

JZ-500 / OZ-500



HELUKABEL® <VDE-REG 7032> JZ-500 25G1,5 QMM / 10110 300/500 V C E

TECHNICAL DATA

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

| | |
|-------------------------------|---|
| Temperature range | flexible -15°C to +80°C fixed -40°C to +80°C |
| Nominal voltage | AC U ₀ /U 300/500 V |
| Test voltage core/core | 4000 V |
| Breakdown voltage | 8000 V |
| Minimum bending radius | flexible 7,5x Outer-Ø fixed 4x Outer-Ø |

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 class 5 / IEC 60228 class 5
- 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 optimal lay lengths
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: grey (RAL 7001)
- Length marking: in metres

PROPERTIES

| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|
| 10001 | 2 x 0.5 | 20 | 4.8 | 9.6 | 40.0 |
| 10002 | 3 G 0.5 | 20 | 5.1 | 14.4 | 46.0 |
| 10003 | 3 x 0.5 | 20 | 5.1 | 14.4 | 46.0 |
| 10004 | 4 G 0.5 | 20 | 5.5 | 19.0 | 56.0 |
| 10005 | 4 x 0.5 | 20 | 5.5 | 19.0 | 56.0 |
| 10006 | 5 G 0.5 | 20 | 6.2 | 24.0 | 65.0 |
| 10007 | 5 x 0.5 | 20 | 6.2 | 24.0 | 65.0 |
| 10008 | 6 G 0.5 | 20 | 6.7 | 29.0 | 75.0 |
| 10009 | 7 G 0.5 | 20 | 6.7 | 33.6 | 80.0 |
| 10010 | 7 x 0.5 | 20 | 6.7 | 33.6 | 80.0 |
| 10011 | 8 G 0.5 | 20 | 7.4 | 38.0 | 97.0 |
| 10172 | 8 x 0.5 | 20 | 7.4 | 38.0 | 97.0 |
| 10012 | 10 G 0.5 | 20 | 8.6 | 48.0 | 116.0 |
| 10013 | 12 G 0.5 | 20 | 9.1 | 58.0 | 135.0 |
| 10014 | 12 x 0.5 | 20 | 9.1 | 58.0 | 135.0 |
| 10015 | 14 G 0.5 | 20 | 9.5 | 67.0 | 150.0 |
| 10183 | 16 G 0.5 | 20 | 10.0 | 76.0 | 175.0 |
| 10016 | 18 G 0.5 | 20 | 10.7 | 86.0 | 196.0 |
| 10017 | 20 G 0.5 | 20 | 11.3 | 96.0 | 215.0 |
| 10018 | 21 G 0.5 | 20 | 11.3 | 101.0 | 240.0 |
| 10019 | 25 G 0.5 | 20 | 12.6 | 120.0 | 270.0 |
| 10020 | 30 G 0.5 | 20 | 13.5 | 144.0 | 310.0 |
| 10021 | 32 G 0.5 | 20 | 14.0 | 154.0 | 323.0 |
| 10022 | 34 G 0.5 | 20 | 14.7 | 163.0 | 362.0 |

- largely resistant to: oil, for details, see "Technical Information"
- conditionally suitable for drag chains
- conditionally torsional
- 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

APPLICATION

Used for flexible applications involving medium mechanical stress with free movement, without tensile stress and without forced motion control in dry, damp and wet rooms, however, not suitable for outdoor use. Used as a connection and control cable in machine tools, assembly lines and conveyor belts, production lines, in plant construction, air-conditioning technology, in smelters and steel mills. Select PVC compounds guarantee good flexibility, efficient and quick installation.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- please note "cleanroom qualification" in your order
- VDE-Reg.-No. 7032

| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|
| 10023 | 40 G 0.5 | 20 | 15.3 | 192.0 | 434.0 |
| 10024 | 42 G 0.5 | 20 | 15.8 | 202.0 | 449.0 |
| 10025 | 50 G 0.5 | 20 | 17.3 | 240.0 | 513.0 |
| 10169 | 52 G 0.5 | 20 | 17.3 | 252.0 | 534.0 |
| 10026 | 61 G 0.5 | 20 | 18.5 | 293.0 | 625.0 |
| 10027 | 65 G 0.5 | 20 | 19.2 | 312.0 | 682.0 |
| 10028 | 80 G 0.5 | 20 | 21.3 | 384.0 | 780.0 |
| 10029 | 100 G 0.5 | 20 | 23.8 | 480.0 | 980.0 |
| 10030 | 2 x 0.75 | 19 | 5.3 | 14.4 | 46.0 |
| 10031 | 3 G 0.75 | 19 | 5.6 | 21.6 | 54.0 |
| 10032 | 3 x 0.75 | 19 | 5.6 | 21.6 | 54.0 |
| 10033 | 4 G 0.75 | 19 | 6.3 | 28.8 | 66.0 |
| 10034 | 4 x 0.75 | 19 | 6.3 | 28.8 | 66.0 |
| 10035 | 5 G 0.75 | 19 | 6.9 | 36.0 | 80.0 |
| 10036 | 5 x 0.75 | 19 | 6.9 | 36.0 | 80.0 |
| 10037 | 6 G 0.75 | 19 | 7.7 | 43.0 | 99.0 |
| 10177 | 6 x 0.75 | 19 | 7.7 | 43.0 | 99.0 |
| 10038 | 7 G 0.75 | 19 | 7.7 | 50.0 | 110.0 |
| 10039 | 7 x 0.75 | 19 | 7.7 | 50.0 | 110.0 |
| 10040 | 8 G 0.75 | 19 | 8.3 | 58.0 | 130.0 |
| 10173 | 8 x 0.75 | 19 | 8.3 | 58.0 | 130.0 |
| 10041 | 9 G 0.75 | 19 | 9.1 | 65.0 | 153.0 |
| 10042 | 10 G 0.75 | 19 | 9.8 | 72.0 | 162.0 |
| 10043 | 12 G 0.75 | 19 | 10.1 | 86.0 | 179.0 |

Continued on next page

JZ-500 / OZ-500



| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|
| 10044 | 12 x 0.75 | 19 | 10.1 | 86.0 | 179.0 |
| 10045 | 14 G 0.75 | 19 | 10.8 | 101.0 | 214.0 |
| 10046 | 15 G 0.75 | 19 | 11.4 | 108.0 | 218.0 |
| 10047 | 18 G 0.75 | 19 | 12.2 | 130.0 | 257.0 |
| 10533 | 19 G 0.75 | 19 | 12.2 | 137.0 | 264.0 |
| 10048 | 20 G 0.75 | 19 | 12.8 | 144.0 | 286.0 |
| 10049 | 21 G 0.75 | 19 | 12.8 | 151.0 | 320.0 |
| 10050 | 25 G 0.75 | 19 | 14.3 | 180.0 | 365.0 |
| 10534 | 27 G 0.75 | 19 | 14.5 | 195.0 | 382.0 |
| 10051 | 32 G 0.75 | 19 | 15.9 | 230.0 | 455.0 |
| 10052 | 34 G 0.75 | 19 | 16.7 | 245.0 | 510.0 |
| 10182 | 37 G 0.75 | 19 | 16.7 | 266.0 | 537.0 |
| 10053 | 40 G 0.75 | 19 | 17.3 | 288.0 | 595.0 |
| 10054 | 41 G 0.75 | 19 | 18.1 | 296.0 | 607.0 |
| 10055 | 42 G 0.75 | 19 | 18.1 | 302.0 | 612.0 |
| 10056 | 50 G 0.75 | 19 | 19.8 | 360.0 | 735.0 |
| 10057 | 61 G 0.75 | 19 | 21.2 | 439.0 | 845.0 |
| 10178 | 65 G 0.75 | 19 | 22.0 | 468.0 | 895.0 |
| 10058 | 80 G 0.75 | 19 | 24.3 | 576.0 | 1070.0 |
| 10059 | 100 G 0.75 | 19 | 27.1 | 720.0 | 1322.0 |
| 10060 | 2 x 1 | 18 | 5.6 | 19.2 | 60.0 |
| 10061 | 3 G 1 | 18 | 6.1 | 29.0 | 72.0 |
| 10062 | 3 x 1 | 18 | 6.1 | 29.0 | 72.0 |
| 10063 | 4 G 1 | 18 | 6.6 | 38.0 | 86.0 |
| 10064 | 4 x 1 | 18 | 6.6 | 38.0 | 86.0 |
| 10065 | 5 G 1 | 18 | 7.5 | 48.0 | 104.0 |
| 10066 | 5 x 1 | 18 | 7.5 | 48.0 | 104.0 |
| 10067 | 6 G 1 | 18 | 8.1 | 58.0 | 125.0 |
| 10068 | 7 G 1 | 18 | 8.1 | 67.0 | 141.0 |
| 10069 | 7 x 1 | 18 | 8.1 | 67.0 | 141.0 |
| 10070 | 8 G 1 | 18 | 9.0 | 77.0 | 175.0 |
| 10071 | 9 G 1 | 18 | 9.8 | 86.0 | 200.0 |
| 10180 | 10 G 1 | 18 | 10.6 | 96.0 | 217.0 |
| 10170 | 10 x 1 | 18 | 10.6 | 96.0 | 217.0 |
| 10072 | 12 G 1 | 18 | 10.9 | 115.0 | 230.0 |
| 10073 | 12 x 1 | 18 | 10.9 | 115.0 | 230.0 |
| 10074 | 14 G 1 | 18 | 11.5 | 134.0 | 271.0 |
| 10075 | 16 G 1 | 18 | 12.3 | 154.0 | 300.0 |
| 10076 | 18 G 1 | 18 | 12.9 | 173.0 | 343.0 |
| 10174 | 18 x 1 | 18 | 12.9 | 173.0 | 343.0 |
| 10197 | 19 G 1 | 18 | 12.9 | 182.0 | 355.0 |
| 10077 | 20 G 1 | 18 | 13.8 | 192.0 | 375.0 |
| 10184 | 20 x 1 | 18 | 13.8 | 192.0 | 375.0 |
| 10179 | 21 G 1 | 18 | 13.8 | 205.0 | 420.0 |
| 10175 | 24 G 1 | 18 | 15.4 | 230.0 | 440.0 |
| 10078 | 25 G 1 | 18 | 15.4 | 240.0 | 485.0 |
| 10176 | 25 x 1 | 18 | 15.4 | 240.0 | 485.0 |
| 10196 | 26 G 1 | 18 | 15.4 | 252.0 | 500.0 |
| 10198 | 27 G 1 | 18 | 15.4 | 259.0 | 534.0 |
| 10168 | 30 x 1 | 18 | 16.5 | 288.0 | 550.0 |
| 10079 | 34 G 1 | 18 | 17.9 | 326.0 | 650.0 |
| 10080 | 36 G 1 | 18 | 17.9 | 346.0 | 668.0 |
| 10199 | 37 G 1 | 18 | 17.9 | 355.0 | 701.0 |
| 10081 | 40 G 1 | 18 | 18.6 | 384.0 | 755.0 |
| 10167 | 40 x 1 | 18 | 18.6 | 384.0 | 755.0 |
| 10082 | 41 G 1 | 18 | 19.4 | 394.0 | 770.0 |
| 10083 | 42 G 1 | 18 | 19.4 | 403.0 | 810.0 |
| 10084 | 50 G 1 | 18 | 21.3 | 480.0 | 936.0 |
| 10085 | 56 G 1 | 18 | 22.1 | 538.0 | 920.0 |
| 10086 | 61 G 1 | 18 | 22.7 | 586.0 | 1100.0 |
| 10087 | 65 G 1 | 18 | 23.6 | 628.0 | 1180.0 |
| 10088 | 80 G 1 | 18 | 26.3 | 768.0 | 1294.0 |
| 10089 | 100 G 1 | 18 | 29.3 | 960.0 | 1644.0 |
| 10090 | 2 x 1.5 | 16 | 6.4 | 29.0 | 70.0 |
| 10091 | 3 G 1.5 | 16 | 6.8 | 43.0 | 90.0 |
| 10092 | 3 x 1.5 | 16 | 6.8 | 43.0 | 90.0 |

| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|
| 10093 | 4 G 1.5 | 16 | 7.6 | 58.0 | 109.0 |
| 10094 | 4 x 1.5 | 16 | 7.6 | 58.0 | 109.0 |
| 10095 | 5 G 1.5 | 16 | 8.3 | 72.0 | 131.0 |
| 10096 | 5 x 1.5 | 16 | 8.3 | 72.0 | 131.0 |
| 10097 | 6 G 1.5 | 16 | 9.2 | 86.0 | 157.0 |
| 10098 | 7 G 1.5 | 16 | 9.2 | 101.0 | 184.0 |
| 10099 | 7 x 1.5 | 16 | 9.2 | 101.0 | 184.0 |
| 10100 | 8 G 1.5 | 16 | 10.1 | 115.0 | 216.0 |
| 11007735 | 8 x 1.5 | 16 | 10.1 | 115.0 | 216.0 |
| 10101 | 9 G 1.5 | 16 | 11.1 | 129.0 | 259.0 |
| 10181 | 10 G 1.5 | 16 | 12.0 | 144.0 | 275.0 |
| 10102 | 11 G 1.5 | 16 | 12.0 | 158.0 | 300.0 |
| 10103 | 12 G 1.5 | 16 | 12.4 | 173.0 | 309.0 |
| 10104 | 12 x 1.5 | 16 | 12.4 | 173.0 | 309.0 |
| 10105 | 14 G 1.5 | 16 | 13.0 | 202.0 | 345.0 |
| 10106 | 16 G 1.5 | 16 | 13.9 | 230.0 | 386.0 |
| 10107 | 18 G 1.5 | 16 | 14.8 | 259.0 | 440.0 |
| 10185 | 19 G 1.5 | 16 | 14.8 | 279.0 | 445.0 |
| 10108 | 20 G 1.5 | 16 | 15.6 | 288.0 | 490.0 |
| 10109 | 21 G 1.5 | 16 | 15.6 | 302.0 | 555.0 |
| 10110 | 25 G 1.5 | 16 | 17.6 | 360.0 | 620.0 |
| 10535 | 27 G 1.5 | 16 | 17.6 | 389.0 | 670.0 |
| 10111 | 32 G 1.5 | 16 | 19.5 | 461.0 | 790.0 |
| 10112 | 34 G 1.5 | 16 | 20.2 | 490.0 | 830.0 |
| 10536 | 37 G 1.5 | 16 | 20.2 | 533.0 | 892.0 |
| 10113 | 41 G 1.5 | 16 | 22.1 | 591.0 | 996.0 |
| 10114 | 42 G 1.5 | 16 | 22.1 | 605.0 | 1007.0 |
| 10115 | 50 G 1.5 | 16 | 24.2 | 720.0 | 1250.0 |
| 10116 | 56 G 1.5 | 16 | 25.1 | 806.0 | 1332.0 |
| 10117 | 61 G 1.5 | 16 | 25.8 | 878.0 | 1440.0 |
| 10187 | 65 G 1.5 | 16 | 26.9 | 936.0 | 1602.0 |
| 10118 | 80 G 1.5 | 16 | 29.8 | 1152.0 | 1871.0 |
| 10119 | 100 G 1.5 | 16 | 33.2 | 1440.0 | 2353.0 |
| 10120 | 2 x 2.5 | 14 | 7.8 | 48.0 | 112.0 |
| 10121 | 3 G 2.5 | 14 | 8.3 | 72.0 | 148.0 |
| 10122 | 3 x 2.5 | 14 | 8.3 | 72.0 | 148.0 |
| 10123 | 4 G 2.5 | 14 | 9.2 | 96.0 | 178.0 |
| 10124 | 4 x 2.5 | 14 | 9.2 | 96.0 | 178.0 |
| 10125 | 5 G 2.5 | 14 | 10.1 | 120.0 | 221.0 |
| 10126 | 5 x 2.5 | 14 | 10.1 | 120.0 | 221.0 |
| 10127 | 7 G 2.5 | 14 | 11.2 | 168.0 | 306.0 |
| 10128 | 7 x 2.5 | 14 | 11.2 | 168.0 | 306.0 |
| 10129 | 8 G 2.5 | 14 | 12.3 | 192.0 | 363.0 |
| 11007736 | 8 x 2.5 | 14 | 12.3 | 192.0 | 363.0 |
| 10548 | 10 G 2.5 | 14 | 14.8 | 240.0 | 429.0 |
| 10130 | 12 G 2.5 | 14 | 15.3 | 288.0 | 498.0 |
| 10131 | 14 G 2.5 | 14 | 16.2 | 336.0 | 569.0 |
| 10132 | 18 G 2.5 | 14 | 18.2 | 432.0 | 764.0 |
| 10133 | 21 G 2.5 | 14 | 19.4 | 504.0 | 914.0 |
| 10134 | 25 G 2.5 | 14 | 21.6 | 600.0 | 1044.0 |
| 10135 | 34 G 2.5 | 14 | 25.2 | 816.0 | 1470.0 |
| 10136 | 42 G 2.5 | 14 | 27.3 | 1008.0 | 1790.0 |
| 10137 | 50 G 2.5 | 14 | 30.0 | 1200.0 | 2095.0 |
| 10138 | 61 G 2.5 | 14 | 32.2 | 1464.0 | 2750.0 |
| 10139 | 100 G 2.5 | 14 | 41.4 | 2400.0 | 4450.0 |
| 10140 | 2 x 4 | 12 | 9.2 | 77.0 | 195.0 |
| 10141 | 3 G 4 | 12 | 9.7 | 115.0 | 230.0 |
| 10142 | 4 G 4 | 12 | 10.8 | 154.0 | 295.0 |
| 10143 | 5 G 4 | 12 | 12.1 | 192.0 | 361.0 |
| 10144 | 7 G 4 | 12 | 13.4 | 269.0 | 458.0 |
| 10145 | 8 G 4 | 12 | 14.7 | 307.0 | 590.0 |
| 10549 | 10 G 4 | 12 | 17.6 | 384.0 | 687.0 |
| 10146 | 12 G 4 | 12 | 18.2 | 461.0 | 790.0 |
| 10147 | 3 G 6 | 10 | 11.9 | 173.0 | 355.0 |
| 10148 | 4 G 6 | 10 | 13.2 | 230.0 | 424.0 |
| 10149 | 5 G 6 | 10 | 14.7 | 288.0 | 525.0 |

05.11.2020 / We reserve the right to make technical changes; the imprint in the image is purely exemplary

Continued on next page

JZ-500 / OZ-500



| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|
| 10150 | 7 G 6 | 10 | 16.2 | 403.0 | 625.0 |
| 10151 | 3 G 10 | 8 | 14.8 | 288.0 | 540.0 |
| 10152 | 4 G 10 | 8 | 16.4 | 384.0 | 701.0 |
| 10153 | 5 G 10 | 8 | 18.3 | 480.0 | 858.0 |
| 10154 | 7 G 10 | 8 | 20.2 | 672.0 | 1106.0 |
| 10190 | 3 G 16 | 6 | 18.4 | 461.0 | 827.0 |
| 10155 | 4 G 16 | 6 | 20.4 | 614.0 | 1035.0 |
| 10156 | 5 G 16 | 6 | 22.8 | 768.0 | 1259.0 |
| 10157 | 7 G 16 | 6 | 25.2 | 1075.0 | 1780.0 |
| 10191 | 3 G 25 | 4 | 22.4 | 720.0 | 1186.0 |
| 10158 | 4 G 25 | 4 | 25.1 | 960.0 | 1582.0 |
| 10159 | 5 G 25 | 4 | 27.9 | 1200.0 | 1999.0 |
| 10160 | 7 G 25 | 4 | 30.8 | 1680.0 | 2825.0 |
| 10192 | 3 G 35 | 2 | 25.2 | 1008.0 | 1585.0 |

| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|-----------------|-----------------------|
| 10161 | 4 G 35 | 2 | 27.9 | 1344.0 | 2105.0 |
| 10162 | 5 G 35 | 2 | 31.0 | 1680.0 | 2633.0 |
| 10193 | 3 G 50 | 1 | 29.9 | 1440.0 | 2550.0 |
| 10163 | 4 G 50 | 1 | 33.0 | 1920.0 | 2940.0 |
| 10188 | 5 G 50 | 1 | 37.0 | 2400.0 | 2936.0 |
| 10194 | 3 G 70 | 2/0 | 34.1 | 2016.0 | 3180.0 |
| 10164 | 4 G 70 | 2/0 | 37.9 | 2688.0 | 4090.0 |
| 10189 | 5 G 70 | 2/0 | 42.4 | 3360.0 | 5443.0 |
| 10195 | 3 G 95 | 3/0 | 39.6 | 2736.0 | 4680.0 |
| 10165 | 4 G 95 | 3/0 | 43.9 | 3648.0 | 5540.0 |
| 10333 | 5 G 95 | 3/0 | 49.0 | 4560.0 | 6931.0 |
| 10166 | 4 G 120 | 4/0 | 48.8 | 4608.0 | 7000.0 |
| 13139 | 4 G 150 | 300 kcmil | 54.4 | 5760.0 | 8340.0 |
| 13140 | 4 G 185 | 350 kcmil | 62.3 | 7104.0 | 9904.0 |