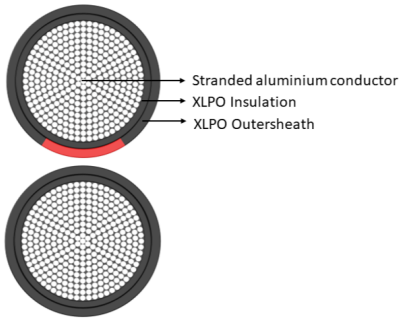
POLYCAB SOLAR AS NZS 5000 XLPO
Photovoltaic Power Cable, Halogen Free, Flame Retardant



Images not to scale. Follow table for dimensions

APPLICATION
POLYCAB low smoke, halogen free, single core cable with electron beam cross linked insulation and sheath 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: -40°C to +120°C
Maximum conductor temperature: +120°C
Continuous Conductor temperature: +90°C

Bending Radius
For fixed installation - > 6D
For occasional moved - > 8D

CONSTRUCTION
• Conductor: Aluminium conductor as per IEC 60228, class 2 / AS-NZS 5000.1
• Insulation: E-Beam cross linked halogen free and flame-retardant compound (XLPO), Colour: Black
• Sheath: E-Beam cross linked halogen free and flame-retardant compound (XLPO).

Core Identification
Black & Black with red Strip
Test Voltage
6.5kv AC 50Hz

OUTSTANDING FEATURES
• Halogen free
• Electron Beam Cross-linked
• Flame retardant
• High life
• UV, Ozone resistant
• Hydrolysis resistant
• High temperature resistant

STANDARD FOLLOWS
IEC 60228
AS/NZS 5000.1
IEC 60332-1-2
UL 4703
IEC 62930
EN 50618

COMPLIANCE
Fire Performance - EN 60332-1
Smoke Emission - IEC 61034/ EN 50268-2
Halogen free material - N 50267-2-1 / IEC 60754-2
Toxicity - EN 50305
Resistance to ozone - EN 50396
Weathering / UV - HD 605/A1 or DIN 53667
Life Expectancy - IEC 60216

OUR ACCREDITATIONS
NABL

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POLYCAB
IDEAS. CONNECTED.

DIMENSIONS AND WEIGHTS:

No. of Cores	Core Cross sectional Area	Nominal insulation thickness	Nominal Sheath thickness	Approx. Overall Diameter	Weight (Approx.)
No.	mm^2	mm	mm	Mm	Kg/Km
1	120	1.2	1.5	18.7	525
1	150	1.4	1.6	20.8	650
1	185	1.6	1.6	22.8	785
1	240	1.7	1.7	25.7	1005
1	300	1.8	1.8	28.3	1230
1	400	2.0	1.9	32.0	1600
1	500	2.2	2.0	35.6	1975
1	630	2.4	2.2	40.7	430

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.
1	120	0.253	0.325	0.81	0.0982	0.339	305	253	252
1	150	0.206	0.265	0.77	0.0965	0.282	350	291	283
1	185	0.164	0.212	0.75	0.0945	0.231	406	340	329
1	240	0.125	0.162	0.81	0.0918	0.186	485	408	388
1	300	0.100	0.130	0.85	0.089	0.158	562	473	440
1	400	0.0778	0.103	0.87	0.089	0.135	660	559	516
1	500	0.0605	0.0813	0.9	0.0869	0.118	772	656	590
1	630	0.0469	0.0649	0.92	0.0853	0.107	904	772	695

De-rating factor :

Current Ratings are based on AS/NZS 3008 std, Continuous Conductor Temperature at 90®C & Ambient temperature at 40®C in Air.
Current rating de-rating factors for other than 40®C ambient temperature.

Temperature	15	20	25	30	35	45	50	55	60	65	70	75	80	85
Factor	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