

# Y-CY-JZ / Y-CY-OZ

EMC-preferred type, with inner sheath



## TECHNICAL DATA

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

<b>Temperature range</b>	flexible -15°C to +80°C fixed -40°C to +80°C
<b>Nominal voltage</b>	AC U <sub>0</sub> /U 300/500 V
<b>Test voltage core/core</b>	4000 V
<b>Breakdown voltage</b>	8000 V
<b>Mutual capacitance core/core</b>	at 800 Hz 0.5 - 2.5 mm <sup>2</sup> : approx. 150 pF/m
<b>Mutual capacitance core/screen</b>	at 800 Hz 0.5 - 2.5 mm <sup>2</sup> : approx. 270 pF/m
<b>Coupling resistance</b>	at 30 MHz, approx. 250 Ohm/km
<b>Minimum bending radius</b>	flexible 10x Outer-Ø fixed 5x 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
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- 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 for flexible applications involving medium mechanical stress with free movement, without tensile stress and without forced motion control in dry rooms, however, not suitable for outdoor use. Used as a connection and control cable in measurement and control technology, in machine and machine tool construction, in conveyers and production lines, in computers, as well as signal cables in electronics. Due to the high screening density, interference-free transmission of signals or pulses is ensured. The PVC inner sheath increases the mechanical load capacity of the cable; the transparent PVC outer sheath makes the tinned copper braid optically effective. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

## NOTES

- the conductor is metrically (mm<sup>2</sup>) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16200	2 x 0.5	20	7.0	41.0	67.0
16201	3 G 0.5	20	7.5	45.0	83.0
16169	3 x 0.5	20	7.5	45.0	83.0
16202	4 G 0.5	20	7.9	54.0	94.0
16170	4 x 0.5	20	7.9	54.0	94.0
16203	5 G 0.5	20	8.6	66.0	108.0
16171	5 x 0.5	20	8.6	66.0	108.0
16204	6 G 0.5	20	9.3	73.0	125.0
16205	7 G 0.5	20	9.3	79.0	136.0
17172	7 x 0.5	20	9.3	79.0	136.0
16206	8 G 0.5	20	9.9	82.0	150.0
16207	10 G 0.5	20	11.2	107.0	170.0
16208	12 G 0.5	20	11.5	137.0	195.0
16209	14 G 0.5	20	12.3	142.0	223.0
16210	16 G 0.5	20	12.8	147.0	250.0

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16211	18 G 0.5	20	13.7	156.0	277.0
16212	20 G 0.5	20	14.3	173.0	310.0
16315	21 G 0.5	20	14.3	189.0	331.0
16213	24 G 0.5	20	15.8	236.0	390.0
16214	25 G 0.5	20	15.8	250.0	407.0
16215	30 G 0.5	20	16.7	297.0	520.0
16216	32 G 0.5	20	17.2	312.0	550.0
16217	36 G 0.5	20	17.9	320.0	585.0
16218	40 G 0.5	20	18.5	345.0	654.0
16453	41 G 0.5	20	19.4	348.0	671.0
16219	50 G 0.5	20	20.9	407.0	740.0
16220	61 G 0.5	20	22.1	520.0	850.0
16221	80 G 0.5	20	25.4	690.0	1080.0
16222	100 G 0.5	20	28.1	805.0	1350.0
16223	2 x 0.75	19	7.7	46.0	87.0

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Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.	Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16224	3 G 0.75	19	8.0	57.0	98.0	16274	5 G 1.5	16	10.9	123.0	202.0
16173	3 x 0.75	19	8.0	57.0	98.0	16182	5 x 1.5	16	10.9	123.0	202.0
16225	4 G 0.75	19	8.9	63.0	113.0	16275	7 G 1.5	16	12.0	148.0	304.0
16196	4 x 0.75	19	8.9	63.0	113.0	16183	7 x 1.5	16	12.0	148.0	304.0
16226	5 G 0.75	19	9.5	76.0	130.0	16276	8 G 1.5	16	13.0	172.0	336.0
16174	5 x 0.75	19	9.5	76.0	130.0	16277	10 G 1.5	16	15.0	198.0	420.0
16227	6 G 0.75	19	10.1	82.0	156.0	16278	12 G 1.5	16	15.4	274.0	434.0
16228	7 G 0.75	19	10.1	100.0	184.0	16279	14 G 1.5	16	16.4	294.0	480.0
16175	7 x 0.75	19	10.1	100.0	184.0	16280	16 G 1.5	16	17.1	318.0	525.0
16229	8 G 0.75	19	10.9	112.0	221.0	16281	18 G 1.5	16	18.0	386.0	640.0
16230	10 G 0.75	19	12.6	140.0	270.0	16282	20 G 1.5	16	19.0	401.0	690.0
16231	12 G 0.75	19	13.0	175.0	292.0	16317	21 G 1.5	16	19.0	447.0	720.0
16232	14 G 0.75	19	13.8	190.0	315.0	16283	24 G 1.5	16	21.0	487.0	770.0
16233	16 G 0.75	19	14.4	204.0	335.0	16284	25 G 1.5	16	21.0	531.0	805.0
16234	18 G 0.75	19	15.2	240.0	358.0	16285	28 G 1.5	16	22.2	562.0	900.0
16235	20 G 0.75	19	16.2	262.0	420.0	16286	30 G 1.5	16	22.2	598.0	950.0
16316	21 G 0.75	19	16.2	274.0	454.0	16287	35 G 1.5	16	24.0	685.0	1100.0
16236	24 G 0.75	19	17.7	291.0	480.0	16288	40 G 1.5	16	25.0	759.0	1350.0
16237	25 G 0.75	19	17.7	306.0	508.0	16456	41 G 1.5	16	25.9	840.0	1381.0
16238	27 G 0.75	19	17.7	326.0	535.0	16289	50 G 1.5	16	28.4	997.0	1675.0
16239	30 G 0.75	19	18.5	340.0	640.0	16290	61 G 1.5	16	30.2	1120.0	1800.0
16240	32 G 0.75	19	19.5	349.0	688.0	16291	80 G 1.5	16	34.4	1360.0	2300.0
16241	36 G 0.75	19	20.1	358.0	730.0	16292	100 G 1.5	16	38.4	1690.0	2600.0
16242	40 G 0.75	19	20.9	371.0	950.0	16293	2 x 2.5	14	10.4	110.0	180.0
16454	41 G 0.75	19	21.5	403.0	971.0	16294	3 G 2.5	14	10.9	148.0	216.0
16243	50 G 0.75	19	23.6	470.0	1100.0	16295	4 G 2.5	14	12.0	169.0	267.0
16244	61 G 0.75	19	25.0	550.0	1290.0	16296	5 G 2.5	14	12.9	220.0	347.0
16245	80 G 0.75	19	28.6	715.0	1510.0	16297	7 G 2.5	14	14.2	284.0	407.0
16246	100 G 0.75	19	31.6	910.0	1640.0	16298	10 G 2.5	14	18.0	369.0	660.0
16248	2 x 1	18	8.0	54.0	97.0	16318	12 G 2.5	14	18.5	470.0	722.0
16249	3 G 1	18	8.6	64.0	103.0	16299	2 x 4	12	12.0	124.0	302.0
16176	3 x 1	18	8.6	64.0	103.0	16300	3 G 4	12	12.6	178.0	340.0
16250	4 G 1	18	9.3	76.0	146.0	16301	4 G 4	12	13.9	234.0	410.0
16177	4 x 1	18	9.3	76.0	146.0	16302	5 G 4	12	15.2	284.0	502.0
16251	5 G 1	18	9.9	89.0	169.0	16303	7 G 4	12	16.6	385.0	638.0
16178	5 x 1	18	9.9	89.0	169.0	16304	2 x 6	10	14.0	176.0	350.0
16252	6 G 1	18	10.7	101.0	199.0	16305	3 G 6	10	14.9	245.0	450.0
16253	7 G 1	18	10.7	114.0	219.0	16306	4 G 6	10	16.4	316.0	559.0
16179	7 x 1	18	10.7	114.0	219.0	16307	5 G 6	10	17.9	442.0	702.0
16254	8 G 1	18	11.8	130.0	270.0	16308	7 G 6	10	19.6	530.0	907.0
16255	10 G 1	18	13.6	156.0	330.0	16309	2 x 10	8	17.0	260.0	500.0
16256	12 G 1	18	14.0	186.0	350.0	16310	3 G 10	8	18.1	367.0	750.0
16257	14 G 1	18	14.7	198.0	400.0	16311	4 G 10	8	19.9	549.0	1020.0
16258	16 G 1	18	15.3	214.0	422.0	16312	5 G 10	8	22.0	604.0	1115.0
16259	18 G 1	18	16.3	284.0	514.0	16313	7 G 10	8	24.0	820.0	1500.0
16260	20 G 1	18	17.0	325.0	545.0	16460	4 G 16	6	24.1	807.0	1380.0
16261	24 G 1	18	18.6	366.0	640.0	16314	5 G 16	6	26.7	940.0	1553.0
16262	25 G 1	18	18.6	387.0	689.0	16461	4 G 25	4	29.1	1169.0	1890.0
16263	28 G 1	18	19.9	421.0	710.0	16462	5 G 25	4	32.2	1420.0	2270.0
16264	30 G 1	18	19.9	457.0	762.0	16463	4 G 35	2	32.1	1680.0	2390.0
16265	34 G 1	18	21.3	500.0	910.0	16464	5 G 35	2	35.5	2020.0	2885.0
16266	40 G 1	18	22.2	536.0	1070.0	16465	4 G 50	1	37.9	2370.0	3315.0
16455	41 G 1	18	23.0	578.0	1092.0	16157	5 G 50	1	42.0	2880.0	4150.0
16267	50 G 1	18	25.3	681.0	1315.0	16466	4 G 70	2/0	43.0	3257.0	4600.0
16268	61 G 1	18	26.9	710.0	1370.0	16158	5 G 70	2/0	47.8	4032.0	5750.0
16269	80 G 1	18	30.7	940.0	1610.0	16467	4 G 95	3/0	49.6	4060.0	6060.0
16270	100 G 1	18	33.9	1180.0	1840.0	16159	5 G 95	3/0	54.8	5244.0	7580.0
16271	2 x 1.5	16	9.0	64.0	130.0	16468	4 G 120	4/0	54.6	5231.0	7315.0
16272	3 G 1.5	16	9.4	82.0	152.0	16160	5 G 120	4/0	59.7	6624.0	9150.0
16180	3 x 1.5	16	9.4	82.0	152.0	16167	4 G 150	300 kcmil	59.8	7760.0	9680.0
16273	4 G 1.5	16	10.0	99.0	168.0	16168	5 G 150	300 kcmil	65.5	8496.0	10170.0
16181	4 x 1.5	16	10.0	99.0	168.0						

28.10.2024 / We reserve the right to make technical changes; the imprint in the image is purely exemplary