SiHF-C-Si

increased temperature resistance, tinned wire, EMC-preferred type

TECHNICAL DATA

Silicone control and connection cable in alignment with DIN VDE 0250-1, DIN VDE 0285-525-2-83 / DIN EN 50525-2-83

Temperature range	flexible -25°C to +180°C fixed -60°C to +180°C
Permissible operating temperature of the conductor	+180°C
Nominal voltage	AC U_0/U 300/500 V
Test voltage core/core	2000 V
Breakdown voltage	4000 V
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 10x Outer-Ø fixed 5x 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
  7 - 25 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
- Inner sheath: silicone
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Foil wrapping
- Outer sheath: silicone
- Sheath colour: redbrown
- Length marking: in metres

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 SiO_2 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

APPLICATION

Silicone-rubber-insulated cables are used for all applications where the cable insulation is subjected to high temperature fluctuations. Can also be used at low temperatures down to -60°C because of the excellent weathering resistance of the material. These cables are halogen-free and hence are particularly suitable for applications in iron and steel works, rolling mills, foundries, in aircraft construction and ship building, as well as in cement, glass and ceramic plants. Silicone-rubber-insulated cables have demonstrated proven applications in projector and high-power lighting fixtures as well as all types of heating equipment. 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 compatibility; to optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

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. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
23151	2 x 0.5	20	8.1	55.5	101.0
23152	3 G 0.5	20	8.4	60.8	118.0
23153	4 G 0.5	20	9.2	66.5	131.0
23154	5 G 0.5	20	10.0	81.6	153.0
23155	7 G 0.5	20	11.0	92.2	173.0
23156	10 G 0.5	20	12.9	124.0	242.0
23157	12 G 0.5	20	13.6	134.4	263.0
23158	16 G 0.5	20	15.2	170.2	326.0
23159	18 G 0.5	20	15.8	181.0	351.0
23291	25 G 0.5	20	18.8	230.1	348.0
23160	2 x 0.75	19	9.1	61.4	124.0
23161	3 G 0.75	19	9.5	69.1	136.0
23162	4 G 0.75	19	10.5	86.7	159.0
23163	5 G 0.75	19	11.4	95.2	180.0
23164	7 G 0.75	19	12.1	113.3	212.0
23165	10 G 0.75	19	14.0	165.2	306.0
23166	12 G 0.75	19	15.3	180.3	333.0
23167	16 G 0.75	19	17.0	212.2	418.0
23168	18 G 0.75	19	18.1	282.1	453.0
23292	25 G 0.75	19	21.5	297.4	468.0
23169	2 x 1	18	9.5	66.7	132.0
23170	3 G 1	18	9.9	86.2	153.0
23171	4 G 1	18	11.2	96.8	173.0
23172	5 G 1	18	12.1	108.3	202.0

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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.
23173	7 G 1	18	12.8	141.2	243.0
23174	10 G 1	18	14.8	190.0	238.0
23175	12 G 1	18	15.9	209.8	371.0
23176	16 G 1	18	17.5	251.8	468.0
23177	18 G 1	18	18.6	297.4	526.0
23293	25 G 1	18	22.3	329.0	559.0
23178	2 x 1.5	16	10.9	87.7	172.0
23179	3 G 1.5	16	11.3	103.5	198.0
23180	4 G 1.5	16	12.1	131.7	235.0
23181	5 G 1.5	16	12.9	148.5	281.0
23182	7 G 1.5	16	13.7	193.4	345.0
23183	10 G 1.5	16	16.3	268.5	482.0
23184	12 G 1.5	16	17.3	298.4	531.0
23185	16 G 1.5	16	20.1	362.3	662.0
23186	18 G 1.5	16	20.9	394.0	720.0
23294	25 G 1.5	16	25.1	488.2	791.0
23187	2 x 2.5	14	12.1	122.3	230.0
23188	3 G 2.5	14	13.0	147.7	275.0
23189	4 G 2.5	14	13.9	188.6	340.0
23190	5 G 2.5	14	14.9	214.9	394.0
23191	7 G 2.5	14	15.9	265.7	488.0
23192	4 G 4	12	16.1	294.0	520.0
23193	5 G 4	12	17.4	374.0	653.0
23150	2 x 6	10	15.9	171.0	350.0
23194	4 G 6	10	18.2	449.0	781.0
23195	5 G 6	10	20.1	563.0	982.0
23196	4 G 10	8	23.3	759.0	1294.0
23197	4 G 16	6	25.7	1180.0	1988.0
23198	4 G 25	4	31.1	1276.0	2995.0
23199	4 G 35	2	33.9	1680.0	4173.0