

# F-CY-JZ

flexible, Cu-screened, EMC-preferred type, meter marking



## Technical data

- Special-PVC control cable adapted to DIN VDE 0285-525-2-51 / DIN EN 50525-2-51
- **Temperature range**  
flexing -10°C to +80°C  
fixed installation -40°C to +80°C
- **Nominal voltage**  
U<sub>0</sub>/U 300/500 V
- **Test voltage**  
core/core 4000 V  
core/screen 2000 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
- Foil separator
- Tinned copper braided screening, approx. 85% coverage
- Outer sheath of special PVC compound type TM2 to DIN VDE 0207-363-4-1/DIN EN 50363-4-1
- Sheath colour: grey (RAL 7001)
- With meter marking

## Properties

- Extensively oil resistant, oil-/chemical resistance see "Technical Informations"
- The materials used during manufacturing are cadmium-free, contain no silicone and are 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 60332-1-2 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- G = with GN-YE conductor  
x = without GN-YE conductor (OZ)
- Please note "cleanroom qualified" when ordering.
- AWG sizes are approximate equivalent values. The actual cross section is in mm<sup>2</sup>.
- Unscreened analogue type:

**JZ-500**

## 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

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

**CE** = Product conforms with Low-Voltage Directive 2014/35/EU.

| 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      |
| 16321    | 3 G 0,5                                | 6,0             | 42,0                | 55,0                | 20      |
| 16322    | 4 G 0,5                                | 6,5             | 47,0                | 61,0                | 20      |
| 16323    | 5 G 0,5                                | 6,9             | 56,0                | 74,0                | 20      |
| 16324    | 6 G 0,5                                | 7,6             | 67,0                | 89,0                | 20      |
| 16325    | 7 G 0,5                                | 7,6             | 69,0                | 98,0                | 20      |
| 16326    | 8 G 0,5                                | 8,4             | 80,0                | 117,0               | 20      |
| 16327    | 10 G 0,5                               | 9,5             | 94,0                | 135,0               | 20      |
| 16328    | 12 G 0,5                               | 9,8             | 108,0               | 157,0               | 20      |
| 16329    | 14 G 0,5                               | 10,4            | 116,0               | 190,0               | 20      |
| 16330    | 16 G 0,5                               | 10,9            | 129,0               | 210,0               | 20      |
| 16331    | 18 G 0,5                               | 11,4            | 145,0               | 217,0               | 20      |
| 16332    | 20 G 0,5                               | 12,2            | 172,0               | 240,0               | 20      |

| 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. |
|----------|----------------------------------------|-----------------|---------------------|---------------------|---------|
| 16333    | 21 G 0,5                               | 12,2            | 188,0               | 250,0               | 20      |
| 16334    | 24 G 0,5                               | 13,7            | 235,0               | 300,0               | 20      |
| 16335    | 25 G 0,5                               | 13,7            | 240,0               | 314,0               | 20      |
| 16336    | 30 G 0,5                               | 14,4            | 295,0               | 360,0               | 20      |
| 16337    | 32 G 0,5                               | 15,1            | 301,0               | 425,0               | 20      |
| 16165    | 34 G 0,5                               | 15,6            | 312,0               | 433,0               | 20      |
| 16338    | 36 G 0,5                               | 15,6            | 318,0               | 446,0               | 20      |
| 16339    | 40 G 0,5                               | 16,4            | 343,0               | 475,0               | 20      |
| 16490    | 41 G 0,5                               | 17,0            | 348,0               | 486,0               | 20      |
| 16340    | 50 G 0,5                               | 18,5            | 406,0               | 573,0               | 20      |
| 16341    | 61 G 0,5                               | 19,6            | 508,0               | 653,0               | 20      |
| 16342    | 80 G 0,5                               | 22,5            | 680,0               | 784,0               | 20      |
| 16343    | 100 G 0,5                              | 25,0            | 804,0               | 995,0               | 20      |

Continuation ►

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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                  | 6,2             | 40,0                | 59,0                | 19      |
| 16345    | 3 G 0,75                  | 6,6             | 52,0                | 66,0                | 19      |
| 16346    | 4 G 0,75                  | 7,1             | 60,0                | 77,0                | 19      |
| 16347    | 5 G 0,75                  | 7,8             | 71,0                | 93,0                | 19      |
| 16348    | 6 G 0,75                  | 8,4             | 80,0                | 113,0               | 19      |
| 16349    | 7 G 0,75                  | 8,4             | 91,0                | 130,0               | 19      |
| 16350    | 8 G 0,75                  | 9,5             | 110,0               | 145,0               | 19      |
| 16351    | 10 G 0,75                 | 10,7            | 137,0               | 180,0               | 19      |
| 16353    | 12 G 0,75                 | 11,1            | 142,0               | 202,0               | 19      |
| 16354    | 14 G 0,75                 | 11,5            | 180,0               | 225,0               | 19      |
| 16355    | 16 G 0,75                 | 12,3            | 200,0               | 275,0               | 19      |
| 16356    | 18 G 0,75                 | 12,9            | 212,0               | 292,0               | 19      |
| 16447    | 19 G 0,75                 | 12,9            | 230,0               | 308,0               | 19      |
| 16357    | 20 G 0,75                 | 13,9            | 238,0               | 320,0               | 19      |
| 16358    | 21 G 0,75                 | 13,9            | 246,0               | 378,0               | 19      |
| 16359    | 24 G 0,75                 | 15,4            | 270,0               | 435,0               | 19      |
| 16360    | 25 G 0,75                 | 15,4            | 281,0               | 415,0               | 19      |
| 16361    | 27 G 0,75                 | 15,7            | 304,0               | 435,0               | 19      |
| 16362    | 30 G 0,75                 | 16,4            | 320,0               | 450,0               | 19      |
| 16363    | 32 G 0,75                 | 17,0            | 342,0               | 484,0               | 19      |
| 16166    | 34 G 0,75                 | 17,8            | 345,0               | 502,0               | 19      |
| 16364    | 36 G 0,75                 | 17,8            | 350,0               | 535,0               | 19      |
| 16448    | 37 G 0,75                 | 17,8            | 361,0               | 592,0               | 19      |
| 16365    | 40 G 0,75                 | 18,4            | 369,0               | 610,0               | 19      |
| 16491    | 41 G 0,75                 | 19,3            | 400,0               | 622,0               | 19      |
| 16366    | 50 G 0,75                 | 21,0            | 461,0               | 777,0               | 19      |
| 16367    | 61 G 0,75                 | 22,3            | 540,0               | 900,0               | 19      |
| 16368    | 80 G 0,75                 | 25,7            | 711,0               | 1210,0              | 19      |
| 16369    | 100 G 0,75                | 28,5            | 900,0               | 1445,0              | 19      |
| 16370    | 2 x 1                     | 6,5             | 50,0                | 65,0                | 18      |
| 16371    | 3 G 1                     | 6,9             | 60,0                | 80,0                | 18      |
| 16372    | 4 G 1                     | 7,6             | 71,0                | 98,0                | 18      |
| 16373    | 5 G 1                     | 8,2             | 88,0                | 127,0               | 18      |
| 16374    | 6 G 1                     | 9,0             | 97,0                | 144,0               | 18      |
| 16375    | 7 G 1                     | 9,0             | 111,0               | 158,0               | 18      |
| 16376    | 8 G 1                     | 10,0            | 127,0               | 197,0               | 18      |
| 16377    | 10 G 1                    | 11,3            | 150,0               | 232,0               | 18      |
| 16378    | 12 G 1                    | 11,9            | 184,0               | 260,0               | 18      |
| 16379    | 14 G 1                    | 12,4            | 196,0               | 302,0               | 18      |
| 16380    | 16 G 1                    | 13,0            | 209,0               | 346,0               | 18      |
| 16381    | 18 G 1                    | 14,0            | 260,0               | 380,0               | 18      |
| 16352    | 19 G 1                    | 14,0            | 280,0               | 412,0               | 18      |
| 16382    | 20 G 1                    | 14,9            | 317,0               | 440,0               | 18      |
| 16383    | 24 G 1                    | 16,5            | 320,0               | 493,0               | 18      |
| 16384    | 25 G 1                    | 16,5            | 349,0               | 534,0               | 18      |
| 16439    | 27 G 1                    | 16,9            | 400,0               | 562,0               | 18      |
| 16385    | 28 G 1                    | 17,6            | 408,0               | 595,0               | 18      |
| 16386    | 30 G 1                    | 17,6            | 441,0               | 616,0               | 18      |
| 16387    | 34 G 1                    | 19,0            | 486,0               | 741,0               | 18      |
| 16446    | 37 G 1                    | 19,0            | 519,0               | 790,0               | 18      |
| 16388    | 40 G 1                    | 19,7            | 510,0               | 835,0               | 18      |
| 16492    | 41 G 1                    | 20,6            | 531,0               | 843,0               | 18      |
| 16389    | 50 G 1                    | 22,4            | 625,0               | 1025,0              | 18      |
| 16390    | 61 G 1                    | 23,8            | 702,0               | 1205,0              | 18      |
| 16391    | 80 G 1                    | 27,4            | 920,0               | 1445,0              | 18      |
| 16392    | 100 G 1                   | 30,6            | 1120,0              | 1613,0              | 18      |
| 16393    | 2 x 1,5                   | 7,1             | 63,0                | 88,0                | 16      |

| Part no. | No.cores x cross-sec. mm² | Outer Ø app. mm | Cop. weight kg / km | Weight app. kg / km | AWG-No. |
|----------|---------------------------|-----------------|---------------------|---------------------|---------|
| 16394    | 3 G 1,5                   | 7,7             | 80,0                | 100,0               | 16      |
| 16395    | 4 G 1,5                   | 8,3             | 97,0                | 126,0               | 16      |
| 16396    | 5 G 1,5                   | 9,2             | 119,0               | 160,0               | 16      |
| 16397    | 7 G 1,5                   | 9,9             | 147,0               | 208,0               | 16      |
| 16398    | 8 G 1,5                   | 11,2            | 170,0               | 244,0               | 16      |
| 16399    | 10 G 1,5                  | 12,7            | 193,0               | 315,0               | 16      |
| 16400    | 12 G 1,5                  | 13,5            | 267,0               | 338,0               | 16      |
| 16401    | 14 G 1,5                  | 14,1            | 283,0               | 383,0               | 16      |
| 16402    | 16 G 1,5                  | 15,0            | 315,0               | 424,0               | 16      |
| 16403    | 18 G 1,5                  | 15,7            | 374,0               | 479,0               | 16      |
| 16449    | 19 G 1,5                  | 15,7            | 386,0               | 508,0               | 16      |
| 16404    | 20 G 1,5                  | 16,7            | 396,0               | 545,0               | 16      |
| 16405    | 21 G 1,5                  | 16,7            | 425,0               | 560,0               | 16      |
| 16406    | 24 G 1,5                  | 18,5            | 458,0               | 690,0               | 16      |
| 16407    | 25 G 1,5                  | 18,5            | 526,0               | 705,0               | 16      |
| 16450    | 27 G 1,5                  | 19,1            | 531,0               | 774,0               | 16      |
| 16408    | 28 G 1,5                  | 19,7            | 541,0               | 810,0               | 16      |
| 16409    | 30 G 1,5                  | 19,7            | 555,0               | 830,0               | 16      |
| 16410    | 35 G 1,5                  | 21,3            | 645,0               | 890,0               | 16      |
| 16451    | 37 G 1,5                  | 21,3            | 674,0               | 945,0               | 16      |
| 16411    | 40 G 1,5                  | 22,3            | 725,0               | 1060,0              | 16      |
| 16493    | 41 G 1,5                  | 23,1            | 801,0               | 1071,0              | 16      |
| 16412    | 50 G 1,5                  | 25,5            | 885,0               | 1290,0              | 16      |
| 16413    | 61 G 1,5                  | 27,1            | 1100,0              | 1705,0              | 16      |
| 16414    | 80 G 1,5                  | 31,1            | 1324,0              | 2010,0              | 16      |
| 16415    | 100 G 1,5                 | 34,5            | 1641,0              | 2505,0              | 16      |
| 16416    | 2 x 2,5                   | 8,5             | 96,0                | 130,0               | 14      |
| 16417    | 3 G 2,5                   | 9,2             | 144,0               | 167,0               | 14      |
| 16418    | 4 G 2,5                   | 10,0            | 148,0               | 195,0               | 14      |
| 16419    | 5 G 2,5                   | 11,0            | 181,0               | 223,0               | 14      |
| 16420    | 7 G 2,5                   | 12,1            | 255,0               | 344,0               | 14      |
| 16421    | 10 G 2,5                  | 15,7            | 340,0               | 460,0               | 14      |
| 16438    | 12 G 2,5                  | 16,4            | 441,0               | 570,0               | 14      |
| 16452    | 18 G 2,5                  | 19,3            | 570,0               | 681,0               | 14      |
| 16422    | 2 x 4                     | 10,5            | 120,0               | 185,0               | 12      |
| 16423    | 3 G 4                     | 11,1            | 174,0               | 240,0               | 12      |
| 16424    | 4 G 4                     | 12,3            | 230,0               | 310,0               | 12      |
| 16425    | 5 G 4                     | 13,8            | 273,0               | 385,0               | 12      |
| 16426    | 7 G 4                     | 15,1            | 316,0               | 500,0               | 12      |
| 16427    | 2 x 6                     | 11,9            | 173,0               | 268,0               | 10      |
| 16428    | 3 G 6                     | 12,6            | 240,0               | 330,0               | 10      |
| 16429    | 4 G 6                     | 14,2            | 305,0               | 415,0               | 10      |
| 16430    | 5 G 6                     | 15,6            | 439,0               | 509,0               | 10      |
| 16431    | 7 G 6                     | 17,1            | 505,0               | 672,0               | 10      |
| 16432    | 2 x 10                    | 15,3            | 255,0               | 425,0               | 8       |
| 16433    | 3 G 10                    | 16,5            | 350,0               | 500,0               | 8       |
| 16434    | 4 G 10                    | 18,2            | 535,0               | 783,0               | 8       |
| 16435    | 5 G 10                    | 20,0            | 592,0               | 856,0               | 8       |
| 16436    | 7 G 10                    | 22,1            | 810,0               | 1305,0              | 8       |
| 16458    | 3 G 16                    | 19,0            | 585,0               | 795,0               | 6       |
| 16440    | 4 G 16                    | 21,0            | 740,0               | 880,0               | 6       |
| 16437    | 5 G 16                    | 23,1            | 895,0               | 1295,0              | 6       |
| 16441    | 4 G 25                    | 26,4            | 1140,0              | 1570,0              | 4       |
| 16442    | 5 G 25                    | 29,0            | 1380,0              | 1965,0              | 4       |
| 16443    | 4 G 35                    | 29,0            | 1576,0              | 2070,0              | 2       |
| 16444    | 5 G 35                    | 32,3            | 1930,0              | 2690,0              | 2       |
| 16445    | 4 G 50                    | 34,8            | 2155,0              | 3015,0              | 1       |

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