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

Max AC Operating Voltage Uo 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,

**C** € 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	
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	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			
<b>Derating Factor</b>	1.00	0.91	0.82	0.71	0.58	0.41			

