

SY-JZ

PVC, Black Cores, Steel Shield, 300/500V



SY-JZ (OZ) is oil-resistant PVC power and control cable with a galvanized steel wire braid. Suitable for fixed or flexible applications. Commonly used as a measuring, regulating and control cable used in machine tool, plant engineering and construction, conveying and transport systems, assembly and production lines, air conditioning, ventilation systems and paint spray lines. Designed for free and unrestricted movements without exposure to tensile loads. The galvanized steel braid offers mechanical protection from adverse operating conditions while providing partial shielding from electromagnetic interference (EMI). Outdoor use is not permitted.

► **Construction:**

- Fine bare copper strands
- Strands to VDE-0295 Class-5, IEC 60228 CI-5
- Special PVC core insulation
- Color code VDE-0293 - black & numbered
- Gray PVC inner jacket
- 65% Galvanized Steel Braid
- Transparent PVC outer jacket
- "OZ" denotes no ground wire
- *Extremely oil & chemical resistant*

► **Technical:**

- Working voltage: 300/500 volts
- Test voltage: 4000 volts
- Flexing bending radius: 20 x Ø
- Static bending radius: 6 x Ø
- Flexing temp: -5° C to +70° C
- Static temp: -30° C to +80° C
- Flame retardant: IEC 60332.1
- Insulation resistance: >20 MΩ x km

► **Approvals:**

- VDE-0245, 0281, 0293, 0295
- CE Low Voltage Directive 73/23/EEC and 93/68/EEC
- ROHS compliant

| PART NUMBER | CORES | NOMINAL OD (in) | NOMINAL OD (mm) | CU LBS/ MFT | WT LBS/ MFT |
|--|-------|--------------------|--------------------|----------------|----------------|
| 20 AWG (16/32) 0,50mm² | | | | | |
| 1222002 | OZ 2 | 0.276" | 7.0mm | 6 | 58 |
| 1232003 | 3 | 0.295" | 7.5mm | 10 | 64 |
| 1232004 | 4 | 0.311" | 7.9mm | 13 | 72 |
| 1232005 | 5 | 0.343" | 8.7mm | 16 | 82 |
| 1232007 | 7 | 0.394" | 10.0mm | 23 | 99 |
| 1232010 | 10 | 0.437" | 11.1mm | 32 | 131 |
| 1232012 | 12 | 0.456" | 11.6mm | 39 | 146 |
| 1232014 | 14 | 0.472" | 12.0mm | 46 | 162 |
| 1232018 | 18 | 0.531" | 13.5mm | 58 | 195 |
| 1232021 | 21 | 0.598" | 15.2mm | 68 | 226 |
| 1232025 | 25 | 0.630" | 16.0mm | 80 | 251 |
| 1232030 | 30 | 0.650" | 16.5mm | 97 | 294 |
| 1232035 | 35 | 0.705" | 17.9mm | 109 | 335 |
| 1232040 | 40 | 0.748" | 19mm | 129 | 379 |
| 1232052 | 52 | 0.815" | 20.7mm | 161 | 463 |
| 1232061 | 61 | 0.909" | 23.1mm | 196 | 565 |
| 1232080 | 80 | 1.011" | 25.7mm | 257 | 704 |
| 18 AWG (24/32) 0,75mm² | | | | | |
| 1221802 | OZ 2 | 0.311" | 7.9mm | 10 | 65 |
| 1231803 | 3 | 0.319" | 8.1mm | 14 | 72 |
| 1231804 | 4 | 0.343" | 8.7mm | 19 | 90 |
| 1231805 | 5 | 0.374" | 9.5mm | 24 | 98 |
| 1231807 | 7 | 0.413" | 10.5mm | 35 | 115 |
| 1231809 | 9 | 0.469" | 11.9mm | 44 | 150 |
| 1231810 | 10 | 0.484" | 12.3mm | 48 | 149 |
| 1231812 | 12 | 0.508" | 12.9mm | 58 | 176 |
| 1231815 | 15 | 0.555" | 14.1mm | 72 | 211 |
| 1231818 | 18 | 0.579" | 14.7mm | 87 | 238 |
| 1231821 | 21 | 0.650" | 16.5mm | 101 | 284 |
| 1231825 | 25 | 0.685" | 17.4mm | 121 | 312 |
| 1231834 | 34 | 0.776" | 19.7mm | 164 | 400 |
| 1231841 | 41 | 0.850" | 21.6mm | 198 | 497 |
| 1231850 | 50 | 0.944" | 24.0mm | 241 | 620 |
| 1231861 | 61 | 0.999" | 25.4mm | 294 | 726 |
| 17 AWG (32/32) 1,00mm² | | | | | |
| 1221702 | OZ 2 | 0.331" | 8.4mm | 13 | 71 |
| 1231703 | 3 | 0.339" | 8.6mm | 19 | 80 |
| 1231704 | 4 | 0.362" | 9.2mm | 26 | 95 |
| 1231705 | 5 | 0.398" | 10.1mm | 32 | 110 |
| 1231707 | 7 | 0.445" | 11.3mm | 45 | 134 |
| 1231712 | 12 | 0.543" | 13.8mm | 77 | 207 |
| 1231714 | 14 | 0.559" | 14.2mm | 103 | 231 |
| 1231718 | 18 | 0.626" | 15.9mm | 116 | 282 |
| 1231720 | 20 | 0.654" | 16.6mm | 129 | 330 |
| 1231725 | 25 | 0.720" | 18.3mm | 161 | 367 |
| 1231734 | 34 | 0.815" | 20.7mm | 219 | 496 |

Sizes continued on next page.

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SY-JZ Sizes Continued. (17 AWG to 10 AWG)

| PART NUMBER | CORES | NOMINAL OD (in) | NOMINAL OD (mm) | CU LBS/ MFT | WT LBS/ MFT |
|--|-------|--------------------|--------------------|----------------|----------------|
| 1231736 | 36 | 0.906" | 23.0mm | 232 | 575 |
| 1231741 | 41 | 0.984" | 25.0mm | 264 | 666 |
| 1231750 | 50 | 1.000" | 25.4mm | 322 | 746 |
| 1231756 | 56 | 1.024" | 26.0mm | 361 | 821 |
| 1231761 | 61 | 1.071" | 27.2mm | 393 | 876 |
| 1231765 | 65 | 1.118" | 28.4mm | 418 | 1033 |
| 1231780 | 80 | 1.217" | 30.9mm | 527 | 1173 |
| 1231700 | 100 | 1.386" | 35.2mm | 644 | 1308 |
| 16 AWG (30/30) 1,50mm² | | | | | |
| 1221602 | OZ 2 | 0.358" | 9.1mm | 19 | 86 |
| 1231603 | 3 | 0.374" | 9.5mm | 29 | 101 |
| 1231604 | 4 | 0.398" | 10.1mm | 39 | 116 |
| 1231605 | 5 | 0.433" | 11.0mm | 48 | 135 |
| 1231607 | 7 | 0.472" | 12.0mm | 68 | 166 |
| 1231608 | 8 | 0.496" | 12.6mm | 77 | 202 |
| 1231609 | 9 | 0.520" | 13.2mm | 87 | 205 |
| 1231610 | 10 | 0.571" | 14.5mm | 97 | 240 |
| 1231612 | 12 | 0.606" | 15.4mm | 116 | 266 |
| 1231614 | 14 | 0.654" | 16.6mm | 135 | 294 |
| 1231618 | 18 | 0.693" | 17.6mm | 174 | 361 |
| 1231625 | 25 | 0.803" | 20.4mm | 241 | 478 |
| 1231632 | 32 | 0.988" | 25.1mm | 309 | 681 |
| 1231634 | 34 | 0.921" | 23.4mm | 329 | 633 |
| 1231642 | 42 | 1.063" | 27.0mm | 412 | 813 |
| 1231650 | 50 | 1.102" | 28.0mm | 483 | 934 |
| 1231661 | 61 | 1.252" | 31.8mm | 589 | 1214 |
| 1231680 | 80 | 1.433" | 36.4mm | 772 | 1553 |
| 1231600 | 100 | 1.630" | 41.4mm | 966 | 1945 |
| 14 AWG (50/30) 2,50mm² | | | | | |
| 1221402 | OZ 2 | 0.409" | 10.4mm | 32 | 111 |
| 1231403 | 3 | 0.453" | 11.5mm | 48 | 138 |
| 1231404 | 4 | 0.488" | 12.4mm | 64 | 167 |
| 1231405 | 5 | 0.516" | 13.1mm | 80 | 198 |
| 1231407 | 7 | 0.579" | 14.7mm | 113 | 250 |
| 1231412 | 12 | 0.736" | 18.7mm | 193 | 393 |
| 1231414 | 14 | 0.783" | 19.9mm | 225 | 438 |
| 1231418 | 18 | 0.831" | 21.1mm | 290 | 552 |
| 1231425 | 25 | 0.996" | 25.3mm | 402 | 733 |
| 1231430 | 30 | 1.181" | 30.0mm | 483 | 1131 |
| 1231434 | 34 | 1.303" | 33.1mm | 547 | 1253 |
| 1231450 | 50 | 1.551" | 39.4mm | 805 | 1475 |
| 1231461 | 61 | 1.634" | 41.5mm | 982 | 2012 |
| 12 AWG (56/28) 4,00mm² | | | | | |
| 1231203 | 3 | 0.496" | 12.6mm | 78 | 191 |
| 1231204 | 4 | 0.555" | 14.1mm | 103 | 233 |
| 1231205 | 5 | 0.630" | 16.0mm | 129 | 275 |
| 1231207 | 7 | 0.665" | 16.9mm | 180 | 348 |
| 10 AWG (84/28) 6,00mm² | | | | | |
| 1231004 | 4 | 0.650" | 16.5mm | 154 | 323 |
| 1231005 | 5 | 0.697" | 17.7mm | 193 | 388 |
| 1231007 | 7 | 0.768" | 19.5mm | 270 | 496 |
| 8 AWG (80/26) 10,0mm² | | | | | |
| 1230804 | 4 | 0.795" | 20.2mm | 257 | 525 |



Sizes continued on next page.

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**SY-JZ Sizes Continued. (8 AWG to Larger)**

| PART NUMBER | CORES | NOMINAL OD (in) | NOMINAL OD (mm) | CU LBS/ MFT | WT LBS/ MFT |
|---|-------|--------------------|--------------------|----------------|----------------|
| 1230805 | 5 | 0.890" | 22.6mm | 322 | 634 |
| 1230807 | 7 | 0.972" | 24.7mm | 451 | 871 |
| 6 AWG (128/26) 16,0mm² | | | | | |
| 1230604 | 4 | 0.906" | 23.0mm | 412 | 928 |
| 1230605 | 5 | 1.020" | 25.9mm | 515 | 1167 |
| 1230607 | 7 | 1.142" | 29.0mm | 721 | 1243 |
| 4 AWG (200/26) 25,0mm² | | | | | |
| 1230404 | 4 | 1.220" | 31.0mm | 644 | 1153 |
| 1230405 | 5 | 1.437" | 36.5mm | 805 | 1428 |
| 2 AWG (280/26) 35,0mm² | | | | | |
| 1230204 | 4 | 1.417" | 36.0mm | 901 | 1526 |
| 1230205 | 5 | 1.602" | 40.7mm | 1127 | 1870 |
| 1 AWG (400/26) 50,0mm² | | | | | |
| 1230104 | 4 | 1.673" | 42.5mm | 1287 | 2213 |
| 1230105 | 5 | 1.701" | 43.2mm | 1610 | 2849 |
| 2/0 AWG (356/24) 70,0mm² | | | | | |
| 1232104 | 4 | 2.063" | 52.4mm | 1802 | 2958 |
| 1232105 | 5 | 2.039" | 51.8mm | 2254 | 3944 |
| 3/0 AWG (485/24) 95,0mm² | | | | | |
| 1233104 | 4 | 2.268" | 57.6mm | 2446 | 3512 |
| 1233105 | 5 | 2.220" | 56.4mm | 3059 | 5413 |
| 4/0 AWG (614/24) 120,0mm² | | | | | |
| 1234104 | 4 | 2.217" | 56.3mm | 3091 | 5480 |
| 300 MCM (765/24) 150,0mm² | | | | | |
| 1233004 | 4 | 2.500" | 63.5mm | 3863 | 6687 |