



Technical data

- Power and control cable to DIN VDE 0276 part 603, HD 603 S1 and IEC 60502, 7 core and above to DIN VDE 0276 part 627, HD 627 S1 and 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
- Max. permissible **tensile stress** with cable grip at conductor 50 N/mm²
- **Minimum bending radius**
single-core 15x cable Ø
multi-core 12x cable Ø
- **Caloric load values**
see Technical Informations

Cable structure

- Bare copper-conductor, to DIN VDE 0295 cl.1 or cl.2, single-wire or multi-wire, BS 6360 cl.1 or cl.2, IEC 60228 cl.1 or cl.2
- Core insulation of PVC compound type DIV4 to HD 603 S1
- Core identification to DIN VDE 0293-308, 0276 part 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 in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Tests

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

Highest permissible voltage

- Direct current systems 1,8 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 part 603 table 5) and permitted to place as insulated core (green-yellow and blue as ½-conductor), stranded in layer.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

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= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

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	9,0	38,0	115,0	32001	12	-	32089	12
1 x 6	re	9,5	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	12,0	240,0	360,0	32005	4	-	32093	4
1 x 35	rm	13,0	336,0	470,0	32006	2	-	32094	2
1 x 50	rm	15,0	480,0	620,0	32007	1	-	32095	1
1 x 70	rm	16,5	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	23,5	480,0	960,0	32022	4	-	32110	4	-
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	26,5	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	40,0	4320,0	4900,0	32293	300 kcmil	-	32296	300 kcmil	-
3 x 185	sm	46,0	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	15,0	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	21,5	614,0	1045,0	32049	6	-	32137	6	-
4 x 25	rm	26,0	960,0	1640,0	32050	4	-	32138	4	-
4 x 35	sm	27,5	1344,0	1760,0	32051	2	-	32139	2	-
4 x 50	sm	30,0	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	39,0	3648,0	4250,0	32054	3/0	-	32142	3/0	-
4 x 120	sm	42,5	4608,0	5300,0	32055	4/0	-	32143	4/0	-
4 x 150	sm	47,5	5760,0	6400,0	32056	300 kcmil	-	32144	300 kcmil	-
4 x 185	sm	52,0	7104,0	8500,0	32057	350 kcmil	-	32145	350 kcmil	-
4 x 240	sm	58,0	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	18,0	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	40,0	2400,0	3500,0	32257	1	-	-	-	-
5 x 70	rm	42,7	3360,0	4470,0	79608	2/0	-	-	-	-
5 x 95	rm	50,3	4560,0	6149,0	700939	3/0	-	-	-	-
7 x 1,5	re	15,5	101,0	310,0	32066	16	-	32153	16	-
7 x 2,5	re	16,5	168,0	450,0	32076	14	-	32163	14	-
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	-
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	-
14 x 1,5	re	20,0	202,0	470,0	32069	16	-	32156	16	-
14 x 2,5	re	21,0	336,0	680,0	32079	14	-	32166	14	-
16 x 1,5	re	21,0	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	23,0	302,0	650,0	32072	16	-	32159	16	-
21 x 2,5	re	24,5	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	-
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	-
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	-
52 x 2,5	re	35,0	1248,0	2150,0	32169	14	-	-	-	-
61 x 1,5	re	34,0	878,0	1680,0	32176	16	-	-	-	-

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	24,5	874,0	1530,0	32035	4	-	32123	4	-
3 x 35 / 16	sm/re	26,0	1162,0	1750,0	32036	2	-	32124	2	-
3 x 50 / 25	sm	29,0	1680,0	2350,0	32037	1	-	32125	1	-
3 x 70 / 35	sm/rm	32,0	2352,0	2850,0	32038	2/0	-	32126	2/0	-
3 x 95 / 50	sm	38,0	3216,0	3850,0	32039	3/0	-	32127	3/0	-
3 x 120 / 70	sm	41,0	4128,0	4780,0	32040	4/0	-	32128	4/0	-
3 x 150 / 70	sm	46,0	4992,0	5800,0	32041	300 kcmil	-	32129	300 kcmil	-
3 x 185 / 95	sm	51,0	6240,0	7600,0	32042	350 kcmil	-	32130	350 kcmil	-
3 x 240 / 120	sm	58,0	8064,0	9800,0	32043	500 kcmil	-	32131	500 kcmil	-
3 x 300 / 150	sm	64,0	10080,0	11500,0	32256	600 kcmil	-	-	-	-

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