



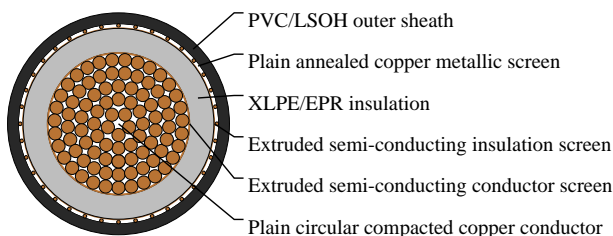
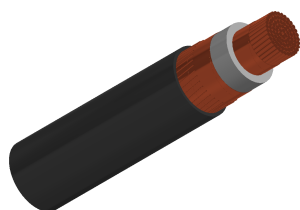
# Caledonian

Industrial Cables (Australian Standard Medium Voltage)

www.caledonian-cables.com

marketing@caledonian-cables.com

## 12.7/22kV Single Core Screened & PVC Sheathed (Cu Conductor) Light Duty 1C630



### APPLICATIONS

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.

### STANDARDS

AS/NZS 1429.1

### VOLTAGE RATING

12.7/22kV

### CABLE CONSTRUCTION

CONDUCTOR: Plain circular compacted copper to AS/NZS1125

Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard

Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 3kA for nominal 1 second(LIGHT DUTY)

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard

Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative

Low smoke zero halogen (LSOH) – alternative

### TECHNICAL CHARACTERISTICS

| NonMax. Conduc | Cond.    | Cond.    | Inductive | Inductive | Inductive | Insulation | Conductor  | Max.       | Current   | Current | Current |
|----------------|----------|----------|-----------|-----------|-----------|------------|------------|------------|-----------|---------|---------|
| Cross-         | DC       | AC       | AC        | reactance | reactance | reactance  | Resistance | dielectric | Ratings   | Ratings | Ratings |
| Section        | Resistan | Resistan | Resistan  | @50Hz     | @50Hz     | @50Hz      | @20°C      | stress     | Unenclose | (Buried | (Buried |
| Area           | @20°C    | @50Hz    | @50Hz     | and       | and       | and        |            |            | In Air)   | Direct) | In      |
|                |          | and      | and       | 90°C      | 90°C      | 90°C       |            |            |           |         | Ducts)  |
|                |          | 90°C     | 90°C      | (Trefoil  | (flat     | (flat      |            |            |           |         |         |
|                |          | (Trefoil | (flat     | touching) | touching) | spaced)    |            |            |           |         |         |
|                |          |          | spaced)   |           |           |            |            |            |           |         |         |



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|                 |            | or Flat<br>touching) |            |            |            |               |       |            |            |      |     |     |
|-----------------|------------|----------------------|------------|------------|------------|---------------|-------|------------|------------|------|-----|-----|
| mm <sup>2</sup> | Ohm/<br>km | Ohm/<br>km           | Ohm/<br>km | Ohm/<br>km | Ohm/<br>km | Ohm/Meg<br>km | Ohm.k | μF ×<br>km | kV ×<br>mm | A    | A   | A   |
| 630             | 0.0283     | 0.0407               | 0.0388     | 0.101      | 0.117      | 0.162         | 5300  | 0.453      | 2.64       | 1132 | 829 | 758 |

## DIMENSION AND PARAMETERS

| Nominal<br>Cross-<br>sectional<br>Area | Conductor<br>Diameter | Nominal<br>Insulation<br>Thickness | Nominal<br>Diameter<br>over<br>Insulation | Screen<br>Area on<br>Each core | No.<br>Diameter of<br>Screened<br>Wires | Nom.<br>Diameter<br>Over<br>Screened<br>Wires | Nom.<br>Overall<br>Diameter | Approx.<br>Weight |
|--|-----------------------|------------------------------------|---|--------------------------------|---|---|-----------------------------|-------------------|
| mm <sup>2</sup>                        | mm                    | mm                                 | mm  | mm <sup>2</sup>                | no x mm                                 | mm  | mm                          | kg/km             |
| 630                                    | 29.9                  | 5.5                                | 42.7                                      | 20                             | 36x0.85                                 | 43.9  | 51.2                        | 720               |