

### X-Olene®

## Type RHH or RHW-2

### 600/1000V Power and Control

Copper Conductor/90°C Wet or Dry  
Sunlight Resistant



**A** Bare, Solid or Stranded  
Copper Conductor  
**B** X-Olene Insulation

#### Insulation

X-Olene is Okonite's trade name for its chemically cross-linked polyethylene insulating compound with outstanding electrical and physical properties. Its excellent chemical physical resistance permits X-Olene's use in areas exposed to alcohol, ketones and dilute acids and bases, without additional coverings.

#### Applications

X-Olene Type RHH or RHW-2 600/1000 Volt Power and Control Cables are recommended for general low voltage power and control applications. Where the National Electrical Code applies, Type RHH or RHW-2 may be used up to 90°C in dry or wet locations. These cables may be installed in wet or dry locations, indoors or outdoors, in raceways, underground ducts, directly buried in the earth, or lashed to a messenger for aerial installation. Sizes 8 AWG & larger may be used for 600V underground distribution per ANSI/ICEA S-105-692.

#### Specifications

**Conductor:** Uncoated soft copper per ASTM B-3. Solid per ASTM B-3. Sizes smaller than #8 are compress stranded per ASTM B-8. Sizes #8 and larger are compact stranded per ASTM B-496.

**Insulation:** Meets or exceeds all requirements of ICEA S-95-658, NEMA WC-70, and UL Standards 44 and 854.

Listed by Underwriters Laboratories, Inc. as Type RHH or RHW-2.

Meets the requirements of ANSI/ICEA S-105-692.

#### Product Features

- Outstanding heat resistance.
- Rated 90°C wet or dry.
- Mechanically rugged.
- Stable electrical properties.
- Low moisture absorption.
- Highly resistant to weather and most chemicals.
- UL Listed.
- Meets ANSI/ICEA S-105-692.
- Oil resistant, PR I & PR II.
- Gasoline and oil resistant, GR I & GR II.
- Sunlight resistant.

#### Options available:

- CSA RW90 listing.
- Tinned copper conductors.
- 2000V Rated RHH or RHW-2.
- Aluminum 8000 Series alloy conductors.



| Catalog Number | Conductor size<br>AWG kcmil | Number of Strands | Insulation Thickness - mils | Insulation Thickness - Inches | Approx. O.D. - Inches | Approx. O.D. - mm | Approx. Net Weight<br>lbs./1000' | Approx. Ship Weight<br>lbs./1000' | 90°C Wet (1)*<br>NEC Ampacity | 75°C Wet (1)*<br>NEC Ampacity | ICEA Ampacity (2) |
|----------------|-----------------------------|-------------------|-----------------------------|-------------------------------|-----------------------|-------------------|----------------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------|
| 112-32-3061    | 14 1                        | 45                | 1.14                        | 0.16                          | 4.06                  | 20                | 25                               | 15                                | 15                            | 24                            |                   |
| 112-32-3071    | 14 7                        | 45                | 1.14                        | 0.17                          | 4.32                  | 21                | 26                               | 15                                | 15                            | 24                            |                   |
| 112-32-3101    | 12 1                        | 45                | 1.14                        | 0.18                          | 4.57                  | 28                | 33                               | 20                                | 20                            | 30                            |                   |
| 112-32-3111    | 12 7                        | 45                | 1.14                        | 0.19                          | 4.57                  | 30                | 35                               | 20                                | 20                            | 30                            |                   |
| 112-32-3141    | 10 1                        | 45                | 1.14                        | 0.20                          | 5.08                  | 41                | 46                               | 30                                | 30                            | 42                            |                   |
| 112-32-3151    | 10 7                        | 45                | 1.14                        | 0.21                          | 5.33                  | 44                | 49                               | 30                                | 30                            | 42                            |                   |
| 112-32-3231    | 8 7                         | 60                | 1.52                        | 0.26                          | 6.60                  | 67                | 72                               | 55                                | 30                            | 55                            |                   |
| 112-32-3271    | 6 7                         | 60                | 1.52                        | 0.30                          | 7.62                  | 100               | 111                              | 75                                | 65                            | 75                            |                   |
| 112-32-3311    | 4 7                         | 60                | 1.52                        | 0.34                          | 8.64                  | 151               | 162                              | 95                                | 85                            | 97                            |                   |
| 112-32-3371    | 2 7                         | 60                | 1.52                        | 0.40                          | 10.16                 | 231               | 254                              | 130                               | 115                           | 130                           |                   |
| 112-32-3401    | 1 19                        | 80                | 2.03                        | 0.47                          | 11.94                 | 298               | 321                              | 150                               | 130                           | 156                           |                   |
| 112-32-3421    | 1/0 19                      | 80                | 2.03                        | 0.51                          | 12.95                 | 368               | 400                              | 170                               | 150                           | 179                           |                   |
| 112-32-3441    | 2/0 19                      | 80                | 2.03                        | 0.55                          | 13.97                 | 457               | 489                              | 195                               | 175                           | 204                           |                   |
| 112-32-3461    | 3/0 19                      | 80                | 2.03                        | 0.60                          | 15.24                 | 568               | 600                              | 225                               | 200                           | 242                           |                   |
| 112-32-3481    | 4/0 19                      | 80                | 2.03                        | 0.65                          | 16.51                 | 706               | 745                              | 260                               | 230                           | 278                           |                   |
| 112-32-3511    | 250 37                      | 95                | 2.41                        | 0.73                          | 18.54                 | 843               | 882                              | 290                               | 255                           | 317                           |                   |
| 112-32-3521    | 300 37                      | 95                | 2.41                        | 0.78                          | 19.81                 | 1002              | 1057                             | 320                               | 285                           | 351                           |                   |
| 112-32-3541    | 350 37                      | 95                | 2.41                        | 0.82                          | 20.83                 | 1159              | 1214                             | 350                               | 310                           | 384                           |                   |
| 112-32-3581    | 500 37                      | 95                | 2.41                        | 0.94                          | 23.87                 | 1628              | 1692                             | 430                               | 380                           | 477                           |                   |
| 112-32-3641    | 750 61                      | 110               | 2.79                        | 1.13                          | 28.70                 | 2431              | 2531                             | 535                               | 475                           | 598                           |                   |
| 112-32-3701    | 1000 61                     | 110               | 2.79                        | 1.28                          | 32.51                 | 3211              | 3327                             | 615                               | 545                           | 689                           |                   |

Okonite's web site, [www.okonite.com](http://www.okonite.com) contains the most up to date information.

To order a color other than black, change the last digit of the catalog number as follows:

|       |   |        |   |
|-------|---|--------|---|
| White | 2 | Orange | 5 |
| Red   | 3 | Blue   | 6 |
| Green | 4 | Yellow | 7 |

Example: To order #14/Sol - Red, the catalog number would be 112-31-3063.

(1) **Ampacities** are based on Table 310.16 of the National Electrical Code for these 90°C rated conductors at an ambient temperature of 30°C. The 75°C wet column is provided for additional information.

The ampacities shown apply to open runs of cable, installation in any approved raceway, direct burial in the earth, or as aerial cable on a messenger. Derating for more than three current carrying conductors within a raceway is in accordance with NEC 310.15(C)(1).

(2) Based on three (3) conductors in a single enclosed or exposed conduit. Capacities based on 40°C air ambient using ICEA methods. For 30°C ambient multiply values by 1.10; for 50°C multiply by .90. For other ambients or installation conditions refer to Okonite's Engineering Data Book EHB.

\*Available with CSA RW90 rating on special request.

\*Current limited to 15, 20 and 30 amps per Section 240.4(D)(3) of the NEC for #14, #12 and #10 AWG, respectively.