

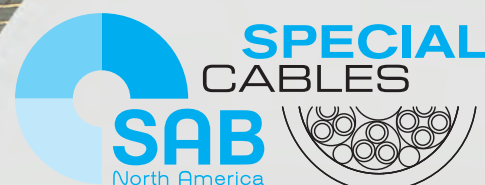
CABLES & ACCESSORIES FOR AIRPORT EQUIPMENT



21

21

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SAB North America

About Us



SAB North America is a focused supplier for the automation, aerospace, medical, high temperature, and robotics industries, providing cable and thermocouple solutions that meet, exceed, and set new standards in the flexible cable market. In addition to flexible cable products, we offer an extensive inventory of high-quality cable accessories, including cord grips, grounding glands and other accessories that complement our flexible control and automation cables.

Whatever the need may be, look to SAB North America for Special Cables that can, for example, help minimize maintenance costs and increase productivity, reduce downtime, and solve specific problems. Here is a small sample of some of the challenges that Special Cables from SAB North America can help address:

- Hybrid designs for multiple functions
- Harsh environments
- Difficult applications
- Industry-specific requirements



Cables deployed in airports, such as those that operate inside boarding bridges, need rugged construction to withstand the rigors of this unique environment. That's why airport operators must be able to count on a single source for wire and cable that also has a deep understanding of airport equipment and infrastructure. SAB North America cables are built to operate reliably in boarding bridges and a host of other airport machines. SAB has more than 75 years of experience manufacturing quality, rugged cables for challenging applications, so you can be sure passengers will be comfortable and operations will run safely and smoothly.

Whether you're a valued distribution partner, a manufacturer, an automation house, an integrator, or a contractor, rest assured that our cables are reliable to maximize production efficiencies. SAB brings world class performance & 75 years of ingenuity to the table.

SAB's level of speed and service as a supplier is unmatched. SAB lives up to its name in not only flexible cable but also flexible manufacturing.



SAB Advantage...We make it Easy

- Engineering & technical assistance
- Cut to length with no cut charges
- Prepaid freight within US for orders over \$2,500
- Specialty cable designs (1500 ft minimum)
- No minimum on orders from stock
- Free drop shipments (no surcharges)
- 24-hour shipments from stock
- Cord Grips for securing and grounding cables

Cables for Airport Equipment

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Cables for Airport Equipment

Application Examples

■ Airport equipment:

SAB offers a broad range of cables for airport facilities such as passenger bridges, as well as for continuously flexible applications, wiring cable or for use in bus systems. Our innovative, durable cables stand up to the unique needs of airport equipment and infrastructure.

■ Ground power equipment:

Cables used in ground power units (GPU) and ground support equipment (GSE) must stand up to weather, oils and abrasion. And, changing conditions at runways demand easy connection and installation. Our 400 Hz cables are well-suited for fixed laying, flexible or reeling applications in GPU and GSE systems. These durable cables are also available as plug-and-play devices, harnessed with 400 Hz plugs for different suppliers. One such cable, the GP400 QF power cable with integrated control cores, features flexible, smooth construction for easy handling, plus our SABIX® insulation. It can also be suspended under boarding bridges.



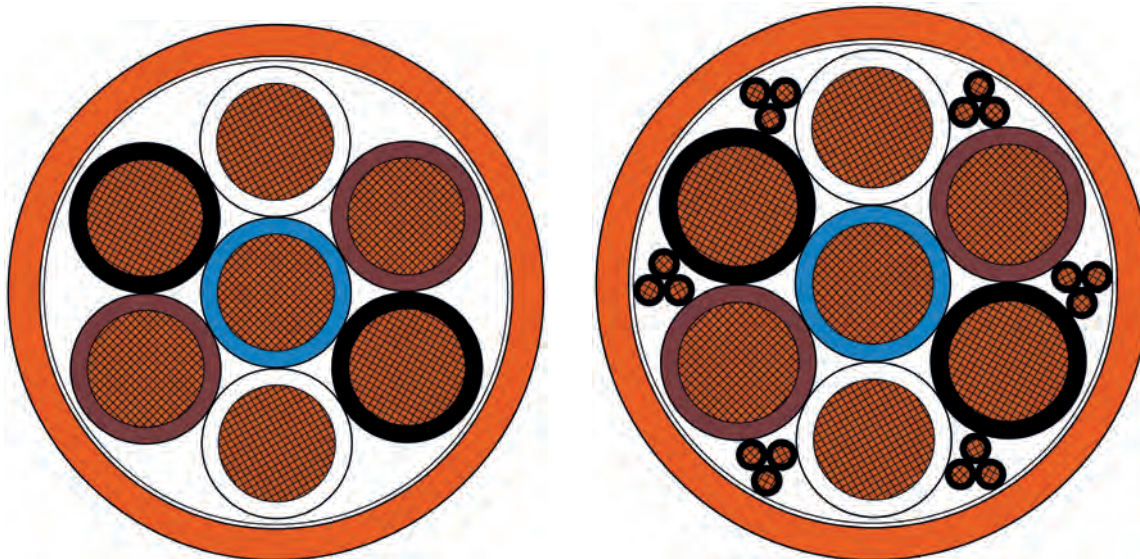
Cables for Airport Equipment

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 7x35.0mm ² +6x3x1.0mm ² 3400-7213 CE and current meter marking

Technical data:

Nominal voltage:	U ₀ /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

Outstanding features:

reduced outer diameter

item no.	AWG/c	outer-ø		cable weight ≈ lbs/mft	DC resistance at 20°C max. Ω/km		voltage drop [mV/(A*m)]
		approx. inch	approx. mm				
▶ 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 18 AWG: 19.500	2 AWG: 1.108 18 AWG: 39.0	

Other dimensions and colors are available on request



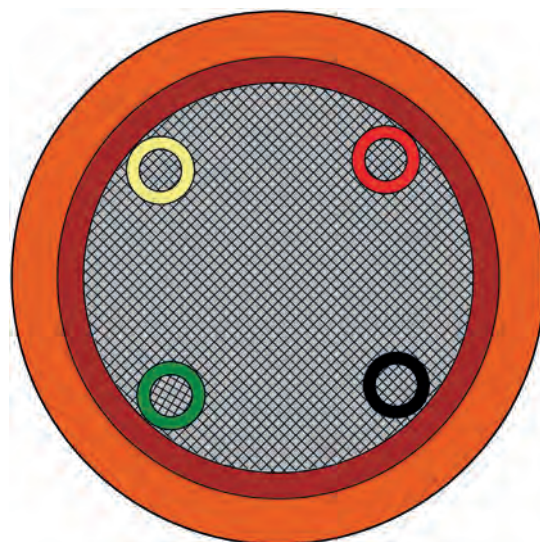
Also available with
24 control conductors

Cables for Airport Equipment

GP 400 SC

400 Hz Ground Power Supply Cable - SingleCore

for flexible application



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 50mm ² +4x1.0mm ² 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:	U ₀ /U 115/200 V
Max. permissible operating voltage*:	U ₀ /U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius:	
fixed installation:	4 x O.D
flexible application:	6 x O.D
Temperature range:	
static:	-50/+90°C
flexible*:	-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		cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km	voltage drop [mV/(A*m)]
		approx. inch	approx. mm			
▶ 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

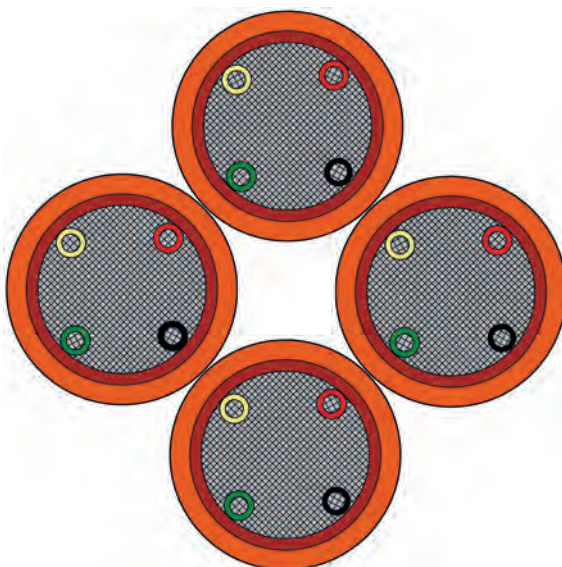
Other dimensions and colors are available on request

Cables for Airport Equipment

GP 400 QF

400 Hz Ground Power Supply Cable - QuadFlex

for flexible application



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(50mm ² +4x1.0mm ²) 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:	U ₀ /U 115/200 V
Max. permissible operating voltage*:	U ₀ /U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius:	
fixed installation:	4 x O.D
flexible application:	6 x O.D
Temperature range:	
static:	-50/+90°C
flexible*:	-40/+90°C
short-term use:	+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		cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km		voltage drop [mV/(A*m)]
		approx. inch	approx. mm				
▶ 34004321	4 x (2 AWG + 4 x 18 AWG)	1.476	37.5	1613	2 AWG: 0.393 18 AWG: 20.000	2 AWG: 0.786 18 AWG: 40.0	
▶ 34004421	4 x (2/0 AWG + 4 x 18 AWG)	1.673	42.5	2193	2/0 AWG: 0.277 18 AWG: 20.000	2/0 AWG: 0.554 18 AWG: 40.0	

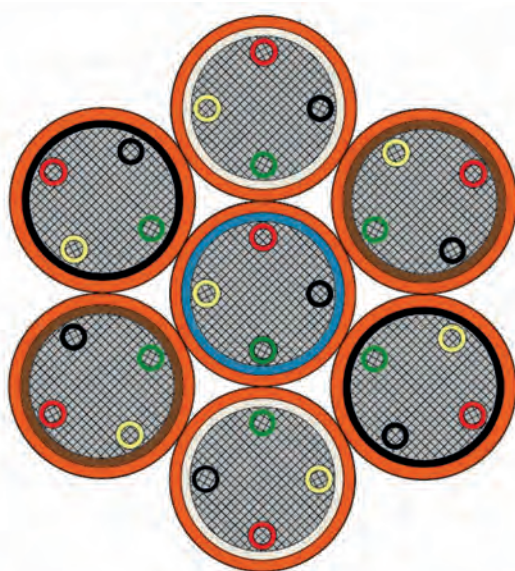
Other dimensions and colors are available on request

Cables for Airport Equipment

GP 400 7F

400 Hz Ground Power Supply Cable - SevenFlex

for flexible
application



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 35.0mm ² +4x1.0mm ² 34009006 CE and current meter marking

Technical data:

Nominal voltage:	U ₀ /U 0.6/1kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius:	
fixed installation:	4 x O.D
flexible application:	6 x O.D
Temperature range:	
static:	-50/+90°C
flexible*:	-40/+90°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
- abrasion-resistant PUR jacket
- control conductors symmetrically arranged inside power supply conductor
- cold flexible
- halogen-free
- oil resistant
- weather resistant

item no.	AWG/c	outer-ø		cable weight ≈ lbs/mft	DC resistance at 20°C max. Ω/km		voltage drop [mV/(A*m)]
		approx. inch	approx. mm				
▶ 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

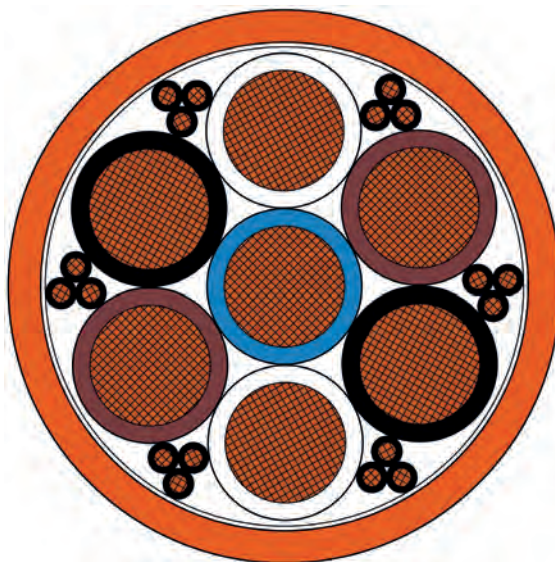
Other dimensions and colors are available on request

Cables for Airport Equipment

GP 400 SF

400 Hz Ground Power Supply Cable - SymmetricalFlex

for flexible application



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:	U ₀ /U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius:	
fixed installation:	4 x O.D
flexible application:	6 x O.D
Temperature range:	
static:	-40/+70°C
flexible:	-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

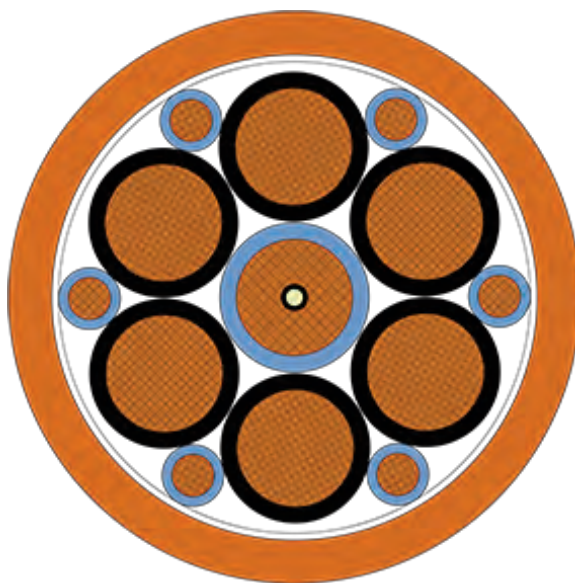
item no.	AWG/c	outer-ø		cable weight ≈lbs/mft	DC resistance at 20°C max. Ω/km		voltage drop [mV/(A*m)]	
		approx. inch	approx. mm					
▶ 34007123	7 x 4 AWG + (6x3 x 18 AWG)	1.276	32.4	1509	4 AWG: 0.780 18 AWG: 19.500		4 AWG: 1.560 18 AWG: 39.0	
▶ 34007223	7 x 2 AWG + (6x3 x 18 AWG)	1.661	42.2	1972	2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

Cables for Airport Equipment

GP 400 SF S Supply Cable

400 Hz Ground Power Supply Cable

for flexible application



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

Technical data:

Nominal voltage:	U ₀ /U 0.6/1 kV
Testing voltage:	conductor/conductor: 4000 V AC
Min. bending radius: <i>continuously flexible:</i>	7.5 x O.D
Temperature range: <i>static:</i> <i>flexible:</i>	-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

Outstanding features:

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

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

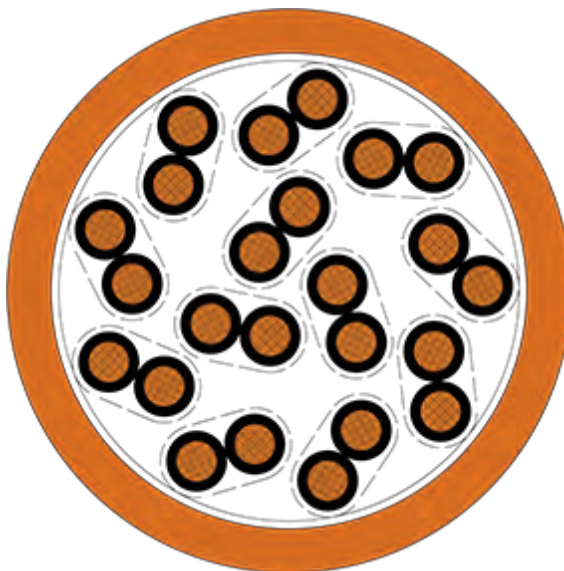
Other dimensions and colors are available on request

Cables for Airport Equipment

GP 400 SF S Control Cable

400 Hz Ground Power Control Cable

for flexible application



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

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

Outstanding features:

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

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

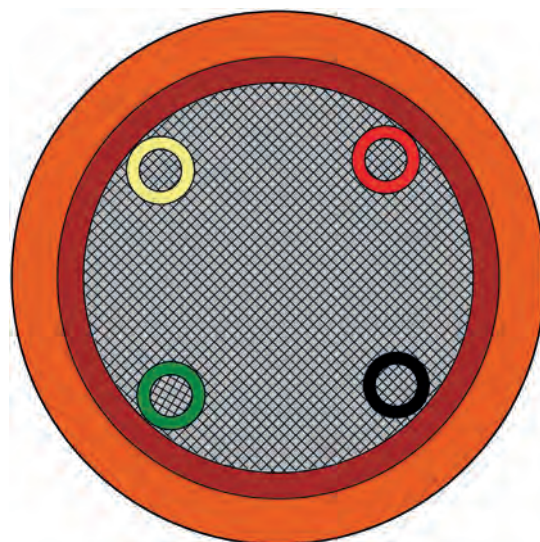
Other dimensions and colors are available on request

Cables for Airport Equipment

GP 400 SC DC

Ground Power Supply Cable 28 V DC - SingleCore Direct Current

for flexible application



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 (120mm ² +4x1.0mm ²) 34001621 CE and current meter marking

Technical data:

Nominal voltage:	28 V DC
Testing voltage:	conductor/conductor: 600 V AC
Min. bending radius:	
fixed installation:	4 x O.D
flexible application:	6 x O.D
Temperature range:	
static:	-50/+90°C
flexible:	-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

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

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

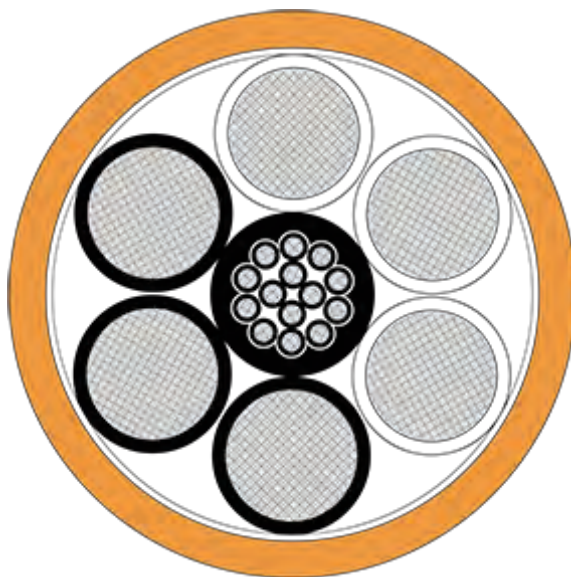
Other dimensions and colors are available on request

Cables for Airport Equipment

GP 400 SF 28V DC

400 Hz Ground Power supply cable - 28 V DC

for flexible
application



Application: For the application as fixed supply cable with optimised 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 mm ² : black conductors with consecutive numbers 1 - 14 40 mm ² : 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 6x40.0mm ² +14x1.0mm ² 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:	4 x O.D
flexible application:	6 x O.D
Temperature range:	
static:	-50/+90°C
flexible:	-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:

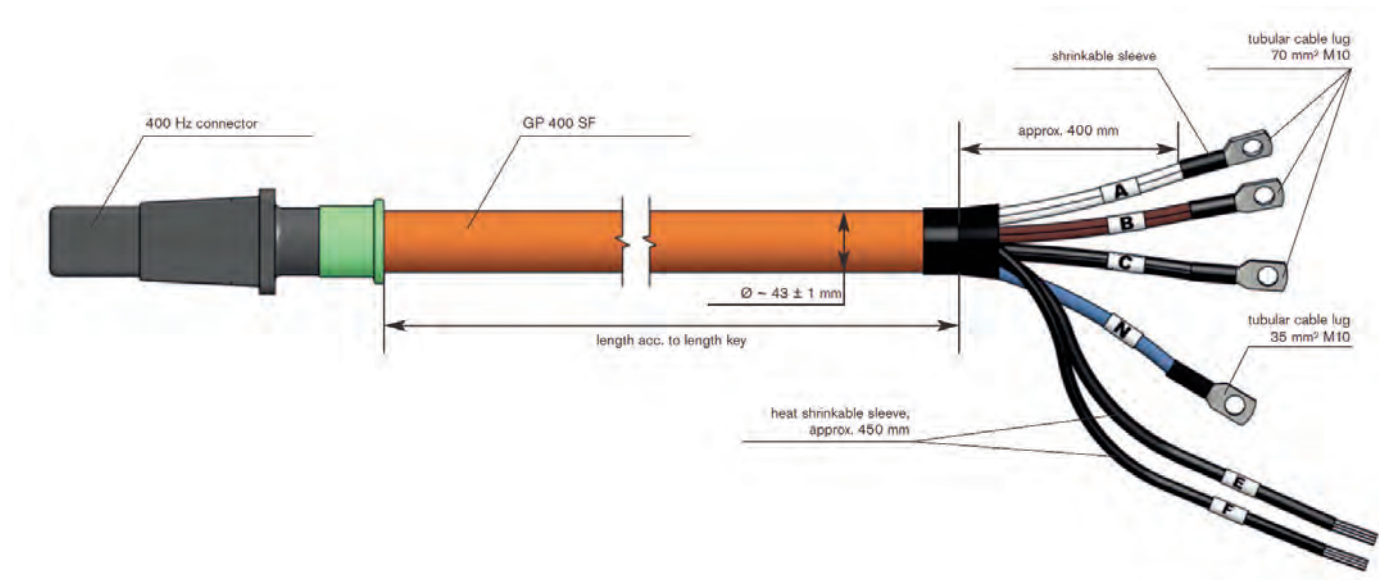
- low capacity insulation
- extremely flexible and smooth handling
- also usable as supply cable on the aircraft itself
- very good installation in narrowest spaces
- good resistance characteristics also against wear and tear

item no.	Dimensions	outer-ø		cable weight ≈ lbs/mft	DC resistance at 20°C max. Ω/km
		inch	mm		
▶ 34009020	6 x 40.0 + 14 x 1.0	min. 1.417 max. 1.496	min. 36 max. 38	1955	40 mm ² : 0.500 1.0 mm ² : 20.0

Other dimensions and colors are available on request

Cables for Airport Equipment

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:

connector 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

Cables for Airport Equipment

Plug'n'Play - ready harnessed with plug connector

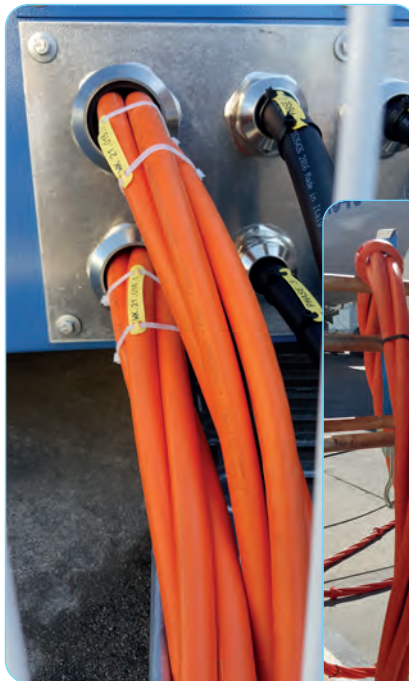
Ready-to-connect ground power cables with plug connectors



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.



Cables for Airport Equipment

BB 380 Boarding Bridge

Cables for the flexible applications in passenger bridges

shielded version
on request

ERSEN · BB 380 Boarding Bridge 300/500V 4 G 1.0 mm² CE



Marking for BB 380 Boarding Bridge 53800410:

SAB BRÜCKSKES · 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:

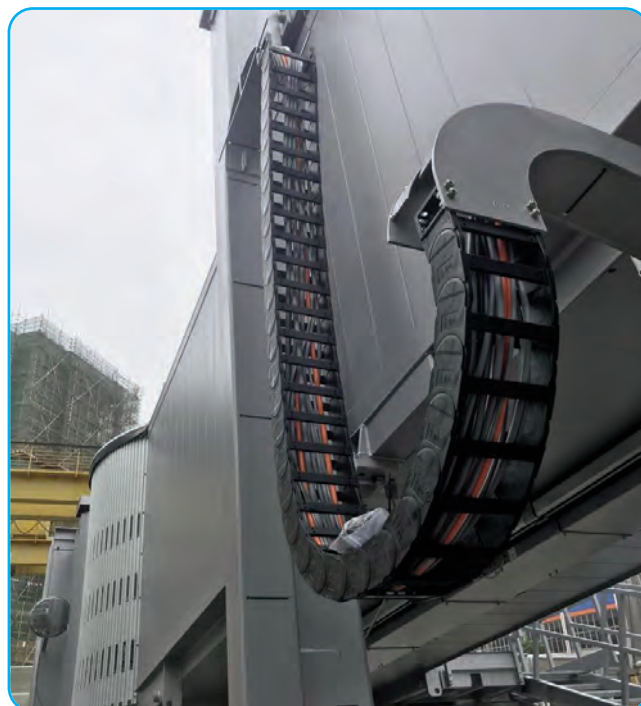
Nominal voltage:	up to AWG 18: up to AWG 16:	U ₀ /U 300/500 V U ₀ /U 0.6/1 kV
Testing voltage:	300/500 V: 0.6/1 kV:	3000 V 4000 V
Min. bending radius: <i>fixed installation:</i> <i>flexible application:</i>	4 x O.D. 7.5 x O.D.	
Radiation resistance:	5 x 10 ⁷ cJ/kg	
Temperature range: <i>static:</i> <i>flexible:</i>	-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	

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 14 AWG (≈ 46/30) ▪ 2.50 mm ²				
53800325	3	0.394	10.0	98
53800525	5	0.480	12.2	151
▶ 10 AWG (≈ 78/28) ▪ 6.00 mm ²				
53800560	5	0.614	15.6	28

Other dimensions and colors are available on request

Also possible
as hybrid
construction

(4x2x26AWG) CAT 6A+
(3x0.25mm²) CB+10G 1.0 mm²



Cables for Airport Equipment

S 200

Continuous flex halogen-free polyurethane control cable with extreme temperature range



Marking for S 200 7741215:

SAB BRÖCKSKES · D-VIERSEN · S 200 12 x 1.5 mm² CE

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, green/yellow ground from 3 conductors
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Jacket material:	PUR, TPU acc. to EN 50363-3 + VDE 0207-363-3-10-2 with matte surface
Jacket color:	gray (RAL 7000)

Outstanding features:

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

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	conductor/conductor: 2000 V
Min. bending radius: continuously flexing:	7.5 x O.D.
Radiation resistance:	1 x 10 ⁷ cJ/kg
Temperature range: static: flexing:	-50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
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



On request also with
UL recognition, CSA approval
and improved fire performance

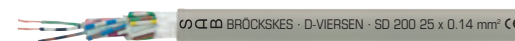
item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 20 AWG (≈ 28/34) ▪ 0.50 mm ²				
7740205	2	0.193	4.9	19
7740305	3	0.201	5.1	23
7740405	4	0.217	5.5	28
7740505	5	0.236	6.0	34
7740705	7	0.272	6.9	46
7741205	12	0.327	8.3	67
7741805	18	0.390	9.9	96
7742505	25	0.469	11.9	132
▶ 19 AWG (≈ 42/34) ▪ 0.75 mm ²				
7740207	2	0.213	5.4	24
7740307	3	0.224	5.7	30
7740407	4	0.240	6.1	36
7740507	5	0.264	6.7	45
7740707	7	0.311	7.9	62
▶ 18 AWG (≈ 56/34) ▪ 1.00 mm ²				
7740210	2	0.228	5.8	30
7740310	3	0.240	6.1	36
7740410	4	0.260	6.6	45
7740510	5	0.283	7.2	55
▶ 16 AWG (≈ 84/34) ▪ 1.50 mm ²				
7740115	1	0.157	4.0	17
7740215	2	0.252	6.4	38
7740315	3	0.264	6.7	47
7740415	4	0.287	7.3	60
▶ 14 AWG (≈ 140/34) ▪ 2.50 mm ²				
7740125	1	0.185	4.7	26
7740425	4	0.362	9.2	95
▶ 12 AWG (≈ 224/34) ▪ 4.00 mm ²				
7740140	1	0.213	5.4	38
7740440	4	0.425	10.8	146

Other dimensions and colors are available on request

item no.	no. of conductors incl. ground	outer-ø ±10% inch	±10% mm	cable weight ≈lbs/mft
▶ 10 AWG (≈ 186/32) ▪ 6.00 mm ²				
7740160	1	0.240	6.1	51
▶ 8 AWG (≈ 320/32) ▪ 10.00 mm ²				
7740161	1	0.280	7.1	81
7740461	4	0.622	15.8	341
▶ 6 AWG (≈ 504/32) ▪ 16.00 mm ²				
7740162	1	0.327	8.3	119
7740462	4	0.748	19.0	525
▶ 4 AWG (≈ 760/32) ▪ 25.00 mm ²				
7740163	1	0.390	9.9	177
7740463	4	0.898	22.8	776
▶ 2 AWG (≈ 1083/32) ▪ 35.00 mm ²				
7740164	1	0.453	11.5	247
7740464	4	1.039	26.4	1030
7740564	5	1.173	29.8	1273
▶ 1 AWG (≈ 703/28) ▪ 50.00 mm ²				
7740165	1	0.551	14.0	361
▶ 2/0 AWG (≈ 988/28) ▪ 70.00 mm ²				
7740166	1	0.657	16.7	507
▶ 3/0 AWG (≈ 1340/28) ▪ 95.00 mm ²				
7740167	1	0.807	20.5	691
▶ 4/0 AWG (≈ 1680/28) ▪ 120.00 mm ²				
7740168	1	0.846	21.5	847
▶ 250 MCM (≈ 2122/28) ▪ 150.00 mm ²				
7740169	1	0.969	24.6	1087
▶ 350 MCM (≈ 1472/28) ▪ 185.00 mm ²				
7740170	1	1.051	26.7	1305
▶ 450 MCM (≈ 1910/28) ▪ 240.00 mm ²				
7740171	1	1.185	30.1	1668

further continuously flexible TPE/PUR data and control cables:

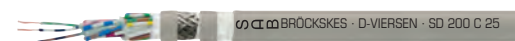
SD 200 extremely flexible TPE/PUR data cable
Item group with colored conductors
0774



S 200 C TPE/PUR control cable with numbered
Item group conductors and overall copper shield
0784



SD 200 C TPE/PUR data cable with colored
Item group conductors and overall copper shield
0784



SD 200 C TP TPE/PUR paired data cable with colored
Item group conductors and overall copper shield
0789



Cables for Airport Equipment

S 910 P Continuous flex oil resistant power supply cable

S 910 CP Continuous flex oil and abrasion resistant shielded power supply cable



56 80°C 600V CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE



Marking for S 910 P 37681362:

SAB BRÖCKSKES · D-VIERSEN · 37680601 16.0 mm² S 910 P 6 AWG 37681362 AWM Style 10456 80°C 600V CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE



80°C 600V CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE



Marking for S 910 CP 37692362:

SAB BRÖCKSKES · D-VIERSEN · 37690601 16.0 mm² S 910 CP 6 AWG 37692362 AWM Style 10456 80°C 600V CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	TPE, black
Wrapping:	non-woven tape
Shielding:	
S 910 CP:	tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	
S 910 P:	black (RAL 9005)
S 910 CP:	orange (RAL 2003)

Outstanding features:

- highly flexible single conductor for use in cable tracks
- good chemical resistance
- high abrasion resistance
- halogen-free

Technical data:

Nominal voltage:	U ₀ /U 0.6/1 kV
Voltage:	UL: 600 V CSA: 1000V
Min. bending radius: <i>continuously flexing:</i>	7.5 x O.D.
Radiation resistance:	S 910 P 1 x 10 ⁷ cJ/kg S 910 CP 5 x 10 ⁷ cJ/kg
Temperature range: <i>static:</i> <i>flexing:</i>	DIN VDE -50/+90°C UL/CSA: up to +80°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, UL/CSA 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.
Continuous flexibility:	very good
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

S 910 P

item no.	no. of conductors n x mm²	AWG/MCM	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 37681340	1 x 4.00	12 (≈ 224/34)	0.260	6.6	46
▶ 37681360	1 x 6.00	10 (≈ 186/32)	0.295	7.5	63
▶ 37681361	1 x 10.0	8 (≈ 320/32)	0.331	8.4	93
▶ 37681362	1 x 16.0	6 (≈ 512/32)	0.390	9.9	138
▶ 37681363	1 x 25.0	4 (≈ 798/32)	0.437	11.1	199
▶ 37681364	1 x 35.0	2 (≈ 1083/32)	0.496	12.6	262
▶ 37681365	1 x 50.0	1 (≈ 703/28)	0.579	14.7	372
▶ 37681366	1 x 70.0	2/0 (≈ 988/28)	0.669	17.0	518
▶ 37681367	1 x 95.0	3/0 (≈ 1340/28)	0.803	20.4	688
▶ 37681368	1 x 120.0	4/0 (≈ 1680/28)	0.906	23.0	886
▶ 37681369	1 x 150.0	250 MCM (≈ 2122/28)	1.012	25.7	1108
▶ 37681370	1 x 185.0	350 MCM (≈ 1472/26)	1.087	27.6	1357

S 910 CP

item no.	no. of conductors n x mm²	AWG/MCM	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 37692340	1 x 4.00	12 (≈ 224/34)	0.280	7.1	56
▶ 37692360	1 x 6.00	10 (≈ 186/32)	0.315	8.0	75
▶ 37692361	1 x 10.0	8 (≈ 320/32)	0.350	8.9	105
▶ 37692362	1 x 16.0	6 (≈ 512/32)	0.406	10.3	153
▶ 37692363	1 x 25.0	4 (≈ 798/32)	0.461	11.7	225
▶ 37692364	1 x 35.0	2 (≈ 1083/32)	0.524	13.3	292
▶ 37692365	1 x 50.0	1 (≈ 703/28)	0.622	15.8	424
▶ 37692366	1 x 70.0	2/0 (≈ 988/28)	0.705	17.9	564
▶ 37692367	1 x 95.0	3/0 (≈ 1340/28)	0.902	22.9	802
▶ 37692368	1 x 120.0	4/0 (≈ 1680/28)	0.941	23.9	955
▶ 37692369	1 x 150.0	250 MCM (≈ 2122/28)	1.047	26.6	1191

Other dimensions and colors are possible on request.

Cables for Airport Equipment

SL 841 C

Continuous flex TPE motor connection cable with black numbered power conductors,
1 or 2 supply pairs and overall tinned copper shield, 0.6/1 kV



Style 20235 80°C CSA AWM I/II A/B 80°C 300V FT1 FT2 CE



Marking for SL 841 C 8410407:

SAB BRÖCKSKES · D-VIERSEN · 8410407 SL 841 C 4 x 0.75 mm² (1000V) + 2 x (2 x 0.34 mm²) (300V) DESINA AWM Style 20235 80°C CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6 < 20 AWG with reference to VDE 0812
Insulation:	TPE
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground power supply conductors: * U1, V2, W3 and a green/yellow ground control conductors: ** BR1 and BR2
from item no. 8411415:	
Stranding:	control conductors: 22 - 14 AWG; twisted to pairs
Shielding:	pairs wrapped with alu. foil and tinned copper braiding
Wrapping:	pairs with PETP foil
Stranding:	shielded control pairs and power supply conductors twisted together in layers
Wrapping:	two layers non-woven tape
Shielding:	overall tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	orange (RAL 2003)

Outstanding features:

- UL recognized, CSA approval
- Very good EMC characteristics
- Long service life
- Adhesion-free installation
- High flexibility
- Suitable for cable tracks
- Halogen-free
- Free from paint wetting impairment
substances (PWIS-free)
- Flexible at low temperatures
- DESINA® colors (see page G/3)
- In accordance with Indramat INK and
Siemens 6FX8008

Technical data:

Peak operating voltage:	control conductors: max. 350 V
Nominal voltage:	power supply conductors: U ₀ /U 0.6/1 kV
Voltage UL/CSA:	control conductors: 300 V power supply conductors: 1000 V
Testing voltage:	
power supply conductors:	conductor/conductor: 4000 V conductor/shielding: 4000 V
control conductors:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
for continuous flexing:	12 x O.D.
Radiation resistance:	5 x 10 ⁷ cJ/kg
Temperature range:	DIN VDE 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; UL FT1, CSA FT1, FT2
Oil resistance:	very good - TPU 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
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30



**Cable harnessing
possible on request**

item no.	power supply conductors	control pairs individually shielded	inch	outer-ø mm	cable weight ≈lbs/mft
▶ 8410407	19 AWG/4c	22 AWG/2pr	0.457 ± 0.020	11.6 ± 0.5	113
▶ 8410410	18 AWG/4c	19 AWG/2pr	0.465 ± 0.020	11.8 ± 0.5	135
▶ 8410415	16 AWG/4c	19 AWG/2pr	0.484 ± 0.020	12.3 ± 0.5	153
▶ 8410425	14 AWG/4c	18 AWG/2pr	0.571 ± 0.031	14.5 ± 0.8	215
▶ 8410441	12 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.685 ± 0.024	17.4 ± 0.6	308
▶ 8410461	10 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.744 ± 0.031	18.9 ± 0.8	374
▶ 8410471	8 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.803 ± 0.039	20.4 ± 1.0	495
▶ 8410485	6 AWG/4c	16 AWG/2pr	1.024 ± 0.031	26.0 ± 0.8	746
▶ 8410490	4 AWG/4c	16 AWG/2pr	1.157 ± 0.031	29.4 ± 0.8	1019
▶ 8410495	2 AWG/4c	16 AWG/2pr	1.232 ± 0.031	31.3 ± 0.8	1265
▶ 8410496	1 AWG/4c	14 AWG/2pr	1.504 ± 0.031	38.2 ± 0.8	1787

item no.	power conductors	control pairs individually shielded	inch	outer-ø mm	cable weight ≈lbs/mft
▶ 8411415	16 AWG/4c	16 AWG/1pr	0.492 ± 0.012	12.5 ± 0.3	149
▶ 8411425	14 AWG/4c	16 AWG/1pr	0.524 ± 0.016	13.3 ± 0.4	191
▶ 8411440	12 AWG/4c	16 AWG/1pr	0.598 ± 0.016	15.2 ± 0.4	248
▶ 8411460	10 AWG/4c	16 AWG/1pr	0.654 ± 0.043	16.6 ± 1.1	326
▶ 8411470	8 AWG/4c	16 AWG/1pr	0.768 ± 0.063	19.5 ± 1.6	455
▶ 8411480	6 AWG/4c	16 AWG/1pr	0.933 ± 0.039	23.7 ± 1.0	685
▶ 8411490	4 AWG/4c	16 AWG/1pr	1.071 ± 0.028	27.2 ± 0.7	953
▶ 8411495	2 AWG/4c	16 AWG/1pr	1.185 ± 0.039	30.1 ± 1.0	1216
▶ 8411496	1 AWG/4c	16 AWG/1pr	1.354 ± 0.039	34.4 ± 1.0	1655

Other dimensions and colors are available on request

Note: SIEMENS® is a registered trademark. It is only used for comparative purposes.
BOSCH REXROTH® is a registered trademark. It is only used for comparative purposes.
DESINA® is a registered trademark of the German Machine Tool Builders' Association.

Cables for Airport Equipment

S PN 667

PUR Profinet type C, continuous flex with UL recognition and CSA approval

S PB 640 UL

PUR Profibus-DP continuous flex suitable for cable tracks with UL recognition



21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for S PN 667 6672202:

SAB BRÖCKSKES · D-VIERSEN · S PN 667 Industrial Ethernet FC Cat 5 Typ C 2x2x22AWG AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE

e 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for S PB 640 UL 06402611:

SAB BRÖCKSKES · D-VIERSEN · S PB 640 UL 24 AWG/2c 6402611 AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE

Construction:	PN 667 Profinet type C continuous flex	S PB 640 UL continuous flex
Item numbers:	6672202 / 6679001	6402611
Dimensions:	2 x 2 x 22 AWG	2 x 24 AWG
Conductor:	tinned copper strands, 7 wires or 19 wires	bare copper strands 24 AWG
Insulation:	special polymer	acc. to EN 50290-2-23 + VDE 0819-103 (02Y11)
Color code:	blue, yellow, white, orange	red, green
Stranding:	in layers	in layers
Wrapping:	PETP foil	—
Inner jacket:	thermoplastic material	SABIX®
Shielding:	alu foil + tinned copper braiding	alu foil + tinned copper braiding
Wrapping:	non-woven tape	—
Jacket material:	PUR	PUR, TMPU acc. to EN 50363-10-2 with matte surface
Jacket color:	green (similar RAL 6018)	red lilac (RAL 4001)
Technical data:	PN 667 Profinet type C continuous flex	S PB 640 continuous flex
Peak operating voltage:	max. 350 V	max. 350 V
Voltage:	UL/CSA: 300 V	UL/CSA: 300 V
Testing voltage: conductor/conductor: conductor/shielding:	2000 V 2000 V	2000 V 2000
Min. bending radius: fixed installation: free movement: continuous flex:	5 x O.D. 10 x O.D. 15 x O.D.	5 x O.D. 10 x O.D. 15 x O.D.
Temperature range VDE: static: flexible:	UL/CSA: up to +80°C -40/+70°C -40/+70°C	UL/CSA: up to +80°C -40/+80°C -30/+80°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	—	flame retardant and self-extinguishing acc. to IEC 60332 + VDE 0482-332-1-2
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	very good EN 50363-10-2 + VDE 0207-363-10-2
Characteristic impedance:	100Ω ± 5Ω, fulfills the electrical and transmission requirements with high frequency acc. to EN 50288-2-2 + VDE 0819-2-2 (CAT 5 acc. to EN 50173)	3 - 20 MHz: Ω ± 10%
UL Style:	21198	21198
Application:	suitable for EtherCAT and EtherNET/IP applications	—
Absence of harmful substances:	acc. to RoHS directive of the European Union, see page O/30	

item no.	type	no. of conductors	AWG	max. cond.-ø mm	±10% inch	outer-ø ±10% mm	cable weight ≈ lbs/mft	ohmic resistance at 20°C acc. to VDE 0812 max. Ω/km
▶ 6402611	S PB 640 UL	2	24		0.315	8.0	42	-
▶ 6672202	S PN 667	4	22	1.55	0.256	6.5	40	58.8
For extreme bending stress - conductor construction 19 wires:								
▶ 6679001	S PN 667	4	22	1.55	0.256	6.5	39	58.8

Other dimensions and colors are available on request

Cables for Airport Equipment

PN 662 AIR

Industrial Ethernet Cable CAT 5- Profinet type B, for flexible applications



Marking for PN 662 AIR 06629015:

SAB BRÖCKSKES · D-VIERSEN · ETHERNETLEITUNG 2x2x28AWG 06629015 CE

Application: Suitable for the use as Ethernet cable referring to EN 50288-2-2 (Cat. 5 acc. EN 50173): characteristic impedance of matching conductors white/blue and yellow/orange $100 \pm 10 \Omega$.

Construction:

Conductor:	silver coated copper strands
Insulation:	FEP
Color code:	white, yellow, blue, orange
Stranding:	twisted as quad
Wrapping:	non-woven tape
Wrapping:	metal coated tape
Shielding:	silver coated copper wrapping
Jacket material:	FEP
Jacket color:	orange (RAL 2003)

Technical data:

Operating voltage:	max. 150 V
Testing voltage:	conductor/conductor: 1500 V conductor/shield: 1200 V
Min. bending radius	
fixed laying:	5 x O.D.
flexible:	10 x O.D.
Temperature range	
fixed laying:	-90/+180°C
flexible application:	-40/+180°C
Hydraulic fluids resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union

item no.	type	no. of pairs	AWG	outer-ø		cable weight	ohmic resistance
				approx. inch	approx. mm	≈ lbs/mft	at 20°C acc. to VDE 0812 max. Ω/km
▶ 6629015	PN 662 AIR	2	28	0.102	2.6	10	222.2

Other dimensions and colors are possible on request.

Also possible
as harnessed cable
with M12 or RJ 45 plug!



Cable assembly

Ethernet cable with 4-pole Lemo male connector on both ends



Cable:

Ethernet cable:	2 x 2 x 28 AWG (6629015)
Cable length:	2.50 m (S 6624001) 5.00 m (S 6624002) 12.00 m (S 6624003) 25.00 m (S 6624004) 50.00 m (S 6624005) 100.00 m (S 6624006)

Harnessing:

Side 1	
Lemo connector:	FGG.00.304.CYCD27Z 4-pole with bend relief gray
Pin configuration:	pin 1 = white pin 2 = blue pin 3 = yellow pin 4 = orange
Shield:	connected on housing
Connector:	Lemo Type FGG.00.304.CYCD27Z 4-pole
Side 2	
Lemo connector:	FGG.00.304.CYCD27Z 4-pole with bend relief gray
Pin configuration:	pin 1 = yellow pin 2 = orange pin 3 = white pin 4 = blue
Shield:	connected on housing
Connector:	Lemo Type FGG.00.304.CYCD27Z 4-pole

Cables for Airport Equipment

CATLine CAT 6 S
CATLine CAT 6A S
CATLine CAT 7A S

CAT 6 Ethernet cable suitable for cable tracks
CAT 6A Ethernet cable suitable for cable tracks
CAT 7A Ethernet cable suitable for cable tracks

+90°C on request



20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for CATLine CAT 7A S 17774631:

SAB BRÖCKSKES · D-VIERSEN · CATLine Cat.7A S 4x2x26AWG 1777-4631 AWM Style 20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE

Construction:	CATLine CAT 6 S <i>suitable for cable tracks</i>	CATLine CAT 6A S <i>suitable for cable tracks</i>	CATLine CAT 7A S <i>suitable for cable tracks</i>
Item numbers:	16774630	16774631	17774631 / 17774431
Dimensions:	4 x 2 x 26 AWG	4 x 2 x 26 AWG	4 x 2 x 26 AWG / 4 x 2 x 24 AWG
Conductor:	bare copper strands, fine wires	bare copper strands, fine wires	bare copper strands fine wires
Insulation:	special polymer	special polymer	special polymer
Color code:	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
Stranding:	conductors twisted to pairs, pairs together	conductors twisted to pairs, pairs together	conductors twisted to pairs, pairs shielded with foil, pairs together
Wrapping:	non-woven tape	non-woven tape	—
Shielding:	alu foil	alu foil	aluminized non-woven tape
Shielding:	tinned copper braiding	tinned copper braiding	tinned copper braiding
Wrapping:	non-woven tape	non-woven tape	non-woven tape
Jacket material:	PUR	PUR	PUR
Jacket color:	green (similar RAL 6018)	green (similar RAL 6018)	green (similar RAL 6018)

Technical data:	CATLine CAT 6 S <i>suitable for cable tracks</i>	CATLine CAT 6A S <i>suitable for cable tracks</i>	CATLine CAT 7A S <i>suitable for cable tracks</i>
Peak operating voltage:	max. 90 V	max. 90 V	max. 90 V
Voltage UL/CSA:	300 V	300 V	300 V
Testing voltage: conductor/conductor: conductor/shielding:	2000 V 2000 V	2000 V 2000 V	2000 V 2000 V
Min. bending radius: fixed installation free movement: continuous flex:	5 x O.D. 10 x O.D. 15 x O.D.	5 x O.D. 10 x O.D. 15 x O.D.	5 x O.D. 10 x O.D. 15 x O.D.
Torsion:	—	—	—
Temperature range VDE: static: flexible:	UL: up to +80°C -40/+70°C -40/+70°C	UL: up to +80°C -40/+70°C -40/+70°C	UL/CSA: up to +80°C -40/+70°C -40/+70°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1	acc. to IEC 60754-1 + VDE 0482-754-1	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; UL Horizontal Flame Test FT2		
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2		
Characteristic impedance (100 MHz):	100Ω ± 10Ω, fulfills the electrical and transmission requirements with high frequency with reference to EN 50288-5-2 / CAT 6	100Ω ± 10Ω, fulfills the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 / CAT 6A	100Ω ± 10Ω, fulfills the electrical and transmission requirements with high frequency with reference to EN 50288-9-2 / CAT 7A
Flexibility:	very good	very good	very good
UL Style:	20549	20549	20549
Application:	suitable for EtherCAT and EtherNET/IP applications		
Absence of harmful substances:	acc. to RoHS directive of the European Union, see page O/30		

item no.	type	dimensions AWG	max. cond.-ø mm	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 16774630	CATLine CAT 6 S	26 (≈ 7/34)/4pr	1.05	0.280	7.1	38
▶ 16774631	CATLine CAT 6A S	26 (≈ 7/34)/4pr	1.05	0.280	7.1	38
▶ 17774631	CATLine CAT 7A S	26 (≈ 7/34)/4pr	1.50	0.355	8.5	54
▶ 17774431	CATLine CAT 7A S	24 (≈ 7/34)/4pr	1.60	0.409	10.4	68

Other dimensions and colors are available on request



Cables for Airport Equipment

USB 3.0 cable assembly with molded connector

USB 3.0 cable with molded type A and Micro-B male connector

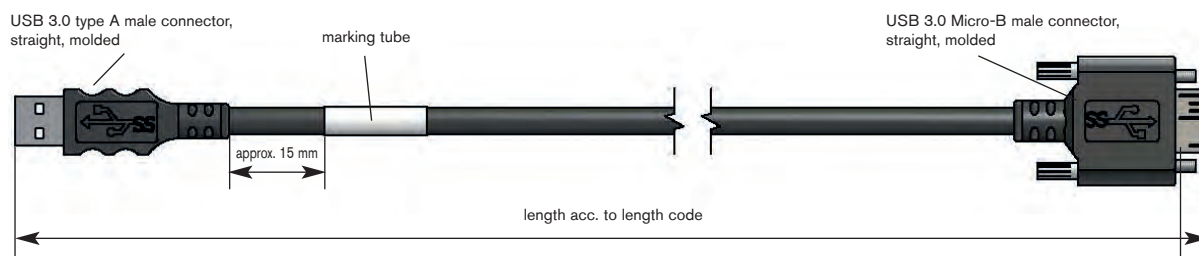
USB 3.0 cable with molded type A male connector and type A female connector



Configuration examples:

Connector:	
side 1:	USB 3.0 type A male connector
side 2:	USB 3.0 type Micro-B male connector

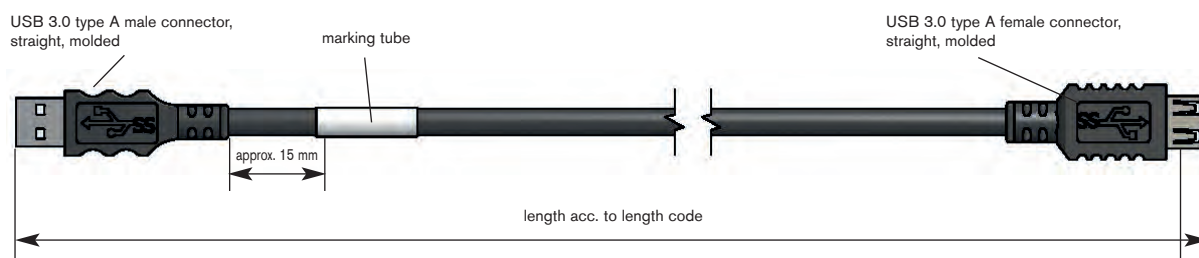
item no.	length "L" in cm
S0604-4004-00100	100
S0604-4004-00200	200
S0604-4004-00300	300
S0604-4004-00500	500



Configuration examples:

Connector:	
side 1:	USB 3.0 type A male connector
side 2:	USB 3.0 type A female connector

item no.	length "L" in cm
S0604-4005-00050	50
S0604-4005-00100	100
S0604-4005-00200	200
S0604-4005-00300	300
S0604-4005-00500	500



Application:

Connection cable PC – 3D camera
Extension cable



Cable characteristics:

- mechanically very rugged
- PUR cable suitable for cable tracks

Cable data:

Construction:	3x(2x30AWG)ST+2x24AWG
Insulation:	SABIX®
Outer jacket:	PUR
Outer diameter:	approx. 6.1 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V

SAB marking:

item number, order number, length

Also possible as a
cable assembly with
M12 or RJ 45 plug

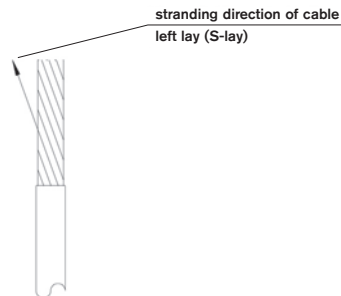


Cables for Airport Equipment

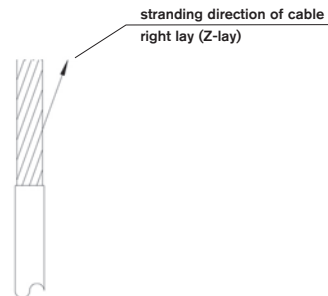
SAB helix cables

- 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.



Cables for Airport Equipment

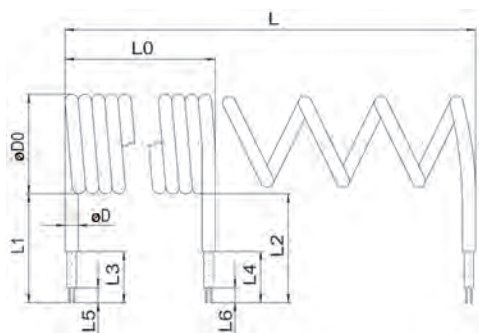
Construction details for helix cables

to **SAB North America**

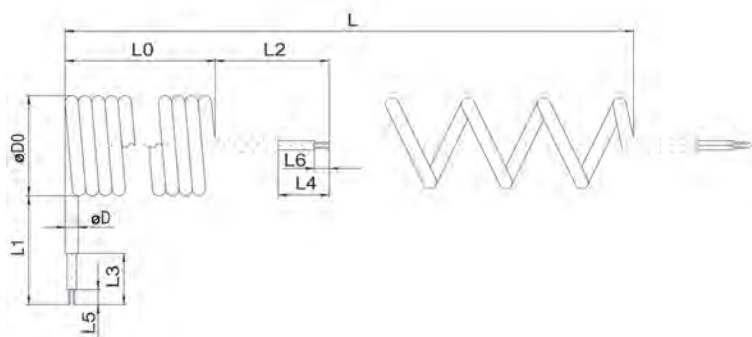
Fax: 973-276-1515 ▪ Toll Free: 1-866-722-2974 ▪ Phone: 973-276-0500

Company/Name: _____

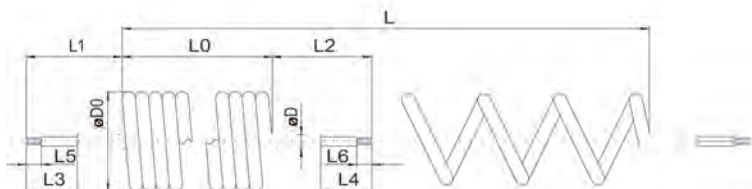
Please calculate a non-binding offer based on the following requirements:



q Cable ends: radial



q Cable ends: radial and axial



q 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: q yes q no

Insulation material
(jacket): _____

No. of conductors: _____

Cross section: _____

Notes: _____

Production possibilities

Flexible cables and wires “Made in Germany”

As a leading manufacturer we develop and produce cables for industrial purposes.

Our wide range of materials offer a lot of possibilities for your individual product requirement.

The following survey shows an extract of our production possibilities:

Conductor Materials:

- ✓ bare copper
- ✓ tinned copper
- ✓ silver plated copper
- ✓ nickel plated copper
- ✓ nickel
- ✓ nickel pure
- ✓ compensating cable alloys

Insulation and Jacketing Materials:

- ✓ PVC
- ✓ Polyethylene
- ✓ Polypropylene
- ✓ Polyurethane
- ✓ TPE
- ✓ SABIX® (zero halogen)
- ✓ Besilen® - Silicone
- ✓ FEP, ETFE, PFA, PTFE
- ✓ PI foil
- ✓ Fiberglass

Temperature Ranges:

- Thermoplastic Elastomers
- ✓ -50°C up to +145°C
- SABIX®
- ✓ -50°C up to +220°C
- Besilen® - Silicone
- ✓ -40°C up to +220°C
- FEP, ETFE, PFA
- ✓ -90°C up to +260°C
- Fiberglass
- ✓ up to +600°C

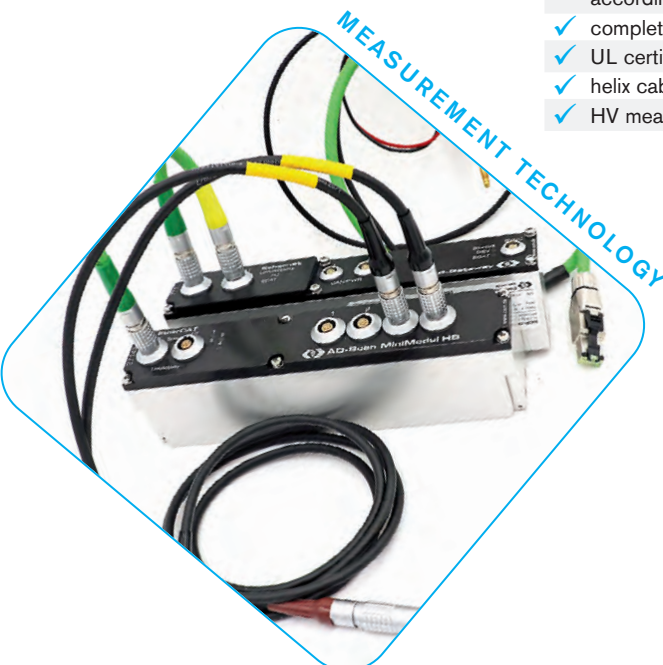
Conductors:

- ✓ cross sections 0.055 - 300 mm²
- ✓ unshielded and shielded over 100 conductors

Cable assemblies directly from the manufacturer SAB:

As a full service partner, we are able to offer cable design and production as well as the manufacturing of cable assemblies according to customer's request. Please trust on our experience for decades in the treatment of cables and connectors.

- ✓ cable assemblies according to customer's demands
- ✓ complete cable assemblies
- ✓ UL certified assemblies
- ✓ helix cables
- ✓ HV measuring assemblies



Measuring technology for industrial applications

Manufacturer of temperature sensors for industrial applications with 75 years of experience!

- ✓ mineral insulated thermocouples
- ✓ mineral insulated resistance thermometers
- ✓ temperature sensors
- ✓ mobile high voltage measuring technology
- ✓ temperature sensors for vehicle testing

Accessories for Airport Equipment

CORD GRIPS & ACCESSORIES

Secure & Protect Your Cable

Liquid tight seal, fast and easy installation, wide clamping range, multi-purpose applications, easy handling.



Technical data:

Protection type:	IP 68 - 5 Bar NEMA 4X
Temperature range:	
permanent:	-20°C to +100°C
intermittent:	-30°C to +150°C
Flammability:	V2 (according to UL 94)

CG 100 POLYAMIDE CORD GRIPS

Dome cap, black or gray available in NPT, PG, or metric thread

Liquid tight seal, fast and easy installation, wide clamping range, multi-purpose applications, easy handling.



CG 200 POLYAMIDE CORD GRIPS

Flex cap, black or gray available in NPT, PG, or metric thread

Strain relief gland offers maximum protection against conductor fatigue caused by flexing cables



CG 300 NICKEL PLATED BRASS CORD GRIPS

Available in NPT, PG, or metric thread

Impact resistant, suitable for industrial applications, water tight, corrosion resistant.



CG 350 STAINLESS STEEL CORD GRIPS

Available in NPT, PG, or metric thread and SS 303 or SS 316

Impact resistant, suitable for industrial applications, water tight, corrosion resistant.



EMC-2 GROUNDING CORD GRIPS

Nickel plated brass EMC cable gland available in NPT, PG, or metric thread

EMC-2 is a nickel plated brass strain relief with integral grounding springs in the gland.

Features:

- One Direction Installation
- Affordable
- Nickel Plated Brass with Tinned Copper Springs



EMC-4 GROUNDING CORD GRIPS

Nickel plated brass, EMC cable gland, vibration proof, available in NPT, PG, or metric thread

EMC-4 is a nickel plated brass strain relief with integral grounding springs in the gland that will allow the cable to move without damage to the shield.

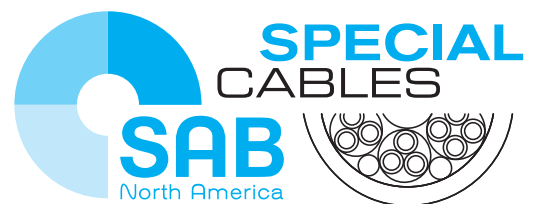
Features:

- Bi-directional Installation
- Great Anti-Vibration Mechanisms
- Nickel Plated Brass with Tinned Copper Springs



Accessories & Fittings

Enlargers	Reducers	Hole Plugs	Multi-Hole Bushing	Vent Gland & Plugs	Locknuts



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