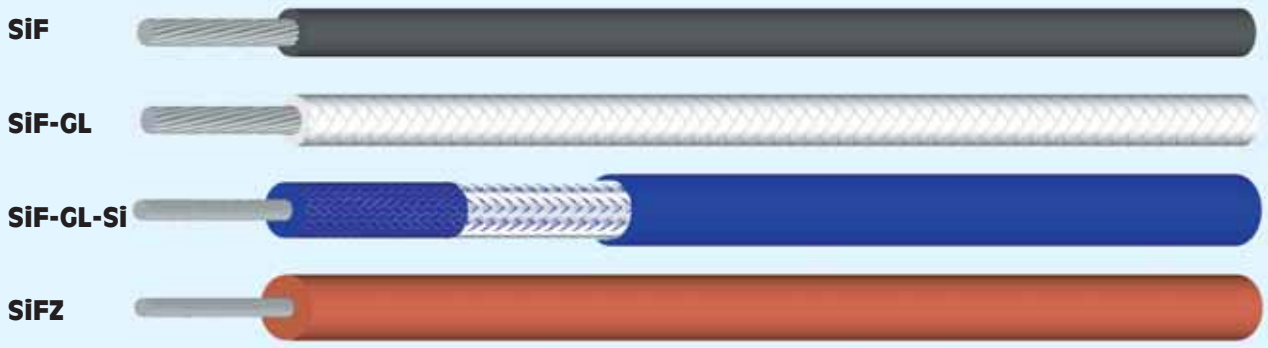
SiF, SiF-GL, SiFZ

Silicone, single core cables, halogen-free



Cable structure

- Type SiF tinned copper conductor, according to DIN VDE 0295 and IEC 60228 cl. 5, silicone core insulation
- Type SiFF (on request) as SiF, but fine stranded copper cl. 6
- Type SiF-GL as SiF, but insulation of glass-fibre braiding
- Type SiD (on request) solid copper conductor, tinned, silicone insulation
- Type SiD-GL (on request) as SiD but insulation of glass-fibre braiding
- Type SiFZ stranded copper tinned conductor, silicone insulation, high-voltage cable
- Type SiF-GL-Si stranded copper tinned conductor, silicone insulation, glass-fibre braiding, silicone outer sheath

Technical data

- Special silicone conductors, extensively heat resistant
- **Temperature range** from -60 °C to +180 °C short time +200 °C
- **Nominal voltage** 500 V, SiF-GL-Si 16 kV
- **Test voltage a.c.** 2000 V, SiFZ 20 kV
- **Breakdown voltage** min. 5000 V, SiF-GL-Si 30 kV, SiFZ 35 kV
- **Minimum bending radius** approx. 15× cable diameter
- **Radiation resistance** up to 20×10^6 cJ/kg (up to 20 Mrad)
- **Halogen-free** according to DIN VDE 0482 part 267/EN 50267-2-1/IEC 60754-1
- **Self-extinguishing and flame** resistant sheath according to VDE 0482 part 265-2-1/EN 50265-2-1/IEC 60332-1

Application

These silicone cables are used in all areas with permanent high temperatures up to 180 °C, short term up to 200 °C, as well as for areas with low temperatures up to -60 °C. Silicone cables are halogen-free and are used in power plants, in iron mills, steel-works, rolling-mills, in aviation and ship indutry, in cement, glass and ceramic factories etc. SiF-GL-Si cables are used as ignition cables in automotive industry.

Resistant to

high molecular oils, fats, alcohols, oxygen, sea water, weather-proofed.

Note

Fixed installation only in open or ventilated pipe systems or ducts. Otherwise the mechanical properties of the silicone are reduced in the enclosed areas with air temperatures exceeding 90 °C

CE = the product is conformed with the EC Low-Voltage Directive 73/23/EEC

Conforms to RoHS.

When ordering, please complete the Part No. of the cable SiF using the table below up to 6 mm², above 6 mm² black sheath

00-black	01-green	02-brown	03-blue	04-white	05-red	06-violet
07-grey	08-orange	09-yellow	10-beige	11-transparent.	12-twin color	

Part No.	core cross-section [mm²]	Approx. outer ∅ [mm]	Cooper weight [kg/km]	Approx. cable weight [kg/km]
SiF				
04232 __	0,25	1,9	2,4	5,5
04233 __	0,5	2,1	4,8	8,6
04234 __	0,75	2,4	7,2	11,8
04235 __	1	2,5	9,6	13,5
04236 __	1,5	2,8	14,4	18,5
04237 __	2,5	3,4	24,0	30,0
04238 __	4	4,2	38,0	47,3
04239 __	6	5,2	58,0	71,1
0423950	10	7,0	96,0	119,4
0423951	16	8,4	154,0	187,7
0423952	25	10,3	240,0	289,6
0423953	35	11,6	336,0	398,3
0423954	50	13,9	480,0	559,7
0423955	70	16,0	672,0	765,8
0423956	95	18,4	912,0	1031,5
0423957	120	20,0	1152,0	1 284,6
0423958	150	23,0	1440,0	1563,4
0423959	185	24,9	1776,0	1858,2

Part No.	core cross-section [mm²]	Approx. outer ∅ [mm]	Cooper weight [kg/km]	Approx. cable weight [kg/km]
SiF-GL				
0447001	0,25	2,4	2,4	7,7
0447002	0,5	2,6	4,8	12,4
0447003	0,75	2,9	7,2	16,2
0447004	1	3,0	9,6	18,2
0447005	1,5	3,3	14,4	23,4
0447006	2,5	3,9	24,0	35,2
0447007	4	4,7	38,0	53,5
0447008	6	5,7	58,0	77,4
0447009	10	7,5	96,0	129,2
0447010	16	8,9	154,0	198,4
0447011	25	10,8	240,0	303,0
0447012	35	12,1	336,0	413,2
0447013	50	14,4	480,0	577,8
SiF-GL-Si 16 kV				
0423106	1	8,0	9,6	65
0423107	1,5	8,5	14,4	88
SiFZ 20 kV				
0423108	1	7,0	9,6	61

Other types available on request. Technical changes reserved.