ENERGY CABLES

Building & Construction Circular PVC

2-50C + E, 1.5mm²

APPLICATION		
For control circuits unenclosed, enclosed in conduit, buried direct or in underground ducts for commercial, industrial, mining and electricity authority systems where not subject to mechanical damage. Suitable for glanding.	STANDARD	AS/NZS 5000.1
	VOLTAGE	600/1000V
	CONDUCTOR	Copper 1.5mm²
	INSULATION	PVC, V-90 White (with markings) & Green/Yellow
	SHEATH	PVC, 5V-90 Orange or Black
	MAX. OPERATING TEMP.	90°C

TECHNICAL SPECIFICATIONS

ITEM NUMBER	CONDUCTOR			OVERALL DIAMETER		APPROX. MASS kg/km	MINIMUM INSTALLED BENDING RADIUS mm
	NUMBER OF CORES	mm²	(No./mm)	MIN mm	MAX mm		
15037xxx	2C + E	1.5	7/0.50	10.0	10.7	150	70
15038xxx	3C + E	1.5	7/0.50	10.9	11.6	155	75
15039xxx	4C + E	1.5	7/0.50	11.8	12.6	190	80
15071xxx	5C + E	1.5	7/0.50	13.0	13.8	210	85
15072xxx	6C + E	1.5	7/0.50	13.0	13.8	230	85
15074xxx	7C + E	1.5	7/0.50	13.9	14.8	260	90
15076xxx	8C + E	1.5	7/0.50	15.1	16.0	285	100
15077xxx	9C + E	1.5	7/0.50	15.1	16.0	320	100
15073xxx	10C + E	1.5	7/0.50	15.5	16.5	340	105
15075xxx	12C + E	1.5	7/0.50	17.3	18.4	390	110
15078xxx	15C + E	1.5	7/0.50	18.2	19.3	460	120
15084xxx	20C + E	1.5	7/0.50	20.1	21.3	580	130
15079xxx	25C + E	1.5	7/0.50	22.3	23.6	700	140
15081xxx	30C + E	1.5	7/0.50	24.4	26.0	820	155
15082xxx	40C + E	1.5	7/0.50	27.3	28.9	1070	175
15083xxx	50C + E	1.5	7/0.50	34.6	36.8	1670	220

- xxx=016 for Black
- xxx=131 for Orange

TECHNICAL SPECIFICATIONS - Continued

CONDUCTOR	CURRENT RATING (a)			ELECTRICAL CHARACTERISTICS			
Number of Cores	Unenclosed In Air A	Non-metallic wiring enclosure in air A	Buried In Ducts A	Maximum DC Resistance @20°C Ω/km	Maximum AC Resistance @90°C Ω/km	Equivalent Star Reactance Ω/km	Single Phase Voltage Drop @90°C mV/A.m
2C + E	18	16	21	13.6	17.3	0.111	30.0
3 - 50C + E	15	14	18	13.6	17.3	0.111	30.0

(a) Based on 40°C ambient air temperature and where applicable, burial depth of 0.5m, soil temperature of 25°C and soil resistivity of 1.2°C.m/W. Based on 2 to 4 cores fully loaded with the remainder of the cores <35% loaded.

The above information is from the following sources:

- AS/NZS 3008.1.1 (tables 10, 13, 30, 35, 42)
- AS 1125 (table 2.3)

For installation with thermal insulation refer to AS/NZS 3008 for de-rating factors.
Do not put in direct contact with polystyrene, polyurethane or similar thermal insulation materials.

ACTIVE / CONDUCTOR				EARTH		
NUMBER OF CORES	NUMBER & DIAMETER OF WIRES No/mm	NOMINAL DIAMETER mm	MINIMUM INSULATION THICKNESS mm	NOMINAL AREA. mm^2	NUMBER & DIAMETER OF WIRES No/mm	MINIMUM INSULATION THICKNESS mm
2 - 50C + E	7/0.50	1.5	0.8	1.5	7/0.50	0.6

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