NYY unarmoured 1kV power single or multicore PVC black

These tough cables are designed for fixed power and control use primarily in industrial applications. Also known as NYY-J (including earth) and NYY-O (without earth) they can be used as an alternative to the old Delta Hi-tuf cables. Suitable for installation indoors, outdoors, in ducts, in water or underground.

Low smoke zero halogen (LSZH) versions may be available on request for increased fire safety.

Construction

solid or stranded plain annealed copper conductors

polyvinylchloride (PVC) core insulation

cores twisted concentrically (multicores)

filling compound over the core assembly

black hardened PVC outer sheath

Technical

conductor stranding:	according to class 1 or 2 (VDE 0295 / IEC 60228 / BS EN 60228:2005)
	RE = solid round, RM = stranded round, SM = stranded sectorial
bend radius:	single core = 15 x O/D (overall diameter), multicore = 12 x O/D
voltage rating:	600/1000V operating , 4000V test
current rating:	see NYY & NYCY chart
temperature range:	-5°C to +50°C flexing, -40°C to +70°C fixed
standards:	construction generally to VDE 0276-603
	flame retardant according to IEC 60332-1, VDE 0482-332-1-2
core identification:	single core = green/yellow (NYY-J) or black (NYY-O)
	2 cores = coloured to VDE 0293 without earth (NYY-O)
	3-5 cores = coloured to VDE 0293 including green/yellow earth (NYY-J)
	6+ cores = numbered black cores including green/yellow earth (NYY-J)

SINGLE CORE CABLES

Conductor		Cable Overall		Conductor		Cable Overall	
Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)	Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)
4.0	RE	9.1	110	70.0	RM	17.0	840
6.0	RE	9.7	136	95.0	RM	19.0	1100
10.0	RE	10.6	182	120.0	RM	20.8	1350
16.0	RE	11.6	250	150.0	RM	23.0	1650
25.0	RM	12.6	365	185.0	RM	25.5	2000
35.0	RM	14.0	480	240.0	RM	28.5	2600
50.0	RM	15.8	620	300.0	RM	31.0	3200

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Central Cables Limited

NYY unarmoured 1kV power single or multicore PVC black

SINGLE CORE CABLES							
Conductor		Cable Overall		Conductor		Cable Overall	
Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)	Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)
400.0	RM	35.0	4100	630.0	RM	43.0	6650
500.0	RM	38.0	5200				

MULTICORE CABLES									
Conductors			Cable Overall		Conductors			Cable Overall	
No. of	Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)	No. of	Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)
2	1.5	RE	11.0	170	19	2.5	RE	23.0	1010
3	1.5	RE	12.0	225	21	2.5	RE	24.0	1050
4	1.5	RE	13.0	220	24	2,5	RE	26.0	1130
5	1.5	RE	13.0	280	30	2.5	RE	28.0	1285
7	1.5	RE	14.0	370	40	2.5	RE	30.0	1700
10	1.5	RE	17.0	530	52	2.5	RE	36.0	2285
12	1.5	RE	18.5	580					
14	1.5	RE	19.5	620	2	4.0	RE	14.0	290
16	1.5	RE	20.0	700	3	4.0	RE	14.0	375
19	1.5	RE	21.0	770	4	4.0	RE	15.5	410
21	1.5	RE	22.0	850	5	4.0	RE	16.0	490
24	1.5	RE	23.0	900	7	4.0	RE	19.0	630
30	1.5	RE	24.0	1020					
40	1.5	RE	28.0	1245	2	6.0	RE	15.0	360
52	1.5	RE	33.0	1400	3	6.0	RE	15.0	480
					4	6.0	RE	17.0	510
2	2.5	RE	12.5	210	5	6.0	RE	18.0	650
3	2.5	RE	13.0	275	7	6.0	RE	21.0	840
4	2.5	RE	14.0	300					
5	2.5	RE	15.0	360	2	10.0	RE	16.0	490
7	2.5	RE	16.0	450	3	10.0	RE	18.0	670
10	2.5	RE	19.0	650	4	10.0	RE	19.0	720
12	2.5	RE	20.0	715	5	10.0	RE	20.0	870
14	2.5	RE	21.0	820	7	10.0	RE	24.0	1150
16	2.5	RE	22.0	920					

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MULTICORE CABLES

Conductors			Cable Overall		Conductors			Cable Overall	
No. of	Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)	No. of	Area (mm²)	Strand Type	Diameter (mm)	Weight (kg/km)
2	16.0	RE	18.0	660	3	95.0	SM	35.0	3600
3	16.0	RE	19.0	880	3½	95/50	SM/SM	37.0	3900
4	16.0	RE	22.0	1050	4	95.0	SM	38.5	4500
5	16.0	RE	23.0	1250	5	95.0	RMv	50.0	6130
2	25.0	RM	23.5	940	3	120.0	SM	39.0	4380
3	25.0	RM	24.5	1390	3½	120/70	SM/SM	42.0	4880
3½	25/16	RM/RE	25.0	1580	4	120.0	SM	43.0	5520
4	25.0	RM	27.0	1650	5	120.0	RMv	51.3	7480
5	25.0	RM	30.0	1970					
					3	150.0	SM	44.0	4900
3	35.0	SM	25.0	1600	3½	150/70	SM/SM	47.0	5800
3½	35/16	SM/RE	26.0	1700	4	150.0	SM	48.0	6860
4	35.0	SM	29.0	1860	5	150.0	RMv	58.5	8360
5	35.0	RM	34.0	2630					
					3	185.0	SM	49.0	6500
3	50.0	SM	28.0	2018	3½	185/95	SM/SM	51.0	7400
3½	50/25	SM/RM	30.0	2330	4	185.0	SM	52.5	8460
4	50.0	SM	31.5	2500					
5	50.0	RM	42.4	3500	3	240.0	SM	53.0	8300
					3½	240/120	SM/SM	58.0	9700
3	70.0	SM	31.0	2680	4	240.0	RE	60.0	11000
3½	70/35	SM/SM	35.0	2900					
4	70.0	SM	35.5	3300	3½	300/150	SM/SM	66.0	11200
5	70.0	RMv	44.0	4450					

PVC properties: fairly tough & flexible material with fair abrasive resistance, good resistance to water, aqueous salt solutions, acids and alkalis, moderate/poor resistance against organic solvents and oils. Oil resistant PVC (polyvinylchloride) is commonly available.

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