

# JZ-HF-CY / OZ-HF-CY

oil resistant, with inner sheath, EMC-preferred type



HELUKABEL® <VDE-REG 7033> JZ-HF-CY 7G0,75 QMM / 15949 300/500 V CE

## TECHNICAL DATA

PVC drag chain cable in alignment with DIN VDE 0285-525-2-51 / DIN EN 50525-2-51

|                               |   |
|-------------------------------|---|
| <b>Temperature range</b>      | flexible -10°C to +80°C<br>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>Coupling resistance</b>    | at 30 MHz, approx. 250 Ohm/km                   |
| <b>Minimum bending radius</b> | flexible 10x Outer-Ø<br>fixed 5x Outer-Ø        |

## CABLE STRUCTURE

- Copper wire bare, extra finely stranded acc. to DIN VDE 0295 Class 6 / IEC 60228 Class 6
- 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 optimally matched lay lengths
- Fleece wrapping over each stranding layer
- Inner sheath: PVC
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: oil-resistant special PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM5)
- Sheath colour: grey (RAL 7001)
- Length marking: in metres

## PROPERTIES

- resistant to: oil
- suitable for use in drag chains

- 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
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- certifications and approvals: EAC  
VDE-Reg.-No. 7033, valid for temperature range up to +70°C

## APPLICATION

Used for installation in dry and damp rooms, but not outdoors. With free movement, without tensile stress and without forced motion control capabilities, these cables have proven their reliable performance in standard drag chain applications, automatic handling machines, robots and permanently moving machine parts. These screened cables have been developed for interference-free data signal transmission for all areas in electronics, measurement and control technology. Also available in paired version. 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
- cleanroom qualification tested on analog types; please note "cleanroom qualification" in your order
- for use in energy supply systems:
  - 1) the assembly instructions must be observed
  - 2) for further application parameters, please refer to the selection tables
  - 3) for special applications, we recommend contacting us and using our data entry form for energy supply systems

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|
| 15930    | 2 x 0.5                                | 20           | 7.1                 | 30.0            | 90.0                  |
| 15931    | 3 G 0.5                                | 20           | 7.4                 | 38.0            | 115.0                 |
| 15932    | 4 G 0.5                                | 20           | 8.0                 | 48.0            | 140.0                 |
| 15933    | 5 G 0.5                                | 20           | 8.5                 | 64.0            | 168.0                 |
| 15934    | 7 G 0.5                                | 20           | 10.0                | 70.0            | 217.0                 |
| 15935    | 12 G 0.5                               | 20           | 11.5                | 100.0           | 274.0                 |
| 15876    | 14 G 0.5                               | 20           | 12.1                | 135.0           | 332.0                 |
| 15877    | 16 G 0.5                               | 20           | 12.8                | 145.0           | 388.0                 |
| 15936    | 18 G 0.5                               | 20           | 13.8                | 154.0           | 445.0                 |
| 15937    | 20 G 0.5                               | 20           | 14.3                | 160.0           | 497.0                 |
| 15878    | 21 G 0.5                               | 20           | 14.9                | 175.0           | 500.0                 |
| 15938    | 25 G 0.5                               | 20           | 16.5                | 240.0           | 505.0                 |
| 15879    | 30 G 0.5                               | 20           | 16.8                | 280.0           | 515.0                 |
| 15880    | 34 G 0.5                               | 20           | 17.9                | 290.0           | 530.0                 |
| 15881    | 36 G 0.5                               | 20           | 17.9                | 300.0           | 572.0                 |

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|----------|--|--------------|---------------------|-----------------|-----------------------|
| 15882    | 42 G 0.5                               | 20           | 19.4                | 330.0           | 605.0                 |
| 15883    | 50 G 0.5                               | 20           | 21.0                | 393.0           | 742.0                 |
| 15945    | 2 x 0.75                               | 19           | 7.7                 | 39.0            | 105.0                 |
| 15946    | 3 G 0.75                               | 19           | 8.0                 | 49.0            | 128.0                 |
| 15947    | 4 G 0.75                               | 19           | 8.5                 | 60.0            | 184.0                 |
| 15948    | 5 G 0.75                               | 19           | 9.3                 | 70.0            | 200.0                 |
| 15949    | 7 G 0.75                               | 19           | 10.8                | 95.0            | 269.0                 |
| 15885    | 10 G 0.75                              | 19           | 12.5                | 110.0           | 327.0                 |
| 15950    | 12 G 0.75                              | 19           | 12.5                | 140.0           | 366.0                 |
| 15886    | 14 G 0.75                              | 19           | 13.4                | 163.0           | 426.0                 |
| 15887    | 16 G 0.75                              | 19           | 14.2                | 187.0           | 487.0                 |
| 15951    | 18 G 0.75                              | 19           | 14.8                | 211.0           | 547.0                 |
| 15888    | 20 G 0.75                              | 19           | 15.6                | 216.0           | 551.0                 |
| 15889    | 21 G 0.75                              | 19           | 16.4                | 272.0           | 590.0                 |
| 15952    | 25 G 0.75                              | 19           | 18.0                | 322.0           | 600.0                 |

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| Part no. | No. cores x cross-sec. mm <sup>2</sup> | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. | Part no. | No. cores x cross-sec. mm <sup>2</sup> | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|----------|--|--------------|---------------------|-----------------|-----------------------|
| 15890    | 30 G 0.75                              | 19           | 18.3                | 414.0           | 650.0                 | 15980    | 7 G 1.5                                | 16           | 12.8                | 148.0           | 403.0                 |
| 15891    | 34 G 0.75                              | 19           | 19.9                | 473.0           | 685.0                 | 15981    | 12 G 1.5                               | 16           | 15.4                | 274.0           | 592.0                 |
| 15892    | 36 G 0.75                              | 19           | 19.9                | 500.0           | 720.0                 | 15982    | 18 G 1.5                               | 16           | 17.5                | 386.0           | 844.0                 |
| 15893    | 42 G 0.75                              | 19           | 21.4                | 583.0           | 800.0                 | 15983    | 25 G 1.5                               | 16           | 21.8                | 584.0           | 1155.0                |
| 15894    | 50 G 0.75                              | 19           | 22.9                | 695.0           | 954.0                 | 15152    | 41 G 1.5                               | 16           | 25.6                | 867.0           | 1227.0                |
| 15961    | 2 x 1                                  | 18           | 8.0                 | 50.0            | 115.0                 | 15153    | 50 G 1.5                               | 16           | 27.6                | 970.0           | 1445.0                |
| 15962    | 3 G 1                                  | 18           | 8.3                 | 60.0            | 142.0                 | 15154    | 61 G 1.5                               | 16           | 30.4                | 1028.0          | 1724.0                |
| 15963    | 4 G 1                                  | 18           | 9.1                 | 73.0            | 196.0                 | 15925    | 3 G 2.5                                | 14           | 11.1                | 140.0           | 215.0                 |
| 15964    | 5 G 1                                  | 18           | 9.7                 | 81.0            | 271.0                 | 15926    | 4 G 2.5                                | 14           | 11.8                | 159.0           | 264.0                 |
| 15965    | 7 G 1                                  | 18           | 11.4                | 114.0           | 307.0                 | 15927    | 5 G 2.5                                | 14           | 13.3                | 194.0           | 344.0                 |
| 15966    | 12 G 1                                 | 18           | 13.4                | 186.0           | 474.0                 | 15928    | 7 G 2.5                                | 14           | 15.6                | 234.0           | 410.0                 |
| 15967    | 18 G 1                                 | 18           | 15.7                | 254.0           | 622.0                 | 15929    | 12 G 2.5                               | 14           | 18.6                | 390.0           | 721.0                 |
| 15968    | 25 G 1                                 | 18           | 19.5                | 365.0           | 828.0                 | 15155    | 3 G 4                                  | 12           | 12.8                | 178.0           | 292.0                 |
| 15969    | 34 G 1                                 | 18           | 21.1                | 500.0           | 1049.0                | 15156    | 4 G 4                                  | 12           | 14.2                | 222.0           | 372.0                 |
| 15970    | 41 G 1                                 | 18           | 22.7                | 576.0           | 1257.0                | 15157    | 5 G 4                                  | 12           | 15.5                | 328.0           | 448.0                 |
| 15971    | 50 G 1                                 | 18           | 24.7                | 681.0           | 1437.0                | 15158    | 4 G 6                                  | 10           | 15.8                | 305.0           | 526.0                 |
| 15972    | 65 G 1                                 | 18           | 27.8                | 932.0           | 1823.0                | 15159    | 5 G 6                                  | 10           | 17.3                | 441.0           | 632.0                 |
| 15976    | 2 x 1.5                                | 16           | 8.6                 | 64.0            | 170.0                 | 15160    | 4 G 10                                 | 8            | 21.1                | 485.0           | 838.0                 |
| 15977    | 3 G 1.5                                | 16           | 9.0                 | 84.0            | 203.0                 | 15161    | 5 G 10                                 | 8            | 23.0                | 610.0           | 998.0                 |
| 15978    | 4 G 1.5                                | 16           | 9.8                 | 99.0            | 243.0                 | 15162    | 4 G 16                                 | 6            | 24.1                | 840.0           | 1225.0                |
| 15979    | 5 G 1.5                                | 16           | 10.5                | 120.0           | 288.0                 | 15163    | 5 G 16                                 | 6            | 27.0                | 1050.0          | 1560.0                |