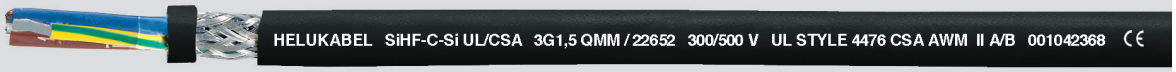
SiHF-C-Si UL/CSA halogen-free, 150°C/ 600 V, two-approvals silicon multicore cable, Cu-screened, EMC-preferred type



RoHS

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_0/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 10x cable Ø
  fixed installation 5x cable Ø
- **Coupling resistance**
  max. 250 Ohm/km
- **Radiation resistance**
  up to $20x10^6$ 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 numbers
- For 2-cores brown, blue
- Cores stranded in layers with optimal lay-length
- GN-YE conductor, 3 cores and above
- Foil separator
- Tinned copper braided screening, approx. 85% coverage
- Outer sheath of silicone
- Sheath colour black

Tests

- 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 FT1.

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_2

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
- 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
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- non-screened analogue type:
  SiHF UL/CSA

Application

UL-CSA approved Silicone cables were evolved for use wherever insulation is subjected to extreme temperature changes. 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 elastical characteristic of core insulations, these are used as flexible connection cable. An interference-free transmission of signals and pulse is assured by the high screening density. The ideal interference-protected silicone multicore flexible cable for such applications as given above.

EMC = Electromagnetic compatibillity

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

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

Part no.	No.cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
22637	2 x 0,5	20	9,0	55,5	94,0
22638	3 G 0,5	20	9,3	60,8	104,0
22639	4 G 0,5	20	9,7	66,5	125,0
22640	5 G 0,5	18	10,1	81,6	149,0
22641	7 G 0,5	20	10,5	92,2	168,0
22642	10 G 0,5	20	13,2	124,0	237,0
22643	12 G 0,5	20	13,4	134,4	260,0
22644	2 x 1	18	9,5	66,7	130,0
22645	3 G 1	18	9,6	86,2	151,0
22646	4 G 1	18	10,6	96,8	169,0
22647	5 G 1	18	11,6	108,3	198,0
22648	7 G 1	18	12,1	141,2	236,0
22649	10 G 1	18	14,7	190,0	248,0
22650	12 G 1	18	15,1	209,8	364,0
22651	2 x 1,5	16	10,6	87,7	169,0
22652	3 G 1,5	16	11,0	103,5	191,0
22653	4 G 1,5	16	11,6	131,7	230,0
22654	5 G 1,5	16	13,1	148,5	272,0
22655	7 G 1,5	16	14,1	193,4	341,0

Part no.	No.cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
22656	10 G 1,5	16	17,3	268,5	478,0
22657	12 G 1,5	16	17,9	298,4	521,0
22658	2 x 2,5	14	12,0	122,3	226,0
22659	3 G 2,5	14	12,7	147,7	271,0
22660	4 G 2,5	14	14,0	188,6	332,0
22661	5 G 2,5	14	15,1	214,9	384,0
22662	7 G 2,5	14	16,9	265,7	478,0
22663	4 G 4	12	17,0	294,0	516,0
22664	5 G 4	12	19,1	374,0	641,0
22665	4 G 6	10	18,6	449,0	773,0
22666	5 G 6	10	21,3	563,0	980,0
22667	4 G 10	8	25,5	759,0	1284,0

Dimensions and specifications may be changed without prior notice. (RN03)

16.04.2015 / Dimensions and specifications may be changed without prior