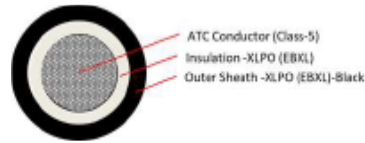


## TECHNICAL SPECIFICATION

### 1.0/1.0 KV AC OR 1.5/1.5 KV DC (Nom)(1.8 KV DC(Max.) SOLAR CABLE



| No.  | PARAMETERS                         | UNIT   | SPECIFICATION   |
|------|------------------------------------|--------|---|
| 1    | Appication                         |        | Suited for connecting photovoltaic system components inside and outside                         |
| 2    | APPLICABLE STANDARD                |        | AS PER EN-50618/2014  |
| 3    | TYPE OF CABLE                      |        | SOLAR CABLE - ROHS compliant  |
| 4    | VOLTAGE GRADE                      | kV     | 1.0/1.0 kV (AC),1.5 kV (DC) (both Conductor to Conductor & Conductor to Earth) 1.8 kV (DC)(Max) |
| 5    | NO. OF CORES                       | no.    | 1   |
| 6    | CONDUCTOR                          |        |   |
| 6.1  | Material                           |        | FINE WIRE STRANDS ANNEALED TINNED COPPER  |
| 6.2  | Nom. Size                          | sqmm   | 4   |
| 6.3  | Shape                              |        | FLEXIBLE (CLASS - 5) as per IEC 60228:2004  |
| 6.4  | No.of strands                      | no./mm | 56/0.285  |
| 6.5  | Max.Wire dia.(Before stranding)    | mm     | 0.30  |
| 6.6  | Approx. Conductor Diameter         | mm     | 2.6   |
| 6.7  | Max. D.C. Resistance at 20°C       | Ω/km   | 5.09  |
| 7    | INSULATION                         |        |   |
| 7.1  | Material                           |        | CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN)  |
| 7.2  | Nom. Thickness                     | mm     | 0.7   |
| 7.3  | Min. Insulation Resistance at 20°C | MΩ.km  | 580   |
| 7.4  | Min. Insulation Resistance at 90°C | MΩ.km  | 0.58  |
| 8    | OUTER SHEATH                       |        |   |
| 8.1  | Material                           |        | CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN)  |
| 8.2  | Nom. Thickness                     | mm     | 0.8   |
| 9    | OVERALL DIAMETER OF CABLE          | mm     | 5.6 ± 0.15  |
| 10   | PROPERTY OF CABLE                  |        |   |
| 10.1 | Test Voltage                       |        | AS PER EN: 50395  |

|       |  |       |   |
|-------|--|-------|---|
| 10.2  | Tinned fine copper strands (Class - 5)                     |       | CONFIRM (AS PER IEC : 60228 - 2004)                         |
| 10.3  | Conductor Temperature                                      |       |   |
|       | Max.conductor temperature at rated current                 | °C    | 90  |
|       | Short circuit Temperature                                  | °C    | 250 for 5 Second  |
|       | Conductor temperature when overload capacity               | °C    | 120   |
|       | Min.conductor temperature at rated current                 | °C    | -40   |
|       | Operating Temperature                                      | °C    | - 40 to +90   |
| 10.4  | Service life   |       | 25 YEARS  |
| 10.5  | Acid & Alkali Resistance on sheath                         |       | AS PER EN : 60811-404                                       |
| 10.6  | Weathering & UV Resistance on sheath                       |       | AS PER EN-50618/2014  |
| 10.7  | Ozone Resistance on complete cable                         |       | Method A (AS PER EN : 60811-403)                            |
| 10.8  | Thermal Endurance Test                                     |       | AS PER EN : 60216   |
| 10.9  | Dynamic Penetration Test                                   |       | AS PER EN-50618/2014  |
| 10.10 | Damp heat Test   |       | AS PER EN : 60068-2-78                                      |
| 10.11 | Smoke emission   |       | 60 % TRANSMITTANCE (Min.) (AS PER IEC : 61034)              |
| 10.12 | Water Resistance(Long Term Resistance of Insulation to DC) |       | AS PER EN: 50395  |
| 10.13 | Surface Resistance on Sheath                               |       | AS PER EN: 50395  |
| 10.14 | Vertical Flame Propagation Test                            |       | AS PER IEC : 60332-1  |
| 10.15 | Hot set Test   |       | AS PER EN : 50618   |
| 11    | Min. Bending radius of cable                               | mm    | 6 TIMES O.D.  |
| 12    | Current Rating   |       |   |
| 12.1  | In Air (upto 60°C)   | Amp   | 55  |
| 12.2  | Single cable on surface                                    | Amp   | 52  |
| 12.3  | Two cables adjacent on surface                             | Amp   | 44  |
| 13    | STANDARD PACKING LENGTH                                    | Mtrs. | (100/500/1000) ± 5%   |
| 14    | NON STANDARD LENGTH  | Mtrs. | 10%-20% QUANTITY TO BE SUPPLIED IN NON STD.LENGTHS          |
| 15    | ORDER QUANTITY TOLERANCE                                   | Mtrs. | ±5%   |
| 16    | COUNTRY OF ORIGIN  |       | Fiji / China under the supervision of Pacific Cables (Fiji) |

*Note : The No. of strands & Strand diameter shall be such that it meets the conductor resistance as per relevant standard.*