

# SiHF-J

## Highly heat-resistant, silicone-sheathed flexible cable



### Applications

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, foundries, cement works, glass factories and ceramics plants as well as in the production of electric motors, in sauna construction, in ships and aeroplanes, in heat, refrigeration and air-conditioning technology, as well as in lighting gear etc.

The insulation consists of silicone rubber. It is halogen-free and 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.

### Design

- Stranded tinned Cu conductor, fine wire
- Strand structure to VDE 0295 class 5 / IEC 60228 class 5
- Silicone-insulated cores
- Up to 5 cores: coloured cores to VDE 0293
- 6 cores and over: black cores with printed consecutive number coding
- Green-yellow protective conductor (3 cores and over) in the outer layer
- Cores twisted in layers, with optimal lay lengths
- Outer sheath: silicone
- Sheath colour: preferably reddish brown

### Electrical and technical specifications

Rated voltage:  
U<sub>o</sub>/U 300/500 V

Test voltage: 2000 V

Insulation resistance: ≥ 200 MΩm x km

Bending radius: 15 x cable diameter

Temperature range: -50° C to +180° C temporarily  
up to +200° C

Flame retardant to IEC 60332-1

Halogen-free:  
HCl emission to IEC 60754-1  
Corrosiveness of combustion gas to IEC 60754-2

Cross-section mm <sup>2</sup>	Cu content kg/km	Outer diameter approx. mm	Weight approx. kg/km
2x0.5	9.6	5.2	35
3x0.5	14.4	5.5	40
4x0.5	19.2	5.9	51
5x0.5	24.0	6.5	62
6x0.5	28.8	7.0	72
7x0.5	33.6	7.3	80
2x0.75	14.4	6.4	53
3x0.75	22.0	6.8	64
4x0.75	28.8	7.8	84
5x0.75	36.0	8.5	101
6x0.75	43.2	9.2	117
7x0.75	50.0	9.2	125
12x0.75	86.0	10.6	170

Cross-section mm <sup>2</sup>	Cu content kg/km	Outer diameter approx. mm	Weight approx. kg/km
2x1.0	19.2	6.6	60
3x1.0	28.8	7.4	78
4x1.0	38.4	8.0	95
5x1.0	48.0	8.8	116
6x1.0	57.6	9.5	135
7x1.0	67.0	9.5	144
8x1.0	77.0	10.0	160
12x1.0	115.2	11.1	211
18x1.0	172.8	13.5	302
24x1.0	230.4	15.9	405
25x1.0	241.0	16.3	430
2x1.5	28.8	7.6	82
3x1.5 *	43.2	8.0	98
4x1.5	57.6	8.8	122
5x1.5	72.0	9.6	148
6x1.5	86.4	10.4	173
7x1.5	100.8	10.4	187
8x1.5	115.0	11.5	238
10x1.5	144.0	12.9	250
12x1.5	172.8	14.0	332
14x1.5	202.0	15.0	360
16x1.5	230.4	15.5	427
18x1.5	259.2	16.2	430
20x1.5	288.0	18.5	549
24x1.5	345.6	20.0	635
2x2.5	48.0	9.2	135
3x2.5	72.0	9.7	152
4x2.5	96.0	10.6	189
5x2.5	120.0	11.6	229
6x2.5	144.0	12.6	268
7x2.5	168.0	12.6	293
12x2.5	288.0	18.0	580
24x2.5	576.0	23.0	850
2x4.0	77.0	10.8	191
3x4.0	115.0	11.4	224
4x4.0	153.6	13.1	295
5x4.0	192.0	14.4	359
7x4.0	268.8	16.2	481
2x6.0	115.2	13.4	274
3x6.0	173.0	14.2	338
4x6.0	230.4	16.2	442
5x6.0	288.0	17.7	535
7x6.0	403.2	19.2	685
3x10	288.0	18.1	598
4x10	384.0	20.0	707
5x10	480.0	21.1	810
4x16	614.0	24.3	987
5x16	768.0	25.6	1180
4x25	960.0	27.3	1480
4x35	1344.0	31.0	2030

\* also available with black outer sheath from stock  
Other core numbers and cross-sections available on request