

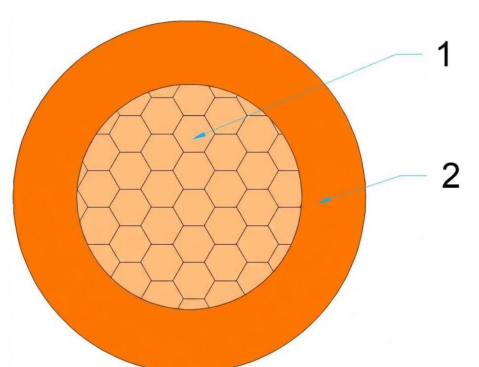
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		Rev.	A-0
	LV Earth Cable 0.6/1kV	Date	2026-05-12
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CU/V-90 0.6/1kV

1. Standard compliance

Item	Standard
Cable design	AS/NZS 5000.1
Conductor	AS/NZS 1125
Insulating and sheathing material	AS/NZS 3808

2. Construction



No.	Construction	Specification
1	Conductor	Class 2 plain annealed stranded circular copper conductor as per AS/NZS 1125
2	Insulation	V-90 (UV resistant) as per AS/NZS 3808, G/Y or as per client's requirements

3. Cable identification & Packing

Item	Requirement
Core identification:	G/Y
Printing Colour:	Black colour text on G/Y insulation
Cable marking by printing:	e.g.: **** CABLES ELECTRIC CABLE CU/V-90 1C70MM2 0.6/1kV AS/NZS 5000.1 2026 xxxxM
Printing criteria:	By printing in one line on the surface of insulation. The distance between the end of one block of marking and the beginning of the next shall not exceed 275 mm. Meter marking interval is every one meter.
Packing length in meters:	As per cable schedule
Type of drum:	Steel-wooden/Wooden/Plywood Drum

4. Electrical properties

Item	Specification
Voltage grade	0.6/1kV
Permissible frequency variation	49Hz~61Hz
Conductor temperature during normal operation at rated current	75°C
Max. permissible conductor temperature	90°C (See note 3&4)

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Max. conductor temp. at the end of short circuit	160°C
Ambient temperature during operation	-15°C~55°C
Lowest temperature during installation	0°C
Test voltage	3.5kV AC/5 min. (50 Hz)

5. Construction characteristics

Dimensions					
No. of cores & CSA	Minimum number of wires in conductor	Approx. dia. of conductor	Insulation thickness (Nom.)	Approx. OD of cable	Approx. weight of cable
Sq.mm	Nos.	mm	mm	mm	kg/km
1C1.5	3	1.5	0.8	3.2±0.1	22.1
1C2.5	3	2.01	0.8	3.8±0.1	32.7
1C4	7	2.55	1.0	4.8±0.1	52.4
1C6	7	3.1	1.0	5.4±0.2	72.8
1C10	7	4.0	1.0	6.3±0.2	110.8
1C16	7	5.0	1.0	7.3±0.2	167.5
1C25	7	6.0	1.2	8.7±0.2	258.6
1C35	7	7.0	1.2	9.8±0.2	347.8
1C50	19	8.4	1.4	11.6±0.3	477.0
1C70	19	9.8	1.4	13.1±0.3	669.2
1C95	19	11.6	1.6	15.3±0.4	926.1
1C120	37	13.5	1.6	17.3±0.4	1158.6
1C150	37	14.5	1.8	18.7±0.5	1427.3
1C185	37	16.1	2.0	20.8±0.5	1775.6
1C240	61	19.0	2.2	24.1±0.5	2333.4
1C300	61	20.4	2.4	25.9±0.5	2910.3
1C400	61	23.3	2.6	29.3±0.5	3733.3
1C500	61	26.3	2.8	32.7±0.5	4768.8
1C630	53	30	2.8	36.4±0.5	6055.0

6. Electrical and Mechanical properties

Characteristics						
No. of cores & CSA	Max. DC resistance of conductor at 20°C	Max. AC resistance of conductor at 75°C	Fault current capacity of conductor (1s)	Max. allowable pulling force of conductor	Min. bending radius	
					During installation	Installed
Sq.mm	Ω/km	Ω/km	kA	kN	mm	mm
1C1.5	13.6	16.5	0.17	0.11	20	13
1C2.5	7.41	9.01	0.29	0.18	23	16
1C4	4.61	5.61	0.46	0.28	29	20
1C6	3.08	3.75	0.69	0.42	33	22
1C10	1.83	2.23	1.15	0.70	38	26

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1C16	1.15	1.4	1.84	1.12	44	30
1C25	0.727	0.885	2.88	1.75	105	70
1C35	0.524	0.638	4.03	2.45	118	79
1C50	0.387	0.471	5.75	3.50	140	93
1C70	0.268	0.327	8.05	4.90	158	105
1C95	0.193	0.236	10.93	6.65	184	123
1C120	0.153	0.188	13.80	8.40	208	139
1C150	0.124	0.153	17.25	10.50	225	150
1C185	0.0991	0.123	21.28	12.95	250	167
1C240	0.0754	0.095	27.60	16.80	290	193
1C300	0.0601	0.0772	34.50	21.00	311	208
1C400	0.047	0.0624	41.12	28.00	352	235
1C500	0.0366	0.0509	51.40	35.00	393	262
1C630	0.0283	0.0424	64.77	44.10	437	292

Note:

1. The particulars given above are nominal & are subject to normal manufacturing tolerances.
2. All parameter is approximate value for reference only.
3. The maximum permissible temperatures are applicable when there is no chance of thermal deformation or a reasonable chance of human contact in normal use.
4. V-90 and V-90HT insulated cables may be operated up to the maximum permissible temperatures 90°C and 105°C provided that the cable is installed in a manner that is not subject to, or is protected against, severe mechanical pressure at temperatures higher than 75°C.