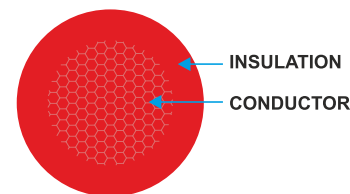




Silicon Cables

SiF - Silicone Single Core Cable



Application

Suitable where PVC insulated cables become brittle due to high-temperature variations. Silicone-insulated single cores are preferably used in the metallurgical industry, steel works, hot rolling mills, coking plants, foundries, etc.

Insulation consists of silicone rubber. It is resistant to vegetable and animal fat, many types of oil, and diluted acids. No decomposition occurs when exposed to alcohol, alkaline solutions, etc. The insulation is resistant to oxygen and ozone. Should the cable burn, an insulation silicon dioxide layer will remain on the conductor to render it short-circuit-proof.

Properties

Advantages high ignition or flash point resistant to high molecular oils, fats from vegetables and animals, alcohols, plasticizers and clothes, diluted acids, lye and salt dissolution, oxidation substances, tropical influences and weather, lake water, oxygen Halogen-free according to DIN VDE 0482 part 267/ EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815). Behaviour in fire No flame propagation test according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B).

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.

Construction

- Fine tinned copper strands
- Strands to VDE-0295 Class-5, IEC 60228 Cl-5
- Silicone core insulation
- Cores to VDE-0293 colors on the chart

Technical Parameter

- Working voltage : 300 / 500 V
- Test voltage : 2 KV
- Bending radius : 6 x Ø
- Temp range : -55°C to +180°C
- Short time temp up to +350°C
- Flame retardant : IEC 60332.1
- Insulation resistance : Min.870 MΩ x km

VDE 0482-261 EN 50267-2-1 IEC 60754-1

Dimension

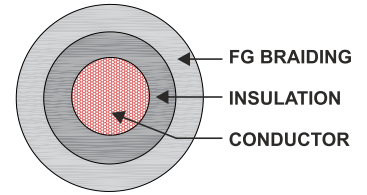
Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km
1801T010002	1	0.25	1.9	5.5
1801T010005	1	0.5	2.1	8.6
1801T010007	1	0.75	2.4	11.8
1801T010010	1	1	2.5	13.5
1801T010015	1	1.5	2.8	18.5
1801T010025	1	2.5	3.4	30
1801T010040	1	4	4.2	47.3
1801T010060	1	6	5.2	71.1
1801T010100	1	10	7.1	119.4
1801T010160	1	16	8.4	187.7
1801T010250	1	25	10.3	289.6
1801T010350	1	35	11.6	398.3
1801T010500	1	50	13.9	559.7
1801T010700	1	70	16.0	765.8
1801T010950	1	95	18.4	1031.5
1801T011200	1	120	20.0	1284.6
1801T011500	1	150	23.0	1563.4
1801T011850	1	185	24.9	1858.2

1801 - Silicon Cables



Silicon Cables

SiF / GL - Silicone Single Core with Glass fibre + lacquering braiding cable



Application

Suitable where PVC insulated cables become brittle due to high-temperature variations. Silicone-insulated single cores are preferably used in the metallurgical industry, steel works, hot rolling mills, coking plants, foundries, etc.

Insulation consists of silicone rubber. It is resistant to vegetable and animal fat, many types of oil, and diluted acids. No decomposition occurs when exposed to alcohol, alkaline solutions, etc. The insulation is resistant to oxygen and ozone. Should the cable burn, an insulation silicon dioxide layer will remain on the conductor to render it short-circuit-proof. Additional mechanical protection due to the glass fiber braid.

Properties

Advantages high ignition or flash point resistant to high molecular oils, fats from vegetables and animals, alcohols, plasticizers and clothes, diluted acids, lye and salt dissolution, oxidation substances, tropical influences and weather, lake water, oxygen halogen-free according to DIN VDE 0482 part 267/ EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815). Behaviour in fire No flame propagation Test according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B).

Construction

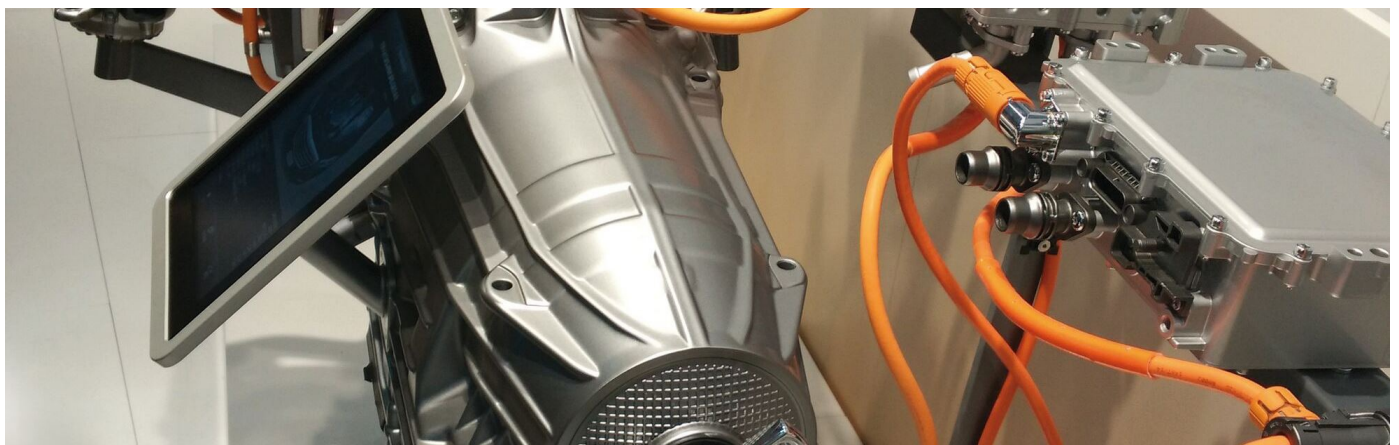
- Fine strands of tinned copper wire
- Stranding acc. to VDE 0295 class 5
- Core insulation made of silicone rubber
- Glass fibre braiding
- Bending radius : 10 x cable Ø

Technical Parameter

- Special silicone single conductor cable with higher heat-resistance range adapted to DIN VDE 0250 part 1 and part 502
- Temperature range : -55°C to +180°C
- Short time temp up to : 350°C
- Temperature limit at the conductor in operation +180°C
- Nominal voltage : 300/500 V
- Test voltage : 2 KV
- Minimum bending radius : 10 x cable Ø

Dimension

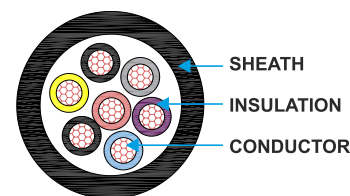
Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km
1802T010002	1	0.25	2.4	7.9
1802T010005	1	0.5	2.6	12.6
1802T010007	1	0.75	2.9	16
1802T010010	1	1	3	18.4
1802T010015	1	1.5	3.3	23.7
1802T010025	1	2.5	3.9	35.6
1802T010040	1	4	4.7	53.3
1802T010060	1	6	5.7	77.4
1802T010100	1	10	7.5	129.2
1802T010160	1	16	8.9	198.4
1802T010250	1	25	10.8	303
1802T010350	1	35	12.1	413.2
1802T010500	1	50	14.4	577.8





Silicon Cables

SiHF - Silicone Control Cable



Application

Suitable where PVC insulated cables become brittle due to high-temperature variations. Silicone-insulated single cores are commonly used in the metallurgical industry, steel works, hot rolling mills, coking plants, foundries, etc. The insulation consists of silicone rubber. It is resistant to vegetable and animal fat, many types of oil, and diluted acids. No decomposition occurs when exposed to alcohol, alkaline solutions, etc. The insulation is resistant to oxygen and ozone. Should the cable burn, a silicon dioxide layer will remain on the conductor to render it short-circuit-proof.

Properties

Advantages hardly changes in dielectric strength and insulation resistance at high temperatures, high ignition, or flash points, in case of fire, forms an insulating layer of SiO₂. Resistant to high molecular oils, fats from vegetables and animals, alcohols, plasticizers and clothes, diluted acids, lye and salt dissolution, oxidation substances, tropical influences and weather, lake water, oxygen, and UV halogen-free according to DIN VDE 0482 part 267/ EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813) behavior in fire no flame propagation.

Test according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

Construction

- Tinned copper conductors to DIN VDE 0295 cl. 5, BS 6360 cl. 5, and IEC 60228 cl. 5
- Silicone conductor insulation
- Conductor identification to DIN VDE 0293-308 color-coded or black conductors with continuous white numbers For 2-conductors brown, blue
- Conductors stranded in layers with optimal lay-length
- Green-yellow earth-conductor (3 conductors and above)
- The outer jacket is silicone

Technical Parameter

- Special silicone multi-conductor cable with higher heat-resistance range adapted to DIN VDE 0250 part 1 and part 816
- Working voltage : 300/500 V
- Test voltage : 2 KV
- Bending radius : flexing 7.5 x cable Ø, fixed installation 4 x cable Ø
- Temp range : -55°C to +180°C
- Short time temp up to +350°C
- Flame retardant : IEC 60332.1

Dimension

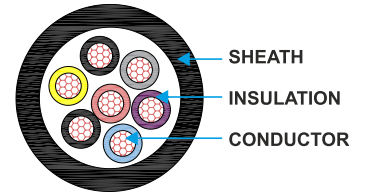
Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km
1803T020005	2	0.5	5.5	42
1803T030005	3	0.5	5.8	44
1803T040005	4	0.5	6.2	58
1803T050005	5	0.5	6.8	62
1803T060005	6	0.5	7.4	79
1803T070005	7	0.5	7.4	85
1803T080005	8	0.5	8.6	99
1803T100005	10	0.5	9.5	124
1803T120005	12	0.5	9.8	141
1803T160005	16	0.5	11	186
1803T180005	18	0.5	11.5	211
1803T250005	25	0.5	13.7	271
1803T020007	2	0.75	6.4	53
1803T030007	3	0.75	6.8	63
1803T040007	4	0.75	7.8	83
1803T050007	5	0.75	8.5	101
1803T060007	6	0.75	9.2	115
1803T070007	7	0.75	9.2	124
1803T080007	8	0.75	9.7	138
1803T100007	10	0.75	10.9	156
1803T120007	12	0.75	11.1	185
1803T160007	16	0.75	12.6	218
1803T180007	18	0.75	13.3	260
1803T250007	25	0.75	15.6	370
1803T020010	2	1	6.6	59
1803T030010	3	1	7.4	77
1803T040010	4	1	8	94
1803T050010	5	1	8.8	115
1803T060010	6	1	9.5	134

1803 - Silicon Cables



Silicon Cables

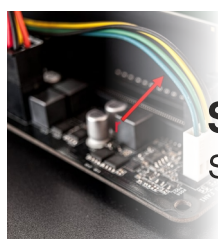
SiHF - Silicone Control Cable



1803 - Silicon Cables

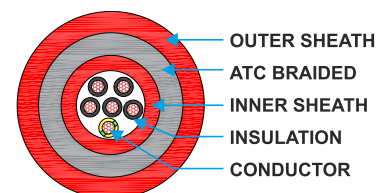
Dimension

Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km
1803T100010	7	1	9.5	144
1803T080010	8	1	10.4	175
1803T100010	10	1	11.3	216
1803T120010	12	1	11.5	231
1803T160010	16	1	13.1	302
1803T180010	18	1	13.8	340
1803T250010	25	1	16.2	431
1803T020015	2	1.5	7.6	81
1803T030015	3	1.5	8	98
1803T040015	4	1.5	8.8	122
1803T050015	5	1.5	9.6	147
1803T060015	6	1.5	10.4	173
1803T070015	7	1.5	10.4	187
1803T080015	8	1.5	11.6	213
1803T100015	10	1.5	13.6	263
1803T120015	12	1.5	14.6	314
1803T140015	14	1.5	15.4	379
1803T160015	16	1.5	16.7	445
1803T180015	18	1.5	17.6	506
1803T200015	20	1.5	18.2	566
1803T240015	24	1.5	20	722
1803T020025	2	2.5	9.2	134
1803T030025	3	2.5	9.7	152
1803T240025	4	2.5	10.6	188
1803T050025	5	2.5	11.6	228
1803T060025	6	2.5	12.9	304
1803T070025	7	2.5	13	320
1803T080025	8	2.5	14.9	373
1803T100025	10	2.5	16.5	450
1803T120025	12	2.5	17.8	502
1803T160025	16	2.5	19.1	659
1803T180025	18	2.5	20	761
1803T250025	25	2.5	24.5	1007
1803T020040	2	4	10.8	180
1803T030040	3	4	11.4	224
1803T040040	4	4	13.1	295
1803T050040	5	4	14.4	359
1803T070040	7	4	16.2	479
1803T020060	2	6	13.4	274
1803T030060	3	6	14.2	338
1803T040060	4	6	16.2	441
1803T050060	5	6	17.7	535
1803T070060	7	6	19.2	685
1803T020100	2	10	17.6	400
1803T030100	3	10	18.7	620
1803T040100	4	10	20.4	707
1803T050100	5	10	22.5	900
1803T070100	7	10	24.4	1151
1803T020160	2	16	20.4	400
1803T030160	3	16	22	500
1803T040160	4	16	24.3	714
1803T050160	5	16	26.7	850
1803T070160	7	16	27.6	1682
1803T020250	2	25	24.6	700
1803T030250	3	25	26.2	1100
1803T040250	4	25	31.8	1500
1803T020350	2	35	28.2	1100
1803T030350	3	35	29.9	1500
1803T040350	4	35	32.8	2100



Silicon Cables

SiHF-C-Si - Silicone Multi-Core Braided Cable



Application

SiHF-C-Si is a special 180-degree C silicone multi-core cable for use in high and low-temperature areas or whenever the insulation is subject to extreme temperature changes. These cables are mainly found in the steel-producing industry and aviation industry as well as in shipbuilding, cement, glass, and ceramic factories.

SiHF-C-Si cables are low-smoke and halogen-free especially suited for use in power stations. The silicone jacket provides added heat, chemical, oil, and acidic resistance while the internal tinned copper braid shield protects against electromagnetic interference offering disturbance-free signals and impulses. Not permitted for outdoor use.

Properties

Resistant to High molecular oils, fats from vegetables and animals, alcohols, plasticizers and clothes, diluted acids, lye and salt dissolution, oxidation substances, tropical influences and weather, lake water, oxygen, and UV halogen-free.

According to DIN VDE 0482 part 267 / EN 50267-2-2 / IEC 60754-2 (equivalent DIN VDE 0472 part 813) Burning behaviour No propagation of fire Testing according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

Construction

- Tinned copper conductor according to DIN VDE 0295 cl.5, BS 6360 cl.5, and IEC 60228 cl.5.
- Conductor insulation of silicone.
- Conductor identification according to DIN VDE 0293-308, single color, or black conductors with sequential.
- Numbering imprinted in white, for 2 conductors brown, and blue.
- Conductors are stranded in layers with optimal lay length.
- Green-yellow grounding (3 conductors)
- Inner jacket of silicone.
- Braid of tinned Cu wires, coverage approx. 85%
- Silicone-rubber-insulated common outer jacket.
- Jacket preferentially red-brown color.

Technical Parameter

- Special silicone-insulated cable with higher heat resistance adapted to DIN VDE 0250 part 1 and part 816
- Temperature range : -55°C to +180°C
- Short time temp up to : +350°C
- Temperature limit at the conductor in operation +180°C
- Nominal voltage : 300 / 500 V
- Test voltage : 2 KV
- Minimum bending radius : Flexing 10 x cable Ø, 5 x cable Ø
- Coupling resistance : Max. 250Ω/km

Dimension

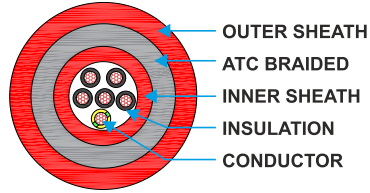
Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km (approx)
1804T020002	2	0.25	8.7	101
1804T030002	3	0.25	8.9	118
1804T040002	4	0.25	9.4	131
1804T050002	5	0.25	10	153
1804T070002	7	0.25	10.5	173
1804T100002	10	0.25	13.1	242
1804T120002	12	0.25	13.4	263
1804T160002	16	0.25	14.6	326
1804T180002	18	0.25	15.1	351
1804T250002	25	0.25	19.4	348
1804T020007	2	0.75	9.2	124
1804T030007	3	0.75	9.5	136
1804T040007	4	0.75	10.1	159
1804T050007	5	0.75	10.8	180
1804T070007	7	0.75	11.6	212
1804T100007	10	0.75	14.4	306
1804T120007	12	0.75	14.7	333
1804T160007	16	0.75	16.5	418
1804T180007	18	0.75	17.3	453
1804T250007	25	0.75	22.1	468
1804T020010	2	1	9.5	132
1804T030010	3	1	9.7	153
1804T040010	4	1	10.4	173
1804T050010	5	1	11.3	202
1804T070010	7	1	12	243
1804T100010	10	1	14.9	238
1804T120010	12	1	15.2	371
1804T160010	16	1	17	468
1804T180010	18	1	17.8	526

1804 - Silicon Cables



Silicon Cables

SIHF-C-Si - Silicone Multi-Core Shielded Double Jacket Cable



1804 - Silicon Cables

Dimension

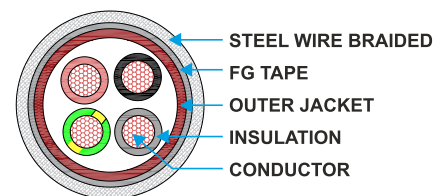
Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km (approx)
1804T250010	25	1	23	559
1804T020015	2	1.5	10.7	172
1804T030015	3	1.5	11.2	198
1804T040015	4	1.5	11.8	235
1804T050015	5	1.5	13.3	281
1804T070015	7	1.5	14.3	345
1804T100015	10	1.5	17.7	482
1804T120015	12	1.5	18	531
1804T160015	16	1.5	20.1	662
1804T180015	18	1.5	20.9	720
1804T250015	25	1.5	24.1	791
1804T020025	2	2.5	12.1	230
1804T030025	3	2.5	12.9	275
1804T040025	4	2.5	14.2	340
1804T050025	5	2.5	15.3	394
1804T070025	7	2.5	16.9	488
1804T040040	4	4	17.1	520
1804T050040	5	4	19.4	653
1804T040060	4	6	18.8	781
1804T050060	5	6	21.2	982
1804T040100	4	10	25.7	1294
1804T040160	4	16	28.4	1988
1804T040250	4	25	35	2995





Silicon Cables

SiHF-GLP-Silicone Multi Core Cable



Application

SiHF-GLP is a special 180 Degree C silicone multi-core cable with an overall steel braid for use in high and low temperature areas or whenever the insulation is subject to extreme temperature changes. These cables are mainly found in steel producing and aviation industry as well as in ship building, cement, glass and ceramic factories. SiHF-GLP cables are low-smoke and halogen-free especially suited for use in power stations. The silicone jacket provides added heat, chemical, oil and acid resistance. The external galvanized steel braid ensures excellent mechanical protection.

Construction

- Tinned copper conductors to DIN VDE 0295 cl. 5, BS 6360 cl. 5, and IEC 60228 cl. 5
- Silicon insulation.
- Conductor identification to DIN VDE 0293-308 color-coded or black conductors with continuous white numbers
- For 2 conductor brown & blue
- Conductors stranded in layers with optimal lay-length
- Green-yellow earth-conductor (3 conductors and above)
- The outer jacket is silicon
- Jacket color preferably red brown
- Glass fibre tape over the jacket
- Galvanized steel wire outer braiding

Properties

Advantages Hardly changes of dielectric strength and insulation resistance at high temperatures, high ignition or flash point. In case of fire, an insulating layer of SiO₂ is formed. Resistant to molecular oils, fats from vegetables and animals, alcohols, plasticizers and clothes, diluted acids, lye and salt dissolution, oxidation substances, tropical influences and weather, lake water, oxygen. Halogen-free.

According to DIN VDE 0482 part 267/ IEC 60754-2 (equivalent DIN VDE 0472 part 813) Behaviour in fire No flame propagation. Test according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

Technical Parameter

- Special silicon multi-conductor cable with higher heat-resistance range adapted to DIN VDE 0250 part 1 and part 816
- Temperature range : -55°C to +180°C
- Short time temp up to : +350° C
- Temperature limit at the conductor in operation +180°C
- Nominal voltage : 300 / 500 V
- Test voltage : 2 KV
- Minimum bending radius : flexing 10 x cable Ø fixed installation 5 x cable Ø

Dimension

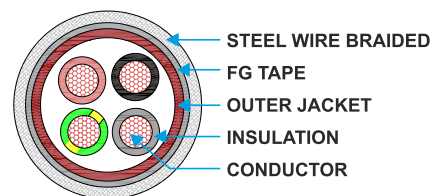
Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km
1805T020007	2	0.75	7.2	88
1805T030007	3	0.75	7.6	99
1805T040007	4	0.75	8.1	121
1805T050007	5	0.75	9.2	147
1805T060007	6	0.75	9.9	169
1805T070007	7	0.75	9.9	178
1805T020010	2	1	7.6	98
1805T030010	3	1	8	119
1805T040010	4	1	8.8	139
1805T050010	5	1	9.7	167
1805T060010	6	1	10.4	185
1805T070010	7	1	10.4	194
1805T020015	2	1.5	8.3	126
1805T030015	3	1.5	8.7	143
1805T040015	4	1.5	9.6	170
1805T050015	5	1.5	10.4	198
1805T060015	6	1.5	11.4	245
1805T070015	7	1.5	11.4	256
1805T080015	8	1.5	12.7	315
1805T100015	10	1.5	14	370
1805T120015	12	1.5	14.5	408
1805T140015	14	1.5	15.6	471
1805T160015	16	1.5	17	541
1805T180015	18	1.5	17.8	599
1805T200015	20	1.5	18.3	630
1805T240015	24	1.5	20.4	760

1805 - Silicon Cables



Silicon Cables

SIHF-GLP-Silicone Multi Core Cable



1805 - Silicon Cables

Dimension

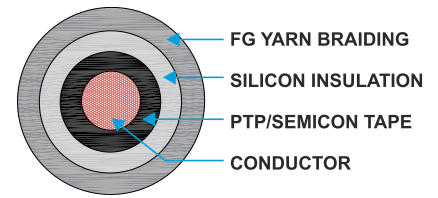
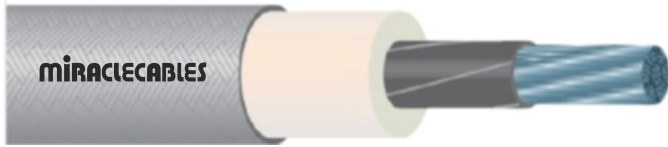
Part code	No. of Cores	Conductor cross-section mm ²	Nominal OD mm	Gross Weight kg/km
1805T020025	2	2.5	9.7	165
1805T030025	3	2.5	10.2	238
1805T040025	4	2.5	11.5	268
1805T050025	5	2.5	12.7	315
1805T060025	6	2.5	13.7	370
1805T070025	7	2.5	13.7	385
1805T120025	12	2.5	17.6	608
1805T020040	2	4	11.5	255
1805T030040	3	4	12.2	299
1805T040040	4	4	13.4	365
1805T050040	5	4	15.1	455
1805T060040	6	4	16.4	525
1805T070040	7	4	16.4	556
1805T020060	2	6	12.9	326
1805T030060	3	6	13.7	401
1805T040060	4	6	14.8	485
1805T050060	5	6	16.8	602
1805T060060	6	6	18.2	701
1805T070060	7	6	18.2	736
1805T020100	2	10	17.3	543
1805T030100	3	10	18.4	652
1805T040100	4	10	20.6	825
1805T050100	5	10	22.5	987
1805T020160	2	16	20.2	748
1805T030160	3	16	21.5	909
1805T040160	4	16	23.4	1183
1805T050160	5	16	26.2	1393
1805T020250	2	25	23.8	1046
1805T030250	3	25	26	1347
1805T040250	4	25	28.3	1678
1805T020350	2	35	27.2	1378
1805T030350	3	35	29	1846
1805T040350	4	35	32.3	2240
1805T020500	2	50	31.4	1869
1805T030500	3	50	33.5	2384
1805T040500	4	50	37.2	2702





Silicon Cables

Single Core V Cables – 1.1 KV, 3.3 KV, 6.6 KV



Application

Cabling for rotating machines, motors, alternators, generators.
 Cabling for static machine transformers, inductors, inverter, choppers, shipbuilding and railway construction.
 Power cabinets, high voltage machines.

Construction

- Flexible tin-plated copper core - class 5 as per IEC 60228 - PTP separator tape for 1.1 kv & Semicon tape (including & above 3.3 kv)
- Insulation : Silicone rubber synthetic yarn braid varnish

Properties

- Breakdown field strength : >20 KV / mm
- Dielectric constant : 3-4
- Loss factor : <10-2
- Insulation resistance : 200 MΩ X KM
- Tensile strength : 8Mpq (Min.)
- Elongation at break of insulation : 250% (Min.)
- Minimum bending radius : 5 X Overall diameter
- Flexibility (Conductor) : Class-5 conf. to IEC-60228

Technical Parameter

- Continuous operating temperature : +180°C
- Intermittent : +180°C
- Short time duration 1-5 sec. : +350°C
- Rated voltage 1.1 KV (Test voltage - 3.5 KV)
- Rated voltage 3.3 KV (Test voltage - 10 KV)
- Rated voltage 6.6 KV (Test voltage - 15 KV)

Dimension

Part code	Sq.mm.	Thickness Insulation (mm)			Overall Diameter (mm)						Cond Resistance @20degC
		Voltage category V			1.1KV		3.3KV		6.6KV		
		1.1KV	3.3kv	6.6kv	Min	Max	Min	Max	Min	Max	
1806T010040	4.00	1.0	~	~	5.0	5.6	~	~	~	~	5.09
1806T010060	6.00	1.0	~	~	5.6	6.3	~	~	~	~	3.39
1806T010100	10	1.2	~	~	6.9	7.6	~	~	~	~	1.95
1806T010160	16	1.2	2.2	2.8	8.2	9.0	10.5	11.3	11.8	12.6	1.24
1806T010250	25	1.4	2.2	2.8	10	11	11.8	12.8	13	13.8	0.795
1806T010350	35	1.4	2.2	2.8	11.3	12.3	12.9	13.9	14.2	15.3	0.565
1806T010500	50	1.6	2.2	2.8	13.3	14.3	13.4	15.6	15.8	16.0	0.393
1806T010700	70	1.6	2.2	2.8	15.2	16.2	16.4	17.6	17.7	19.1	0.277
1806T010950	95	1.8	2.4	3.0	17.8	18.8	18.6	19.7	19.9	21.4	0.210
1806T011200	120	1.8	2.4	3.0	19.1	20.1	20.2	21.5	21.6	23.0	0.164
1806T011500	150	2.0	2.4	3.0	21.4	22.4	22.0	23.3	23.3	24.6	0.132

Bare = Bare Copper

