



**TECHNICAL PARTICULARS**  
**0.6/1 KV SOLAR CABLE**

Customer : M/s. Shyam Corporation

Sr.No.	PARTICULARS	SIZE : UNIT	1 X 10 Sq.mm
1.	NAME OF MANUFACTURER		APAR INDUSTRIES LTD (UNIT : UNIFLEX CABLES)
2.	APPLICABLE STANDARD		AS PER TUV SPECIFICATION - 2 Pfg 1169/08.2007
3.	TYPE OF CABLE		SOLAR CABLE
4.	VOLTAGE GRADE	KV KV	0.6/1 (1.2) KV (AC) 0.9/1.5 (1.8) KV (DC) Un Earthed Systems
5.	NO. OF CORES	No.	1
6.	CONDUCTOR		FINE WIRE STRANDS ANNEALED TINNED COPPER
	a) Material		
	b) Nom. Size	Sq.mm.	10
	c) Shape		FLEXIBLE (CLASS - 5) AS PER IEC 60228:2004
	d) No.of strands		80
	e) Max.Wire dia.(Before stranding)	mm	0.41
	f) Approx.Conductor Diameter	mm	4.80
	g) Max. D.C. Resistance at 20°C	Ohm/Km	1.95
7.	INSULATION		ELECTRON BEAM CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO (POLYOLEFIN))
	a) Material		
	b) Min. Thickness	mm	0.50
	c) Colour of Insulation		NATURAL
	d) Insulation Resistance		TO BE MEET VOLUME RESISTIVITY $1 \times 10^{14}$ OHM-CM (MIN.) AT 20°C
8.	OUTER SHEATH		ELECTRON BEAM CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO (POLYOLEFIN))
	a) Material		
	b) Min. Thickness	mm	0.5
	c) Colour		Black(50% Qty),Black with red strip(50% Qty)
9.	OVERALL DIAMETER OF CABLE	mm	$7.0 \pm 0.7$
10.	APPROX. NET WEIGHT OF CABLE	Kg/Km	110
	APPROX.WEIGHT OF COPPER IN THIS CABLE	Kg/Km	80.10
11.	PROPERTY OF CABLE		
	- Test Voltage		6.5 KV AC FOR 5 min.
	- Tinned fine copper strands (Class - 5)		CONFIRM (AS PER IEC : 60228 - 2004)
	- Fire Performance		CONFIRM (AS PER IEC : 60332-1)
	- Smoke emission		60 % TRANSMITTANCE (Min.) (AS PER IEC : 61034)
	- Conductor Temperature		
	a) Max.conductor temperature at rated current	°C	90
	b) Max.conductor temperature at the end of short circuit	°C	250
	c) Conductor temperature when overload capacity	°C	120
	d) Min.conductor temperature at rated current	°C	- 40

Sr.No.	PARTICULARS	SIZE : UNIT	1 X 10 Sq.mm
	e) Operating Temperature - Service life - Halogen free - Resistance to chemical and oils - Min. Bending radius of cable	°C	- 40 to +120 EXPECTED SERVICE LIFE 25 YEARS Max.HCL 0.5 % (AS PER IEC : 60754 - 1) CONFIRM (AS PER IEC : 60811) 5 TIMES O.D.
	Current Rating		
	a) In Air (upto 60°C)	Amp	98
	b) Single cable on surface	Amp	93
	c) Two cables adjacent on surface	Amp	79
12	STANDARD PACKING LENGTH	Mtrs.	500 ± 5%/1000 ± 5%
13	CABLE END SEALING		YES (HEAT SHRINKABLE ELSTOMERIC CAP)
14	NON STANDARD LENGTH ORDER QUANTITY TOLERANCE		10%-20% QUANTITY TO BE SUPPLIED IN NON STD.LENGTHS. ±5%
15	PRINTING		0000M AIL/UNIT: UNIFLEX CABLES-INDIA "UNICAB" 1.8KV DC EBXL XLPO/XLPO 120°C PV1-F SOLAR CABLE ( As per TuV 2Pfg 1169/08.2007 ) ZH-FRLS size in sqmm 2017

NOTE : The particulars given above are nominal & are subject to normal manufacturing tolerances.

**For APAR INDUSTRIES LTD**

**[UNIT: UNIFLEX CABLES]**