

SiHF-C-Si UL/CSA

increased temperature resistance, tinned wire, EMC-preferred type



HELUKABEL® SiHF-C-Si 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
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 10x Outer-Ø fixed 5x Outer-Ø

- 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, as well as in ceramic, glass and cement factories. Due to the elastic properties of the core insulation, this silicone cable is ideally suitable as a flexible connection cable. An interference-free transmission of signals and pulse is assured by the high screening density. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

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

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
7 - 12 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
- Foil wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- 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

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
22637	2 x 0.5	20	8.2	39.7	90.0
22638	3 G 0.5	20	8.6	45.1	100.0
22639	4 G 0.5	20	9.3	57.7	125.0
22640	5 G 0.5	20	10.0	63.1	140.0
22641	7 G 0.5	20	10.7	81.0	168.0
22642	10 G 0.5	20	12.7	111.6	215.0
22643	12 G 0.5	20	13.6	122.4	255.0
22644	2 x 1	18	9.0	55.4	110.0
22645	3 G 1	18	9.5	65.0	130.0
22646	4 G 1	18	10.2	74.6	150.0
22647	5 G 1	18	11.0	91.4	180.0
22648	7 G 1	18	11.9	110.6	215.0
22649	10 G 1	18	15.2	161.1	290.0
22650	12 G 1	18	15.2	180.3	335.0
22651	2 x 1.5	16	9.6	65.0	125.0
22652	3 G 1.5	16	10.1	79.4	150.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
22653	4 G 1.5	16	10.9	101.0	185.0
22654	5 G 1.5	16	11.8	115.4	210.0
22655	7 G 1.5	16	12.8	151.4	265.0
22656	10 G 1.5	16	15.8	220.0	355.0
22657	12 G 1.5	16	16.9	248.8	435.0
22658	2 x 2.5	14	10.4	84.2	150.0
22659	3 G 2.5	14	11.0	115.4	195.0
22660	4 G 2.5	14	11.9	139.4	230.0
22661	5 G 2.5	14	12.9	170.6	275.0
22662	7 G 2.5	14	14.4	158.7	345.0
22663	4 G 4	12	13.4	204.2	320.0
22664	5 G 4	12	14.9	249.9	385.0
22665	4 G 6	10	17.2	306.4	490.0
22666	5 G 6	10	18.7	374.8	570.0
22667	4 G 10	8	22.8	481.7	785.0