



HELUKABEL <VDE> 0276 NYY-J 0,6/1 kV

Technical data

- Power and control cable,
 - **NYY-J / NYY-O** acc. to DIN VDE 0276-603 / HD 603 S1 / IEC 60502 7 core and above acc. to DIN VDE 0276-627 / HD 627 S1 / IEC 60502
 - **(N)YY-J / (N)YY-O** in alignment with DIN VDE 0276-603 / HD 603 S1 / IEC 60502 7 core and above in alignment with DIN VDE 0276-627 / HD 627 S1 / IEC 60502
- Temperature range**
flexing -5°C to +50°C
fixed installation -40°C to +70°C
- Permissible **operating temperature** at conductor +70°C
- Permissible **short circuit temperature** (short circuit duration max. 5 s)
≤ 300 mm² +160°C
> 300 mm² +140°C
- Nominal voltage**
U₀/U 0,6/1 kV
- Test voltage**
4 kV
- Minimum bending radius**
single core 15x Outer-Ø
multi core 12x Outer-Ø
- Caloric load values**
see "Technical Information"

Cable structure

- Bare copper conductor, single wire or multi wire acc. to DIN VDE 0295 cl.1 or cl.2 / IEC 60228 cl.1 or cl.2
- Core insulation of PVC compound type DIV4 acc. to HD 603 S1
- Core identification acc. to DIN VDE 0293-308 / 0276-603
- Core colour for 3+½ conductor
J-version: GN-YE (½), BN, BK, GY
O-version: BU (½), BN, BK, GY
- Cores stranded in concentric layers
- Outer sheath of PVC compound type DMV5 to HD 603 S1
- Sheath colour: black

Properties

- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

Tests

- Flame retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

Highest permissible voltage

- Direct current systems
 - Conductor/conductor 1,8 kV
 - Conductor/earth 0,9 kV
- Alternating current systems
 - Single phase systems both outer conductors insulated 1,4 kV
 - Single phase systems one outer conductor earthed 0,7 kV
- Three phase systems 1,2 kV

Note

- re = round conductor, single wire
- rm = round conductor, multi wire
- sm = sectional conductor, multi wire
- J-version = with GN-YE conductor
- O-version = without GN-YE conductor
- In respect to 3+½ conductors
Whereby only one conductor is allowed to contain a smaller cross section (as per DIN VDE 0276-603) and permitted to place as insulated core (green-yellow and blue as ½-conductor), stranded in layer.
- The conductor is metrically constructed (mm²). The AWG designation is approximate and purely informative.

Application

Power cables for energy supply are installed in open air, in underground, in water, in concrete, indoors, in cable ducts, power stations, for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected.

CE = Product conforms with Low-Voltage Directive 2014/35/EU.

NYY-J / NYY-O

No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. factor per km	Weight app. kg / km	J type Part no.	AWG-No.	O type Part no.	AWG-No.
1 x 4 re	8,1	38,0	115,0	32001	12	32089	12
1 x 6 re	8,6	58,0	135,0	32002	10	32090	10
1 x 10 re	10,0	96,0	179,0	32003	8	32091	8
1 x 16 re	11,0	154,0	245,0	32004	6	32092	6
1 x 25 rm	13,7	240,0	360,0	32005	4	32093	4
1 x 35 rm	14,5	336,0	470,0	32006	2	32094	2
1 x 50 rm	16,0	480,0	620,0	32007	1	32095	1
1 x 70 rm	17,5	672,0	810,0	32008	2/0	32096	2/0
1 x 95 rm	19,0	912,0	1110,0	32009	3/0	32097	3/0
1 x 120 rm	20,5	1152,0	1360,0	32010	4/0	32098	4/0
1 x 150 rm	22,5	1440,0	1670,0	32011	300 kcmil	32099	300 kcmil
1 x 185 rm	25,0	1776,0	2050,0	32012	350 kcmil	32100	350 kcmil
1 x 240 rm	28,0	2304,0	2630,0	32013	500 kcmil	32101	500 kcmil
1 x 300 rm	30,0	2880,0	3200,0	32014	600 kcmil	32102	600 kcmil
1 x 400 rm	34,0	3840,0	4150,0	32015	750 kcmil	32103	750 kcmil
1 x 500 rm	38,0	4800,0	5200,0	32556	1000 kcmil	32558	1000 kcmil
1 x 630 rm	43,0	6048,0	6650,0	32557	1250 kcmil	32559	1250 kcmil



NYY-J / NYY-O

No. cores x cross-sec. mm²		Outer Ø app. mm	Cop. factor per km	Weight app. kg / km	J type Part no.	AWG-No.	O type Part no.	AWG-No.
2 x 1,5	re	11,0	29,0	175,0			32104	16
2 x 2,5	re	12,0	48,0	215,0			32105	14
2 x 4	re	14,0	77,0	295,0			32106	12
2 x 6	re	15,0	115,0	370,0			32107	10
2 x 10	re	16,5	192,0	495,0	32020	8	-	32108
2 x 16	re	18,5	307,0	670,0	32021	6	-	32109
2 x 25	rm	20,5	480,0	960,0	32022	4	-	32110
2 x 35	rm	24,1	672,0	1248,0	34128	2	-	34129
3 x 1,5	re	11,5	43,0	195,0	32023	16	-	32111
3 x 2,5	re	12,5	72,0	250,0	32024	14	-	32112
3 x 4	re	14,0	115,0	340,0	32025	12	-	32113
3 x 6	re	15,0	173,0	430,0	32026	10	-	32114
3 x 10	re	17,0	288,0	590,0	32027	8	-	32115
3 x 16	re	19,0	461,0	820,0	32028	6	-	32116
3 x 25	rm	24,0	720,0	1320,0	32029	4	-	32117
3 x 35	sm	25,0	1008,0	1450,0	32030	2	-	32118
3 x 50	sm	28,4	1440,0	1850,0	32031	1	-	32119
3 x 70	sm	30,0	2016,0	2450,0	32032	2/0	-	32120
3 x 95	sm	34,5	2736,0	3300,0	32033	3/0	-	32121
3 x 120	sm	37,0	3456,0	4100,0	32034	4/0	-	32122
3 x 150	sm	36,5	4320,0	4900,0	32293	300 kcmil	-	32296
3 x 185	sm	41,5	5328,0	6500,0	32294	350 kcmil	-	32297
3 x 240	sm	51,0	6912,0	8300,0	32295	500 kcmil	-	32298
4 x 1,5	re	12,0	58,0	230,0	32044	16	-	32132
4 x 2,5	re	13,5	96,0	300,0	32045	14	-	32133
4 x 4	re	16,0	154,0	410,0	32046	12	-	32134
4 x 6	re	16,5	230,0	520,0	32047	10	-	32135
4 x 10	re	18,5	384,0	730,0	32048	8	-	32136
4 x 16	re	20,3	614,0	1045,0	32049	6	-	32137
4 x 25	rm	24,5	960,0	1640,0	32050	4	-	32138
4 x 35	sm	23,5	1344,0	1760,0	32051	2	-	32139
4 x 50	sm	27,0	1920,0	2350,0	32052	1	-	32140
4 x 70	sm	34,0	2688,0	3100,0	32053	2/0	-	32141
4 x 95	sm	35,5	3648,0	4250,0	32054	3/0	-	32142
4 x 120	sm	39,0	4608,0	5300,0	32055	4/0	-	32143
4 x 150	sm	42,5	5760,0	6400,0	32056	300 kcmil	-	32144
4 x 185	sm	48,5	7104,0	8500,0	32057	350 kcmil	-	32145
4 x 240	sm	53,5	9216,0	11000,0	32058	500 kcmil	-	32146
5 x 1,5	re	13,0	72,0	270,0	32059	16	-	32147
5 x 2,5	re	14,5	120,0	360,0	32060	14	-	32148
5 x 4	re	16,5	192,0	490,0	32061	12	-	32149
5 x 6	re	19,5	288,0	600,0	32062	10	-	32150
5 x 10	re	20,0	480,0	890,0	32063	8	-	32151
5 x 16	re	22,5	768,0	1255,0	32064	6	-	32152
5 x 25	rm	28,0	1200,0	1960,0	32065	4	-	-
5 x 35	rm	34,0	1680,0	2400,0	32300	2	-	-
5 x 50	rm	35,3	2400,0	3500,0	32257	1	-	-
5 x 70	rm	39,0	3360,0	4470,0	79608	2/0	-	-
5 x 95	rm	47,0	4560,0	6149,0	700939	3/0	-	-
5 x 120	rm	51,5	5760,0	7483,0	79607	4/0	-	-
5 x 150	rm	57,8	7200,0	8948,0	700940	300 kcmil	-	-
7 x 1,5	re	14,5	101,0	310,0	32066	16	-	32153
7 x 2,5	re	15,5	168,0	450,0	32076	14	-	32163
7 x 4	re	18,5	269,0	640,0	32086	12	-	32173
7 x 6	re	20,0	403,0	850,0	32087	10	-	32174
7 x 10	re	23,5	672,0	1200,0	32088	8	-	32175
10 x 1,5	re	18,0	144,0	380,0	32067	16	-	32154
10 x 2,5	re	19,5	240,0	520,0	32077	14	-	32164
10 x 4	re	21,0	384,0	900,0	79900	12	-	75838
12 x 1,5	re	19,0	173,0	420,0	32068	16	-	32155
12 x 2,5	re	20,5	288,0	600,0	32078	14	-	32165
12 x 4	re	23,0	461,0	960,0	-	-	33296	12
14 x 1,5	re	19,0	202,0	470,0	32069	16	-	32156
14 x 2,5	re	21,0	336,0	680,0	32079	14	-	32166
14 x 4	re	26,0	538,0	1130,0	700044	12	-	75864
16 x 1,5	re	19,0	230,0	520,0	32070	16	-	32157
16 x 2,5	re	22,0	384,0	750,0	32080	14	-	32167
19 x 1,5	re	22,0	274,0	570,0	32071	16	-	32158
19 x 2,5	re	23,0	456,0	850,0	32081	14	-	32168
19 x 4	re	28,0	730,0	1415,0	702177	12	-	79898
21 x 1,5	re	21,0	302,0	650,0	32072	16	-	32159
21 x 2,5	re	23,0	504,0	980,0	32082	14	-	-
24 x 1,5	re	25,0	346,0	750,0	32073	16	-	32160
24 x 2,5	re	27,0	576,0	1100,0	32083	14	-	32170
30 x 1,5	re	26,0	432,0	860,0	32074	16	-	32161
30 x 2,5	re	28,0	720,0	1280,0	32084	14	-	32171
40 x 1,5	re	29,0	576,0	1070,0	32075	16	-	32162
40 x 2,5	re	31,5	960,0	1700,0	32085	14	-	32169
52 x 2,5	re	35,0	1248,0	2150,0	-	-	32176	16
61 x 1,5	re	32,0	878,0	1680,0	-	-	32172	14

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