

# JZ-600-Y-CY / OZ-600-Y-CY

EMC-preferred type, with inner sheath



HELUKABEL® JZ-600 Y-CY 4G2,5 QMM / 11576 0,6/1 kV CE

## TECHNICAL DATA

PVC control and connection cable in alignment with DIN VDE 0262, DIN VDE 0285-525-2-51 / DIN EN 50525-2-51

|                        |                                                 |
|------------------------|-------------------------------------------------|
| Temperature range      | flexible -15°C to +80°C<br>fixed -40°C to +80°C |
| Nominal voltage        | AC U <sub>0</sub> /U 600/1000 V                 |
| Test voltage core/core | 4000 V                                          |
| Breakdown voltage      | 8000 V                                          |
| Coupling resistance    | at 30 MHz, approx. 250 Ohm/km                   |
| Minimum bending radius | flexible 10x Outer-Ø<br>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 acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type T12)
- 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 acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: black (RAL 9005)
- Length marking: in metres

## PROPERTIES

- resistant to: UV radiation, weathering effects

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|----------------------------|--------------|---------------------|------------------|-----------------------|
| 11464    | 2 x 0.5                    | 20           | 8.4                 | 41.0             | 115.0                 |
| 11465    | 3 G 0.5                    | 20           | 8.8                 | 45.0             | 127.0                 |
| 11466    | 4 G 0.5                    | 20           | 9.3                 | 54.0             | 149.0                 |
| 11467    | 5 G 0.5                    | 20           | 10.1                | 66.0             | 169.0                 |
| 11469    | 7 G 0.5                    | 20           | 10.9                | 79.0             | 230.0                 |
| 11472    | 12 G 0.5                   | 20           | 14.0                | 137.0            | 386.0                 |
| 11475    | 18 G 0.5                   | 20           | 16.3                | 156.0            | 428.0                 |
| 11478    | 25 G 0.5                   | 20           | 19.0                | 250.0            | 693.0                 |
| 11489    | 2 x 0.75                   | 19           | 8.9                 | 46.0             | 128.0                 |
| 11490    | 3 G 0.75                   | 19           | 9.3                 | 57.0             | 143.0                 |
| 11491    | 4 G 0.75                   | 19           | 10.1                | 63.0             | 164.0                 |
| 11492    | 5 G 0.75                   | 19           | 11.0                | 76.0             | 198.0                 |
| 11494    | 7 G 0.75                   | 19           | 11.9                | 100.0            | 232.0                 |
| 11498    | 12 G 0.75                  | 19           | 15.4                | 175.0            | 360.0                 |
| 11501    | 18 G 0.75                  | 19           | 18.0                | 240.0            | 562.0                 |
| 11504    | 25 G 0.75                  | 19           | 21.9                | 306.0            | 729.0                 |

- largely resistant to: oil, for details, see "Technical Information"
- for outdoor use
- 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
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- certifications and approvals: EAC

## APPLICATION

Used as a connection and control cable in machine tools, assembly lines and conveyor belts, production lines, plant construction, heating and air-conditioning technology and in smelters and steel mills. Suitable for flexible applications involving medium mechanical stress with free movement, without tensile stress and without forced motion control in dry, damp and wet rooms, as well as outdoors (fixed installation). May not be laid directly in soil (suitable for direct burial starting with an outer diameter of 20 mm) or water. Due to its extended nominal voltage range and good UV resistance, this cable is primarily used in Southern Europe, Arabic, Asian and Eastern countries. Due to the high screening density, interference-free transmission of signals or pulses is ensured. 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

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|----------------------------|--------------|---------------------|------------------|-----------------------|
| 11516    | 2 x 1                      | 18           | 9.2                 | 54.0             | 146.0                 |
| 11517    | 3 G 1                      | 18           | 9.8                 | 64.0             | 165.0                 |
| 11518    | 4 G 1                      | 18           | 10.4                | 76.0             | 204.0                 |
| 11519    | 5 G 1                      | 18           | 11.6                | 89.0             | 224.0                 |
| 11521    | 7 G 1                      | 18           | 12.3                | 114.0            | 379.0                 |
| 11525    | 12 G 1                     | 18           | 16.2                | 186.0            | 430.0                 |
| 11528    | 18 G 1                     | 18           | 18.9                | 284.0            | 636.0                 |
| 11532    | 25 G 1                     | 18           | 22.8                | 387.0            | 837.0                 |
| 11546    | 2 x 1.5                    | 16           | 10.4                | 64.0             | 175.0                 |
| 11547    | 3 G 1.5                    | 16           | 11.3                | 82.0             | 213.0                 |
| 11548    | 4 G 1.5                    | 16           | 12.0                | 99.0             | 247.0                 |
| 11549    | 5 G 1.5                    | 16           | 13.1                | 123.0            | 300.0                 |
| 11551    | 7 G 1.5                    | 16           | 14.6                | 148.0            | 364.0                 |
| 11556    | 12 G 1.5                   | 16           | 18.7                | 274.0            | 668.0                 |
| 11559    | 18 G 1.5                   | 16           | 22.8                | 386.0            | 844.0                 |
| 11563    | 25 G 1.5                   | 16           | 26.2                | 531.0            | 1356.0                |

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EMC-preferred type, with inner sheath

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. | Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|----------------------------|--------------|---------------------|------------------|-----------------------|----------|----------------------------|--------------|---------------------|------------------|-----------------------|
| 11574    | 2 x 2.5                    | 14           | 12.0                | 110.0            | 241.0                 | 11607    | 2 x 16                     | 6            | 23.2                | 491.0            | 1150.0                |
| 11575    | 3 G 2.5                    | 14           | 12.6                | 148.0            | 266.0                 | 11608    | 3 G 16                     | 6            | 24.5                | 653.0            | 1395.0                |
| 11576    | 4 G 2.5                    | 14           | 13.9                | 169.0            | 351.0                 | 11609    | 4 G 16                     | 6            | 26.5                | 807.0            | 1426.0                |
| 11577    | 5 G 2.5                    | 14           | 15.4                | 220.0            | 434.0                 | 11610    | 5 G 16                     | 6            | 29.3                | 940.0            | 2720.0                |
| 11578    | 7 G 2.5                    | 14           | 16.6                | 284.0            | 517.0                 | 11611    | 7 G 16                     | 6            | 32.0                | 1345.0           | 3213.0                |
| 11580    | 12 G 2.5                   | 14           | 22.8                | 470.0            | 862.0                 | 11612    | 3 G 25                     | 4            | 29.0                | 920.0            | 1810.0                |
| 11582    | 18 G 2.5                   | 14           | 26.2                | 572.0            | 1236.0                | 11613    | 4 G 25                     | 4            | 32.0                | 1169.0           | 2261.0                |
| 11584    | 25 G 2.5                   | 14           | 30.6                | 740.0            | 1659.0                | 11614    | 5 G 25                     | 4            | 35.3                | 1420.0           | 2773.0                |
| 11590    | 2 x 4                      | 12           | 13.4                | 124.0            | 306.0                 | 11615    | 7 G 25                     | 4            | 38.6                | 1921.0           | 4980.0                |
| 11591    | 3 G 4                      | 12           | 14.7                | 178.0            | 444.0                 | 11616    | 3 G 35                     | 2            | 31.9                | 1250.0           | 2400.0                |
| 11592    | 4 G 4                      | 12           | 15.9                | 234.0            | 489.0                 | 11617    | 4 G 35                     | 2            | 35.0                | 1680.0           | 2973.0                |
| 11593    | 5 G 4                      | 12           | 17.6                | 284.0            | 623.0                 | 11618    | 5 G 35                     | 2            | 38.6                | 2020.0           | 3548.0                |
| 11594    | 7 G 4                      | 12           | 19.0                | 385.0            | 775.0                 | 11619    | 3 G 50                     | 1            | 37.0                | 1887.0           | 3120.0                |
| 11596    | 12 G 4                     | 12           | 25.5                | 581.0            | 1244.0                | 11620    | 4 G 50                     | 1            | 40.8                | 2370.0           | 3873.0                |
| 11024506 | 12 x 4                     | 12           | 25.5                | 581.0            | 1244.0                | 11621    | 5 G 50                     | 1            | 45.2                | 2880.0           | 4634.0                |
| 11597    | 2 x 6                      | 10           | 15.2                | 176.0            | 433.0                 | 11622    | 3 G 70                     | 2/0          | 41.5                | 2516.0           | 4220.0                |
| 11598    | 3 G 6                      | 10           | 16.2                | 245.0            | 572.0                 | 11623    | 4 G 70                     | 2/0          | 45.9                | 3257.0           | 5546.0                |
| 11599    | 4 G 6                      | 10           | 17.8                | 316.0            | 673.0                 | 11624    | 5 G 70                     | 2/0          | 50.8                | 4032.0           | 6410.0                |
| 11600    | 5 G 6                      | 10           | 19.4                | 442.0            | 841.0                 | 11625    | 3 G 95                     | 3/0          | 47.4                | 3086.0           | 5240.0                |
| 11601    | 7 G 6                      | 10           | 22.2                | 530.0            | 1078.0                | 11626    | 4 G 95                     | 3/0          | 52.3                | 4060.0           | 6538.0                |
| 11602    | 2 x 10                     | 8            | 18.6                | 260.0            | 640.0                 | 11627    | 5 G 95                     | 3/0          | 57.4                | 5244.0           | 7812.0                |
| 11603    | 3 G 10                     | 8            | 20.0                | 367.0            | 820.0                 | 11628    | 3 G 120                    | 4/0          | 52.2                | 4176.0           | 7210.0                |
| 11604    | 4 G 10                     | 8            | 22.7                | 549.0            | 979.0                 | 11629    | 4 G 120                    | 4/0          | 56.9                | 5231.0           | 7994.0                |
| 11605    | 5 G 10                     | 8            | 24.8                | 604.0            | 1207.0                | 13137    | 4 G 150                    | 300 kcmil    | 63.3                | 7760.0           | 10305.0               |
| 11606    | 7 G 10                     | 8            | 26.8                | 820.0            | 2210.0                | 13147    | 4 G 185                    | 350 kcmil    | 69.4                | 8104.0           | 12154.0               |

