

## 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** U<sub>0</sub>/U 300/500v

**Max AC Operating Voltage** U<sub>0</sub> 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 <sup>2</sup> )	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
<b>Derating Factor</b>	1.00	0.91	0.82	0.71	0.58	0.41