

# Silicone-Sheathed Flexible Cable SiHF

Highly heat-resistant flexible Cable

## Application

Silicone-insulated cables are used when exposure to high temperatures and temperature variations would cause conventional PVC-insulated cables to become brittle. Silicone-insulated cables are preferably used in the metallurgical industry, steel works, hot-rolling mills, coking plants, foundaries, cement works, glass factories and ceramic plants as well as in the production of electric motors, in ships and aeroplanes, in heating equipment, and in lighting gear etc. Silicone rubber is resistant to vegetable and animal fat, many types of oil and diluted acids. No decomposition occurs when exposed to alcohol, plasticizers, alkaline solutions, saline solutions, etc. The insulation is fully tropicalized and resistant to oxygen and ozone. One of its exceptional features is its high flash point. Should the cable burn, an insulating silicon dioxide layer will remain on the conductor to render it short circuit proof.



Construction	
Conductor	Tinned copper conductor to IEC 60228 cl.5
Insulation	Silicone core insulation
Cores identification	Colour coding according to DIN VDE 0293 up to 5 cores 3 cores & above: with Green/Yellow earth core 6 cores & above: 6 cores & above: black cores with white numbering + Yellow/Green
Outer sheath	Silicone rubber, colour Reddish Brown
	Behaviour in fire no flame propagation test, IEC 60332-1B, halogen free
Technical Data	
Nominal voltage	300/500V
Test voltage	2000 V
Breakdown voltage	Min. 5000V
Insulation resistance	Min. 200 MOhm x km
Temperature range	-60°C to +180°C (up to +220°C for short time)
Temperature limit of conductor	+180°C (in operation)
Minimum bending radius	Flexing: 7.5 x cable Ø    Fixed installation: 4 x cable Ø

## Specifications

No of cores	Conductor nominal area	Outer diameter	Approx. cable weight	No of cores	Conductor nominal area	Outer diameter	Approx. cable weight
	mm <sup>2</sup>	mm	Kg/km		mm <sup>2</sup>	mm	Kg/km
*2	0.5	5.5	42.00	7	0.75	9.2	124.00
3	0.5	5.8	44.00	8	0.75	9.7	138.00
4	0.5	5.2	58.00	10	0.75	10.9	156.00
5	0.5	6.8	62.00	12	0.75	11.1	185.00
5	0.5	7.4	79.00	16	0.75	12.6	218.00
7	0.5	7.4	85.00	18	0.75	13.3	260.00
8	0.5	8.5	99.00	25	0.75	15.6	370.00
10	0.5	9.5	124.00	*2	1	6.6	59.00
12	0.5	9.8	141.00	3	1	7.4	77.00
16	0.5	11.0	186.00	4	1	8.0	94.00
18	0.5	11.5	211.00	5	1	8.8	115.00
25	0.5	13.7	271.00	6	1	9.5	134.00
*2	0.75	6.4	53.00	7	1	9.5	144.00
3	0.75	6.8	63.00	8	1	10.4	175.00
*3	0.75	6.8	63.00	10	1	11.3	216.00
4	0.75	7.8	83.00	12	1	11.5	231.00
*4	0.75	7.8	83.00	16	1	13.1	302.00
5	0.75	8.5	101.00	18	1	13.8	340.00
5	0.75	9.2	115.00	25	1	16.2	431.00

Note : \* = without G/Y earth core

### Specifications

No of cores	Conductor nominal area	Outer diameter	Approx. cable weight	No of cores	Conductor nominal area	Outer diameter	Approx. cable weight
	mm <sup>2</sup>	mm	Kg/km		mm <sup>2</sup>	mm	Kg/km
*2	1.5	7.6	81.00	*2	4	10.8	180.0
3	1.5	8.0	98.00	3	4	11.4	224.00
4	1.5	8.8	122.00	4	4	13.1	295.00
5	1.5	9.6	147.00	5	4	14.4	359.00
6	1.5	10.4	173.00	7	4	16.2	479.00
7	1.5	10.4	187.00	*2	6	13.4	274.00
8	1.5	11.6	213.00	3	6	14.2	338.00
10	1.5	13.6	263.00	4	6	16.2	441.00
12	1.5	14.6	314.00	5	6	17.7	535.00
14	1.5	15.4	379.00	7	6	19.2	685.00
16	1.5	16.7	445.00	*2	10	17.6	400.00
18	1.5	17.6	506.00	3	10	18.7	620.00
20	1.5	18.2	566.00	4	10	20.4	707.00
24	1.5	20.0	722.00	5	10	22.5	900.00
*2	2.5	9.2	134.00	7	10	24.4	1151.00
3	2.5	9.7	152.00	*2	16	20.4	400.00
4	2.5	10.6	188.00	3	16	22.0	500.00
5	2.5	11.6	228.00	4	16	24.3	714.00
6	2.5	12.9	304.00	5	16	26.7	850.00
7	2.5	13.0	320.00	7	16	27.6	1682.00
8	2.5	14.9	373.00	*2	25	24.6	700.00
10	2.5	16.5	450.00	3	25	26.2	1100.00
12	2.5	17.8	502.00	4	25	31.8	1500.00
16	2.5	19.1	659.00	*2	35	28.2	1100.00
18	2.5	20.0	761.00	3	35	29.9	1500.00
25	2.5	24.5	1007.00	4	35	32.8	2100.00

Note : \* = without G/Y earth core