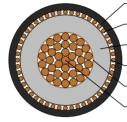


Caledonian

Industrial Cables (Australian Standard Medium Voltage) www.caledonian-cables.com marketing@caledonian-cables.com

12.7/22kV Single Core Screened & PVC Sheathed (Cu Conductor) Heavy Duty 1C185





PVC/LSOH outer sheath
Plain annealed copper metallic screen
XLPE/EPR insulation
Extruded semi-conducting insulation screen
Extruded semi-conducting conductor screen
Plain circular compacted copper conductor

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: 10kA for nominal 1 second(HEAVY 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

| NonMa | x.Conduc | Cond. | Cond. | Inductive | Inductive | Inductive | nsulatio | Conducto | Max. | Current | Current | Current |
|----------|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|---------|---------|
| Cross- | DC | AC | AC I | eactance | eactance | eactand | Resistanc | to o | liaelectri | Ratings | Ratings | Ratings |
| SectiorR | lesistan B | lesistanE | Resistanc | @50Hz | @50Hz | @50Hz | @20°C | screen | stress(L | Inenclose | (Buried | (Buried |
| Area | @20°C | @50Hz | @50Hz | and | and | and | C | apacitano | | 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 touching) | | | | | | | | | | |
|-----|------------|----------------------|------------|------------|------------|-------------|---------|------------|------------|-----|-----|-----|
| mm² | Ohm/ km | Ohm/ km | Ohm/ km | Ohm/ km | Ohm/ km | Ohm/M km | egOhm.k | μF × km | kV × mm | A | A | A |
| 185 | 0.0991 | 0.128 | 0.127 | 0.119 | 0.135 | 0.18 | 8800 | 0.274 | 2.93 | 541 | 440 | 387 |

DIMENSION AND PARAMETERS

| Nominal Cross- sectional Area | Conductor Diameter | Nominal Insulation Thickness | Nominal Diameter over Insulation | Screen Area on Each core | No. Diamter of Screened Wires | Nom. Diameter Over Screened Wires | Nom. Overall Diameter | Approx. Weight |
|--|-----------------------|------------------------------------|---|--------------------------------|--|---|-----------------------------|-------------------|
| mm² | mm | mm | mm | mm² | no x mm | mm | mm | kg/km |
| 185 | 16.1 | 5.5 | 28.4 | 68.7 | 48x1.35 | 32.7 | 37.4 | 310 |