



# S.M.C

Single Core Aluminum, PVC Insulated, Armored /Unarmored Cables.  
 Current Rating and Voltage drop for cables & wires Up to and including  
 600/1000V Single Core Aluminum, PVC Insulated, Armored /Unarmored Cables  
 Three Single cores in Trefoil touching.

Nominal Area of Conductor	In Air				In Ground		In Duct		Voltage drops of single core cables	
	Unarmored		Armored		Armored		Armored		at 70°C	at 85°C
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C		
Sqmm	A				A		A		V/A/Km	V/A/Km
16	73	83	73	83	82	91	77	86	3.97	4.18
25	97	111	97	111	107	119	101	112	2.50	2.62
35	120	137	120	137	125	139	121	135	1.81	1.92
50	129	148	132	151	146	163	146	163	1.35	1.41
70	164	188	167	191	179	199	179	199	0.94	0.99
95	202	231	204	233	215	239	212	237	0.69	0.72
120	235	269	238	272	245	273	240	268	0.56	0.58
150	270	309	272	311	274	305	267	296	0.46	0.48
185	314	359	316	362	311	346	292	323	0.38	0.40
240	375	429	374	427	333	370	306	339	0.31	0.32
300	435	496	430	490	367	407	334	370	0.27	0.28
400	500	574	500	574	405	452	365	407	0.23	0.23
500	552	632	552	632	430	479	387	432	0.20	0.21
630	626	709	626	709	488	538	440	485	0.18	0.19
800	707	803	707	803	551	608	496	548	0.17	0.18
1000	795	894	795	894	619	677	558	610	0.16	0.17

Installation conditions for above Rating:

Maximum Conductor Temp. for PVC Type 5 Insulation

85°C Maximum Conductor Temp. for PVC TI1/Type A Insulation 70°C

Ambient air Temperature 30 °C

Ground Temperature 20 °C

Depth of Laying 0.5 m

Thermal resistivity of soil