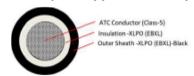




TECHNICAL SPECIFICATION 1.0/1.0 KV AC OR 1.5/1.5 KV DC (Nom)(1.8 KV DC(Max.) SOLAR CABLE



4 VOLTAGE GRADE kV to Conductor & Conductor to Earth) 1.8 kV (DC)(Max) 5 NO. OF CORES no. 1 6 CONDUCTOR FINE WIRE STRANDS ANNEALED TINNED COPPER 6.1 Material FINE WIRE STRANDS ANNEALED TINNED COPPER 6.2 Nom. Size sqmm 6 6.3 Shape FLEXIBLE (CLASS - 5) as per IEC 60228:2004 6.4 No. of strands no. /mm 84/0.285 6.5 Max. Wire dia. (Before stranding) mm 0.30 6.6 Approx. Conductor Diameter mm 3.2 6.7 Max. D.C. Resistance at 20°C Ω/km 3.39 7 INSULATION CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN) 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 500 7.4 Min. Insulation Resistance at 90°C MΩ.km 0.50	No.	PARAMETERS	UNIT	SPECIFICATION
SOLAR CABLE - ROHS compliant	1	Appication		
VOLTAGE GRADE	2	APPLICABLE STANDARD		AS PER EN-50618/2014
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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 500 7.4 Min. Insulation Resistance at 90°C MΩ.km 0.50 8 OUTER SHEATH CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN) 8.1 Material CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN) 8.2 Nom. Thickness mm 0.8 9 OVERALL DIAMETER OF CABLE mm 6.2 ± 0.20 10 PROPERTY OF CABLE The company of the company	6.7	Max. D.C. Resistance at 20°C	Ω/km	3.39
7.1 Material (XLPO) (POLYOLEFIN) 7.2 Nom. Thickness mm 0.7 7.3 Min. Insulation Resistance at 20°C MΩ.km 500 7.4 Min. Insulation Resistance at 90°C MΩ.km 0.50 8 OUTER SHEATH CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN) 8.1 Material (XLPO) (POLYOLEFIN) 8.2 Nom. Thickness mm 0.8 9 OVERALL DIAMETER OF CABLE mm 6.2 ± 0.20 10 PROPERTY OF CABLE	7	INSULATION		
 7.3 Min. Insulation Resistance at 20°C MΩ.km MΩ.km 0.50 OUTER SHEATH Material CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN) Nom. Thickness Mm 0.8 OVERALL DIAMETER OF CABLE PROPERTY OF CABLE 	7.1	Material		CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN)
7.4 Min. Insulation Resistance at 90°C MΩ.km 0.50 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 6.2 ± 0.20	7.2	Nom. Thickness	mm	0.7
8 OUTER SHEATH 8.1 Material Nom. Thickness 9 OVERALL DIAMETER OF CABLE The property of Cable CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN) mm 0.8 6.2 ± 0.20	7.3	Min. Insulation Resistance at 20°C	MΩ.km	500
8.1 Material CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO) (POLYOLEFIN) 8.2 Nom. Thickness mm 0.8 9 OVERALL DIAMETER OF CABLE mm 6.2 ± 0.20 10 PROPERTY OF CABLE	7.4	Min. Insulation Resistance at 90°C	MΩ.km	0.50
8.1 Material (XLPO) (POLYOLEFIN) 8.2 Nom. Thickness mm 0.8 9 OVERALL DIAMETER OF CABLE mm 6.2 ± 0.20 10 PROPERTY OF CABLE	8	OUTER SHEATH		
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10 PROPERTY OF CABLE	8.2	Nom. Thickness	mm	
	9	OVERALL DIAMETER OF CABLE	mm	6.2 ± 0.20
10.1 Test Voltage AS PER EN: 50395	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 oveload 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 & Alkalki 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 Propogation 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	70
12.2	Single cable on surface	Amp	67
12.3	Two cables adjecent on surface	Amp	57
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.