



# S.M.C

Current Rating and Voltage drop for cables & wires Up to and including 600/1000V.  
 Current ratings of cables given in tables below are based on the ERA (Electrical Research Association) Report 69-30, Part V (for XLPE cables) and part III (For PVC cables) which is accepted worldwide.  
 Single core copper, XLPE insulated armored / unarmored cables.

Nominal Area of Conductor	In Air		In Ground	In Duct	Voltage drop of 3 single core cables Trefoil
	Single core in Trefoil		Single core in Trefoil	Single core in Trefoil	
	Unarmored	Armored	Armored	Armored	
Sqmm	A		A	A	V/A/Km
1.5	27	27	32	29	26.7
2.5	37	37	43	40	16.4
4	48	48	55	52	10.2
6	60	60	70	67	6.8
10	82	82	93	88	4.0
16	112	112	122	114	2.5
25	150	150	157	151	1.62
35	178	178	186	174	1.17
50	212	220	225	225	0.88
70	271	281	276	270	0.62
95	336	344	330	318	0.46
120	392	400	375	356	0.38
150	453	460	419	385	0.32
185	525	528	471	425	0.28
240	626	622	542	476	0.23
300	725	709	606	519	0.21
400	844	810	671	551	0.20
500	977	916	744	598	0.18
630	1129	1032	817	645	0.17
800	1282	1121	864	672	0.16
1000	1430	1216	915	714	0.15

**Operating Conditions**

- Ambient Air temperature: 30°C
- Ground Temperature: 20°C
- Depth of Laying: 0.5 m
- Thermal Resistivity of soil: 1.2 K.m/W