

Besilen® - Silicone

Cables





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Besilen® - Silicone Cables






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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:

BiS	Especially for the insulation of connecting and soldering points, can be drawn over cables or conductors in lamps, heating appliances and electrical plants
BiAF/YW	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:

BiZ	Application in smelteries, steelworks and hot-rolling mills, in cement, glass and ceramic factories or for the internal wiring of lamps and heating appliances
ZKBi	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
HZLBi	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
BiL	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)
BiA	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
BiAF N2GFA/2GFA	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
BiAFF N2GFAF/2GFAF	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 118 B 119 B 120	These insulated strands with 0,6/1kV, 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 110 C	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
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■ 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
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■ 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

Besilen® - Silicone Cables

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 ₀ /U 300/300 V		●				●		●									
	Nominal voltage U ₀ /U 300/500 V							●		●								
	Nominal voltage U ₀ /U 0,6/1 kV										●							
	Nominal voltage U ₀ /U 1,5/1,5 kV											●						
	Nominal voltage U ₀ /U 1,8/3 kV												●		●	●	●	
	Nominal voltage U ₀ /U 3,6/6 kV													●				
	Nominal voltage U ₀ /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		H	F	F	F	F	F	H	F	F	F	F	F	F	H	H	H
Protection against mechanical damage																		



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

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 U ₀ /U 300/300 V		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Nominal voltage U ₀ /U 300/500 V		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Nominal voltage U ₀ /U 0,6/1 kV																			
	Nominal voltage U ₀ /U 1,5/1,5 kV																			
	Nominal voltage U ₀ /U 1,8/3 kV																			
	Nominal voltage U ₀ /U 3,6/6 kV																			
	Nominal voltage U ₀ /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			●	●							●									



● 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:

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

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

Outstanding features:

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

Technical data:

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

item no.	no. of cores x cross section n x mm ²	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

ZKBi

Besilen® ignition cable

Testing voltage
20 kV



Construction:

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

Outstanding features:

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

Technical data:

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

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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

HZLBI

Besilen® high-voltage ignition cable

Testing voltage
20 kV



Construction:

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

Outstanding features:

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

Technical data:

Testing voltage:	5 mm ϕ : 15 kV 7 mm ϕ : 20 kV
Min. bending radius:	7.5 x d
Radiation resistance:	2×10^7 cJ/kg
Temperature range	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short time use:</i>	+250 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Chem. resistance:	see chapter N „Technical data“
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire ϕ mm	outer- ϕ \pm 10% 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

BiL

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

Nominal voltage
3.5/4.0/7.5 kV



Construction:

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

Outstanding features:

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

Technical data:

Nominal voltage:	U _o 3,5 kV · U _o 4,0 kV · U _o 7,5 kV
Testing voltage:	10 kV
Min. bending radius:	7.5 x d
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short time use:</i>	+250 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Chem. resistance:	see chapter N „Technical data“
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire ø mm	nominal voltage kV	outer-ø ± 10% 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:

Conductor: solid tinned copper wire
acc. to IEC 60228, VDE 0295, class 1

Insulation: Besilen® EI2
acc. to EN 50363-1 + VDE 0207-363-1

Outstanding features:

- » halogen-free
- » heat resistant

Technical data:

Nominal voltage: U₀/U 300/300 V

Testing voltage: 2000 V

Min. bending radius: 7.5 x d

Radiation resistance: 2 x 10⁷ cJ/kg

Temperature range
fixed laying: -40/+180 °C
flexible application: -25/+180 °C
short time use: +250 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases

Chem. resistance: see chapter N „Technical data“

Weather resistance: very good

Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	nominal wire-ø ø mm	outer-ø ± 10% 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.*	10,0	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:

Conductor: tinned copper strands,
acc. to IEC 60228, VDE 0295, class 5

Insulation: Besilen® EI2
acc. to EN 50363-1 + VDE 0207-363-1

Outstanding features:

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

Technical data:

Nominal voltage: Uo/U 300/500 V

Testing voltage: 2000 V

Min. bending radius: 7.5 x d

Radiation resistance: 2 x 10⁷ cJ/kg

Temperature range cable

fixed laying: -40/+180 °C

flexible application: -25/+180 °C

short time use: +250 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases

Chem. resistance: see chapter N „Technical data“

Weather resistance: very good

Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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:

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

Outstanding features:

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

Technical data:

Nominal voltage: Uo/U 300/300 V
Testing voltage: 2000 V
Min. bending radius: 5 x d
Radiation resistance: 2 x 10⁷ cJ/kg
Temperature range cable
fixed laying: -40/+180 °C
flexible application: -25/+180 °C
short time use: +250 °C
Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases
Chem. resistance: see chapter N „Technical data“
Weather resistance: very good
Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire Ø mm	outer-Ø ± 10% 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:

Conductor: tinned copper strands,
acc. to IEC 60228, VDE 0295, class 5

Insulation: Besilen® EI2
acc. to EN 50363-1 + VDE 0207-363-1

Standard colour: white

Braiding: fibre-glass

Impregnation: impregnating lacquer

Technical data:

Nominal voltage: U₀/U 300/500 V

Testing voltage: 2000 V

Min. bending radius: 7.5 x d

Radiation resistance: 2 x 10⁷ cJ/kg

Temperature range cable

fixed laying: -40/+180 °C

flexible application: -25/+180 °C

short time use: +250 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases

Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

Outstanding features:

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

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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
 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:

Conductor: tinned copper strands,
 acc. to IEC 60228, VDE 0295, class 5

Insulation: Besilen® EI2
 acc. to EN 50363-1 + VDE 0207-363-1

Outstanding features:

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

Technical data:

Nominal voltage: Uo/U 0,6/1 kV

Testing voltage: 2500 V

Current-carrying capacity: acc. to VDE 0298-4, see chapter N „Technical data“

Min. bending radius: 7.5 x d

Temperature range
fixed laying: -40/+180 °C
flexible application: -25/+180 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
 - no development of corrosive conflagration gases

Weather resistance: very good

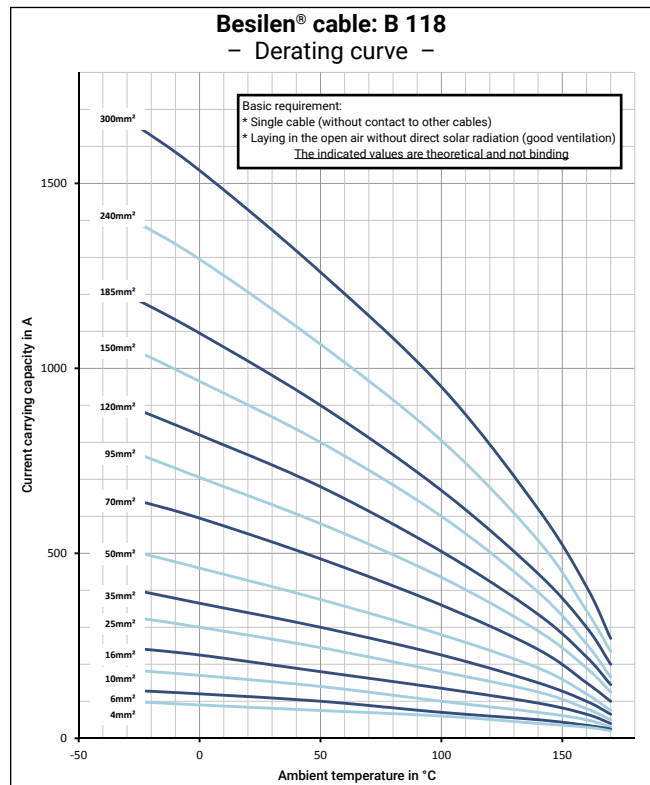
Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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® - 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:

Conductor: tinned copper strands,
acc. to IEC 60228, VDE 0295, class 5

Insulation: Besilen® EI2
acc. to EN 50363-1 + VDE 0207-363-1

Technical data:

Nominal voltage: Uo/U 1,8/3 kV

Testing voltage: 6500 V

Current-carrying capacity: acc. to VDE 0298-4, see chapter N „Technical data“

Min. bending radius: 7.5 x d

Temperature range
fixed laying: -40/+180 °C
flexible application: -25/+180 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases

Weather resistance: very good

Absence of harmful substances: 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 ²	largest single wire ø mm	outer-ø ± 10% 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
U₀/U 1.8/3 kV AC



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

marking example:

SAB BRÜCKSKES · D-VIERSEN · B 110 C U₀/U 1,8/3 kV 95,0mm² 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:

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

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

item no.	nominal cross section mm ²	largest single wire ø mm	ø over inner sheath approx. mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
01100107	1,00	0,07	4,3	7,6	27,2	70
01100157	1,50	0,07	4,7	8,0	34,4	81
01100257	2,50	0,07	5,2	8,5	44,6	96
01100407	4,00	0,07	5,9	9,2	61,3	118
01100607	6,00	0,07	6,3	9,6	83,8	143
01101007	10,00	0,07	8,2	11,7	147,7	222
01101607	16,00	0,07	8,5	12,0	205,7	273
01102507	25,00	0,10	10,9	14,7	307,4	416
01103507	35,00	0,10	12,6	16,3	432,6	548
01105007	50,00	0,10	14,5	18,2	593,6	725
01107007	70,00	0,10	16,5	20,4	804,4	954
01109507	95,00	0,10	18,4	22,3	1064,5	1244
01101207	120,00	0,10	20,1	24,2	1311,0	1514
01101507	150,00	0,10	23,3	27,4	1627,6	1873
01101857	185,00	0,15	24,9	29,2	1970,9	2231
01102407	240,00	0,15	27,5	32,0	2511,2	2841
01103007	300,00	0,15	30,0	34,7	3108,6	3354

Other dimensions and colours are possible on request.

Besilen® - Silicone Cables

B 120

Besilen® insulated strands Uo/U 3.6/6 kV

Nominal voltage
Uo/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:

Conductor: tinned copper strands,
acc. to IEC 60228, VDE 0295, class 5

Insulation: Besilen® EI2
acc. to EN 50363-1 + VDE 0207-363-1

Technical data:

Nominal voltage: Uo/U 3,6/6 kV

Testing voltage: 11 kV

Current-carrying capacity: acc. to VDE 0298-4, see chapter N „Technical data“

Min. bending radius: 7.5 x d

Temperature range
fixed laying: -40/+180 °C
flexible application: -25/+180 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases

Weather resistance: very good

Absence of harmful substances: 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 ²	largest single wire ø mm	outer-ø ± 10% 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
U₀/U 1.8/3 kV

SAB Rail

ES · D-VIERSEN · R 107 1,8/3 kV 95,0mm² 6107-0894



marking example:

SAB BRÜCKSKES · D-VIERSEN · R 107 1,8/3 kV 95,0mm² 6107-0894

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

Construction:

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

Outstanding features:

- » extremely flexible
- » fulfils fire protection requirements acc. to EN 45545-2 / from 1,50 - 10,00 mm²: R15 (EL1A) HL 1 / R16 (EL1B) HL 1-2 from 16,00 mm²: 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

Technical data:

Nominal voltage: U₀/U 1,8/3,0 kV
Testing voltage: 6500 V
Current-carrying capacity: acc. to VDE 0298-4, see chapter N „Technical data“

Min. bending radius
fixed laying: 2 x d
flexible application: 4 x d

Temperature range
fixed laying: -50/+180 °C
flexible application: -25/+180 °C
short-time use: +250 °C

Halogen-free: 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.

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. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Toxicity: acc. to EN 50305 + VDE 0260-305
Smoke density: acc. to IEC 61034 + VDE 0482-1034
Weather resistance: very good
Ozone resistance: acc. to EN 50382-2 + VDE 0260-382-2
Oil resistance: good
Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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



95,0mm² cULus AWM Style 30122 AWM I A 150°C 3000V FT2

marking example:

SAB BRÜCKSKES · D-VIERSEN · B 107 U_o/U 1,8/3 kV 95,0mm² cULus AWM Style 30122 AWM I A 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:

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

Technical data:

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

Outstanding features:

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

item no.	nominal cross section mm ²	largest single wire Ø mm	outer-Ø ± 10% 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



CKSKES · D-VIERSEN · B 108 U_o/U 1,8/3 kV 95,0mm²

marking example:

SAB BRÜCKSKES · D-VIERSEN · B 108 U_o/U 1,8/3 kV 95,0mm²

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

- Outstanding features:**
- » extremely flexible
 - » halogen-free
 - » flexible at low temperatures
 - » heat resistant
 - » flame retardant and self-extinguishing
 - » weather resistant
 - » dimensionally stable construction

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

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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

- * 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.

Besilen® - Silicone Cables

BiHF-J

Besilen® insulated strands with Besilen® outer sheath

also possible
with extremely notch
resistant sheath



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Sheath material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)

Technical data:

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

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Sheath material:	Besilen® notch resistant
Sheath colour:	black (similar RAL 9011)

Outstanding features:

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

Technical data:

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

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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.

Besilen® - Silicone Cables

BiHFP-J

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



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Sheath material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)
Armour:	galvanized steel wire braiding

Technical data:

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

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Sheath material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)
Wrapping:	fibre-glass tape
Armour:	galvanized steel wire braiding

Technical data:

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

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Wrapping:	PETP foil
Screen:	tinned copper braiding
Sheath material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)

Technical data:

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

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Inner sheath:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Screen:	tinned copper braiding
Sheath material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)

Technical data:

Nominal voltage:	U _o /U 300/500 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Chem. resistance:	see chapter N „Technical data“
Weather resistance:	very good
Absence of harmful substances:	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 ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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
01900410	4 x 1,00	0,21	9,3	64,8	135

Other dimensions and colours are possible on request.

Besilen® - Silicone Cables

BiHF/Cu/Bi(K)-J

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

EWKF



Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Inner sheath:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Screen:	tinned copper braiding
Sheath material:	Besilen® notch resistant
Sheath colour:	black (similar RAL 9011)

Technical data:

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

Possible on request
without inner sheath!

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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.

Besilen® - Silicone Cables

Besilen® ESD Control Cable

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

electrostatic
discharge



marking example:

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:

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

Outstanding features:

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

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	core/core 2000 V
CAN-Bus element	
Peak operating voltage:	max. 350 V
Testing voltage:	core/core 1500 V core/screen 1200 V
Min. bending radius	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
Temperature range	
<i>fixed laying:</i>	-40/+180 °C
<i>flexible application:</i>	-25/+180 °C
Surface resistance:	1 x 10 ⁴ - 1 x 10 ⁹ Ω acc. to EN 50395 section 11
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section n x mm ²	outer-φ ± 10% 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)C 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



marking example:

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

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Sheath material:	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)

Outstanding features:

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

Technical data:

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

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 ²	largest single wire ø mm	outer-ø ± 10% 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
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
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
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
01270225	2 x 2,50	0,26	8,5	48,0	101

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
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
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

Besilen® - Silicone Cables

SC 600 C HDTR

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



marking example:

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

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Inner sheath:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Screen:	tinned copper braiding
Sheath material:	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	black (similar RAL 9011)

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius	
fixed laying:	4 x d
flexible application:	6 x d
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	UL/CSA: up to +150 °C Style 4535 DIN VDE: -40/+180 °C / +200 °C (2000 h)
flexible application:	-25/+180 °C
short-time use:	+250 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Absence of harmful substances:	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
- » UL recognized, CSA approved

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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 example:

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

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Sheath material:	Besilen® better than EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)
Armour:	galvanized steel wire braiding

Technical data:

Nominal voltage:	Uo/U 300/500 V
Voltage UL/CSA:	600 V
Testing voltage:	core/core 2000 V
Min. bending radius	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	UL/CSA: up to +150 °C Style 4535
<i>fixed laying:</i>	DIN VDE: -40/+180 °C / +200 °C (2000 h)
<i>flexible application:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases
Absence of harmful substances:	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 ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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!**

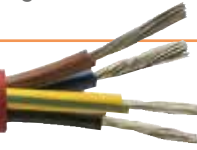
Besilen® - Silicone Cables

SC 700 HDTR

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

Temperature range
up to
+200 °C

511 200°C 600V cUL AWM I/II A/B 200°C 600V FT1 FT2 CE



marking example:

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

Construction:

Conductor:	< 10 mm ² : nickel-plated copper strands ≥ 10 mm ² : tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Sheath material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	reddish brown (similar RAL 3016)

Outstanding features:

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

Technical data:

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

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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
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
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
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
01250225	2 x 2,50	0,26	8,5	48,0	102

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
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
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 example:

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:

Conductor:	< 10 mm ² : nickel-plated copper strands ≥ 10 mm ² : tinned copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to EN 50363-1 + VDE 0207-363-1
Colour code:	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
Stranding:	in layers
Inner sheath:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Screen:	tinned copper braiding
Sheath material:	Besilen® EM9 acc. to EN 50363-2-1 + VDE 0207-363-2-1
Sheath colour:	black (similar RAL 9011)

Technical data:

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

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% 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 ²	largest single wire ø mm	outer-ø ± 10% 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:

Conductor: solid tinned copper wire
acc. to IEC 60228, VDE 0295, class 1

Insulation: Besilen® EI2
acc. to EN 50363-1 + VDE 0207-363-1

Outstanding features:

- » halogen-free
- » 0,75 mm² VDE standardized
- » flexible at low temperatures
- » heat resistant

Technical data:

Nominal voltage: U_o/U 300/300 V

Testing voltage: 2000 V

Min. bending radius: 7.5 x d

Radiation resistance: 2 x 10⁷ cJ/kg

Temperature range

fixed laying: -40/+180 °C

flexible application: -25/+180 °C

short-time use: +250 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases

Chem. resistance: see chapter N „Technical data“

Weather resistance: very good

Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	nominal wire-ø mm	outer-ø ± 10% 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 mm² 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:

Conductor: tinned copper strands
acc. to IEC 60228, VDE 0295, class 5

Insulation: Besilen® EI2
acc. to EN 50363-1 + VDE 0207-363-1

Outstanding features:

- » flexible
- » halogen-free
- » 0,75 mm² VDE standardized
- » flexible at low temperatures
- » heat resistant

Technical data:

Nominal voltage: U₀/U 300/300 V

Testing voltage: 2000 V

Min. bending radius: 7.5 x d

Radiation resistance: 2 x 10⁷ cJ/kg

Temperature range
fixed laying: -40/+180 °C
flexible application: -25/+180 °C
short-time use: +250 °C

Halogen-free: acc. to IEC 60754-1 + VDE 0482-754-1

Fire performance: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2

Corrosiveness of conflagration gases: IEC 60754-2 + VDE 0482-754-2
- no development of corrosive conflagration gases

Chem. resistance: see chapter N „Technical data“

Weather resistance: very good

Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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 |

** N2GFAF 0,75 mm² 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:

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

Outstanding features:

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

Technical data:

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

item no.	nominal cross section mm ²	nominal wire-ø mm	outer-ø ± 10% 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:

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

Technical data:

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

Outstanding features:

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

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% 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

SCM BRÖCKSKES · D-VIERSEN · BiAF/YW 2x1,5mm²



marking example:

SAB BRÖCKSKES · D-VIERSEN · BiAF/YW 2x1,5mm²

Construction:

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

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

Technical data:

Nominal voltage:	24 V
Testing voltage:	core/core 600 V
Min. bending radius:	7.5 x d
Radiation resistance:	8 x 10 ⁷ cJ/kg
Temperature range	
<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
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Chem. resistance:	see chapter N „Technical data“
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	no. of cores x cross section mm ²	largest single wire ø mm	dimension 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.