

SiHF UL/CSA

increased temperature resistance, tinned wire



HELUKABEL® SiHF UL/CSA 3G1,5 QMM E170315 UL STYLE 4476 600V AWM II A/B CE

TECHNICAL DATA

Silicone control and connection cable acc. to UL-Std. 758 (AWM) Style 4476, CSA-Std. C22.2 No. 210 - AWM I/II A/B

Temperature range	VDE -60°C to +180°C UL (AWM) -50°C to +150°C
Nominal voltage	VDE AC U ₀ /U 300/500 V UL (AWM) AC 600 V
Test voltage core/core	2000 V
Breakdown voltage	5000 V
Minimum bending radius	flexible 7.5x Outer-Ø fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper wire tinned, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: silicone
- Core identification acc. to DIN VDE 0293-308,
2 - 5 core(s): colour coded
6 - 41 core(s): black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores,
G = with protective conductor GN-YE, in the outer layer,
x = without protective conductor
- Cores stranded in layers with optimal lay lengths
- Outer sheath: silicone
- Sheath colour: black

PROPERTIES

- resistant to: ozone, oxygen, weathering effects, alcohols, dilute acids, alkalis, saline solutions, oxidising agents, high molecular weight oils, vegetable and animal fats, plasticisers and clophen, seawater

- halogen-free
- high flash point
- leaves an insulating layer of SiO₂ when exposed to flames
- no significant changes in dielectric strength and insulation resistance even at higher temperatures

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, CSA FT1

APPLICATION

UL-/CSA-approved silicone cable, developed for export-oriented machine builders, particularly for USA and Canada. Silicone cables are halogen-free and are especially suited for installation in power stations, iron, steel and rolling mills, in solariums, sauna facilities, foundries, in the aviation industry, ship building, in ceramic, glass and cement factories as well as in high-power luminaires and heating devices. Due to the elastic properties of the core insulation, this silicone cable is ideally suitable as a flexible connection cable.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- for fixed installation, always install in open, ventilated pipe or duct systems; otherwise, a combination of high temperatures above 90°C and the absence of air would affect the mechanical properties of silicone

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
23214	2 x 0.5	20	7.4	10.8	73.0
23215	3 G 0.5	20	7.8	16.1	82.0
23216	4 G 0.5	20	8.5	21.5	98.0
23217	5 G 0.5	20	9.2	26.9	120.0
23218	6 G 0.5	20	9.9	32.3	131.0
23219	7 G 0.5	20	9.9	37.6	140.0
23220	8 G 0.5	20	10.7	43.0	183.0
23221	10 G 0.5	20	11.9	53.8	201.0
23222	12 G 0.5	20	13.2	64.5	241.0
23223	16 G 0.5	20	14.6	86.0	269.0
23224	18 G 0.5	20	15.3	96.8	311.0
23225	25 G 0.5	20	18.6	134.4	401.0
23226	2 x 1	18	8.2	19.2	88.0
23227	3 G 1	18	8.6	28.8	111.0
23228	4 G 1	18	9.4	38.4	130.0
23229	5 G 1	18	10.3	48.0	161.0
23230	6 G 1	18	11.1	57.6	182.0
23231	7 G 1	18	11.1	67.2	198.0
23232	8 G 1	18	12.0	76.8	251.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
24010	9 G 1	18	13.0	86.4	277.0
23233	10 G 1	18	13.4	96.0	304.0
23234	12 G 1	18	14.9	115.2	343.0
23235	16 G 1	18	16.4	153.6	441.0
23236	18 G 1	18	17.3	172.8	492.0
23237	25 G 1	18	21.1	240.0	617.0
23238	2 x 1.5	16	8.8	28.8	117.0
23239	3 G 1.5	16	9.3	43.2	131.0
23240	4 G 1.5	16	10.1	57.6	166.0
23241	5 G 1.5	16	11.1	72.0	198.0
23242	6 G 1.5	16	12.0	86.4	240.0
23243	7 G 1.5	16	12.0	100.8	261.0
23244	8 G 1.5	16	13.0	115.2	298.0
23245	10 G 1.5	16	15.0	144.0	359.0
23246	12 G 1.5	16	16.1	172.8	431.0
23247	14 G 1.5	16	16.9	201.6	520.0
23248	16 G 1.5	16	17.8	230.4	569.0
23249	18 G 1.5	16	18.8	259.2	652.0
23250	20 G 1.5	16	19.8	288.0	724.0

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Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
23251	25 G 1.5	16	22.9	360.0	925.0
23252	41 G 1.5	16	29.2	590.4	1440.0
23253	2 x 2.5	14	9.6	48.0	141.0
23254	3 G 2.5	14	10.2	72.0	174.0
23255	4 G 2.5	14	11.1	96.0	217.0
23256	5 G 2.5	14	12.2	120.0	271.0
23257	6 G 2.5	14	13.2	144.0	314.0
23258	7 G 2.5	14	13.2	168.0	331.0
23259	8 G 2.5	14	14.7	192.0	404.0
23260	10 G 2.5	14	16.5	240.0	495.0
23261	12 G 2.5	14	16.5	288.0	554.0
23262	16 G 2.5	14	20.1	384.0	725.0
23263	18 G 2.5	14	21.2	432.0	838.0
23264	25 G 2.5	14	25.4	600.0	1108.0
23265	2 x 4	12	10.8	76.8	190.0
23266	3 G 4	12	11.5	115.2	241.0
23267	4 G 4	12	12.6	153.6	304.0
23268	5 G 4	12	14.2	192.0	384.0
23269	7 G 4	12	15.4	268.8	527.0
23270	2 x 6	10	14.0	115.2	284.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
23271	3 G 6	10	14.9	172.8	392.0
23272	4 G 6	10	16.4	230.4	492.0
23273	5 G 6	10	18.0	288.0	610.0
23274	7 G 6	10	19.6	403.2	681.0
23275	2 x 10	8	18.4	192.0	405.0
23276	3 G 10	8	20.1	288.0	620.0
23277	4 G 10	8	22.0	384.0	741.0
23278	5 G 10	8	24.4	480.0	914.0
23279	7 G 10	8	26.6	672.0	1164.0
23280	2 x 16	6	20.4	307.2	441.0
23281	3 G 16	6	21.8	460.8	501.0
23282	4 G 16	6	23.9	614.4	623.0
23283	5 G 16	6	26.8	768.0	971.0
23284	7 G 16	6	29.4	1075.3	1690.0
23285	2 x 25	4	23.2	480.0	711.0
23286	3 G 25	4	24.8	720.0	1210.0
23287	4 G 25	4	28.3	960.0	1524.0
23288	2 x 35	2	25.4	672.0	1140.0
23289	3 G 35	2	27.5	1008.0	1523.0
23290	4 G 35	2	31.0	1344.0	2217.0