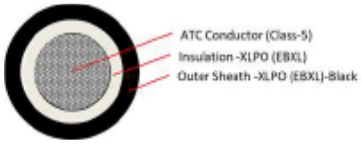
Pacific Cables
SAFETY FOREVER

ISO 9001 Certified ApprovalMark

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	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		
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		
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		
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	℃	90
	Short circuit Temperature	℃	250 for 5 Second
	Conductor temperature when oveload capacity	℃	120
	Min.conductor temperature at rated current	℃	-40
	Operating Temperature	℃	- 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℃)	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.