

SY-JZ / SY-OZ

galvanised steel wire braid, with inner sheath



TECHNICAL DATA

PVC control and connection cable in alignment with DIN VDE 0285-525-2-51 / DIN EN 50525-2-51

Temperature range	flexible -15°C to +80°C fixed -40°C to +80°C
Nominal voltage	AC U ₀ /U 300/500 V
Test voltage core/core	4000 V
Breakdown voltage	8000 V
Minimum bending radius	flexible 20x Outer-Ø fixed 6x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: PVC, compound type Z 7225
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores,
G = with protective conductor GN-YE, in the outer layer,
x = without protective conductor (OZ)
- Cores stranded in layers with optimal lay lengths
- Inner sheath: PVC
- Steel wire braid, galvanised
- Outer sheath: PVC
- Sheath colour: transparent
- Length marking: in metres

PROPERTIES

- largely resistant to: oil,
for details, see "Technical Information"
- 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
- certifications and approvals:
EAC
VDE-Reg.-No. 7032, valid for temperature range up to +70°C

APPLICATION

Used as a connection and control cable for flexible applications involving medium mechanical stress with free movement, without tensile stress and without forced motion control in dry, damp and wet rooms, however, not suitable for outdoor use in machine tools, plant construction and data technology. Due to the dense braiding, the cable is well protected against mechanical damage. The galvanisation of the braid prevents corrosion and guarantees improved solderability of the braid.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- cleanroom qualification tested on analog types; please note "cleanroom qualification" in your order

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
12001	2 x 0.5	20	7.4	9.6	80.0
12002	3 G 0.5	20	7.7	14.4	92.0
12003	4 G 0.5	20	8.1	19.2	102.0
12004	5 G 0.5	20	9.0	24.0	119.0
12005	7 G 0.5	20	9.5	33.6	157.0
12006	10 G 0.5	20	11.4	48.0	205.0
12007	12 G 0.5	20	11.9	58.0	218.0
12008	14 G 0.5	20	12.5	67.0	242.0
12009	18 G 0.5	20	13.7	86.0	340.0
12010	21 G 0.5	20	14.3	101.0	370.0
12114	25 G 0.5	20	15.8	120.0	406.0
12012	30 G 0.5	20	16.7	144.0	439.0
12013	35 G 0.5	20	17.9	168.0	500.0
12014	40 G 0.5	20	18.5	192.0	565.0
12015	42 G 0.5	20	19.4	202.0	593.0
12016	50 G 0.5	20	20.9	240.0	690.0
12017	61 G 0.5	20	22.1	293.0	843.0
12018	80 G 0.5	20	25.4	384.0	1050.0
12011	100 G 0.5	20	28.1	480.0	1240.0
12019	2 x 0.75	19	7.9	14.4	98.0
12020	3 G 0.75	19	8.2	21.6	103.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
12021	4 G 0.75	19	9.1	28.8	122.0
12022	5 G 0.75	19	9.7	36.0	142.0
12112	6 G 0.75	19	10.5	43.2	180.0
12023	7 G 0.75	19	10.5	50.0	185.0
12188	8 G 0.75	19	11.1	57.6	201.0
12024	9 G 0.75	19	12.1	65.0	249.0
12113	10 G 0.75	19	12.8	72.0	252.0
12025	12 G 0.75	19	13.4	86.0	292.0
12026	15 G 0.75	19	14.4	108.0	335.0
12027	18 G 0.75	19	15.2	130.0	388.0
12028	21 G 0.75	19	16.2	151.0	474.0
12029	25 G 0.75	19	17.7	180.0	503.0
12030	32 G 0.75	19	19.5	230.0	644.0
12031	34 G 0.75	19	20.1	245.0	663.0
12032	41 G 0.75	19	21.5	296.0	741.0
12033	50 G 0.75	19	23.6	360.0	925.0
12034	61 G 0.75	19	25.0	439.0	1082.0
12035	2 x 1	18	8.2	19.2	112.0
12036	3 G 1	18	9.0	28.8	132.0
12037	4 G 1	18	9.5	38.4	143.0
12038	5 G 1	18	10.1	48.0	166.0

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Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
12039	6 G 1	18	10.9	58.0	22.0
12040	7 G 1	18	10.9	67.0	227.0
12041	8 G 1	18	12.0	77.0	277.0
12042	9 G 1	18	12.8	86.0	295.0
12043	12 G 1	18	14.0	115.0	340.0
12044	14 G 1	18	14.7	134.0	420.0
12045	18 G 1	18	16.3	173.0	500.0
12046	20 G 1	18	17.0	192.0	532.0
12047	25 G 1	18	18.6	240.0	664.0
12048	34 G 1	18	21.3	326.0	845.0
12049	36 G 1	18	21.3	346.0	857.0
12050	41 G 1	18	23.0	394.0	993.0
12051	50 G 1	18	25.3	480.0	1112.0
12052	56 G 1	18	25.9	538.0	1225.0
12053	61 G 1	18	26.9	586.0	1306.0
12054	65 G 1	18	27.8	624.0	1504.0
12055	80 G 1	18	30.7	768.0	1750.0
12056	100 G 1	18	33.9	960.0	1950.0
12057	2 x 1.5	16	9.2	29.0	129.0
12058	3 G 1.5	16	9.6	43.0	149.0
12059	4 G 1.5	16	10.4	58.0	185.0
12060	5 G 1.5	16	11.1	72.0	205.0
12109	6 G 1.5	16	12.2	87.0	255.0
12061	7 G 1.5	16	12.2	101.0	285.0
12062	8 G 1.5	16	13.2	115.0	340.0
12063	9 G 1.5	16	14.1	130.0	347.0
12064	10 G 1.5	16	15.0	144.0	418.0
12065	11 G 1.5	16	15.0	158.0	430.0
12066	12 G 1.5	16	15.4	173.0	444.0
12067	14 G 1.5	16	16.4	202.0	533.0
12068	18 G 1.5	16	18.0	259.0	593.0
12069	25 G 1.5	16	21.0	360.0	781.0
12070	32 G 1.5	16	23.1	461.0	1015.0
12071	34 G 1.5	16	24.0	490.0	1124.0
12072	42 G 1.5	16	25.9	605.0	1401.0
12073	50 G 1.5	16	28.4	720.0	1583.0
12074	61 G 1.5	16	30.2	878.0	1810.0
12075	80 G 1.5	16	34.4	1152.0	2316.0
12076	100 G 1.5	16	38.4	1440.0	2900.0
12077	2 x 2.5	14	10.6	48.0	185.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
12078	3 G 2.5	14	11.1	72.0	248.0
12079	4 G 2.5	14	12.2	96.0	290.0
12080	5 G 2.5	14	13.3	120.0	347.0
12081	7 G 2.5	14	14.2	168.0	420.0
12082	12 G 2.5	14	18.5	288.0	660.0
12083	14 G 2.5	14	19.7	336.0	750.0
12084	18 G 2.5	14	21.6	432.0	893.0
12085	20 G 2.5	14	23.0	480.0	1169.0
12086	25 G 2.5	14	25.6	600.0	1458.0
12087	30 G 2.5	14	27.3	720.0	1686.0
12088	34 G 2.5	14	29.4	816.0	1869.0
12089	50 G 2.5	14	34.7	1200.0	2200.0
12090	61 G 2.5	14	36.8	1464.0	3000.0
12115	3 G 4	12	12.6	117.0	350.0
12091	4 G 4	12	13.9	154.0	428.0
12092	5 G 4	12	15.2	192.0	504.0
12093	7 G 4	12	16.6	269.0	640.0
12094	11 G 4	12	21.0	422.0	1204.0
12095	4 G 6	10	16.4	230.0	571.0
12096	5 G 6	10	17.9	288.0	671.0
12097	7 G 6	10	19.6	403.0	845.0
12098	4 G 10	8	19.9	384.0	943.0
12099	5 G 10	8	22.0	480.0	1065.0
12100	7 G 10	8	24.0	672.0	1551.0
12101	4 G 16	6	24.1	614.0	1360.0
12102	5 G 16	6	26.7	768.0	1740.0
12103	7 G 16	6	29.2	1075.0	2166.0
12104	4 G 25	4	29.1	960.0	2020.0
12105	5 G 25	4	32.2	1200.0	2465.0
12106	4 G 35	2	32.1	1344.0	2570.0
12107	5 G 35	2	35.5	1680.0	3185.0
12108	4 G 50	1	37.9	1920.0	3513.0
12116	5 G 50	1	42.0	2400.0	4248.0
12111	4 G 70	2/0	43.0	2688.0	4810.0
12117	5 G 70	2/0	47.8	3360.0	5880.0
12110	4 G 95	3/0	49.6	3648.0	6360.0
12118	5 G 95	3/0	54.8	4560.0	8071.0
12119	4 G 120	4/0	54.6	4608.0	8170.0
12327	4 G 150	300 kcmil	59.8	5760.0	9970.0