



# BESILEN® - SILICONE CABLES



[www.sab-cable.com](http://www.sab-cable.com)



## Content






	<b>page</b>
<b>Applications</b> .....	K/4-5
<b>Selection tables</b> .....	K/6-7
<b>Besilen® insulating sleeve, non-fibrous</b>	
■ BiS .....	K/8
<b>Besilen® twin cable</b>	
■ BiZ .....	K/9
<b>Besilen® single conductor</b>	
■ ZKBi Besilen® ignition cable .....	K/10
■ HZLBi Besilen® high-voltage ignition cable .....	K/11
■ BiL Besilen® insulated single conductor for tube lamps (neon cable) .....	K/12
■ BiA Besilen® insulated wire .....	K/13
■ BiAF Besilen® insulated strands .....	K/14
■ BiAFF Besilen® insulated strands, highly flexible .....	K/15
■ BiAF/GL Besilen® insulated strands with fibre-glass braiding .....	K/16
■ B 118 Besilen® insulated strands 0.6/1 kV .....	K/17
■ B 119 Besilen® insulated strands 1.8/3 kV .....	K/18
■ B 110 C  highly flexible Besilen® insulated HV single core, shielded, 1.8/3 kV AC, cULus recognized .....	K/19
■ B 120 Besilen® insulated strands 3.6/6 kV .....	K/20
<b>Besilen® round strands especially for use on rail vehicles</b>	
■ R 107 highly flexible Besilen® insulated HV single core acc. to EN 45545-2 .....	K/21
■ B 107  highly flexible Besilen® insulated HV single core, cULus recognized .....	K/22
■ B 108 highly flexible Besilen® insulated HV single core, shielded .....	K/23
<b>Besilen® sheathed cables</b>	
■ BiHF-J Besilen® insulated strands with Besilen® outer sheath .....	K/24
■ BiHF(K)-J Besilen® insulated strands with extremely notch resistant Besilen® outer sheath .....	K/25
■ BiHF-P-J Besilen® insulated strands with Besilen® outer sheath and steel wire armouring for mechanical protection .....	K/26
■ BiHFGLP-J Besilen® insulated strands with Besilen® outer sheath, fibre-glass tape and steel wire armouring for mechanical protection .....	K/27
■ BiAF/Cu/Bi-J Besilen® insulated strands with Besilen® outer sheath and overall copper screen .....	K/28
■ BiHF/Cu/Bi-J Besilen® insulated strands with Besilen® inner sheath, overall copper screen and Besilen® outer sheath .....	K/29
■ BiHF/Cu/Bi(K)-J Besilen® insulated strands with Besilen® inner sheath, overall copper screen and extremely notch resistant Besilen® outer sheath .....	K/30
■ Besilen® ESD Control Cable Besilen® insulated strands with antistatic Besilen® outer sheath for ESD protective components .....	K/31

**NEW**

**NEW**



## Content

			page
<b>Besilen® cables acc. to VDE, UL, cUL and CSA</b>			
<b>Besilen® sheathed cables acc. to UL and CSA</b>			
■ SC 600 HDTR		Besilen® insulated strands with Besilen® outer sheath .....	K/32
■ SC 600 C HDTR		Besilen® insulated strands with overall copper screen and Besilen® outer sheath .....	K/33
■ SC 600 HDTRS		Besilen® insulated strands with Besilen® outer sheath and steel wire armouring for mechanical protection .....	K/34
<b>Besilen® sheathed cables acc. to UL and cUL</b>			
■ SC 700 HDTR		Besilen® insulated strands with Besilen® outer sheath .....	K/35
■ SC 700 C HDTR		Besilen® insulated strands with overall copper screen and Besilen® outer sheath .....	K/36
<b>Besilen® single conductors acc. to DIN VDE 0250 part 502</b>			
■ N2GFA/2GFA		Besilen® insulated wire .....	K/37
■ N2GFAF/2GFAF		Besilen® insulated strands .....	K/38
<b>Besilen® single conductors with reference to DIN EN 50525-2-41</b>			
■ 05SJ-U		Besilen® insulated wire with fibre-glass braiding .....	K/39
■ 05SJ-K		Besilen® insulated strands with fibre-glass braiding .....	K/40
<b>Besilen® low voltage cable</b>			
■ BiAF/YW		low-voltage connection cable for halogen lamps .....	K/41

**NEW**  
**NEW**

## Applications

### Applications of Besilen® cables

Our Besilen® (Silicone) cables are suitable for diverse applications. The product programme ranges from ignition cables to sheathed cables with mechanical protection and cables with flame protection. Therefore, Besilen® cables can be used for example in the following industries: coke oven plants, foundries, heating appliances, smelteries, steelworks, hot-rolling mills, illumination, in ships and aeroplanes, cement, glass and ceramic factories, bakeries, oil burners, solariums, saunas, coolers, air-conditioning, electronic motor engineering and under certain conditions in food and medical industries. Wherever they are used, Besilen® cables have one thing in common: outstanding heat and cold resistance.

#### Exemplary applications:

<b>BiS</b>	Especially for the insulation of connecting and soldering points, can be drawn over cables or conductors in lamps, heating appliances and electrical plants
<b>BiAF/YW</b>	Connection cable for low-voltage lamps, connection between transformer and halogen lamp

### Applications of Besilen® single conductors

Our Besilen® ignition cables and Besilen® high-voltage ignition cables are suitable for the application at high or very unsteady ambient temperatures of up to +180°C. Besilen® insulated wires and Besilen® insulated strands are suitable for the use at high ambient temperatures especially for the internal wiring of lamps and appliances as well as for the wiring of switchboard plants and distributors, at low mechanical loads.

#### Exemplary applications:

<b>BiZ</b>	Application in smelteries, steelworks and hot-rolling mills, in cement, glass and ceramic factories or for the internal wiring of lamps and heating appliances
<b>ZKBi</b>	Ignition cable for the use at high and very unsteady ambient temperatures, e.g. in thermal and process technologies, in motor engineering, in heat system technology, in dedusting plant and fan engineering
<b>HZLBi</b>	Ignition cable for the use at high and very unsteady ambient temperatures in lamp and illumination industries, e.g. for floodlight projectors or industrial lamps, in electric heating engineering, in thermal and process technologies, in refrigeration and air-conditioning industries
<b>BiL</b>	Single conductor for tubes lamps, especially for the use at high and very unsteady ambient temperatures, mostly in lamp and illumination industries, e.g. for floodlight projectors or industrial lamps, drop lights, equipment lights (protected installation is necessary)
<b>BiA</b>	For internal wiring in lamps, appliances, switchboard plants and distributors in industries such as industrial oven construction, smelteries, steelworks and hot-rolling mills, cement, glass, ceramic and plastic processing and electric industries
<b>BiAF N2GFA/2GFA</b>	Flexible applications for internal wiring of lamps, heating appliances, switchboard plants and distributors in industries such as smelteries, steelworks and hot-rolling mills, industrial oven and textile machine construction, lamp, illumination and electric industries, wood working and paper processing industries
<b>BiAFF N2GFAF/2GFAF</b>	Highly flexible applications for internal wiring of lamps, heating appliances, switchboard plants and distributors in industries such as e.g. smelteries, steelworks and hot-rolling mills, industrial oven and machine tool construction, lamp, illumination and electric industries as well as electric drive technology. Equally they are applied as connection of battery system or energy storage.
<b>B 118 B 119 B 120</b>	These insulated strands with 0,6/1 kV, 1,8/3 kV resp. 3,6/6 kV are for example used in switchboards and distributors, in industrial furnaces and textile machine construction as well as in railway technology. Equally they are applied as connection of battery system or energy storage.
<b>B 110 C</b>	Screened highly flexible single conductor for the connection of E-mobility converters, test benches or power wiring



## Applications

### Applications of Besilen® round strands especially for use in rail vehicles

The strands have proved as current connection in the 3. current collector, at pantographs and as earth connection at wheel sets, coupling blocks and crane mountings on rail vehicles. The strands can be laid easily in narrow spaces due to its extremely flexible construction. The translucent insulation enables an easy control of the state of conductor. An additional copper support braiding under the insulation provides a supplementary reinforcement for applications with high mechanical stress.

#### Exemplary applications:

R 107	Highly flexible single conductor for current or ground connection in railway technology
B 107	Highly flexible single core for switchboard wiring and the use in energy storage systems, test benches or power wiring
B 108	Current or ground connection in railway technology

### Applications of Besilen® single conductors with fibre-glass braiding

This Besilen® cables with fibre-glass braiding are for use at high ambient temperatures for internal wiring e.g. of lamps, heating appliances and electric machines as well as for wiring of switchboard plants and distributors. The fibre-glass braiding offers protection against mechanical damage and at the same time offers excellent heat resistance.

#### Exemplary applications:

BiAF/GL 05SJ-U 05SJ-K	Application at ambient temperatures higher than +55°C, for internal wiring of e.g. lamps and illuminations, heating appliances, household, kitchen and laboratory appliances, electric machines, switchboard plants and distributors, medical appliances
-----------------------------	--

### Applications of Besilen® ESD Control Cable

The Besilen® insulated ESD control cable is used when there is a risk to destroy electronic components due to overvoltage caused by electrostatic charge of the sheath material.

#### Exemplary applications:

Besilen® ESD Control Cable	Test equipment for power electronics, motor control units and soldering installations in the production of electronic components
----------------------------	--

### Applications of Besilen® sheathed cables

Our Besilen® sheathed cables are suitable for applications at high ambient temperatures in dry, damp and wet rooms as well as for outdoor use, as flexible connection cable with low mechanical load. The mechanical load capacity can be enhanced by using a steel wire armouring, a fibre-glass braiding or an inner sheath. The EMC characteristics can be improved by use of an overall copper screen. If these cables are used for fixed installation, they are only to be installed in ventilated tube systems or conduits.

#### Exemplary applications:

BiHF-J BiHF(K)-J SC 600 HDTR SC 700 HDTR	Application in plastics processing, packaging machine construction, smelteries, steelworks and hot-rolling mills, safety technology, measuring and control technologies, cement, glass and ceramic industries, refrigeration, heat and air-conditioning technologies, power plants, sauna construction
BiHFP-J BiHFGLP-J SC 600 HDTRS	Application in plastics processing, packaging and textile machine engineering, smelteries, steelworks and hot-rolling mills, cement, glass and ceramic industries sauna construction, refrigeration, heat and air-conditioning technologies, paper industry, foundries
BiAF/Cu/Bi-J	Application in packaging and textile machine construction, refrigeration, heat and air-conditioning, plastics processing, smelteries, steelworks and hot-rolling mills, cement, glass and ceramic industries, control engineering
BiHF/Cu/Bi-J BiHF/Cu/Bi(K)-J SC 600 C HDTR SC 700 C HDTR	Application in packaging and textile machine construction, refrigeration, heat and air-conditioning, plastics processing, smelteries, steelworks and hot-rolling mills, cement, glass and ceramic industries, plastic processing machine construction

**Note:** If hermetically sealed and used at temperatures higher than 90°C the mechanical characteristics of Silicone rubber will be reduced.

You will find further information about the safe application of cables in chapter N

## Selection table



		Cable type	BIZ	ZKBi	HZLBi	BiL	BiA	BiAF	BiAFF	BiAF/GL	B 118	B 119	B 110 C	B 120	R 107	B 107	B 108	
Basic construction	Twin cable		●															
	Ignition cable			●	●													
	Single conductor for tube lamps					●												
	Single conductor			●	●	●	●	●	●	●	●	●		●				
	Solid wire						●											
	Copper rope													●	●	●	●	
	Multi conductor cable		●															
	Screen													●				
	Fibre-glass braiding			●							●							
	Steel wire braiding																	
Temperature range fixed laying*	+250 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	+180 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	+105 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	+ 90 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	- 40 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	- 50 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Voltage	nominal voltage 24 V																	
	Nominal voltage U <sub>0</sub> /U 300/300 V		●				●											
	Nominal voltage U <sub>0</sub> /U 300/500 V							●										
	Nominal voltage U <sub>0</sub> /U 0,6/1 kV										●							
	Nominal voltage U <sub>0</sub> /U 1,5/1,5 kV																● <sup>3</sup>	
	Nominal voltage U <sub>0</sub> /U 1,8/3 kV											●	●		●	●	● <sup>4</sup>	
	Nominal voltage U <sub>0</sub> /U 3,6/6 kV												●					
	Nominal voltage U <sub>0</sub> /U 3,5 kV/4,0 kV/7,5 kV					●												
	Voltage UL/CSA resp. UL/cUL 600 V																	
	Voltage cULus 3000 V													●				
	Testing voltage 600 V														●			
	Testing voltage 1500 V		●															
	Testing voltage 2000 V						●	●	●	●								
	Testing voltage 4000 V										●						● <sup>3</sup>	
	Testing voltage 6000 V											●					● <sup>4</sup>	
	Testing voltage 6500 V												●		●	●	● <sup>4</sup>	
Testing voltage 10 kV					●													
Testing voltage 11 kV													●					
Testing voltage 15 kV				● <sup>1</sup>														
Testing voltage 20 kV			● <sup>2</sup>															
Standards and approvals	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Halogen-free acc. to EN 50306-1 + EN 50264-1														●			
	Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2														●			
	Fire performance: CSA FT1, FT2																	
	Fire performance: cUL FT1, FT2																	
	Fire performance: cULus FT1, FT2													●				
	Fire performance: cULus FT2														●			
	Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases		●	●	●	●	●	●	●	●	●	●	●	●	●		●	●
	Toxicity acc. to EN 50305 + VDE 0260-305															●		
	Smoke density acc. to IEC 61034 + VDE 0482-1034 tested acc. to EN 45545-2															●		
	acc. to DIN VDE 0250 with reference to DIN EN 50525-2-41																	
	UL recognized / CSA approved																	
	UL/cUL recognized																	
	cULus recognized													●				
	Special features	antistatic outer sheath																
very good weather resistance			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Ozone resistance acc. to EN 50382-2 + VDE 0260-382-2																●		
good oil resistance																●		
Flexibility			H	F	F	F	F	F	F	H	F	F	F	F	F	H	H	H
Protection against mechanical damage																		

from  
 to  
 short-time use  
 F = flexible · H = highly flexible  
<sup>1</sup> 5 mm ø · <sup>2</sup> 7 mm ø  
<sup>3</sup> to 6,0 mm<sup>2</sup> · <sup>4</sup> from 10,0 mm<sup>2</sup>  
<sup>5</sup> at conductor

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

## Selection table

		Cable type	BiHF-J / BiHF(K)-J	BiHFP-J	BiHFGLP-J	BiAF/Cu/Bi-J	BiHF/Cu/Bi-J / BiHF/Cu/Bi(K)-J	Besilen® ESD Control Cable	SC 600 HDTR	SC 600 C HDTR	SC 600 HDTRS	SC 700 HDTR	SC 700 C HDTR	N2GFA/2GFA	N2GFAF/2GFAF	05SJ-U	05SJ-K	BiAF/YW	
Basic construction	Twin cable																		
	Ignition cable																		
	Single conductor for tube lamps																		
	Single conductor																		
	Solid wire																		
	Copper rope																		
	Multi conductor cable		●	●	●	●	●	●	●	●	●	●	●	●					●
	Screen																		
	Fibre-glass braiding																		
	Steel wire braiding																		
Temperature range fixed laying*	+250 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	+180 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	+105 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	+ 90 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	- 40 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	- 50 °C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Voltage	nominal voltage 24 V																		●
	Nominal voltage Uo/U 300/300 V																		
	Nominal voltage Uo/U 300/500 V		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Nominal voltage Uo/U 0,6/1 kV																		
	Nominal voltage Uo/U 1,5/1,5 kV																		
	Nominal voltage Uo/U 1,8/3 kV																		
	Nominal voltage Uo/U 3,6/6 kV																		
	Nominal voltage Uo/U 3,5 kV/4,0 kV/7,5 kV																		
	Voltage UL/CSA resp. UL/cUL 600 V								●	●	●	●	●	●					
	Voltage cULus 3000 V																		
	Testing voltage 600 V																		
	Testing voltage 1500 V																		
	Testing voltage 2000 V		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Testing voltage 4000 V																		
	Testing voltage 6000 V																		
Testing voltage 6500 V																			
Testing voltage 10 kV																			
Testing voltage 11 kV																			
Testing voltage 15 kV																			
Testing voltage 20 kV																			
Standards and approvals	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Halogen-free acc. to EN 50306-1 + EN 50264-1																		
	Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Fire performance: No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2																		
	Fire performance: CSA FT1, FT2								●	●	●	●	●	●					
	Fire performance: cUL FT1, FT2												●	●					
	Fire performance: cULus FT1, FT2																		
	Fire performance: cULus FT2																		
	Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Toxicity acc. to EN 50305 + VDE 0260-305																		
	Smoke density acc. to IEC 61034 + VDE 0482-1034 tested acc. to EN 45545-2																		
	acc. to DIN VDE 0250														●	●			
	with reference to DIN EN 50525-2-41																●	●	
	UL recognized / CSA approved								●	●	●	●	●	●					
	UL/cUL recognized												●	●					
cULus recognized																			
Special features	antistatic outer sheath							●											
	very good weather resistance		●	●	●	●	●							●	●				
	Ozone resistance acc. to EN 50382-2 + VDE 0260-382-2																		
	good oil resistance																		
	Flexibility		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
	Protection against mechanical damage			●	●							●							

 from to  
 short-time use  
 F = flexible · H = highly flexible  
 1 5 mm ø · 2 7 mm ø  
 3 to 6,0 mm² · 4 from 10,0 mm²  
 5 at conductor

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

# Besilen® - Silicone Cables

## BiS

Besilen® insulating sleeve, non-fibrous



### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant

### Technical data:

<b>Dielectric voltage:</b>	20 kV/mm
<b>Radiation resistance:</b>	$2 \times 10^7$ cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	inside diameter x wall thickness mm	outer ø mm	weight ≈ kg/km
01001004	1,0 x 0,40	1,8	2,2
01001504	1,5 x 0,40	2,3	3,0
01001506	1,5 x 0,60	2,7	5,7
01002004	2,0 x 0,40	2,8	3,8
01002504	2,5 x 0,40	3,3	4,7
01003004	3,0 x 0,40	3,8	5,5
01004005	4,0 x 0,50	5,0	8,9
01004007	4,0 x 0,75	5,5	14,2
01006009	6,0 x 0,90	7,8	23,5
01007009	7,0 x 0,90	8,8	27,0
01008010	8,0 x 1,00	10,0	34,0
01005210	10,0 x 1,00	12,0	44,0



# Besilen® - Silicone Cables

## BiZ

Besilen® twin cable



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/300 V
<b>Testing voltage:</b>	1500 V
<b>Min. bending radius:</b>	5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	dimension mm x mm	copper figure kg/km	cable weight ≈ kg/km
01020205	2 x 0,50	0,21	4,2 x 2,1	9,6	17
01020207	2 x 0,75	0,21	4,8 x 2,4	14,4	23

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

Testing voltage  
20 kV

## ZKBi

Besilen® ignition cable



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Braiding:</b>	fibre-glass
<b>Sheath material:</b>	Besilen® 2GM1 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	blue (similar RAL 5012)

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- voltage-stable

### Technical data:

<b>Testing voltage:</b>	20 kV
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01040101	1,00	0,21	8,0	9,6	78
01040115	1,50	0,26	8,5	14,4	95

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

Testing voltage  
20 kV

## HZLBI

Besilen® high-voltage ignition cable



### Construction:

<b>Conductor:</b>	tinned copper strands 19 x 0,25 mm $\varnothing$
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- voltage-stable

### Technical data:

<b>Testing voltage:</b>	5 mm $\varnothing$ : 15 kV 7 mm $\varnothing$ : 20 kV
<b>Min. bending radius:</b>	7,5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire $\varnothing$ mm	outer- $\varnothing$ $\pm$ 5% mm	copper figure kg/km	cable weight $\approx$ kg/km
01050103	1,00	0,26	5,0	9,6	35
01050102	1,00	0,26	7,0	9,6	62

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

Nominal voltage  
3.5/4.0/7.5 kV

## BiL

Besilen® insulated single conductor for tube lamps (neon cable)



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Sheath colour:</b>	yellow (similar RAL 1006)

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- neon coloured

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> 3,5 kV · U <sub>0</sub> 4,0 kV · U <sub>0</sub> 7,5 kV
<b>Testing voltage:</b>	10 kV
<b>Min. bending radius:</b>	7,5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	nominal voltage kV	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01063515	1,50	0,26	3,5	4,4	14,4	32
01064815	1,50	0,26	4,0	6,6	14,4	59
01067515	1,50	0,26	7,5	7,6	14,4	75

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## BiA

Besilen® insulated wire



### Construction:

<b>Conductor:</b>	solid tinned copper wire acc. to IEC 60228, VDE 0295, class 1
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/300 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

	● halogen-free
	● heat resistant

item no.	nominal cross section mm <sup>2</sup>	nominal wire-ø ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0111005 *	0,50	0,80	1,8	4,8	8
0111007 *	0,75	0,98	2,0	7,2	10
0111010 *	1,00	1,13	2,1	9,6	13
0111015 *	1,50	1,38	2,6	14,4	19
0111025 *	2,50	1,78	3,2	24,0	31
0111040 *	4,00	2,26	3,7	38,4	47
0111060 *	6,00	2,76	4,2	57,6	67
0111100 *	10,00	3,57	5,6	96,0	114

Other dimensions and colours are possible on request.

#### \* Colour code for single conductors, position 8 of the item no.:

0 = green-yellow	4 = grey
1 = blue	5 = white
2 = black	6 = reddish brown
3 = brown	7 = red



# Besilen® - Silicone Cables

## BiAF

Besilen® insulated strands



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

	● halogen-free
	● flexible at low temperatures
	● heat resistant

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0113002.*	0,25	0,16	1,7	2,4	5
0113003.*	0,34	0,26	1,8	3,3	6
0113005.*	0,50	0,21	1,9	4,8	8
0113007.*	0,75	0,21	2,2	7,2	10
0113010.*	1,00	0,21	2,3	9,6	13
0113015.*	1,50	0,26	2,8	14,4	18
0113025.*	2,50	0,26	3,4	24,0	29
0113040.*	4,00	0,31	4,0	38,4	44
0113060.*	6,00	0,31	4,5	57,6	62
0113100.*	10,00	0,41	6,1	96,0	107
0113160.*	16,00	0,41	7,5	153,6	167
0113250.*	25,00	0,41	9,3	240,0	271
0113350.*	35,00	0,41	10,7	336,0	376
0113500.*	50,00	0,41	12,3	480,0	523
0113700.*	70,00	0,41	14,6	672,0	713
0113950.*	95,00	0,51	17,5	912,0	961
0113120.*	120,00	0,51	19,0	1152,0	1177
0113150.*	150,00	0,51	20,9	1440,0	1462
0113185.*	185,00	0,51	23,0	1776,0	1785
0113240.*	240,00	0,51	26,9	2304,0	2404
0113300.*	300,00	0,51	30,0	2880,0	2998

Other dimensions and colours are possible on request.

#### \* Colour code for single conductors, position 8 of the item no.:

0 = green-yellow	4 = grey
1 = blue	5 = white
2 = black	6 = reddish brown
3 = brown	7 = red

# Besilen® - Silicone Cables

## BiAFF

Besilen® insulated strands, highly flexible



### Construction:

<b>Conductor:</b>	tinned copper strands, highly flexible
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/300 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- highly flexible

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0115025.*	0,25	0,05	1,9	2,4	6
0115050.*	0,50	0,05	2,2	4,8	9
0115051.*	0,50	0,07	2,2	4,8	9
0115075.*	0,75	0,05	2,4	7,2	12
0115076.*	0,75	0,07	2,5	7,2	13
0115100.*	1,00	0,05	2,7	9,6	15
0115101.*	1,00	0,07	2,7	9,6	15
0115150.*	1,50	0,07	3,3	14,4	22
0115250.*	2,50	0,07	4,0	24,0	35

Other dimensions and colours are possible on request.

#### \* Colour code for single conductors, position 8 of the item no.:

- |                  |                   |
|------------------|-------------------|
| 0 = green-yellow | 4 = grey          |
| 1 = blue         | 5 = white         |
| 2 = black        | 6 = reddish brown |
| 3 = brown        | 7 = red           |

# Besilen® - Silicone Cables

## BiAF/GL

Besilen® insulated strands with fibre-glass braiding



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Standard colour:</b>	white
<b>Braiding:</b>	fibre-glass
<b>Impregnation:</b>	impregnating lacquer

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- flexible

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01230050	0,50	0,21	2,4	4,8	11
01230070	0,75	0,21	2,7	7,2	13
01230100	1,00	0,21	2,8	9,6	19
01230150	1,50	0,26	3,3	14,4	21
01230250	2,50	0,26	3,9	24,0	34
01230400	4,00	0,31	4,5	38,4	48
01230600	6,00	0,31	5,0	57,6	67
01231000	10,00	0,41	6,6	96,0	118
01231600	16,00	0,41	8,0	153,6	178
01232500	25,00	0,41	9,8	240,0	276
01233500	35,00	0,41	11,2	336,0	379
01235000	50,00	0,41	12,0	480,0	535
01237000	70,00	0,41	15,1	672,0	710
01239500	95,00	0,51	17,6	912,0	976

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## B 118

Besilen® insulated strands Uo/U 0.6/1 kV

On request with  
**RU** recognition

Nominal voltage  
Uo/U 0.6/1 kV



**Application:** These insulated strands with 0,6/1 kV are for example used in switchboards and distributors, in industrial furnaces and textile machine construction as well as in railway technology. Equally they are applied as connection of battery system or energy storage.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Technical data:

<b>Nominal voltage:</b>	Uo/U 0,6/1 kV
<b>Testing voltage:</b>	2500 V
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4, see chapter N „Technical data“
<b>Min. bending radius:</b>	7.5 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:



- halogen-free
- heat resistant
- flexible at low temperatures

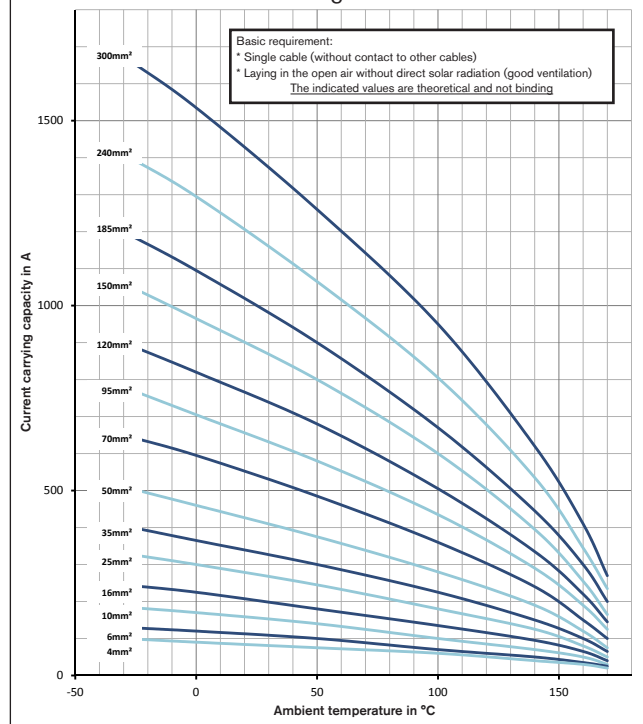
item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0118 .. 50*	0,50	0,21	2,5	4,8	10
0118 .. 75*	0,75	0,21	2,8	7,2	13
0118 .. 80*	1,00	0,21	2,9	9,6	16
0118 .. 82*	1,50	0,26	3,2	14,4	20
0118 .. 84*	2,50	0,26	3,8	24,0	31
0118 .. 86*	4,00	0,31	4,6	38,4	48
0118 .. 87*	6,00	0,31	5,1	57,6	66
0118 .. 88*	10,00	0,41	6,7	96,0	113
0118 .. 89*	16,00	0,41	8,1	153,6	171
0118 .. 90*	25,00	0,41	9,9	240,0	262
0118 .. 91*	35,00	0,41	11,3	336,0	361
0118 .. 92*	50,00	0,41	12,9	480,0	527
0118 .. 93*	70,00	0,41	15,2	672,0	696
0118 .. 94*	95,00	0,51	17,7	912,0	948
0118 .. 95*	120,00	0,51	19,6	1152,0	1161
0118 .. 96*	150,00	0,51	21,5	1440,0	1452
0118 .. 97*	185,00	0,51	23,6	1776,0	1776
0118 .. 98*	240,00	0,51	27,3	2304,0	2378
0118 .. 99*	300,00	0,51	30,4	2880,0	2963

Other dimensions and colours are possible on request.

\* Colour code for single conductors,  
position 5 and 6 of the item no.:

01 = black	06 = green
02 = blue	07 = violet
03 = brown	08 = white
04 = grey	16 = gentian blue
05 = yellow	27 = green-yellow

Besilen® cable: B 118  
- Derating curve -



# Besilen® - Silicone Cables

## B 119

Besilen® insulated strands Uo/U 1.8/3 kV

On request with  
 recognition

Nominal voltage  
 Uo/U 1.8/3 kV



**Application:** These insulated strands with 1,8/3 kV are for example used in switchboards and distributors, in industrial furnaces and textile machine construction as well as in railway technology. Equally they are applied as connection of battery system or energy storage.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Outstanding features:



- halogen-free
- heat resistant
- flexible at low temperatures

### Technical data:

<b>Nominal voltage:</b>	Uo/U 1,8/3 kV
<b>Testing voltage:</b>	6500 V
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4, see chapter N „Technical data“
<b>Min. bending radius:</b>	7.5 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0119 .. 82*	1,50	0,26	4,2	14,4	28
0119 .. 84*	2,50	0,26	4,6	24,0	38
0119 .. 86*	4,00	0,31	5,2	38,4	54
0119 .. 87*	6,00	0,31	5,7	57,6	73
0119 .. 88*	10,00	0,41	7,3	96,0	122
0119 .. 89*	16,00	0,41	8,7	153,6	181
0119 .. 90*	25,00	0,41	10,7	240,0	278
0119 .. 91*	35,00	0,41	12,1	336,0	381
0119 .. 92*	50,00	0,41	13,3	480,0	531
0119 .. 93*	70,00	0,41	15,6	672,0	709
0119 .. 94*	95,00	0,51	18,5	912,0	978
0119 .. 95*	120,00	0,51	20,4	1152,0	1194
0119 .. 96*	150,00	0,51	21,9	1440,0	1472
0119 .. 97*	185,00	0,51	24,0	1776,0	1788
0119 .. 98*	240,00	0,51	27,7	2304,0	2400
0119 .. 99*	300,00	0,51	30,8	2880,0	2988

Other dimensions and colours are possible on request.

#### \* Colour code for single conductors, position 5 and 6 of the item no.:

01 = black	06 = green
02 = blue	07 = violet
03 = brown	08 = white
04 = grey	16 = gentian blue
05 = yellow	27 = green-yellow



# Besilen® - Silicone Cables

## B 110 C

highly flexible Besilen® insulated HV single core, shielded, cULus recognized

Nominal voltage up to  
U<sub>0</sub>/U 1,8/3 kV AC



Style 30123 AWM I/II A/B 150°C 3000V FT1 FT2

Marking for B 110 C 01109507:

SAB BRÖCKSKES · D-VIERSEN · B 110 C U<sub>0</sub>/U 1,8/3 kV 95,0mm<sup>2</sup> cULus 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:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1, orange
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	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
- cULus recognized

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 1,8/3,0 kV AC U <sub>0</sub> /U 2,7/5,4 kV DC
<b>Voltage cULus:</b>	3000 V
<b>Testing voltage:</b>	6500 V
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4, see chapter N „Technical data“
<b>Min. bending radius</b>	
<i>fixed laying:</i>	6 x d
<i>flexible application:</i>	10 x d
<b>Temperature range</b>	<b>DIN VDE</b> <b>cULus:</b> up to +150 °C
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cULus FT1, FT2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	ø over inner sheath approx. mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01 100107	1,00	0,07	4,3	7,6	27,2	70
01 100157	1,50	0,07	4,7	8,0	34,4	81
01 100257	2,50	0,07	5,2	8,5	44,6	96
01 100407	4,00	0,07	5,9	9,2	61,3	118
01 100607	6,00	0,07	6,3	9,6	83,8	143
01 101007	10,00	0,07	8,2	11,7	147,7	222
01 101607	16,00	0,07	8,5	12,0	205,7	273
01 102507	25,00	0,10	10,9	14,7	307,4	416
01 103507	35,00	0,10	12,6	16,3	432,6	548
01 105007	50,00	0,10	14,5	18,2	593,6	725
01 107007	70,00	0,10	16,5	20,4	804,4	954
01 109507	95,00	0,10	18,4	22,3	1064,5	1244
01 101207	120,00	0,10	20,1	24,2	1311,0	1514
01 101507	150,00	0,10	23,3	27,4	1627,6	1873
01 101857	185,00	0,15	24,9	29,2	1970,9	2231
01 102407	240,00	0,15	27,5	32,0	2511,2	2841
01 103007	300,00	0,15	30,0	34,7	3108,6	3354

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

Nominal voltage  
U<sub>o</sub>/U 3,6/6 kV

## B 120

Besilen® insulated strands U<sub>o</sub>/U 3,6/6 kV



**Application:** These insulated strands with 3,6/6 kV are for example used in switchboards and distributors, in industrial furnaces and textile machine construction as well as in railway technology. Equally they are applied as connection of battery system or energy storage.

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Outstanding features:



- halogen-free
- heat resistant
- flexible at low temperatures

### Technical data:

<b>Nominal voltage:</b>	U <sub>o</sub> /U 3,6/6 kV
<b>Testing voltage:</b>	11 kV
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4, see chapter N „Technical data“
<b>Min. bending radius:</b>	7,5 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0120 .. 82*	1,50	0,26	6,8	14,4	57
0120 .. 84*	2,50	0,26	7,2	24,0	69
0120 .. 86*	4,00	0,31	7,8	38,4	88
0120 .. 87*	6,00	0,31	8,3	57,6	110
0120 .. 88*	10,00	0,41	9,5	96,0	160
0120 .. 89*	16,00	0,41	10,9	153,6	225
0120 .. 90*	25,00	0,41	12,9	240,0	332
0120 .. 91*	35,00	0,41	14,3	336,0	440
0120 .. 92*	50,00	0,41	15,5	480,0	599
0120 .. 93*	70,00	0,41	17,8	672,0	784
0120 .. 94*	95,00	0,51	20,5	912,0	1058
0120 .. 95*	120,00	0,51	22,4	1152,0	1280
0120 .. 96*	150,00	0,51	23,9	1440,0	1565
0120 .. 97*	185,00	0,51	25,6	1776,0	1986

Other dimensions and colours are possible on request.

#### \* Colour code for single conductors, position 5 and 6 of the item no.:

01 = black	06 = green
02 = blue	07 = violet
03 = brown	08 = white
04 = grey	16 = gentian blue
05 = yellow	27 = green-yellow

# Besilen® - Silicone Cables

## R 107

highly flexible Besilen® insulated HV single core

EN 45545-2

Nominal voltage up to  
Uo/U 1.8/3 kV

SAB Rail

ES · D-VIERSEN · R 107 1,8/3 kV 95,0mm<sup>2</sup> 6107-0894



Marking for R 107 61070894:

SAB BRÜCKSKES · D-VIERSEN · R 107 1,8/3 kV 95,0mm<sup>2</sup> 6107-0894

**Application:** Highly flexible single conductor for current or ground connection in railway technology.

### Construction:

<b>Conductor:</b>	bare copper strands, extremely fine wires
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour:</b>	slate-gray (RAL 7015)

### Technical data:

<b>Nominal voltage:</b>	Uo/U 1,8/3,0 kV
<b>Testing voltage:</b>	6500 V
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4, see chapter N „Technical data“
<b>Min. bending radius:</b>	5 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-50/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoric content < 0,1% acc. to IEC 60684-2.
<b>Fire performance:</b>	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Toxicity:</b>	acc. to EN 50305 + VDE 0260-305
<b>Smoke density:</b>	acc. to IEC 61034 + VDE 0482-1034
<b>Weather resistance:</b>	very good
<b>Ozone resistance:</b>	acc. to EN 50382-2 + VDE 0260-382-2
<b>Oil resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:



- extremely flexible
- fulfils fire protection requirements  
acc. to EN 45545-2 /  
from 1,50 - 10,00 mm<sup>2</sup>:  
R15 (EL1A) HL 1 / R16 (EL1B) HL 1-2  
from 16,00 mm<sup>2</sup>:  
R15 (EL1A) HL 1-2 / R16 (EL1B) HL 1-3
- halogen-free
- heat resistant
- flexible at low temperatures
- flame retardant and self-extinguishing
- good ozone, UV and weather resistance

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
61070882	1,50	0,07	6,9	14,4	62
61070884	2,50	0,07	7,4	24,0	76
61070886	4,00	0,07	8,1	38,4	97
61070887	6,00	0,07	8,5	57,6	119
61070888	10,00	0,07	10,0	96,0	172
61070889	16,00	0,07	10,3	153,6	222
61070890	25,00	0,10	12,1	240,0	328
61070891	35,00	0,10	13,8	336,0	435
61070892	50,00	0,10	15,7	480,0	591
61070893	70,00	0,10	17,7	672,0	788
61070894	95,00	0,10	19,2	912,0	1041
61070895	120,00	0,10	20,9	1152,0	1281
61070896	150,00	0,10	24,1	1440,0	1588
61070897	185,00	0,15	25,3	1776,0	1912
61070898	240,00	0,15	29,8	2304,0	2476
61070899	300,00	0,15	31,7	2880,0	3094

Other dimensions and colours are possible on request.



On request with  
tinned copper strands!  
Also available with  
copper braiding as R 108!

# Besilen® - Silicone Cables

## B 107

highly flexible Besilen® insulated HV single core, cULus recognized

Nominal voltage up to  
U<sub>0</sub>/U 1.8/3 kV



mm<sup>2</sup> cULus AWM Style 30122 AWM I A/B 150°C 3000V FT2



Marking for B 107 01079500:

SAB BRÖCKSKES · D-VIERSEN · B 107 U<sub>0</sub>/U 1,8/3 kV 95,0mm<sup>2</sup> cULus AWM Style 30122 AWM I A/B 150°C 3000V FT2

**Application:** Highly flexible single core for switchboard wiring and the use in energy storage systems, test benches or power wiring.

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour:</b>	translucent

### Outstanding features:



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

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 1,8/3,0 kV AC U <sub>0</sub> /U 2,7/5,4 kV DC
<b>Voltage cULus:</b>	3000 V
<b>Testing voltage:</b>	6500 V
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4, see chapter N „Technical data“
<b>Min. bending radius:</b>	5 x d
<b>Temperature range</b>	<b>DIN VDE</b> <b>cULus:</b> up to +150 °C
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cULus FT2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01070100	1,00	0,07	4,3	9,6	25
01070150	1,50	0,07	4,7	14,4	31
01070250	2,50	0,07	5,2	24,0	43
01070400	4,00	0,07	5,9	38,4	60
01070600	6,00	0,07	6,3	57,6	80
01071000	10,00	0,07	9,0	96,0	146
01071600	16,00	0,07	9,3	153,6	194
01072500	25,00	0,10	12,0	240,0	314
01073500	35,00	0,10	13,8	336,0	431
01075000	50,00	0,10	15,7	480,0	581
01077000	70,00	0,10	17,7	672,0	792
01079500	95,00	0,10	18,8	912,0	1012
01071200	120,00	0,10	20,5	1152,0	1280
01071500	150,00	0,10	23,7	1440,0	1551
01071850	185,00	0,15	25,3	1776,0	1935
01072400	240,00	0,15	27,9	2304,0	2508
01073000	300,00	0,15	30,8	2880,0	3003

#### \* Colour code for copper rope, position 8 of the item no.:

- |                  |            |
|------------------|------------|
| 1 = green-yellow | 5 = green  |
| 2 = blue         | 6 = white  |
| 3 = black        | 7 = orange |
| 4 = brown        | 8 = red    |

Other dimensions and colours are possible on request.



**Copper rope with orange sheath for E-Mobility HV test benches.**

# Besilen® - Silicone Cables

## B 108

highly flexible Besilen® insulated HV single core, shielded

Nominal voltage up to  
U<sub>o</sub>/U 1,8/3 kV



CKSKES · D-VIERSEN · B 108 U<sub>o</sub>/U 1,8/3 kV 95,0mm<sup>2</sup>



Marking for B 108 01089500:

SAB BRÜCKSKES · D-VIERSEN · B 108 U<sub>o</sub>/U 1,8/3 kV 95,0mm<sup>2</sup>

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Screen:</b>	bare copper braiding
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour:</b>	translucent

### Technical data:

<b>Nominal voltage</b>	4,0 - 6,0 mm <sup>2</sup> : U <sub>o</sub> /U 1,5/1,5 kV 10,0 - 150,0 mm <sup>2</sup> : U <sub>o</sub> /U 1,8/3,0 kV
<b>Testing voltage</b>	4,0 - 6,0 mm <sup>2</sup> : 4000 V 10,0 - 150,0 mm <sup>2</sup> : 6500 V
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4, see chapter N „Technical data“
<b>Min. bending radius:</b>	5 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:



- extremely flexible
- halogen-free
- heat resistant
- flexible at low temperatures
- flame retardant and self-extinguishing
- weather resistant
- dimensionally stable construction

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01080400	4,00	0,07	5,7	53,7	66
01080600	6,00	0,07	6,1	73,3	86
01081000	10,00	0,07	9,4	116,3	164
01081600	16,00	0,07	9,7	174,2	213
01082500	25,00	0,10	12,6	285,9	351
01083500	35,00	0,10	14,4	388,3	467
01085000	50,00	0,10	16,3	542,1	623
01087000	70,00	0,10	18,5	771,8	852
01089500	95,00	0,10	19,6	1023,5	1093
01081200	120,00	0,10	21,3	1268,0	1335
01081500	150,00	0,10	24,5	1593,3	1667

Other dimensions and colours are possible on request.

#### \* Colour code for copper rope, position 8 of the item no.:

- |                  |            |
|------------------|------------|
| 1 = green-yellow | 5 = green  |
| 2 = blue         | 6 = white  |
| 3 = black        | 7 = orange |
| 4 = brown        | 8 = red    |



# Besilen® - Silicone Cables

## BiHF-J

Besilen® insulated strands with Besilen® outer sheath

also possible  
with extremely notch  
resistant sheath



Construction:	
<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)

Technical data:	
<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Outstanding features:	
	● halogen-free
	● flexible at low temperatures
	● heat resistant

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01410202	2 x 0,25	0,16	4,3	4,8	23
01410402	4 x 0,25	0,16	4,9	9,6	32
01410205	2 x 0,50	0,21	4,8	9,6	31
01410305	3 x 0,50	0,21	5,1	14,4	37
01410405	4 x 0,50	0,21	5,5	19,2	45
01410505	5 x 0,50	0,21	6,1	24,0	53
01410705	7 x 0,50	0,21	6,6	33,6	69
01411205	12 x 0,50	0,21	8,9	57,6	113
01411805	18 x 0,50	0,21	10,6	86,4	164
01412505	25 x 0,50	0,21	12,9	120,0	225
01410207	2 x 0,75	0,21	5,4	14,4	41
01410307	3 x 0,75	0,21	5,7	21,6	49
01410407	4 x 0,75	0,21	6,2	28,8	60
01410507	5 x 0,75	0,21	6,9	36,0	72
01410607	6 x 0,75	0,21	7,7	43,2	86
01410707	7 x 0,75	0,21	7,7	50,4	96
01411007	10 x 0,75	0,21	10,0	57,6	136
01411207	12 x 0,75	0,21	10,3	86,4	157
01411607	16 x 0,75	0,21	11,5	115,2	201
01411807	18 x 0,75	0,21	13,2	129,6	228
01412507	25 x 0,75	0,21	14,9	180,0	314
01410210	2 x 1,00	0,21	5,6	19,2	46
01410310	3 x 1,00	0,21	5,9	28,8	57
01410410	4 x 1,00	0,21	6,5	38,4	70
01410510	5 x 1,00	0,21	7,1	48,0	84
01410610	6 x 1,00	0,21	8,0	57,6	101
01410710	7 x 1,00	0,21	8,0	67,2	113
01410810	8 x 1,00	0,21	9,3	76,8	129
01411010	10 x 1,00	0,21	10,4	96,0	160
01411210	12 x 1,00	0,21	10,7	115,2	185
01411410	14 x 1,00	0,21	11,3	134,4	211
01411610	16 x 1,00	0,21	11,9	153,6	242
01411810	18 x 1,00	0,21	12,8	172,8	270
01412010	20 x 1,00	0,21	13,5	192,0	296
01412510	25 x 1,00	0,21	15,5	240,0	369
01410215	2 x 1,50	0,26	6,6	28,8	62

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01410315	3 x 1,50	0,26	7,0	43,2	80
01410415	4 x 1,50	0,26	7,8	57,6	102
01410515	5 x 1,50	0,26	8,6	72,0	121
01410615	6 x 1,50	0,26	9,4	86,4	142
01410715	7 x 1,50	0,26	9,4	100,8	158
01410815	8 x 1,50	0,26	11,2	115,2	187
01411215	12 x 1,50	0,26	12,8	172,8	265
01411615	16 x 1,50	0,26	14,6	230,4	352
01411815	18 x 1,50	0,26	15,4	259,2	391
01412015	20 x 1,50	0,26	16,2	288,0	429
01412415	24 x 1,50	0,26	18,2	345,6	520
01412515	25 x 1,50	0,26	18,6	360,0	539
01410225	2 x 2,50	0,26	8,0	48,0	99
01410325	3 x 2,50	0,26	8,5	72,0	123
01410425	4 x 2,50	0,26	9,3	96,0	153
01410525	5 x 2,50	0,26	10,6	120,0	192
01410625	6 x 2,50	0,26	11,6	144,0	224
01410725	7 x 2,50	0,26	11,6	168,0	251
01410925	9 x 2,50	0,26	15,2	216,0	333
01411225	12 x 2,50	0,26	15,7	288,0	417
01412425	24 x 2,50	0,26	22,4	576,0	813
01410240	2 x 4,00	0,31	9,6	76,8	148
01410340	3 x 4,00	0,31	10,2	115,2	186
01410440	4 x 4,00	0,31	11,1	153,6	230
01410540	5 x 4,00	0,31	12,5	192,0	282
01410740	7 x 4,00	0,31	13,6	230,4	371
01410260	2 x 6,00	0,31	10,8	115,2	201
01410360	3 x 6,00	0,31	11,4	172,8	254
01410460	4 x 6,00	0,31	12,5	230,4	317
01410560	5 x 6,00	0,31	13,8	288,0	383
01410461	4 x 10,0	0,41	16,8	384,0	556
01410561	5 x 10,0	0,41	18,7	480,0	679
01410462	4 x 16,0	0,41	20,3	614,4	820
01410463	4 x 25,0	0,41	25,4	960,0	1330
01410464	4 x 35,0	0,41	28,8	1344,0	1800

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

EWKF

## BiHF(K)-J

Besilen® insulated strands with extremely notch resistant Besilen® outer sheath



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® E12 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	Besilen® notch resistant
<b>Sheath colour:</b>	black (similar RAL 9011)

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:

- improved initial tear resistance
- improved tear-growth resistance
- extremely notch resistant
- good sunlight resistance
- halogen-free
- flexible at low temperatures
- heat resistant

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01450207	2 x 0,75	0,21	5,4	14,4	40
01450307	3 x 0,75	0,21	5,7	21,6	49
01450407	4 x 0,75	0,21	6,2	28,8	59
01450507	5 x 0,75	0,21	6,9	36,0	71
01450707	7 x 0,75	0,21	7,7	50,4	96
01451207	12 x 0,75	0,21	10,3	86,4	157
01450210	2 x 1,00	0,21	5,6	19,2	45
01450310	3 x 1,00	0,21	5,9	28,8	56
01450410	4 x 1,00	0,21	6,5	38,4	69
01450510	5 x 1,00	0,21	7,1	48,0	83
01450710	7 x 1,00	0,21	8,0	67,2	112
01451210	12 x 1,00	0,21	10,7	115,2	185
01450215	2 x 1,50	0,26	6,6	28,8	64
01450315	3 x 1,50	0,26	7,0	43,2	79
01450415	4 x 1,50	0,26	7,8	57,6	101
01450515	5 x 1,50	0,26	8,6	72,0	121
01450715	7 x 1,50	0,26	9,4	100,8	158

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01451215	12 x 1,50	0,26	12,8	172,8	265
01451815	18 x 1,50	0,26	15,4	259,2	391
01452415	24 x 1,50	0,26	18,2	345,6	521
01452515	25 x 1,50	0,26	18,6	360,0	540
01450225	2 x 2,50	0,26	8,0	48,0	97
01450325	3 x 2,50	0,26	8,5	72,0	122
01450425	4 x 2,50	0,26	9,3	96,0	151
01450525	5 x 2,50	0,26	10,6	120,0	191
01450625	6 x 2,50	0,26	11,6	144,0	223
01450725	7 x 2,50	0,26	11,6	168,0	250
01450340	3 x 4,00	0,31	10,2	115,2	184
01450440	4 x 4,00	0,31	11,1	153,6	228
01450540	5 x 4,00	0,31	12,5	192,0	280
01450740	7 x 4,00	0,31	13,6	268,8	369
01450360	3 x 6,00	0,31	11,4	172,8	251
01450460	4 x 6,00	0,31	12,5	230,4	315
01450560	5 x 6,00	0,31	13,8	288,0	381

Other dimensions and colours are possible on request.

K  
25

# Besilen® - Silicone Cables

## BiHFP-J

Besilen® insulated strands with Besilen® outer sheath and steel wire armouring for mechanical protection



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)
<b>Armour:</b>	galvanized steel wire braiding

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- protection against mechanical damage

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01430207	2 x 0,75	0,21	6,4	14,4	69
01430307	3 x 0,75	0,21	6,7	21,6	79
01430407	4 x 0,75	0,21	7,2	28,8	90
01430507	5 x 0,75	0,21	7,9	36,0	108
01430607	6 x 0,75	0,21	8,7	43,2	132
01430707	7 x 0,75	0,21	8,7	50,4	136
01430210	2 x 1,00	0,21	6,6	19,2	76
01430310	3 x 1,00	0,21	6,9	28,8	87
01430410	4 x 1,00	0,21	7,5	38,4	102
01430510	5 x 1,00	0,21	8,1	48,0	120
01430610	6 x 1,00	0,21	9,0	57,6	148
01430710	7 x 1,00	0,21	9,0	67,2	154
01430215	2 x 1,50	0,26	7,5	28,8	95
01430315	3 x 1,50	0,26	7,9	43,2	111
01430415	4 x 1,50	0,26	8,7	57,6	139
01430515	5 x 1,50	0,26	9,6	72,0	168
01430615	6 x 1,50	0,26	10,4	86,4	198

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01430715	7 x 1,50	0,26	10,4	100,8	207
01430225	2 x 2,50	0,26	9,0	48,0	140
01430325	3 x 2,50	0,26	9,5	72,0	166
01430425	4 x 2,50	0,26	10,3	96,0	197
01430525	5 x 2,50	0,26	11,6	120,0	253
01430625	6 x 2,50	0,26	12,8	144,0	314
01430725	7 x 2,50	0,26	12,8	168,0	330
01430240	2 x 4,00	0,31	10,6	76,8	197
01430340	3 x 4,00	0,31	11,2	115,2	236
01430440	4 x 4,00	0,31	12,1	153,6	288
01430540	5 x 4,00	0,31	13,7	192,0	373
01430640	6 x 4,00	0,31	14,8	230,4	433
01430740	7 x 4,00	0,31	14,8	268,8	458
01430260	2 x 6,00	0,31	11,8	115,2	256
01430360	3 x 6,00	0,31	12,6	172,8	333
01430460	4 x 6,00	0,31	13,7	230,4	401
01430560	5 x 6,00	0,31	15,4	288,0	495

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## BiHFGLP-J

Besilen® insulated strands with Besilen® outer sheath, fibre-glass tape and steel wire armouring for mechanical protection



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)
<b>Wrapping:</b>	fibre-glass tape
<b>Armour:</b>	galvanized steel wire braiding

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- protection against mechanical damage

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01460207	2 x 0,75	0,21	6,8	14,4	73
01460307	3 x 0,75	0,21	7,1	21,6	82
01460407	4 x 0,75	0,21	7,6	28,8	96
01460507	5 x 0,75	0,21	8,3	36,0	112
01460607	6 x 0,75	0,21	9,1	43,2	138
01460707	7 x 0,75	0,21	9,1	50,4	142
01460210	2 x 1,00	0,21	7,0	19,2	79
01460310	3 x 1,00	0,21	7,3	28,8	90
01460410	4 x 1,00	0,21	7,9	38,4	107
01460510	5 x 1,00	0,21	8,5	48,0	131
01460610	6 x 1,00	0,21	9,4	57,6	154
01460710	7 x 1,00	0,21	9,4	67,2	160
01460215	2 x 1,50	0,26	7,9	28,8	99
01460315	3 x 1,50	0,26	8,3	43,2	116
01460415	4 x 1,50	0,26	9,1	57,6	145
01460515	5 x 1,50	0,26	10,0	72,0	175
01460615	6 x 1,50	0,26	10,8	86,4	205

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01460715	7 x 1,50	0,26	10,8	100,8	214
01460225	2 x 2,50	0,26	9,4	48,0	146
01460325	3 x 2,50	0,26	9,9	72,0	172
01460425	4 x 2,50	0,26	10,7	96,0	208
01460525	5 x 2,50	0,26	12,0	120,0	260
01460625	6 x 2,50	0,26	13,2	144,0	323
01460725	7 x 2,50	0,26	13,2	168,0	339
01460240	2 x 4,00	0,31	11,0	76,8	204
01460340	3 x 4,00	0,31	11,6	115,2	248
01460440	4 x 4,00	0,31	12,7	153,6	316
01460540	5 x 4,00	0,31	14,1	192,0	383
01460640	6 x 4,00	0,31	15,2	230,4	443
01460740	7 x 4,00	0,31	15,2	268,8	469
01460260	2 x 6,00	0,31	12,2	115,2	265
01460360	3 x 6,00	0,31	13,0	172,8	342
01460460	4 x 6,00	0,31	14,1	230,4	411
01460560	5 x 6,00	0,31	15,4	288,0	493

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## BiAF/Cu/Bi-J

Besilen® insulated strands with Besilen® outer sheath and overall copper screen



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foli
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)

### Outstanding features:



- good EMC characteristics
- halogen-free
- flexible at low temperatures
- heat resistant

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	12 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01880205	2 x 0,50	0,21	6,4	25,7	53
01880305	3 x 0,50	0,21	6,7	31,7	61
01880405	4 x 0,50	0,21	7,1	36,9	70
01880505	5 x 0,50	0,21	7,7	44,4	82
01880705	7 x 0,50	0,21	8,2	56,2	100
01881005	10 x 0,50	0,21	10,2	93,9	145
01881205	12 x 0,50	0,21	10,5	104,0	161
01881605	16 x 0,50	0,21	11,5	129,0	197
01881805	18 x 0,50	0,21	12,0	139,3	214
01880207	2 x 0,75	0,21	7,0	32,0	64
01880307	3 x 0,75	0,21	7,5	41,5	75
01880407	4 x 0,75	0,21	7,8	49,3	88
01880507	5 x 0,75	0,21	8,5	58,8	102
01880707	7 x 0,75	0,21	9,1	76,6	127
01881007	10 x 0,75	0,21	11,4	124,1	185
01881207	12 x 0,75	0,21	11,7	138,9	206
01881607	16 x 0,75	0,21	13,3	176,2	268
01881807	18 x 0,75	0,21	13,9	191,7	292
01880210	2 x 1,00	0,21	7,2	37,0	70
01880310	3 x 1,00	0,21	7,5	49,0	83
01880410	4 x 1,00	0,21	8,1	60,9	99

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01880510	5 x 1,00	0,21	8,7	73,9	117
01880710	7 x 1,00	0,21	9,4	93,7	144
01881010	10 x 1,00	0,21	11,8	148,6	209
01881210	12 x 1,00	0,21	12,1	168,3	235
01881610	16 x 1,00	0,21	13,7	215,3	306
01881810	18 x 1,00	0,21	14,4	240,0	337
01880215	2 x 1,50	0,26	8,0	49,6	87
01880315	3 x 1,50	0,26	8,2	65,8	105
01880415	4 x 1,50	0,26	9,0	83,8	128
01880515	5 x 1,50	0,26	10,0	117,6	162
01880715	7 x 1,50	0,26	10,8	147,6	201
01881015	10 x 1,50	0,26	13,8	205,9	287
01881215	12 x 1,50	0,26	14,2	235,4	323
01881615	16 x 1,50	0,26	15,6	302,9	406
01881815	18 x 1,50	0,26	16,6	360,3	465
01880225	2 x 2,50	0,26	9,2	74,3	121
01880325	3 x 2,50	0,26	9,7	98,9	148
01880425	4 x 2,50	0,26	10,7	142,7	193
01880525	5 x 2,50	0,26	11,6	172,3	232
01880725	7 x 2,50	0,26	13,0	228,5	309

Other dimensions and colours are possible on request.



# Besilen® - Silicone Cables

## BiHF/Cu/Bi-J

Besilen® insulated strands with Besilen® inner sheath, overall copper screen and Besilen® outer sheath

also possible  
with extremely notch  
resistant sheath



Construction:	
<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Inner sheath:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)

Technical data:	
<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
fixed laying:	-40/+180 °C
flexible application:	-25/+180 °C
short-time use:	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Outstanding features:	
●	good EMC characteristics
●	halogen-free
●	flexible at low temperatures
●	heat resistant
●	increased mechanical protection

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01900205	2 x 0,50	0,21	7,6	29,9	83
01900305	3 x 0,50	0,21	7,9	35,0	90
01900405	4 x 0,50	0,21	8,3	41,9	100
01900505	5 x 0,50	0,21	8,9	50,1	115
01900705	7 x 0,50	0,21	9,4	60,1	132
01901005	10 x 0,50	0,21	11,6	100,3	190
01901205	12 x 0,50	0,21	11,9	110,4	211
01901605	16 x 0,50	0,21	13,5	138,2	266
01901805	18 x 0,50	0,21	14,0	148,7	291
01900207	2 x 0,75	0,21	8,2	37,0	99
01900307	3 x 0,75	0,21	8,5	44,4	108
01900407	4 x 0,75	0,21	9,0	55,0	123
01900507	5 x 0,75	0,21	9,7	62,9	139
01900707	7 x 0,75	0,21	10,7	97,1	181
01901007	10 x 0,75	0,21	13,4	133,2	254
01901207	12 x 0,75	0,21	13,7	148,1	281
01901607	16 x 0,75	0,21	14,9	183,2	334
01901807	18 x 0,75	0,21	16,3	228,8	401
01900210	2 x 1,00	0,21	8,4	42,0	107
01900310	3 x 1,00	0,21	8,7	54,7	119
01900410	4 x 1,00	0,21	9,3	64,8	135

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01900510	5 x 1,00	0,21	10,1	93,8	158
01900710	7 x 1,00	0,21	11,0	114,3	201
01901010	10 x 1,00	0,21	14,0	157,9	283
01901210	12 x 1,00	0,21	14,1	177,6	310
01901610	16 x 1,00	0,21	16,1	252,3	404
01901810	18 x 1,00	0,21	16,8	273,3	448
01900215	2 x 1,50	0,26	9,4	55,3	137
01900315	3 x 1,50	0,26	10,1	88,8	165
01900415	4 x 1,50	0,26	10,8	104,4	191
01900515	5 x 1,50	0,26	11,6	124,3	219
01900715	7 x 1,50	0,26	12,8	154,3	271
01901015	10 x 1,50	0,26	16,4	243,5	406
01901215	12 x 1,50	0,26	16,8	273,3	446
01901615	16 x 1,50	0,26	18,6	344,5	539
01901815	18 x 1,50	0,26	19,4	375,5	601
01900225	2 x 2,50	0,26	11,0	95,1	200
01900325	3 x 2,50	0,26	11,5	124,2	226
01900425	4 x 2,50	0,26	12,7	156,0	274
01900525	5 x 2,50	0,26	14,0	182,3	327
01900725	7 x 2,50	0,26	15,0	236,2	392

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

EWKF

## BiHF/Cu/Bi(K)-J

Besilen® insulated strands with Besilen® inner sheath, overall copper screen and extremely notch resistant Besilen® outer sheath



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Inner sheath:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	Besilen® notch resistant
<b>Sheath colour:</b>	black (similar RAL 9011)

### Outstanding features:

- improved initial tear resistance
- improved tear-growth resistance
- extremely notch resistant
- good sunlight resistance
- good EMC characteristics
- halogen-free
- flexible at low temperatures
- heat resistant
- increased mechanical protection

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Possible on request  
without inner sheath!

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01950207	2 x 0,75	0,21	8,2	37,0	100
01950307	3 x 0,75	0,21	8,5	44,4	109
01950407	4 x 0,75	0,21	9,0	55,0	124
01950507	5 x 0,75	0,21	9,7	62,9	140
01950707	7 x 0,75	0,21	10,7	97,1	184
01951207	12 x 0,75	0,21	13,7	148,1	285
01950210	2 x 1,00	0,21	8,4	42,0	108
01950310	3 x 1,00	0,21	8,7	54,7	120
01950410	4 x 1,00	0,21	9,3	64,8	137
01950510	5 x 1,00	0,21	10,1	93,8	159
01950710	7 x 1,00	0,21	11,0	114,3	203
01951210	12 x 1,00	0,21	14,1	177,6	314
01950215	2 x 1,50	0,26	9,4	55,3	138
01950315	3 x 1,50	0,26	10,0	88,8	166
01950415	4 x 1,50	0,26	10,8	104,4	193
01950515	5 x 1,50	0,26	11,6	124,3	221
01950715	7 x 1,50	0,26	12,8	154,3	274

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01951215	12 x 1,50	0,26	16,8	273,3	452
01951815	18 x 1,50	0,26	19,4	375,5	610
01952415	24 x 1,50	0,26	22,4	483,2	786
01952515	25 x 1,50	0,26	22,8	512,9	818
01950225	2 x 2,50	0,26	11,0	95,1	201
01950325	3 x 2,50	0,26	11,5	124,2	227
01950425	4 x 2,50	0,26	12,7	156,0	276
01950525	5 x 2,50	0,26	13,8	181,9	320
01950625	6 x 2,50	0,26	15,0	212,2	370
01950725	7 x 2,50	0,26	15,0	236,2	397
01950340	3 x 4,00	0,31	13,6	176,8	302
01950440	4 x 4,00	0,31	14,5	221,0	377
01950540	5 x 4,00	0,31	15,9	291,2	454
01950740	7 x 4,00	0,31	17,4	379,7	573
01950360	3 x 6,00	0,31	15,7	241,5	447
01950460	4 x 6,00	0,31	17,0	329,1	542
01950560	5 x 6,00	0,31	18,6	402,1	643

Other dimensions and colours are possible on request.

K  
30

## Besilen® ESD Control Cable

Besilen® insulated strands with antistatic Besilen® outer sheath for ESD protective components

KSKES · D-VIERSEN · ESD-Control Cable 2x4,0mm² 0173-0004 CE



Marking for Besilen® ESD Control Cable 01730004:

SAB BRÜCKSKES · D-VIERSEN · ESD-Control Cable 2x4,0mm² 0173-0004 CE

**Application:** Control cable for test bench measurement technology, e.g. for test adapters of control units.

### Construction:

<b>Conductor:</b>	tinned copper strands, extra fine wires
<b>Insulation:</b>	Besilen®
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334
<b>CAN-Bus element</b>	
<b>Colour code:</b>	acc. to DIN 47100
<b>Screen:</b>	tinned copper braiding
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	special Besilen®
<b>Sheath colour:</b>	black (similar RAL 9005)

### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>CAN-Bus element</b>	
<b>Peak operating voltage:</b>	max. 350 V
<b>Testing voltage:</b>	core/core 1500 V core/screen 1200 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<b>Surface resistance:</b>	1 x 10 <sup>4</sup> - 1 x 10 <sup>9</sup> Ω acc. to EN 50395 section 11
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:



- high flexibility
- antistatic outer sheath
- ESD - electrostatic discharge

item no.	no. of cores x cross section n x mm²	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01730002	30 x 1,00	18,2	288,0	478
01730003	26 x 1,00	16,8	249,6	396
01730004	2 x 4,00	10,6	76,8	145
01730005	3 x 4,00	11,2	115,2	188
01730006	4 x 1,00 + (2 x 0,50)CB	12,2	69,5	166
01730007	6 x 0,50	7,2	28,8	69

Other dimensions and colours are possible on request.

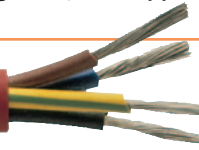


# Besilen® - Silicone Cables

## SC 600 HDTR

Besilen® insulated strands with Besilen® outer sheath, UL recognized, CSA approved

54535 150°C 600V CSA AWM III A 150°C 600V FT1 FT2 CE



Marking for SC 600 HDTR 01270410:

SAB BRÖCKSKES · D-VIERSEN · SC 600 HDTR AWM Style 4535 150°C 600V CSA AWM III A 150°C 600V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® E12 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/CSA:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	<b>UL/CSA:</b> up to +150 °C Style 4535
<i>fixed laying:</i>	<b>DIN VDE:</b> -40/+180 °C / +200 °C (2000 h)
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant
- UL recognized, CSA approved



Temperature range up to +200 °C  
Style 4511 with nickel  
or silver plated copper strands.  
Please contact SAB!

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01270205	2 x 0,50	0,21	5,6	10,3	38
01270305	3 x 0,50	0,21	5,9	15,4	45
01270405	4 x 0,50	0,21	6,3	20,5	53
01270505	5 x 0,50	0,21	6,9	25,6	63
01270705	7 x 0,50	0,21	7,5	35,9	79
01270805	8 x 0,50	0,21	8,6	41,0	91
01271005	10 x 0,50	0,21	9,3	51,3	108
01271205	12 x 0,50	0,21	9,6	61,5	124
01271605	16 x 0,50	0,21	10,6	82,0	157
01271805	18 x 0,50	0,21	11,2	92,3	174
01272405	24 x 0,50	0,21	13,1	123,1	240
01270207	2 x 0,75	0,21	5,9	14,4	46
01270307	3 x 0,75	0,21	6,4	21,6	54
01270407	4 x 0,75	0,21	6,9	28,8	65
01270507	5 x 0,75	0,21	7,6	36,0	77
01270707	7 x 0,75	0,21	8,2	50,4	98
01270807	8 x 0,75	0,21	9,5	57,6	113
01271007	10 x 0,75	0,21	10,3	72,0	135
01271207	12 x 0,75	0,21	10,6	86,4	155
01271607	16 x 0,75	0,21	11,8	115,2	197
01271807	18 x 0,75	0,21	12,5	129,6	221
01272407	24 x 0,75	0,21	14,8	172,8	307
01270210	2 x 1,00	0,21	6,3	19,2	51
01270310	3 x 1,00	0,21	6,6	28,8	62
01270410	4 x 1,00	0,21	7,2	38,4	75
01270510	5 x 1,00	0,21	7,8	48,0	89
01270710	7 x 1,00	0,21	8,5	67,2	115
01270810	8 x 1,00	0,21	9,8	76,8	132
01271010	10 x 1,00	0,21	10,7	96,0	158
01271210	12 x 1,00	0,21	11,0	115,2	182
01271610	16 x 1,00	0,21	12,2	153,6	234
01271810	18 x 1,00	0,21	13,0	172,8	262
01272410	24 x 1,00	0,21	15,9	230,4	379
01270215	2 x 1,50	0,26	7,1	28,8	68
01270315	3 x 1,50	0,26	7,5	43,2	83
01270415	4 x 1,50	0,26	8,0	57,6	99
01270515	5 x 1,50	0,26	8,9	72,0	120
01270715	7 x 1,50	0,26	9,7	100,8	156
01270815	8 x 1,50	0,26	11,4	115,2	182
01271015	10 x 1,50	0,26	12,6	144,0	223
01271215	12 x 1,50	0,26	13,0	172,8	258

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01271615	16 x 1,50	0,26	14,8	230,4	341
01271815	18 x 1,50	0,26	15,6	259,2	379
01272415	24 x 1,50	0,26	18,4	345,6	504
01270225	2 x 2,50	0,26	8,5	48,0	101
01270325	3 x 2,50	0,26	9,0	72,0	126
01270425	4 x 2,50	0,26	9,8	96,0	155
01270525	5 x 2,50	0,26	11,1	120,0	192
01270725	7 x 2,50	0,26	12,1	168,0	250
01270825	8 x 2,50	0,26	14,3	192,0	293
01271025	10 x 2,50	0,26	15,8	240,0	358
01271225	12 x 2,50	0,26	16,3	288,0	415
01271625	16 x 2,50	0,26	18,3	384,0	540
01271825	18 x 2,50	0,26	19,3	432,0	600
01272425	24 x 2,50	0,26	23,2	576,0	889
01270240	2 x 4,00	0,31	9,7	76,8	136
01270340	3 x 4,00	0,31	10,6	115,2	185
01270440	4 x 4,00	0,31	11,6	153,6	230
01270540	5 x 4,00	0,31	12,9	192,0	281
01270740	7 x 4,00	0,31	14,1	268,8	369
01270260	2 x 6,00	0,31	11,2	115,2	199
01270360	3 x 6,00	0,31	11,7	172,8	249
01270460	4 x 6,00	0,31	13,0	230,4	316
01270560	5 x 6,00	0,31	14,3	288,0	381
01270760	7 x 6,00	0,31	16,0	403,2	518
01270261	2 x 10,00	0,41	14,6	192,0	340
01270361	3 x 10,00	0,41	15,5	288,0	433
01270461	4 x 10,00	0,41	17,0	384,0	541
01270561	5 x 10,00	0,41	18,9	480,0	659
01270761	7 x 10,00	0,41	21,1	672,0	894
01270262	2 x 16,00	0,41	17,0	307,2	489
01270362	3 x 16,00	0,41	18,7	460,8	638
01270462	4 x 16,00	0,41	20,5	614,4	799
01270562	5 x 16,00	0,41	20,9	768,0	968
01270762	7 x 16,00	0,41	25,7	1075,2	1329
01270263	2 x 25,00	0,41	21,6	480,0	771
01270363	3 x 25,00	0,41	23,0	720,0	990
01270463	4 x 25,00	0,41	25,6	960,0	1263
01270264	2 x 35,00	0,41	24,8	672,0	1074
01270364	3 x 35,00	0,41	26,4	1008,0	1392
01270464	4 x 35,00	0,41	29,0	1344,0	1757

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## SC 600 C HDTR

Besilen® insulated strands with overall copper screen and Besilen® outer sheath, UL recognized, CSA approved



Marking for SC 600 C HDTR 01240410:

SAB BRÖCKSKES · D-VIERSEN · SC 600 C HDTR AWM Style 4535 150°C 600V CSA AWM III A 150°C 600V FT1 FT2

### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Inner sheath:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	black (similar RAL 9011)

### Outstanding features:



- good EMC characteristics
- halogen-free
- flexible at low temperatures
- heat resistant
- UL recognized, CSA approved

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/CSA:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	<b>UL/CSA:</b> up to +150 °C Style 4535
<i>flexible application:</i>	<b>DIN VDE:</b> -40/+180 °C / +200 °C (2000 h)
<i>short-time use:</i>	-25/+180 °C +250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01240207	2 x 0,75	0,21	8,2	37,0	93
01240307	3 x 0,75	0,21	8,5	44,4	101
01240407	4 x 0,75	0,21	9,0	55,0	123
01240507	5 x 0,75	0,21	9,7	62,9	139
01240210	2 x 1,00	0,21	8,4	42,0	101
01240310	3 x 1,00	0,21	8,7	54,7	120
01240410	4 x 1,00	0,21	9,3	64,8	136
01240510	5 x 1,00	0,21	10,1	93,8	167
01240710	7 x 1,00	0,21	11,0	114,3	202
01240215	2 x 1,50	0,26	9,4	55,3	129
01240315	3 x 1,50	0,26	10,0	88,8	164
01240415	4 x 1,50	0,26	10,8	104,4	192

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01240515	5 x 1,50	0,26	11,6	125,5	235
01240715	7 x 1,50	0,26	12,8	161,0	277
01240225	2 x 2,50	0,26	11,2	99,8	210
01240325	3 x 2,50	0,26	11,7	124,5	233
01240425	4 x 2,50	0,26	12,9	156,3	282
01240525	5 x 2,50	0,26	14,3	187,0	336
01240340	3 x 4,00	0,31	13,8	177,1	329
01240440	4 x 4,00	0,31	14,8	221,5	384
01240540	5 x 4,00	0,31	16,7	292,3	481
01240360	3 x 6,00	0,31	15,1	241,2	396
01240460	4 x 6,00	0,31	16,8	330,9	524
01240560	5 x 6,00	0,31	18,1	400,8	581

Other dimensions and colours are possible on request.



Temperature range up to +200 °C  
Style 4511 with nickel  
or silver plated copper strands.  
Please contact SAB!

# Besilen® - Silicone Cables

## SC 600 HDTRS

Besilen® insulated strands with Besilen® outer sheath and steel wire armouring for mechanical protection, UL recognized, CSA approved



Marking for SC 600 HDTRS 01280310:

SAB BRÖCKSKES · D-VIERSEN · SC 600 HDTRS AWM Style 4535 150°C 600V CSA AWM I/II A 150°C 600V FT1 FT2

Construction:	
<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)
<b>Armour:</b>	galvanized steel wire braiding

Technical data:	
<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/CSA:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	<b>UL/CSA:</b> up to +150 °C Style 4535
<i>flexible application:</i>	<b>DIN VDE:</b> -40/+180 °C / +200 °C (2000 h)
<i>short-time use:</i>	-25/+180 °C +250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Outstanding features:	
	● halogen-free
	● flexible at low temperatures
	● heat resistant
	● protection against mechanical damage
	● UL recognized, CSA approved

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01280207	2 x 0,75	0,21	6,9	14,4	66
01280307	3 x 0,75	0,21	7,2	21,6	75
01280407	4 x 0,75	0,21	7,7	28,8	86
01280507	5 x 0,75	0,21	8,4	36,0	104
01280607	6 x 0,75	0,21	9,0	43,2	116
01280707	7 x 0,75	0,21	9,0	50,4	125
01280210	2 x 1,00	0,21	7,1	19,2	72
01280310	3 x 1,00	0,21	7,4	28,8	83
01280410	4 x 1,00	0,21	8,0	38,4	97
01280510	5 x 1,00	0,21	8,6	48,0	116
01280610	6 x 1,00	0,21	9,3	57,6	131
01280710	7 x 1,00	0,21	9,3	67,2	142
01280215	2 x 1,50	0,26	7,9	28,8	89
01280315	3 x 1,50	0,26	8,3	43,2	109
01280415	4 x 1,50	0,26	8,8	57,6	126
01280515	5 x 1,50	0,26	9,7	72,0	148
01280615	6 x 1,50	0,26	10,5	86,4	173

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01280715	7 x 1,50	0,26	10,5	100,8	190
01280225	2 x 2,50	0,26	9,3	48,0	128
01280325	3 x 2,50	0,26	9,8	72,0	153
01280425	4 x 2,50	0,26	10,6	96,0	188
01280525	5 x 2,50	0,26	11,9	120,0	226
01280625	6 x 2,50	0,26	12,9	144,0	259
01280725	7 x 2,50	0,26	12,9	168,0	286
01280240	2 x 4,00	0,31	10,5	76,8	170
01280340	3 x 4,00	0,31	11,4	115,2	219
01280440	4 x 4,00	0,31	12,4	153,6	264
01280540	5 x 4,00	0,31	13,7	192,0	327
01280640	6 x 4,00	0,31	14,9	230,4	376
01280740	7 x 4,00	0,31	14,9	268,8	417
01280260	2 x 6,00	0,31	12,0	115,2	234
01280360	3 x 6,00	0,31	12,7	172,8	288
01280460	4 x 6,00	0,31	13,8	230,4	363
01280560	5 x 6,00	0,31	15,1	288,0	429

Other dimensions and colours are possible on request.



Temperature range up to +200 °C  
Style 4511 with nickel  
or silver plated copper strands.  
Please contact SAB!



# Besilen® - Silicone Cables

## SC 700 HDTR

Besilen® insulated strands with Besilen® outer sheath, UL/cUL recognized

Temperature range  
Up to  
**+200 °C**



Marking for SC 700 HDTR 01250410:

SAB BRÖCKSKES · D-VIERSEN · SC 700 HDTR AWM Style 4511 200°C 600V AWM I/II A/B 200°C 600V FT1 FT2

Construction:	
<b>Conductor:</b>	< 10 mm <sup>2</sup> : nickel-plated copper strands ≥ 10 mm <sup>2</sup> : tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	reddish brown (similar RAL 3016)

Technical data:	
<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/cUL:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	<b>UL/cUL:</b> up to +200 °C <b>DIN VDE:</b> -40/+180 °C -25/+180 °C +250 °C
<i>fixed laying:</i>	
<i>flexible application:</i>	
<i>short-time use:</i>	
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cUL FT1, FT2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

**Outstanding features:**

- halogen-free
- flexible at low temperatures
- heat resistant
- UL/cUL recognized

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01250205	2 x 0,50	0,21	5,6	10,3	38
01250305	3 x 0,50	0,21	5,9	15,4	46
01250405	4 x 0,50	0,21	6,3	20,5	54
01250505	5 x 0,50	0,21	6,9	25,6	66
01250705	7 x 0,50	0,21	7,5	35,9	81
01250805	8 x 0,50	0,21	8,6	41,0	102
01251005	10 x 0,50	0,21	9,3	51,3	110
01251205	12 x 0,50	0,21	9,6	61,5	126
01251605	16 x 0,50	0,21	10,6	82,0	162
01251805	18 x 0,50	0,21	11,2	92,3	181
01252405	24 x 0,50	0,21	13,1	123,1	231
01250207	2 x 0,75	0,21	5,9	14,4	46
01250307	3 x 0,75	0,21	6,4	21,6	55
01250407	4 x 0,75	0,21	6,9	28,8	66
01250507	5 x 0,75	0,21	7,6	36,0	82
01250707	7 x 0,75	0,21	8,2	50,4	100
01250807	8 x 0,75	0,21	9,5	57,6	127
01251007	10 x 0,75	0,21	10,3	72,0	137
01251207	12 x 0,75	0,21	10,6	86,4	157
01251607	16 x 0,75	0,21	11,8	115,2	203
01251807	18 x 0,75	0,21	12,5	129,6	230
01252407	24 x 0,75	0,21	14,8	172,8	296
01250210	2 x 1,00	0,21	6,3	19,2	52
01250310	3 x 1,00	0,21	6,6	28,8	63
01250410	4 x 1,00	0,21	7,2	38,4	77
01250510	5 x 1,00	0,21	7,8	48,0	94
01250710	7 x 1,00	0,21	8,5	67,2	117
01250810	8 x 1,00	0,21	9,8	76,8	146
01251010	10 x 1,00	0,21	10,7	96,0	161
01251210	12 x 1,00	0,21	11,0	115,2	185
01251610	16 x 1,00	0,21	12,2	153,6	240
01251810	18 x 1,00	0,21	13,0	172,8	271
01252410	24 x 1,00	0,21	15,9	230,4	370
01250215	2 x 1,50	0,26	7,1	28,8	69
01250315	3 x 1,50	0,26	7,5	43,2	84
01250415	4 x 1,50	0,26	8,0	57,6	101
01250515	5 x 1,50	0,26	8,9	72,0	126
01250715	7 x 1,50	0,26	9,7	100,8	159
01250815	8 x 1,50	0,26	11,4	115,2	200
01251015	10 x 1,50	0,26	12,6	144,0	226
01251215	12 x 1,50	0,26	13,0	172,8	262

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01251615	16 x 1,50	0,26	14,8	230,4	350
01251815	18 x 1,50	0,26	15,6	259,2	392
01252415	24 x 1,50	0,26	18,4	345,6	511
01250225	2 x 2,50	0,26	8,5	48,0	102
01250325	3 x 2,50	0,26	9,0	72,0	127
01250425	4 x 2,50	0,26	9,8	96,0	160
01250525	5 x 2,50	0,26	11,1	120,0	200
01250725	7 x 2,50	0,26	12,1	168,0	254
01250825	8 x 2,50	0,26	14,3	192,0	327
01251025	10 x 2,50	0,26	15,8	240,0	364
01251225	12 x 2,50	0,26	16,3	288,0	421
01251625	16 x 2,50	0,26	18,3	384,0	553
01251825	18 x 2,50	0,26	19,3	432,0	621
01252425	24 x 2,50	0,26	23,2	576,0	819
01250240	2 x 4,00	0,31	9,7	76,8	137
01250340	3 x 4,00	0,31	10,6	115,2	187
01250440	4 x 4,00	0,31	11,6	153,6	232
01250540	5 x 4,00	0,31	12,9	192,0	292
01250740	7 x 4,00	0,31	14,1	268,8	373
01250260	2 x 6,00	0,31	11,6	115,2	201
01250360	3 x 6,00	0,31	12,3	172,8	240
01250460	4 x 6,00	0,31	13,4	230,4	323
01250560	5 x 6,00	0,31	15,2	288,0	408
01250760	7 x 6,00	0,31	16,6	403,2	523
01250261	2 x 10,00	0,41	14,6	192,0	342
01250361	3 x 10,00	0,41	15,5	288,0	436
01250461	4 x 10,00	0,41	17,0	384,0	546
01250561	5 x 10,00	0,41	18,9	480,0	681
01250761	7 x 10,00	0,41	21,1	672,0	885
01250262	2 x 16,00	0,41	17,0	307,2	508
01250362	3 x 16,00	0,41	18,7	460,8	652
01250462	4 x 16,00	0,41	20,5	614,4	857
01250562	5 x 16,00	0,41	20,9	768,0	1016
01250762	7 x 16,00	0,41	25,7	1075,2	1363
01250263	2 x 25,00	0,41	21,6	480,0	776
01250363	3 x 25,00	0,41	23,0	720,0	999
01250463	4 x 25,00	0,41	25,6	960,0	1276
01250264	2 x 35,00	0,41	24,8	672,0	1059
01250364	3 x 35,00	0,41	26,4	1008,0	1372
01250464	4 x 35,00	0,41	29,0	1344,0	1730

Other dimensions and colours are possible on request.



# Besilen® - Silicone Cables

## SC 700 C HDTR

Besilen® insulated strands with overall copper screen and Besilen® outer sheath, UL/cUL recognized

Temperature range  
Up to  
**+200 °C**

C 600V cUL AWM I/II A/B 200°C 600V FT1 FT2 CE



Marking for SC 700 C HDTR 01260410:

SAB BRÖCKSKES · D-VIERSEN · SC 700 C HDTR AWM Style 4511 200°C 600V cUL AWM I/II A/B 200°C 600V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	< 10 mm <sup>2</sup> : nickel-plated copper strands ≥ 10 mm <sup>2</sup> : tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	coloured acc. to HD 308 (VDE 0293-308), from 6 cores black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, from 3 cores a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Inner sheath:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
<b>Sheath colour:</b>	black (similar RAL 9011)

### Outstanding features:



- good EMC characteristics
- halogen-free
- flexible at low temperatures
- heat resistant
- UL/cUL recognized

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/cUL:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
fixed laying:	UL/cUL: up to +200 °C DIN VDE: -40/+180 °C
flexible application:	-25/+180 °C
short-time use:	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, cUL FT1, FT2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01260207	2 x 0,75	0,21	8,2	37,0	87
01260307	3 x 0,75	0,21	8,5	44,4	97
01260407	4 x 0,75	0,21	9,0	55,0	112
01260507	5 x 0,75	0,21	9,7	62,9	129
01260210	2 x 1,00	0,21	8,4	42,0	93
01260310	3 x 1,00	0,21	8,7	54,7	115
01260410	4 x 1,00	0,21	9,3	64,8	123
01260510	5 x 1,00	0,21	10,1	93,8	158
01260710	7 x 1,00	0,21	11,0	114,3	187
01260215	2 x 1,50	0,26	9,4	55,3	118
01260315	3 x 1,50	0,26	10,0	88,8	149
01260415	4 x 1,50	0,26	10,8	104,4	175

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01260515	5 x 1,50	0,26	11,6	125,5	205
01260715	7 x 1,50	0,26	12,8	161,0	256
01260225	2 x 2,50	0,26	11,2	99,8	180
01260325	3 x 2,50	0,26	11,7	124,5	207
01260425	4 x 2,50	0,26	12,9	156,3	259
01260525	5 x 2,50	0,26	14,3	187,0	312
01260340	3 x 4,00	0,31	13,8	177,1	293
01260440	4 x 4,00	0,31	14,8	221,5	347
01260540	5 x 4,00	0,31	16,7	292,3	449
01260360	3 x 6,00	0,31	15,1	241,2	373
01260460	4 x 6,00	0,31	16,8	330,9	499
01260560	5 x 6,00	0,31	18,1	400,8	568

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## N2GFA/2GFA

Besilen® insulated wire acc. to DIN VDE 0250



### Construction:

<b>Conductor:</b>	solid tinned copper wire acc. to IEC 60228, VDE 0295, class 1
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Outstanding features:



- halogen-free
- 0,75 mm<sup>2</sup> VDE standardized
- flexible at low temperatures
- heat resistant

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/300 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical Data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see chapter N „Technical Data“

item no.	nominal cross section mm <sup>2</sup>	nominal wire-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0157005...*	0,50	0,80	2,1	4,8	9
0151007...*	0,75**	0,98	2,2	7,2	11
0157010...*	1,00	1,13	2,4	9,6	14
0157015...*	1,50	1,38	2,8	14,4	21
0157025...*	2,50	1,78	3,4	24,0	33

Other dimensions and colours are possible on request.

#### \* Colour code for single conductors:

...0 = green-yellow	...4 = grey
...1 = blue	...5 = white
...2 = black	...6 = reddish brown
...3 = brown	...7 = red
	...9 = nature

\*\* N2GFA 0,75 mm<sup>2</sup>  
according to DIN VDE 0250 part 502.  
Other cross sections with reference to  
DIN VDE 0250 part 502.

# Besilen® - Silicone Cables

## N2GFAF/2GFAF

Besilen® insulated strands acc. to DIN VDE 0250



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1

### Outstanding features:



- flexible
- halogen-free
- 0,75 mm<sup>2</sup> VDE standardized
- flexible at low temperatures
- heat resistant

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/300 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Chem. resistance:</b>	see chapter N „Technical Data“
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see chapter N „Technical Data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
0158002...*	0,25	0,16	1,9	2,4	6
0158003...*	0,34	0,26	2,0	3,3	7
0158005...*	0,50	0,21	2,1	4,8	9
0152007...*	0,75**	0,21	2,4	7,2	12
0158010...*	1,00	0,21	2,5	9,6	14
0158015...*	1,50	0,26	3,0	14,4	20
0158025...*	2,50	0,26	3,6	24,0	31

Other dimensions and colours are possible on request.

#### \* Colour code for single conductors:

...0 = green-yellow	...4 = grey
...1 = blue	...5 = white
...2 = black	...6 = reddish brown
...3 = brown	...7 = red
	...9 = nature

\*\* N2GFA 0,75 mm<sup>2</sup>  
according to DIN VDE 0250 part 502.  
Other cross sections with reference to  
DIN VDE 0250 part 502.

# Besilen® - Silicone Cables

## 05SJ-U

Besilen® insulated wire with fibre-glass braiding with reference to DIN EN 50525-2-41



### Construction:

<b>Conductor:</b>	solid tinned copper wire acc. to IEC 60228, VDE 0295, class 1
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Standard colour:</b>	nature
<b>Braiding:</b>	fibre-glass
<b>Impregnation:</b>	impregnating lacquer

### Outstanding features:



- halogen-free
- flexible at low temperatures
- heat resistant

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see chapter N „Technical Data“

item no.	nominal cross section mm <sup>2</sup>	nominal wire-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01540109	1,00	1,13	3,0	9,6	19
01540159	1,50	1,38	3,4	14,4	26
01540259	2,50	1,78	4,0	24,0	38
01540409	4,00	2,26	4,5	38,4	55
01540609	6,00	2,76	5,0	57,6	75
01541009	10,00	3,57	6,2	96,0	125

Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## 05SJ-K

Besilen® insulated strands with fibre-glass braiding with reference to DIN EN 50525-2-41



### Construction:

<b>Conductor:</b>	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Standard colour:</b>	nature
<b>Braiding:</b>	fibre-glass
<b>Impregnation:</b>	impregnating lacquer

### Outstanding features:



- flexible
- halogen-free
- flexible at low temperatures
- heat resistant

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	2 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see chapter N „Technical Data“

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
01550059	0,50	0,21	2,7	4,8	14
01550079	0,75	0,21	3,0	7,2	17
01550109	1,00	0,21	3,1	9,6	19
01550159	1,50	0,26	3,5	14,4	25
01550259	2,50	0,26	4,2	24,0	35
01550409	4,00	0,31	4,8	38,4	50
01550609	6,00	0,31	5,3	57,6	60
01551009	10,00	0,41	6,4	96,0	120
01551609	16,00	0,41	8,3	153,6	178
01552509	25,00	0,41	10,1	240,0	281
01553509	35,00	0,41	11,5	336,0	388
01555009	50,00	0,41	13,1	480,0	537
01557009	70,00	0,41	15,4	672,0	721
01559509	95,00	0,51	18,0	912,0	963

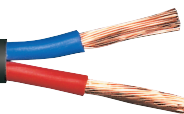
Other dimensions and colours are possible on request.

# Besilen® - Silicone Cables

## BiAF/YW

low-voltage connection cable for halogen lamps

SAB BRÖCKSKES · D-VIERSEN · BiAF/YW 2x1,5mm<sup>2</sup>



Marking for BiAF/YW 01352151:

SAB BRÖCKSKES · D-VIERSEN · BiAF/YW 2x1,5mm<sup>2</sup>

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
<b>Colour code:</b>	blue, red
<b>Stranding:</b>	2 cores parallel
<b>Sheath material:</b>	PVC, TM4 acc. to EN 50363-4-1 + VDE 0207-363-4-1
<b>Sheath colour:</b>	black (similar RAL 9005)
<b>Shape:</b>	flat

### Technical data:

<b>Nominal voltage:</b>	24 V
<b>Testing voltage:</b>	core/core 600 V
<b>Min. bending radius:</b>	7.5 x d
<b>Radiation resistance:</b>	8 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	+5/+90 °C
<i>short-time use:</i>	+105 °C
<i>at the conductor:</i>	+180 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Chem. resistance:</b>	see chapter N „Technical Data“
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see chapter N „Technical Data“

### Outstanding features:



- due to silicone core insulation suitable for temperatures up to 180°C at conductors
- heat resistant PVC outer sheath for ambient temperatures up to 105°C for short-time use
- due to flat construction space-saving
- simplified connecting possibilities
- no wiring with single conductors

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	dimen- sions mm x mm	copper figure kg/km	cable weight ≈ kg/km
01352151	2 x 1,50	0,26	5,8 x 3,5	28,8	44
01352251	2 x 2,50	0,26	6,8 x 4,0	48,0	66
01352401	2 x 4,00	0,31	7,8 x 4,4	76,8	96

Other dimensions and colours are possible on request.