



## Technical data

- Special PVC control cables, adapted to DIN VDE 0245, 0281 part 13
- **Temperature range**  
flexing -5°C to +80°C  
fixed installation -30°C to +80°C
- **Nominal voltage**  $U_0/U$  300/500 V
- **Test voltage**  
core/core 4000 V  
core/screen 2000 V
- **Breakdown voltage** min. 8000 V
- **Insulation resistance**  
min. 20 MΩm x km
- **Mutual capacitance** according to different cross-sections  
0,5 mm<sup>2</sup> to 2,5 mm<sup>2</sup>:  
core/core approx. 150 nF/km  
core/screen approx. 270 nF/km
- **Coupling resistance**  
max. 250 Ωm/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, fine wire conductors, bunch stranded 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 continuous 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
- Foil separator
- Tinned copper braided screening, approx. 85% coverage
- Special PVC outer sheath TM2, to special PVC, TM2 to DIN VDE 0281 part 1 and HD 21.1
- Colour grey (RAL 7001)
- with meter marking, change-over in 2009

## Properties

- Extensively oil resistant.  
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)
- 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).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- Please note the cleanroom qualification when ordering.
- To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.
- **unscreened analogue type: JZ 500**, see page A 6

## Application

For use as a data cable in control circuits, in tool-making and machine industries as well as a signal cable in computer systems and electronics. The more usual PVC inner sheath has been replaced in these cables by a stabilising foil separator, thus reducing the total diameter of the cables considerably and thereby reducing the bending radius, total weight etc. The high covering percentage of the copper screening offers interference-free signal transfer etc.

The dense screening assures disturbance-free transmission of all signals and impulses. An ideal disturbance-free control cable for the above application.

**EMC** = Electromagnetic compatibility

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

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
16320	2 x 0,5	5,7	35,0	45,0	20	16333	21 G 0,5	12,7	188,0	250,0	20
16321	3 G 0,5	5,9	42,0	55,0	20	16334	24 G 0,5	13,5	235,0	300,0	20
16322	4 G 0,5	6,4	47,0	61,0	20	16335	25 G 0,5	13,6	240,0	314,0	20
16323	5 G 0,5	6,9	56,0	74,0	20	16336	30 G 0,5	14,4	295,0	360,0	20
16324	6 G 0,5	7,6	67,0	89,0	20	16337	32 G 0,5	14,9	301,0	425,0	20
16325	7 G 0,5	7,6	69,0	98,0	20	16165	34 G 0,5	15,6	312,0	433,0	20
16326	8 G 0,5	8,7	80,0	117,0	20	16338	36 G 0,5	15,6	318,0	446,0	20
16327	10 G 0,5	9,6	94,0	135,0	20	16339	40 G 0,5	16,9	343,0	475,0	20
16328	12 G 0,5	9,7	108,0	157,0	20	16490	41 G 0,5	16,9	348,0	486,0	20
16329	14 G 0,5	10,2	116,0	190,0	20	16340	50 G 0,5	18,5	406,0	573,0	20
16330	16 G 0,5	11,0	129,0	210,0	20	16341	61 G 0,5	19,7	508,0	653,0	20
16331	18 G 0,5	11,5	145,0	217,0	20	16342	80 G 0,5	22,6	680,0	784,0	20
16332	20 G 0,5	12,2	172,0	240,0	20	16343	100 G 0,5	24,9	804,0	995,0	20

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

Continuation ►

# F-CY-JZ flexible, Cu-screened, EMC-preferred type, meter marking



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Part No.	No. cores x cross-sec. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
16344	2 x 0,75	6,1	40,0	59,0	18
16345	3 G 0,75	6,3	52,0	66,0	
16346	4 G 0,75	6,8	60,0	77,0	18
16347	5 G 0,75	7,4	71,0	93,0	18
16348	6 G 0,75	8,2	80,0	113,0	18
16349	7 G 0,75	8,2	91,0	130,0	18
16350	8 G 0,75	9,6	110,0	145,0	18
16351	10 G 0,75	10,3	137,0	180,0	18
16353	12 G 0,75	10,5	142,0	202,0	18
16354	14 G 0,75	11,3	180,0	225,0	18
16355	16 G 0,75	11,9	200,0	275,0	18
16356	18 G 0,75	12,7	212,0	292,0	18
16447	19 G 0,75	12,7	230,0	308,0	18
16357	20 G 0,75	13,3	238,0	320,0	18
16358	21 G 0,75	14,0	246,0	378,0	18
16359	24 G 0,75	14,9	270,0	435,0	18
16360	25 G 0,75	15,0	281,0	415,0	18
16361	27 G 0,75	15,0	304,0	435,0	18
16362	30 G 0,75	15,8	320,0	450,0	18
16363	32 G 0,75	16,7	342,0	484,0	18
16166	34 G 0,75	17,2	345,0	502,0	18
16364	36 G 0,75	17,2	350,0	535,0	18
16448	37 G 0,75	17,2	361,0	592,0	18
16365	40 G 0,75	18,6	369,0	610,0	18
16491	41 G 0,75	18,6	400,0	622,0	18
16366	50 G 0,75	20,3	461,0	777,0	18
16367	61 G 0,75	21,7	540,0	900,0	18
16368	80 G 0,75	24,8	711,0	1210,0	18
16369	100 G 0,75	27,6	900,0	1445,0	18
16370	2 x 1	6,4	50,0	65,0	17
16371	3 G 1	6,7	60,0	80,0	17
16372	4 G 1	7,2	71,0	98,0	17
16373	5 G 1	8,0	88,0	127,0	17
16374	6 G 1	8,7	97,0	144,0	17
16375	7 G 1	8,7	111,0	158,0	17
16376	8 G 1	10,1	127,0	197,0	17
16377	10 G 1	11,2	150,0	232,0	17
16378	12 G 1	11,4	184,0	260,0	17
16379	14 G 1	12,0	196,0	302,0	17
16380	16 G 1	12,8	209,0	346,0	17
16381	18 G 1	13,5	260,0	380,0	17
16352	19 G 1	13,5	280,0	412,0	17
16382	20 G 1	14,3	317,0	440,0	17
16383	24 G 1	16,0	320,0	493,0	17
16384	25 G 1	16,2	349,0	534,0	17
16439	27 G 1	16,2	400,0	562,0	17
16385	28 G 1	17,0	408,0	595,0	17
16386	30 G 1	17,0	441,0	616,0	17
16387	34 G 1	18,5	486,0	741,0	17
16446	37 G 1	18,5	519,0	790,0	17
16388	40 G 1	19,9	510,0	835,0	17
16492	41 G 1	19,9	531,0	843,0	17
16389	50 G 1	21,8	625,0	1025,0	17
16390	61 G 1	23,3	702,0	1205,0	17
16391	80 G 1	26,6	920,0	1445,0	17
16392	100 G 1	29,7	1120,0	1613,0	17

Part No.	No. cores x cross-sec. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
16393	2 x 1,5	7,0	63,0	88,0	16
16394	3 G 1,5	7,5	80,0	100,0	16
16395	4 G 1,5	8,1	97,0	126,0	16
16396	5 G 1,5	9,0	119,0	160,0	16
16397	7 G 1,5	9,8	147,0	208,0	16
16398	8 G 1,5	11,4	170,0	244,0	16
16399	10 G 1,5	12,6	193,0	315,0	16
16400	12 G 1,5	12,8	267,0	338,0	16
16401	14 G 1,5	13,5	283,0	383,0	16
16402	16 G 1,5	14,4	315,0	424,0	16
16403	18 G 1,5	15,4	374,0	479,0	16
16449	19 G 1,5	15,4	386,0	508,0	16
16404	20 G 1,5	16,1	396,0	545,0	16
16405	21 G 1,5	17,0	425,0	560,0	16
16406	24 G 1,5	18,2	458,0	690,0	16
16407	25 G 1,5	18,4	526,0	705,0	16
16450	27 G 1,5	18,4	531,0	774,0	16
16408	28 G 1,5	19,1	541,0	810,0	16
16409	30 G 1,5	19,1	555,0	830,0	16
16410	35 G 1,5	20,8	645,0	890,0	16
16451	37 G 1,5	20,8	674,0	945,0	16
16411	40 G 1,5	22,6	725,0	1060,0	16
16493	41 G 1,5	22,6	801,0	1071,0	16
16412	50 G 1,5	24,7	885,0	1290,0	16
16413	61 G 1,5	26,4	1100,0	1705,0	16
16414	80 G 1,5	30,3	1324,0	2010,0	16
16415	100 G 1,5	33,6	1641,0	2505,0	16
16416	2 x 2,5	8,3	96,0	130,0	14
16417	3 G 2,5	9,0	144,0	167,0	14
16418	4 G 2,5	9,8	148,0	195,0	14
16419	5 G 2,5	10,9	181,0	223,0	14
16420	7 G 2,5	11,9	255,0	344,0	14
16421	10 G 2,5	15,5	340,0	460,0	14
16438	12 G 2,5	15,8	441,0	570,0	14
16452	18 G 2,5	18,9	570,0	681,0	14
16422	2 x 4	9,8	120,0	185,0	12
16423	3 G 4	10,6	174,0	240,0	12
16424	4 G 4	11,5	230,0	310,0	12
16425	5 G 4	12,7	273,0	385,0	12
16426	7 G 4	14,0	316,0	500,0	12
16427	2 x 6	11,7	173,0	268,0	10
16428	3 G 6	12,5	240,0	330,0	10
16429	4 G 6	13,8	305,0	415,0	10
16430	5 G 6	15,3	439,0	509,0	10
16431	7 G 6	16,9	505,0	672,0	10
16432	2 x 10	14,7	255,0	425,0	8
16433	3 G 10	15,7	350,0	500,0	8
16434	4 G 10	17,3	535,0	783,0	8
16435	5 G 10	19,2	592,0	856,0	8
16436	7 G 10	21,4	810,0	1305,0	8
16440	4 G 16	20,8	740,0	880,0	6
16437	5 G 16	22,6	895,0	1295,0	6
16441	4 G 25	24,9	1140,0	1570,0	4
16442	5 G 25	27,8	1380,0	1965,0	4
16443	4 G 35	28,4	1576,0	2070,0	2
16444	5 G 35	31,6	1930,0	2690,0	2
16445	4 G 50	34,6	2155,0	3015,0	1

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Process control for a large cabling machine at our Windsbach factory.