SERVO MOTOR
CABLES

G

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SPECIAL CABLES
SAB North America

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SAB Servo cables are particularly applicable on Siemens and Indramat drives and controls.

Applications

Applications motor connection cables for pulse converter fed three-phase drives

SL 834 C
SL 835 C
SL 851 C Exploration
SL 863 C
SL 841 C

These cables are suitable for the fixed installation and flexible use e.g. in machine and industrial plant construction with average mechanical demand in dry, damp and wet conditions

Applications of motor, feedback and transmission cable

SL 893 C
SL 842 C
SL 839 C
SL 843 C

Feedback cables are used for controlling motor speed and for giving feedback values. Transmission cables produce transmit control pulses for positioning and procedure characteristics. Exemplary applications: Highly flexible, mobile connection cables for e.g. speedo, brake, temperature control in motors, for continuously flexible applications in automation technology, control and production engineering, in cable tracks on wood-working machines, machine and industrial plant construction, even with high mechanical demands and in dry, damp and wet conditions, as well as at low temperatures flexible connection cables e.g. for speedo, brake, temperature control in motors, for continuously flexible applications in automation technology, control and product engineering.

Applications combined motor connection cables

SL 875 C
SL 891 C

These flexible motor connection cables are used for the power supply of motors. Depending on the construction type supply and control conductors are possible. The cables are suitable for high mechanical demands in dry, damp and wet conditions as well as at low temperatures. Exemplary applications: Applications in industries with intelligent servo drives, e.g. automation technologies, motive power, control and manufacturing engineering, in handling systems, car manufacturing industry, in cable tracks

DESINA - DistributEd and Standardized INstAllation technology

DESINA is an extensive concept for standardizing and distributing fluid and electric installations of machines and plants. A co-operation of machine construction, car manufacturing and supply industries has, furthermore, set up the specification of necessary components.

DESINA applies already existing solutions such as open bus systems, industrial standards for connectors, etc. By standardizing components, interfaces and connecting systems, e.g. an optical fiber copper hybrid cable, most varying systems can be realized on a physical basis.

The following jacket colors are defined as a function code:

	orange	RAL 2003:	servo cable, shielded
	green	RAL 6018:	measuring systems, shielded
	violet	RAL 4001:	field bus, hybrid cables
	yellow	RAL 1021:	sensor/actuator cable, unshielded 4 x 0.34 mm^2 copper
	black	RAL 9005:	power cable, unshielded
	gray	RAL 7001:	24 V control cable, unshielded

The jackets of all cables are to be resistant against industrial lubricants.

Selection Table

	Cable Type	G/5 SL 863 C	G/6 SL 834 C	G/7 SL 835 C	G/8 SL 851C Exploration	G/9 SL 875 C	G/10 SL 891 C	G/11 SL 841 C	G/12 SL 893 C	G/13 SL 842 C	G/14 SL 839 C	G/15 SL 843 C
Application	Feedback and encoder cable								●	●		
	Transmission cable										●	●
	Motor connection cable	●	●	●	●	●	●	●				
	Shielded	●	●	●	●	●	●	●	●	●	●	●
Temperature range fixed laying*	+90°C		●	●	●	●	●	●	●	●		●
	+70°C	●	●	●	●	●	●	●	●	●	●	●
	-30°C		●	●	●	●	●	●	●	●		●
	-40°C		●	●	●	●	●	●	●	●		●
	-50°C		●	●	●	●	●	●	●	●		●
Voltage	Peak operating voltage max. 30 V										●	
	Peak operating voltage max. 350 V	●					●	●				●
	Peak operating voltage max. 500 V					●				●		
	Nominal voltage Uo/U 0.6/1 kV	●	●	●	●	●	●	●				
	Voltage UL 30 V								●		●	
	Voltage UL 300 V							●	●	●		●
	Voltage UL 1000 V	●	●	●	●	●	●					
	Voltage cUL 1000 V			●	●		●					
	Voltage CSA 300 V					●		●		●		●
	Voltage CSA 1000 V		●			●						
	Testing voltage 600 V								●		●	
	Testing voltage 2000 V	●					●	●	●	●		●
	Testing voltage 3000 V					●						
	Testing voltage 4000 V	●	●	●	●	●	●	●				
Standards and approvals	Fire performance: Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	●	●	●	●	●	●	●	●	●		●
	Fire performance UL FT1	●					●	●		●		●
	Fire performance cUL FT1, FT2			●	●				●			
	Fire performance CSA FT1											●
	Fire performance CSA FT1, FT2		●			●		●		●		
	UL recognized	●	●	●	●	●	●	●	●	●	●	●
	cUL recognized			●	●		●		●			
	CSA approved		●			●		●		●		●
	DESINA® colors		●			●	●	●	●	●	●	●
Characteristics	Halogen-free		●	●	●	●	●	●	●	●	●	●
	PWIS-free (PWIS = paint wetting impairment substances)		●	●		●	●	●	●	●	●	●
	Low capacity construction	●	●	●		●	●		●			
	Outer jacket surface: low adhesion		●	●		●	●	●	●	●	●	●
	Very good oil resistance acc. to EN 50363-10-2 + VDE 0207-363-10-2		●	●	●	●	●	●	●	●	●	●
	Very good oil resistance acc. to EN 50363-4-1 + VDE 0207-363-4-1	●										
	Oil rating 60°C acc. to UL 758										●	
	Good resistance against acids, alkalines, solvents, hydraulic liquids, etc.		●	●		●	●	●	●	●	●	●
	Very good weather resistance			●	●	●	●		●		●	
	MUD resistance acc. to IEC 60092-360, IEC 61892-4, NEK TS 606				●							
	Sunlight resistance acc. to HD 605				●							
	Ozone resistance acc. to DIN EN 50396				●							
	Saltwater resistance acc. to UL 1309				●							

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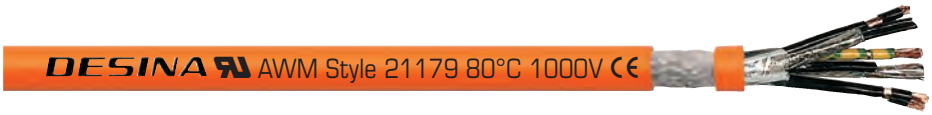
SL 863 C

Stationary PVC motor connection cable with black power conductors, a shielded control pair and overall tinned copper shield, low capacitance 0.6/1 kV



Marking for SL 863 C 8631415:
SAB BRÖCKSKES · D-VIERSEN · 8631415 SL 863 C 4 x 1.50 mm² + (2 x 1.50 mm²) DESINA AWM Style 21179 80°C 1000V CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	power supply conductors: black conductors with printing conductor 1: U/L1/C/L+ conductor 2: V/L2 conductor 3: W/L3/D/L- and a green/yellow ground control conductors: with numbers 5+6
Stranding:	control conductors twisted to pairs
Shielding:	tinned copper braiding
Wrapping:	PETP foil
Stranding:	shielded control pairs and power supply conductors twisted together in layers
Wrapping:	PETP foil
Shielding:	tinned copper braiding
Jacket material:	PVC
Jacket color:	orange (RAL 2003)

Outstanding features:

- **UL recognized**
- **Very good EMC characteristics**
- **Low capacitance**
- **Very good stripping**
- **Very good oil resistance**

Technical data:

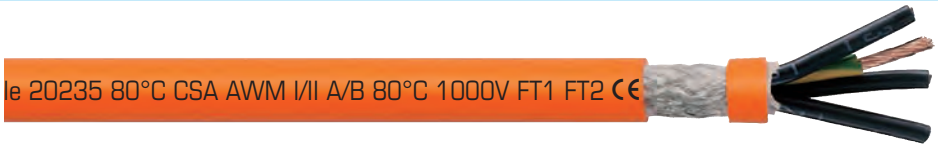
Peak operating voltage:	control conductors: max. 350 V
Nominal voltage:	power supply conductors: Uo/U 0.6/1 kV
Voltage UL:	power supply conductors: 1000 V
Voltage UL:	control conductors: 1000 V
Testing voltage: power *supply conductors:* *control conductors:*	 conductor/conductor: 4000 V conductor/shielding: 4000 V conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius: *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/CSA:** up to +80°C -30/+70°C 0/+70°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; UL FT1
Oil resistance:	very good - TM5 acc. to EN 50363-4-1 + VDE 0207-363-4-1
Approvals:	UR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	power supply conductors	control pair individually shielded	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 8631425	14 AWG/ 4c	16 AWG/ 1pr	0.480	12.2	172
▶ 8631440	12 AWG/ 4c	16 AWG/ 1pr	0.539	13.7	218
▶ 8631460	10 AWG/ 4c	16 AWG/ 1pr	0.638	16.2	317

Other dimensions and colors are available on request

SL 834 C

Continuous flex polyurethane motor connection cable with black numbered conductors and overall tinned copper shield, low capacitance 0.6/1 kV



Marking for SL 834 C 8341604:
SAB BRÖCKSKES · D-VIERSEN · 8340415 4 x 1.5 mm² SL 834 C 16 AWG/4c 1000V 8341604 DESINA AWM Style 20235 80°C CSA AWM I/II A/B 80°C 1000V FT1 FT2

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	special polymer
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground
Stranding:	in layers
Wrapping:	non-woven tape
Shielding:	tinned copper braiding
Jacket material:	PUR
Jacket color:	orange (RAL 2003)

Outstanding features:

- **UL recognized, CSA approval**
- **Low capacitance**
- **Very good EMC characteristics**
- **Halogen-free**
- **Very high flexibility**
- **Suitable for cable tracks**
- **Very good oil resistance**
- **Very long service life**
- **Adhesion-free installation**
- **Free from paint wetting impairment substances** (PWIS-free)
- **Flexible at low temperatures**
- **DESINA® colors** (see page G/3)

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Voltage UL/CSA:	1000 V
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius: *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Radiation resistance:	5 x 10^7 cJ/kg
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/CSA:** up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; CSA FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good - against acids, akalines, solvents, hydraulic liquids, etc.
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

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DESINA®

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
16 AWG (≈ 84/34) • 1.50 mm²				
8341604	4	0.354	9.0	85
14 AWG (≈ 140/34) • 2.50 mm²				
8341404	4	0.425	10.8	131
12 AWG (≈ 224/34) • 4.00 mm²				
8341204	4	0.488	12.4	181
10 AWG (≈ 186/32) • 6.00 mm²				
8341004	4	0.606	15.4	267
8 AWG (≈ 320/32) • 10.00 mm²				
8340804	4	0.693	17.6	406
6 AWG (≈ 504/32) • 16.00 mm²				
8340604	4	0.894	22.7	640
4 AWG (≈ 760/32) • 25.00 mm²				
8340404	4	1.008	25.6	875
2 AWG (≈ 1083/32) • 35.00 mm²				
8340204	4	1.138	28.9	1176
1 AWG (≈ 703/28) • 50.00 mm²				
8340104	4	1.358	34.5	1670

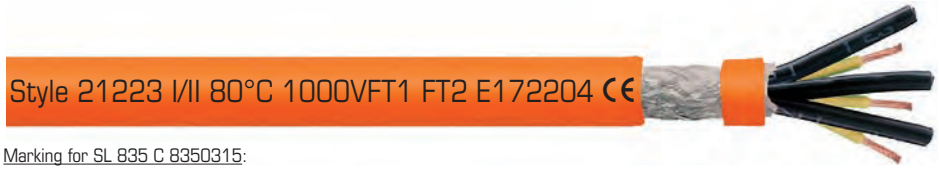
Other dimensions and colors are available on request

low capacity for your frequency controlled drives and motors

Note: DESINA® is a registered trademark of the German Machine Tool Builders' Association.

SL 835 C

Continuous flex polyurethane jacketed motor connection cable with black conductors and overall tinned copper shield, low capacitance 0.6/1 kV



Marking for SL 835 C 8350315:
SAB BRÖCKSKES · D-VIERSEN · 8350315 SL 835 C 3 x 1.5 mm² + 3 G0.25mm² c UL us AWM Style 21223 I/II A/B 80°C 1000V FT1 FT2 E172204

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and 3 green/yellow grounds
Stranding:	in layers
Wrapping:	non-woven tape
Shielding:	alu. foil and tinned copper braiding
Jacket material:	PUR
Jacket color:	orange (RAL 2003)

Outstanding features:

- **UL/cUL recognized**
- **Low capacitance**
- **Very good EMC characteristics**
- **Halogen-free**
- **Very high flexibility**
- **Suitable for cable tracks**
- **Very good oil resistance**
- **Very long service life**
- **Adhesion-free installation**
- **Free from paint wetting impairment substances** (PWIS-free)

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Voltage UL/cUL:	1000 V
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius: *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/cUL:** up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; cUL FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good - against acids, alakines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, cURus AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	dimensions	ground wires n x AWG	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
8350315	16 AWG/3c	3G x 24 AWG	0.362	9.2	81
8350325	14 AWG/3c	3G x 20 AWG	0.453	11.5	136
8350340	12 AWG/3c	3G x 19 AWG	0.500	12.7	177
8350360	10 AWG/3c	3G x 18 AWG	0.559	14.2	229
8350370	8 AWG/3c	3G x 16 AWG	0.650	16.5	351
8350380	6 AWG/3c	3G x 14 AWG	0.780	19.8	519
8350390	4 AWG/3c	3G x 12 AWG	0.898	22.8	736
8350395	2 AWG/3c	3G x 10 AWG	1.039	26.4	1025
8350396	1 AWG/3c	3G x 8 AWG	1.209	30.7	1465

Other dimensions and colors are available on request

EMC optimized by low capacity and ground symmetrical cable construction

high symmetry and low coupling for low capacity power transmission at frequency converters

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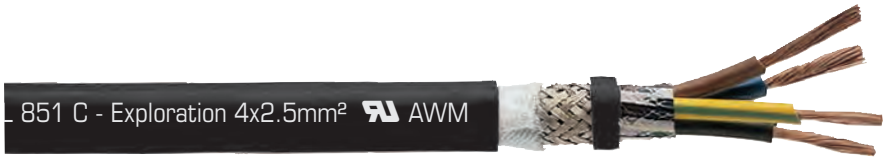
SL 851 C - Exploration

Continuous flex polyurethane shielded motor connection cable with colored conductors foor rough environments, 0.6/1 kV



Marking for SL 851 C - Exploration 8510425:

SAB BRÖCKSKES · D-VIERSEN · SL 851 C - Exploration 4x2.5mm² AWM Style 21223 80°C 1000V cULus AWM I/II A/B 80°C 1000V FT1 FT2 CE

Application: Motor connection cable for the electrical hook-up of drilling equipment, compressors, generators as well as pumps in rough environments.

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 5
Insulation:	SABIX®
Color code:	HD 308 (VDE 0293-308), see below and a green/yellow ground
Shielding:	double shield: alu. foil and tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- **UL/cUL recognized**
- **Extremely large temperature range**
- **Low surface transfer impedance**
- **Low mutual capacitance**
- **Very good oil resistance**
- **Very good EMC characteristics**
- **Halogen-free**

Technical data:

Nominal voltage:	Uo/U 0.6/1 kV
Voltage UL/cUL:	1000 V
Maximum operating voltage:	*in three-phase current and single phase current operation:* Uo/U 0.7/1.2 kV *in D.C. current operation:* Uo/U 0,9/1.8 kV *peak value of AC voltage:* U^ 1.7 kV
Testing voltage:	conductor/conductor: 4000 V conductor/shielding: 4000 V
Min. bending radius:	**≤ 12 mm** / **> 12 mm up to ≤ 20 mm** / **> 20 mm** *fixed installation:* 5 x O.D. / 7.5 x O.D / 10 x O.D *flexible application:* 10 x O.D / 15 x O.D / 20 x O.D
Temperature range:	**DIN VDE** **UL/cUL:** up to +80°C *static:* -50/+90°C *flexible*:* -45/+90°C
Cold resistance:	-50°C acc. to DIN EN 60811-506
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; cUL FT1 FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
MUD resistance:	very good - acc. to IEC 60992-360, IEC 61892-4, NEK TS 606
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc.to UL 1309
Approvals:	UR AWM, cUR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30 *protected installation

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
14 AWG • 2.50 mm²				
8510425	4	0.394	10.0	113
12 AWG • 4.00 mm²				
8510440	4	0.484	12.3	178
10 AWG • 6.00 mm²				
8510460	4	0.551	14.0	259

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
8 AWG • 10.00 mm²				
8510470	4	0.669	17.0	425
6 AWG • 16.00 mm²				
8510480	4	0.870	22.1	626
4 AWG • 25.00 mm²				
8510490	4	1.020	25.9	474

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
2 AWG • 35.00 mm²				
8510495	4	1.173	29.8	1216
1 AWG • 50.00 mm²				
8510496	4	1.311	33.3	1670
2/0 AWG • 70.00 mm²				
8510498	4	1.563	39.7	2319

Other dimensions and colors are available on request

HD 308 color code: up to 5 conductors

2c: blue, brown
3c: green/yellow, blue, brown
4c: green/yellow, brown, black, gray
5c: green/yellow, blue, brown, black, gray

small shielding capacitances for your frequency controlled drives and motors (VFD) U^ 1.7 kV

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SL 875 C

Continuous flex TPE insulated and polyurethane jacketed hybrid motor connection cable with power conductors and control/feedback pairs and overall tinned copper shield, 0.6/1 kV

Marking for SL 875 C 8750105:
SAB BRÖCKSKES · D-VIERSEN · 8750105 SL 875 C 4G1.5 mm² (1000V) + (2 x 1.0 mm²)C (1000V) + (2 x AWG 22)C (1000V) DESINA AWM Style 20910 80°C CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6 < 20 AWG with reference to VDE 0812
Insulation:	special polymer
Color code: *power supply conductors:*	**item 87501..** black conductors with printing conductor 1: U/L1/C/L+ conductor 2: V/L2 conductor 3: W/L3/D/L- and a green/yellow ground
control feedback pairs:	pair #1: black numbered 5 & 6 pair #2: white/blue
power supply conductors:	**item 87505..** black, blue, brown, green/yellow
control pair:	white-blue/white-green
feedback pairs:	white-green/brown-green + gray-pink, yellow-violet
Stranding:	control conductors pairwise, **item 87501..** feedback conductors pairwise **item 87505..** feedback conductors 0.09 mm² pairwise pairs with conductors 0.24 mm² in layers optimally stranded
Wrapping:	non-woven tape resp. foil
Shielding:	elements with tinned copper braid **item 87501..** feedback conductors additional alu. foil
Wrapping:	non-woven tape resp. foil
Stranding:	shielded elements and supply conductors in layers optimally stranded
Wrapping:	non-woven tape
Jacket material:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	orange (RAL 2003)

Outstanding features:

- **Used as all-in-one cable solution for motor feedback systems**
- **Low capacitance**
- **Very good EMC characteristics**
- **Long service life**
- **Adhesion-free installation**
- **Suitable for cable tracks**
- **Halogen-free**
- **Free from paint wetting impairment substances** (PWIS-free)
- **Flexible at low temperatures**
- **DESINA® colors** (see page G/3)

Technical data:

Peak operating voltage:	**DIN VDE:** control conductors + feedback conductors: max. 500 V
Nominal voltage:	**DIN VDE:** power supply conductors: Uo/U 0.6/1 kV
Voltage UL/CSA:	**UL:** 1000 V **CSA:** ≥ 20 AWG 1000 V < 20 AWG 300 V
Testing voltage: *power supply conductors & control conductors:*	conductor/conductor: 4000 V conductor/shielding: 4000 V
feedback conductors:	conductor/conductor: 3000 V conductor/shielding: 3000 V
Min. bending radius: *fixed installation:* *free movement:* *for continuous flexing:*	5 x O.D. 10 x O.D. 12 x O.D.
Radiation resistance:	5 x 10^7 cJ/kg
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/CSA:** up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; CSA FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good - against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	power supply conductors	control pairs individually shielded	feedback pairs individually shielded	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
acc. to SICK HIPERFACE DSL®						
▶ 8750101	20 AWG/4c	(22 AWG/2pr)C	(26 AWG/2pr)C	0.386	9.8	88
▶ 8750102	19 AWG/4c	(22 AWG/2pr)C	(26 AWG/2pr)C	0.394	10.0	93
▶ 8750103	18 AWG/4c	(19 AWG/2pr)C	(22 AWG/2pr)C	0.465	11.8	134
▶ 8750104	16 AWG/4c	(19 AWG/2pr)C	(22 AWG/2pr)C	0.496	12.6	155
▶ 8750105	16 AWG/4c	(18 AWG/2pr)C	(22 AWG/2pr)C	0.504	12.8	159
▶ 8750106	14 AWG/4c	(18 AWG/2pr)C	(22 AWG/2pr)C	0.547	13.9	192
▶ 8750107	12 AWG/4c	(18 AWG/2pr)C	(22 AWG/2pr)C	0.606	15.4	253
▶ 8750108	10 AWG/4c	(18 AWG/2pr)C	(22 AWG/2pr)C	0.713	18.1	349
▶ 8750109	8 AWG/4c	(16 AWG/2pr)C	(22 AWG/2pr)C	0.787	20.0	480
▶ 8750110	6 AWG/4c	(16 AWG/2pr)C	(22 AWG/2pr)C	0.961	24.4	709
acc. to HEIDENHAIN HMC®						
▶ 8750501	19 AWG / 4c	(22 AWG/2pr)C	(24 AWG/2pr) + 28 AWG / 2pr)C	0.425	10.8	110
▶ 8750502	16 AWG / 4c	(19 AWG/2pr)C	(24 AWG/2pr + 28 AWG/2pr)C	0.476	12.1	147
▶ 8750503	14 AWG / 4c	(18 AWG/2pr)C	(24 AWG/2c + 28 AWG/2pr)C	0.539	13.7	189
▶ 8750504	12 AWG / 4c	(18 AWG/2pr)C	(24 AWG/2c + 28 AWG/2pr)C	0.606	15.4	241

Other dimensions and colors are available on request
pair in ( ) denotes shielded. C = tinned copper braid.

all-in-one cable solution in motor feedback systems

Note: SICK HIPERFACE DSL® is a registered trademark of SICK AG. It is only used for comparative purposes.
HEIDENHAIN HMC6® is a registered trademark of Dr. Johannes Heidenhain GmbH.
It is only used for comparative purposes.

SPECIAL CABLES SAB North America
www.sabcable.com
866-722-2974 ■ info@sabcable.com

SL 891 C

Continuous flex polyurethane motor connection cable with black power conductors, a control pair and overall tinned copper shield, low capacitance 0.6/1 kV

Marking for SL 891 C 8911415:
SAB BRÖCKSKES · D-VIERSEN · 8911415 SL 891 C 4 x 1.50 mm² + (2 x 1.50 mm²) c AWM Style 21223 I/II A/B 80°C 1000V FT1 FT2 E172204

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Color code: *power supply conductors:*	Bosch Rexroth: black numbered conductors, 1-3 and a green/yellow ground
control conductors:	black numbered conductors, 5-8
power supply conductors:	Siemens: black conductors with printing conductor 1: U/L1/C/L+, conductor 2: V/L2, conductor 3: W/L3/D/L-, and a green/yellow ground
control conductors:	black conductor with printing, BR1, white conductor with printing, BR2
Stranding:	control conductors twisted to pairs
Wrapping:	control conductors with alu. foil
Shielding:	control conductors with tinned copper braiding
Wrapping:	control conductors with foil
Stranding:	shielded control pairs and power supply conductors twisted together with fillers in layers
Wrapping:	non-woven tape
Overall Shielding:	tinned copper braiding
Jacket material:	PUR, TMPU, acc. to EN50363-10-2+ VDE 0207-363-10-2 with matte surface
Jacket color:	orange (RAL 2003)

Outstanding features:

- **Low capacitance**
- **UL recognized**
- **Very good EMC characteristics**
- **Long service life**
- **Adhesion-free installation**
- **High flexibility**
- **Suitable for cable tracks**
- **Halogen-free**
- **Free from paint wetting impairment substances** (PWIS-free)
- **Very good oil resistance**
- **Flexible at low temperatures**
- **DESINA® colors**

low capacity solution for your servo drive systems

Technical data:

Peak operating voltage:	control conductors: max. 350 V
Nominal voltage:	power supply conductors: Uo/U 0.6/1 kV
Voltage UL/cUL:	1000 V
Testing voltage: *power supply conductors:* *control conductors:*	 conductor/conductor: 4000 V conductor/shielding: 4000 V conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius: *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/cUL:** up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; UL FT1
Oil resistance:	very good - TM5 acc. to EN 50363-4-1 + VDE 0207-363-4-1
Chemical resistance:	good - against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

BOSCH REXROTH®

item no.	power supply conductors	control pairs individually shielded	outer-ø ±0.031 inch	outer-ø ±0.80 mm	cable weight ≈lbs/mft
▶ 8910415	16 AWG/4c	19 AWG/2pr	0.449	11.4	42
▶ 8910425	14 AWG/4c	18 AWG/2pr	0.516	13.1	185
▶ 8910441	12 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.591	15.0	251
▶ 8910461	10 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.673	17.1	334
▶ 8910471	8 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.760	19.3	465
▶ 8910485	6 AWG/4c	16 AWG/2pr	0.902	22.9	680
▶ 8910490	4 AWG/4c	16 AWG/2pr	1.110	28.2	972

SIEMENS®

item no.	power supply conductors	control pair individually shielded	outer-ø ± 0.031 inch	outer-ø ± 0.80 mm	cable weight ≈lbs/mft
▶ 8911410	18 AWG/4c	20 AWG/1pr	0.354	9.0	81
▶ 8911415	16 AWG/4c	18 AWG/1pr	0.421	10.7	127
▶ 8911416	16 AWG/4c	20 AWG/1pr	0.374	9.5	95
▶ 8911425	14 AWG/4c	20 AWG/1pr	0.480	12.2	164
▶ 8911440	12 AWG/4c	18 AWG/1pr	0.535	13.6	213
▶ 8911460	10 AWG/4c	18 AWG/1pr	0.642	16.3	302
▶ 8911470	8 AWG/4c	18 AWG/1pr	0.728	18.5	441
▶ 8911480	6 AWG/4c	18 AWG/1pr	0.870	22.1	636
▶ 8911490	4 AWG/4c	18 AWG/1pr	1.031	26.2	910
▶ 8911495	2 AWG/4c	18 AWG/1pr	1.248	31.7	1258
▶ 8911496	1 AWG/4c	18 AWG/1pr	1.378	35.0	1698

Other dimensions and colors are available on request

SL 841 C

Continuous flex TPE motor connection cable with black numbered power conductors, 1 or 2 supply pairs and overall tinned copper shield, 0.6/1 kV

Marking for SL 841 C 8410407:
SAB BRÖCKSKES · D-VIERSEN · 8410407 SL 841 C 4 x 0.75 mm² (1000V) + 2 x (2 x 0.34 mm²) (300V) DESINA AWM Style 20235 80°C CSA AWM I/II A/B 80°C 300V FT1 FT2

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6 < 20 AWG with reference to VDE 0812
Insulation:	TPE
Color code: **from item no. 8411415:**	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green/yellow ground power supply conductors: * U1, V2, W3 and a green/yellow ground control conductors: ** BR1 and BR2
Stranding:	control conductors: 22 - 14 AWG; twisted to pairs
Shielding:	pairs wrapped with alu. foil and tinned copper braiding
Wrapping:	pairs with PETP foil
Stranding:	shielded control pairs and power supply conductors twisted together in layers
Wrapping:	two layers non-woven tape
Shielding:	overall tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	orange (RAL 2003)

Technical data:

Peak operating voltage:	control conductors: max. 350 V
Nominal voltage:	power supply conductors: Uo/U 0.6/1 kV
Voltage UL/CSA:	control conductors: 300 V power supply conductors: 1000 V
Testing voltage: power *supply conductors:* *control conductors:*	conductor/conductor: 4000 V conductor/shielding: 4000 V conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius: *fixed installation:* *free movement:* *for continuous flexing:*	 5 x O.D. 10 x O.D. 12 x O.D.
Radiation resistance:	5 x 10^7 cJ/kg
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/CSA:** up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; UL FT1, CSA FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good - against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- **UL recognized, CSA approval**
- **Very good EMC characteristics**
- **Long service life**
- **Adhesion-free installation**
- **High flexibility**
- **Suitable for cable tracks**
- **Halogen-free**
- **Free from paint wetting impairment substances** (PWIS-free)
- **Flexible at low temperatures**
- **DESINA® colors** (see page G/3)
- **In accordance with Indramat INK and Siemens 6FX8008**

Cable harnessing possible on request

DESINA® BOSCH REXROTH®

item no.	power supply conductors	control pairs individually shielded	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft
8410407	19 AWG/4c	22 AWG/2pr	0.457 ± 0.020	11.6 ± 0.5	113
8410410	18 AWG/4c	19 AWG/2pr	0.465 ± 0.020	11.8 ± 0.5	135
8410415	16 AWG/4c	19 AWG/2pr	0.484 ± 0.020	12.3 ± 0.5	153
8410425	14 AWG/4c	18 AWG/2pr	0.571 ± 0.031	14.5 ± 0.8	215
8410441	12 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.685 ± 0.024	17.4 ± 0.6	308
8410461	10 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.744 ± 0.031	18.9 ± 0.8	374
8410471	8 AWG/4c	18 AWG/1pr + 16 AWG/1pr	0.803 ± 0.039	20.4 ± 1.0	495
8410485	6 AWG/4c	16 AWG/2pr	1.024 ± 0.031	26.0 ± 0.8	746
8410490	4 AWG/4c	16 AWG/2pr	1.157 ± 0.031	29.4 ± 0.8	1019
8410495	2 AWG/4c	16 AWG/2pr	1.232 ± 0.031	31.3 ± 0.8	1265
8410496	1 AWG/4c	14 AWG/2pr	1.504 ± 0.031	38.2 ± 0.8	1787

SIEMENS®

item no.	power conductors	control pairs individually shielded	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft
8411415	16 AWG/4c	16 AWG/1pr	0.492 ± 0.012	12.5 ± 0.3	149
8411425	14 AWG/4c	16 AWG/1pr	0.524 ± 0.016	13.3 ± 0.4	191
8411440	12 AWG/4c	16 AWG/1pr	0.598 ± 0.016	15.2 ± 0.4	248
8411460	10 AWG/4c	16 AWG/1pr	0.654 ± 0.043	16.6 ± 1.1	326
8411470	8 AWG/4c	16 AWG/1pr	0.768 ± 0.063	19.5 ± 1.6	455
8411480	6 AWG/4c	16 AWG/1pr	0.933 ± 0.039	23.7 ± 1.0	685
8411490	4 AWG/4c	16 AWG/1pr	1.071 ± 0.028	27.2 ± 0.7	953
8411495	2 AWG/4c	16 AWG/1pr	1.185 ± 0.039	30.1 ± 1.0	1216
8411496	1 AWG/4c	16 AWG/1pr	1.354 ± 0.039	34.4 ± 1.0	1655

Other dimensions and colors are available on request

Note: SIEMENS® is a registered trademark. It is only used for comparative purposes.
BOSCH REXROTH® is a registered trademark. It is only used for comparative purposes.
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SL 893 C

Continuous flex polyurethane incremental encoder and feedback cable with colored conductors and with overall tinned copper shield

Marking for SL 893 C 8930003:
SAB BRÖCKSKES · D-VIERSEN · 8930003 SL 893 C 5 x 2 x 0.25 mm² + 2 x 0.50 mm² DESINA cULus AWM Style 20233 I/II A/B 80°C 300V FT1 FT2

Construction:

Conductor:	bare copper strands acc. to VDE 0812 + IEC 60228, VDE 0295, class 5
Insulation:	special polymer
Color code:	colored
Stranding:	conductors/pairs twisted together in layers
	8930004 & 8930010:
Shielding:	pairs shielded with tinned copper braiding
Inner jacket:	special polymer
Wrapping:	non-woven tape or PETP foil
Shielding:	tinned copper braiding
Wrapping:	non-woven tape or PETP foil
Jacket material:	PUR
Jacket color:	green (RAL 6018) or orange (RAL 2003)

Outstanding features:

- **UL/cUL recognized**
- **Low capacitance**
- **Good EMC characteristics**
- **High flexibilty**
- **Suitable for cable tracks**
- **Very good oil resistance**
- **Long service life**
- **Adhesion-free installation**
- **Halogen-free**
- **Free from paint wetting impairment substances** (PWIS-free)
- **DESINA® colors** (see page G/3)

Technical data:

Peak operating voltage:	30 V (UR AWM Style 20236) or 300 V (UR AWM Style 20233)
Testing voltage:	
30 V cable:	conductor/conductor: 600 V conductor/shielding: 600 V
300 V cable:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius:	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
Temperature range:	**DIN VDE** **UL/cUL:** up to +80°C
static:	-50/+90°C
flexible:	-40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; cUL FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good - against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

suitable for resolvers, encoders, and position signaling cable

item no.	dimensions	peak operating voltage	jacket color	outer-ø ±0.012 inch	outer-ø ±0.30 mm	cable weight ≈lbs/mft	color codes
8930001	0.15 mm²/2pr + 0.38 mm²/2c	30 V	green	0.268	6.8	42	(GN, YE, BU, PK) - (RD, BK)
8930002	0.20 mm²/2pr + 0.38 mm²/2c	30 V	green	0.268	6.8	38	(GN, YE, BU, PK) – (RD, BK)
8930003	0.25 mm²/5pr + 0.50 mm²/2c	300 V	green	0.319	8.1	57	(WH, BN, GN, YE, GY, PK, BK, VT, GY-PK, RD-BU) – (BU, RD)
8930004	(0.14 mm²/2c)C + 0.25 mm²/6pr + 0.50mm²/2c	300 V	green	0.346	8.8	63	(WH, BN, GN, YE, GY, PK, BU, RD, BK, VT, GY-PK, RD-BU, WH-GN, BN-GN) – (WH, BN)
8930005	0.15 mm²/3pr + 0.38 mm²/2c	30 V	green	0.276	7.0	45	(WH, BN, GN, YE, GY, PK) - (BU, RD)
8930006	0.14 mm²/4pr + 0.50 mm²/4c	300 V	green	0.335	8.5	70	(PK, GY, RD, BK, BN, GN, YE-PR) – (PK-GY, RD-BK, BN-GN, YE-PR)
8930007	0.25 mm²/4pr + 0.50 mm²/2c	300 V	orange	0.346	8.8	62	(BN, GN, RD, BK, BU, PR, GY, PK) – (WH, BN)
8930008	0.25 mm²/4pr + 1.0 mm²/2c	300 V	orange	0.323	8.2	62	(BN, GN, RD, BK, BU, PR, GY, PK) – (WH, BN)
8930009	0.38 mm²/4pr + 0.50 mm²/4c	30 V	green	0.350	8.9	71	(RD, OR, GN, YE, BU, PR, BN, BK) – (BK-WH, RD-WH, YE-WH, BU-WH)
8930010	3 x (0.14 mm²/2c)D + 0.14 mm²/4c + 0.22mm²/4c + 0.50mm²/2c	30 V	green	0.378	9.6	73	(RD, OR, BN, BK, GN, YE, BU, GY, WH-BK, WH-YE) - (BN-BU, BN-RD) – (BN-YE, GN-RD, BN-GY, GN-BK)

Other dimensions and colors are available on request
pair in ( ) denotes shielded. C = tinned copper braid D= tinned copper spiral.

SL 842 C

Continuous flex TPE insulated and polyurethane jacketed feedback cable with colored conductors and overall tinned copper shield

Marking for SL 842 C 8422009:
SAB BRÖCKSKES · D-VIERSEN · 8420050 9 x 0.5 mm² SL 842 C 20 AWG/9c 8422009 AWM-Style 20233 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 FT2

Construction:

Conductor:	bare copper strands acc. to VDE 0812
Insulation:	TPE
Color code:	white, brown, green, yellow, gray, pink, blue, red, black
Stranding:	in layers
Stranding:	conductors/pairs twisted together in layers
Wrapping:	one or two layers non-woven tape
Shielding:	tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	orange (RAL 2003)

Outstanding features:

- **UL recognized, CSA approval**
- **Good EMC characteristics**
- **High flexibility**
- **Suitable for cable tracks**
- **Oil resistant**
- **Long service life**
- **Adhesion-free installation**
- **Halogen-free**
- **Free from paint wetting impairment substances** (PWIS-free)
- **DESINA® colors** (see page G/3)

Technical data:

Peak operating voltage:	max. 500 V
Voltage UL/CSA:	300 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius: *fixed installation:* *free movement:* *for continuous flexing:*	 5 x O.D. 10 x O.D. 12 x O.D.
Radiation resistance:	5 x 10^7 cJ/kg
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/CSA:** up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; UL FT1, CSA FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good - against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	dimensions	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft
▶ 8422009	20 AWG/9c	0.346 ± 0.012	8.8 ± 0.03	70

Other dimensions and colors are available on request

suitable for resolvers and shaft encoders

SL 839 C

Continuous flex composite polyurethane transmission cable with colored conductors and overall tinned copper shield

Marking for SL 839 C 8390122:
SAB BRÖCKSKES · D-VIERSEN · 8390122 SL 839 C 12 x 0.22 mm² DESINA AWM Style 20236 80°C 30V

Construction:

Conductor:	tinned copper strands acc. to VDE 0812
Insulation:	special polymer
Color code:	colored (see chart below)
	8390114, 8390214, & 8391050:
Shielding:	pairs shielded with tinned copper braiding
Inner jacket:	special polymer
Stranding:	conductors or pairs; twisted together in layers
Wrapping:	one non-woven tape or non-woven tape and PETP foil
Shielding:	tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface or PU acc. to UL 758
Jacket color:	green (RAL 6018)

Technical data:

Nominal voltage:	max. 30 V
Voltage UL:	30 V
Testing voltage:	conductor/conductor: 600 V conductor/shielding: 600 V
Min. bending radius: *fixed installation:* *free movement:* *for continuous flexing:*	 5 x O.D. 10 x O.D. 12 x O.D.
Radiation resistance:	5 x 10^7 cJ/kg
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/CSA:** up to +80°C -40/+70°C -20/+70°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2; oil rating 60°C acc. to UL 758
Chemical resistance:	good - against acids, akalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- **UL recognized**
- **Good EMC characteristics**
- **Flexible and flexing installation**
- **Oil resistant**
- **Long service life**
- **Adhesion-free installation**
- **Halogen-free**
- **Suitable for cable tracks**
- **Free from paint wetting impairment substances** (PWIS-free)
- **DESINA® colors** (see page G/3)

suitable for resolvers and shaft encoders

item no.	dimensions	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	color codes
Jacket material TMPU acc. to DIN VDE 0282					
8390114	(0.14 mm²/3pr)D + (20 AWG/2c)D	0.362 ± 0.016	9.2 ± 0.4	71	(GN/YE+BN/BK+OR/RD) - (RD+BK)
8390214	(0.14 mm²/3pr)D + 0.14 mm² + 20 AWG/2c	0.354 ± 0.016	9.0 ± 0.4	68	(RD/OR+BN/BK+GN/YE) - (BU+GY+WH-BK+WH-YE) - (BN-BU+BN-RD)
8391050	(0.14 mm²/3pr)D + 0.14 mm²/4c + 0.22 mm²/4c + 20 AWG/2c	0.378 ± 0.016	9.6 ± 0.4	77	(RD/OR+BN/BK+GN/YE) - (BU+GY+WH-BK+WH-YE) - (BN-YE+GN-RD+BN-GY+GN-BK) - (BN-BU+BN-RD)
8390138	0.38 mm²/4pr + 20 AWG/4c	0.346 ± 0.016	8.8 ± 0.4	75	(RD/OR+GN/YE+BU/VT+BN/BK) - (BK-WH+RD-WH+YE-WH+BU-WH)
8390318	0.18 mm²/8pr	0.307 ± 0.016	7.8 ± 0.4	52	(WH/GY+VT/BU+GN/YE+OR/RD+BK/BN+WH-RD/WH-OR+WH-BK/WH-BN+WH-YE/WH-GN)
8390122	0.22 mm²/12c	0.264 ± 0.016	6.7 ± 0.4	44	(RD+BK+BN+WH+GY+VT+BU+GN+YE+OR+WH-BN+WH-BK)
Jacket material PU acc. to UL 758					
8390118	0.18 mm²/4c	0.193 ± 0.016	4.9 ± 0.4	20	(RD+BK+OR+BN)
8390218	0.18 mm²/4pr	0.248 ± 0.016	6.3 ± 0.4	34	(VT/BU+GN/YE+OR/RD+BK/BN)
8390115	0.15 mm²/2pr + 0.38 mm²/2c	0.272 ± 0.012	6.9 ± 0.3	45	(GN/YE+BU/PK) + (RD+BK)
8390220	0.20 mm²/2pr + 0.38 mm²/2c	0.272 ± 0.012	6.9 ± 0.3	41	(GN/YE+BU/PK) + (RD+BK)

Other dimensions and colors are available on request
D = tinned copper spiral

Note: DESINA® is a registered trademark of the German Machine Tool Builders' Association.

SL 843 C

Continuous flex TPE insulated and polyurethane jacketed transmission cable with colored conductors and overall tinned copper shield

Marking for SL 843 C 8431050:
SAB BRÖCKSKES · D-VIERSEN · 8431050 SL 843 C 3 x (2 x 0.14 mm² D) + 4 x 0.22 mm² + 2 x 0.5 mm² DESINA AWM-Style 20235 80°C CSA AWM I/II A/B 80°C 300V FT1

Construction:

Conductor:	bare copper strands acc. to VDE 0812
Insulation:	TPE
Color code:	colored (see chart below)
Stranding:	in layers or pairwise
Shielding:	*8430160, 8430040, 8430060, 8430020, 8430022, 8431050 & 8430070:* pairs with tinned copper wires braided or wrapped
Inner jacket:	TPE over shielded pairs
Stranding:	conductors/pairs twisted together in layers
Wrapping:	one or two layers non-woven tape
Shielding:	tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	green (RAL 6018) or orange (RAL 2003)

Outstanding features:

- **Good EMC characteristics**
- **High flexibility**
- **Suitable for cable tracks**
- **Oil resistant**
- **Long service life**
- **Adhesion-free installation**
- **Halogen-free**
- **Free from paint wetting impairment substances** (PWIS-free)
- **DESINA® colors** (see page G/3)

Technical data:

Peak operating voltage:	max. 350 V
Voltage UL/CSA:	300 V
Testing voltage:	conductor/conductor: 2000 V conductor/shielding: 2000 V
Min. bending radius: *fixed installation:* *free movement:* *for continuous flexing:*	 5 x O.D. 10 x O.D. 12 x O.D.
Radiation resistance:	5 x 10^7 cJ/kg
Temperature range: *static:* *flexible:*	**DIN VDE** **UL/CSA:** up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2; UL FT1, CSA FT1
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good - against acids, alkalines, solvents, hydraulic liquids, etc.
Weather resistance:	very good
Approvals:	UR AWM, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

suitable for resolvers and shaft encoders

item no.	dimensions	jacket color	outer-ø inch	outer-ø mm	cable weight ≈lbs/mft	color codes
8430009	24 AWG/4pr + 20 AWG/2c	orange	0.346 ± 0.012	8.8 ± 0.3	62	(BN/GN+RD/BK+BU/VT+GY/PK) - (WH+BN)
8430010	24 AWG/4pr + 18 AWG/2c	orange	0.346 ± 0.012	8.8 ± 0.3	65	(BN/GN+RD/BK+BU/VT+GY/PK) - (WH+BN)
8430160	(24 AWG/3pr)D + 24 AWG/3c + 18 AWG/2c	orange	0.394 ± 0.012	10.0 ± 0.3	89	(GN/YE+GY/PK+BU/RD) - (GY-PK+RD-BU+WH-GN) - (WH+BN)
8430040	(24 AWG/3pr)D	orange	0.343 ± 0.012	8.7 ± 0.3	63	(WH/BN+GN/YE+GY/PK)
8430060	26 AWG/4pr + (26 AWG/4c)D + 18 AWG/4c	orange	0.386 ± 0.012	9.8 ± 0.3	91	(GY/PK+YE/VT+BN/GN+BK/RD) - (GN-BK+BU-BK+YE-BK+RD-BK) - (WH+BU+WH-GN+BN-GN)
8430012	26 AWG/4pr + 20 AWG/4c	green	0.358 ± 10%	9.1 ± 10%	68	(PK/GY+RD/BK+BN/GN+YE/VT) - (BU+WH+BN-GN+WH-GN)
8430112	26 AWG/10c + 20 AWG/2c	green	0.335 ± 10%	8.5 ± 10%	60	(WH+BN+GN+YE+GY+PK+BU+RD+BK+VT) - (WH+BN)
8430114	26 AWG/10c + 20 AWG/4c	green	0.354 ± 10%	9.0 ± 10%	71	(WH+BN+GN+YE+GY+PK+BU+RD+BK+VT) - (WH+BN+GN+YE)
8430006	24 AWG/3pr + 20 AWG/2c	green	0.343 ± 10%	8.7 ± 10%	60	(WH/BN+GN/YE+GY/PK) - (BU+RD)
8430013	0.38 mm²/4pr + 20 AWG/4c	green	0.406 ± 10%	10.3 ± 10%	91	(WH/BN+GN/YE+GY/PK+BU/RD) - (BK+VT+GY-PK+RD-BU)
8430020	(26 AWG/3pr)C + 18 AWG/2c	green	0.394 ± 10%	10.0 ± 10%	85	(GN/YE+GY/PK+BU/RD) - (WH+BN)
8430022	(26 AWG/3pr)C + (20 AWG/2c)C	green	0.398 ± 10%	10.1 ± 10%	90	(GN/YE+GY/PK+BU/RD) - (WH+BN)
8431050	(26 AWG/3pr)D + 26 AWG/4c + 0.22 mm²/4c + 20 AWG/2c	green	0.421 ± 10%	10.7 ± 10%	87	(RD/OR+BN/BK+GN/YE) - (BU+GY+WH-BK+WH-YE) - (BN-YE+GN-RD+BN-GY+GN-BK) - (BN-BU+BN-RD)
8430070	(26 AWG/3pr)D + 26 AWG/4c + 20 AWG/2c	green	0.398 ± 10%	10.1 ± 10%	82	(RD/OR+BN/BK+GN/YE) - (BU+GY+WH-BK+WH-YE) - (BN-BU+BN-RD)
8430310	0.22 mm²/12c	green	0.335 ± 10%	8.5 ± 10%	58	(WH+BN+GN+YE+GY+PK+BU+RD+BK+VT+GY-PK+RD-BU)
8430212	0.18 mm²/2pr	green	0.264 ± 10%	6.7 ± 10%	34	(WH/BN+GN/YE)
8430214	0.18 mm²/4pr	green	0.323 ± 10%	8.2 ± 10%	48	(WH/BN+GN/YE+GY/PK+BU/RD)
8430216	0.18 mm²/8pr	green	0.382 ± 10%	9.7 ± 10%	70	(WH/BN+GN/YE+GY/PK+BU/RD+BK/VT+GY-PK/RD-BU+WH-GN/BN-GN+WH-YE/YE-BN)

Other dimensions and colors are available on request
pair in ( ) denotes shielded. C = tinned copper braid. D = tinned copper spiral.

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