

**SiHF UL/CSA** halogen-free, 150°C/ 600 V, two-approvals silicon multicore cable

HELUKABEL SiHF UL/CSA 3G1,5 QMM / 23180 300/500 V UL STYLE 4476 CSA AWM II A/B 001042365

**Technical data**

- Special silicone multicore cable with higher heat-resistance range to UL Style 4476 and CSA AWM II A/B
- **Temperature range**  
VDE -60°C to +180°C  
(up to +220°C for short time)  
UL/CSA -50°C to +150°C
- **Nominal voltage**  
VDE U<sub>0</sub>/U 300/500 V  
UL/CSA 600 V
- **Test voltage** 2000 V
- **Breakdown voltage** min. 5000 V
- **Insulation resistance**  
min. 200 MOhm x km
- **Minimum bending radius**  
flexing 7,5x cable Ø  
fixed installation 4x cable Ø
- **Radiation resistance**  
up to 20x10<sup>6</sup> cJ/kg (up to 20 Mrad)

**Cable structure**

- Tinned copper conductors to DIN VDE 0295 cl.5, BS 6360 cl.5 and IEC 60228 cl.5
- Core insulation of silicone
- Core identification to DIN VDE 0293-308 colour coded or black cores with continuous white numbering
- For 2-cores brown, blue
- Cores stranded in layers with optimal lay-length
- GN-YE conductor, 3 cores and above
- Outer sheath of silicone
- Sheath colour black

**Properties**

- **Advantages**  
Hardly changes of dielectric strength and the insulation resistance also at high temperatures, high ignition or flash point, in case of fire, forms an insulating layer of SiO<sub>2</sub>
- **Resistant to**  
High molecular oils, fats from vegetables and animals, alcohols, plasticizers and clophenes, diluted acids, lyes and salt dissolution, oxidation substances, tropical influences and weather, lake water, oxygen and UV
- Halogen-free  
acc. to DIN VDE 0482 part 267 / DIN EN 50267-2-1 / IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Behaviour in fire no flame propagation  
acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B), CSA FT 1
- For laying as a fixed installation only in open or ventilated pipe systems as well as in ducts. Otherwise the mechanical properties of the silicon are reduced by the enclosed air at temperatures exceeding 90°C.

**Note**

- G = with green-yellow conductor  
x = without green-yellow conductor
- screened analogue type:  
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**Application**

UL-CSA approved Silicone cables were evolved for use wherever insulation is subjected to extreme temperature changes. They are heat-resistant for permanent temperature up to +180°C, for short time operation up to +220°C. The good performance of the environmental resistant properties means that silicone cables can be used at temperatures down to -60°C. Silicone cables are halogen-free cables and are especially suited for installation in power stations. They have also found their uses in the steel producing industries, aviation industry, ship building as well as in ceramic, glass and cement factories. Due to elastics characteristic of core insulations, these are used as flexible connection cable.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
23214	2 x 0,5	20	7,7	9,6	73,0
23215	3 G 0,5	20	8,1	14,4	82,0
23216	4 G 0,5	20	8,8	19,2	98,0
23217	5 G 0,5	20	9,4	24,0	120,0
23218	6 G 0,5	20	10,4	28,8	131,0
23219	7 G 0,5	20	10,4	33,6	140,0
23220	8 G 0,5	20	10,8	38,4	183,0
23221	10 G 0,5	20	12,8	48,0	201,0
23222	12 G 0,5	20	13,4	57,6	241,0
23223	16 G 0,5	20	13,9	76,8	269,0
23224	18 G 0,5	20	14,4	86,4	311,0
23225	25 G 0,5	20	16,8	120,0	401,0

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
23226	2 x 1	18	8,2	19,2	88,0
23227	3 G 1	18	9,0	28,2	111,0
23228	4 G 1	18	10,0	38,4	130,0
23229	5 G 1	18	10,6	48,0	161,0
23230	6 G 1	18	11,4	57,6	182,0
23231	7 G 1	18	11,4	67,2	198,0
23232	8 G 1	18	12,4	76,8	251,0
24010	9 G 1	18	13,2	86,0	277,0
23233	10 G 1	18	13,2	96,0	304,0
23234	12 G 1	18	14,4	115,2	343,0
23235	16 G 1	18	15,7	153,6	441,0
23236	18 G 1	18	16,6	172,8	492,0
23237	25 G 1	18	19,1	240,0	617,0

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