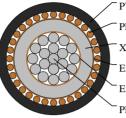


## Caledonian

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

### 3.8/6.6kV Single Core Screened & PVC Sheathed (Al Conductor) Light Duty 1C70





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 aluminium 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

3.8/6.6kV

#### CABLE CONSTRUCTION

CONDUCTOR: Plain circular compacted aluminium 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**

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 <del>B</del>	lesistan <del>b</del>	Resistanc	@50Hz	@50Hz	@50Hz	@20°C	screen	stress(L	Inenclose	(Buried	(Buried
Area	@20°C	@50Hz	@50Hz	and	and	and	Ca	apacitanc		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
70	0.443	0.568	0.568	0.125	0.14	0.185	6800	0.353	1.82	196	201	192

### DIMENSION AND PARAMETERS

Nominal Cross- sectional Area	Conductor Diameter	Nominal Insulation Thickness	Nominal Diameter over Insulation	Screen Area on Each core	Nom. Diameter Over Screened Wires	Nom. Overall Diameter	Approx. Weight
mm²	mm	mm	mm	mm²	mm	mm	kg/km
70	9.6	2.5	15.8	17.6	17.3	22.8	69