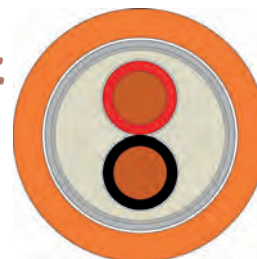


High-Voltage Cables for Electric Vehicles

HV 1000 C - MC

Flexible high-voltage multi-conductor cable with overall copper shield



Marking for HV 1000 C MC 39100240:

SAB BRÖCKSKES · D-VIERSEN · HV 1000 C - MC 2x4.0mm² 39100240 CE

Application: These high-voltage cables can be used in high-voltage applications e.g. in the fields of agricultural vehicles, construction vehicles and special vehicles. The HV 1000 C - MC is used as a connection cable e.g. for cabin heating, the electric compressor, the high-voltage heat pump in electric and hybrid vehicles.

Construction:

Conductor:	bare copper strands, acc. to IEC 60228, VDE 0295, class 5
Insulation:	TPFP
Color code:	from 2 conductors: red, black from 3 conductors: HD 308 or acc. to customer request
Stranding:	in layers
Inner jacket:	Besilen®
Shielding:	alu. foil and tinned copper braiding
Wrapping:	non-woven tape
Jacket material:	TPE-U
Jacket color:	orange (RAL 2003)

Outstanding features:

- extremely high mechanical strength
- high protection against environmental influences
- 100% oil resistance acc. to standard
- application range from -50° to +125°C

Technical data:

Nominal voltage:	U _o /U max. 0.6/1 kV AC/DC
Testing voltage:	conductor/conductor: 5000 V conductor/shielding: 5000 V
Min. bending radius:	
fixed installation:	5 x O.D.
free movement:	10 x O.D.
Temperature range:	
static:	-50/+90°C
flexible:	-40/+90°C
short-term use:	+125°C (2,000 h)
Low temperature resistance:	-50°C acc. to DIN EN 60811-506
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
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 EN 50396
Salt water resistance:	acc. to UL 1309
Mechanical characteristics:	the main mechanical characteristics accomplished by the TPE-U outer jacket are: - high tensile strength - high tear strength - high abrasion resistance - high notch resistance - high transverse strength
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors	outer-ø		cable weight ≈lbs/mft	ohmic resistance at 20°C max. Ω/km
		max inch	max mm		
▶ 14 AWG ▪ 2.50 mm ²					
39100225	2	0.390	9.9	99	7.98
39100325	3	0.409	10.4	122	7.98
▶ 12 AWG ▪ 4.0 mm ²					
39100240	2	0.445	11.3	138	4.95
39100340	3	0.476	12.1	169	4.95
▶ 10 AWG ▪ 6.00 mm ²					
39100260	2	0.504	12.8	179	3.10
39100360	3	0.555	14.1	246	3.10
39100460	4	0.594	15.1	291	3.10
39100560	5	0.642	16.3	346	3.10

Other dimensions and colors are available on request

Construction, materials and tests with reference to:

- DIN EN 60228
- DIN EN 50525
- DIN EN 50290-2-30
- DIN EN 50620
- DIN EN 60811

In individual cases, the specific application must be agreed with SAB Bröckskes.

HD 308 Color code:

3c: green/yellow, blue, brown

4c: green/yellow, brown, black, gray

5c: green/yellow, blue, brown, black, gray