



HIGH TEMPERATURE CABLES

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HIGH TEMPERATURE CABLES

SIHF MULTI CORE SERIES

**High Performance Flexible Silicone Rubber High Temperature Cable
300/500V 180°C**



APPLICATIONS:

High Temperature Suitable for wiring on kilns, boilers, lighting and other high temperature applications and surfaces not exceeding 180°C.

Low Temperature Used for wiring in industrial cool stores and freezers to -60°C.

PRODUCT FEATURES:

- ▶ Halogen – Free IEC 60754
- ▶ Tinned fine stranded copper conductor
- ▶ High ignition or flashpoint
- ▶ Minimal change to dielectric strength at high temperature
- ▶ Minimal change to insulation resistance at high temperature
- ▶ In the event of a fire the silicone forms an insulating layer of SiO₂
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ Very good behaviour to variations of outdoor temperature
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

Conductor Annealed tinned copper stranded high flexibility (Class 5).

Insulation Silicone rubber.

Sheath Silicone rubber.

CHARACTERISTICS:

Operating Temperature Range Fixed -60°C to 180°C / Flexing -40°C to 180°C.

Maximum Conductor Temperature 180°C.

Rated Voltage U_o/U 300/500v.

Max AC Operating Voltage U_o 318v.

Minimum Bending Radius Fixed 4 x cable diameter / Flexing 7.5 x cable diameter.

Sheath Colour Reddish-Brown.

Standard Core Colours

3 Core – Blue, Brown, Green/Yellow.

4 Core – Brown, Black, Grey, Green/Yellow.

5 Core – Blue, Brown, Black, Grey, Green/Yellow.

Multi Core – Black Numbered, Green/Yellow.

Relevant Standards IEC 60332-1, IEC 60754-2, IEC6 0228, VDE 0472, VDE 0282, **CE** Directive 2006/95/EC,


RoHS Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 150°C fixed installation
	(mm ²)	No. of wires x mm	(mm)	(Kg/Km)	Touching or in ventilated ducts
SIHF3/0.75	3 x 0.75	24/0.20	6.8	76	12
SIHF3/1.0	3 x 1.0	32/0.20	7.4	93	15
SIHF3/1.5	3 x 1.5	30/0.25	8.0	117	18
SIHF3/2.5	3 x 2.5	50/0.25	9.7	179	26
SIHF4/0.75	4 x 0.75	24/0.20	7.8	101	12
SIHF4/1.5	4 x 1.5	30/0.25	8.8	145	18
SIHF4/2.5	4 x 2.5	50/0.25	10.6	222	26
SIHF4/4.0	4 x 4.0	56/0.30	13.2	346	34
SIHF4/6.0	4 x 6.0	84/0.30	15.6	497	44
SIHF4/10	4 x 10.0	80/0.40	19.1	778	61
SIHF5/0.5	5 x 0.5	16/0.20	7.8	59	3
SIHF5/1.5	5 x 1.5	30/0.25	9.6	175	18
SIHF5/2.5	5 x 2.5	50/0.25	11.6	268	26

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SIHF MULTI CORE SERIES continued

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 150°C fixed installation
	(mm ²)	No. of wires x mm	(mm)	(Kg/Km)	Touching or in ventilated ducts 
SIHF5/4.0	5 x 4.0	56/0.30	14.4	359	34
SIHF7/0.75	7 x 0.75	24/0.20	9.2	148	12
SIHF7/1.5	7 x 1.5	30/0.25	10.4	220	18
SIHF12/1.5	12 x 1.5	30/0.25	14.6	413	18
SIHF19/1.5	19 x 1.5	30/0.25	17.0	591	18

CONVERSION FACTORS FOR DEVIATING AMBIENT TEMPERATURES

Temp. °C	Up to 150	150–155	155–160	160–165	165–170	170–175
Derating Factor	1.00	0.91	0.82	0.71	0.58	0.41

HIGH TEMPERATURE CABLES

SIHF SINGLE CORE SERIES

High Performance Flexible Silicone Rubber High Temperature Cable 300/500V 180°C



APPLICATIONS:

High Temperature Suitable for wiring on kilns, boilers, lighting and other high temperature applications and surfaces to 180°C.

Low Temperature Used for wiring in industrial cool stores and freezers to -60°C.

Power Suitable for wiring of public lighting in medical areas.

PRODUCT FEATURES:

- ▶ Halogen – Free IEC 60754
- ▶ Tinned fine stranded copper conductor
- ▶ High ignition or flashpoint
- ▶ Minimal change to dielectric strength at high temperature
- ▶ Minimal change to insulation resistance at high temperature
- ▶ In the event of a fire the silicone forms an insulating layer of SiO₂
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ Water and moisture resistant
- ▶ Heat, oil and chemical resistant (See Technical Section)

CONSTRUCTION:

Conductor Annealed tinned copper stranded high flexibility (Class 5).

Insulation Silicone rubber.

CHARACTERISTICS:

Operating Temperature Range Fixed -60°C to 180°C / Flexing -40°C to 180°C.

Maximum Conductor Temperature 180°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage U_o/U 300/500v.

Max AC Operating Voltage U_o 318v.

Minimum Bending Radius Fixed 4 x cable diameter / Flexing 7.5 x cable diameter.

Insulation Colour

1.0 - 1.5mm² - Black, Blue, Green/Yellow, Red



2.5mm² - Black, Blue, Green/Yellow, Red, Grey, Brown

4.0mm² - Black, Blue, Green/Yellow

6.0 – 16.0mm² - Black

25.0mm² and above – Red, Black. Other colours subject to availability.

Relevant Standards IEC 60332-1, IEC 60754-1, IEC 60228, VDE 0282, VDE 0295, VDE 0472, **CE** Directive 2006/95/EC, **RoHS** Compliant.

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Nominal Amps un-enclosed protected from sun or in ventilated duct @ 150°C fixed installation	
					Spaced 	Laid in ventilated duct 
SIHF1/1.0	1 x 1.0	32/0.21	2.3	13	19	12
SIHF1/1.5	1 x 1.5	30/0.25	2.7	18	24	16
SIHF1/2.5	1 x 2.5	50/0.25	3.4	30	32	21
SIHF1/4.0	1 x 4.0	56/0.30	4.0	47	42	28
SIHF1/6.0	1 x 6.0	84/0.30	4.5	71	54	36
SIHF1/10	1 x 10.0	80/0.40	6.8	119	73	49
SIHF1/16	1 x 16.0	128/0.40	7.8	187	98	65
SIHF1/25	1 x 25.0	200/0.40	10.3	290	129	85
SIHF1/35	1 x 35.0	280/0.40	11.6	398	158	105
SIHF1/50	1 x 50.0	400/0.40	13.9	560	198	140

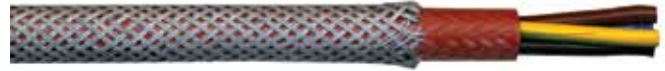
CONVERSION FACTORS FOR DEVIATING AMBIENT TEMPERATURES

Temp. °C	Up to 150	150–155	155–160	160–165	165–170	170–175
Derating Factor	1.00	0.91	0.82	0.71	0.58	0.41

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SICY SERIES

High Performance Flexible Silicone Rubber SWB High Temperature Cable 300/500V 180°C



APPLICATIONS:

High Temperature Suitable for wiring on kilns, boilers, lighting and other high temperature applications and surfaces not exceeding 180°C.

Low Temperature Used for wiring in industrial cool stores and freezers to -60°C.

Tough Environments The steel wire external braid adds to its mechanical strength and ensures disturbance free transmission of signals.

PRODUCT FEATURES:

- ▶ Tinned fine stranded copper conductor
- ▶ High ignition or flashpoint
- ▶ Halogen Free
- ▶ Minimal change to dielectric strength at high temperature
- ▶ Minimal change to insulation resistance at high temperature
- ▶ In the event of a fire the silicone forms an insulating layer of SiO₂
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

Conductor Annealed tinned copper stranded high flexibility (Class 5).

Insulation Silicone rubber.

Sheath Silicone rubber.

Screen External steel wire braid.

CHARACTERISTICS:

Operating Temperature Range Fixed -60°C to 180°C / Flexing -40°C to 180°C.

Maximum Conductor Temperature 180°C.

Rated Voltage U₀/U 300/500v

Max AC Operating Voltage U₀ 318v.

Minimum Bending Radius Fixed 10 x cable diameter / Flexing 15 x cable diameter.

Sheath Colour Tinned steel wire braid over glass fibre tape over reddish-brown silicone.

Standard Core Colours

3 Core – Blue, Brown, Green/Yellow.

4 Core – Brown, Black, Grey, Green/Yellow.

Relevant Standards DIN VDE 0295, IEC 60332-1, IEC 60754-1, IEC 60228, VDE 0472, VDE 0282,

CE Directive 2006/95/EC, **RoHS** Compliant.

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Nominal Amps un-enclosed protected from sun @ 150°C fixed installation
					Touching or in ventilated duct
SICY3/1.5	3 x 1.5	30/0.25	7.9	145	18
SICY3/2.5	3 x 2.5	50/0.25	9.5	205	26
SICY4/1.5	4 x 1.5	30/0.25	8.7	173	18
SICY4/2.5	4 x 2.5	50/0.25	10.3	278	26
SICY4/4.0	4 x 4.0	56/0.30	12.1	384	34

CONVERSION FACTORS FOR DEVIATING AMBIENT TEMPERATURES

Temp. °C	Up to 150	150–155	155–160	160–165	165–170	170–175
Derating Factor	1.00	0.91	0.82	0.71	0.58	0.41