



Caledonian

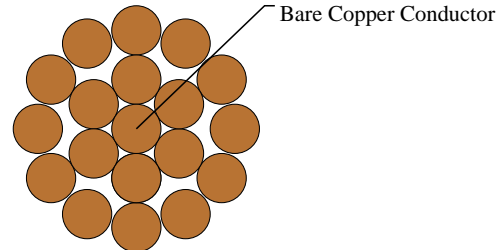
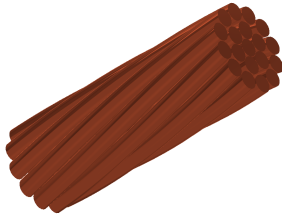
Bare Copper Conductor

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Bare Copper Conductor

CCL-BC-R 50



APPLICATIONS

Stranded Class 2 bare copper wire to BS EN 60228 / IEC 60228 cables are non insulated and non sheathed soft drawn copper to BS6360/81. Stranded bare soft or annealed copper conductors are recommended for use as neutrals, in circuit ground connections as well as machinery and equipment grounding systems. Soft copper may be used for transformer drop leads or other non-tension hook-up jumpers.

PRODUCT DESCRIPTION

Features and Benefits

Stranded bare soft or annealed copper conductors are suitable for direct burial and do not suffer from the inherent corrosion problems that an aluminum conductor would. Copper is almost twice as conductive as aluminum. Copper is easier than aluminum to terminate and join at splices and joints.

STANDARDS

Basic design to BS 6360 and BS EN 60228 / IEC 60228

CABLE CONSTRUCTION

Conductor material: Electrolytic, stranded and bare copper

Conductor class: Class 2 according to BS EN60228

Bare copper conductors are compressed concentric-lay-stranded consisting of one or more layers of wire wrapped helically around a straight round central wire. Each successive layer has six wires more than the layer immediately beneath. Greater flexibility is afforded by using Class 2 stranding. The direction of lay for the outer layer is left hand lay. In 7,19 and 37 wire constructions, the direction of lay of each successive layer is reversed.

PHYSICAL AND THERMAL PROPERTIES

Usage characteristics

Minimum Installation Temperature: 0°C

Maximum Installation Temperature: 60°C

Minimum Operating Temperature: -15°C

Maximum Operating Temperature: 70°C

Maximum conductor temperature: 90°C

Linear resistance @20°C: According to BS EN60228 / IEC 60228



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Short-circuit max. conductor temperature:370°C

Mechanical characteristics

Min. Bending Radius:35mm² up to 400mm² = 6 x OD

DIMENSION AND PARAMETERS

Nominal Cross-sectional Area	No./Nominal Diameter of Strands	Conductor Diameter	Appr. Copper Weight	Max. DC Resistance at 20°C
mm ²	no./mm	mm	kg/km	Ω/km
50	19/1.78	8.9	430	0.387