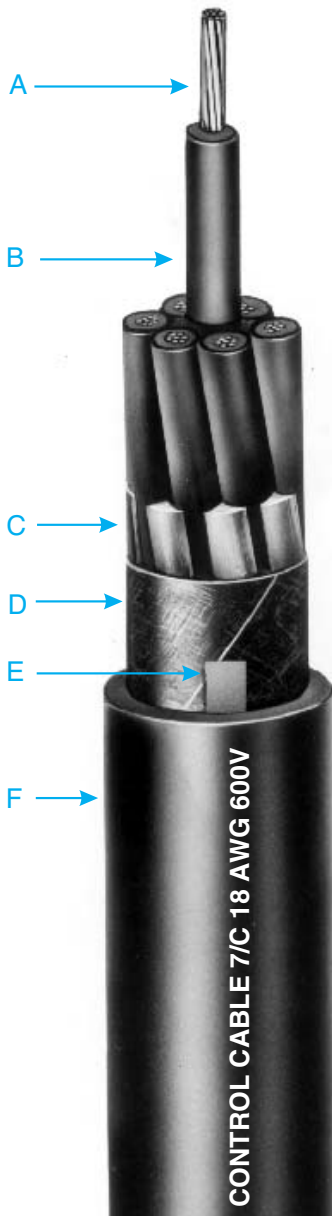




Okozel-Okozel[®] Control Cable

600 Volt Control Cable

Multiple Copper Conductors/150°C Rating
For Central Station Applications



- A Bare, Stranded Copper Conductors
- B Okozel Insulation
- C Fiberglass Fillers, as required
- D Binder Tape
- E Marker Tape
- F Okozel Jacket

Insulation

Okozel is Okonite's trade name for ETFE Fluoropolymer, a modified Ethylene Tetrafluoroethylene. Okozel is extremely rugged with excellent resistance to cut-through and abrasion. It is chemically inert and has low permeability. Okozel is flame retardant and non-propagating, passes the IEEE 383 and UL vertical tray flame test, and is rated "non-burning" under ASTM D635. It is rated for 150°C (302°F) conductor operating temperature for continuous use and retains all useful physical properties at temperatures down to -100°F (-148°C).

Specifications

Conductors: Bare copper per ASTM B-3, stranded per ASTM B-8.

Insulation: Flame-retardant, radiation-resistant Okozel, a modified ETFE fluoropolymer per NEMA Std. HP-100.2.

Insulated conductor is rated "non-burning" under ASTM D635.

Conductor Identification: Base colors with traces in accordance with ICEA S-73-532, Method 1. See table on back of sheet.

Assembly: Conductors cabled together in accordance with ICEA S-73-532; with non-hygroscopic fillers as required; and a binder tape overall.

Jacket: Flame-retardant, fuel and chemical-resistant Okozel.

Cable meets or exceeds the requirements of IEEE Std. 383, Type Test of Class IE Electric Cables for Nuclear Power Generating Stations and is rated "non-burning" under ASTM D635.

Applications

Okozel control cables are recommended for use in fossil fueled generating stations where continuity of service in critical circuits is of primary importance. These conductors, which are rated 150°C in dry locations and 75°C in wet locations, permit smaller conduit use through higher ampacities

and thinner insulation walls than comparable XLPE or rubber constructions.

Okozel control cables are also recommended for high ambient temperature areas up to 150°C (302°F) in industrial applications or for cold weather installations to -65°C (-85°F).

Product Features

- Passes the Vertical Tray Flame Test requirements of UL 1581 at 70,000 Btu/hr, ICEA T-29-520 210,000 Btu/Hr., and IEEE 1202-1991.
- 150°C continuous operating temperature.
- Low smoke emission.
- Low surface friction provides easier installation.
- Smaller and lighter diameter permits more cables per tray.
- Cold installation temperature in excess of -65°C.
- Exceptional abrasion resistance, will not cut or tear.
- Chemically inert-unaffected by typical acids, bases, solvents and cleaning agents, fuels and hydraulic fluids.
- High dielectric strength.
- Low dielectric constant.
- Special designs available that are qualified for nuclear generating stations at 90°C in accordance with IEEE Standards 383-74 and 323-74.

Okozel-Okozel Control Cable

600 Volt Control Cable

Multiple Copper Conductors/150°C Rating
For Central Station Applications

Product Data Section 4: Sheet 23

| Catalog Number | Conductor Size (AWG) | Number of Conductors | Insulation Thickness - mils | Jacket Thickness - mils | Jacket Thickness - mm | Approx. O.D. - Inches | Approx. O.D. - mm | Cross-Sectional Area (sq. in.) | Approx. Net Weight (lbs/1000') | Approx. Ship Weight (lbs/1000') | Ampacity 150°C Dry | |
|----------------|---------------------------------|----------------------|-----------------------------|-------------------------|-----------------------|-----------------------|-------------------|--------------------------------|--------------------------------|---------------------------------|--------------------|----|
| 203-76-3152 | 18 (7x) 0.82 mm ² | 2 | 15 | 0.76 | 0.20 | 5.0 | 0.03 | 28 | 39 | 18 | 15 | |
| 203-76-3153 | | 3 | | 0.76 | 0.21 | 5.3 | 0.03 | 35 | 40 | 18 | | |
| 203-76-3154 | | 4 | | 0.76 | 0.23 | 5.8 | 0.04 | 45 | 49 | 14 | | |
| 203-76-3155 | 18 (7x) 0.82 mm ² | 5 | 15 | 0.76 | 0.25 | 6.4 | 0.05 | 53 | 58 | 14 | 15 | |
| 203-76-3157 | | 7 | | 0.76 | 0.27 | 7.0 | 0.06 | 70 | 74 | 12 | | |
| 203-76-3159 | | 9 | | 0.76 | 0.32 | 8.2 | 0.08 | 83 | 94 | 12 | | |
| 203-76-3162 | 18 (7x) 0.82 mm ² | 12 | 15 | 0.76 | 0.37 | 9.3 | 0.10 | 112 | 123 | 12 | 15 | |
| 203-76-3169 | | 19 | | 0.76 | 0.43 | 10.9 | 0.15 | 166 | 189 | 12 | | |
| 203-76-3187 | | 37 | | 0.89 | 0.60 | 15.2 | 0.28 | 321 | 345 | 10 | | |
| 203-76-3252 | 16 (7x) 1.31 mm ² | 2 | 15 | 0.76 | 0.22 | 5.6 | 0.04 | 37 | 42 | 23 | 15 | |
| 203-76-3253 | | 3 | | 0.76 | 0.24 | 6.0 | 0.04 | 48 | 53 | 23 | | |
| 203-76-3254 | | 4 | | 0.76 | 0.26 | 6.6 | 0.05 | 61 | 66 | 18 | | |
| 203-76-3255 | 16 (7x) 1.31 mm ² | 5 | 15 | 0.76 | 0.28 | 7.2 | 0.06 | 74 | 79 | 18 | 15 | |
| 203-76-3257 | | 7 | | 0.76 | 0.31 | 7.9 | 0.08 | 97 | 102 | 16 | | |
| 203-76-3259 | | 9 | | 0.76 | 0.37 | 9.3 | 0.11 | 117 | 128 | 16 | | |
| 203-76-3262 | 16 (7x) 1.31 mm ² | 12 | 15 | 0.76 | 0.42 | 10.5 | 0.14 | 158 | 181 | 16 | 15 | |
| 203-76-3269 | | 19 | | 0.89 | 0.50 | 12.7 | 0.20 | 243 | 266 | 16 | | |
| 203-76-3287 | | 37 | | 0.89 | 0.68 | 17.3 | 0.37 | 459 | 491 | 13 | | |
| 203-76-3352 | 14 (7x) 2.08 mm ² | 2 | 15 | 0.76 | 0.25 | 6.3 | 0.05 | 53 | 57 | 29 | 15 | |
| 203-76-3353 | | 3 | | 0.76 | 0.27 | 6.7 | 0.06 | 68 | 73 | 29 | | |
| 203-76-3354 | | 4 | | 0.76 | 0.29 | 7.4 | 0.07 | 87 | 92 | 23 | | |
| 203-76-3355 | 14 (7x) 2.08 mm ² | 5 | 15 | 0.76 | 0.32 | 8.2 | 0.08 | 106 | 117 | 23 | 15 | |
| 203-76-3357 | | 7 | | 0.76 | 0.35 | 9.0 | 0.10 | 140 | 151 | 20 | | |
| 203-76-3359 | | 9 | | 0.76 | 0.42 | 10.6 | 0.14 | 170 | 193 | 20 | | |
| 203-76-3362 | 14 (7x) 2.08 mm ² | 12 | 15 | 0.89 | 0.48 | 12.3 | 0.18 | 236 | 259 | 20 | 15 | |
| 203-76-3369 | | 19 | | 0.89 | 0.57 | 14.5 | 0.26 | 354 | 386 | 20 | | |
| 203-76-3387 | | 37 | | 1.27 | 0.79 | 20.1 | 0.49 | 683 | 738 | 17 | | |
| 203-76-3452 | 12 (7x) 3.31 mm ² | 2 | 15 | 0.76 | 0.28 | 7.2 | 0.06 | 74 | 79 | 36 | 15 | |
| 203-76-3453 | | 3 | | 0.76 | 0.30 | 7.7 | 0.07 | 98 | 103 | 36 | | |
| 203-76-3454 | | 4 | | 0.76 | 0.34 | 8.5 | 0.09 | 126 | 137 | 29 | | |
| 203-76-3455 | 12 (7x) 3.31 mm ² | 5 | 15 | 0.76 | 0.37 | 9.4 | 0.11 | 154 | 165 | 29 | 15 | |
| 203-76-3457 | | 7 | | 0.76 | 0.41 | 10.3 | 0.13 | 206 | 229 | 25 | | |
| 203-76-3459 | | 9 | | 0.89 | 0.49 | 12.5 | 0.19 | 257 | 280 | 25 | | |
| 203-76-3462 | 12 (7x) 3.31 mm ² | 12 | 15 | 0.89 | 0.56 | 14.2 | 0.25 | 347 | 371 | 25 | 15 | |
| 203-76-3469 | | 19 | | 0.89 | 0.65 | 16.5 | 0.34 | 515 | 547 | 25 | | |
| 203-76-3487 | | 37 | | 1.27 | 0.92 | 23.3 | 0.66 | 1014 | 1069 | 21 | | |
| 203-76-3552 | 10 (7x) 5.26 mm ² | 2 | 20 | 0.76 | 0.36 | 9.1 | 0.10 | 115 | 127 | 51 | 15 | |
| 203-76-3553 | | 3 | | 0.76 | 0.38 | 9.7 | 0.11 | 154 | 165 | 51 | | |
| 203-76-3554 | | 4 | | 0.76 | 0.42 | 10.7 | 0.14 | 200 | 223 | 41 | | |
| 203-76-3555 | 10 (7x) 5.26 mm ² | 5 | 20 | 0.76 | 0.47 | 11.9 | 0.17 | 245 | 267 | 41 | 15 | |
| 203-76-3557 | | 7 | | 0.89 | 0.53 | 13.4 | 0.22 | 317 | 340 | 36 | | |
| 203-76-3559 | | 9 | | 0.89 | 0.62 | 15.8 | 0.30 | 405 | 437 | 36 | | |
| 203-76-3562 | 10 (7x) 5.26 mm ² | 12 | 20 | 0.89 | 0.71 | 18.0 | 0.39 | 550 | 582 | 36 | 15 | |
| 203-76-3652 | | 2 | | 25 | 0.76 | 0.40 | 10.2 | 0.13 | 146 | 169 | | 67 |
| 203-76-3653 | | 3 | | | 0.76 | 0.43 | 11.0 | 0.15 | 195 | 218 | | 67 |
| 203-76-3654 | 4 | 0.89 | 0.49 | | 12.4 | 0.19 | 260 | 283 | 53 | | | |
| 203-76-3655 | 9 (7x) 6.63 mm ² | 5 | 25 | 0.89 | 0.54 | 13.7 | 0.23 | 320 | 346 | 53 | 15 | |
| 203-76-3657 | | 7 | | 0.89 | 0.59 | 15.1 | 0.28 | 423 | 455 | 46 | | |
| 203-76-3659 | | 9 | | 0.89 | 0.71 | 17.9 | 0.39 | 514 | 546 | 46 | | |
| 203-76-3662 | 9 (7x) 6.63 mm ² | 12 | 25 | 1.27 | 0.82 | 20.7 | 0.52 | 710 | 749 | 46 | 15 | |

| COLOR CODE | | |
|--------------|------------|--------------|
| No. of Cond. | Base Color | Tracer Color |
| 1 | Black | — |
| 2 | White | — |
| 3 | Red | — |
| 4 | Green | — |
| 5 | Orange | — |
| 6 | Blue | — |
| 7 | White | Black |
| 8 | Red | Black |
| 9 | Green | Black |
| 10 | Orange | Black |
| 11 | Blue | Black |
| 12 | Black | White |
| 13 | Red | White |
| 14 | Green | White |
| 15 | Blue | White |
| 16 | Black | Red |
| 17 | White | Red |
| 18 | Orange | Red |
| 19 | Blue | Red |
| 20 | Red | Green |
| 21 | Orange | Green |

For more than 21 conductors, above colors are repeated, with an additional tracer.

Visit Okonite's web site, www.okonite.com for the most up to date dimensions.

Optional Shields

Longitudinal corrugated copper shield (LCS) or aluminum-nylon-polyester tape shield and drain wire are also available. Contact your local sales representative for details.

Ampacities

Ampacities are based on Table 310.18 of the NEC for type Z conductors rated at a continuous operating temperature of 150°C (302°F) adjusted for a multi-conductor cable in raceway in free air at an ambient temperature of 40°C (104°F).