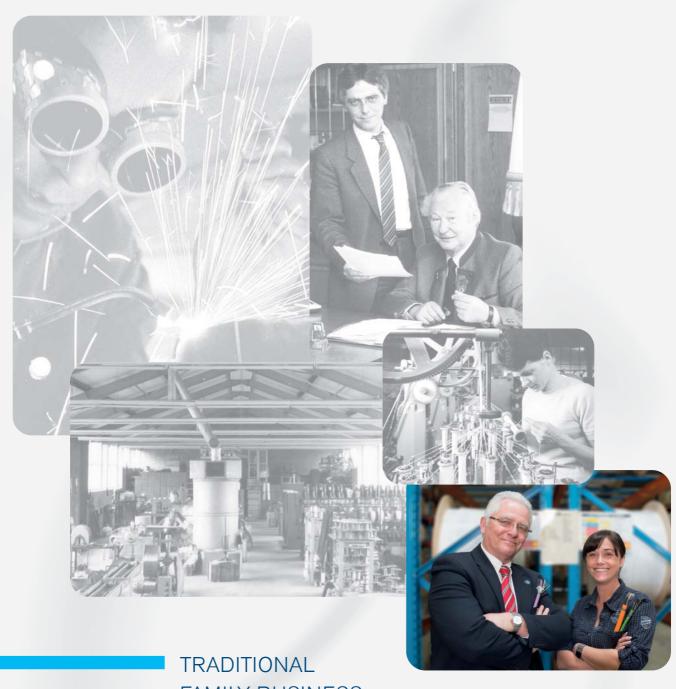


### SPECIAL CABLES FOR MEDICAL TECHNOLOGY

### THE RIGHT SOLUTION FOR EACH AREA





FAMILY BUSINESS

SINCE 1947

# CONTENT

Monitoring / information systems

Endoscopy

**Electro-mobility** 

	SUNVEI	
<ul><li>Who we are a survey</li><li>UL Certified Cable Harness</li><li>SAB worldwide</li></ul>		
	APPLICATION EXAMPLES	
Surgery robot systems		8
Dental technology		=
Sterilization and disinfection		10
Imaging techniques		11
<ul><li>Operation tables and treatment units</li></ul>		12
Surgical ligths		13
■ Electro-surgical systems		14
Electro-therapy devices		15
Laboratory equipment		1E

The examples shown above are only a selection of our possibilities. For other solutions our experts are always at your disposal. Please, do not hesitate to contact our specialists who will advice you individually for your special application.

### WHO WE ARE

### A SURVEY

ore than 60 years of experience in temperature measurement and control technique as well as in cable production have made a one man business a company with nearly 500 staff members. Our strength is not only the production of standard products but also the development and manufacturing of special products acc. to customers' specifications. Every year, we manufacture more than 1500 special products on our customers' request. Every single product is a challenge for our technical team. We at SAB Bröckskes see ourselves as manufacturer and service provider - in the sense of real partnership and customer oriented work.

The quality of our products is known in more than 40 countries worldwide. Our customers have tested our products intensively and confirm that they have a longer service life than others. In all product ranges, we are certified acc. to ISO 9001:2008. Besides, we established an environmental management system for our company acc. to ISO 14001:2004, an occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007 as well as an energy management system acc. to DIN EN ISO 50001:2011. And our future slogan is:

WE GO FORWARD!

FOUNDED:	1947 by Peter Bröckskes sen. an independent, medium-sized company.
CEO:	Peter Bröckskes and Sabine Bröckskes-Wetten
PLANT/LOCATION:	In Viersen (Lower Rhine) 110.000 m <sup>2</sup> company site.
	Own manufacturing from copper conductor to outer sheath.
	VDE proofed burnchamber and laboratory within the company.
EMPLOYEES/WORKERS:	Approx. 420 at the plant in Viersen, 500 worldwide
YEARLY SALES:	Approx. 95 Mio. € worldwide
PRODUCTS:	Special Cables
	Temperature Measurement
	Cable Harnessing
CERTIFICATES AND APPROVALS:	Quality management system acc. to ISO 9001:2008 for every manufacturing field  Environmental management system acc. to ISO 14001:2004
MIL, VDE, HAR, IEC, GL, DNV, BV, KR, ABS, NK, RINA, LR, CE	Occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007  Energy management system acc. to DIN EN ISO 50001:2011

### **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 to listed under file no. E473226 as gualified 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 and 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

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.



# WE ARE AT YOUR SERVICE,

# WHEN YOU NEED US ...

rom our central stock in Viersen-Süchteln or our external stocks, we supply standard lengths as well as special dimensions, often within 24 hours. It is our strength to be at different places at the same time. This shows also our wide product range. Being always ready to deliver our products of constant quality is one of the premises at SAB BRÖCKSKES. Challenge, obligation - but also guarantee at the same time. This is your advantage - we are present whenever you need our assistance.

#### HEAD OFFICE:

SAB BRÖCKSKES GmbH & Co. KG Grefrather Str. 204-212b 41749 Viersen Germany

Phone: +49 (0) 2162 898-0 Fax: +49 (0) 2162 898-101 E-Mail: info@sab-broeckskes.de Internet: http://www.sab-worldwide.com

#### SUBSIDIARY NETHERLANDS:

Peter Bröckskes v.o.f. Bokkerijder 34 NL- 5571 MX Bergeijk Netherlands

 Phone:
 +31 497 575 201

 Fax:
 +31 497 577 217

 E-Mail:
 info@brockskes.nl

 Internet:
 http://www.brockskes.nl

#### SUBSIDIARY FRANCE EAST:

Cablerie SAB S.A.
26, la Rue des Caillottes
ZI Plaine des Isles
89006 Auxerre Cedex
France

Phone: +33 3 869 466 94
Fax: +33 3 869 466 50
E-Mail: info@cablerie-sab.fr
Internet: http://www.cablerie-sab.fr

#### SUBSIDIARY FRANCE WEST:

Auxicom 12 Rue de Clairières ZAC du Taillis 3 · BP 35 44840 Les Sorinières France

Phone: +33 2 518 976 76
Fax: +33 2 518 900 21
E-Mail: info@auxicom.fr
Internet: http://www.auxicom.fr

#### SUBSIDIARY USA:

SAB North America 344 Kaplan Drive Fairfield, NJ 07004 USA

Phone: +1 973 276-0500
Fax: +1 973 276-1515
E-Mail: info@sabcable.com
Internet: http://www.sabcable.com

#### SUBSIDIARY CHINA:

SAB Special Cable (Shanghai) Co. Ltd. Room 1705, Xinjian Mansion, No. 488, Yaohua Road, Pudong New District, Shanghai, China, 200126

Phone: + 86 21 583 508 43
Fax: + 86 21 583 508 45
E-Mail: sales@sab-broeckskes.net Internet: http://www.sab-cable.net

#### SUBSIDIARY MEXICO:

Electrokabel México SA de CV Miguel Alemán 759 Col. Mig. de la Madrid Hurtado Zapopan, Jalisco C.P. 45235 Mexico

Phone: + 52 33 36 84 0026 Fax: + 52 33 36 84 3976 E-Mail: hector.perez@sabmexico.com Internet: http://www.sabmexico.com

#### REPRESENTATION KOREA:

TCC Thomas Cable Co. Ltd. 20-4, Yeochon-Ri Ochang-Myun, Cheongwon-Kun Chungbuk 363-884

Phone: + 82 43 211 9900

Korea

Fax: + 82 43 211 5533
E-Mail: thomascable@thomaskorea.com
Internet: http://www.thomas.co.kr

#### EPRESENTATION INDIA:

Alltronix C-340, 6th Cross, 1st Stage Peenya Industrial Estate Bangalore-560 058 Karnataka

 Phone:
 +91 / 80 4083 8383

 Fax:
 +91 / 80 4083 8305

 E-Mail:
 mail@alltronixin.com

 Internet:
 http://www.alltronixindia.com

#### DEPRESENTATION RUSSIA:

Pozitron LLC Frontovyh Brigad 18, office 206 620017 Yekaterinburg Russian Federation

Phone: +7 (912) 270 23 90
Phone: +7 (343) 389 16 17
Fax: +7 (343) 389 16 18
E-Mail: info@pozitron-ekb.ru
Internet: http://www.pozitron-ekb.ru

#### REPRESENTATION BRASIL:

BERUF Ltda Rua do Camacuan, 718 Curitiba/PR-81.550-360 Brasil

Phone: +55 41 3575 0001
Fax: +55 11 3522 8378
E-Mail: vendas@beruf.com.br
Internet: http://www.beruf.com.br

#### EPRESENTATION SINGAPORE:

Precision Technologies Pte Ltd 211 Henderson Road #13 - 02 Henderson Industrial Park Singapore 159552

 Phone:
 +65 6273-4573

 Fax:
 +65 6273-8898

 E-Mail:
 precision@pretech.com.sg

 Internet:
 http://www.pretech.com.sg

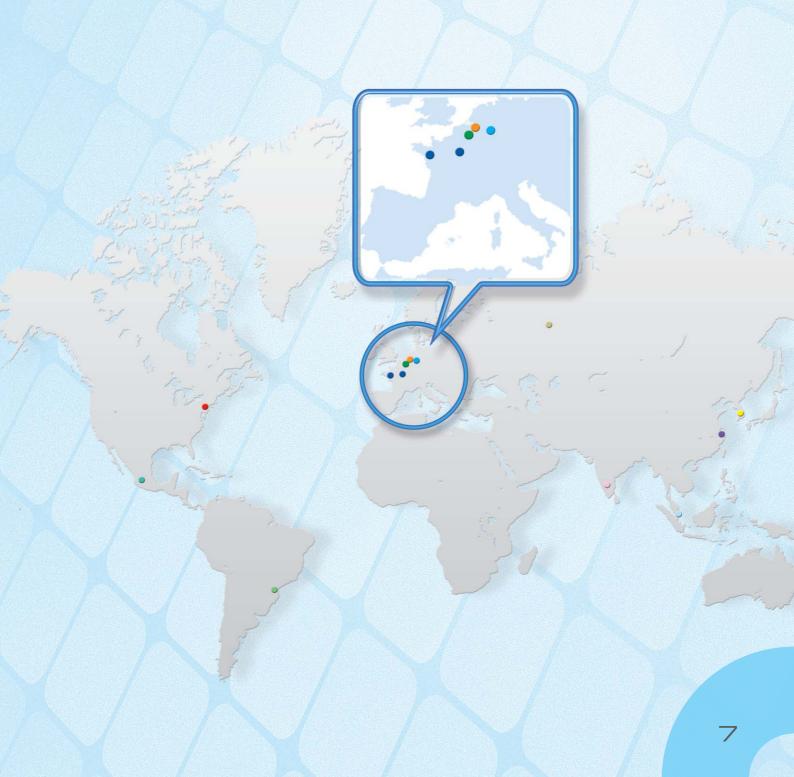
# REPRESENTATION TEMPERATURE MEASUREMENT TECHNIQUE REIGIIM

Ets. Fabritius SPRL Av. van Volxem 180 B-1190 Brussels Belgium

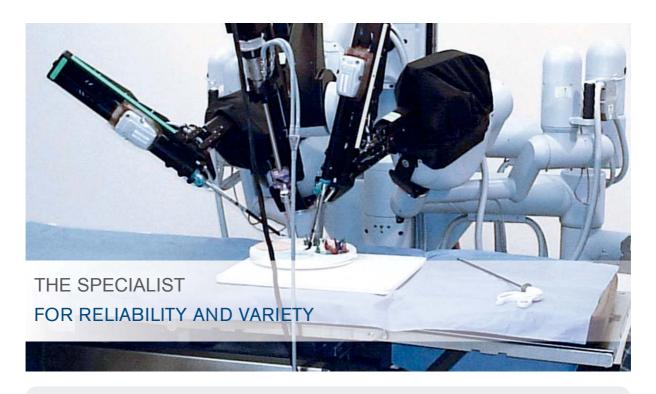
Phone : +32-2-34 33 932
Fax: +32-2-34 45 794
E-Mail: info@fabritius.be
Internet: http://www.fabritius.be

# WORLDWIDE

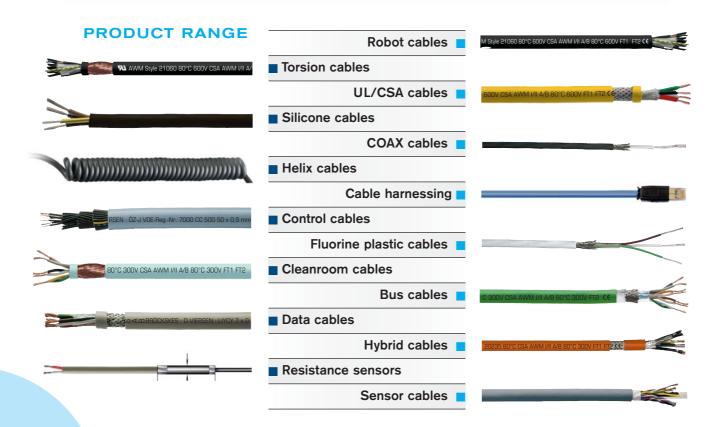
SHORTEST WAY
INDIVIDUAL SOLUTIONS.



### **SURGERY ROBOT SYSTEMS**



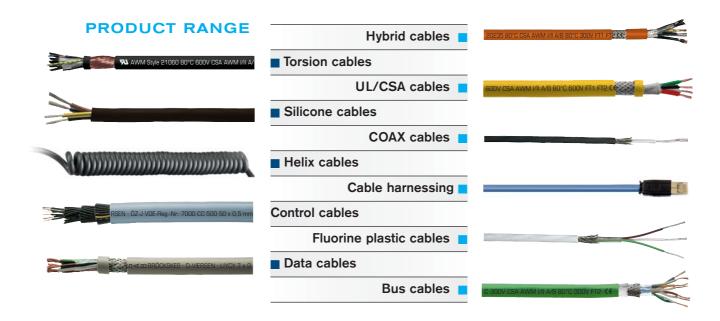
Surgery robot sytems have the demand of high mechanic requirements as well as million cycles of torsional and bending movements. To fullfil these high requirements we check our products with our in-house test systems regarding performance and durability. The combination of different insulation and sheath materials allows the use of various disinfectiance and cleaning substances up to autoclaveability and clean-room application.



### **DENTAL TECHNOLOGY**



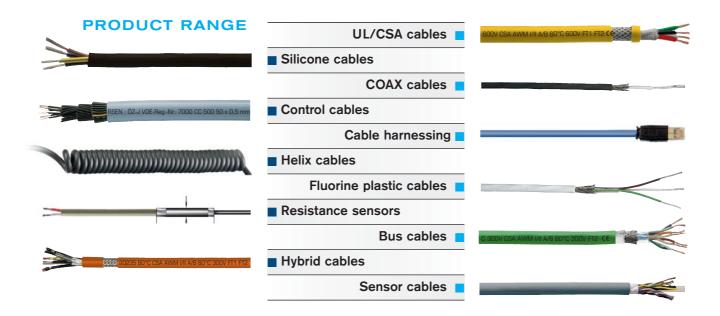
The performance expectation at the dental technology extends from flexible and soft silicone cables in hand-held application to torsional stress in swivle arms and minimized connection cables. Due to the wide range of material combinations we fullfil your demands at the highest level.



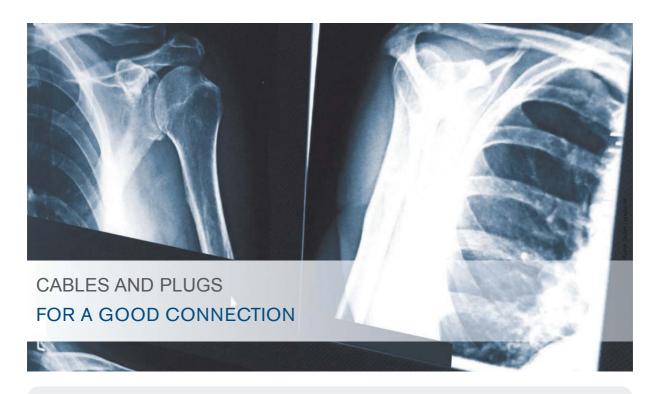
### STERILIZATION AND DISINFECTION



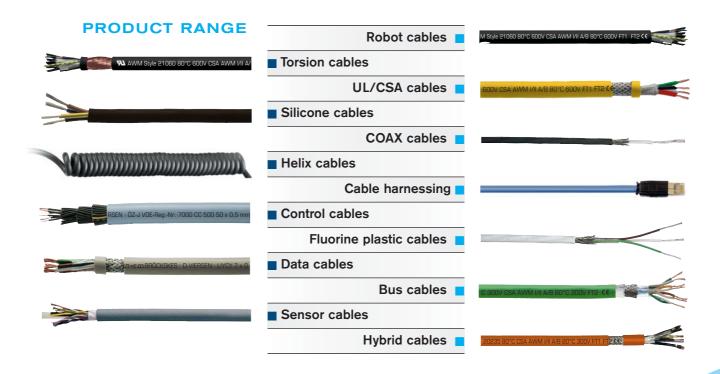
For the application of sterilization and disinfection we produce connection cables and products for temperature measurements. The often used PT100/PT1000- and NTC-Sensors are manufactured with highest precision Steam-tight versions are possible as well as autoclaveable connection cables, even with international standards.



### **IMAGING TECHNIQUES**



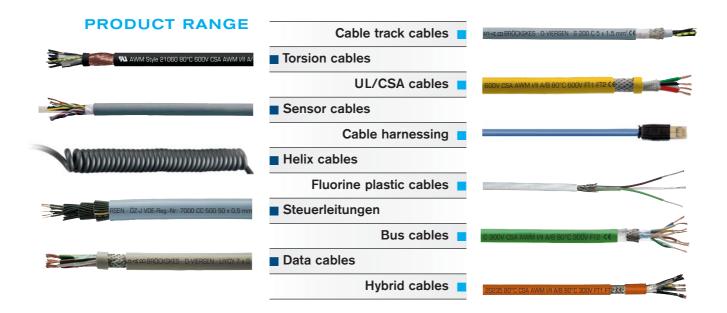
imaging systems for medical diagnostic need transfer secure and reliable connection. SAB BRÖCKSKES offers a variety of possibilitys to fullIfil your demands. Our strength of custome-made solution shows particularly clear at the innovative realization of your application. Wether combined cables with KOAX-elements or special electrical screend products with high-flexible performance - often we are able to produce for as little as 100m.



### OPERATION TABLES AND TREATMENT UNITS



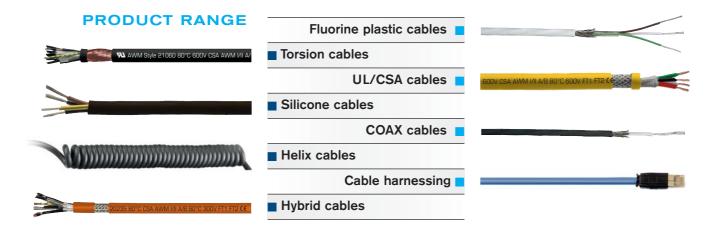
We fullfil the rising requirements on operating tables and treatment units regarding to patient positioning and user friendly handling with our wide range of products. Wether we produce helix-cables with harnessed ends, connection cables with internationals standards or combined cables with high-flexible performance - we satisfy your demands on the highest level.



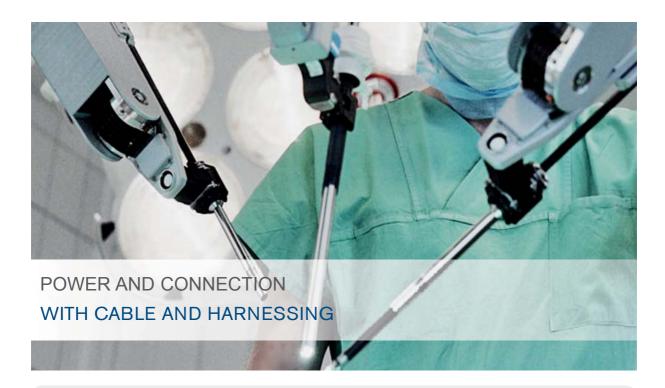
### **SURGICAL LIGTHS**



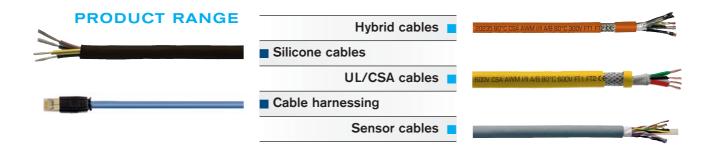
Above all in the lightning industry cables that withstand high and fluctuating ambient temperatures up to + 180°C are needed. For this application SAB BRÖCKSKES offers a broad range of Besilen insulated cables and strands. These are particularly used for the inner wiring of lamps and devices as well as for the wiring of switch and distribution boards with low mechanical stress.



### **ELECTRO-SURGICAL SYSTEMS**



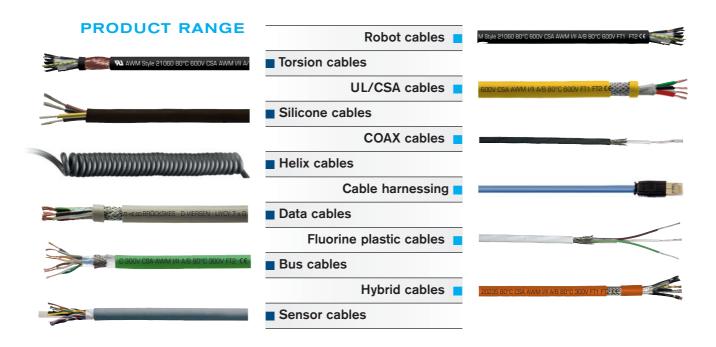
Wether if monopolar or bipolar applications - the manufacturing at SAB BRÖCKSKES always takes place on the highest quality level in consideration of bio-compatible materials. Even versions with increased screen effectivity to avoid disturbance of imaging techniques can be manufactured.



### **ELECTRO-THERAPY DEVICES**



Connection cables in the field of electro-therapy application with electric stimulation or fine-flow are customermade designed and manufactured by SAB BRÖCKSKES. Depending of the application and customer demand, we would be pleased to take especially flexible and user-friendly performance, resistance against wipe-disinfection or minimized combinations into consideration. Everey variation can be harnessed by us.



### LABORATORY EQUIPMENT



MEDICAL LABRATORY AND SAMPLE PROCESSING –
INDIVIDUALLY AND PRACTICAL



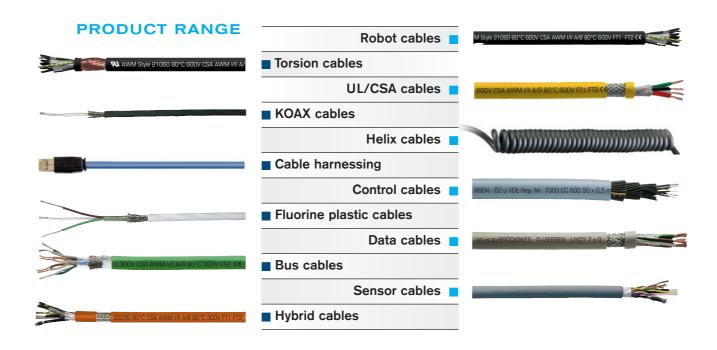
For the demands of labratory equipment SAB BRÖCKSKES offers a wide range of innovative products: silicone (Besilen®) cables, featured by high-temperature resistance up to +250°C with simultaneous high-flexible perfomance. Or connection cables designed for permanent movement at the devices door. The often used PT100/PT1000 and NTC-Sensors are manufactured with highest precision. Steam-tight versions are possible as well as autoclaveable connection cables, even with international standards.



### MONITORING / INFORMATION SYSTEMS



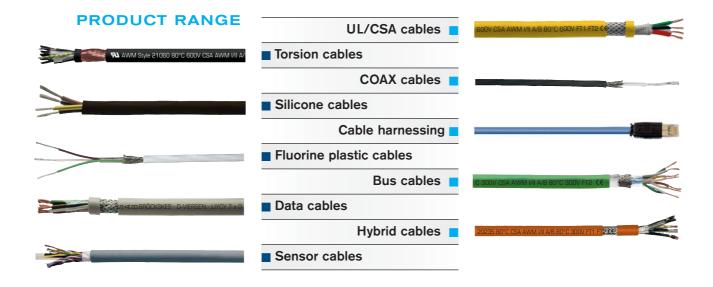
Based on the strong innovating power of medical monitoring and information techniques, SAB BRÖCKSKES developed a high amount of new cable solutions. Particularly progressive are the appliactions of the linked surgery sytems. Depending on the use, we can offer for exampkle CAT5, CAT6 and CAT7-Cables for high flexible, temperature and chemical resistance as well as drumable and robot-suitable variations.



### **ENDOSCOPY**



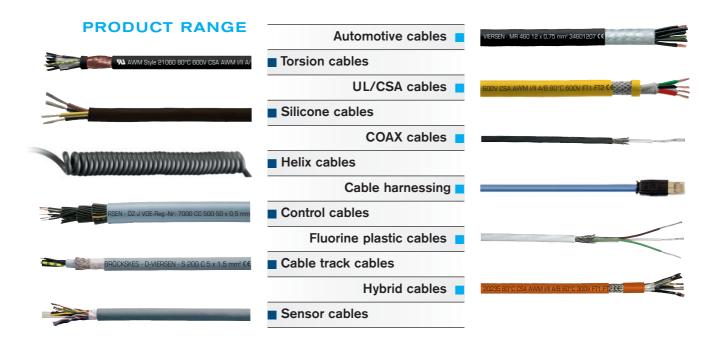
Endoscopic systems need, like other imaging systems, transfer secure and reliable connection in combination with smooth and user-friendly performance. SAB BRÖCKSKES can use its innovative strength for custom-made products - often we are able to produce for as little as 100m and harnessed.

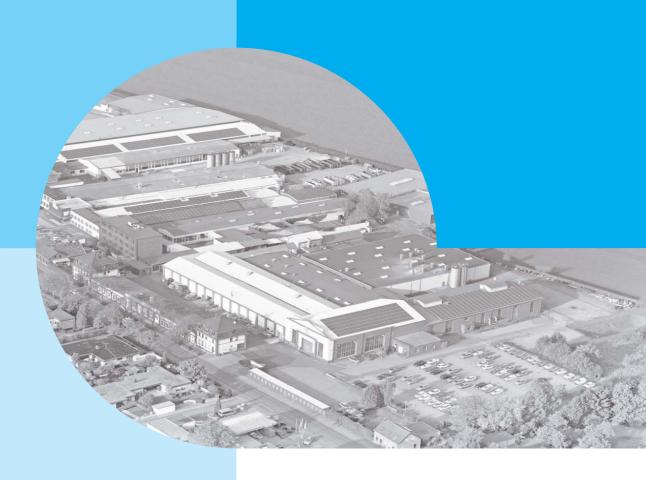


### **ELECTRO-MOBILITY**



Based on our experiences in the field of vehicle technology and battery-charging systems, SAB BRÖCKSKES offers a wide range of products for electro-mobility. The special advantage is the easy installation, even at small space conditions.







**SAB** BRÖCKSKES GMBH & CO. KG GREFRATHER STR. 204 - 212 B 41749 VIERSEN · GERMANY

TEL.:+49/2162/898-0 FAX: +49/2162/898-101

WWW.SAB-WORLDWIDE.COM
INFO@SAB-BROECKSKES.DE