



Draka

Power and Control Tray Cable

with THHN or THWN conductors / 14 AWG to 750 KCMIL / PVC jacket / 600 volt



Applications

For important industrial power or control circuits where small diameter, highly flame-retardant cables are desired. The cables are UL listed in accordance with Article 340 of the NEC and are approved for use where exposed to direct sunlight or directly buried.

These cables may be used for:

cable trays in accordance with NEC Article 318 (these cables meet the requirements of the 70,000 BTU/hr vertical tray flame test in UL 1277, IEEE 383 and the ICEA 70,000 and 210,000 BTU/hr vertical tray flame tests as detailed in ICEA T-29-520 and T-30-520), in Class 1 division 2 hazardous locations in accordance with Article 501, and for Class 1 control circuits in accordance with Article 725.

These cables are tough with excellent resistance to moisture and corrosion. The insulated conductors are UL listed THHN or THWN.

Features

1. CONDUCTORS

Bare soft copper per ASTM B 3, Class B concentrically stranded per ASTM B 8.

2. INSULATION

High dielectric strength heat and moisture-resistant colored polyvinylchloride (PVC) rated for continuous use at 90°C dry; 75°C wet to meet UL 83 for THHN or THWN wire.

3. CONDUCTOR JACKET

Sheathed with a clear nylon jacket meeting UL 83 for THHN or THWN.

4. CIRCUIT IDENTIFICATION

PVC insulation is coded in accordance with NEMA WC-57 Color Code.

5. ASSEMBLY

Individual conductors are cabled, with non-hygroscopic fillers where necessary, to form a round compact core and wrapped with a binder. Two conductor cables are assembled flat parallel.

6. JACKET

Abrasion, oil and chemical resistant and highly flame retardant PVC jacket to meet UL Standard 1277.

Ratings

UL Standards 83 and 1277

ICEA S-73-532 (NEMA WC-57)

ICEA T-29-520, T-30-520, IEEE 383

National Electrical Code Articles 310, 318, 340



Shield Options

Corrugated longitudinally-applied
.005 or .010 copper

Flat helically-applied .005 or .010 copper

Aluminum/mylar tape (with or without a drain wire)

Longitudinally-applied copper or aluminum
copolymer-bonded shield

Copper braid (specify percentage of coverage
for optimum EMI protection)

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| Part Number | Conductor Number | Conductor AWG | Nominal Insulation Thickness in (mm) | Ground AWG | Nominal Jacket Thickness in (mm) | Nominal Cable O.D. in (mm) | Approximate Cable Weight Lbs/Mft (Kg/Km) |
|-------------|------------------|---------------|--------------------------------------|------------|----------------------------------|----------------------------|--|
| 004023 | 2 | 14 | .015/.004 (.38/.10) | - | .045 (1.1) | .215 x .330 (5.46 x 8.38) | 57 (84) |
| 004033 | 3 | 14 | .015/.004 (.38/.10) | - | .045 (1.1) | .350 (8.89) | 79 (117) |
| 004043 | 4 | 14 | .015/.004 (.38/.10) | - | .045 (1.1) | .380 (9.65) | 99 (147) |
| 004053 | 5 | 14 | .015/.004 (.38/.10) | - | .045 (1.1) | .415 (10.54) | 119 (176) |
| 004073 | 7 | 14 | .015/.004 (.38/.10) | - | .045 (1.1) | .450 (11.43) | 147 (218) |
| 004093 | 9 | 14 | .015/.004 (.38/.10) | - | .045 (1.1) | .525 (13.44) | 199 (295) |
| 004123 | 12 | 14 | .015/.004 (.38/.10) | - | .060 (1.5) | .615 (15.62) | 275 (407) |
| 006023 | 2 | 12 | .015/.004 (.38/.10) | - | .045 (1.1) | .230 x .370 (5.84 x 9.40) | 78 (155) |
| 006033 | 3 | 12 | .015/.004 (.38/.10) | - | .045 (1.1) | .395 (10.0) | 110 (163) |
| 006043 | 4 | 12 | .015/.004 (.38/.10) | - | .045 (1.1) | .430 (10.9) | 139 (206) |
| 006053 | 5 | 12 | .015/.004 (.38/.10) | - | .045 (1.1) | .470 (11.9) | 169 (250) |
| 006073 | 7 | 12 | .015/.004 (.38/.10) | - | .045 (1.1) | .510 (13.0) | 225 (333) |
| 006093 | 9 | 12 | .015/.004 (.38/.10) | - | .060 (1.5) | .630 (16.0) | 304 (500) |
| 006123 | 12 | 12 | .015/.004 (.38/.10) | - | .060 (1.5) | .700 (17.8) | 393 (582) |
| 008023 | 2 | 10 | .020/.004 (.50/.10) | - | .045 (1.1) | .265 x .440 (6.73 x 11.2) | 115 (170) |
| 008033 | 3 | 10 | .020/.004 (.50/.10) | - | .045 (1.1) | .470 (11.9) | 164 (243) |
| 008043 | 4 | 10 | .020/.004 (.50/.10) | - | .045 (1.1) | .515 (13.1) | 210 (311) |
| 008053 | 5 | 10 | .020/.004 (.50/.10) | - | .060 (1.5) | .595 (15.1) | 273 (404) |
| 008073 | 7 | 10 | .020/.004 (.50/.10) | - | .060 (1.5) | .650 (16.5) | 362 (536) |
| 008093 | 9 | 10 | .020/.004 (.50/.10) | - | .060 (1.5) | .760 (19.3) | 461 (682) |
| 008123 | 12 | 10 | .020/.004 (.50/.10) | - | .060 (1.5) | .850 (21.6) | 573 (848) |
| 012047 | 3 + ground | 8 | .030/.005 (.76/.13) | 10 | .060 (1.5) | .650 (16.5) | 323 (478) |
| 013047 | 3 + ground | 6 | .030/.005 (.76/.13) | 8 | .060 (1.5) | .735 (18.7) | 536 (798) |
| 014047 | 3 + ground | 4 | .040/.006 (1.0/.15) | 8 | .080 (2.0) | .910 (23.1) | 701 (1037) |
| 015047 | 3 + ground | 2 | .040/.006 (1.0/.15) | 6 | .080 (2.0) | 1.050 (26.7) | 1020 (1510) |
| 018249 | 3 + ground | 1/0 | .050/.007 (1.3/.18) | 6 | .080 (2.0) | 1.270 (32.3) | 1529 (2263) |
| 018349 | 3 + ground | 2/0 | .050/.007 (1.3/.18) | 6 | .080 (2.0) | 1.380 (35.1) | 1841 (2725) |
| 018549 | 3 + ground | 4/0 | .050/.007 (1.3/.18) | 4 | .080 (2.0) | 1.630 (41.4) | 2799 (4142) |
| 018649 | 3 + ground | 250 | .060/.008 (1.5/.20) | 4 | .110 (2.8) | 1.840 (46.7) | 3395 (5025) |
| 018849 | 3 + ground | 350 | .060/.008 (1.5/.20) | 3 | .110 (2.8) | 2.080 (52.8) | 4511 (3338) |
| 019149 | 3 + ground | 500 | .060/.008 (1.5/.20) | 2 | .110 (2.8) | 2.380 (60.5) | 6244 (9241) |
| 019649 | 3 + ground | 750 | .070/.009 (1.8/.23) | 1 | .140 (3.6) | 2.860 (72.6) | 8955 (13253) |

Optional features available are: 1) Flexible stranded conductors; 2) Tin-coated copper conductors per ASTM B33.

The data herein is approximate and subject to normal manufacturing tolerances. These specifications are subject to change without notice.

Consult factory for a variety of alternate constructions for specific applications.

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