

**Y-CY-JZ** flexible, Cu-screened, transparent, EMC-preferred type, meter marking

A

**Technical data**

- Special-PVC control cable adapted to DIN VDE 0285-525-2-51 / DIN EN 50525-2-51
- **Temperature range**  
flexing -15°C to +80°C  
fixed installation -40°C to +80°C
- **Nominal voltage**  $U_0/U$  300/500 V
- **Test voltage** 4000 V
- **Breakdown voltage** min. 8000 V
- **Insulation resistance**  
min. 20 MOhm x km
- **Mutual capacitance**  
acc. to different cross-sections  
0,5 up to 2,5 mm<sup>2</sup>:  
core/core approx. 150 nF/km  
core/screen approx. 270 nF/km
- **Coupling resistance**  
max. 250 Ohm/km
- **Minimum bending radius**  
flexing 10x cable Ø  
fixed installation 5x cable Ø
- **Radiation resistance**  
up to 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)

**Cable structure**

- Bare copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of special PVC compound type Z 7225
- Core identification to DIN VDE 0293 black cores with continuous white numbering
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal lay-length
- Inner sheath of PVC, grey
- Tinned copper braided screen, approx. 85% coverage
- Outer sheath of special PVC
- Sheath colour transparent
- with meter marking

**Properties**

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

**Note**

- G = with green-yellow conductor  
x = without green-yellow conductor (OZ)
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- unscreened analogue type:  
**JZ-500**, confer page 30

**Application**

For use as a data and control cable in machinery, computer systems etc. as well as a signal cable for electronics. The high level of screening ensures a high degree of interference protection. The screening density assures disturbance-free transmission of all signals and impulses. The PVC-inner sheaths of those cables raise the mechanical stress. The applied clear transparent PVC outer sheath accentuates the optical view of the tinned copper braid.

**EMC** = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

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

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
16200	2 x 0,5	7,0	41,0	67,0	20	16219	50 G 0,5	20,7	407,0	740,0	20
16201	3 G 0,5	7,3	45,0	83,0	20	16220	61 G 0,5	22,0	520,0	850,0	20
16169	3 x 0,5	7,3	45,0	83,0	20	16221	80 G 0,5	25,0	690,0	1080,0	20
16202	4 G 0,5	7,9	54,0	94,0	20	16222	100 G 0,5	27,4	805,0	1350,0	20
16170	4 x 0,5	7,9	54,0	94,0	20	16223	2 x 0,75	7,7	46,0	87,0	19
16203	5 G 0,5	8,4	66,0	108,0	20	16224	3 G 0,75	8,0	57,0	98,0	19
16171	5 x 0,5	8,4	66,0	108,0	20	16173	3 x 0,75	8,0	57,0	98,0	19
16204	6 G 0,5	9,1	73,0	125,0	20	16225	4 G 0,75	8,5	63,0	113,0	19
16205	7 G 0,5	9,1	79,0	136,0	20	16196	4 x 0,75	8,5	63,0	113,0	19
17172	7 x 0,5	9,1	79,0	136,0	20	16226	5 G 0,75	9,3	76,0	130,0	19
16206	8 G 0,5	9,7	82,0	150,0	20	16174	5 x 0,75	9,3	76,0	130,0	19
16207	10 G 0,5	10,7	107,0	170,0	20	16227	6 G 0,75	9,9	82,0	156,0	19
16208	12 G 0,5	11,5	137,0	195,0	20	16228	7 G 0,75	9,9	100,0	184,0	19
16209	14 G 0,5	12,2	142,0	223,0	20	16175	7 x 0,75	9,9	100,0	184,0	19
16210	16 G 0,5	12,7	147,0	250,0	20	16229	8 G 0,75	10,6	112,0	221,0	19
16211	18 G 0,5	13,5	156,0	277,0	20	16230	10 G 0,75	11,8	140,0	270,0	19
16212	20 G 0,5	14,2	173,0	310,0	20	16231	12 G 0,75	12,7	175,0	292,0	19
16315	21 G 0,5	14,2	189,0	331,0	20	16232	14 G 0,75	13,3	190,0	315,0	19
16213	24 G 0,5	15,5	236,0	390,0	20	16233	16 G 0,75	14,1	204,0	335,0	19
16214	25 G 0,5	15,7	250,0	407,0	20	16234	18 G 0,75	14,9	240,0	358,0	19
16215	30 G 0,5	16,2	297,0	520,0	20	16235	20 G 0,75	15,4	262,0	420,0	19
16216	32 G 0,5	17,0	312,0	550,0	20	16316	21 G 0,75	15,4	274,0	454,0	19
16217	36 G 0,5	17,7	320,0	585,0	20	16236	24 G 0,75	17,3	291,0	480,0	19
16218	40 G 0,5	18,4	345,0	654,0	20	16237	25 G 0,75	17,5	306,0	508,0	19
16453	41 G 0,5	18,9	348,0	671,0	20	16238	27 G 0,75	17,7	326,0	535,0	19
						16239	30 G 0,75	18,3	340,0	640,0	19

Continuation ▶

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Part no.	No.cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No.cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
16240	32 G 0,75	18,9	349,0	688,0	19	16282	20 G 1,5	18,5	401,0	690,0	16
16241	36 G 0,75	19,7	358,0	730,0	19	16317	21 G 1,5	18,5	447,0	720,0	16
16242	40 G 0,75	20,4	371,0	950,0	19	16283	24 G 1,5	20,4	487,0	770,0	16
16454	41 G 0,75	21,0	403,0	971,0	19	16284	25 G 1,5	20,8	531,0	805,0	16
16243	50 G 0,75	23,2	470,0	1100,0	19	16285	28 G 1,5	21,4	562,0	900,0	16
16244	61 G 0,75	24,6	550,0	1290,0	19	16286	30 G 1,5	21,6	598,0	950,0	16
16245	80 G 0,75	28,3	715,0	1510,0	19	16287	35 G 1,5	23,2	685,0	1100,0	16
16246	100 G 0,75	31,1	910,0	1640,0	19	16288	40 G 1,5	24,5	759,0	1350,0	16
16248	2 x 1	8,0	54,0	97,0	18	16456	41 G 1,5	25,0	840,0	1381,0	16
16249	3 G 1	8,3	64,0	103,0	18	16289	50 G 1,5	27,4	997,0	1675,0	16
16176	3 x 1	8,3	64,0	103,0	18	16290	61 G 1,5	29,2	1120,0	1800,0	16
16250	4 G 1	9,0	76,0	146,0	18	16291	80 G 1,5	33,4	1360,0	2300,0	16
16177	4 x 1	9,0	76,0	146,0	18	16292	100 G 1,5	36,8	1690,0	2600,0	16
16251	5 G 1	9,7	89,0	169,0	18	16293	2 x 2,5	10,1	110,0	180,0	14
16178	5 x 1	9,7	89,0	169,0	18	16294	3 G 2,5	10,8	148,0	216,0	14
16252	6 G 1	10,3	101,0	199,0	18	16295	4 G 2,5	11,5	169,0	267,0	14
16253	7 G 1	10,3	114,0	219,0	18	16296	5 G 2,5	12,8	220,0	347,0	14
16179	7 x 1	10,3	114,0	219,0	18	16297	7 G 2,5	14,0	284,0	407,0	14
16254	8 G 1	11,2	130,0	270,0	18	16298	10 G 2,5	16,8	369,0	660,0	14
16255	10 G 1	12,6	156,0	330,0	18	16318	12 G 2,5	17,9	470,0	722,0	14
16256	12 G 1	13,3	186,0	350,0	18	16299	2 x 4	11,6	124,0	302,0	12
16257	14 G 1	14,1	198,0	400,0	18	16300	3 G 4	12,5	178,0	340,0	12
16258	16 G 1	14,8	214,0	422,0	18	16301	4 G 4	13,7	234,0	410,0	12
16259	18 G 1	15,6	284,0	514,0	18	16302	5 G 4	14,9	284,0	502,0	12
16260	20 G 1	16,4	325,0	545,0	18	16303	7 G 4	16,2	321,0	638,0	12
16261	24 G 1	18,2	366,0	640,0	18	16304	2 x 6	13,7	176,0	350,0	10
16262	25 G 1	18,5	387,0	689,0	18	16305	3 G 6	14,4	245,0	450,0	10
16263	28 G 1	19,1	421,0	710,0	18	16306	4 G 6	15,7	316,0	559,0	10
16264	30 G 1	19,2	457,0	762,0	18	16307	5 G 6	17,3	442,0	702,0	10
16265	34 G 1	20,9	500,0	910,0	18	16308	7 G 6	19,0	530,0	907,0	10
16266	40 G 1	21,5	536,0	1070,0	18	16309	2 x 10	16,6	260,0	500,0	8
16455	41 G 1	22,2	578,0	1092,0	18	16310	3 G 10	17,6	367,0	750,0	8
16267	50 G 1	24,8	681,0	1315,0	18	16311	4 G 10	19,4	549,0	1020,0	8
16268	61 G 1	26,0	710,0	1370,0	18	16312	5 G 10	21,3	604,0	1115,0	8
16269	80 G 1	30,0	940,0	1610,0	18	16313	7 G 10	23,4	820,0	1500,0	8
16270	100 G 1	33,1	1180,0	1840,0	18	16460	4 G 16	23,4	807,0	1380,0	6
16271	2 x 1,5	8,6	64,0	130,0	16	16314	5 G 16	26,0	940,0	1553,0	6
16272	3 G 1,5	9,2	82,0	152,0	16	16461	4 G 25	28,3	1169,0	1890,0	4
16180	3 x 1,5	9,2	82,0	152,0	16	16462	5 G 25	31,5	1420,0	2270,0	4
16273	4 G 1,5	9,8	99,0	168,0	16	16463	4 G 35	32,9	1680,0	2390,0	2
16181	4 x 1,5	9,8	99,0	168,0	16	16464	5 G 35	36,9	2020,0	2885,0	2
16274	5 G 1,5	10,8	123,0	202,0	16	16465	4 G 50	38,6	2370,0	3315,0	1
16182	5 x 1,5	10,8	123,0	202,0	16	16157	5 G 50	43,5	2880,0	4150,0	1
16275	7 G 1,5	11,7	148,0	304,0	16	16466	4 G 70	46,1	3257,0	4600,0	2/0
16183	7 x 1,5	11,7	148,0	304,0	16	16158	5 G 70	50,5	4032,0	5750,0	2/0
16276	8 G 1,5	12,6	172,0	336,0	16	16467	4 G 95	51,1	4060,0	6060,0	3/0
16277	10 G 1,5	14,2	198,0	420,0	16	16159	5 G 95	56,0	5244,0	7580,0	3/0
16278	12 G 1,5	14,9	274,0	434,0	16	16468	4 G 120	56,5	5231,0	7315,0	4/0
16279	14 G 1,5	15,8	294,0	480,0	16	16160	5 G 120	62,1	6624,0	9150,0	4/0
16280	16 G 1,5	16,7	318,0	525,0	16	16167	4 G 150	64,6	7760,0	9680,0	300 kcmil
16281	18 G 1,5	17,4	386,0	640,0	16	16168	5 G 150	70,6	8496,0	10170,0	300 kcmil

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



Suitable accessories can be found in Chapter X.

- Cable Gland - HELUTOP® HT-MS-EP4