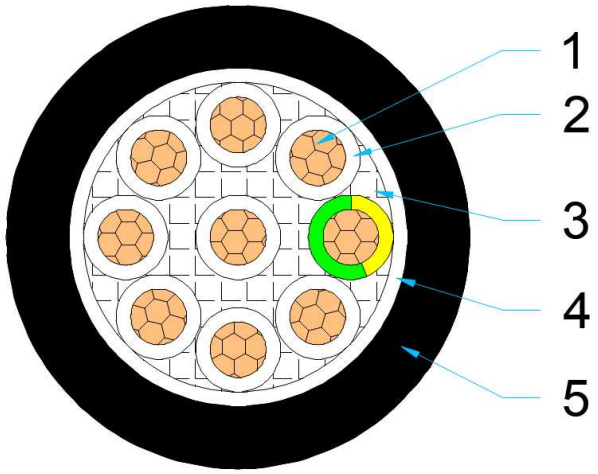
CU/V-90/5V-90 0.6/1kV

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 as per AS/NZS 3808
3	Filler	PP rope (if necessary)
4	Binder tape	Polyester tape
5	Outer sheath	5V-90 (UV resistant) as per AS/NZS 3808, **Black** or as per client's requirements

3. Cable identification & Packing

Item	Requirement
Core identification:	Multi-core: White core with black numbers (e.g.：1 ONE，2 TWO，3 THREE，...)
	Multi-core+E: White core with black numbers (e.g.：1 ONE，2 TWO，3 THREE，...) and G/Y for earth core
Printing Colour:	**White** colour text on **Black** sheath or **Black** colour text on **Other colour** sheath
Cable marking by printing:	**e.g.:** ****** CABLES ELECTRIC CABLE CU/V-90/5V-90 8C1.5+E1.5MM2 0.6/1kV AS/NZS 5000.1 2026 xxxxM**
Printing criteria:	By printing in one line on the surface of outer sheath. The distance between the end of one block of marking and the beginning of the next shall not exceed 550 mm. Meter marking interval is every one meter.
Packing length in meters:	As per cable schedule
Type of drum:	Steel-wooden/Wooden/Plywood/Steel Drum

4. Electrical properties

Item	Specification
Voltage grade	0.6/1kV
Permissible frequency variation	49Hz~61Hz
Normal use conductor temperature at rated current	75°C
Max. permissible conductor temperature	90°C (See note 3&4)
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.)		Outer sheath thickness (Nom.)	Approx. OD of cable	Approx. weight of cable
	Phase	Earth	Phase	Earth	Phase	Earth			
Sq.mm	Nos.	Nos.	mm	mm	mm	mm	mm	mm	kg/km
6C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	13.8±1.0	251.5
8C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	16.0±1.0	333.8
10C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	17.5±1.0	396.8
12C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	18.3±1.0	449.4
16C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	20.2±1.0	560.5
18C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	20.2±1.0	572.8
20C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	21.1±1.0	654.2
25C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	23.8±1.0	808.0
30C1.5+E1.5	3	3	1.5	1.5	0.8	0.8	1.8	25.6±1.0	948.8
6C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	15.3±1.0	339.5
8C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	17.9±1.0	452.8
10C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	19.6±1.0	541.5
12C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	20.5±1.0	617.0
16C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	22.7±1.0	775.7
18C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	22.7±1.0	798.3
20C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	23.8±1.0	912.5
25C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	27.0±1.0	1137.0
30C2.5+E2.5	3	3	2.01	2.01	0.8	0.8	1.8	29.0±1.0	1331.0

6. Electrical and Mechanical properties

Characteristics							
No. of cores & CSA	Max. DC resistance of conductor at 20°C		Max. AC resistance of conductor at	Fault current capacity of conductor	Max. allowable pulling force	Min. bending radius	
	Phase	Earth				During	Installed

			75℃	(1s)	of conductor	installation	
Sq.mm	Ω/km	Ω/km	Ω/km	kA	kN	mm	mm
6C1.5+E1.5	13.6	13.6	16.5	0.17	0.74	83	56
8C1.5+E1.5	13.6	13.6	16.5	0.17	0.95	96	64
10C1.5+E1.5	13.6	13.6	16.5	0.17	1.16	105	70
12C1.5+E1.5	13.6	13.6	16.5	0.17	1.37	110	74
16C1.5+E1.5	13.6	13.6	16.5	0.17	1.79	122	81
18C1.5+E1.5	13.6	13.6	16.5	0.17	2.00	122	81
20C1.5+E1.5	13.6	13.6	16.5	0.17	2.21	127	85
25C1.5+E1.5	13.6	13.6	16.5	0.17	2.73	143	96
30C1.5+E1.5	13.6	13.6	16.5	0.17	3.26	231	154
6C2.5+E2.5	7.41	7.41	9.01	0.29	1.23	92	62
8C2.5+E2.5	7.41	7.41	9.01	0.29	1.58	108	72
10C2.5+E2.5	7.41	7.41	9.01	0.29	1.93	118	79
12C2.5+E2.5	7.41	7.41	9.01	0.29	2.28	123	82
16C2.5+E2.5	7.41	7.41	9.01	0.29	2.98	137	91
18C2.5+E2.5	7.41	7.41	9.01	0.29	3.33	137	91
20C2.5+E2.5	7.41	7.41	9.01	0.29	3.68	143	96
25C2.5+E2.5	7.41	7.41	9.01	0.29	4.55	243	162
30C2.5+E2.5	7.41	7.41	9.01	0.29	5.43	261	174

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.