

Silicone Cables



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NEW

NEW

NEW

NEW



: especially for use in rail vehicles

Note: For more information please see page N/5

Applications

■ Application 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:

SC 113 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

■ Application of Besilen® single conductors with fiberglass braiding

These Besilen® cables with fiberglass 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 fiberglass braiding offers protection against mechanical damage and at the same time offers excellent heat resistance.

Exemplary applications:

SC 123 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

■ Application 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 armoring, a fiberglass 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	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 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
BiHF/Cu/Bi-J BiHF/Cu/Bi(K)-J SC 600 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

Applications

■ Application of cable track cables with Besilen® outer jacket

SAB cable track cables with Besilen® outer jacket are for continuously flexible use in high temperature areas as for example in cable tracks as control cable with medium mechanical stress.

Exemplary applications:

S 180 HT / S 180 C HT Conveyor systems in steel production and steel processing industries, at feeding lines for blast furnaces

■ Application of silicone insulated round strands for railway technology

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:

B 107 / B 108 3. current collector, at pantographs and as earth connection at wheel sets, coupling blocks and crane mountings on rail vehicles

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

Selection index

		Cable type												
		SC 600 HDTR	SC 600 C HDTR	SC 600 HDTRS	SC 113	SC 123	BiHF-J / BiHF(K)-J	BiHFP-J	BiHF/Cu/Bi-J / BiHF/Cu/Bi(K)-J	S 180 HT	S 180 C HT	B 107	B 108	
Application	Single conductor				x	x						x	x	
	Screen		x						x		x		x	
	Steel wire braiding			x				x						
	Color code: up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire	x	x	x			x	x	x					
	Inner jacket		x						x					
Temperature range static*	+ 250 °C													
	+ 200 °C													
	+ 180 °C													
	- 25 °C													
	- 40 °C													
Voltage	UL / cUL 600 V	x	x	x										
	Nominal voltage U ₀ /U 300/300 V Testing voltage 2000 V					x								
	Nominal voltage U ₀ /U 300/500 V Testing voltage 2000 V	x	x	x	x		x	x	x					
	Nominal voltage U ₀ /U 0.6/1 kV Testing voltage 4000 V									x	x			
	Nominal voltage 12 - 10 AWG U ₀ /U 1.5/1,5 kV from 8 AWG U ₀ /U 1.8/3.0 kV Testing voltage 12 - 10 AWG 4000 V from 8 AWG 6000 V											x	x	
Standards and approvals	Zero halogen acc. to DIN VDE 0472 part 815 and IEC 60754-1	x	x	x	x	x	x	x	x			x	x	
	Burning characteristics: flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2	x	x	x	x	x	x	x	x	x	x	x	x	
	Burning characteristics: flame retardant and self-extinguishing acc. to cUL FT1 and FT2	x	x	x										
	Corrosiveness of conflagration gases: IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases	x	x	x	x	x	x	x	x			x	x	
	UL / cUL recognition	x	x	x										
Special features	Min. bending radius x O.D. free movement	6	10	10	7,5	7,5	6	10	10	10	15	5	5	
	Weather resistance	x	x	x	x		x	x	x			x	x	
	Flexibility	x	x	x	x	x	x	x	x	x	x	x	x	
	Protection against mechanical damage		x	x				x					x	

Temperature range:
 from short time use
to

*The temperature range for flexing is mentioned on the particular catalog page

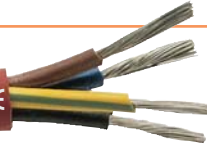


SILICONE CABLES



SC 600 HDTR SABIX® insulated strands with Silicone outer jacket

4511 200°C 600V cUL AWM I/II A/B 200°C 600V FT1 FT2 CE



Marking for SC 600 HDTR 01270410:

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

SC 600 HDTR is a heavy duty, multi-conductor, silicone insulated control cable with tear resistant silicone jacket. This cable is recommended for use in applications where high temperatures, UV light and mechanical abuse rapidly cause other cables to deteriorate. The SC 600 HDTR is a flexible, cost effective, high temperature cable. Recommended applications include foundries, steel mills, glass factories, baking equipment, burners, heating and lighting systems. This cable can also be used anywhere salt water is present, and high temperature processes are utilized.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Jacket material:	Besilen® better than EM9 acc. to DIN EN 50363-2-1
Jacket color:	reddish brown

Outstanding features:

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

Technical data:

Voltage:	UL/cUL: 600 V	
Nominal voltage:	DIN VDE: U ₀ /U 300/500 V	
Testing voltage:	2000 V acc. to DIN VDE 0282 part 2 + HD 22.2	
Min. bending radius		
<i>fixed installation:</i>	< 12 mm = 3 x O.D. > 12 mm = 4 x O.D.	
<i>free movement:</i>	< 12 mm = 5 x O.D. > 12 mm = 6 x O.D.	
Radiation resistance:	2 x 10 ⁷ cJ/kg	
Temperature range	DIN VDE:	UL/cUL: up to +200 °C
<i>static:</i>	-40/+180 °C	
<i>flexing:</i>	-25/+180 °C	
<i>short-time use:</i>	+250 °C	
Zero halogen:	acc. to DIN VDE 0472 part 815 + IEC 60754-1	
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2, cUL FT1 and FT2	
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases	
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28	

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
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▶ 20 AWG (≈ 16/32) • 0.50 mm²

01272002	2	0.220	5.6	26
01272003	3	0.232	5.9	30
01272004	4	0.248	6.3	36
01272005	5	0.272	6.9	42
01272007	7	0.295	7.5	53
01272008	8	0.339	8.6	61
01272010	10	0.366	9.3	73
01272012	12	0.378	9.6	83
01272016	16	0.417	10.6	106
01272018	18	0.441	11.2	117
01272024	24	0.516	13.1	161

▶ 19 AWG (≈ 23/32) • 0.75 mm²

01271902	2	0.232	5.9	31
01271903	3	0.252	6.4	36
01271904	4	0.272	6.9	44
01271905	5	0.299	7.6	52
01271907	7	0.323	8.2	66
01271908	8	0.374	9.5	76
01271910	10	0.406	10.3	91
01271912	12	0.417	10.6	104
01271916	16	0.465	11.8	132
01271918	18	0.492	12.5	149
01271924	24	0.583	14.8	206

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
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▶ 18 AWG (≈ 30/32) • 1.00 mm²

01271802	2	0.248	6.3	34
01271803	3	0.260	6.6	42
01271804	4	0.283	7.2	50
01271805	5	0.307	7.8	60
01271807	7	0.335	8.5	77
01271808	8	0.386	9.8	89
01271810	10	0.421	10.7	106
01271812	12	0.433	11.0	122
01271816	16	0.480	12.2	157
01271818	18	0.512	13.0	176
01271824	24	0.626	15.9	255

▶ 16 AWG (≈ 27-29/30) • 1.50 mm²

01271602	2	0.280	7.1	46
01271603	3	0.295	7.5	56
01271604	4	0.315	8.0	67
01271605	5	0.350	8.9	81
01271607	7	0.382	9.7	105
01271608	8	0.449	11.4	122
01271610	10	0.496	12.6	150
01271612	12	0.512	13.0	173
01271616	16	0.583	14.8	229
01271618	18	0.614	15.6	255
01271624	24	0.724	18.4	339

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
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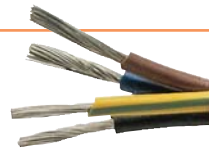
▶ 14 AWG (≈ 46/30) • 2.50 mm²

01271402	2	0.335	8.5	68
01271403	3	0.354	9.0	85
01271404	4	0.386	9.8	104
01271405	5	0.437	11.1	129
01271407	7	0.476	12.1	168
01271408	8	0.563	14.3	197
01271410	10	0.622	15.8	241
01271412	12	0.642	16.3	279
01271416	16	0.720	18.3	363
01271418	18	0.760	19.3	403
01271424	24	0.913	23.2	597

Continued on next page



SC 600 HDTR SABIX® insulated strands with Silicone outer jacket



Style 4511 200°C 600V cUL AWM I/II A/B 200°C 600V FT1 FT2

Marking for SC 600 HDTR 01270410:

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

SC 600 HDTR is a heavy duty, multi-conductor, silicone insulated control cable with tear resistant silicone jacket. This cable is recommended for use in applications where high temperatures, UV light and mechanical abuse rapidly cause other cables to deteriorate. The SC 600 HDTR is a flexible, cost effective, high temperature cable. Recommended applications include foundries, steel mills, glass factories, baking equipment, burners, heating and lighting systems. This cable can also be used anywhere salt water is present, and high temperature processes are utilized.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Jacket material:	Besilen® better than EM9 acc. to DIN EN 50363-2-1
Jacket color:	reddish brown

Outstanding features:

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

Technical data:

Voltage:	UL/cUL: 600 V	
Nominal voltage:	DIN VDE: U ₀ /U 300/500 V	
Testing voltage:	2000 V acc. to DIN VDE 0282 part 2 + HD 22.2	
Min. bending radius		
<i>fixed installation:</i>	< 12 mm = 3 x O.D. > 12 mm = 4 x O.D.	
<i>free movement:</i>	< 12 mm = 5 x O.D. > 12 mm = 6 x O.D.	
Radiation resistance:	2 x 10 ⁷ cJ/kg	
Temperature range	DIN VDE:	UL/cUL: up to +200 °C
<i>static:</i>	-40/+180 °C	
<i>flexing:</i>	-25/+180 °C	
<i>short-time use:</i>	+250 °C	
Zero halogen:	acc. to DIN VDE 0472 part 815 + IEC 60754-1	
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2, cUL FT1 and FT2	
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases	
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28	

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 12 AWG (≈ 52/28) • 4.00 mm²				
01271202	2	0.382	9.7	91
01271203	3	0.417	10.6	124
01271204	4	0.457	11.6	155
01271205	5	0.508	12.9	189
01271207	7	0.555	14.1	248
▶ 10 AWG (≈ 78/28) • 6.00 mm²				
01271002	2	0.441	11.2	134
01271003	3	0.461	11.7	167
01271004	4	0.512	13.0	212
01271005	5	0.563	14.3	256
01271007	7	0.630	16.0	348

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 8 AWG (≈ 77/26) • 10.00 mm²				
01270802	2	0.575	14.6	228
01270803	3	0.610	15.5	291
01270804	4	0.669	17.0	364
01270805	5	0.744	18.9	443
01270807	7	0.831	21.1	601
▶ 6 AWG (≈ 122/26) • 16.00 mm²				
01270602	2	0.669	17.0	329
01270603	3	0.736	18.7	429
01270604	4	0.807	20.5	537
01270605	5	0.823	20.9	650
01270607	7	1.012	25.7	893

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 4 AWG (≈ 190/26) • 25.00 mm²				
01270402	2	0.850	21.6	518
01270403	3	0.906	23.0	665
01270404	4	1.008	25.6	849
▶ 2 AWG (≈ 272/26) • 35.00 mm²				
01270202	2	0.976	24.8	722
01270203	3	1.039	26.4	935
01270204	4	1.142	29.0	1181

Other dimensions and colors are possible on request.



SILICONE CABLES



SC 600 C HDTR Shielded SABIX® insulated strands with Silicone outer jacket

4511 200°C 600V cUL AWM I/II A/B 200°C 600V FT1 FT2 CE



Marking for SC 600 C HDTR 01240410:

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

SC 600 C HDTR is a heavy duty, multi-conductor, shielded, silicone insulated control cable with tear resistant silicone jacket. This cable is recommended for use in applications where high temperatures, UV light and mechanical abuse rapidly cause other cables to deteriorate. The SC 600 C HDTR is a flexible, cost effective, high temperature cable. Recommended applications include foundries, steel mills, glass factories, baking equipment, burners, heating and lighting systems. This cable can also be used anywhere salt water is present, and high temperature processes are utilized. An overall tinned copper shield is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Inner jacket:	Besilen® EM9 acc. to DIN EN 50363-2-1
Screen:	tinned copper braiding
Jacket material:	Besilen® better than EM9 acc. to DIN EN 50363-2-1
Jacket color:	black

Outstanding features:

- good EMC characteristics
- halogen-free
- flexible at low temperatures
- heat resistant
- protection against mechanical damage
- UL/cUL recognition

Technical data:

Voltage:	UL/cUL: 600 V
Nominal voltage:	DIN VDE: Uo/U 300/500 V
Testing voltage:	2000 V acc. to DIN VDE 0282 part 2 + HD 22.2 conductor/screen 2000 V
Min. bending radius	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	DIN VDE: UL/cUL: up to +200 °C
static:	-40/+180 °C
flexing:	-25/+180 °C
short-time use:	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 + IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2, cUL FT1 and FT2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²					▶ 16 AWG (≈ 27-29/30) • 1.50 mm²					▶ 12 AWG (≈ 52/28) • 4.00 mm²				
01241902	2	0.323	8.2	62	01241602	2	0.370	9.4	87	01241203	3	0.543	13.8	221
01241903	3	0.335	8.5	68	01241603	3	0.394	10.0	110	01241204	4	0.583	14.8	258
01241904	4	0.354	9.0	83	01241604	4	0.425	10.8	129	01241205	5	0.657	16.7	323
01241905	5	0.382	9.7	93	01241605	5	0.457	11.6	158	▶ 10 AWG (≈ 78/28) • 6.00 mm²				
▶ 18 AWG (≈ 30/32) • 1.00 mm²					01241607	7	0.504	12.8	186	01241003	3	0.594	15.1	266
01241802	2	0.331	8.4	68	▶ 14 AWG (≈ 46/30) • 2.50 mm²					01241004	4	0.661	16.8	352
01241803	3	0.343	8.7	81	01241402	2	0.441	11.2	141	01241005	5	0.713	18.1	390
01241804	4	0.366	9.3	91	01241403	3	0.461	11.7	157	Other dimensions and colors are possible on request.				
01241805	5	0.398	10.1	112	01241404	4	0.508	12.9	190					
01241807	7	0.433	11.0	136	01241405	5	0.563	14.3	226					

SILICONE CABLES



SC 600 HDTRS SABIX® insulated strands with Silicone outer jacket and steel wire armoring for mechanical protection



Marking for SC 600 HDTRS 01280310:
SAB BRÖCKSKES · D-VIERSEN · SC 600 HDTR AWM Style 4511 200°C 600V AWM I/II A/B 200°C 600V FT1 FT2

SC 600 HDTRS is a heavy duty, multi-conductor, silicone insulated control cable with tear resistant silicone jacket. This cable is recommended for use in applications where high temperatures, UV light and mechanical abuse rapidly cause other cables to deteriorate. The SC 600 HDTRS is a flexible, cost effective, high temperature cable. Recommended applications include foundries, steel mills, glass factories, baking equipment, burners, heating and lighting systems. This cable can also be used anywhere salt water is present, and high temperature processes are utilized.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Jacket material:	Besilen® better than EM9 acc. to DIN EN 50363-2-1
Jacket color:	reddish brown
Armour:	galvanized steel wire braiding

Technical data:

Voltage:	UL/cUL: 600 V
Nominal voltage:	DIN VDE: U ₀ /U 300/500 V
Testing voltage:	2000 V acc. to DIN VDE 0282 part 2 + HD 22.2
Min. bending radius	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	DIN VDE: UL/cUL: up to +200 °C
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 + IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2, cUL FT1 and FT2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

Outstanding features:

- halogen-free
- flexible at low temperatures
- heat resistant
- protection against mechanical damage
- UL/cUL recognition

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²					▶ 16 AWG (≈ 27-29/30) • 1.50 mm²					▶ 12 AWG (≈ 52/28) • 4.00 mm²				
01281902	2	0.272	6.9	44	01281602	2	0.311	7.9	60	01281202	2	0.413	10.5	114
01281903	3	0.283	7.2	50	01281603	3	0.327	8.3	73	01281203	3	0.449	11.4	147
01281904	4	0.303	7.7	58	01281604	4	0.346	8.8	85	01281204	4	0.488	12.4	177
01281905	5	0.331	8.4	70	01281605	5	0.382	9.7	99	01281205	5	0.539	13.7	220
01281906	6	0.354	9.0	78	01281606	6	0.413	10.5	116	01281206	6	0.587	14.9	253
01281907	7	0.354	9.0	84	01281607	7	0.413	10.5	128	01281207	7	0.587	14.9	280
▶ 18 AWG (≈ 30/32) • 1.00 mm²					▶ 14 AWG (≈ 46/30) • 2.50 mm²					▶ 10 AWG (≈ 78/28) • 6.00 mm²				
01281802	2	0.280	7.1	48	01281402	2	0.366	9.3	86	01281002	2	0.472	12.0	157
01281803	3	0.291	7.4	56	01281403	3	0.386	9.8	103	01281003	3	0.500	12.7	194
01281804	4	0.315	8.0	65	01281404	4	0.417	10.6	126	01281004	4	0.543	13.8	244
01281805	5	0.339	8.6	78	01281405	5	0.469	11.9	152	01281005	5	0.594	15.1	288
01281806	6	0.366	9.3	88	01281406	6	0.508	12.9	174	Other dimensions and colors are possible on request.				
01281807	7	0.366	9.3	95	01281407	7	0.508	12.9	192					

SILICONE CABLES



SC 113 Silicone insulated hook up wire



SC 113 is a high temperature single conductor silicone wire recommended for use in applications where temperature exceeds the maximum rating of traditional plastic and rubber insulated wires. This cable is a flexible, cost-effective wire. Recommended applications include foundries, steel mills and glass factories, and other high temperature processes and is recommended wherever an overall abrasion resistant covering is required.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to DIN EN 50363-1

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Chem. resistance:	see page N/9
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

Outstanding features:

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

item no.	mm ²	AWG		nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
▶ 0113002...*	0.25	24 (≈ 14/34)		0.067	1.7	3
▶ 0113003...*	0.34	22 (≈ 7/30)		0.071	1.8	4
▶ 0113005...*	0.50	20 (≈ 16/32)		0.075	1.9	5
▶ 0113007...*	0.75	19 (≈ 23/32)		0.087	2.2	7
▶ 0113010...*	1.00	18 (≈ 30/32)		0.091	2.3	9
▶ 0113015...*	1.50	16 (≈ 27-29/30)		0.110	2.8	12
▶ 0113025...*	2.50	14 (≈ 46/30)		0.134	3.4	19
▶ 0113040...*	4.00	12 (≈ 52/28)		0.157	4.0	30
▶ 0113060...*	6.00	10 (≈ 78/28)		0.177	4.5	42
▶ 0113100...*	10.00	8 (≈ 77/26)		0.240	6.1	72
▶ 0113160...*	16.00	6 (≈ 122/26)		0.295	7.5	112
▶ 0113250...*	25.00	4 (≈ 190/26)		0.366	9.3	182
▶ 0113350...*	35.00	2 (≈ 272/26)		0.421	10.7	253
▶ 0113500...*	50.00	1 (≈ 400/26)		0.484	12.3	351
▶ 0113700...*	70.00	2/0 (≈ 543/26)		0.575	14.6	479
▶ 0113950...*	95.00	3/0 (≈ 484/24)		0.689	17.5	646
▶ 0113120...*	120.00	4/0 (≈ 589/24)		0.748	19.0	791
▶ 0113150...*	150.00	250 MCM (≈ 740/24)		0.823	20.9	982
▶ 0113185...*	185.00	350 MCM (≈ 902/24)		0.906	23.0	1200
▶ 0113240...*	240.00	450 MCM (≈ 1220/24)		1.059	26.9	1615
▶ 0113300...*	300.00	550 MCM (≈ 1525/24)		1.181	30.0	2015

Other dimensions and colors are possible on request.

* Color code for single conductors:

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

SILICONE CABLES

SC 123 Silicone insulated strands with fiberglass braid



SC 123 is a high temperature single conductor silicone wire recommended for use in applications where temperature exceeds the maximum rating of traditional plastic and rubber insulated wires. This cable is a flexible, cost-effective wire. Recommended applications include foundries, steel mills and glass factories, and other high temperature processes and is recommended wherever an overall abrasion resistant covering is required.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® E12 acc. to DIN EN 50363-1
Standard color:	nature
Braiding:	fiberglass
Impregnation:	impregnating lacquer

Outstanding features:

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

Technical data:

Nominal voltage:	Uo/U 300/300 V
Testing voltage:	2000 V
Min. bending radius:	7.5 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

item no.	mm ²	AWG	nominal outer- inch	outer- mm	cable weight ≈ lbs/ft
▶ 01230050	0.50	20 (≈ 16/32)	0.094	2.4	7
▶ 01230070	0.75	19 (≈ 23/32)	0.106	2.7	11
▶ 01230100	1.00	18 (≈ 30/32)	0.110	2.8	12
▶ 01230150	1.50	16 (≈ 27-29/30)	0.126	3.2	15
▶ 01230250	2.50	14 (≈ 46/30)	0.154	3.9	24
▶ 01230400	4.00	12 (≈ 52/28)	0.177	4.5	34
▶ 01230600	6.00	10 (≈ 78/28)	0.205	5.2	50
▶ 01231000	10.00	8 (≈ 77/26)	0.287	7.3	91
▶ 01231600	16.00	6 (≈ 122/26)	0.327	8.3	133
▶ 01232500	25.00	4 (≈ 190/26)	0.402	10.2	206
▶ 01233500	35.00	2 (≈ 272/26)	0.449	11.4	271
▶ 01235000	50.00	1 (≈ 400/26)	0.555	14.1	384
▶ 01237000	70.00	2/0 (≈ 543/26)	0.594	15.1	509
▶ 01239500	95.00	3/0 (≈ 484/24)	0.728	18.5	702

Other dimensions and colors are possible on request.

also possible
with extremely notch
resistant sheath

SILICONE CABLES



BiHF-J Silicone insulated strands with Silicone outer jacket



BiHF-J is a multi-conductor, silicone insulated control cable with a reddish brown silicone jacket. Silicone cables are recommended for use where high temperatures rapidly cause other cables to deteriorate. Recommended applications include foundries, steel mills and glass factories and other high temperature processes.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to DIN EN 50363-1
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Jacket material:	Besilen® EM9 acc. to DIN EN 50363-2-1
Jacket color:	reddish brown

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2000 V
Min. bending radius	
<i>fixed installation:</i>	< 12 mm = 3 x O.D. > 12 mm = 4 x O.D.
<i>free movement:</i>	< 12 mm = 5 x O.D. > 12 mm = 6 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Chem. resistance:	see page N/9
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

Outstanding features:

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

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm²				
01410205	2	0.189	4.8	21
01410305	3	0.201	5.1	25
01410405	4	0.217	5.5	30
01410505	5	0.240	6.1	36
01410705	7	0.260	6.6	46
01411205	12	0.350	8.9	76
01411805	18	0.417	10.6	110
01412505	25	0.508	12.9	151
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
01410207	2	0.213	5.4	28
01410307	3	0.224	5.7	33
01410407	4	0.244	6.2	40
01410507	5	0.272	6.9	48
01410607	6	0.303	7.7	58
01410707	7	0.303	7.7	65
01411007	10	0.394	10.0	91
01411207	12	0.406	10.3	106
01411807	18	0.520	13.2	153
01412507	25	0.587	14.9	211

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
01410210	2	0.220	5.6	31
01410310	3	0.232	5.9	38
01410410	4	0.256	6.5	47
01410510	5	0.280	7.1	56
01410610	6	0.315	8.0	68
01410710	7	0.315	8.0	76
01410810	8	0.366	9.3	87
01411210	12	0.421	10.7	124
01411810	18	0.504	12.8	131
01412510	25	0.610	15.5	248
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
01410215	2	0.260	6.6	42
01410315	3	0.276	7.0	54
01410415	4	0.307	7.8	69
01410515	5	0.339	8.6	81
01410615	6	0.370	9.4	95
01410715	7	0.370	9.4	106
01410815	8	0.441	11.2	126
01411215	12	0.504	12.8	178
01411815	18	0.606	15.4	263
01412015	20	0.638	16.2	288
01412515	25	0.732	18.6	362

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
01410225	2	0.315	8.0	67
01410325	3	0.335	8.5	83
01410425	4	0.366	9.3	103
01410525	5	0.417	10.6	129
01410625	6	0.457	11.6	151
01410725	7	0.457	11.6	169
01410925	9	0.598	15.2	224
01411225	12	0.618	15.7	280
01412425	24	0.882	22.4	546

Continued on next page

also possible
with extremely notch
resistant sheath



BiHF-J Silicone insulated strands with Silicone outer jacket



BiHF-J is a multi-conductor, silicone insulated control cable with a reddish brown silicone jacket. Silicone cables are recommended for use where high temperatures rapidly cause other cables to deteriorate. Recommended applications include foundries, steel mills and glass factories and other high temperature processes.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to DIN EN 50363-1
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Jacket material:	Besilen® EM9 acc. to DIN EN 50363-2-1
Jacket color:	reddish brown

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	2000 V
Min. bending radius	
<i>fixed installation:</i>	< 12 mm = 3 x O.D. > 12 mm = 4 x O.D.
<i>free movement:</i>	< 12 mm = 5 x O.D. > 12 mm = 6 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Chem. resistance:	see page N/9
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

Outstanding features:

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

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 12 AWG (≈ 52/28) • 4.00 mm ²					▶ 8 AWG (≈ 77/26) • 10.00 mm ²					▶ 4 AWG (≈ 190/26) • 25.00 mm ²				
01410240	2	0.378	9.6	99	01410461	4	0.661	16.8	374	01410463	4	1.000	25.4	894
01410340	3	0.402	10.2	125	01410561	5	0.736	18.7	456	▶ 2 AWG (≈ 272/26) • 35.00 mm ²				
01410440	4	0.437	11.1	155	▶ 6 AWG (≈ 122/26) • 16.00 mm ²					01410464	4	1.134	28.8	1210
01410540	5	0.492	12.5	190	01410462	4	0.799	20.3	551	Other dimensions and colors are possible on request.				
01410740	7	0.535	13.6	249										
▶ 10 AWG (≈ 78/28) • 6.00 mm ²														
01410260	2	0.425	10.8	135										
01410360	3	0.449	11.4	171										
01410460	4	0.492	12.5	213										
01410560	5	0.543	13.8	257										



BiHF(K)-J Silicone insulated strands with extremely notch resistant Silicone outer jacket



BiHF(K)-J is a multi-conductor, silicone insulated control cable with a black extremely notch resistant silicone jacket. Silicone cables are recommended for use where high temperatures and UV light rapidly cause other cables to deteriorate. Recommended applications include foundries, steel mills and glass factories and other high temperature processes.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® E12 acc. to DIN EN 50363-1
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Jacket material:	Besilen® notch resistant
Jacket color:	black

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:	2000 V
Min. bending radius	
<i>fixed installation:</i>	< 12 mm = 3 x O.D. > 12 mm = 4 x O.D.
<i>free movement:</i>	< 12 mm = 5 x O.D. > 12 mm = 6 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Chem. resistance:	see page N/9
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
01450207	2	0.213	5.4	27
01450307	3	0.224	5.7	33
01450407	4	0.244	6.2	40
01450507	5	0.272	6.9	48
01450707	7	0.303	7.7	65
01451207	12	0.406	10.3	106
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
01450210	2	0.220	5.6	30
01450310	3	0.232	5.9	38
01450410	4	0.256	6.5	46
01450510	5	0.280	7.1	56
01450710	7	0.315	8.0	75
01451210	12	0.421	10.7	124

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
01450215	2	0.260	6.6	43
01450315	3	0.276	7.0	53
01450415	4	0.307	7.8	68
01450515	5	0.339	8.6	81
01450715	7	0.370	9.4	106
01451215	12	0.504	12.8	178
01451815	18	0.606	15.4	263
01452415	24	0.717	18.2	350
01452515	25	0.732	18.6	363
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
01450225	2	0.315	8.0	65
01450325	3	0.335	8.5	82
01450425	4	0.366	9.3	101
01450525	5	0.417	10.6	128
01450625	6	0.457	11.6	150
01450725	7	0.457	11.6	168

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 12 AWG (≈ 52/28) • 4.00 mm²				
01450340	3	0.402	10.2	124
01450440	4	0.437	11.1	153
01450540	5	0.492	12.5	188
01450740	7	0.535	13.6	248
▶ 10 AWG (≈ 78/28) • 6.00 mm²				
01450360	3	0.449	11.4	169
01450460	4	0.492	12.5	212
01450560	5	0.543	13.8	256

Other dimensions and colors are possible on request.

SILICONE CABLES

BIHFP-J Silicone insulated strands with Silicone outer jacket and steel wire armoring for mechanical protection



BIHFP-J is a multi-conductor, silicone insulated control cable with silicone jacket and protective steel braid. Recommended for use where high temperatures, mechanical abuse and abrasion rapidly cause other cables to deteriorate. It is a flexible, high temperature cable where additional mechanical protection is required. Recommended applications include foundries, steel mills and glass factories and other high temperature processes.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® E12 acc. to DIN EN 50363-1
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Jacket material:	Besilen® EM9 acc. to DIN EN 50363-2-1
Jacket color:	reddish brown
Armour:	galvanized steel wire braiding

Technical data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	2000 V
Min. bending radius	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Chem. resistance:	see page N/9
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

Outstanding features:

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

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm ²					▶ 16 AWG (≈ 27-29/30) • 1.50 mm ²					▶ 12 AWG (≈ 52/28) • 4.00 mm ²				
01430207	2	0.252	6.4	46	01430215	2	0.295	7.5	64	01430240	2	0.417	10.6	132
01430307	3	0.264	6.7	53	01430315	3	0.311	7.9	75	01430340	3	0.441	11.2	159
01430407	4	0.283	7.2	60	01430415	4	0.343	8.7	93	01430440	4	0.476	12.1	194
01430507	5	0.311	7.9	73	01430515	5	0.378	9.6	113	01430540	5	0.539	13.7	251
01430607	6	0.343	8.7	89	01430615	6	0.409	10.4	133	01430640	6	0.583	14.8	291
01430707	7	0.343	8.7	91	01430715	7	0.409	10.4	139	01430740	7	0.583	14.8	308
▶ 18 AWG (≈ 30/32) • 1.00 mm ²					▶ 14 AWG (≈ 46/30) • 2.50 mm ²					▶ 10 AWG (≈ 78/28) • 6.00 mm ²				
01430210	2	0.260	6.6	51	01430225	2	0.354	9.0	94	01430260	2	0.465	11.8	172
01430310	3	0.272	6.9	58	01430325	3	0.374	9.5	112	01430360	3	0.496	12.6	224
01430410	4	0.295	7.5	69	01430425	4	0.406	10.3	132	01430460	4	0.539	13.7	269
01430510	5	0.319	8.1	81	01430525	5	0.457	11.6	170	01430560	5	0.606	15.4	333
01430610	6	0.354	9.0	99	01430625	6	0.504	12.8	211	Other dimensions and colors are possible on request.				
01430710	7	0.354	9.0	103	01430725	7	0.504	12.8	222					

SILICONE CABLES

also possible
with extremely notch
resistant sheath



BiHF/Cu/Bi-J Shielded Silicone insulated strands with Silicone outer jacket



BiHF/Cu/Bi-J is a multi-conductor, shielded, silicone insulated control cable with a reddish brown silicone jacket. Silicone cables are recommended for use where high temperatures rapidly cause other cables to deteriorate. Recommended applications include foundries, steel mills and glass factories and other high temperature processes. An overall tinned copper shield is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® EI2 acc. to DIN EN 50363-1
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Inner jacket:	Besilen® EM9 acc. to DIN EN 50363-2-1
Screen:	tinned copper braiding
Jacket material:	Besilen® EM9 acc. to DIN EN 50363-2-1
Jacket color:	reddish brown

Outstanding features:

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

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2000 V conductor/screen 1000 V
Min. bending radius	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Chem. resistance:	see page N/9
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

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item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 20 AWG (≈ 16/32) • 0.50 mm ²					▶ 18 AWG (≈ 30/32) • 1.00 mm ²					▶ 14 AWG (≈ 46/30) • 2.50 mm ²				
01900205	2	0.299	7.6	56	01900210	2	0.331	8.4	72	01900225	2	0.433	11.0	134
01900305	3	0.311	7.9	60	01900310	3	0.343	8.7	80	01900325	3	0.453	11.5	152
01900405	4	0.327	8.3	67	01900410	4	0.366	9.3	91	01900425	4	0.500	12.7	184
01900505	5	0.350	8.9	77	01900510	5	0.398	10.1	106	01900525	5	0.551	14.0	220
01900705	7	0.370	9.4	89	01900710	7	0.433	11.0	135	01900725	7	0.591	15.0	263
01901005	10	0.457	11.6	128	01901010	10	0.551	14.0	190	Other dimensions and colors are possible on request.				
01901205	12	0.469	11.9	142	01901210	12	0.555	14.1	208					
01901605	16	0.531	13.5	179	01901610	16	0.634	16.1	271					
01901805	18	0.551	14.0	196	01901810	18	0.661	16.8	301					
▶ 19 AWG (≈ 23/32) • 0.75 mm ²					▶ 16 AWG (≈ 27-29/30) • 1.50 mm ²									
01900207	2	0.323	8.2	67	01900215	2	0.370	9.4	92					
01900307	3	0.335	8.5	73	01900315	3	0.398	10.1	111					
01900407	4	0.354	9.0	83	01900415	4	0.425	10.8	128					
01900507	5	0.382	9.7	93	01900515	5	0.457	11.6	147					
01900707	7	0.421	10.7	122	01900715	7	0.504	12.8	182					
01901007	10	0.528	13.4	171	01901015	10	0.646	16.4	273					
01901207	12	0.539	13.7	189	01901215	12	0.661	16.8	300					
01901607	16	0.587	14.9	224	01901615	16	0.732	18.6	362					
01901807	18	0.642	16.3	269	01901815	18	0.764	19.4	404					

also possible
without
inner sheath!

SILICONE CABLES

EWKF

BiHF/Cu/Bi(K)-J Shielded Silicone insulated strands with extremely notch resistant Silicone outer jacket



BiHF/Cu/Bi(K)-J is a multi-conductor, shielded, silicone insulated control cable with a black extremely notch resistant silicone jacket. Silicone cables are recommended for use where high temperatures and UV light rapidly cause other cables to deteriorate. Recommended applications include foundries, steel mills and glass factories and other high temperature processes. An overall tinned copper shield is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	Besilen® E12 acc. to DIN EN 50363-1
Color code:	up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire
Stranding:	in layers
Inner jacket:	Besilen® EM9 acc. to DIN EN 50363-2-1
Screen:	tinned copper braiding
Jacket material:	Besilen® notch resistant
Jacket color:	black

Outstanding features:

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

Technical data:

Nominal voltage:	U ₀ /U 300/500 V
Testing voltage:	2000 V conductor/screen 1000 V
Min. bending radius	
<i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Radiation resistance:	2 x 10 ⁷ cJ/kg
Temperature range	
<i>static:</i>	-40/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosivity:	in compliance with IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases
Chem. resistance:	see page N/9
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm²				
01950207	2	0.323	8.2	67
01950307	3	0.335	8.5	73
01950407	4	0.354	9.0	83
01950507	5	0.382	9.7	94
01950707	7	0.421	10.7	124
01951207	12	0.539	13.7	192
▶ 18 AWG (≈ 30/32) • 1.00 mm²				
01950210	2	0.331	8.4	73
01950310	3	0.343	8.7	81
01950410	4	0.366	9.3	92
01950510	5	0.398	10.1	107
01950710	7	0.433	11.0	136
01951210	12	0.555	14.1	211

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm²				
01950215	2	0.370	9.4	93
01950315	3	0.394	10.0	112
01950415	4	0.425	10.8	130
01950515	5	0.457	11.6	149
01950715	7	0.504	12.8	184
01951215	12	0.661	16.8	304
01951815	18	0.764	19.4	410
01952415	24	0.882	22.4	528
01952515	25	0.898	22.8	550
▶ 14 AWG (≈ 46/30) • 2.50 mm²				
01950225	2	0.433	11.0	135
01950325	3	0.453	11.5	153
01950425	4	0.500	12.7	185
01950525	5	0.543	13.8	215
01950625	6	0.591	15.0	249
01950725	7	0.591	15.0	267

item no.	no. of conductors incl. ground	nominal outer-Ø inch	mm	cable weight ≈ lbs/mft
▶ 12 AWG (≈ 52/28) • 4.00 mm²				
01950340	3	0.535	13.6	203
01950440	4	0.571	14.5	253
01950540	5	0.626	15.9	305
01950740	7	0.685	17.4	385
▶ 10 AWG (≈ 78/28) • 6.00 mm²				
01950360	3	0.618	15.7	300
01950460	4	0.669	17.0	364
01950560	5	0.732	18.6	432

Other dimensions and colors are possible on request.

SILICONE CABLES



S 180 HT Continuous flex control cable with Silicone outer jacket for cable tracks



S 180 HT is a heavy duty, multiple-conductor, continuous flex cable with tear resistant silicone jacket. The S 180 HT is recommended for use in continuous flex applications where high temperatures, UV light and mechanical abuse rapidly cause other cables to deteriorate. The S 180 HT is a continuous flex, cost effective, high temperature cable. Recommended applications include foundries, steel mills, glass factories, baking equipment, burners, heating and lighting and injection molding machinery. This cable can also be used anywhere salt water is present and high temperature processes are utilized.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6
Insulation:	FEP
Color code:	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	tape
Jacket material:	special Besilen®
Jacket color:	gray

Technical data:

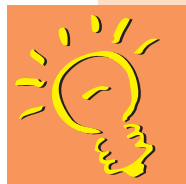
Nominal voltage:	U ₀ /U 0.6/1 kV
Testing voltage U:	4000 V acc. to EN 50264
Min. bending radius continuous flexing:	10 x O.D.
Temperature range	
static:	-25/+180 °C
flexing:	-25/+180 °C
short-time use:	+200 °C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

Outstanding features:

- extreme temperature resistance
- high notch resistance
- very good flexibility

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 84/34) • 1.50 mm ²					▶ 12 AWG (≈ 224/34) • 4.00 mm ²					▶ 8 AWG (≈ 320/32) • 10.00 mm ²				
31800315	3	0.303	7.7	63	31800440	4	0.476	12.1	178	31800461	4	0.669	17.0	409
31800415	4	0.327	8.3	78	31800540	5	0.528	13.4	224	31800561	5	0.744	18.9	501
31800515	5	0.362	9.2	99	31800740	7	0.626	15.9	315	▶ 6 AWG (≈ 504/32) • 16.00 mm ²				
31800715	7	0.417	10.6	134	▶ 10 AWG (≈ 186/32) • 6.00 mm ²					31800462	4	0.815	20.7	613
▶ 14 AWG (≈ 140/34) • 2.50 mm ²					31800460	4	0.575	14.6	274	31800562	5	0.913	23.2	770
31800325	3	0.370	9.4	97	31800560	5	0.646	16.4	333	▶ 4 AWG (≈ 760/32) • 25.00 mm ²				
31800425	4	0.398	10.1	119	31800760	7	0.764	19.4	468	31800463	4	0.945	24.0	882
31800525	5	0.453	11.5	153	▶ 2 AWG (≈ 1083/32) • 35.00 mm ²					▶ 2 AWG (≈ 1083/32) • 35.00 mm ²				
31800725	7	0.531	13.5	215						31800464	4	1.110	28.2	1210

Other dimensions and colors are possible on request.



Application:
for use in cable tracks with extremely high ambient temperatures.
For example:
Steel industry.

SILICONE CABLES

S 180 C HT Continuous flex shielded control cable with Silicone outer jacke for cable tracks



S 180 C HT is a heavy duty, multiple-conductor, shielded, continuous flex cable with tear resistant silicone jacket. The S 180 C HT is recommended for use in continuous flex applications where high temperatures, UV light and mechanical abuse rapidly cause other cables to deteriorate. The S 180 C HT is a continuous flex, cost effective, high temperature cable. Recommended applications include foundries, steel mills, glass factories, baking equipment, burners, heating and lighting and injection molding machinery. This cable can also be used anywhere salt water is present and high temperature processes are utilized. An overall tinned copper shield is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6
Insulation:	FEP
Color code:	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	tape
Screen:	tinned copper braiding
Jacket material:	special Besilen®
Jacket color:	gray

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Testing voltage U:	4000 V acc. to EN 50264
Min. bending radius continuous flexing:	15 x O.D.
Temperature range	
<i>static:</i>	-25/+180 °C
<i>flexing:</i>	-25/+180 °C
<i>short-time use:</i>	+200 °C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

Outstanding features:

- very good EMC characteristics
- extreme temperature resistance
- high notch resistance
- very good flexibility

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 84/34) • 1.50 mm²				
31850315	3	0.319	8.1	74
31850415	4	0.350	8.9	92
31850515	5	0.378	9.6	112
31850715	7	0.449	11.4	161
▶ 14 AWG (≈ 140/34) • 2.50 mm²				
31850325	3	0.386	9.8	110
31850425	4	0.437	11.1	149
31850525	5	0.476	12.1	180
31850725	7	0.551	14.0	245

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 12 AWG (≈ 224/34) • 4.00 mm²				
31850440	4	0.500	12.7	204
31850540	5	0.551	14.0	254
31850740	7	0.657	16.7	364
▶ 10 AWG (≈ 186/32) • 6.00 mm²				
31850460	4	0.598	15.2	307
31850560	5	0.677	17.2	382
31850760	7	0.795	20.2	524

item no.	no. of conductors incl. ground	nominal outer-Ø inch	nominal outer-Ø mm	cable weight ≈ lbs/mft
▶ 8 AWG (≈ 320/32) • 10.00 mm²				
31850461	4	0.701	17.8	459
31850561	5	0.776	19.7	556
▶ 6 AWG (≈ 504/32) • 16.00 mm²				
31850462	4	0.846	21.5	677
31850562	5	0.945	24.0	844
▶ 4 AWG (≈ 760/32) • 25.00 mm²				
31850463	4	0.992	25.2	970
▶ 2 AWG (≈ 1083/32) • 35.00 mm²				
31850464	4	1.142	29.0	1300

Other dimensions and colors are possible on request.



Application:
for use in cable tracks with extremely high ambient temperatures.
For example:
Steel industry.

up to 1.8/3.0 kV

SILICONE CABLES



B 107 Silicone insulated strands



Marking for B 107 01071000:

SAB BRÖCKSKES · D-VIERSEN · B 107 · U₀/U 1,8/3 kV

The current and earth connection with silicone insulated copper round strands B 107 is used 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.

Construction:

Conductor:	bare copper strands, extra fine wires
Insulation:	Besilen® EI2 acc. to DIN EN 50363-1
Color:	translucent

Outstanding features:

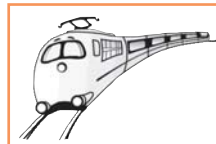
- halogen-free
- heat resistant
- flexible at low temperatures
- flame retardant and self-extinguishing
- weather resistant

Technical data:

Nominal voltage	
12 - 10 AWG:	U ₀ /U 1.5/1,5 kV
from 8 AWG:	U ₀ /U 1.8/3.0 kV
Testing voltage	
12 - 10 AWG:	4000 V
from 8 AWG:	6000 V
Min. bending radius:	5 x O.D.
Temperature range	
static:	-50/+180 °C
flexing:	-25/+180 °C
short-time use:	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosiveness of Burnindcteristics:	IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 – no development of corrosive conflagration gas
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

item no.	mm ²	AWG	nominal outer- \emptyset inch	mm	cable weight ≈ lbs/mft
▶ 01070400	4.00	12 (≈ 224/34)	0.209	5.3	36
▶ 01070600	6.00	10 (≈ 186/32)	0.224	5.7	49
▶ 01071000	10.00	8 (≈ 320/32)	0.354	9.0	77
▶ 01071600	16.00	6 (≈ 504/32)	0.366	9.3	130
▶ 01072500	25.00	4 (≈ 760/32)	0.472	12.0	222
▶ 01073500	35.00	2 (≈ 1083/32)	0.543	13.8	284
▶ 01075000	50.00	1 (≈ 703/28)	0.618	15.7	387
▶ 01077000	70.00	2/0 (≈ 988/28)	0.697	17.7	518
▶ 01079500	95.00	3/0 (≈ 1340/28)	0.740	18.8	676
▶ 01071200	120.00	4/0 (≈ 1680/28)	0.866	22.0	845
▶ 01071500	150.00	250 MCM (≈ 2122/28)	0.933	23.7	1036
▶ 01071850	185.00	350 MCM (≈ 1472/26)	0.996	25.3	1266

Other dimensions and colors are possible on request.



**Especially
for use in
rail vehicles**



B 108 Shielded Silicone insulated strands



Marking for B 108 01081000: SAB BRÖCKSKES · D-VIERSEN · B 108 · Uo/U 1,8/3 kV

The current and earth connection with silicone insulated copper round strands B 108 is used 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.

Construction:

Conductor:	bare copper strands, extra fine wires
Screen:	tinned copper braiding
Insulation:	Besilen® EI2 acc. to DIN EN 50363-1
Color:	translucent

Outstanding features:

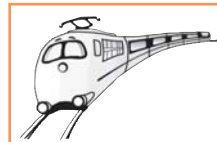
- halogen-free
- heat resistant
- flexible at low temperatures
- flame retardant and self-extinguishing
- weather resistant
- dimensionally stable construction

Technical data:

Nominal voltage	
12 - 10 AWG:	Uo/U 1.5/1,5 kV
from 8 AWG:	Uo/U 1.8/3.0 kV
Testing voltage	
12 - 10 AWG:	4000 V
from 8 AWG:	6000 V
Min. bending radius:	5 x O.D.
Temperature range	
static:	-50/+180 °C
flexing:	-25/+180 °C
short-time use:	+250 °C
Zero halogen:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2
Corrosiveness of Burnindcteristics:	IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 – no development of corrosive conflagration gase
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/28

item no.	mm ²	AWG	nominal inch	outer- \emptyset mm	cable weight ≈ lbs/mft
▶ 01080400	4.00	12 (≈ 224/34)	0.224	5.7	45
▶ 01080600	6.00	10 (≈ 186/32)	0.240	6.1	58
▶ 01081000	10.00	8 (≈ 320/32)	0.370	9.4	110
▶ 01081600	16.00	6 (≈ 504/32)	0.382	9.7	144
▶ 01082500	25.00	4 (≈ 760/32)	0.496	12.6	236
▶ 01083500	35.00	2 (≈ 1083/32)	0.567	14.4	314
▶ 01085000	50.00	1 (≈ 703/28)	0.642	16.3	423
▶ 01087000	70.00	2/0 (≈ 988/28)	0.728	18.5	573
▶ 01089500	95.00	3/0 (≈ 1340/28)	0.772	19.6	737
▶ 01081200	120.00	4/0 (≈ 1680/28)	0.898	22.8	916
▶ 01081500	150.00	250 MCM (≈ 2122/28)	0.965	24.5	1118

Other dimensions and colors are possible on request.



**Especially
for use in
rail vehicles**