

High Temperature Cables

B 107

Silicone insulated specially stranded copper rope



mm² cULus AWM Style 30122 AWM I A/B 150°C 3000V FT2



Marking for B 107 1079500:

SAB BRÖCKSKES · D-VIERSEN · B 107 U₀/U 1.8/3.0 kV 95.0mm² cULus AWM Style 30122 AWM I A/B 150°C 3000V FT2

Application: B 107 is a silicone insulated single conductor cable with special copper stranding. It is used as current and ground connection in 3rd Rail current collectors at pantographs and as earth connection at wheel sets, coupling blocks and crane mountings on rail vehicles. The wire can be laid easily in narrow spaces due to its extremely flexible construction. The translucent insulation enables an easy inspection of the state of conductor.

Construction:

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

Outstanding features:

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

Technical data:

Nominal voltage:	U ₀ /U 1.8/3.0 kV AC U ₀ /U 2.7/5.4 kV DC	
Voltage cULus:	3000 V	
Testing voltage:	6500 V	
Current carrying capacity:	acc. to VDE 0298-4, see page O20 & O21	
Min. bending radius:	5 x O.D.	
Temperature range:	DIN VDE	cULus: up to 150°C
<i>static:</i>	-40/+180°C	
<i>flexible:</i>	-25/+180°C	
<i>short-term use:</i>	up to 250°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 cULus FT2	
Corrosivity:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	
Weather resistance:	very good	
Approvals:	cULus AWM, RoHS	
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30	

item no.	mm ²	AWG	outer-ø		cable weight ≈lbs/mft
			inch	mm	
▶ 1070100	1.00	18	0.169	4.3	17
▶ 1070150	1.50	16 (≈ 84/34)	0.185	4.7	21
▶ 1070250	2.50	14 (≈ 140/34)	0.205	5.2	29
▶ 1070400	4.00	12 (≈ 224/34)	0.232	5.9	40
▶ 1070600	6.00	10 (≈ 186/32)	0.248	6.3	54
▶ 1071000	10.00	8 (≈ 320/32)	0.354	9.0	98
▶ 1071600	16.00	6 (≈ 504/32)	0.366	9.3	130
▶ 1072500	25.00	4 (≈ 760/32)	0.472	12.0	211
▶ 1073500	35.00	2 (≈ 1083/32)	0.543	13.8	290
▶ 1075000	50.00	1 (≈ 703/28)	0.618	15.7	390
▶ 1077000	70.00	2/0 (≈ 988/28)	0.697	17.7	532
▶ 1079500	95.00	3/0 (≈ 1340/28)	0.740	18.8	680
▶ 1071200	120.00	4/0 (≈ 1680/28)	0.807	20.5	860
▶ 1071500	150.00	250 MCM (≈ 2122/28)	0.933	23.7	1042
▶ 1071850	185.00	350 MCM (≈ 1472/26)	0.996	25.3	1300
▶ 1072400	240.00	450 MCM	1.098	27.9	1685
▶ 1073000	300.00	550 MCM	1.213	30.8	2018

Other dimensions and colors are available on request



B 107 HV copper rope with orange jacket is suitable for E-Mobility HV test benches.