

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

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
Mutual capacitance core/core	at 800 Hz 0.5 - 2.5 mm ² : approx. 150 pF/m
Mutual capacitance core/screen	at 800 Hz 0.5 - 2.5 mm ² : approx. 270 pF/m
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	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

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/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
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

- 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

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 (mm²) constructed, AWG numbers are approximated, and are for reference only
- VDE-Reg.-No. 7032

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
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
16224	3 G 0.75	19	8.0	57.0	98.0
16173	3 x 0.75	19	8.0	57.0	98.0
16225	4 G 0.75	19	8.9	63.0	113.0
16196	4 x 0.75	19	8.9	63.0	113.0
16226	5 G 0.75	19	9.5	76.0	130.0
16174	5 x 0.75	19	9.5	76.0	130.0

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

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