG: blue 2 AWG: black with numbers, 2 x 1-3 blue
Stranding:	2 AWG: neutral core with strain relief in the core, wrapped with non-woven tape
Wrapping:	non-woven tape
Jacket material:	PUR
Jacket color:	orange
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 SF S 7x35,0mm²+6x6,0mm² 34006230 CE and current meter marking

Outstanding features:

- **low capacity insulation**
- **abrasion resisistant PUR jacket**
- **cold flexible**
- **halogen-free**
- **oil resistant**
- **weather resistant**

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius: *continuously flexible:*	 7.5 x O.D
Temperature range: *static:* *flexible:*	 -50/+90°C -40/+90°C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km	
▶ 34006230	16 AWG/7c + 2 AWG/6c	1.50	38	2132	2 AWG: 16 AWG:	0.565 3.39

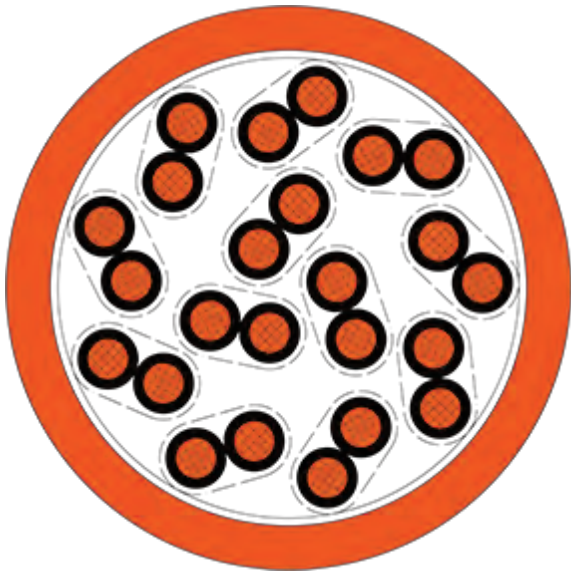
Other dimensions and colors are available on request

GP 400 SF S Control

400 Hz Ground Power Control Cable

for flexible application

CE RoHS



Application: For the application as cable track cables in energy supply chains or as Festoon cable on passenger boarding bridges.

Construction:

Conductor:	bare copper strands, fine wires
Insulation:	SABIX®
Color code:	black with numbers: 1-24
Stranding:	conductors twisted to pairs, optimized twisting of pairs in layers
Jacket material:	PUR
Jacket color:	orange
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 SF S 12x2x1,5mm² 34009028 CE and current meter marking

Outstanding features:

- **low capacity insulation**
- **abrasion resisistant PUR jacket**
- **cold flexible**
- **halogen-free**
- **oil resistant**
- **weather resistant**

Technical data:

Nominal voltage:	300/500 V
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius: *continuously flexible:*	7.5 x O.D
Temperature range: *static:* *flexible:*	 -50/+90°C -40/+90°C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/prs	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km
▶ 34009028	16 AWG/12pr	0.906	23	323	16 AWG: 13.7

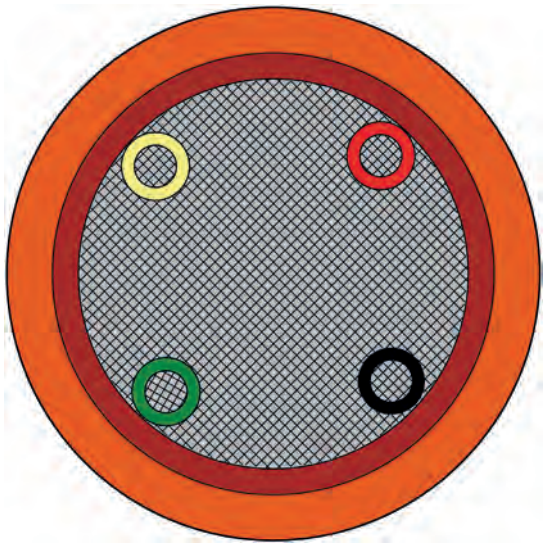
Other dimensions and colors are available on request

GP 400 SC DC

Ground Power supply cable 28 V DC - SingleCore Direct Current

for flexible application

CE RoHS



Application: For use in flexible applications, e.g. on mobile generators, in cable dispensers in the ground or on the passenger bridge at 28 V DC.

Construction:

Conductor:	tinned copper strands
Insulation:	SABIX®
Color code:	control conductors: red, black, green, yellow power supply conductor: red
Stranding:	control conductors within the power supply conductor
Jacket material:	PUR
Jacket color:	orange
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 SC DC (120mm²+4x1.0mm²) 34001621 CE and current meter marking

Outstanding features:

- **low capacity insulation**
- **abrasion-resistant PUR jacket**
- **control conductors symmetrically arranged inside power supply conductor**
- **cold flexible**
- **halogen-free**
- **oil resistant**
- **weather resistant**

Technical data:

Nominal voltage:	28 V DC
Testing voltage:	conductor/conductor: 600 V AC
Min. bending radius: *fixed installation:* *flexible application:*	 4 x O.D 6 x O.D
Temperature range: *static:* *flexible:*	 -50/+90°C -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 + VDE 0207-363-10-2
Weather resistance:	very good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km		voltage drop [mV/(A*m)]	
▶ 34001621	4/0 AWG/ 1c + 18 AWG/ 4c	0.874	22.2	894	4/0 AWG: 18 AWG:	0.164 20.000	4/0 AWG: 18 AWG:	0.328 40.0

Other dimensions and colors are available on request

GP 400 SF 28V DC

400 Hz Ground Power supply cable - 28 V DC

for flexible application

CE RoHS

Application: For the application as fixed supply cable with optimized installation or for a flexible hand-held application without elevated mechanical stress for example mobile GPUs. Excellent flexibility due to smooth core and sheath materials make possible an easy laying and handling.

Construction:

Conductor:	tinned copper strands, fine wires
Insulation:	SABIX®
Color code:	1.0 mm²: black conductors with consecutive numbers 1 - 14 40 mm²: white conductors with consecutive numbers 1 - 3, black conductors with consecutive numbers 1 - 3
Stranding:	in layers
Jacket material:	PVC
Jacket color:	orange
Marking:	SAB BRÖCKSKES · D-VIERSEN · GP 400 SF 28V DC 6x40.0mm²+14x1.0mm² 34009020 CE and current meter marking

Technical data:

Nominal voltage:	28 V DC
Testing voltage:	conductor/conductor: 600 V AC
Min. bending radius: *fixed installation:* *flexible application:*	 4 x O.D 6 x O.D
Temperature range: *static:* *flexible:*	 -50/+90°C -40/+90°C
Oil resistance:	acc. to internal standard
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

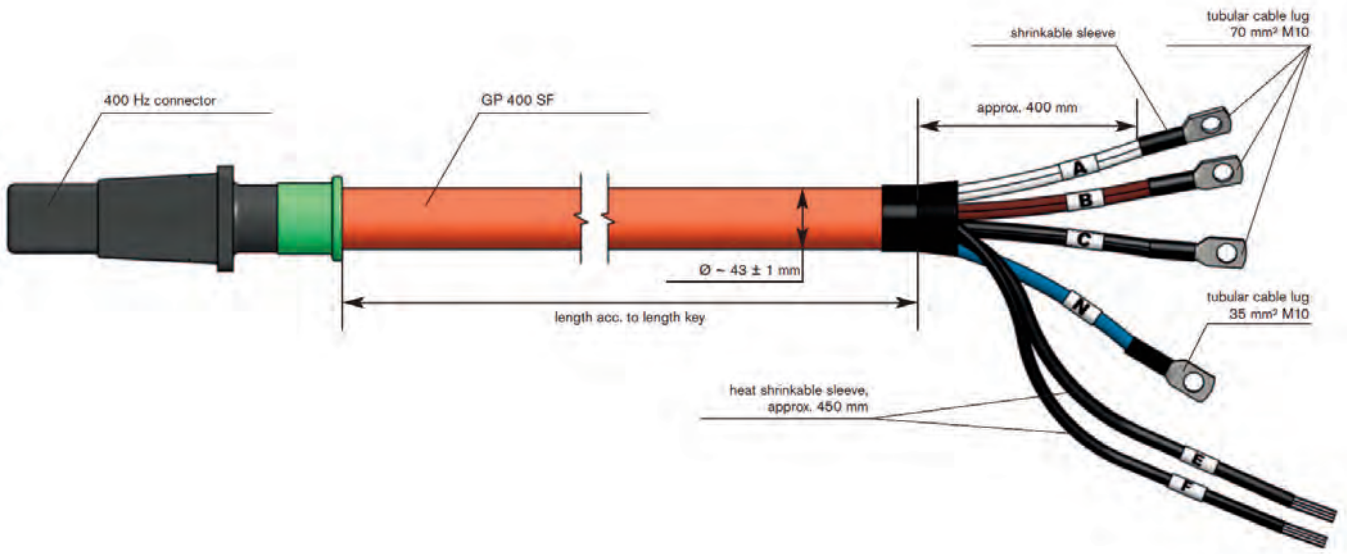
Outstanding features:

- **low capacity insulation**
- **extremely flexible and smooth handling**
- **also usable as supply cable on the aircraft itself**
- **very good installation in narrowest spaces**
- **good resistance characteristics also against wear and tear**

item no.	Dimensions	outer-ø approx. inch	outer-ø approx. mm	cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km
▶ 34009020	6 x 40.0mm + 14 x 1.0mm	min. 1.417 max. 1.496	min. 36 max. 38	1955	40 mm²: 0.500 1.0 mm²: 20.0

Other dimensions and colors are available on request

SAB 400 Hz cable for mobile GPUs with connectors



Pin Assignment:

400 Hz Connector	Cable	Connection Piece
pin A	2 x wh (35 mm²)	tubular cable lug 70 mm², M10
pin B	2 x bn (35 mm²)	tubular cable lug 70 mm², M10
pin C	2 x bk (35 mm²)	tubular cable lug 70 mm², M10
pin N	1 x bu (35 mm²)	tubular cable lug 35 mm², M10
pin E	conductors 1-9 (1 mm²)	cores pulled into shrinkable sleeves, core ends untreated
pin F	conductors 10-18 (1 mm²)	

Weight:

connnector and tubular cable lugs	Cable
approx. 3 kg	approx. 3.2 kg/m

Configuration examples:

item no.	length "L" in cm
► S3400-3003-01000	100
► S3400-3003-02000	200

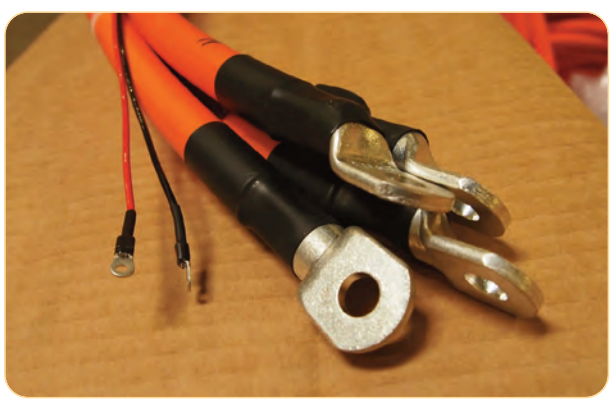
Plug'n'Play - ready harnessed with plug connector

Ready-to-connect ground power cables with plug connectors

SAB also supplies 400 Hz cables ready for installation.

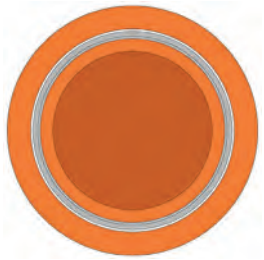
Various 400 Hz connectors available.

- on request also with cable lugs.
- each assembly is packed safely and individually.
- each product is tested for function.
- on request with test report for 100% documentation.



HV 1000 C - SC

Flexible high-voltage single conductor cable with overall copper shield



Marking for HV 1000 C SC 39100163:
SAB BRÖCKSKES · D-VIERSEN · HV 1000 C - SC 1x25mm² 39100163 CE

Application: These high-voltage cables can be used in high-voltage applications e.g. in the fields of agricultural vehicles, construction vehicles and special vehicles. The HV 1000 C - SC is used e.g. between inverters and electric motors.

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	TPFP
Color code:	orange
Shielding:	alu. foil and tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	TPE-U
Jacket color:	orange (RAL 2003)

Outstanding features:

- **extremely high mechanical strength**
- **high protection against environmental influences**
- **100% oil resistance acc. to standard**
- **application range from -50° to +125°C**

Technical data:

Nominal voltage:	Uo/U max. 0.6/1 kV AC/DC
Testing voltage:	conductor/shielding: 5000 V
Min. bending radius:	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
Temperature range:	
static:	-50/+90°C
flexible:	-40/+90°C
short-term use:	+125°C (2,000 h)
Low temperature resistance:	-50°C acc. to DIN EN 60811-506
Burning characteristics:	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
MUD resistance:	very good - acc. to IEC 60992-360, IEC 61892-4 NEK TS 606
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to EN 50396
Salt water resistance:	acc.to UL 1309
Mechanical characteristics:	the main mechanical characteristics accomplished by the TPE-U outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance - high transverse strength
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø max inch	outer-ø max mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
▶ 39100140	12 AWG / 1c	0.228	5.8	50	4.950
▶ 39100160	10 AWG / 1c	0.256	6.5	67	3.300
▶ 39100161	8 AWG / 1c	0.346	8.8	116	1.910
▶ 39100162	6 AWG / 1c	0.402	10.2	165	1.210
▶ 39100163	4 AWG / 1c	0.480	12.2	244	0.780
▶ 39100164	2 AWG / 1c	0.567	14.4	340	0.554
▶ 39100165	1 AWG / 1c	0.622	15.8	451	0.386
▶ 39100166	2/0 AWG / 1c	0.717	18.2	605	0.227
▶ 39100167	3/0 AWG / 1c	0.823	20.9	814	0.206

Other dimensions and colors are available on request

Construction, materials and tests with reference to:

- **DIN EN 60228**
- **DIN EN 50525**
- **DIN EN 50290-2-30**
- **DIN EN 50620**
- **DIN EN 60811**

In individual cases, the specific application must be agreed with SAB Bröckskes.

HV 1000 C - MC

Flexible high-voltage multi-conductor cable with overall copper shield

Marking for HV 1000 C MC 39100240:
SAB BRÖCKSKES · D-VIERSEN · HV 1000 C - MC 2x4.0mm² 39100240 CE

Application: These high-voltage cables can be used in high-voltage applications e.g. in the fields of agricultural vehicles, construction vehicles and special vehicles. The HV 1000 C - MC is used as a connection cable e.g. for cabin heating, the electric compressor, the high-voltage heat pump in electric and hybrid vehicles.

Construction:

Conductor:	bare copper strands, acc. to IEC 60228, VDE 0295, class 5
Insulation:	TPFP
Color code:	from 2 conductors: red, black from 3 conductors: HD 308 or acc. to customer request
Stranding:	in layers
Inner jacket:	Besilen®
Shielding:	alu. foil and tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	TPE-U
Jacket color:	orange (RAL 2003)

Outstanding features:

- **extremely high mechanical strength**
- **high protection against environmental influences**
- **100% oil resistance acc. to standard**
- **application range from -50° to +125°C**

Technical data:

Nominal voltage:	Uo/U max. 0.6/1 kV AC/DC
Testing voltage:	conductor/conductor: 5000 V conductor/shielding: 5000 V
Min. bending radius: *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:* *short-term use:*	 -50/+90°C -40/+90°C +125°C (2,000 h)
Low temperature resistance:	-50°C acc. to DIN EN 60811-506
Burning characteristics:	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
MUD resistance:	very good - acc. to IEC 60992-360, IEC 61892-4 NEK TS 606
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to EN 50396
Salt water resistance:	acc.to UL 1309
Mechanical characteristics:	the main mechanical characteristics accomplished by the TPE-U outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance - high transverse strength
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors	outer-ø max inch	outer-ø max mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
► **14 AWG ▪ 2.50 mm²**					
39100225	2	0.390	9.9	99	7.98
39100325	3	0.409	10.4	122	7.98
► **12 AWG ▪ 4.0 mm²**					
39100240	2	0.445	11.3	138	4.95
39100340	3	0.476	12.1	169	4.95
► **10 AWG ▪ 6.00 mm²**					
39100260	2	0.504	12.8	179	3.10
39100360	3	0.555	14.1	246	3.10
39100460	4	0.594	15.1	291	3.10
39100560	5	0.642	16.3	346	3.10

Other dimensions and colors are available on request

Construction, materials and tests with reference to:

- **DIN EN 60228**
- **DIN EN 50525**
- **DIN EN 50290-2-30**
- **DIN EN 50620**
- **DIN EN 60811**

In individual cases, the specific application must be agreed with SAB Bröckskes.

HD 308 Color code:
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

HV Measuring Cable (DC)

High-voltage multi-conductor shielded cable for DC Voltage Measurement, scoop-proof

Marking for HV measuring cable 38339800:
SAB BRÖCKSKES · D-VIERSEN · ϟHV-Messleitung (2x0.25mm²) ϟ CE

CE RoHS

Application: This high voltage measuring cable is used in the development of electric vehicles where scoop-proof testing & measuring of up to 1800 V DC operating voltage and application in the high voltage environment of electromobility takes place. Examples of applications are HV power electronics, HV batteries, electric motors, inverters, etc. High voltage measuring cables are used on the test benches and in test vehicles.

Construction:

Conductor:	tinned copper strands, extra fine wire
Insulation:	FEP
Color code:	black and red
Stranding:	in layers with tinned copper drain wire, AWG 24
Shielding:	alu. foil and tinned copper braiding
Inner jacket:	FEP - blue acc. to RAL 5024
Jacket material:	PUR
Jacket color:	orange with black vertical stripes

Outstanding features:

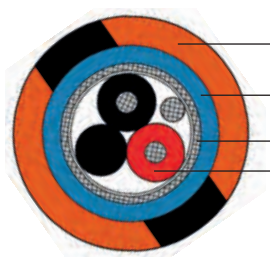
- **temperature resistance up to +150°C (up to 3,000 hours)**
- **high flexibility**
- **high abrasion resistance**
- **easy harnessing**

Technical data:

Scoop-proof testing voltage:	1000 V DC over the blue inner jacket 5000 V AC over the blue inner jacket
Operating voltage:	Uo 1000 V DC U 1800 V DC
Testing voltage:	conductor/conductor: 5000 V AC conductor/shielding: 5000 V AC
Min. bending radius: *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:* *short-term use:*	 -50/+125°C -40/+125°C +150°C (3,000 h)
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
38339800	24 AWG/2c	0.256	6.5	39	80.0
38339819	22 AWG/2c	0.264	6.7	42	58.8
38339801	20 AWG/2c	0.280	7.1	47	40.1
38339802	18 AWG/2c	0.307	7.8	60	20.0
38339803	16 AWG/2c	0.331	8.4	73	13.7

Other dimensions and colors are available on request



Possible on request:

also possible as harnessed measuring cable with connected lab plugs to collect the tension at HV components.

HV measuring cable (AC)

High-voltage multi-conductor shielded cable for AC voltage measurement, scoop-proof

CE RoHS

Marking for HV connecting cable 38339813:
SAB BRÖCKSKES · D-VIERSEN · ϟHV-Messleitung (3x1.50mm²) ϟ CE

Application: The high voltage measuring cable is used in the development of electric vehicles where scoop-proof testing and measuring of up to 1800 V DC operating voltage and application in the HV environment of electromobility take place. Examples of applications are HV power electronics, HV batteries, electric motors, inverters, etc. High voltage measuring cables are used on the test benches and in test vehicles.

Construction:

Conductor:	tinned copper strands, extra fine wire
Insulation:	FEP
Color code:	brown, black, gray
Stranding:	in layers with tinned copper drain wire, 24 AWG
Shielding:	alu. foil and tinned copper braiding
Inner jacket:	FEP - blue acc. to RAL 5024
Jacket material:	PUR
Jacket color:	orange with black vertical stripes

Outstanding features:

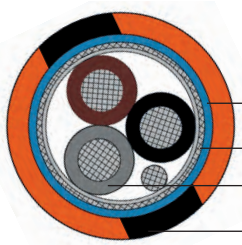
- **temperature resistance up to +150°C (up to 3,000 hours)**
- **high flexibility**
- **high abrasion resistance**
- **easy harnessing**

Technical data:

Scoop-proof testing voltage:	1000 V DC over the blue inner jacket 5000 V AC over the blue inner jacket
Operating voltage:	conductor/conductor: 1800 V DC conductor/conductor: 1000 V AC
Testing voltage:	conductor/conductor: 5000 V AC conductor/shielding: 5000 V AC
Min. bending radius: *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:* *short-term use:*	 -50/+125°C -40/+125°C +150°C (3,000 h)
Temperature range of conductors:	up to +180°C (short-term use up to + 205°C)
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	AWG/c	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
▶ 38339820	24 AWG/3c	0.268	6.8	44	80.0
▶ 38339816	22 AWG/3c	0.276	7.0	48	58.8
▶ 38339815	20 AWG/3c	0.291	7.4	54	40.1
▶ 38339814	18 AWG/3c	0.319	8.1	71	20.0
▶ 38339813	16 AWG/3c	0.346	8.8	87	13.7

Other dimensions and colors are available on request



outer jacket and HV identification

inner jacket (double insulation and wear indicator)

100% shield

conductors

measuring cable identification

Possible on request:

As harnessed measuring cable with connected lab plugs to collect the voltage at HV components

B 107 HV

Highly flexible silicone HV single conductor, unshielded, cULus recognized

Marking for B 107 HV 1079507:
SAB BRÖCKSKES · D-VIERSEN · B 107 Uo/U 1.8/3.0 kV 95.0mm² cULus AWM Style 30122 AWM I A/B 150°C 3000V FT2

Application: The highly flexible single core is particularly appropriate for the application on electric test benches. Due to the fine stranding and the resulting flexibility, the cable can be installed easily. The high voltage single core is designed for a voltage range up to 1.8/3 kV. In this way it fulfills the increasing demands within the voltage class.

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color:	orange (similar RAL 2004)

Outstanding features:

- **extremely flexible**
- **halogen-free**
- **heat resistant**
- **flexible at low temperatures**
- **flame retardant and self-extinguishing**
- **weather resistant**
- **cURus recognized**

Technical data:

Nominal voltage:	Uo/U 1.8/3.0 kV AC Uo/U 2.7/5.4 kV DC
Voltage cURus:	3000 V
Testing voltage:	6500 V
Current carrying capacity:	acc. to VDE 0298-4, see page O20 & O21
Min. bending radius: *fixed installation:* *free movement:*	 6 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:* *short-term use:*	**DIN VDE:** **cURus:** up to +150°C -40/+180°C -25/+180°C +250°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 cURus FT1, FT2
Corrosivity:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Weather resistance:	very good
Approvals:	cURus AWM, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	mm²	AWG		outer-ø inch	outer-ø mm	cable weight ≈lbs/mft
▶ 1070107	1.00	18		0.169	4.3	17
▶ 1070157	1.50	16	(≈ 84/34)	0.185	4.7	21
▶ 1070257	2.50	14	(≈ 140/34)	0.205	5.2	29
▶ 1070407	4.00	12	(≈ 224/34)	0.248	6.3	40
▶ 1070607	6.00	10	(≈ 186/32)	0.248	6.3	49
▶ 1071007	10.00	8	(≈ 320/32)	0.354	9.0	97
▶ 1071607	16.00	6	(≈ 504/32)	0.366	9.3	130
▶ 1072507	25.00	4	(≈ 760/32)	0.472	12.0	212
▶ 1073507	35.00	2	(≈ 1083/32)	0.543	13.8	290
▶ 1075007	50.00	1	(≈ 703/28)	0.618	15.7	397
▶ 1077007	70.00	2/0	(≈ 988/28)	0.697	17.7	522
▶ 1079507	95.00	3/0	(≈ 1340/28)	0.740	18.8	694
▶ 1071207	120.00	4/0	(≈ 1680/28)	0.807	20.5	860
▶ 1071507	150.00	250 MCM	(≈ 2122/28)	0.933	23.7	1076
▶ 1071857	185.00	350 MCM	(≈ 1472/26)	0.996	25.3	1301
▶ 1072407	240.00	450 MCM		1.098	27.9	1686
▶ 1073007	300.00	550 MCM		1.213	30.8	2018

Other dimensions and colors are available on request

Copper rope with orange jacket for E-Mobility HV test benches

B 110 C

Silicone insulated shielded copper rope with overall copper shield

Marking for B 110 C 1109507:

SAB BRÖCKSKES · D-VIERSEN · B 110 C Uo/U 1.8/3.0 kV 95.0mm² c us AWM Style 30123 AWM I/II A/B 150°C 3000V FT1 FT2

Application: The connection cable is for example appropriate to connect converters to electric-mobility test benches. Due to the high voltage rating, the cable can be used for various components and power electronics. The extremely flexible cable design enables an easy laying.

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1, orange
Wrapping:	alu. foil
Shielding:	tinned copper braiding
Jacket material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Jacket color:	orange (similar RAL 2004)

Outstanding features:

- **extremely flexible**
- **halogen-free**
- **good EMC characteristics**
- **flexible at low temperatures**
- **heat resistant**
- **flame retardant and self-extinguishing**
- **weather resistant**

Technical data:

Nominal voltage:	Uo/U 1.8/3.0 kV AC Uo/U 2.7/5.4 kV DC
Voltage cURus:	3000 V
Testing voltage:	6500 V
Current carrying capacity:	acc. to VDE 0298-4, see page O20 & O21
Min. bending radius: *fixed installation:* *free movement:*	 3 x O.D. 6 x O.D.
Temperature range: *static:* *flexible:* *short-term use:*	**DIN VDE:** **cURus:** up to +150°C -40/+180°C -25/+180°C +250°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 cURus FT1, FT2
Corrosivity:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Weather resistance:	very good
Approvals:	cURus AWM, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	mm²	AWG		ø over inner jacket approx. inch	ø over inner jacket approx. mm	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft
▶ 1100107	1.00	18		0.169	4.3	0.299	7.6	47
▶ 1100157	1.50	16		0.185	4.7	0.315	8.0	54
▶ 1100257	2.50	14		0.205	5.2	0.335	8.5	65
▶ 1100407	4.00	12	(≈ 224/34)	0.232	5.9	0.362	9.2	79
▶ 1100607	6.00	10	(≈ 186/32)	0.248	6.3	0.378	9.6	96
▶ 1101007	10	8	(≈ 320/32)	0.323	8.2	0.461	11.7	149
▶ 1101607	16	6	(≈ 504/32)	0.335	8.5	0.472	12.0	183
▶ 1102507	25	4	(≈ 760/32)	0.429	10.9	0.579	14.7	280
▶ 1103507	35	2	(≈ 1083/32)	0.496	12.6	0.642	16.3	368
▶ 1105007	50	1	(≈ 703/28)	0.571	14.5	0.717	18.2	487
▶ 1107007	70	2/0	(≈ 988/28)	0.650	16.5	0.803	20.4	641
▶ 1109507	95	3/0	(≈ 1340/28)	0.724	18.4	0.878	22.3	836
▶ 1101207	120	4/0	(≈ 1680/28)	0.791	20.1	0.953	24.2	1017
▶ 1101507	150	250 MCM	(≈ 2122/28)	0.917	23.3	1.079	27.4	1258
▶ 1101857	185	350 MCM	(≈ 1472/26)	0.980	24.9	1.150	29.2	1499
▶ 1102407	240	450 MCM		1.083	27.5	1.260	32.0	1909
▶ 1103007	300	550 MCM		1.181	30.0	1.366	34.7	2254

Other dimensions and colors are available on request

Application:
for example: the connection of converters to test benches for electric mobility. Very good laying compatibility due to the extremely flexible construction.

www.sabcable.com
866-722-2974 ■ info@sabcable.com

B 110 C Sense Cable

Halogen-free, high temperature and voltage shielded silicone cable

cULus RoHS

Marking for B 110 C Sense Cable 1109001:

SAB BRÖCKSKES · D-VIERSEN · B 110 C Sense Cable 2x1.0mm² 1109001 cULus AWM Style 4659 AWM I/II A/B 150°C 3000V FT1 FT2

Application: Sensor cable is required to check and monitor the transferred power of the B 110 C on test benches.

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Color code:	black and red
Stranding:	conductor twisted with tinned copper drain wire, AWG 26
Shield:	alu. foil and tinned copper braiding
Jacket material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Jacket color:	orange (similar RAL 2004)

Outstanding features:

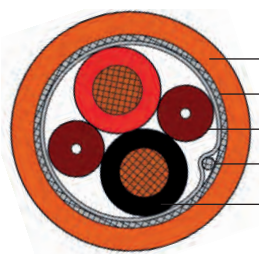
- **extremely flexible**
- **good EMC characteristics**
- **halogen-free**
- **heat resistant**
- **flexible at low temperatures**
- **flame retardant and self-extinguishing**
- **weather resistant**

Technical data:

Nominal voltage:	Uo/U 1.8/3.0 kV AC Uo/U 2.7/5.4 kV DC
Voltage cURus:	3000 V
Testing voltage:	4000 V
Current carrying capacity:	acc. to VDE 0298-4, see page O20 & O21
Min. bending radius: *fixed installation:* *free movement:*	 6 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:* *short-term use:*	**DIN VDE:** **cURus:** up to +150°C -40/+180°C -25/+180°C +250°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 cURus FT1, FT2
Corrosivity:	IEC 60754-2 - no development of corrosive conflagration gases
Weather resistance:	very good
Approvals:	cURus AWM, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	mm²	AWG	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	ohmic resistance at 20 °C max. Ω/km
▶ 1109006	0.25	24 AWG/2c	0.421	10.7	75	80.0
▶ 1109007	0.34	22 AWG/2c	0.437	11.1	87	58.8
▶ 1109008	0.50	20 AWG/2c	0.461	11.7	95	39.0
▶ 1109001	1.00	18 AWG/2c	0.500	12.7	114	20.0
▶ 1109002	1.50	16 AWG/2c	0.531	13.5	133	13.3
▶ 1109003	2.50	14 AWG/2c	0.575	14.6	160	7.98
▶ 1109004	4.00	12 AWG/2c	0.634	16.1	200	4.95
▶ 1109005	6.00	10 AWG/2c	0.673	17.1	245	3.30

Other dimensions and colors are available on request



Possible on request:

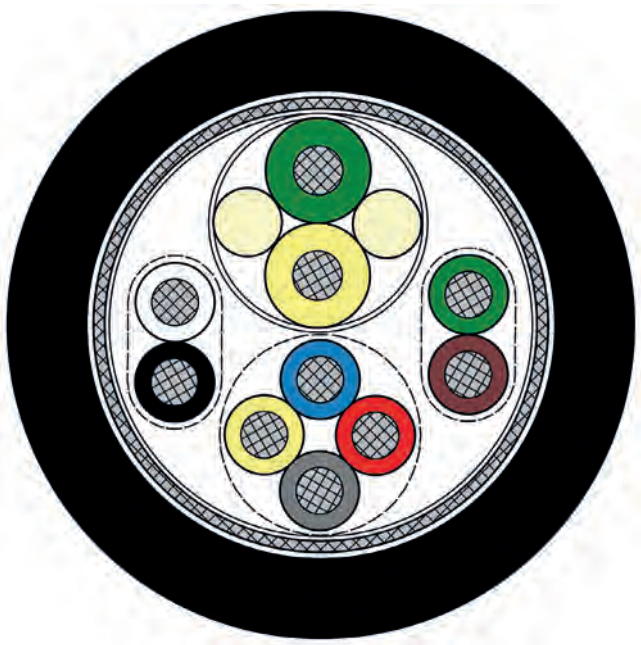
As harnessed measuring cable with connected lab plugs to collect the voltage at HV components

Example: CAN-Bus cable

Halogen-free combined cable with overall copper shield

item no. 63359002

cross section: 2 x 2 x 20 AWG +
4 x 20 AWG +
2 x 20 AWG



CE EAC RoHS

Construction:

Conductor:	tinned copper strands, fine wires with reference to VDE 0812
Insulation:	SABIX® thermoplastic material and 02YI1 acc. to EN 50290-2-23 + VDE 0819-103 (for 2 x 20 AWG)
Stranding:	pairs and quads twisted together in layers
Shielding:	tinned copper braiding, optical coverage ≥ 85%
Jacket material:	SABIX® thermoplastic material
Jacket color:	black (RAL 9005)
Marking:	SAB BRÖCKSKES · D-VIERSEN · SO. SABIX® CAN-BUS-LEITUNG

Technical Data:

Peak operating voltage:	max. 450 V
Testing voltage:	conductor/conductor: 1000 V (DC) conductor/shielding: 1500 V (DC)
Min. bending radius: *free movement:*	 10 x O.D.
Temperature range: *static:* *flexible:*	 -40/+70°C -30/+70°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	no flame propagation resp. IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 cat. C resp. D, see chapter O. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Characteristic impedance:	acc. to EN 50289-1-11 nom. 120 Ω (CAN-Bus)
Oil resistance:	acc. to EN 60811-507 section 10 + VDE 0473-811-507 section 10
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

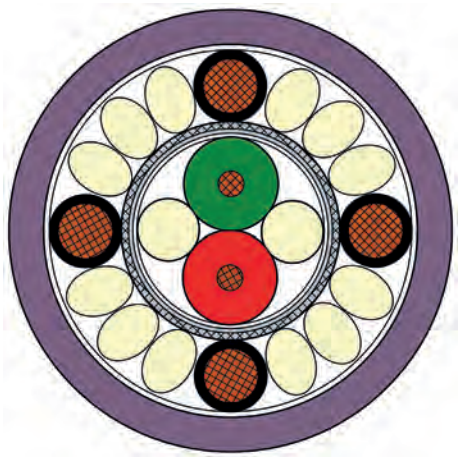
item no.	dimension	outer-ø inch ± 10%	outer-ø mm ± 10%	cable weight ≈lbs/mft
► 63359002	20 AWG/2pr + 20/4c AWG + 20 AWG/2c	0.433	11.0	108

S PB 634 Hybrid with Valve Control
S PB 634 Hybrid with Current Supply

Halogen-free Profibus-DP cable with valve control for use in cable tracks

item no. 6349010

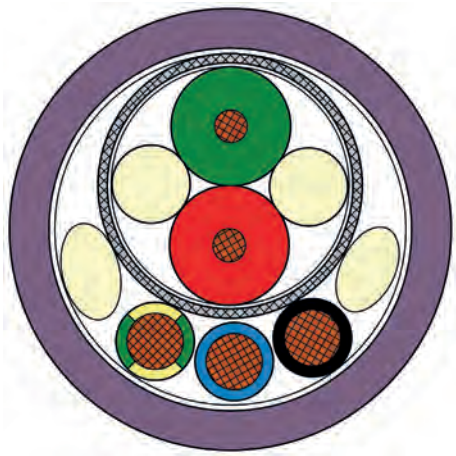
cross section: 2 x 22 AWG + 4 x 16 AWG



Halogen-free Profibus-DP cable with separate current supply for use in cable tracks

item no. 6349015

cross section: 2 x 22 AWG + 3 x 18 AWG



Construction:

Conductor:	bare copper strands, fine wires
Insulation:	22 AWG: cellular PE 18 & 16 AWG: TPE
Stranding:	Profibus twisted pairwise, pairs and conductors twisted in layers
Profibus Shielding:	tinned copper braiding
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	red lilac (RAL 4001)
Marking item no. 06349010:	SAB BRÖCKSKES · D-VIERSEN · S PB 634 2 x 0.34 mm² + 4 x 1.5 mm² CE
Marking item no. 06349015:	SAB BRÖCKSKES · D-VIERSEN · S PB 634 2 x 0.34 mm² + 3 x 1.0 mm² CE

Technical Data:

Peak operating voltage:	**item no. 06349010:** 100 V **item no. 06349015:** max. 350 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1000 V
Min. bending radius *free movement:*	12 x O.D.
Temperature range: *static:* *flexible:*	-40/+80°C -40/+80°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Characteristic impedance:	acc. to EN 50289-1-11 at 3-20 MHz: 150 Ω ± 15 Ω
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	dimension	outer-ø max inch	outer-ø max mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
▶ 6349010	22 AWG/2c 16 AWG/4c	0.472	12	111	55.0 13.3

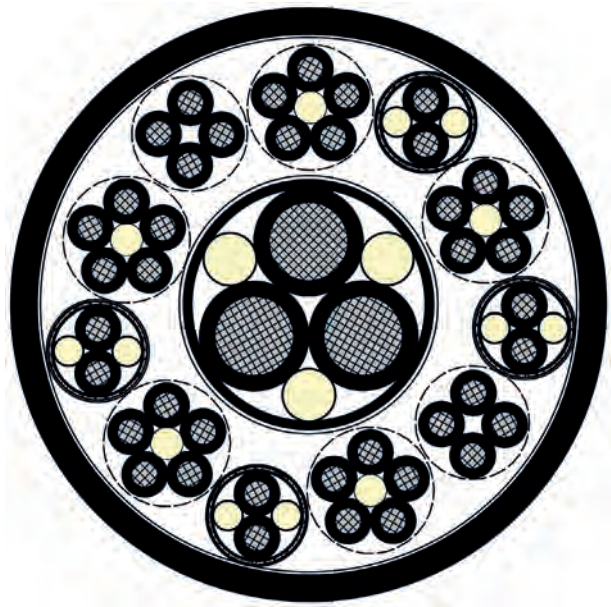
item no.	dimension	outer-ø max inch	outer-ø max mm	cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
▶ 6349015	22 AWG/2c 18 AWG/3c	0.417	10.6	69	55.0 19.5

Example: Coupling cable T 790

Torsional connecting cable

item no. 7909008

cross section: 33 x 16 AWG +
3 x 8 AWG +
4 x (2 x 16 AWG)



Construction:

Conductor:	special copper, fine wires
Insulation:	TPE
Shielding:	special copper braiding, optical coverage ≥ 85%
Jacket material:	special PUR
Jacket color:	black (RAL 9005)

Technical data:

Nominal voltage:	16 AWG: Uo/U 0.6/1.0 kV 8 AWG: Uo/U 1.8/3.0 kV
Testing voltage:	conductor/conductor: 16 AWG: 4000 V 8 AWG: 12000 V conductor/shielding: 16 AWG: 2000 8 AWG: 6000 V
Min. bending radius *free movement:*	10 x O.D.
Temperature range: *static:* *flexible:*	-50/+90°C -40/+90°C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30“

item no.	dimension	outer-ø inch ± 10%	outer-ø mm ± 10%	cable weight ≈lbs/mft
► 7909008	33 x 16 AWG + 3 x 8 AWG + 4 x (2 x 16 AWG)	1.654	42	1391

Example: Interbus Hybrid cable for the automotive industry

PUR interbus hybrid cable pairwise with copper wrapping for flexible application

item no. 3679048

cross section: 4 x 18 AWG +
5 x 2 x 24 AWG +
1 x 18 AWG

Construction:

Conductor:	bare copper strands, fine wires
Insulation:	24 AWG: PE 18 AWG: TPE
Color code:	24 AWG: DIN 47100, see page O/26 18 AWG: black, blue, red, brown, green/yellow
Shielding:	pairs wrapped with tinned copper braiding, optical coverage min. 90%
Jacket material: **item no. 03679048:**	special PUR
Jacket color:	red lilac (RAL 4001)
Marking **item no. 03679048:**	SAB BRÖCKSKES · D-VIERSEN · Hybridleitung 0367-9048 CE

Technical data:

Peak operating voltage:	max. 350 V
Testing voltage:	conductor/conductor: 1700 V (AC) conductor/shielding: 1000 V (AC) conductor/conductor: 2500 V (DC) conductor/shielding: 1500 V (DC)
Min. bending radius:	7.5 x O.D.
Temperature range: *static:* *flexible:*	 -40/+70°C -40/+70°C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	dimension	outer-ø inch ± 10%	outer-ø mm ± 10%	cable weight ≈lbs/mft
► 7260042	4 x 18 AWG + 5 x 2 x 24 AWG + 1 x 18 AWG	0.520	13.2	140

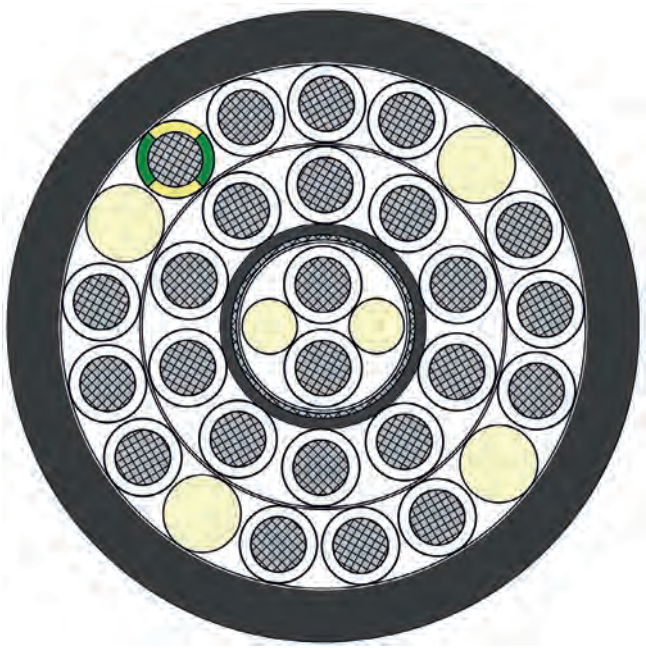
Example: Control cable for the automotive industry

CE RoHS

Special PUR connection cable with numbered conductors and overall copper shielding

item no. 7649065

cross section: 23 x 18 AWG + (2 x 18 AWG) D



Construction:

Conductor:	tinned copper strands
Insulation:	TPE
Color code:	white conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground
Shielding:	wrapped with tinned copper braiding
Inner jacket:	TPE
Jacket color:	black (RAL 9005)
Jacket material:	special PUR
Jacket color:	black (RAL 9005)
Marking:	SAB BRÖCKSKES · D-VIERSEN · 23 x 1.0 mm² + (2 x 1.0 mm²) D

Technical data:

Operating voltage:	max. 600 V DC conductor-conductor
Testing voltage:	conductor/conductor: 2500 V DC conductor/shielding: 1250 V DC
Min. bending radius: *free movement:*	10 x O.D.
Temperature range: *static:* *flexible:*	 -50/+90 °C -40/+90 °C
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

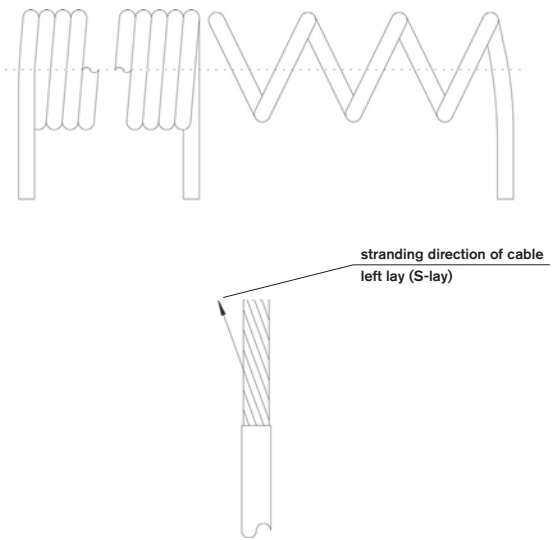
item no.	dimension	outer-ø inch ± 10%	outer-ø mm ± 10%	cable weight ≈lbs/mft
► 7649065	23 x 18 AWG + (2 x 18 AWG)D	0.531	13.5	231

pair in ( ) denotes shielded. D= tinned copper spiral

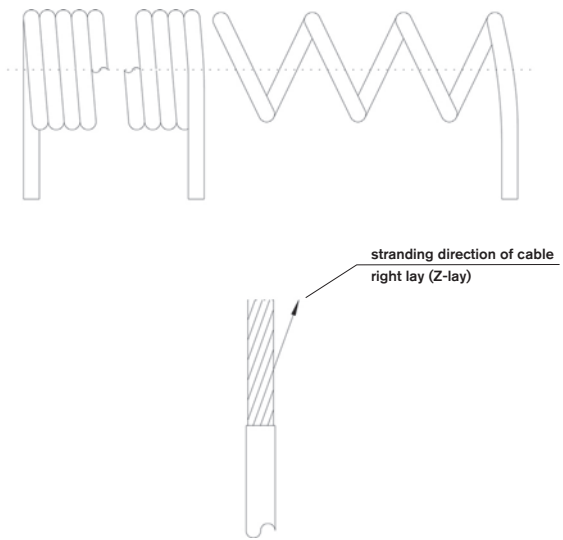
Overview

- By a special method cables can be transferred from their straight form to a coiled form. According to the application the cable can be adjusted to your demands and specifications.
- It is possible to make helix cables of both, PVC as well as PUR jacketed cables. You can also buy shielded helix cables from us.
- PVC helix cables can be used as extension or connection cables. These cost saving cables are used if there is no continuous restoring force demanded, e.g. for lamps or electrical appliances …
- PUR helix cables are used for when repeated product performance is essential. The extended length of these cables is approximately 4:1 and they have a good memory as well. For this reason these cables are used in material handling appliances, in machines, on gates …
- The helical direction is dependent on the stranding direction of a cable.

Helical direction ⇨ left (counter-clockwise)



Helical direction ⇨ right (clockwise)



- You can send us an inquiry for helix cables using the form shown on the next page.

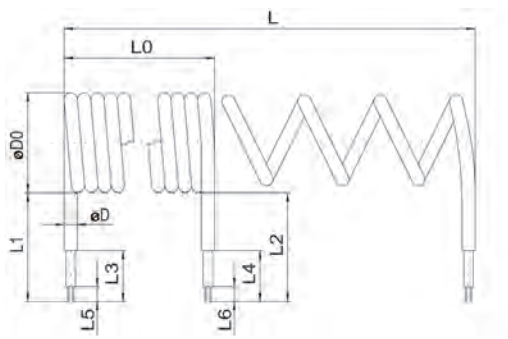
Construction details for helix cables

to SAB North America

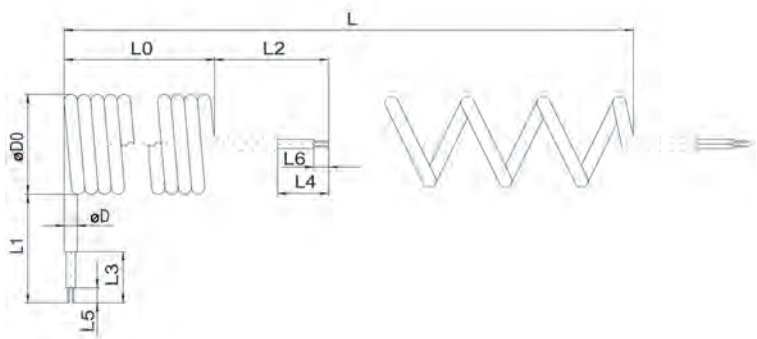
Fax: 973-276-1515 ▪ Toll Free: 1-866-722-2974 ▪ Phone: 973-276-0500

Company/Name: _____

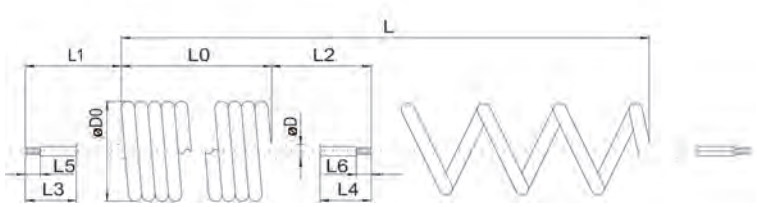
Please calculate a non-binding offer based on the following requirements:



❑ Cable ends: radial



❑ Cable ends: radial and axial



❑ Cable ends: axial

L = _____ mm
L0 = _____ mm
øD = _____ mm
øD0 = _____ mm
L1 = _____ mm
L2 = _____ mm
L3 = _____ mm
L4 = _____ mm
L5 = _____ mm
L6 = _____ mm

Quantity: _____

Application
(type of installation): _____

Helical direction: _____

Standard cable
(item no.): _____

Insulation material
(conductor): _____

Shielding: ❑ yes ❑ no

Insulation material
(jacket): _____

No. of conductors: _____

Cross section: _____

Notes: _____