

NYY-J & NYY-O PVC CABLE



NYY cables serve as an economical power and control cable solution for fixed installations, suitable for both indoor and outdoor use. These unarmored cables are ideal for applications where mechanical protection is not required, such as ducts and areas with minimal risk of damage.

Primarily used for energy supply in fixed installations, NYY cables can be installed indoors, on cable trays, within conduits, or fixed to walls, where mechanical damage is unlikely. They are versatile, applicable in various settings including open air, underground, concrete, power stations, and distribution boards

CONDUCTOR	Plain Copper
STRANDING	Class 2
INSULATION	PVC
OUTERSHEATH	PVC
OUTERSHEATH COLOUR	Black
RATED VOLTAGE	0.6/1kV
CORE IDENTIFICATION	Single core: Black Two core: Brown and Blue Three core: Brown, Blue and Green / Yellow Four core: Black, Grey, Brown and Green / Yellow Five core: Black, Blue, Brown, Grey and Green / Yellow Seven - Forty cores: Black cores, numbered and Green / Yellow
MINIMUM BENDING RADIUS	Fixed: 12 x overall diameter
OPERATING TEMPERATURE	Max 70°C
STANDARDS	IEC 60502-1, VDE 0276-603, HD 603, IEC 60228 Flame retardant according to IEC/EN 60332-1-2
APPROVALS	

SPECIFICATION DATA

BATT Part No	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm2	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
16946	1	6	RE	1	.4	6.15	62
16947	1	10	RM	1	1.4	8.6	155
16836	1	16	RM	1	1.4	9.6	218
16837	1	25	RM	1.2	1.4	11.1	318
16838	1	35	RM	1.2	1.4	12.1	414
16839	1	50	RM	1.4	1.4	13.7	552
16840	1	70	RM	1.4	1.4	15.5	750
16100	1	95	RM	1.6	1.5	17.6	1020
16905	1	120	RM	1.6	1.6	19.3	1259
16904	1	150	RM	1.8	1.6	21	1546
16211	1	185	RM	2	1.7	23.2	1913
16903	1	240	RM	2.2	1.8	26.2	2471
16813	1	300	RM	2.4	2	29.2	3097
16984	1	500					
16486	2	1					
16663	2	1.5	RE	0.8	1.8	10	147
16502	2	2.5	RE	0.8	1.8	10.7	179
16299	2	4	RM	1	1.8	13	268
16722	2	6	RM	1	1.8	14.2	337
16398	2	10	RM	1	1.8	16.2	472
16375	2	16	RM	1	1.8	18.2	644
16401	2	25					
16503	3	1.5	RE	0.8	1.8	10.4	166
16408	3	2.5	RE	0.8	1.8	11.3	212
16597	3	4	RE	1	1.8	13.1	299
16591	3	6	RM	1	1.8	15	402
16683	3	10	RM	1	1.8	17.1	570
16714	3	16	RM	1	1.8	19.2	789
16616	3	25	RM	1.2	1.8	22.1	1141
16773	3	35	RM	1.2	1.8	24.1	1462
16841	3	50	RM	1.4	1.8	27.6	1964
16675	3	70	RM	1.6	2.1	36.3	3635
16386	3	95	RM	1.6	2.2	40	4488
16595	4	1.5	RE	0.8	1.8	11.6	198
16676	4	2.5	RE	0.8	1.8	12.1	252
16709	4	4	RM	1	1.8	15.1	391
16729	4	6	RM	1	1.8	16.5	465
16731	4	10	RM	1	1.8	18.6	702
16752	4	16	RM	1	1.8	21.1	992
16500	4	25	RM	1.2	1.8	24.2	1431
16501	4	35	RM	1.2	1.8	26.6	1861
16481	4	50	RM	1.4	1.9	30.9	2535
16596	4	70	RM	1.4	2.1	35.1	3441
16629	4	95	RM	1.6	2.2	404	4691
16630	4	185	RM	2	2.7	53.9	8810
16605	5	1.5	RE	0.8	1.8	12	232

16505	5	2.5	RE	0.8	1.8	13.1	302
16685	5	4	RM	1	1.8	16.6	477
16672	5	6	RM	1	1.8	18.2	618
16692	5	10	RM	1	1.8	20.3	853
16686	5	16	RM	1	1.8	26.6	1212
16325	5	25					
16589	5	35					
16010	5	120					
16193	7	1.5	RE	1	0.8	14.1	368
16161	7	2.5	RE	1	1.8	16.6	477
16226	7	4					
16308	12	1.5	RE	0.8	1.8	16.6	475
16244	12	2.5	RE	0.8	1.8	16.2	628
16228	19	1.5	RE	0.8	1.8	18.9	648
16774	19	2.5	RE	0.8	1.8	20.3	843
16247	21	1.5					
16339	40	2.5					

CONDUCTORS

Class 1 Solid Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm2	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km - Circular, Annealed Copper Conductor - Plain Wires
1.5	12.1
2.5	7.41
4	4.61
6	3.08
10	1.83
16	1.15
25	0.727
35	0.524
50	0.387
70	0.268
95	0.193
120	0.153
150	0.124
185	0.101
240	0.0775
300	0.062

Class 2 Stranded Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm2	MINIMUM NO. OF WIRES IN CONDUCTOR - Circular cu	MINIMUM NO. OF WIRES IN CONDUCTOR - Circular cu	MINIMUM NO. OF WIRES IN CONDUCTOR - Circular Compacted cu	MINIMUM NO. OF WIRES IN CONDUCTOR - Circular Compacted al	MINIMUM NO. OF WIRES IN CONDUCTOR - Shaped cu	MINIMUM NO. OF WIRES IN CONDUCTOR - Shaped al	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C - Annealed Copper Conductor - Plain wires ohms/km
1.5	7		6				12.1
2.5	7		6				7.41
4	7		6				4.61

6	7		6				3.08
10	7	7	6	6			1.83
16	7	7	6	6			1.15
25	7	7	6	6	6	6	0.727
35	7	7	6	6	6	6	0.524
50	19	19	6	6	6	6	0.387
70	19	19	12	12	12	12	0.268
95	19	19	15	15	15	15	0.193
120	37	37	18	15	18	15	0.153
150	37	37	18	15	18	15	0.124
185	37	37	30	30	30	30	0.0991
240	37	37	34	30	34	30	0.0754
300	61	61	34	30	34	30	0.0601

ELECTRICAL CHARACTERISTICS Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm2	CONDUCTOR TYPE	CURRENT CARRYING CAPACITY IN DUCT Amps	CURRENT CARRYING CAPACITY IN AIR Amps
1	2.5			26
1	4			57
1	6			57
1	10			78
1	16		127	103
1	25		103	137
1	35		195	169
1	50		230	206
1	70		282	261
1	95		336	321
1	120		382	374
1	150		428	428
1	185		483	414
1	240		561	590
1	300		632	678
2	1.5		32	20
2	2.5		42	27
2	4		54	37
2	6		68	48
2	10		90	66
2	16		116	89
3	1.5		26	18
3	2.5		34	25
3	4		44	34
3	4		44	34
3	6		56	43
3	6		56	43
3	10		75	60
3	16		98	80
3	25		128	106
3	35		157	131
3	50		185	159
3	95		275	244
3	120		313	282

4	1.5		26	18
4	2.5		34	25
4	4		44	34
4	4		44	34
4	6		56	43
4	6		56	43
4	10		75	60
4	16		98	80
4	25		128	106
4	35		157	131
4	50		185	159
4	70		252	247
4	95		303	305
4	120		313	282
4	150		390	407
4	185		399	371
4	240		464	436
5	1.5		24	18
5	2.5		34	25
5	4		44	34
5	4		44	34
5	6		56	43
5	6		56	43
5	10		75	60
5	16		98	80
5	25		128	106
7	1.5		15	12
7	2.5		20	16
12	1.5		12	9
12	2.5		16	13
14	1.5		12	9
19	1.5		10	8
19	2.5		13.6	11.3
27	1.5		12	9

DE-RATING FACTORS For Air Temperature other than 30°C

AIR TEMPERATURE	20°C	25°C	30°C	35°C	40°C	45°C	50°C
DE-RATING FACTOR	1.12	1.07	1.00	0.94	0.87	0.79	0.71

The information in this datasheet is for guidance only and subject to change without liability. Images provided are representations; actual cable dimensions may vary due to manufacturing tolerances.

