

VDE Reg.-Nr.



HELUKABEL VDE-REG.-Nr. 7032 JZ-500 25G1,5 QMM / 10110 300/500 V 001041117 CE

RoHS

Technical data

- Special-PVC control cable adapted to DIN VDE 0285-525-2-51 / DIN EN 50525-2-51
- **Temperature range**
flexing -15°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage** U₀/U 300/500 V
- **Test voltage** 4000 V
- **Breakdown voltage** min. 8000 V
- **Insulation resistance**
min. 20 MOhm x km
- **Minimum bending radius**
flexing 7,5x cable Ø
fixed installation 4x cable Ø
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)

Cable structure

- Bare copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of special PVC compound type Z 7225
- Core identification to DIN VDE 0293 black cores with continuous white numbering (also available in other colours on request)
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal lay-length
- Outer sheath of special PVC compound type TM2 to DIN VDE 0207-363-4-1/DIN EN 50363-4-1
- Sheath colour grey (RAL 7001)
- with meter marking

Properties

- Extensively oil resistant, oil-/chemical resistance see table Technical Informations
- conditional drag chain compatible
- conditional suitability for torsion
- 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)

Note

- G = with green-yellow conductor
x = without green-yellow conductor (OZ)
- We supply any "desired length" of stranded cores without outer sheath, core insulation colour acc. RAL 9005 with number combination acc. customers requirement.
- Please note the cleanroom qualification when ordering.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- screened analogue type:

**F-CY-JZ,
F-CY-OZ (LiY-CY),
Y-CY-JB,
Y-CY-JZ**

Application

These cables are used for flexible use for medium mechanical stresses with free movement without tensile stress or forced movements in dry, moist and wet rooms but not suitable for open air, as measuring and control cables in tool machines, conveyor belts, production lines in machinery production, in air-conditioning and in steel production.

Selected PVC-compounds guarantee a good flexibility as well as an economic and fast installation.

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

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
10001	2 x 0,5	4,8	9,6	40,0	20
10002	3 G 0,5	5,1	14,4	46,0	20
10003	3 x 0,5	5,1	14,4	46,0	20
10004	4 G 0,5	5,5	19,0	56,0	20
10005	4 x 0,5	5,5	19,0	56,0	20
10006	5 G 0,5	6,2	24,0	65,0	20
10007	5 x 0,5	6,2	24,0	65,0	20
10008	6 G 0,5	6,7	29,0	75,0	20
10009	7 G 0,5	6,7	33,6	80,0	20
10010	7 x 0,5	6,7	33,6	80,0	20
10011	8 G 0,5	7,4	38,0	97,0	20
10172	8 x 0,5	7,4	38,0	97,0	20
10012	10 G 0,5	8,3	48,0	116,0	20
10013	12 G 0,5	8,7	58,0	135,0	20
10014	12 x 0,5	8,7	58,0	135,0	20
10015	14 G 0,5	9,5	67,0	150,0	20
10183	16 G 0,5	10,0	76,0	175,0	20
10016	18 G 0,5	10,7	86,0	196,0	20
10017	20 G 0,5	11,3	96,0	215,0	20
10018	21 G 0,5	11,3	101,0	240,0	20
10019	25 G 0,5	12,6	120,0	270,0	20
10020	30 G 0,5	13,5	144,0	310,0	20
10021	32 G 0,5	14,0	154,0	323,0	20
10022	34 G 0,5	14,3	163,0	362,0	20
10023	40 G 0,5	15,3	192,0	434,0	20
10024	42 G 0,5	15,8	202,0	449,0	20

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
10025	50 G 0,5	17,5	240,0	513,0	20
10169	52 G 0,5	17,5	252,0	534,0	20
10026	61 G 0,5	18,5	293,0	625,0	20
10027	65 G 0,5	19,4	312,0	682,0	20
10028	80 G 0,5	21,4	384,0	780,0	20
10029	100 G 0,5	24,0	480,0	980,0	20
10030	2 x 0,75	5,3	14,4	46,0	19
10031	3 G 0,75	5,6	21,6	54,0	19
10032	3 x 0,75	5,6	21,6	54,0	19
10033	4 G 0,75	6,3	28,8	66,0	19
10034	4 x 0,75	6,3	29,0	66,0	19
10035	5 G 0,75	6,9	36,0	80,0	19
10036	5 x 0,75	6,9	36,0	80,0	19
10037	6 G 0,75	7,5	43,0	99,0	19
10177	6 x 0,75	7,5	43,0	99,0	19
10038	7 G 0,75	7,5	50,0	110,0	19
10039	7 x 0,75	7,5	50,0	110,0	19
10040	8 G 0,75	8,3	58,0	130,0	19
10173	8 x 0,75	8,3	58,0	130,0	19
10041	9 G 0,75	8,9	65,0	153,0	19
10042	10 G 0,75	9,2	72,0	162,0	19
10043	12 G 0,75	9,8	86,0	179,0	19
10044	12 x 0,75	9,8	86,0	179,0	19
10045	14 G 0,75	10,6	101,0	214,0	19
10046	15 G 0,75	11,4	108,0	218,0	19
10047	18 G 0,75	12,2	130,0	257,0	19

Continuation ▯

JZ-500 flexible, number coded, meter marking



Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
10533	19 G 0,75	12,2	137,0	264,0	19	10107	18 G 1,5	14,6	259,0	440,0	16
10048	20 G 0,75	12,7	144,0	286,0	19	10185	19 G 1,5	14,6	279,0	445,0	16
10049	21 G 0,75	12,7	151,0	320,0	19	10108	20 G 1,5	15,6	288,0	490,0	16
10050	25 G 0,75	14,3	180,0	365,0	19	10109	21 G 1,5	15,6	302,0	555,0	16
10534	27 G 0,75	14,6	195,0	382,0	19	10110	25 G 1,5	17,4	360,0	620,0	16
10051	32 G 0,75	15,9	230,0	455,0	19	10535	27 G 1,5	17,5	389,0	670,0	16
10052	34 G 0,75	16,5	245,0	510,0	19	10111	32 G 1,5	19,5	461,0	790,0	16
10182	37 G 0,75	16,7	266,0	537,0	19	10112	34 G 1,5	20,0	490,0	830,0	16
10053	40 G 0,75	17,2	288,0	595,0	19	10536	37 G 1,5	20,2	533,0	892,0	16
10054	41 G 0,75	18,1	296,0	607,0	19	10113	41 G 1,5	21,8	591,0	996,0	16
10055	42 G 0,75	18,1	302,0	612,0	19	10114	42 G 1,5	21,8	605,0	1007,0	16
10056	50 G 0,75	19,8	360,0	735,0	19	10115	50 G 1,5	24,2	720,0	1250,0	16
10057	61 G 0,75	21,2	439,0	845,0	19	10116	56 G 1,5	24,9	806,0	1332,0	16
10178	65 G 0,75	21,8	468,0	895,0	19	10117	61 G 1,5	25,8	878,0	1440,0	16
10058	80 G 0,75	24,3	576,0	1070,0	19	10187	65 G 1,5	26,8	936,0	1602,0	16
10059	100 G 0,75	27,0	720,0	1322,0	19	10118	80 G 1,5	29,8	1152,0	1871,0	16
10060	2 x 1	5,6	19,2	60,0	18	10119	100 G 1,5	33,2	1440,0	2353,0	16
10061	3 G 1	5,9	29,0	72,0	18	10120	2 x 2,5	7,8	48,0	112,0	14
10062	3 x 1	5,9	29,0	72,0	18	10121	3 G 2,5	8,3	72,0	148,0	14
10063	4 G 1	6,6	38,4	86,0	18	10122	3 x 2,5	8,3	72,0	148,0	14
10064	4 x 1	6,6	38,4	86,0	18	10123	4 G 2,5	9,2	96,0	178,0	14
10065	5 G 1	7,3	48,0	104,0	18	10124	4 x 2,5	9,2	96,0	178,0	14
10066	5 x 1	7,3	48,0	104,0	18	10125	5 G 2,5	10,1	120,0	221,0	14
10067	6 G 1	8,1	58,0	125,0	18	10126	5 x 2,5	10,1	120,0	221,0	14
10068	7 G 1	8,1	67,0	141,0	18	10127	7 G 2,5	11,2	168,0	306,0	14
10069	7 x 1	8,1	67,0	141,0	18	10128	7 x 2,5	11,2	168,0	306,0	14
10070	8 G 1	8,8	77,0	175,0	18	10129	8 G 2,5	12,3	192,0	363,0	14
10071	9 G 1	9,7	86,0	200,0	18	10548	10 G 2,5	14,1	240,0	429,0	14
10180	10 G 1	9,8	96,0	217,0	18	10130	12 G 2,5	14,8	288,0	498,0	14
10170	10 x 1	9,8	96,0	217,0	18	10131	14 G 2,5	16,0	336,0	569,0	14
10072	12 G 1	10,4	115,0	230,0	18	10132	18 G 2,5	18,2	432,0	764,0	14
10073	12 x 1	10,4	115,0	230,0	18	10133	21 G 2,5	19,2	504,0	914,0	14
10074	14 G 1	11,4	134,0	271,0	18	10134	25 G 2,5	21,6	600,0	1044,0	14
10075	16 G 1	12,3	154,0	300,0	18	10135	34 G 2,5	24,8	816,0	1470,0	14
10076	18 G 1	12,9	173,0	343,0	18	10136	42 G 2,5	27,4	1008,0	1790,0	14
10174	18 x 1	12,9	173,0	343,0	18	10137	50 G 2,5	30,0	1200,0	2095,0	14
10197	19 G 1	12,9	182,0	355,0	18	10138	61 G 2,5	32,0	1464,0	2750,0	14
10077	20 G 1	13,8	192,0	375,0	18	10139	100 G 2,5	41,4	2400,0	4450,0	14
10184	20 x 1	13,8	192,0	375,0	18	10140	2 x 4	9,2	77,0	195,0	12
10179	21 G 1	13,8	205,0	420,0	18	10141	3 G 4	9,8	115,0	230,0	12
10175	24 G 1	15,1	230,0	440,0	18	10142	4 G 4	10,9	154,0	295,0	12
10078	25 G 1	15,4	240,0	485,0	18	10143	5 G 4	12,1	192,0	361,0	12
10176	25 x 1	15,4	240,0	485,0	18	10144	7 G 4	13,2	269,0	458,0	12
10196	26 G 1	15,5	252,0	500,0	18	10145	8 G 4	14,7	307,0	590,0	12
10198	27 G 1	15,6	259,0	534,0	18	10549	10 G 4	16,8	384,0	687,0	12
10168	30 x 1	16,4	308,0	550,0	18	10146	12 G 4	17,7	461,0	790,0	12
10079	34 G 1	17,7	326,0	650,0	18	10147	3 G 6	11,9	173,0	355,0	10
10080	36 G 1	17,9	346,0	668,0	18	10148	4 G 6	13,0	230,0	424,0	10
10199	37 G 1	17,9	355,0	701,0	18	10149	5 G 6	14,5	288,0	525,0	10
10081	40 G 1	18,5	384,0	755,0	18	10150	7 G 6	16,2	403,0	625,0	10
10167	40 x 1	18,5	384,0	755,0	18	10151	3 G 10	14,9	288,0	540,0	8
10082	41 G 1	19,5	394,0	770,0	18	10152	4 G 10	16,5	384,0	701,0	8
10083	42 G 1	19,5	403,0	810,0	18	10153	5 G 10	18,3	480,0	858,0	8
10084	50 G 1	21,3	480,0	936,0	18	10154	7 G 10	20,2	672,0	1106,0	8
10085	56 G 1	21,9	538,0	920,0	18	10190	3 G 16	18,3	461,0	827,0	6
10086	61 G 1	22,5	586,0	1100,0	18	10155	4 G 16	20,1	614,0	1035,0	6
10087	65 G 1	23,6	628,0	1180,0	18	10156	5 G 16	22,6	768,0	1259,0	6
10088	80 G 1	26,1	768,0	1294,0	18	10157	7 G 16	24,8	1075,0	1780,0	6
10089	100 G 1	28,8	960,0	1644,0	18	10191	3 G 25	22,3	720,0	1186,0	4
10090	2 x 1,5	6,4	29,0	70,0	16	10158	4 G 25	25,0	960,0	1582,0	4
10091	3 G 1,5	6,8	43,0	90,0	16	10159	5 G 25	27,7	1200,0	1999,0	4
10092	3 x 1,5	6,8	43,0	90,0	16	10160	7 G 25	30,6	1680,0	2825,0	4
10093	4 G 1,5	7,4	58,0	109,0	16	10192	3 G 35	25,9	1008,0	1585,0	2
10094	4 x 1,5	7,4	58,0	109,0	16	10161	4 G 35	28,7	1344,0	2105,0	2
10095	5 G 1,5	8,3	72,0	131,0	16	10162	5 G 35	31,9	1680,0	2633,0	2
10096	5 x 1,5	8,3	72,0	131,0	16	10193	3 G 50	30,8	1440,0	2550,0	1
10097	6 G 1,5	9,2	86,0	157,0	16	10163	4 G 50	34,1	1920,0	2940,0	1
10098	7 G 1,5	9,2	101,0	184,0	16	10188	5 G 50	38,1	2400,0	2936,0	1
10099	7 x 1,5	9,2	101,0	184,0	16	10194	3 G 70	36,4	2016,0	3180,0	2/0
10100	8 G 1,5	10,0	115,0	216,0	16	10164	4 G 70	40,2	2688,0	4090,0	2/0
10101	9 G 1,5	10,9	129,0	259,0	16	10189	5 G 70	44,7	3360,0	5443,0	2/0
10181	10 G 1,5	10,9	144,0	275,0	16	10195	3 G 95	41,3	2736,0	4680,0	3/0
10102	11 G 1,5	11,6	158,0	300,0	16	10165	4 G 95	46,0	3648,0	5540,0	3/0
10103	12 G 1,5	11,8	173,0	309,0	16	10333	5 G 95	50,7	4560,0	6931,0	3/0
10104	12 x 1,5	11,8	173,0	309,0	16	10166	4 G 120	51,0	4608,0	7000,0	4/0
10105	14 G 1,5	13,0	202,0	345,0	16	13139	4 G 150	57,2	5760,0	8340,0	300 kcmil
10106	16 G 1,5	13,9	230,0	386,0	16	13140	4 G 185	63,0	7104,0	9904,0	350 kcmil

Dimensions and specifications may be changed without prior notice. (RA01)