

NYY / NYY-J / NYY-O PVC 0.6/1kV Power Cable



APPLICATION

Power and control cable for fixed installation. Can be used indoors, outdoors, underground, in concrete and in water.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

0.6/1kV

Temperature Rating

Fixed: -15°C to +70°C

Flexed: -5°C to +50°C

Minimum Bending Radius

Fixed: 12 x overall diameter

STANDARDS

IEC 60502-1, VDE 0276-603, HD 603, IEC 60228

Flame retardant according to IEC/EN 60332-1-2

THE CABLE TEST

We have world-class testing facility, and made rigorous testing regime, every meter of cable before leaving the factory must go through strict testing, testing qualified products will be shipped to customers, effectively ensure product quality and meet customer requirements.

SUSTAINABILITY COMMITMENT

Guowang Cable actively implements the "carbon reduction" goal, strives to promote the green's low-carbon transformation, strengthens energy-saving and emission reduction technology innovation, and promotes the company's healthy and sustainable development.

CONSTRUCTION

Conductor

RE: Class 1 solid copper conductor

RM: Class 2 stranded copper conductor

Insulation

PVC (Polyvinyl Chloride)

Filler

PVC (Polyvinyl Chloride)

Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

Black, Customized as needed

Core Identification

2 core: Blue Brown

3 core: Green/Yellow Blue Brown

4 core: Green/Yellow Brown Black Grey

5 core: Green/Yellow Brown Black Grey Blue

7 core and above: Green/Yellow Black with White numbers

Note

NYY-O (without Green/Yellow earth conductor) also available

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
1	2.5	RE	0.8	1.4	6.15	62
1	4	RE	1	1.4	7.5	85
1	6	RE	1	1.4	7.5	108
1	10	RM	1	1.4	8.6	155
1	16	RM	1	1.4	9.6	218
1	25	RM	1.2	1.4	11.1	318
1	35	RM	1.2	1.4	12.1	414
1	50	RM	1.4	1.4	13.7	552
1	70	RM	1.4	1.4	15.5	750
1	95	RM	1.6	1.5	17.6	1020
1	120	RM	1.6	1.6	19.3	1259
1	150	RM	1.8	1.6	21	1546
1	185	RM	2	1.7	23.2	1913
1	240	RM	2.2	1.8	26.2	2471
1	300	RM	2.4	2	29.2	3097
1	400	RMv	2.6	2	33.8	4100
1	500	RMv	2.8	2.1	38	5200
2	1.5	RE	0.8	1.8	10	147
2	2.5	RE	0.8	1.8	10.7	179
2	4	RM	1	1.8	13	268
2	6	RM	1	1.8	14.2	337
2	10	RM	1	1.8	16.2	472
2	16	RM	1	1.8	18.2	644
3	1.5	RE	0.8	1.8	10.4	166
3	2.5	RE	0.8	1.8	11.3	212
3	4	RE	1	1.8	13.1	299
3	6	RE	1	1.8	15	402
3	10	RM	1	1.8	17.1	570
3	16	RM	1	1.8	19.2	789
3	25	RM	1.2	1.8	22.1	1141
3	35	RM	1.2	1.8	24.1	1462
3	50	RM	1.4	1.8	27.6	1964
3	70	RM	1.6	2.1	36.3	3635
3	95	RM	1.6	2.2	40	4488

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION	NOMINAL THICKNESS OF SHEATH	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	mm ²		mm	mm	mm	kg/km
4	1.5	RE	0.8	1.8	11.6	198
4	2.5	RE	0.8	1.8	12.1	252
4	4	RM	1	1.8	15.1	391
4	6	RM	1	1.8	16.5	465
4	10	RM	1	1.8	18.6	702
4	16	RM	1	1.8	21.1	992
4	25	RM	1.2	1.8	24.2	1431
4	35	RM	1.2	1.8	26.6	1861
4	50	RM	1.4	1.9	30.9	2535
4	70	RM	1.4	2.1	35.1	3441
4	95	RM	1.6	2.2	40.4	4691
4	120	RM	1.6	2.4	44.2	5757
4	150	RM	1.8	2.5	48.5	7095
4	185	RM	2	2.7	53.9	8810
4	240	RM	2.2	2.9	61.1	11400
5	1.5	RE	10.8	1.8	12	232
5	2.5	RE	0.8	1.8	13.1	302
5	4	RM	1	1.8	16.6	477
5	6	RM	1	1.8	18.2	618
5	10	RM	1	1.8	20.3	853
5	16	RM	1	1.8	23.1	1212
5	25	RM	0.8	1.8	26.6	280
7	1.5	RE	1	1.8	16.6	477
7	2.5	RE	0.8	1.8	14.1	368
12	1.5	RE	0.8	1.8	16.6	475
12	2.5	RE	0.8	1.8	18.2	628
14	1.5	RE	0.8	1.8	17.1	515
19	1.5	RE	0.8	1.8	18.9	648
19	2.5	RE	0.8	1.8	20.3	843
27	1.5	RE	0.8	1.8	22.6	895

CONDUCTORS

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

NOMINAL CROSS SECTIONAL AREA mm ²	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 mm ²	MINIMUM NO. OF WIRES IN CONDUCTOR						MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C
	Circular		Circular Compacted		Shaped		Annealed Copper Conductor
	Cu	Al	Cu	Al	Cu	Al	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
400	—	—	—	—	—	—	0.047
500	—	—	—	—	—	—	0.0366

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	CURRENT CARRYING CAPACITY	
			Amps	
			In Duct	In Air
1	2.5	RE	—	26
1	4	RE	—	47
1	6	RE	—	57
1	10	RM	—	78
1	16	RM	127	103
1	25	RM	163	137
1	35	RM	195	169
1	50	RM	230	206
1	70	RM	282	261
1	95	RM	336	321
1	120	RM	382	374
1	150	RM	428	428
1	185	RM	483	414
1	240	RM	561	590
1	300	RM	632	678
1	400	RMv	—	646
1	500	RMv	—	747
2	1.5	RE	32	20
2	2.5	RE	42	27
2	4	RM	54	37
2	6	RM	68	48
2	10	RM	90	66
2	16	RM	116	89
3	1.5	RE	26	18
3	2.5	RE	34	25
3	4	RE	44	34
3	4	RM	44	34
3	6	RE	56	43
3	6	RM	56	43
3	10	RM	75	60
3	16	RM	98	80
3	25	RM	128	106
3	35	RM	157	131
3	50	RM	185	159
3	95	RM	275	244
3	120	RM	313	282

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	CURRENT CARRYING CAPACITY	
			Amps	
			In Duct	In Air
4	1.5	RE	26	18
4	2.5	RE	34	25
4	4	RE	44	34
4	4	RM	44	34
4	6	RE	56	43
4	6	RM	56	43
4	10	RM	75	60
4	16	RM	98	80
4	25	RM	128	106
4	35	RM	157	131
4	50	RM	185	159
4	70	RM	252	247
4	95	RM	303	305
4	120	RM	313	282
4	150	RM	390	407
4	185	RM	399	371
4	240	RM	464	436
5	1.5	RE	24	18
5	2.5	RE	34	25
5	4	RE	44	34
5	4	RM	44	34
5	6	RE	56	43
5	6	RM	56	43
5	10	RM	75	60
5	16	RM	98	80
5	25	RM	128	106
7	1.5	RE	15	12
7	2.5	RE	20	16
12	1.5	RE	12	9
12	2.5	RE	16	13
14	1.5	RE	12	9
19	1.5	RE	10	8
19	2.5	RE	13.6	11.3
27	1.5	RE	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