

## Single Core Copper Conductor Electron Beam Cross Linked Solar Cable as per TUV & UL Specification

### Construction:

Conductor : Annealed Tinned Copper (APC Optional) according to IEC 60228, Class 5 or as per customer order  
 Insulation : XLPO 120°C (Colour Red & Black). Other colours as per customer order  
 Jacket : XLPO Highly weather & UV Resistant (Colour Black or Black with Red strip)

### Type of Solar cables:

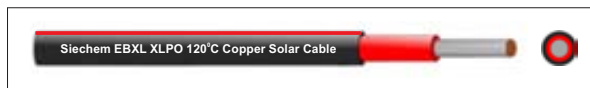
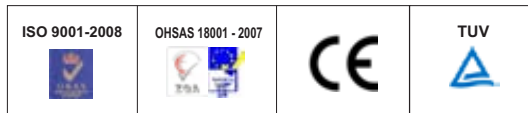
TUV : Siechem Single & Multi Core and Screened Solar cables meets specn.2Pfg 1169/08.2007  
 UL : Siechem Single & Multicore and Screened Solar cables meets UL 4703  
 Dual : Siechem Single & Multicore and Screened cables to meet both TUV & UL specn.

### Siechem Solar Cable Range:

Single Core : 1.5 to 400sq.mm or its equivalent size in AWG  
 Multi Core : 2 to 4 cores x 1.5 to 70 sq.mm or its equivalent size in AWG  
 Multi Core (EMC) : Up to 61 core screened cables (data sheet against specific request for EMC cables)

### Features:

Resistance against UV, Water, Ozone, Fluids, Oil, Salt & General Weathering.  
 Electron Beam Cross Linked,  
 Halogen Free, Flame Retardant, Low Smoke emission,  
 Fire retardant to meet IEC 607541-1/EN 50268-2  
 RoHS compliant as per EU norms  
 Max.Temp. at Conductor : 120°C (20,000h)  
 Test Voltage : 6500V AC  
 Voltage Resistance Test : EN 50395  
 Rated Voltage : 600/1000 V AC, 1800 V DC  
 Short Circuit Temp : +280°C



### Singlecore Solar Cable

Part Number	Cross Section (nom.)	Max. diameter of wires in Conductor Design	Conductor (ATC) DC res at 20°C (max.)	Cable Diameter (nom.)	Copper Weight (nom.)	Cable Weight (nom.)	Current Rating Two Cables adjacent on Surfaces
	Sq.mm	mm	ohm/km	mm	Kg/Km	Kg/Km	Amps
649 13 XX*	1.5	0.26	13.7	4.5	13.0	32.0	24
649 16 XX	2.5	0.26	8.21	5.0	21.0	43.0	33
649 19 XX	4	0.31	5.09	5.5	33.6	60.0	44
649 23 XX	6	0.31	3.39	6.5	51.6	87.0	57
649 27 XX	10	0.41	1.95	7.8	85.5	134.0	79
649 28 XX	16	0.41	1.24	9.3	140.6	206.0	107
649 30 XX	25	0.41	0.795	11.8	218.6	325.0	142
649 32 XX	35	0.41	0.565	13.0	307.7	429.0	176
649 34 XX	50	0.41	0.393	15.3	427.5	593.0	208
649 37 XX	70	0.51	0.277	17.1	608.0	797.0	255
649 38 XX	95	0.51	0.210	19.7	802.3	1056.0	306
649 41 XX	120	0.51	0.164	21.5	1027.0	1312.0	346
649 42 XX	150	0.51	0.132	24.0	1276.8	1629.0	390
649 44 XX	185	0.51	0.108	26.6	1561.8	2000.0	436
649 46 XX	240	0.51	0.0817	30.0	2061.5	2605.0	507
649 48 XX	300	0.51	0.0654	31.7	2621.0	3238.0	571
649 49 XX	400	0.51	0.0495	37.4	3485.0	4282.0	649

Note : XX\* : Please add last two digits in the part number as per the colour code given hereunder replacing XX while ordering.  
 Red - 01 & Black - 04



Area of Cross Section (Sq.mm)	Conductor Strand Size (Max.)	Max. Conductor DC resistance as per IEC 60228 @ 20°C (Ω/Km)	Outer diameter (mm) (Approx.)	Current Carrying Capacity	
				Air	Ground
2.5	0.25	8.21	4.6 ± 0.3	41	39
4	0.3	5.09	5.3 ± 0.3	55	52
6	0.3	3.39	5.8 ± 0.4	70	67
10	0.4	1.95	7.9 ± 0.5	98	93
16	0.4	1.24	9.0 ± 0.6	132	125
25	0.4	0.795	10.5 ± 0.7	176	167
35	0.4	0.565	12.0 ± 1.0	218	207
50	0.4	0.393	13.5 ± 1.5	281	268
70	0.5	0.277	15.0 ± 1.5	357	341
95	0.5	0.21	17.5 ± 2.0	425	405
120	0.5	0.164	19.5 ± 2.0	493	470
150	0.5	0.132	21.7 ± 2.0	583	543
185	0.5	0.108	24.5 ± 2.5	659	627
240	0.5	0.0817	26.5 ± 3.0	794	754
300	0.5	0.0654	30.0 ± 3.0	912	866