ASSEMBLIES HELIX/SPIRAL CABLES



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



SAB assembles our cables and wires directly to your individual requirements and specifications. We offer a variety of combination possibilities which include different connector types (Harting, Lemo, Sub-D, M12, and RJ45 connectors) and terminals. The cable jacket material is selected based on your application. We offer solutions for different applications including: connectorized solutions, cables with stripped outer jacket and wire insulation, and cables with wire end ferrules. SAB can helix/spiral your cable for use in connecting mobile operating units and mobile machine parts.

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



Helix/Spiral Cables

UL certified cable harness

Bröckskes has completed its range of harnessed cables with the certification acc. to UL Standard Wiring Harness "category ZPFW2 (UL)" and "ZPFW8 (Canada)" and herewith strengthens its position as cable specialist for cable harness acc. to customer's specification.

Whenever harnessed cables are produced as component part of a final product for the North American and Canadian market, an UL certified cable harness is necessary. With the UL certification, SAB ensures the detailed traceability of individual components as for example cables, plugs or

sleeves and offers highest planning reliability also with special harnessing products.

Underwriter Laboratories Inc. (UL), an independent American test and certification authority confirms the use of the materials and documents required by the final customer according to the UL certification for "Wiring Harness" acc. to ZPFW2 and ZPFW8. In the manufacturer's data base (www.ul.com) SAB is listed under file no. E473226 as a qualified and reliable manufacturer.

The requirements for UL certified cable harness are controlled by external audits every three months in order to guarantee the high requirements of the UL standards. Besides our cables, also harnessed versions, are tested in our own laboratory with regard to safety and reliability and are marked with the "Wiring Harness Label".

On request SAB is able to manufacture cable harnessing products acc. to customer's specification acc. to UL Wiring Harnesses ZPFW2 and ZPFW8 from the cable to the harness and offers broad advice.

CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date

20150123-E473226 E473226-20150123 2015-JANUARY-23

Issued to: SAB BROECKSKES GMBH & CO KG GREFRATHERSTRASSE 204-212B **POSTFACH 12 01 60** 41749 VIERSEN GERMANY

This is to certify that representative samples of COMPONENT - WIRING HARNESSES General Coverage

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety:

Wiring Harnesses, Subject 764, and CSA Informs Wiring Harnesses No. 1

Additional Information:

See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Ethernet Cable

Helix cable with axial outlets and M12 D-coded male connectors

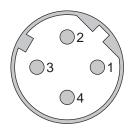




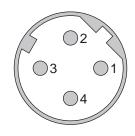
Application: CAT 5 Profinet cable spiral cable for mobile use on machines and systems.

	Technical Data:	
Temperature range:	-30°C to +80°C	
Voltage:	max. 113 V	
Connection side 1:	M12 D-coded	
Connection side 2:	M12 D-coded	
Marking:	yellow marking tube with marking: item number - order number - length - certification mark, with customer identification on request!	

	Cable characteristics:		
SAB item no.:	L0616-9066		
Dimension:	2 x 2 x 26 AWG		
Conductor:	bare copper strands, fine wires		
Insulation:	SABIX®		
Shielding:	tinned copper braiding		
Outer jacket:	PUR, green (similar RAL 6018)		
Outer diameter:	approx. 6.1 mm		



connection diagram/pin assignment			
side 1	1:1	side 2	
M12 connector	conductor	M12 connector	
pin 1	yellow	pin 1	
pin 2	white	pin 2	
pin 3	orange	pin 3	
pin 4	blue	pin 4	
housing	shield	housing	





Individual lengths and further plug combinations on request!

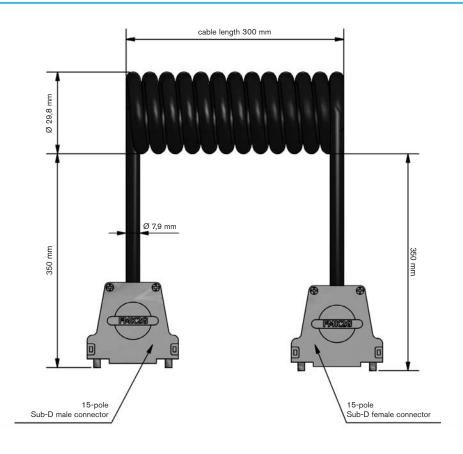




Helix Cable

with radial outlets and 15-pole Sub-D male connector and female connector





	Technical Data:		
Temperature range:	-35°C to +85°C		
Voltage range:	0 - 24 V		
Connection side 1:	Sub-D connector		
Connection side 2:	Sub-D connector		

	Cable characteristics:	
SAB item no.:	L0803-9209	
Dimension:	(5x0.14 mm ² +2x0.14mm ² +4x(2x0.14mm ²)D)D	
Conductor:	bare copper strands, fine wires	
Insulation:	TPE	
Shielding:	wrapped with tinned copper braiding	
Outer jacket:	PUR, black (similar RAL 9005)	
Outer diameter:	approx. 7.9 mm	

item no. with length code		
length	item no.:	
0.3 m	S0803-4123-00030	
0.5 m	S0803-4123-00050	
1.0 m	S0803-4123-00100	
2.0 m	S0803-4123-00200	
3.0 m	S0803-4123-00300	
5.0 m	S0803-4123-00500	
7.5 m	S0803-4123-00750	
10.0 m	S0803-4123-01000	
15.0 m	S0803-4123-01500	
20.0 m	S0803-4123-02000	
25.0 m	S0803-4123-02500	

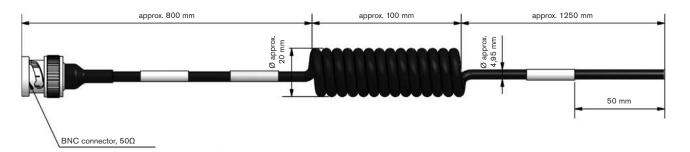


Helix/Spiral Cables

Helix Cable

with axial outlets, BNC connector and smoothly cut end





Technical Data:		
Temperature range:	-40°C to +90°C (cable)	
Voltage range:	max. 500 V (cable)	
Connection side 1:	HF plug connector	
Connection side 2:	cut smoothly	

	Cable characteristics:	
SAB item no.:	L3600-9064 / KOAX 50 Ω	
Dimension:	AWG 22/19	
Conductor:	bare copper strands, fine wires	
Insulation:	SABIX [®]	
Shielding:	wrapped with tinned copper braiding	
Outer jacket:	PUR, black (similar RAL 9005)	
Outer diameter:	approx. 5.0 mm	

item no. with length code		
length	item no.:	
0.5 m	S3600-4103-00050	
1.0 m	S3600-4103-00100	
2.0 m	S3600-4103-00200	
3.0 m	S3600-4103-00300	
5.0 m	S3600-4103-00500	
7.5 m	S3600-4103-00750	
10.0 m	S3600-4103-01000	
15.0 m	S3600-4103-01500	
20.0 m	S3600-4103-02000	
25.0 m	S3600-4103-02500	

Among others the following cable types belong to our delivery program:

- ✓ low-noise cable
- ✓ RG 316
- ✓ RG 58
- ✓ RG 179
- \checkmark coax cables with 50 Ω or 75 Ω
- ✓ cables with heat resistant, flexible outer jacket up to +150°C

Please choose from the following plug connectors:

- UHF plug connector
- mini UHF plug connector
- MMCX plug connector
- SMB plug connector
- **_** ..



Construction details for helix cables

to SAB North America

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

Com	pany	/Na	me:
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Please calculate a non-binding offer based on the following requirements:

	L = mm L0 = mm ØD = mm ØD0 = mm L1 = mm L2 = mm L3 = mm		
Cable ends: radial	L4 = mm		
L0 L2	L5 = mm		
	L6 = mm		
	Quantity:		
Lb L4	Application (type of installation):		
5 - 0	(type of installation).		
	Helical direction:		
127	Standard cable		
Cable ends: radial and axial	(item no.):		
<u> </u>	Insulation material (conductor):		
L1 L0 L2	Shielding: Oyes Ono		
8 L6 L6	Insulation material (jacket):		
L3 L4 V V	No. of cores:		
Cable ends: axial	Cross section:		
Neter			
Notes:			
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