

N2XY & N2XH unarmoured power cables

These charts relate to unarmoured power cables with XLPE core insulation and LSZH or PVC sheathing such as N2XY & N2XH. The figures shown are to be considered as guiding values only.

Current Carrying Capacity in Ampere (Amps)			
Based on laying in free air with an ambient air temperature of 30°C and an operating temperature at conductor of 90°C			
Core Area (mm ²)	one single core cable*	multicore cable, 3 or 4 loaded cores	2 or 3 single core cables, laid trefoil
1.5	33	24	26
2.5	43	32	34
4.0	57	42	44
6.0	72	53	56
10	99	74	77
16	131	98	102
25	177	133	138
35	217	162	170
50	265	197	207
70	336	250	263
95	415	308	325
120	485	359	380
150	557	412	437
185	646	475	507
240	774	564	604
300	901	-	697
400	1060	-	811
500	1252	-	940

* rated current for direct current systems with a far-distanced return conductor

Conversion factors ≥ 5 core cables, 1.5mm² to 10.0mm², against above table								
Loaded Cores:	5	7	10	14	19	24	40	61
Factor:	0.75	0.65	0.55	0.50	0.45	0.40	0.35	0.30

Conversion factors for deviating ambient air temperature								
Temperature:	10°C	15°C	20°C	25°C	35°C	40°C	45°C	50°C
Factor:	1.15	1.12	1.08	1.04	0.96	0.91	0.87	0.82

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Current Carrying Capacity in Ampere (Amps)			
Based on laying in ground with an ambient ground temperature of 20°C and an operating temperature at conductor of 90°C			
Core Area (mm ²)	one single core cable*	multicore cable, 3 or 4 loaded cores	2 or 3 single core cables, laid trefoil
1.5	48	31	33
2.5	63	40	42
4.0	82	52	54
6.0	102	64	67
10	136	86	89
16	176	112	115
25	229	145	148
35	275	174	177
50	326	206	209
70	400	254	256
95	480	305	307
120	548	348	349
150	616	392	393
185	698	444	445
240	815	517	517
300	927	-	583
400	1064	-	663
500	1227	-	749

* rated current for direct current systems with a far-distanced return conductor

Conversion factors ≥ 5 core cables, 1.5mm² to 10.0mm², against above table								
Loaded Cores:	5	7	10	14	19	24	40	61
Factor:	0.10	0.60	0.50	0.45	0.40	0.35	0.30	0.25

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