

Motor Connection Cables



SL 851 C - Exploration

Continuous flex polyurethane shielded motor connection cable with colored conductors
for 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 III 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, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Technical data:

Nominal voltage:	U _o /U 0.6/1 kV
Voltage UL/cUL:	1000 V
Maximum operating voltage:	<i>in three-phase current and single phase current operation:</i> U _o /U 0.7/1.2 kV <i>in D.C. current operation:</i> U _o /U 0.9/1.8 kV <i>peak value of AC voltage:</i> 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 <i>fixed installation:</i> 5 x O.D. 7.5 x O.D. 10 x O.D. <i>flexible application:</i> 10 x O.D. 15 x O.D. 20 x O.D.
Temperature range:	DIN VDE UL/cUL: up to +80°C <i>static:</i> -50/+90°C <i>flexible*:</i> -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 - TPU 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

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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

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% mm	cable weight ≈lbs/mft
▶ 14 AWG ▪ 2.50 mm ² 8510425	4	0.394	10.0	113
▶ 12 AWG ▪ 4.00 mm ² 8510440	4	0.484	12.3	178
▶ 10 AWG ▪ 6.00 mm ² 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 mm ² 8510470	4	0.669	17.0	425
▶ 6 AWG ▪ 16.00 mm ² 8510480	4	0.870	22.1	626
▶ 4 AWG ▪ 25.00 mm ² 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 mm ² 8510495	4	1.173	29.8	1216
▶ 1 AWG ▪ 50.00 mm ² 8510496	4	1.311	33.3	1670
▶ 2/0 AWG ▪ 70.00 mm ² 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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