



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

Technical data

- Power and control cable 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
- **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, mutli 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 (gree-yellow and blue as ½-conductor), stranded in layer.
- Part no. 33297, 33298, 11017729 in reference to VDE designation (N)YY-O
- 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.

No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / 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	-

Continuation ▶

No. cores x cross-sec. mm ²		Outer Ø app. mm	Cop. weight kg / 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	32016	16	-	32104	16	-
2 x 2,5	re	12,0	48,0	215,0	32017	14	-	32105	14	-
2 x 4	re	14,0	77,0	295,0	32018	12	-	32106	12	-
2 x 6	re	15,0	115,0	370,0	32019	10	-	32107	10	-
2 x 10	re	16,5	192,0	495,0	32020	8	-	32108	8	-
2 x 16	re	18,5	307,0	670,0	32021	6	-	32109	6	-
2 x 25	rm	20,5	480,0	960,0	32022	4	-	32110	4	-
2 x 35	rm	24,1	672,0	1248,0	34128	2	-	34129	2	-
3 x 1,5	re	11,5	43,0	195,0	32023	16	-	32111	16	-
3 x 2,5	re	12,5	72,0	250,0	32024	14	-	32112	14	-
3 x 4	re	14,0	115,0	340,0	32025	12	-	32113	12	-
3 x 6	re	15,0	173,0	430,0	32026	10	-	32114	10	-
3 x 10	re	17,0	288,0	590,0	32027	8	-	32115	8	-
3 x 16	re	19,0	461,0	820,0	32028	6	-	32116	6	-
3 x 25	rm	24,0	720,0	1320,0	32029	4	-	32117	4	-
3 x 35	sm	25,0	1008,0	1450,0	32030	2	-	32118	2	-
3 x 50	sm	28,4	1440,0	1850,0	32031	1	-	32119	1	-
3 x 70	sm	30,0	2016,0	2450,0	32032	2/0	-	32120	2/0	-
3 x 95	sm	34,5	2736,0	3300,0	32033	3/0	-	32121	3/0	-
3 x 120	sm	37,0	3456,0	4100,0	32034	4/0	-	32122	4/0	-
3 x 150	sm	36,5	4320,0	4900,0	32293	300 kcmil	-	32296	300 kcmil	-
3 x 185	sm	41,5	5328,0	6500,0	32294	350 kcmil	-	32297	350 kcmil	-
3 x 240	sm	51,0	6912,0	8300,0	32295	500 kcmil	-	32298	500 kcmil	-
4 x 1,5	re	12,0	58,0	230,0	32044	16	-	32132	16	-
4 x 2,5	re	13,5	96,0	300,0	32045	14	-	32133	14	-
4 x 4	re	16,0	154,0	410,0	32046	12	-	32134	12	-
4 x 6	re	16,5	230,0	520,0	32047	10	-	32135	10	-
4 x 10	re	18,5	384,0	730,0	32048	8	-	32136	8	-
4 x 16	re	20,3	614,0	1045,0	32049	6	-	32137	6	-
4 x 25	rm	24,5	960,0	1640,0	32050	4	-	32138	4	-
4 x 35	sm	23,5	1344,0	1760,0	32051	2	-	32139	2	-
4 x 50	sm	27,0	1920,0	2350,0	32052	1	-	32140	1	-
4 x 70	sm	34,0	2688,0	3100,0	32053	2/0	-	32141	2/0	-
4 x 95	sm	35,5	3648,0	4250,0	32054	3/0	-	32142	3/0	-
4 x 120	sm	39,0	4608,0	5300,0	32055	4/0	-	32143	4/0	-
4 x 150	sm	42,5	5760,0	6400,0	32056	300 kcmil	-	32144	300 kcmil	-
4 x 185	sm	48,5	7104,0	8500,0	32057	350 kcmil	-	32145	350 kcmil	-
4 x 240	sm	53,5	9216,0	11000,0	32058	500 kcmil	-	32146	500 kcmil	-
5 x 1,5	re	13,0	72,0	270,0	32059	16	-	32147	16	-
5 x 2,5	re	14,5	120,0	360,0	32060	14	-	32148	14	-
5 x 4	re	16,5	192,0	490,0	32061	12	-	32149	12	-
5 x 6	re	19,5	288,0	600,0	32062	10	-	32150	10	-
5 x 10	re	20,0	480,0	890,0	32063	8	-	32151	8	-
5 x 16	re	22,5	768,0	1255,0	32064	6	-	32152	6	-
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 120	sm	47,0	5760,0	6856,0	33291	4/0	-	-	-	-
5 x 150	rm	57,8	7200,0	8948,0	700940	300 kcmil	-	-	-	-
5 x 150	sm	53,0	7200,0	8380,0	33292	300 kcmil	-	-	-	-
5 x 185	sm	58,0	8880,0	10390,0	33293	350 kcmil	-	-	-	-
5 x 240	sm	64,5	11520,0	13221,0	33294	500 kcmil	-	-	-	-
5 x 300	sm	71,0	14400,0	16370,0	33295	600 kcmil	-	-	-	-
7 x 1,5	re	14,5	101,0	310,0	32066	16	-	32153	16	-
7 x 2,5	re	15,5	168,0	450,0	32076	14	-	32163	10	-
7 x 4	re	18,5	269,0	640,0	32086	12	-	32173	12	-
7 x 6	re	20,0	403,0	850,0	32087	10	-	32174	10	-
7 x 10	re	23,5	672,0	1200,0	32088	8	-	32175	8	-
10 x 1,5	re	18,0	144,0	380,0	32067	16	-	32154	16	-
10 x 2,5	re	19,5	240,0	520,0	32077	14	-	32164	14	-
10 x 4	re	21,0	384,0	900,0	79900	12	-	-	-	-
12 x 1,5	re	19,0	173,0	420,0	32068	16	-	32155	16	-
12 x 2,5	re	20,5	288,0	600,0	32078	14	-	32165	14	-
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	16	-
14 x 2,5	re	21,0	336,0	680,0	32079	14	-	32166	14	-
14 x 4	re	26,0	538,0	1130,0	700044	12	-	75864	12	-
16 x 1,5	re	19,0	230,0	520,0	32070	16	-	32157	16	-
16 x 2,5	re	22,0	384,0	750,0	32080	14	-	32167	14	-
19 x 1,5	re	22,0	274,0	570,0	32071	16	-	32158	16	-
19 x 2,5	re	23,0	456,0	850,0	32081	14	-	32168	14	-
21 x 1,5	re	21,0	302,0	650,0	32072	16	-	32159	16	-
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	16	-
24 x 2,5	re	27,0	576,0	1100,0	32083	14	-	32170	14	-
24 x 4	re	30,6	922,0	1724,0	-	-	-	33297	12	-
30 x 1,5	re	26,0	432,0	860,0	32074	16	-	32161	16	-
30 x 2,5	re	28,0	720,0	1280,0	32084	14	-	32171	14	-
30 x 4	re	32,5	1152,0	1991,0	-	-	-	11017729	12	-
40 x 1,5	re	29,0	576,0	1070,0	32075	16	-	32162	16	-
40 x 2,5	re	31,5	960,0	1700,0	32085	14	-	32172	14	-
40 x 4	re	37,0	1536,0	2604,0	-	-	-	33298	12	-
52 x 2,5	re	35,0	1248,0	2150,0	32169	14	-	-	-	-
61 x 1,5	re	32,0	878,0	1680,0	32176	16	-	-	-	-

Continuation ▶

3+1/2 conductors

No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	J type Part no.	AWG-No.	O type Part no.	AWG-No.
3 x 25 / 16	rm/re 27,5	874,0	1530,0	32035	4	- 32123	4
3 x 35 / 16	sm/re 28,0	1162,0	1750,0	32036	2	- 32124	2
3 x 50 / 25	sm/rm 31,5	1680,0	2350,0	32037	1	- 32125	1
3 x 70 / 35	sm/sm 35,0	2352,0	2850,0	32038	2/0	- 32126	2/0
3 x 95 / 50	sm/sm 38,0	3216,0	3850,0	32039	3/0	- 32127	3/0
3 x 120 / 70	sm/sm 41,0	4128,0	4780,0	32040	4/0	- 32128	4/0
3 x 150 / 70	sm/sm 46,0	4992,0	5800,0	32041	300 kcmil	- 32129	300 kcmil
3 x 185 / 95	sm/sm 51,0	6240,0	7600,0	32042	350 kcmil	- 32130	350 kcmil
3 x 240 / 120	sm/sm 58,0	8064,0	9800,0	32043	500 kcmil	- 32131	500 kcmil
3 x 300 / 150	sm/sm 56,5	10080,0	11500,0	32256	600 kcmil	-	-

Dimensions and specifications may be changed without prior notice. (RQ01)