



Technical data

- Special PVC control cable in accordance to DIN VDE 0281, 0293, 0295
- **Temperature range**
flexing -15 °C¹⁾ 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 20x cable ø
fixed installation 6x cable ø
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)
- ¹⁾ cold bending test, impact resistance test at low temperatures, elongation test at low temperatures. Tested according VDE 0473 part 811-1-4, EN 60811-1-4

Cable structure

- Bare copper, fine wire conductors, to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Core insulation of special PVC Z 7225
- Black cores with white figure imprint to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Special PVC inner jacket
- Galvanized steel wire braid
- Special PVC outer jacket
- Colour transparent (also available in grey)
- with meter marking, change-over in 2011

Properties

- Extensively oil resistant, oil-/ chemical Resistance - see table Technical Informations
- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B) for outer jacket grey
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- G = with green-yellow earth core; x = without green-yellow earth core (OZ).
- Further dimensions available on request.
- These cables can be also delivered with coloured conductors (SY-JB).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- Cleanroom qualification tested with analog type. Please note "cleanroom qualified" when ordering.
- **screened analogue type: SY-JB**, see page A 40

Application

SY-JZ cables are used as measuring and control cables in tool machinery, plant installation, power stations and in data equipment. The braided screen offers best possible protection against mechanical damage. The galvanized coating on the steel wire braiding not only helps protect against corrosion, but also notably improves the soldering performance.

The clear transparent outer sheath gives the cable in addition an optical reevaluation.

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

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.
12001	2 x 0,5	7,3	9,6	80,0	20	12027	18 G 0,75	15,0	130,0	388,0	18
12002	3 G 0,5	7,6	14,4	92,0	20	12028	21 G 0,75	15,5	151,0	474,0	18
12003	4 G 0,5	8,2	19,2	102,0	20	12029	25 G 0,75	17,3	180,0	503,0	18
12004	5 G 0,5	8,9	24,0	119,0	20	12030	32 G 0,75	19,1	230,0	644,0	18
12005	7 G 0,5	9,5	33,6	157,0	20	12031	34 G 0,75	19,9	245,0	663,0	18
12006	10 G 0,5	11,1	48,0	205,0	20	12032	41 G 0,75	21,2	296,0	741,0	18
12007	12 G 0,5	11,8	58,0	218,0	20	12033	50 G 0,75	23,2	360,0	925,0	18
12008	14 G 0,5	12,5	67,0	242,0	20	12034	61 G 0,75	25,2	439,0	1082,0	18
12009	18 G 0,5	13,6	86,0	340,0	20	12035	2 x 1	8,2	19,2	112,0	17
12010	21 G 0,5	14,3	101,0	370,0	20	12036	3 G 1	8,5	28,8	132,0	17
12114	25 G 0,5	15,7	120,0	406,0	20	12037	4 G 1	9,2	38,4	143,0	17
12012	30 G 0,5	16,4	144,0	439,0	20	12038	5 G 1	9,9	48,0	166,0	17
12013	35 G 0,5	17,9	168,0	500,0	20	12039	6 G 1	10,5	58,0	22,0	17
12014	40 G 0,5	18,4	192,0	565,0	20	12040	7 G 1	10,7	67,0	227,0	17
12015	42 G 0,5	19,1	202,0	593,0	20	12041	8 G 1	11,3	77,0	277,0	17
12016	50 G 0,5	20,9	240,0	690,0	20	12042	9 G 1	12,6	86,0	295,0	17
12017	61 G 0,5	22,4	293,0	843,0	20	12043	12 G 1	13,4	115,0	340,0	17
12018	80 G 0,5	25,4	384,0	1050,0	20	12044	14 G 1	14,2	134,0	420,0	17
12011	100 G 0,5	28,6	480,0	1240,0	20	12045	18 G 1	15,7	173,0	500,0	17
12019	2 x 0,75	7,9	14,4	98,0	18	12046	20 G 1	16,3	192,0	532,0	17
12020	3 G 0,75	8,2	21,6	103,0	18	12047	25 G 1	18,4	240,0	664,0	17
12021	4 G 0,75	8,7	28,8	122,0	18	12048	34 G 1	20,9	326,0	845,0	17
12022	5 G 0,75	9,5	36,0	142,0	18	12049	36 G 1	20,9	346,0	857,0	17
12112	6 G 0,75	10,1	43,2	180,0	18	12050	41 G 1	22,2	394,0	993,0	17
12023	7 G 0,75	10,3	50,0	185,0	18	12051	50 G 1	24,4	480,0	1112,0	17
12188	8 G 0,75	10,8	57,6	201,0	18	12052	56 G 1	25,5	538,0	1225,0	17
12024	9 G 0,75	11,8	65,0	249,0	18	12053	61 G 1	26,3	586,0	1306,0	17
12113	10 G 0,75	11,8	72,0	252,0	18	12054	65 G 1	26,9	624,0	1504,0	17
12025	12 G 0,75	12,8	86,0	292,0	18	12055	80 G 1	30,0	768,0	1750,0	17
12026	15 G 0,75	14,2	108,0	335,0	18	12056	100 G 1	34,6	960,0	1950,0	17

Continuation ▶

SY-JZ flexible, number coded, with steel wire braiding, 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.
12057	2 x 1,5	8,8	29,0	129,0	16
12058	3 G 1,5	9,4	43,0	149,0	16
12059	4 G 1,5	10,0	58,0	185,0	16
12060	5 G 1,5	10,9	72,0	205,0	16
12109	6 G 1,5	11,8	87,0	255,0	16
12061	7 G 1,5	11,8	101,0	285,0	16
12062	8 G 1,5	12,7	115,0	340,0	16
12063	9 G 1,5	13,9	130,0	347,0	16
12064	10 G 1,5	13,9	144,0	418,0	16
12065	11 G 1,5	15,0	158,0	430,0	16
12066	12 G 1,5	15,0	173,0	444,0	16
12067	14 G 1,5	15,8	202,0	533,0	16
12068	18 G 1,5	17,4	259,0	593,0	16
12069	25 G 1,5	20,6	360,0	781,0	16
12070	32 G 1,5	22,3	461,0	1015,0	16
12071	34 G 1,5	23,2	490,0	1124,0	16
12072	42 G 1,5	25,2	605,0	1401,0	16
12073	50 G 1,5	27,6	720,0	1583,0	16
12074	61 G 1,5	29,4	878,0	1810,0	16
12075	80 G 1,5	33,8	1152,0	2316,0	16
12076	100 G 1,5	38,0	1440,0	2900,0	16
12077	2 x 2,5	10,2	48,0	185,0	14
12078	3 G 2,5	10,9	72,0	248,0	14
12079	4 G 2,5	11,6	96,0	290,0	14
12080	5 G 2,5	12,9	120,0	347,0	14
12081	7 G 2,5	14,2	168,0	420,0	14
12082	12 G 2,5	17,7	288,0	660,0	14
12083	14 G 2,5	18,8	336,0	750,0	14
12084	18 G 2,5	21,0	432,0	893,0	14
12085	20 G 2,5	22,1	480,0	1169,0	14
12086	25 G 2,5	24,4	600,0	1458,0	14
12087	30 G 2,5	26,0	720,0	1686,0	14
12088	34 G 2,5	28,4	816,0	1869,0	14
12089	50 G 2,5	34,0	1200,0	2200,0	14
12090	61 G 2,5	36,3	1464,0	3000,0	14

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
12115	3 G 4	12,6	117,0	350,0	12
12091	4 G 4	13,8	154,0	428,0	12
12092	5 G 4	15,1	192,0	504,0	12
12093	7 G 4	16,4	269,0	640,0	12
12094	11 G 4	21,2	422,0	1204,0	12
12095	4 G 6	15,8	230,0	571,0	10
12096	5 G 6	17,3	288,0	671,0	10
12097	7 G 6	19,0	403,0	845,0	10
12098	4 G 10	19,4	384,0	943,0	8
12099	5 G 10	21,3	480,0	1065,0	8
12100	7 G 10	23,6	672,0	1551,0	8
12101	4 G 16	23,8	614,0	1360,0	6
12102	5 G 16	26,6	768,0	1740,0	6
12103	7 G 16	29,2	1075,0	2166,0	6
12104	4 G 25	29,3	960,0	2020,0	4
12105	5 G 25	32,5	1200,0	2465,0	4
12106	4 G 35	33,4	1344,0	2570,0	2
12107	5 G 35	37,1	1680,0	3185,0	2
12108	4 G 50	39,8	1920,0	3513,0	1
12116	5 G 50	44,1	2400,0	4248,0	1
12111	4 G 70	46,3	2688,0	4810,0	2/0
12117	5 G 70	50,9	3360,0	5880,0	2/0
12110	4 G 95	51,4	3648,0	6360,0	3/0
12118	5 G 95	56,5	4560,0	8071,0	3/0
12119	4 G 120	56,6	4608,0	8170,0	4/0
12327	4 G 150	64,3	5760,0	9970,0	300 kcmil

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