



# SPECIAL CABLES PVT. LTD.

## SOLAR CABLES

**Application:** Solar cables are used for interconnections between solar panels and other electrical components of D.C. system.

**Types & Sizes:** Typically Single core cables upto 630 sq. mm for voltage grade 1.1 KV to 3.3 KV

**Conductor:** Aluminium – Stranded (Circular) or Copper – Stranded or Flexible (Circular)

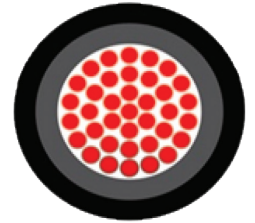
**Insulation:** XLPE, XLPO, HFFR

**Outer Sheath:** PVC FR, FRLS, HFFR, HDPE

**Specifications:** Generally conforming to EN 50618, TUV 2 pfg 1169/08.2007 and designed to meet customer's requirements.

**Key features:**

- (a) Extreme weather and ozone resistant.
- (b) High resistance to abrasion, fire & oil.
- (c) Long life expectancy under tough conditions.



## Technical Data for Solar Cables

SINGLE CORE, ALUMINIUM CONDUCTOR, XLPE INSULATED, HDPE / PVC SHEATHED, UNARMoured CABLE AS PER IS: 7098 (PT-I & II)																		
Cross Sectional Area	1.1 KV			3.3 KV			Max. D.C Conductor Resistance at 20° C	Short Circuit Rating For 1 Sec Duration	A.C Current Rating						1.1 KV		3.3 KV	
	Thickness of XLPE Insulation	Overall Dia	Weight	Thickness of XLPE Insulation	Overall Dia	Weight			1.1 KV			3.3 KV			Reactance of cable at 50 Hz	Capacitance of cable	Reactance of cable at 50 Hz	Capacitance of cable
									In Air	Direct In Ground	In Duct	In Air	Direct In Ground	In Duct				
(Nom.)	(Nom.)	(Approx.)		(Nom.)	(Approx.)				(For reference only)			(For reference only)			(Approx.)		(Approx.)	(Approx.)
(sq. mm.)	(mm)	(mm)	(kg/km)	(mm)	(mm)	(kg/km)	(Ω/km)	(kA)	(Amps.)	(Amps.)	(Amps.)	(Amps.)	(Amps.)	(Amps.)	(Ω/km)	(μf/km)	(Ω/km)	(μf/km)
10	0.7	9.0	100	-	-	-	3.08	0.940	64	69	58	-	-	-	0.1140	0.430	-	-
16	0.7	10.0	130	-	-	-	1.91	1.50	84	89	75	-	-	-	0.1080	0.510	-	-
25	0.9	11.5	170	2.2	14.0	230	1.20	2.40	112	115	96	110	100	91	0.1030	0.490	0.1133	0.590
35	0.9	12.5	210	2.2	15.5	280	0.868	3.30	137	137	115	135	120	110	0.0986	0.570	0.1085	0.620
50	1.0	14.5	270	2.2	17.0	340	0.641	4.70	165	161	135	165	140	125	0.0937	0.580	0.1031	0.640
70	1.1	16.0	350	2.2	18.5	410	0.443	6.60	209	198	165	210	175	155	0.0900	0.630	0.0990	0.670
95	1.1	18.0	440	2.2	20.0	510	0.320	9.00	264	243	199	255	205	185	0.0865	0.730	0.0952	0.740
120	1.2	19.5	530	2.2	21.5	600	0.253	11.30	308	276	226	295	235	210	0.0841	0.740	0.0925	0.780
150	1.4	21.5	650	2.2	23.5	720	0.206	14.20	350	308	252	335	260	230	0.0839	0.730	0.0923	0.790
185	1.6	24.0	790	2.2	25.0	840	0.164	17.50	406	349	285	390	295	260	0.0836	0.690	0.0920	0.730
240	1.7	26.0	980	2.2	27.0	1030	0.125	22.60	480	404	329	460	340	300	0.0813	0.740	0.0894	0.790
300	1.8	29.0	1120	2.2	29.5	1190	0.100	28.30	551	454	369	530	385	335	0.0795	0.800	0.0875	0.850
400	2	32.5	1490	2.2	33.0	1510	0.0778	37.70	647	518	421	620	440	380	0.0787	0.830	0.0866	0.880
500	2.2	36.0	1840	2.4	36.5	1870	0.0605	47.00	751	588	476	730	495	430	0.0779	0.830	0.0857	0.880
630	2.4	39.5	2280	2.6	39.5	2320	0.0469	59.22	868	663	536	840	560	485	0.0785	0.870	0.0864	0.920

**Note:** Technical Data given is for reference only and may be revised without notice. Current ratings are given for standard conditions (Ambient Air Temperature @ 40°C, Ambient Ground / Duct Temperature @ 30°C ) and may vary if site conditions are different.

**Corporate Office :** B-II/12, Mohan Cooperative Industrial Estate, Badarpur, New Delhi-110 044 ★ Tel : +91-11-29891011, 29893640 ★ E-mail : sales@specialcables.co.in

**Manufacturing Unit:** Plot No. 60-65, Sector-3, SIDCUL – IIE Pantnagar, Rudrapur- 263153, Distt.: U.S.Nagar, Uttarakhand, India

Tel : +91-594-4250781 ★ E-mail : worksrdr@specialcables.co.in ★ Website : www.specialcables.co.in