



## CONNECTION CABLE SILICOU L CLASS H 180°C

*A flexible and highly durable high-voltage cable adapted for motors, generators, transformers and rotors, A high-voltage cable also well suited for offshore and traction applications. Very good thermal properties.*

- Working temperature -60°C - +180°C
- Good flexibility
- Available in versions 1.1 kV – 13.8 kV
- Good resistance to the damaging effects of "corona" and ozone
- Good resistance to thermal shock and UV radiation

### PRODUCT INFORMATION

**A flexible and highly durable high-voltage cable with very good thermal properties.**

#### Applications

Cabling of both static and rotating machines such as motors, generators, rotors, stators, transformers, etc.

#### Branches

Offshore, ships, traction, wind power, hydro power, power supply

#### Properties

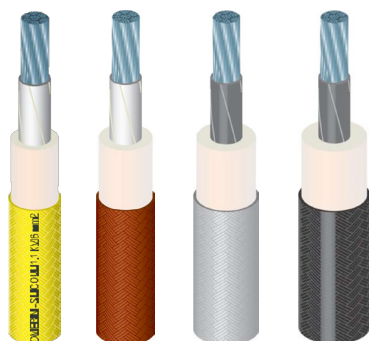
- Good resistance to the damaging effects of "corona" and ozone
- Good resistance to thermal shock and UV radiation
- Halogen-free
- Compatible with most impregnating varnishes
- Excellent low and high thermal properties
- Excellent mechanical strength
- Excellent resistance to ageing

#### Composition

- Core of flexible tinned copper acc. IEC 60228 – class 5
- Separation band
- Silicone rubber
- Coated synthetic braided reinforced fabric

#### Colours

- 1,1 kV Yellow
- 3,7 kV Brown
- 6,6 kV Grey
- 13,8 kV Black



#### Packaging

On rolls of 25 m

#### Technical data

- Temperatures: Working temp. -60°C - + 180°C, Short periods Temperature peaks +230°C
- Voltage: Operating voltage: Yellow 1.1 kV, Brown 3.7 kV, Grey 6.6 kV, Black 13.8 kV

#### Test voltage

- Yellow 3.5 kV, Brown 10 kV, Grey 15 kV, Black 30 kV
- Bending radius: ~ 5xD (outer diameter)

#### Approvals-Standards

- F1 classed as NF F 16-101
- Type approved for use in ship construction acc. IEC 60092-350. Registered with Lloyd's Register of Shipping and Bureau Veritas
- Fire characteristics: Tested acc. IEC 60331-21, IEC 60332-1 and 60332-3-22 requirements

#### Options

- Available in UL-approved version acc. UL-style 3663 (on request)

*Product information for which Carbex bears no responsibility is provided by the manufacturer.*



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Item number	Area mm <sup>2</sup> mm <sup>2</sup>	Number wires x diam	External diameter mm	Weight kg/km	Conductor resistance Ω/km vid 20°C	Description	Colour
02 040 1606	16	126 x 0.40	8.6	178	1.240	1.1 kV 16mm <sup>2</sup>	Gul
02 040 2506	25	196 x 0.40	10.4	273	0.795	1.1 kV 25mm <sup>2</sup>	Gul
02 040 3506	35	276 x 0.40	11.9	376	0.565	1.1 kV 35mm <sup>2</sup>	Gul
02 040 5006	50	396 x 0.40	14.1	534	0.393	1.1kV 50mm <sup>2</sup>	Gul
02 040 7006	70	360 x 0.50	1.9	738	0.277	1.1kV 70mm <sup>2</sup>	Gul
02 040 9506	95	485 x 0.50	18.2	970	0.210	1.1 kV 95mm <sup>2</sup>	Gul
02 040 1206	120	608 x 0.50	20.2	1220	0.164	1.1 kV 120mm <sup>2</sup>	Gul
-	-	-	-	-	-	-	-
02 043 1606	16	126 x 0.40	10.2	212	1.240	3.7 kV 16mm <sup>2</sup>	Brun
02 043 2506	25	196 x 0.40	11.8	305	0.795	3.7 kV 25mm <sup>2</sup>	Brun
02 043 3506	35	276 x 0.40	13.2	413	0.565	3.7 kV 35mm <sup>2</sup>	Brun
02 043 5006	50	396 x 0.40	15.4	575	0.393	3.7 kV 50mm <sup>2</sup>	Brun
02 043 7006	70	360 x 0.50	17.0	782	0.277	3.7 kV 70mm <sup>2</sup>	Brun
02 043 9506	95	485 x 0,50	19.8	1030	0.210	3.7 kV 95mm <sup>2</sup>	Brun
02 043 1206	120	608 x 0.50	21.8	1290	0.164	3.7 kV 120mm <sup>2</sup>	Brun
-	-	-	-	-	-	-	-
02 041 1606	16	126 x 0.40	11.5	238	1.240	6.6 kV 16mm <sup>2</sup>	Grå
02 041 2506	25	196 x 0.40	13.0	330	0.795	6.6 kV 25mm <sup>2</sup>	Grå
02 041 3506	35	276 x 0.40	14.6	440	0.565	6.6 kV 35mm <sup>2</sup>	Grå
02 041 5006	50	396 x 0.40	16.7	612	0.393	6.6 kV 50mm <sup>2</sup>	Grå
02 041 7006	70	360 x 0.50	18.3	825	0.277	6.6 kV 70mm <sup>2</sup>	Grå
02 041 9506	95	485 x 0.50	20.5	1060	0.210	6.6 kV 95mm <sup>2</sup>	Grå
02 041 1206	120	608 x 0.50	22.6	1315	0.164	6.6 kV 120mm <sup>2</sup>	Grå
-	-	-	-	-	-	-	-
02 042 1606	16	126 x 0.40	14.2	303	1.240	13.8 kV 16mm <sup>2</sup>	Svart
02 042 2506	25	196 x 0.40	15.7	407	0.795	13.8 kV 25mm <sup>2</sup>	Svart
02 042 3506	35	276 x 0.40	17.2	522	0.565	13.8 kV 35mm <sup>2</sup>	Svart
02 042 5006	50	396 x 0.40	18.9	690	0.393	13.8 kV 50mm <sup>2</sup>	Svart
02 042 7006	70	360 x 0.50	20.7	907	0.277	13.8 kV 70mm <sup>2</sup>	Svart
02 042 9506	95	485 x 0.50	22.7	1160	0.210	13.8 kV 95mm <sup>2</sup>	Svart
02 042 1206	120	608 x 0.50	24.7	1415	0.164	13.8 kV 120mm <sup>2</sup>	Svart

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Temperature classes of insulation materials according to EN 60085

IEC 60085	Old IEC 60085	NEMA Class	NEMA/UL	Max temp
70				
90	Y			90°C
105	A	105	A	105°C
120	E			120°C
130	B	130	B	130°C
155	F	155	F	155°C
180	H	180	H	180°C
200			N	200°C
220		220	R	220°C
			S	240°C
250				250°C

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AWG Number	Ø [Inch]	Ø [mm]	Ø [mm <sup>2</sup> ]
6/0 = 000000	0,580	14,73	170,30
5/0 = 00000	0,517	13,12	135,10
4/0 = 0000	0,460	11,7	107,0
3/0 = 000	0,410	10,4	85,0
2/0 = 00	0,365	9,26	67,4
1/0 = 0	0,325	8,25	53,5
1	0,289	7,35	42,4
2	0,258	6,54	33,6
3	0,229	5,83	26,7
4	0,204	5,19	21,1
5	0,182	4,62	16,8
6	0,162	4,11	13,3
7	0,144	3,66	10,5
8	0,128	3,26	8,36
9	0,114	2,91	6,63
10	0,102	2,59	5,26
11	0,0907	2,30	4,17
12	0,0808	2,05	3,31
13	0,0720	1,83	2,62
14	0,0641	1,63	2,08
15	0,0571	1,45	1,65
16	0,0508	1,29	1,31
17	0,0453	1,15	1,04
18	0,0403	1,02	0,823
19	0,0359	0,912	0,653
20	0,0320	0,812	0,518
21	0,0285	0,723	0,410
22	0,0253	0,644	0,326
23	0,0226	0,573	0,258
24	0,0201	0,511	0,205
25	0,0179	0,455	0,162
26	0,0159	0,405	0,129
27	0,0142	0,361	0,102
28	0,0126	0,321	0,0810
29	0,0113	0,286	0,0642
30	0,0100	0,255	0,0509
31	0,00893	0,227	0,0404
32	0,00795	0,202	0,0320
33	0,00708	0,180	0,0254
34	0,00631	0,160	0,0201
35	0,00562	0,143	0,0160
36	0,00500	0,127	0,0127
37	0,00445	0,113	0,0100
38	0,00397	0,101	0,00797
39	0,00353	0,0897	0,00632
40	0,00314	0,0799	0,00501

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