



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB low smoke, halogen free, flexible 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

### Bending Radius

For fixed installation - > 6D

For occasional moved - > 8D

## CONSTRUCTION

- Conductor: Tinned copper conductor as per IEC 60228, class 5.
- 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
- Flexibility
- UV, Ozone resistant
- Hydrolysis resistant
- High temperature resistant

## STANDARD FOLLOWS

IEC 60228  
EN 50618  
IEC 60332-1-2  
UL 4703  
IEC 62930

## COMPLIANCE

Fire Performance	- EN 60332-1
Smoke Emission	- IEC 61034/ EN 50268-2
Halogen free material	- EN 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



**WEIGHT , DIMENSION & ELECTRICAL DATA :**

Single Core Cross sectional Area  <b>mm<sup>2</sup></b>	Nominal insulation thickness  <b>mm</b>	Nominal Sheath thickness  <b>mm</b>	Nominal Overall Diameter  <b>mm</b>	Weight (Approx.)  <b>Kg/Km</b>	Max. DC Resistance at 20° C  <b>Ω/km</b>	Current Rating capacity		
						single cable free in air  <b>Amp.</b>	Single cable on a surface  <b>Amp.</b>	Two loaded cables touching on a surface  <b>Amp.</b>
2.5	0.7	0.8	5.2	49	8.21	41	39	33
4.0	0.7	0.8	5.8	64	5.09	55	52	44
6.0	0.7	0.8	6.4	85	3.39	70	67	57
10	0.7	0.8	7.3	126	1.95	98	93	79
16	0.7	0.9	8.6	190	1.24	132	125	107
25	0.9	1.0	10.4	285	0.795	176	167	142
35	0.9	1.1	11.8	389	0.565	218	207	176
50	1.0	1.1	13.8	547	0.393	276	262	221
70	1.1	1.2	15.6	749	0.277	347	330	278
95	1.1	1.3	17.7	969	0.210	416	395	333
120	1.2	1.3	19.5	1222	0.164	488	464	390
150	1.4	1.4	21.6	1520	0.132	566	538	453
185	1.6	1.6	24.2	1867	0.108	644	612	515
240	1.7	1.7	27.1	2440	0.0817	775	736	620

**De-rating factor :**

Current Ratings are based on EN 50618 at Max. Conductor Temperature 120°C and Ambient Air temperature 60°C.

Current rating de-rating factors other than 60°C ambient temperature.

up to 60	70	80	90
1.00	0.92	0.84	0.75