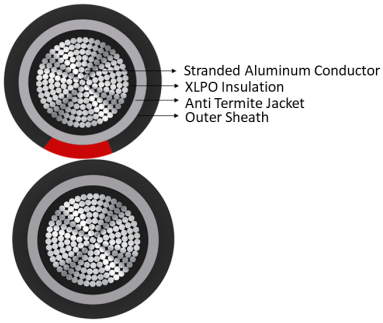
POLYCAB SOLAR AS NZS 5000 PVC – TWIST ANTI TERMITE

Photovoltaic Power Cable, Flame Retardant



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB low smoke, flame retardant, two single cores twisted cable with cross linked insulation is designed to use for Photovoltaic installation at the Direct current side. These cables are suitable for permanent outdoor use under variable climatic condition

CHARACTERISTICS

Voltage Rating
Nominal Voltage:1500 V DC between conductors as well as conductor and earth. Max permitted voltage: 1800 V

Operation Temperature
Fixed: -20°C to +90° C
Maximum conductor temperature: +90° C

CONSTRUCTION

- Conductor: Aluminium conductor as perIEC 60228, class 2 / AS-NZS 5000.1
- Insulation: cross linked halogen free flame retardant material, Colour: Black
- Anti Termite Jacket: Polyamide (Nylon),Colour: Black
- Sheath: Polyvinyl Chloride

Core Identification
Black & Black with red Strip

Bending Radius
For fixed installation - > 15D
For occasional moved - > 18D

Test Voltage
6.5kv AC 50Hz

OUTSTANDING FEATURES

- Flame retardant
- High life
- UV, Ozone resistant
- Hydrolysis resistant
- Termite resistant

STANDARD FOLLOWS

IEC 60228
EN 50618
AS/NZS 5000.1
AS/NZS 3808

COMPLIANCE

Flame Retardant : EN 60332-1

UV resistance : ASTM G-154

OUR ACCREDITATIONS

NABL

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DIMENSIONS AND WEIGHTS:

No. of Cores	Core Cross sectional Area	Nominal insulation thickness	Min. Nylon Jacket thickness	Nominal Sheath thickness	Approx. Overall Diameter	Weight (Approx.)
No.	mm^2	mm	mm	mm	mm	Kg/Km
2	120	1.2	0.2	1.5	20.3 x 40.6	1100
2	150	1.4	0.2	1.6	22.4 x 44.8	1360
2	185	1.6	0.2	1.6	24.4 x 48.8	1620
2	240	1.7	0.2	1.7	27.3 x 54.6	2050
2	300	1.8	0.2	1.8	29.9 x 59.8	2490
2	400	2.0	0.2	1.9	33.7 x 67.4	3210
2	500	2.2	0.2	2.0	37.2 x 74.4	3940
2	630	2.4	0.2	2.2	42.3 x 84.6	5050

ELECTRICAL CHARACTERISTICS:

No. of Cores	Core Cross sectional Area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Approx. Cable Capacitance	Approx. Cable Reactance	Impedance of Cable at 90°C	Current Rating capacity		
							Two cables touching in air unenclosed spaced from surface	Two cable touching in air on surface	Two cable touching in enclosure Underground
No.	mm^2	Ω/km	Ω/km	mfd/km	Ohm/km	Ohm/km	Amp.	Amp.	Amp.
2	120	0.253	0.325	0.81	0.0982	0.339	305	253	252
2	150	0.206	0.265	0.77	0.0965	0.282	350	291	283
2	185	0.164	0.212	0.75	0.0945	0.231	406	340	329
2	240	0.125	0.162	0.81	0.0918	0.186	485	408	388
2	300	0.100	0.130	0.85	0.089	0.158	562	473	440
2	400	0.0778	0.103	0.87	0.089	0.135	660	559	516
2	500	0.0605	0.0813	0.9	0.0869	0.118	772	656	590
2	630	0.0469	0.0649	0.92	0.0853	0.107	904	772	695

*: Current Ratings are based on AS/NZS 3008 std, Max. Conductor Temperature at 90°C, Ambient temperature at 40°C in Air, Ambient temperature at 25°C in Ground, Soil thermal resistivity 1.2 k.m/W, Depth of Laying 0.5m.

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De-Rating Factor

Current rating de-rating factors for other than 40°C ambient air temperature.

Ambient Temperature	15	20	25	30	35	45	50	55	60	65	70	75	80	85
De-rating factors	1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating de-rating factors for other than 25°C ground temperature.

Ambient Temperature	10	15	20	30	35	40
De-rating factors	1.11	1.07	1.03	0.97	0.93	0.89