



CONSTRUCTION - PVC CABLES 0.6/1 kV

2C+E PVC CIRCULAR

PVC INSULATED LAID UP AND PVC SHEATHED CABLE TO AS/NZS 5000.1.

For mains, submains and subcircuits unenclosed, in conduit, buried direct or in underground ducts for buildings and industrial plants where not subject to mechanical damage.



Cable Characteristics





OD>25 6D













Cable Design

CONDUCTOR:

Plain annealed copper conductor to AS/NZS 1125 Maximum continuous operating temperature: 75 °C

Can also be operated at temperatures up to 90 °C when not exposed to mechanical deformation (see AS/NZS 3008.1)

INSULATION:

V-90 PVC

Colours: Red, Black, Green/Yellow

SHEATH:

5V-90 PVC Colours: Orange

Installation Conditions



INDUSTRIAL **EQUIPMENT**



OD≤25 6D OD>25 9D



IN FREE AIR



CONDUIT



MACHINES





IN TRENCH



IN GROUND WITH **PROTECTION**





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CONSTRUCTION - PVC CABLES 0.6/1 kV - 2C+E PVC CIRCULAR

Physical & Electrical Characteristics

	Conductor			Cable				Min
Product	Number and	Number and		Nominal	Overall diameter mm			Min. installed
code	Nominal C.S.A. mm²	diameter of wires No/mm	Nominal diameter mm	insulation thickness mm	Minimum	Maximum	Approx. mass kg/100 m	bending radius mm
1.52CEOC	1.5	7/0.50	1.5	0.8	10	10.4	15	45
2.52CEOC	2.5	7/0.67	2.0	0.8	11.3	11.7	21	50
42CEOC	4	7/0.85	2.6	1.0	12.7	13.2	27	55
62CEOC	6	7/1.04	3.1	1.0	13.7	14.3	34	60
102CEOC	10	7/1.35	4.1	1.0	16.1	16.8	45	70
162CEOC	16	7/1.70	5.1	1.0	18.2	18.9	62	75
252CEOC	25	19/1.35	6.8	1.2	21.3	22.0	84	90
352CEOC	35	19/1.53	7.7	1.2	23.5	24.3	110	100
502CEOC	50	19/1.78	8.9	1.4	26.8	27.9	149	170
702CEOC	70	19/2.14	10.7	1.4	30.5	31.4	203	190

Conductor	Current rating (a)			Electrical characteristics	
nominal area mm²	Unenclosed spaced A	Buried direct A	Underground in duct A	Maximum D.C. resistance at 20°C Ω/km	Reactance per core Ω/km
1.5	19	28	22	13.6	0.111
2.5	27	40	31	7.41	0.102
4	37	52	40	4.61	0.102
6	46	65	51	3.08	0.0967
10	64	87	68	1.83	0.0906
16	85	115	88	1.15	0.0861
25	115	145	115	0.727	0.0853
35	140	180	140	0.524	0.0826
50	170	210	165	0.387	0.0797
70	215	260	205	0.268	0.0770

(a) Based on 75 °C conductor temperature, 40 °C ambient air temperature and where applicable, burial depth of 0.5 m, soil temperature of 25 °C and soil thermal resistivity of 1.2 °C.m/W. Refer to AS/NZS 3008.1 for other installation conditions.



CABLE HANDLING

Cable Usage Characteristics



AMBIENT TEMPERATURE

Maximum operating temperature
Minimum operating temperature



MECHANIC	CAL IMPACT RESISTANCE
4	

1	Light Impact
2	Moderate Impact
3	Heavy Impact
4	Very Heavy Impact



RESISTANCE TO SOLAR RADIATION AND WEATHER

Excellent	Permanent	
Very Good	Frequent	
Good	Occasional	
Acceptable	Accidental	
Poor	None	



BEHAVIOUR IN FLAME AND FIRE

Reaction To Fire	Resistant To Fire
C 1 Fire retardant	Level 1 Ultimate fire survival
C 2 Flame retardant	Level 2 Two hours fire survival
C 3 No fire performance	Level 3 Restrained spread & self extinguishing



HALOGEN FREE

AS/NZS 4507



MINIMUM BENDING RADIUS

Minimum bending radius of installed cables



CHEMICAL RESISTANCE		
Excellent	Permanent	
Very Good	Frequent	
Good	Occasional	
Acceptable	Accidental	
Poor	None	



RESISTANCE TO WATER Negligible No humidity Water Drops Occasional condensation Spray Water run off Splashes Exposed to water splashes Heavy Sea Exposed to waves Immersion Temporarily covered by water



FLEXIBILITY		
Rigid	Flexible	
Semi-rigid	Very flexible	

Permanently covered by water



LOW SMOKE EMISSION

AS/NZS 4507

Submersion

Laying Conditions



MINIMUM BENDING RADIUS DURING INSTALLATION



IN TRENCH



IN GROUND



IN DUCT



DOMESTIC APPLIANCES



MACHINES



MOBILE EQUIPMENT



SUBMERGED



OVERHEAD AERIAL



MIN. INSTALLATION TEMPERATURE



IN FREE AIR



IN GROUND WITH PROTECTION



IN CONDUIT



OUTDOOR APPLIANCES



EESTOON



INTERNAL WIRING



INDUSTRIAL EQUIPMENT



EXTERNAL BUILDING

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