## **HIGH TEMPERATURE CABLES**

# **SHF** 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 SiO<sub>2</sub>
- 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 Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 4 x cable diameter /

Flexing 7.5 x cable diameter.

#### **Insulation Colour**

1.0 - 1.5mm<sup>2</sup> - Black, Blue, Green/Yellow, Red

2.5mm<sup>2</sup> - Black, Blue, Green/Yellow, Red, Grey, Brown

- 4.0mm<sup>2</sup> Black, Blue, Green/Yellow
- 6.0 16.0mm<sup>2</sup> Black

25.0mm<sup>2</sup> 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, **€** 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 or in ventilated duct @ 150°C fixed installation	
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	Spaced 0	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

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.