



Application

Control cables for the use in tool-machines, conveyor belts, production lines in machinery production, in air-conditioning and in steel production. As well as in energy generating plants, electric substations and factories automation.

For fixed laying and flexible application and medium mechanical stresses with free movement without tensile stress.

These cables are suitable for the installation in dry, moist and wet rooms. Outdoor use only with UV-protection and not for underground laying.

Cable construction

- Conductor bare copper strand, fine wired
- Conductor class acc. to DIN VDE 0295 cl. 5 / IEC 60228 cl. 5
- Core insulation special PVC
- Core identification acc. to DIN VDE 0293 black with white numbering and green-yellow earth core (G =JZ) with protective conductor and (X = OZ) without protective conductor
- Stranding cores stranded in layers
- Outer sheath special PVC , meter marking
- Sheath colour grey, RAL 7001

Technical Data

- Nominal voltage U₀/U 300/500 V
- Test voltage 4000 V
- Conductor resistance acc. to DIN VDE 0295 cl. 5 / IEC 60228 cl. 5
- Insulation resistance min. 20 MΩ x km
- Minimum bending radius fixed 4 x Ø / flexible installation 15 x Ø
- Temperature range fixed - 40 °C / + 80 °C
flexible - 5 °C / + 70 °C
- Temperature at conductor + 70 °C in operation
- Temperature at short-circuit + 150 °C for 5 seconds
- Flame test PVC self-extinguishing and flame retardant acc. to IEC 60332-1
- Norms similar to EN 50525-2-51

Special features

- Testing voltage 4000 V
- Largely resistant to acids, bases and usual oils under normal operation conditions.
- LABS-/silicone-free (during production)

Remarks

- **RoHS** conform
- **CE** conform to the EC Low-Voltage directive 2014/35/EU
- Other outer sheath colours and sections upon customer request.



Part no.	Section mm ²	Outer-Ø mm	Cu-weight kg / km	Weight kg / km
110001	2 X 0,5	4,9	9,6	35,0
110002	3 G 0,5	5,1	14,4	42,0
110003	3 X 0,5	5,1	14,4	46,0
110004	4 G 0,5	5,5	19,2	55,0
110005	4 X 0,5	5,5	19,2	55,0
110006	5 G 0,5	6,2	24,0	66,0
110007	5 X 0,5	6,2	24,0	66,0
110008	6 G 0,5	6,9	29,0	75,0
110009	7 G 0,5	7,0	34,0	79,0
110010	7 X 0,5	7,0	34,0	79,0
110011	8 G 0,5	7,4	38,0	98,0
110012	8 X 0,5	7,4	38,0	98,0
110013	10 G 0,5	8,5	48,0	113,0
110014	12 G 0,5	8,9	58,0	128,0
110015	12 X 0,5	8,9	58,0	128,0
110016	14 G 0,5	9,5	67,0	149,0
110017	16 G 0,5	10,1	77,0	165,0
110018	18 G 0,5	10,9	86,0	194,0
110019	20 G 0,5	11,3	96,0	215,0
110020	21 G 0,5	11,5	101,0	229,0
110021	25 G 0,5	13,0	120,0	250,0
110022	30 G 0,5	13,4	144,0	292,0
110023	32 G 0,5	14,0	154,0	323,0
110024	34 G 0,5	15,0	163,0	341,0
110025	40 G 0,5	15,6	192,0	394,0
110026	42 G 0,5	16,0	202,0	415,0
110027	50 G 0,5	18,4	240,0	527,0
110028	52 G 0,5	17,8	250,0	530,0
110029	61 G 0,5	19,7	293,0	608,0
110030	65 G 0,5	20,9	312,0	629,0
110031	80 G 0,5	21,4	384,0	780,0
110032	2 X 0,75	5,3	14,4	43,0
110033	3 G 0,75	5,6	22,0	51,0
110034	3 X 0,75	5,6	22,0	51,0
110035	4 G 0,75	6,3	29,0	65,0
110036	4 X 0,75	6,3	29,0	65,0
110037	5 G 0,75	6,7	36,0	81,0
110038	5 X 0,75	6,7	36,0	81,0
110039	6 G 0,75	7,4	43,0	97,0
110040	6 X 0,75	7,4	43,0	97,0
110042	7 G 0,75	7,5	50,0	98,0
110043	7 X 0,75	7,5	50,0	98,0
110044	8 G 0,75	8,3	58,0	120,0
110045	8 X 0,75	8,3	58,0	120,0
110046	9 G 0,75	9,0	65,0	130,0
110047	10 G 0,75	9,2	72,0	143,0
110048	12 G 0,75	9,9	86,0	167,0
110049	12 X 0,75	9,9	86,0	167,0
110050	14 G 0,75	10,8	101,0	198,0
110051	15 G 0,75	11,2	108,0	206,0



Part no.	Section mm ²	Outer-Ø mm	Cu-weight kg / km	Weight kg / km
110052	16 G 0,75	11,3	116,0	219,0
110053	18 G 0,75	11,7	130,0	238,0
110054	19 G 0,75	12,0	137,0	251,0
110055	20 G 0,75	12,7	144,0	286,0
110056	21 G 0,75	13,3	151,0	292,0
110057	25 G 0,75	14,0	180,0	334,0
110058	32 G 0,75	15,8	230,0	426,0
110059	34 G 0,75	16,0	245,0	430,0
110060	37 G 0,75	16,2	266,4	467,0
110061	41 G 0,75	17,7	296,0	535,0
110062	42 G 0,75	17,4	302,0	529,0
110063	50 G 0,75	19,2	360,0	648,0
110065	61 G 0,75	21,0	439,0	765,0
110066	65 G 0,75	21,5	468,0	829,0
110067	80 G 0,75	24,3	576,0	1016,0
110068	2 X 1	5,6	19,2	50,0
110069	3 G 1	5,9	29,0	60,0
110070	3 X 1	5,9	29,0	60,0
110071	4 G 1	6,7	38,4	76,0
110072	4 X 1	6,7	38,4	76,0
110073	5 G 1	7,3	48,0	94,0
110074	5 X 1	7,3	48,0	94,0
110075	6 G 1	8,1	58,0	116,0
110076	7 G 1	8,1	67,0	121,0
110077	7 X 1	8,1	67,0	121,0
110078	8 G 1	9,4	77,0	139,0
110079	9 G 1	9,8	86,0	161,0
110080	10 G 1	10,0	96,0	176,0
110081	10 X 1	10,0	96,0	176,0
110082	12 G 1	10,5	115,0	200,0
110083	12 X 1	10,5	115,0	200,0
110084	14 G 1	11,4	134,0	234,0
110085	16 G 1	12,0	154,0	261,0
110086	18 G 1	12,8	173,0	298,0
110087	18 X 1	12,8	173,0	298,0
110088	19 G 1	13,0	182,4	309,0
110089	20 G 1	13,5	192,0	328,0
110090	20 X 1	13,5	192,0	328,0
110091	21 G 1	13,7	202,0	339,0
110092	24 G 1	14,7	230,0	401,0
110093	25 G 1	14,9	240,0	406,0
110094	25 X 1	14,9	240,0	406,0
110095	26 G 1	15,0	250,0	408,0
110096	27 G 1	15,0	260,0	414,0
110097	30 X 1	16,3	288,0	482,0
110098	34 G 1	17,2	326,0	548,0
110099	36 G 1	17,6	346,0	568,0
110100	37 G 1	17,3	355,2	562,0
110101	40 G 1	19,1	384,0	643,0
110102	40 X 1	19,1	384,0	643,0



Part no.	Section mm ²	Outer-Ø mm	Cu-weight kg / km	Weight kg / km
110103	41 G 1	19,0	394,0	645,0
110104	42 G 1	19,1	403,0	660,0
110105	50 G 1	20,6	480,0	765,0
110106	61 G 1	22,1	586,0	914,0
110107	65 G 1	23,6	624,0	1013,0
110108	80 G 1	25,6	768,0	1211,0
110109	2 X 1,5	6,4	29,0	66,0
110110	3 G 1,5	6,8	43,0	81,0
110111	3 X 1,5	6,8	43,0	81,0
110112	4 G 1,5	7,4	58,0	100,0
110113	4 X 1,5	7,4	58,0	100,0
110114	5 G 1,5	8,3	72,0	125,0
110115	5 X 1,5	8,3	72,0	125,0
110116	6 G 1,5	9,0	86,0	150,0
110117	7 G 1,5	9,1	101,0	157,0
110118	7 X 1,5	9,1	101,0	157,0
110119	8 G 1,5	9,9	115,0	190,0
110120	9 G 1,5	10,9	130,0	206,0
110121	10 G 1,5	11,0	144,0	225,0
110122	11 G 1,5	11,7	158,0	244,0
110123	12 G 1,5	11,7	173,0	264,0
110124	12 X 1,5	11,7	173,0	264,0
110125	14 G 1,5	12,8	202,0	305,0
110126	16 G 1,5	13,4	230,0	343,0
110127	18 G 1,5	14,5	259,0	392,0
110128	19 G 1,5	14,7	274,0	409,0
110129	20 G 1,5	15,5	288,0	446,0
110130	21 G 1,5	15,5	302,0	450,0
110131	25 G 1,5	16,9	360,0	544,0
110132	27 G 1,5	17,5	389,0	582,0
110133	32 G 1,5	18,8	461,0	664,0
110134	34 G 1,5	20,0	490,0	741,0
110135	37 G 1,5	20,1	533,0	753,0
110136	41 G 1,5	21,5	591,0	871,0
110137	42 G 1,5	21,6	605,0	884,0
110138	50 G 1,5	23,6	720,0	1061,0
110139	61 G 1,5	25,6	878,0	1253,0
110140	65 G 1,5	26,0	936,0	1303,0
110141	80 G 1,5	29,2	1152,0	1629,0
110142	2 X 2,5	7,6	48,0	101,0
110143	3 G 2,5	8,3	72,0	128,0
110144	3 X 2,5	8,3	72,0	128,0
110145	4 G 2,5	9,0	96,0	156,0
110146	4 X 2,5	9,0	96,0	156,0
110147	5 G 2,5	10,1	120,0	197,0
110148	5 X 2,5	10,1	120,0	197,0
110149	7 G 2,5	11,3	168,0	253,0
110150	7 X 2,5	11,3	168,0	253,0
110151	8 G 2,5	12,3	192,0	290,0



Part no.	Section mm ²	Outer-Ø mm	Cu-weight kg / km	Weight kg / km
110152	10 G 2,5	14,3	240,0	384,0
110153	12 G 2,5	14,6	288,0	423,0
110154	14 G 2,5	16,0	336,0	503,0
110155	18 G 2,5	17,8	432,0	629,0
110156	21 G 2,5	20,2	504,0	773,0
110157	25 G 2,5	20,8	600,0	857,0
110158	34 G 2,5	24,6	816,0	1150,0
110159	42 G 2,5	27,4	1008,0	1467,0
110160	50 G 2,5	30,1	1200,0	1751,0
110161	61 G 2,5	32,2	1464,0	2061,0
110162	2 X 4	9,3	77,0	152,0
110163	3 G 4	9,8	115,2	188,0
110164	4 G 4	11,0	154,0	242,0
110165	5 G 4	12,1	192,0	295,0
110166	7 G 4	13,6	269,0	390,0
110167	11 G 4	17,8	423,0	613,0
110168	3 G 6	11,7	173,0	273,0
110169	4 G 6	12,8	230,0	339,0
110170	5 G 6	14,3	288,0	423,0
110171	7 G 6	15,7	403,0	553,0
110172	3 G 10	14,7	288,0	448,0
110173	4 G 10	16,3	384,0	570,0
110174	5 G 10	18,2	480,0	708,0
110175	7 G 10	20,0	672,0	917,0
110176	3 G 16	17,6	461,0	705,0
110177	4 G 16	20,0	614,0	913,0
110178	5 G 16	21,6	768,0	1096,0
110179	7 G 16	24,2	1075,0	1435,0
110180	3 G 25	22,3	720,0	1180,0
110181	4 G 25	23,8	960,0	1343,0
110182	5 G 25	26,9	1200,0	1690,0
110183	7 G 25	29,7	1680,0	2195,0
110184	3 G 35	25,6	1008,0	1498,0
110185	4 G 35	27,4	1344,0	1832,0
110186	5 G 35	30,9	1680,0	2300,0
110187	3 G 50	30,8	1440,0	2550,0
110188	4 G 50	34,1	1920,0	2687,0
110189	5 G 50	38,2	2400,0	3345,0
110190	3 G 70	36,4	2016,0	3180,0
110191	4 G 70	40,2	2688,0	3724,0
110192	5 G 70	44,7	3360,0	5443,0
110193	3 G 95	41,3	2736,0	4680,0
110194	4 G 95	45,6	3648,0	5400,0