



**TECHNICAL PARTICULARS**  
**1.0/1.0 KV AC OR 1.5 KV DC SOLAR CABLE**

Date : 08/10/2017

Sr.No.	PARTICULARS	SIZE :	1 X 95
		UNIT	Sq.mm
1.	NAME OF MANUFACTURER		APAR INDUSTRIES LTD (UNIT : UNIFLEX CABLES)
2.	APPLICABLE STANDARD		AS PER EN-50618/2014
3.	TYPE OF CABLE		SOLAR CABLE
4.	VOLTAGE GRADE	KV	1.0/1.0 KV (AC)
		KV	1.5 KV (DC)
			(both Conductor to Conductor & Conductor to Earth)
5.	NO. OF CORES	No.	1
6.	CONDUCTOR		FINE WIRE STRANDS ANNEALED TINNED COPPER
	a) Material		
	b) Nom. Size	Sq.mm.	95
	c) Shape		FLEXIBLE (CLASS - 5) AS PER IEC 60228:2004
	d) No.of strands		475
	e) Max.Wire dia.(Before stranding)	mm	0.51
	f) Approx.Conductor Diameter	mm	12.66
	g) Max. D.C. Resistance at 20°C	Ohm/Km	0.21
7.	INSULATION		ELECTRON BEAM CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO (POLYOLEFIN))
	a) Material		
	b) Nom. Thickness	mm	1.1
	c) Colour of Insulation		NATURAL
	d) Min Insulation Resistance		220 Mega Ohm.KM AT 20°C
8.	OUTER SHEATH		ELECTRON BEAM CROSS LINKED CO-POLYMER HALOGEN FREE (XLPO (POLYOLEFIN))
	a) Material		
	b) Nom. Thickness	mm	1.3
	c) Colour		Black(50% Qty),Black with red strip(50% Qty)
9.	APPROX. OVERALL DIAMETER OF CABLE	mm	17.8mm
10.	APPROX. NET WEIGHT OF CABLE	Kg/Km	910
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
	e) Operating Temperature	°C	- 40 to +120
	- Service life		EXPECTED SERVICE LIFE 25 YEARS
	- Halogen free		AS PER IEC : 60754 - 1
	- Resistance to chemical and oils		AS PER EN : 50618

Sr.No.	PARTICULARS	SIZE : UNIT	1 X 95 Sq.mm
	- Min. Bending radius of cable  Current Rating a) In Air (upto 60°C) b) Single cable on surface c) Two cables adjacent on surface	mm  Amp Amp Amp	5 TIMES O.D.  416 395 333
12	STANDARD PACKING LENGTH	Mtrs.	500/1000 ± 5%
13	CABLE END SEALING		YES ( END CAP WITH SUITABLE MATERIAL )
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 " H1Z2Z2-K" SOLAR CABLE ( As per EN 50618 ) ZH-FRLS size in sqmm 2017

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