



Caledonian

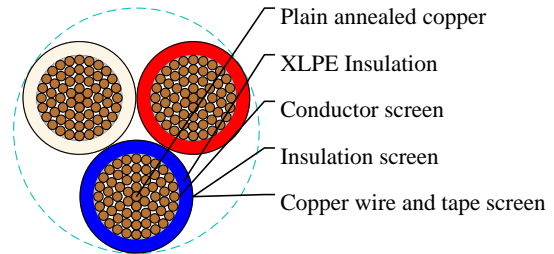
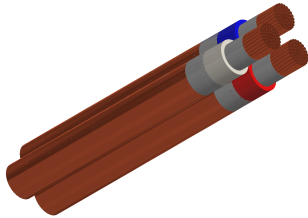
Medium Voltage Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

Caledonian Medium Voltage Cables 3C500

Unarmoured cables



APPLICATIONS

This product is used for an underground distribution cable for the lead-out parts of substations of general power distribution lines including high-capacity power distribution, cable tunnels, pipelines, directly embedded types, raising parts of telephone poles, etc.

STANDARDS

JIS C 3606-2003 (6600V)

VOLTAGE RATING

17KV

CABLE CONSTRUCTION

Conductor: Plain annealed copper with JCS C 3102.

Conductor Screen: The conductor screen consists of an extruded layer of non metallic, semi-conducting compound firmly bonded to the insulation to exclude all air voids.

Insulation: XLPE.

Insulation Screen: The insulation screen consists of an extruded layer of non metallic, semiconducting compound extruded over the insulation. The extruded semi-conducting layers shall consist of bonded or cold strippable semi-conducting compound capable of removal for jointing or terminating. As an option, a semi-conducting tape may be applied over the extruded semi-conducting layer as a bedding for the metallic layer. The minimum thickness is 0.5 mm. The screen is tightly fitted to the insulation to exclude all air voids and can be easily hand stripped on site.

Metallic Screen: By sufficiently winding of a soft copper tape on an external semiconducting layer, each core shall be shielded, the tape is wound with overlapping about one-sixth of its width or the equivalent of that.

Over Sheath: Black, PVC or PE.

COLOUR CODE

Identification of wire cores: Wire core identification shall be performed with 3 colors, that is, white, red and blue.

PHYSICAL AND THERMAL PROPERTIES

Operating Temperature: up to 120°C

Cold Resistant: -15 ± 0.5 °C



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TECHNICAL CHARACTERISTICS

Nom. Cross-Section Area	Max. Conductor DC Resistance @20°C	Insulation Resistance @20°C	Electrostatic Capacitance
mm ²	Ohm/km	MegOhm.km	μF/km
500	0.0376	900	0.74

DIMENSION AND PARAMETERS

Nominal Cross-sectional Area	Nominal Insulation Thickness	Nominal Sheath Thickness	Diameter Of Core	Approx. Overall Diameter	Approx. Weight
mm ²	mm	mm	mm	mm	kg/km
500	4.5	3.5	45	98	17000