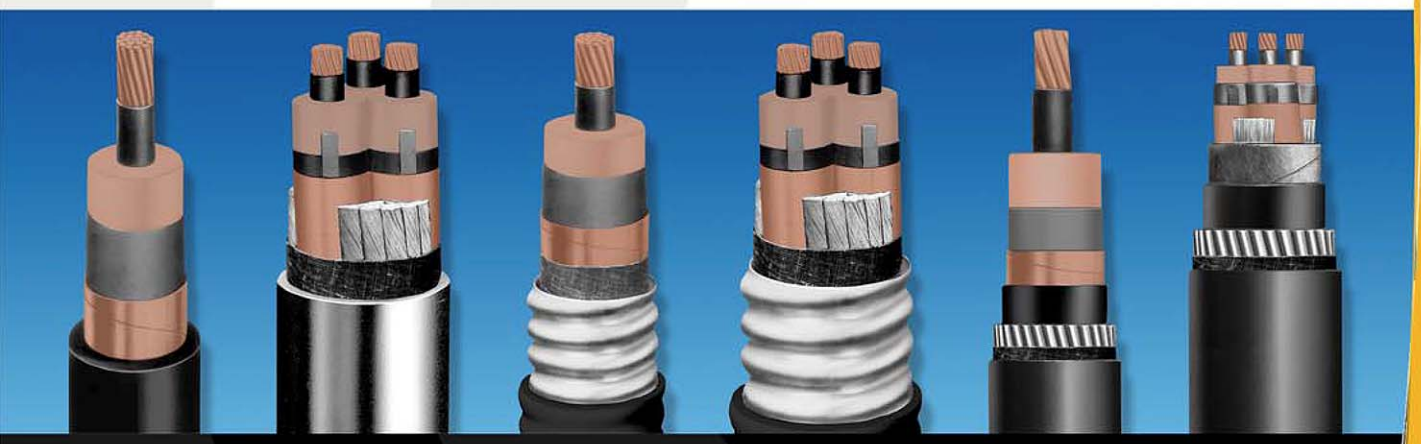
THE OKONITE COMPANY

# IEC 60502-2 CERTIFIED MEDIUM VOLTAGE CABLES



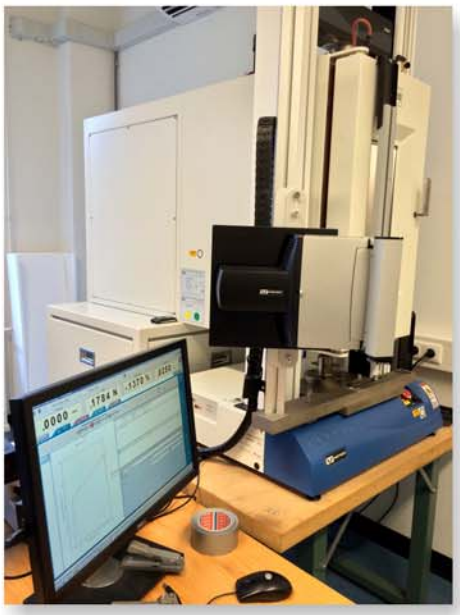
## 6 - 30 kV Shielded Power Cables

*Setting the Standard*

# OKONITE QUALITY

Okonite's Okoguard all EPR insulation system has performed in the most demanding environments for over 45 years. Serving the Electric Utility, Industrial, Petrochemical and Railroad Transit markets for over 135 years. Okonite is considered to be the premium quality cable available.

Okonite continues to lead the industry in innovation, research, and plant modernizations.



# INDEPENDENT LAB CERTIFICATION

Okonite chose KEMA to certify our Petrochemical Utility and Industrial customers' demanding need for the highest level of cable performance, safety, and reliability.

KEMA utilizes state-of-the-art equipment to ensure electrical and non-electrical type tests are carried out to the highest standard.

Users of cables made to IEC standards require certification by an independent testing organization.

# CERTIFICATION

Following the successful testing and complete conformance of Okonite Cables to IEC 60502-2, KEMA Type Test Certificates were issued. These documents are globally recognized as evidence of the highest level of quality of construction and materials.

Okonite IEC medium voltage cables also meet the following optional tests:

- Vertical tray flame testing per IEC 60332-3
- Flame spread per IEC 60332-1-2
- Oil immersion per IEC 60811-404

## Okonite offers the following six constructions tested by KEMA to IEC 60502-2:

Section 2: Sheet 43 1/C Okoguard Shielded Power Cable - Non-armored
Section 2: Sheet 44 3/C Okoguard Shielded Power Cable - Non-armored

Section 2: Sheet 45 1/C Okoguard Shielded Power Cable - CLX Armor
Section 2: Sheet 46 3/C Okoguard Shielded Power Cable - CLX Armor

Section 2: Sheet 47 1/C Okoguard Shielded Power Cable - Aluminum Wire Armor
Section 2: Sheet 48 3/C Okoguard Shielded Power Cable - Galvanized Steel Wire Armor

KEMA

Type test Certificate of complete type tests

**The Okonite Company**

Ramsey, NJ, United States of America

has successfully passed the type test sequence on a

**single-core power cable**

Type: 18/30 kV EPR PVC 1x95mm² X7589
Rating: 18/30(36) kV – 1x95 mm² – Cu – EPR

The test object passed the required clauses of

**IEC 60502-2**

The test results are recorded in Certificate No.

**TIC 1027-14**

This Certificate is issued on 25 July 2014

KEMA Nederland B.V.

S.A.M. Verhoeven
Director Testing, Inspections & Certification The Netherlands



Copies of the Type Test Certificates and Reports of Performance are available upon request.
Please contact your local Okonite District Office as shown on the back of this brochure.

# Okoguard®-Okoseal® Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Shielded Power Cable

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating


A Conductor - Compact Stranded Copper
B Strand Screen - Extruded Semi-conducting EPR
C Insulation - Okoguard EPR
D Insulation Screen - Extruded Semi-conducting EPR
E Shield - Copper Tape
F Jacket - Okoseal PVC

### Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) based, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance of electrical and physical properties for long, problem free service.

The triple tandem extrusion of the screens with the insulation provides optimum electrical characteristics.

### Jacket

The Okoseal (PVC) flame retardant jacket supplied with this cable is mechanically rugged and has excellent resistance to oil and most chemicals.

### Applications

Okoguard-Okoseal Type IEC 60502-2 cables are intended for use in fixed installations such as distribution networks or industrial applications.

### Specifications

**Conductor:** Annealed uncoated copper compact stranded per IEC 60228.

**Strand Screen:** Extruded semiconducting EPR strand screen. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation:** Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation Screen:** Extruded semiconducting EPR insulation screen applied directly over the insulation. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Shield:** 0.005 inches (0.127mm) bare copper tape helically applied with 25% minimum overlap.

**Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2 for polyvinyl chloride jackets.

### Product Features

- Certification to IEC 60502-2 conducted by KEMA Nederland B.V.
- Conformance provided by means of Type Test Certificate TIC 1011-14.
- Passes optional flame spread requirements pre IEC 60332-1-2.
- PVC jacket passes oil immersion requirements per IEC 60811-404.
- Passes IEC 60332-3-24 Category C vertical tray flame test.
- Triple tandem extruded, all EPR system.
- Okoguard cables meet or exceed all recognized industry standards.
- Excellent corona resistance.
- Screens are free stripping.
- Exceptional resistance to "treeing".
- Exceptional resistance to moisture.
- Resistant to most oils, acids, and alkalies.
- Sunlight resistant.
- Aluminum and coated copper conductors available.

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating



## US MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | |
| 114-23-0002 | 25 | 0.098 | 0.473 | 0.533 | 0.059 | 0.677 | 373 | 395 |
| 114-23-0003 | 35 | 0.098 | 0.515 | 0.575 | 0.059 | 0.719 | 453 | 484 |
| 114-23-0005 | 50 | 0.098 | 0.557 | 0.617 | 0.063 | 0.769 | 548 | 581 |
| 114-23-0007 | 70 | 0.098 | 0.621 | 0.681 | 0.063 | 0.833 | 703 | 749 |
| 114-23-0009 | 95 | 0.098 | 0.688 | 0.748 | 0.067 | 0.908 | 898 | 951 |
| 114-23-0012 | 120 | 0.098 | 0.762 | 0.822 | 0.067 | 0.982 | 1084 | 1143 |
| 114-23-0015 | 150 | 0.098 | 0.826 | 0.886 | 0.071 | 1.054 | 1333 | 1411 |
| 114-23-0018 | 185 | 0.098 | 0.878 | 0.938 | 0.071 | 1.106 | 1533 | 1611 |
| 114-23-0024 | 240 | 0.102 | 0.978 | 1.038 | 0.075 | 1.214 | 1939 | 2055 |
| 114-23-0030 | 300 | 0.110 | 1.089 | 1.149 | 0.079 | 1.335 | 2453 | 2639 |
| 114-23-0040 | 400 | 0.118 | 1.223 | 1.283 | 0.087 | 1.485 | 3002 | 3239 |
| 114-23-0050 | 500 | 0.126 | 1.366 | 1.426 | 0.091 | 1.636 | 3859 | 4096 |
| **10 kV Rated Cable** | | | | | | | | |
| 115-23-0102 | 25 | 0.134 | 0.545 | 0.605 | 0.063 | 0.757 | 430 | 465 |
| 115-23-0103 | 35 | 0.134 | 0.587 | 0.647 | 0.063 | 0.799 | 514 | 548 |
| 115-23-0105 | 50 | 0.134 | 0.629 | 0.689 | 0.063 | 0.841 | 606 | 652 |
| 115-23-0107 | 70 | 0.134 | 0.693 | 0.753 | 0.067 | 0.913 | 772 | 825 |
| 115-23-0109 | 95 | 0.134 | 0.760 | 0.820 | 0.067 | 0.980 | 965 | 1040 |
| 115-23-0112 | 120 | 0.134 | 0.834 | 0.894 | 0.071 | 1.062 | 1164 | 1259 |
| 115-23-0115 | 150 | 0.134 | 0.898 | 0.958 | 0.075 | 1.134 | 1418 | 1507 |
| 115-23-0118 | 185 | 0.134 | 0.950 | 1.010 | 0.075 | 1.186 | 1622 | 1711 |
| 115-23-0124 | 240 | 0.134 | 1.042 | 1.102 | 0.079 | 1.288 | 2028 | 2144 |
| 115-23-0130 | 300 | 0.134 | 1.137 | 1.197 | 0.083 | 1.391 | 2526 | 2712 |
| 115-23-0140 | 400 | 0.134 | 1.255 | 1.315 | 0.087 | 1.517 | 3048 | 3285 |
| 115-23-0150 | 500 | 0.134 | 1.382 | 1.442 | 0.091 | 1.652 | 3884 | 4121 |
| **15 kV Rated Cable** | | | | | | | | |
| 115-23-0202 | 25 | 0.177 | 0.635 | 0.695 | 0.063 | 0.847 | 502 | 536 |
| 115-23-0203 | 35 | 0.177 | 0.677 | 0.737 | 0.067 | 0.897 | 596 | 635 |
| 115-23-0205 | 50 | 0.177 | 0.719 | 0.779 | 0.067 | 0.939 | 692 | 767 |
| 115-23-0207 | 70 | 0.177 | 0.783 | 0.843 | 0.071 | 1.011 | 864 | 939 |
| 115-23-0209 | 95 | 0.177 | 0.850 | 0.910 | 0.071 | 1.078 | 1064 | 1140 |
| 115-23-0212 | 120 | 0.177 | 0.924 | 0.984 | 0.075 | 1.160 | 1270 | 1372 |
| 115-23-0215 | 150 | 0.177 | 0.988 | 1.048 | 0.075 | 1.224 | 1521 | 1637 |
| 115-23-0218 | 185 | 0.177 | 1.040 | 1.100 | 0.079 | 1.286 | 1741 | 1857 |
| 115-23-0224 | 240 | 0.177 | 1.132 | 1.192 | 0.083 | 1.386 | 2154 | 2287 |
| 115-23-0230 | 300 | 0.177 | 1.227 | 1.287 | 0.087 | 1.489 | 2661 | 2870 |
| 115-23-0240 | 400 | 0.177 | 1.345 | 1.405 | 0.091 | 1.615 | 3194 | 3431 |
| 115-23-0250 | 500 | 0.177 | 1.472 | 1.532 | 0.094 | 1.748 | 4039 | 4350 |

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating



## US MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | |
| 115-23-0303 | 35 | 0.217 | 0.759 | 0.819 | 0.067 | 0.979 | 672 | 747 |
| 115-23-0305 | 50 | 0.217 | 0.801 | 0.861 | 0.071 | 1.029 | 779 | 854 |
| 115-23-0307 | 70 | 0.217 | 0.865 | 0.925 | 0.071 | 1.093 | 948 | 1024 |
| 115-23-0309 | 95 | 0.217 | 0.932 | 0.992 | 0.075 | 1.168 | 1162 | 1264 |
| 115-23-0312 | 120 | 0.217 | 1.006 | 1.066 | 0.079 | 1.252 | 1377 | 1500 |
| 115-23-0315 | 150 | 0.217 | 1.070 | 1.130 | 0.079 | 1.316 | 1633 | 1766 |
| 115-23-0318 | 185 | 0.217 | 1.122 | 1.182 | 0.083 | 1.376 | 1857 | 2043 |
| 115-23-0324 | 240 | 0.217 | 1.214 | 1.274 | 0.083 | 1.468 | 2266 | 2452 |
| 115-23-0330 | 300 | 0.217 | 1.309 | 1.369 | 0.087 | 1.571 | 2781 | 2990 |
| 115-23-0340 | 400 | 0.217 | 1.427 | 1.487 | 0.091 | 1.697 | 3323 | 3577 |
| 115-23-0350 | 500 | 0.217 | 1.554 | 1.614 | 0.094 | 1.830 | 4178 | 4489 |
| **30 kV Rated Cable** | | | | | | | | |
| 115-23-0405 | 50 | 0.315 | 1.001 | 1.061 | 0.079 | 1.247 | 1020 | 1122 |
| 115-23-0407 | 70 | 0.315 | 1.065 | 1.125 | 0.079 | 1.311 | 1202 | 1325 |
| 115-23-0409 | 95 | 0.315 | 1.132 | 1.192 | 0.083 | 1.386 | 1430 | 1554 |
| 115-23-0412 | 120 | 0.315 | 1.206 | 1.266 | 0.083 | 1.460 | 1648 | 1772 |
| 115-23-0415 | 150 | 0.315 | 1.270 | 1.330 | 0.087 | 1.532 | 1928 | 2114 |
| 115-23-0418 | 185 | 0.315 | 1.322 | 1.382 | 0.087 | 1.584 | 2151 | 2341 |
| 115-23-0424 | 240 | 0.315 | 1.414 | 1.474 | 0.091 | 1.684 | 2590 | 2787 |
| 115-23-0430 | 300 | 0.315 | 1.509 | 1.569 | 0.094 | 1.785 | 3122 | 3376 |
| 115-23-0440 | 400 | 0.315 | 1.627 | 1.687 | 0.098 | 1.913 | 3693 | 4000 |
| 115-23-0450 | 500 | 0.315 | 1.754 | 1.814 | 0.102 | 2.048 | 4577 | 4888 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating



## METRIC MEASUREMENTS

| Catalog Number | Conductor Size - mm2 | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | |
| 114-23-0002 | 25 | 2.5 | 12.0 | 13.5 | 1.5 | 17.2 | 555 | 588 |
| 114-23-0003 | 35 | 2.5 | 13.1 | 14.6 | 1.5 | 18.3 | 674 | 720 |
| 114-23-0005 | 50 | 2.5 | 14.1 | 15.7 | 1.6 | 19.5 | 815 | 865 |
| 114-23-0007 | 70 | 2.5 | 15.8 | 17.3 | 1.6 | 21.2 | 1046 | 1115 |
| 114-23-0009 | 95 | 2.5 | 17.5 | 19.0 | 1.7 | 23.1 | 1336 | 1415 |
| 114-23-0012 | 120 | 2.5 | 19.4 | 20.9 | 1.7 | 24.9 | 1613 | 1701 |
| 114-23-0015 | 150 | 2.5 | 21.0 | 22.5 | 1.8 | 26.8 | 1984 | 2100 |
| 114-23-0018 | 185 | 2.5 | 22.3 | 23.8 | 1.8 | 28.1 | 2281 | 2397 |
| 114-23-0024 | 240 | 2.6 | 24.8 | 26.4 | 1.9 | 30.8 | 2885 | 3058 |
| 114-23-0030 | 300 | 2.8 | 27.7 | 29.2 | 2.0 | 33.9 | 3650 | 3927 |
| 114-23-0040 | 400 | 3.0 | 31.1 | 32.6 | 2.2 | 37.7 | 4467 | 4820 |
| 114-23-0050 | 500 | 3.2 | 34.7 | 36.2 | 2.3 | 41.6 | 5742 | 6095 |
| **10 kV Rated Cable** | | | | | | | | |
| 115-23-0102 | 25 | 3.4 | 13.8 | 15.4 | 1.6 | 19.2 | 640 | 692 |
| 115-23-0103 | 35 | 3.4 | 14.9 | 16.4 | 1.6 | 20.3 | 765 | 815 |
| 115-23-0105 | 50 | 3.4 | 16.0 | 17.5 | 1.6 | 21.4 | 902 | 970 |
| 115-23-0107 | 70 | 3.4 | 17.6 | 19.1 | 1.7 | 23.2 | 1149 | 1228 |
| 115-23-0109 | 95 | 3.4 | 19.3 | 20.8 | 1.7 | 24.9 | 1436 | 1548 |
| 115-23-0112 | 120 | 3.4 | 21.2 | 22.7 | 1.8 | 27.0 | 1732 | 1873 |
| 115-23-0115 | 150 | 3.4 | 22.8 | 24.3 | 1.9 | 28.8 | 2110 | 2242 |
| 115-23-0118 | 185 | 3.4 | 24.1 | 25.7 | 1.9 | 30.1 | 2414 | 2546 |
| 115-23-0124 | 240 | 3.4 | 26.5 | 28.0 | 2.0 | 32.7 | 3018 | 3190 |
| 115-23-0130 | 300 | 3.4 | 28.9 | 30.4 | 2.1 | 35.3 | 3759 | 4035 |
| 115-23-0140 | 400 | 3.4 | 31.9 | 33.4 | 2.2 | 38.5 | 4535 | 4888 |
| 115-23-0150 | 500 | 3.4 | 35.1 | 36.6 | 2.3 | 42.0 | 5779 | 6132 |
| **15 kV Rated Cable** | | | | | | | | |
| 115-23-0202 | 25 | 4.5 | 16.1 | 17.7 | 1.6 | 21.5 | 747 | 798 |
| 115-23-0203 | 35 | 4.5 | 17.2 | 18.7 | 1.7 | 22.8 | 887 | 945 |
| 115-23-0205 | 50 | 4.5 | 18.3 | 19.8 | 1.7 | 23.9 | 1030 | 1141 |
| 115-23-0207 | 70 | 4.5 | 19.9 | 21.4 | 1.8 | 25.7 | 1286 | 1397 |
| 115-23-0209 | 95 | 4.5 | 21.6 | 23.1 | 1.8 | 27.4 | 1583 | 1696 |
| 115-23-0212 | 120 | 4.5 | 23.5 | 25.0 | 1.9 | 29.5 | 1890 | 2042 |
| 115-23-0215 | 150 | 4.5 | 25.1 | 26.6 | 1.9 | 31.1 | 2263 | 2436 |
| 115-23-0218 | 185 | 4.5 | 26.4 | 27.9 | 2.0 | 32.7 | 2591 | 2763 |
| 115-23-0224 | 240 | 4.5 | 28.8 | 30.3 | 2.1 | 35.2 | 3205 | 3403 |
| 115-23-0230 | 300 | 4.5 | 31.2 | 32.7 | 2.2 | 37.8 | 3960 | 4271 |
| 115-23-0240 | 400 | 4.5 | 34.2 | 35.7 | 2.3 | 41.0 | 4753 | 5105 |
| 115-23-0250 | 500 | 4.5 | 37.4 | 38.9 | 2.4 | 44.4 | 6010 | 6473 |

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating



## METRIC MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | |
| 115-23-0303 | 35 | 5.5 | 19.3 | 20.8 | 1.7 | 24.9 | 1000 | 1112 |
| 115-23-0305 | 50 | 5.5 | 20.3 | 21.9 | 1.8 | 26.1 | 1159 | 1271 |
| 115-23-0307 | 70 | 5.5 | 22.0 | 23.5 | 1.8 | 27.8 | 1411 | 1524 |
| 115-23-0309 | 95 | 5.5 | 23.7 | 25.2 | 1.9 | 29.7 | 1729 | 1881 |
| 115-23-0312 | 120 | 5.5 | 25.6 | 27.1 | 2.0 | 31.8 | 2049 | 2232 |
| 115-23-0315 | 150 | 5.5 | 27.2 | 28.7 | 2.0 | 33.4 | 2430 | 2628 |
| 115-23-0318 | 185 | 5.5 | 28.5 | 30.0 | 2.1 | 35.0 | 2763 | 3040 |
| 115-23-0324 | 240 | 5.5 | 30.8 | 32.4 | 2.1 | 37.3 | 3372 | 3649 |
| 115-23-0330 | 300 | 5.5 | 33.2 | 34.8 | 2.2 | 39.9 | 4138 | 4449 |
| 115-23-0340 | 400 | 5.5 | 36.2 | 37.8 | 2.3 | 43.1 | 4945 | 5323 |
| 115-23-0350 | 500 | 5.5 | 39.5 | 41.0 | 2.4 | 46.5 | 6217 | 6680 |
| **30 kV Rated Cable** | | | | | | | | |
| 115-23-0405 | 50 | 8.0 | 25.4 | 26.9 | 2.0 | 31.7 | 1518 | 1670 |
| 115-23-0407 | 70 | 8.0 | 27.1 | 28.6 | 2.0 | 33.3 | 1789 | 1972 |
| 115-23-0409 | 95 | 8.0 | 28.8 | 30.3 | 2.1 | 35.2 | 2128 | 2312 |
| 115-23-0412 | 120 | 8.0 | 30.6 | 32.2 | 2.1 | 37.1 | 2452 | 2637 |
| 115-23-0415 | 150 | 8.0 | 32.3 | 33.8 | 2.2 | 38.9 | 2869 | 3146 |
| 115-23-0418 | 185 | 8.0 | 33.6 | 35.1 | 2.2 | 40.2 | 3201 | 3483 |
| 115-23-0424 | 240 | 8.0 | 35.9 | 37.4 | 2.3 | 42.8 | 3854 | 4147 |
| 115-23-0430 | 300 | 8.0 | 38.3 | 39.9 | 2.4 | 45.3 | 4646 | 5023 |
| 115-23-0440 | 400 | 8.0 | 41.3 | 42.8 | 2.5 | 48.6 | 5495 | 5952 |
| 115-23-0450 | 500 | 8.0 | 44.6 | 46.1 | 2.6 | 52.0 | 6811 | 7273 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Okoguard®-Okoseal® Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Shielded Power Cable

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating


A Conductor - Compact Stranded Copper
B Strand Screen - Extruded Semiconducting EPR
C Insulation - Okoguard EPR
D Insulation Screen - Extruded Semiconducting EPR
E Phase Identification Tape
F Shield - Copper Tape
G Fillers and Binder Tape
H Jacket - Okoseal PVC

## Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) based, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance of electrical and physical properties for long, problem free service.

The triple tandem extrusion of the screens with the insulation provides optimum electrical characteristics.

## Assembly

The shielded insulated conductors are assembled with fillers and a binder tape overall.

## Jacket

The Okoseal (PVC) flame retardant jacket supplied with this cable is mechanically rugged and has excellent resistance to oil and most chemicals.

## Applications

Okoguard-Okoseal Type IEC 60502-2 cables are intended for use in fixed installations such as distribution networks or industrial applications.

## Specifications

**Conductor:** Annealed uncoated copper compact stranded per IEC 60228.

**Strand Screen:** Extruded semiconducting EPR strand screen. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation:** Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation Screen:** Extruded semiconducting EPR insulation screen applied directly over the insulation. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Shield:** 0.005 inches (0.127mm) bare copper tape helically applied with 10% minimum overlap.

**Phase Identification:** Color coded (black, red, blue) polyester ribbon laid longitudinally under the copper tape shield.

**Assembly:** Cabled with fillers and an overall binder tape.

**Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2 for polyvinyl chloride jackets.

## Product Features

- Certification to IEC 60502-2 conducted by KEMA Nederland B.V.
- Conformance provided by means of Type Test Certificate TIC 1011-14.
- Passes optional flame spread requirements pre IEC 60332-1-2.
- PVC jacket passes oil immersion requirements per IEC 60811-404.
- Passes IEC 60332-3-22 Category A vertical tray flame test.
- Triple tandem extruded, all EPR system.
- Okoguard cables meet or exceed all recognized industry standards.
- Excellent corona resistance.
- Screens are free stripping.
- Exceptional resistance to "treeing".
- Exceptional resistance to moisture.
- Resistant to most oils, acids, and alkalies.
- Sunlight resistant.
- Aluminum and coated copper conductors available.
- Complete prepackaged, color coded, factory tested wiring system.

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating



US MEASUREMENTS

| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | |
| 114-23-0102 | 25 | 0.098 | 0.473 | 0.533 | 1.191 | 0.083 | 1.371 | 1193 | 1286 |
| 114-23-0103 | 35 | 0.098 | 0.515 | 0.575 | 1.282 | 0.083 | 1.462 | 1466 | 1572 |
| 114-23-0105 | 50 | 0.098 | 0.557 | 0.617 | 1.373 | 0.087 | 1.561 | 1748 | 1891 |
| 114-23-0107 | 70 | 0.098 | 0.621 | 0.681 | 1.511 | 0.091 | 1.707 | 2244 | 2408 |
| 114-23-0109 | 95 | 0.098 | 0.688 | 0.748 | 1.653 | 0.098 | 1.865 | 2835 | 3022 |
| 114-23-0112 | 120 | 0.098 | 0.762 | 0.822 | 1.813 | 0.102 | 2.033 | 3465 | 3721 |
| 114-23-0115 | 150 | 0.098 | 0.826 | 0.886 | 1.952 | 0.106 | 2.180 | 4240 | 4532 |
| 114-23-0118 | 185 | 0.098 | 0.878 | 0.938 | 2.064 | 0.110 | 2.300 | 4896 | 5455 |
| 114-23-0124 | 240 | 0.102 | 0.978 | 1.038 | 2.280 | 0.118 | 2.532 | 6224 | 6783 |
| 114-23-0130 | 300 | 0.110 | 1.089 | 1.149 | 2.520 | 0.126 | 2.788 | 7876 | 8468 |
| 114-23-0140 | 400 | 0.118 | 1.223 | 1.283 | 2.809 | 0.138 | 3.101 | 9587 | 10349 |
| 114-23-0150 | 500 | 0.126 | 1.366 | 1.426 | 3.118 | 0.150 | 3.436 | 12352 | 13285 |
| **10 kV Rated Cable** | | | | | | | | | |
| 115-23-0502 | 25 | 0.134 | 0.545 | 0.605 | 1.347 | 0.087 | 1.535 | 1391 | 1534 |
| 115-23-0503 | 35 | 0.134 | 0.587 | 0.647 | 1.437 | 0.091 | 1.633 | 1672 | 1896 |
| 115-23-0505 | 50 | 0.134 | 0.629 | 0.689 | 1.528 | 0.094 | 1.730 | 1962 | 2190 |
| 115-23-0507 | 70 | 0.134 | 0.693 | 0.753 | 1.664 | 0.098 | 1.876 | 2500 | 2728 |
| 115-23-0509 | 95 | 0.134 | 0.760 | 0.820 | 1.809 | 0.102 | 2.029 | 3105 | 3410 |
| 115-23-0512 | 120 | 0.134 | 0.834 | 0.894 | 1.969 | 0.110 | 2.205 | 3778 | 4146 |
| 115-23-0515 | 150 | 0.134 | 0.898 | 0.958 | 2.107 | 0.114 | 2.351 | 4580 | 4953 |
| 115-23-0518 | 185 | 0.134 | 0.950 | 1.010 | 2.219 | 0.118 | 2.471 | 5263 | 5636 |
| 115-23-0524 | 240 | 0.134 | 1.042 | 1.102 | 2.418 | 0.122 | 2.678 | 6527 | 7060 |
| 115-23-0530 | 300 | 0.134 | 1.137 | 1.197 | 2.623 | 0.130 | 2.899 | 8130 | 8892 |
| 115-23-0540 | 400 | 0.134 | 1.255 | 1.315 | 2.878 | 0.142 | 3.178 | 9815 | 10735 |
| 115-23-0550 | 500 | 0.134 | 1.382 | 1.442 | 3.152 | 0.150 | 3.470 | 12430 | 13363 |
| **15 kV Rated Cable** | | | | | | | | | |
| 115-23-0602 | 25 | 0.177 | 0.635 | 0.695 | 1.541 | 0.094 | 1.743 | 1648 | 1802 |
| 115-23-0603 | 35 | 0.177 | 0.677 | 0.737 | 1.630 | 0.094 | 1.832 | 1903 | 2131 |
| 115-23-0605 | 50 | 0.177 | 0.719 | 0.779 | 1.720 | 0.098 | 1.932 | 2263 | 2568 |
| 115-23-0607 | 70 | 0.177 | 0.783 | 0.843 | 1.859 | 0.106 | 2.087 | 2821 | 3126 |
| 115-23-0609 | 95 | 0.177 | 0.850 | 0.910 | 2.003 | 0.110 | 2.239 | 3474 | 3842 |
| 115-23-0612 | 120 | 0.177 | 0.924 | 0.984 | 2.163 | 0.114 | 2.407 | 4133 | 4542 |
| 115-23-0615 | 150 | 0.177 | 0.988 | 1.048 | 2.301 | 0.118 | 2.553 | 5004 | 5728 |
| 115-23-0618 | 185 | 0.177 | 1.030 | 1.090 | 2.392 | 0.122 | 2.652 | 5623 | 6193 |
| 115-23-0624 | 240 | 0.177 | 1.132 | 1.192 | 2.612 | 0.130 | 2.888 | 7004 | 7766 |
| 115-23-0630 | 300 | 0.177 | 1.227 | 1.287 | 2.818 | 0.138 | 3.110 | 8556 | 9318 |
| 115-23-0640 | 400 | 0.177 | 1.333 | 1.393 | 3.047 | 0.146 | 3.357 | 10258 | 11043 |
| 115-23-0650 | 500 | 0.177 | 1.472 | 1.532 | 3.347 | 0.157 | 3.679 | 13004 | 14082 |

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating



## US MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | | |
| 115-23-0703 | 35 | 0.217 | 0.759 | 0.819 | 1.807 | 0.102 | 2.027 | 2217 | 2522 |
| 115-23-0705 | 50 | 0.217 | 0.801 | 0.861 | 1.898 | 0.106 | 2.126 | 2563 | 2931 |
| 115-23-0707 | 70 | 0.217 | 0.865 | 0.925 | 2.036 | 0.110 | 2.272 | 3126 | 3494 |
| 115-23-0709 | 95 | 0.217 | 0.932 | 0.992 | 2.180 | 0.114 | 2.424 | 3851 | 4224 |
| 115-23-0712 | 120 | 0.217 | 1.006 | 1.066 | 2.340 | 0.122 | 2.600 | 4553 | 5112 |
| 115-23-0715 | 150 | 0.217 | 1.070 | 1.130 | 2.479 | 0.126 | 2.747 | 5355 | 5947 |
| 115-23-0718 | 185 | 0.217 | 1.122 | 1.182 | 2.591 | 0.130 | 2.867 | 6063 | 6825 |
| 115-23-0724 | 240 | 0.217 | 1.214 | 1.274 | 2.790 | 0.138 | 3.082 | 7393 | 8155 |
| 115-23-0730 | 300 | 0.217 | 1.309 | 1.369 | 2.995 | 0.146 | 3.305 | 9016 | 9949 |
| 115-23-0740 | 400 | 0.217 | 1.427 | 1.487 | 3.250 | 0.154 | 3.576 | 10764 | 11697 |
| 115-23-0750 | 500 | 0.217 | 1.554 | 1.614 | 3.524 | 0.161 | 3.864 | 13545 | 15354 |
| **30 kV Rated Cable** | | | | | | | | | |
| 115-23-0805 | 50 | 0.315 | 1.001 | 1.061 | 2.330 | 0.122 | 2.590 | 3472 | 3952 |
| 115-23-0807 | 70 | 0.315 | 1.065 | 1.125 | 2.468 | 0.126 | 2.736 | 4048 | 4772 |
| 115-23-0809 | 95 | 0.315 | 1.132 | 1.192 | 2.612 | 0.130 | 2.888 | 4812 | 5536 |
| 115-23-0812 | 120 | 0.315 | 1.206 | 1.266 | 2.772 | 0.138 | 3.064 | 5522 | 6246 |
| 115-23-0815 | 150 | 0.315 | 1.270 | 1.330 | 2.911 | 0.142 | 3.211 | 6426 | 7211 |
| 115-23-0818 | 185 | 0.315 | 1.322 | 1.382 | 3.023 | 0.146 | 3.333 | 7110 | 7895 |
| 115-23-0824 | 240 | 0.315 | 1.414 | 1.474 | 3.222 | 0.154 | 3.548 | 8545 | 9478 |
| 115-23-0830 | 300 | 0.315 | 1.509 | 1.569 | 3.427 | 0.157 | 3.759 | 10232 | 11310 |
| 115-23-0840 | 400 | 0.315 | 1.627 | 1.687 | 3.682 | 0.169 | 4.038 | 12091 | 13900 |
| 115-23-0850 | 500 | 0.315 | 1.754 | 1.814 | 3.956 | 0.177 | 4.328 | 14959 | 16768 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating



METRIC MEASUREMENTS

| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | |
| 114-23-0102 | 25 | 2.5 | 12.0 | 13.5 | 30.3 | 2.1 | 34.8 | 1775 | 1914 |
| 114-23-0103 | 35 | 2.5 | 13.1 | 14.6 | 32.6 | 2.1 | 37.1 | 2181 | 2339 |
| 114-23-0105 | 50 | 2.5 | 14.1 | 15.7 | 34.9 | 2.2 | 39.6 | 2601 | 2814 |
| 114-23-0107 | 70 | 2.5 | 15.8 | 17.3 | 38.4 | 2.3 | 43.4 | 3339 | 3583 |
| 114-23-0109 | 95 | 2.5 | 17.5 | 19.0 | 42.0 | 2.5 | 47.4 | 4218 | 4497 |
| 114-23-0112 | 120 | 2.5 | 19.4 | 20.9 | 46.1 | 2.6 | 51.6 | 5156 | 5537 |
| 114-23-0115 | 150 | 2.5 | 21.0 | 22.5 | 49.6 | 2.7 | 55.4 | 6309 | 6744 |
| 114-23-0118 | 185 | 2.5 | 22.3 | 23.8 | 52.4 | 2.8 | 58.4 | 7285 | 8117 |
| 114-23-0124 | 240 | 2.6 | 24.8 | 26.4 | 57.9 | 3.0 | 64.3 | 9261 | 10093 |
| 114-23-0130 | 300 | 2.8 | 27.7 | 29.2 | 64.0 | 3.2 | 70.8 | 11719 | 12600 |
| 114-23-0140 | 400 | 3.0 | 31.1 | 32.6 | 71.3 | 3.5 | 78.8 | 14265 | 15399 |
| 114-23-0150 | 500 | 3.2 | 34.7 | 36.2 | 79.2 | 3.8 | 87.3 | 18380 | 19768 |
| **10 kV Rated Cable** | | | | | | | | | |
| 115-23-0502 | 25 | 3.4 | 13.8 | 15.4 | 34.2 | 2.2 | 39.0 | 2070 | 2283 |
| 115-23-0503 | 35 | 3.4 | 14.9 | 16.4 | 36.5 | 2.3 | 41.5 | 2488 | 2821 |
| 115-23-0505 | 50 | 3.4 | 16.0 | 17.5 | 38.8 | 2.4 | 43.9 | 2919 | 3259 |
| 115-23-0507 | 70 | 3.4 | 17.6 | 19.1 | 42.3 | 2.5 | 47.7 | 3720 | 4059 |
| 115-23-0509 | 95 | 3.4 | 19.3 | 20.8 | 45.9 | 2.6 | 51.5 | 4620 | 5074 |
| 115-23-0512 | 120 | 3.4 | 21.2 | 22.7 | 50.0 | 2.8 | 56.0 | 5622 | 6169 |
| 115-23-0515 | 150 | 3.4 | 22.8 | 24.3 | 53.5 | 2.9 | 59.7 | 6815 | 7370 |
| 115-23-0518 | 185 | 3.4 | 24.1 | 25.7 | 56.4 | 3.0 | 62.8 | 7831 | 8386 |
| 115-23-0524 | 240 | 3.4 | 26.5 | 28.0 | 61.4 | 3.1 | 68.0 | 9712 | 10505 |
| 115-23-0530 | 300 | 3.4 | 28.9 | 30.4 | 66.6 | 3.3 | 73.6 | 12097 | 13231 |
| 115-23-0540 | 400 | 3.4 | 31.9 | 33.4 | 73.1 | 3.6 | 80.7 | 14605 | 15974 |
| 115-23-0550 | 500 | 3.4 | 35.1 | 36.6 | 80.1 | 3.8 | 88.1 | 18496 | 19884 |
| **15 kV Rated Cable** | | | | | | | | | |
| 115-23-0602 | 25 | 4.5 | 16.1 | 17.7 | 39.1 | 2.4 | 44.3 | 2452 | 2681 |
| 115-23-0603 | 35 | 4.5 | 17.2 | 18.7 | 41.4 | 2.4 | 46.5 | 2832 | 3171 |
| 115-23-0605 | 50 | 4.5 | 18.3 | 19.8 | 43.7 | 2.5 | 49.1 | 3367 | 3821 |
| 115-23-0607 | 70 | 4.5 | 19.9 | 21.4 | 47.2 | 2.7 | 53.0 | 4198 | 4651 |
| 115-23-0609 | 95 | 4.5 | 21.6 | 23.1 | 50.9 | 2.8 | 56.9 | 5169 | 5717 |
| 115-23-0612 | 120 | 4.5 | 23.5 | 25.0 | 54.9 | 2.9 | 61.1 | 6150 | 6758 |
| 115-23-0615 | 150 | 4.5 | 25.1 | 26.6 | 58.4 | 3.0 | 64.8 | 7446 | 8523 |
| 115-23-0618 | 185 | 4.5 | 26.2 | 27.7 | 60.8 | 3.1 | 67.4 | 8367 | 9215 |
| 115-23-0624 | 240 | 4.5 | 28.8 | 30.3 | 66.3 | 3.3 | 73.4 | 10422 | 11556 |
| 115-23-0630 | 300 | 4.5 | 31.2 | 32.7 | 71.6 | 3.5 | 79.0 | 12731 | 13865 |
| 115-23-0640 | 400 | 4.5 | 33.9 | 35.4 | 77.4 | 3.7 | 85.3 | 15264 | 16432 |
| 115-23-0650 | 500 | 4.5 | 37.4 | 38.9 | 85.0 | 4.0 | 93.4 | 19350 | 20954 |

# Okoguard®-Okoseal® Type IEC 60502-2

**6, 10, 15, 20, 30 kV Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating



## METRIC MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | | |
| 115-23-0703 | 35 | 5.5 | 19.3 | 20.8 | 45.9 | 2.6 | 51.5 | 3299 | 3753 |
| 115-23-0705 | 50 | 5.5 | 20.3 | 21.9 | 48.2 | 2.7 | 54.0 | 3814 | 4361 |
| 115-23-0707 | 70 | 5.5 | 22.0 | 23.5 | 51.7 | 2.8 | 57.7 | 4651 | 5199 |
| 115-23-0709 | 95 | 5.5 | 23.7 | 25.2 | 55.4 | 2.9 | 61.6 | 5730 | 6285 |
| 115-23-0712 | 120 | 5.5 | 25.6 | 27.1 | 59.4 | 3.1 | 66.0 | 6775 | 7607 |
| 115-23-0715 | 150 | 5.5 | 27.2 | 28.7 | 63.0 | 3.2 | 69.8 | 7968 | 8849 |
| 115-23-0718 | 185 | 5.5 | 28.5 | 30.0 | 65.8 | 3.3 | 72.8 | 9022 | 10156 |
| 115-23-0724 | 240 | 5.5 | 30.8 | 32.4 | 70.9 | 3.5 | 78.3 | 11001 | 12135 |
| 115-23-0730 | 300 | 5.5 | 33.2 | 34.8 | 76.1 | 3.7 | 83.9 | 13416 | 14804 |
| 115-23-0740 | 400 | 5.5 | 36.2 | 37.8 | 82.6 | 3.9 | 90.8 | 16017 | 17405 |
| 115-23-0750 | 500 | 5.5 | 39.5 | 41.0 | 89.5 | 4.1 | 98.1 | 20155 | 22847 |
| **30kV Rated Cable** | | | | | | | | | |
| 115-23-0805 | 50 | 8.0 | 25.4 | 26.9 | 59.2 | 3.1 | 65.8 | 5166 | 5881 |
| 115-23-0807 | 70 | 8.0 | 27.1 | 28.6 | 62.7 | 3.2 | 69.5 | 6023 | 7101 |
| 115-23-0809 | 95 | 8.0 | 28.8 | 30.3 | 66.3 | 3.3 | 73.4 | 7160 | 8238 |
| 115-23-0812 | 120 | 8.0 | 30.6 | 32.2 | 70.4 | 3.5 | 77.8 | 8217 | 9294 |
| 115-23-0815 | 150 | 8.0 | 32.3 | 33.8 | 73.9 | 3.6 | 81.6 | 9562 | 10730 |
| 115-23-0818 | 185 | 8.0 | 33.6 | 35.1 | 76.8 | 3.7 | 84.7 | 10580 | 11748 |
| 115-23-0824 | 240 | 8.0 | 35.9 | 37.4 | 81.8 | 3.9 | 90.1 | 12715 | 14103 |
| 115-23-0830 | 300 | 8.0 | 38.3 | 39.9 | 87.0 | 4.0 | 95.5 | 15225 | 16829 |
| 115-23-0840 | 400 | 8.0 | 41.3 | 42.8 | 93.5 | 4.3 | 102.6 | 17991 | 20683 |
| 115-23-0850 | 500 | 8.0 | 44.6 | 46.1 | 100.5 | 4.5 | 109.9 | 22259 | 24951 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# C-L-X® Aluminum Sheath* Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating


A Conductor - Compact Stranded Copper
B Strand Screen - Extruded Semiconducting EPR
C Insulation - Okoguard EPR
D Insulation Screen - Extruded Semiconducting EPR
E Shield - Copper Tape
F Semiconducting Tape
G Sheath - Impervious, Continuous, Corrugated Aluminum C-L-X
H Jacket - Okoseal PVC

### Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) based, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance of electrical and physical properties for long, problem free service.

The triple tandem extrusion of the screens with the insulation provides optimum electrical characteristics.

### Assembly

The shielded insulated conductor is assembled with a semiconducting tape, encased by a continuously corrugated welded aluminum sheath (C-L-X). The impervious, continuous, corrugated aluminum C-L-X sheath provides complete protection against moisture, liquids and gases in addition to its excellent mechanical strength. In addition, the aluminum sheath has adequate ampacity capability to be used as a grounding conductor in U.S. National Electrical Code (NEC) non Hazardous Location (HL) areas.

### Jacket

The Okoseal (PVC) flame retardant jacket supplied with this cable is mechanically rugged and has excellent resistance to oil and most chemicals.

### Applications

C-L-X Type IEC 60502-2 cables are intended for use in fixed installations such as distribution networks or industrial applications.

C-L-X power cables are recommended as an economical alternate to a wire in conduit system.

### Specifications

**Conductor:** Annealed uncoated copper compact stranded per IEC 60228.

**Strand Screen:** Extruded semiconducting EPR strand screen. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation:** Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation Screen:** Extruded semiconducting EPR insulation screen applied directly over the insulation. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Shield:** 0.005 inches (0.127mm) bare copper tape helically applied with 10% minimum overlap, followed by a semiconducting tape.

**Sheath:** Close fitting, impervious, continuous, corrugated aluminum C-L-X per UL 1072. C-L-X is recognized as a grounding conductor by the U.S. National Electrical Code (NEC).

**Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2.

### Product Features

- Testing to IEC 60502-2 conducted by KEMA Nederland B.V.
- Conformance provided by means of Report of Performance TIC 1373-14.
- Passes optional flame spread requirements per IEC 60332-1-2.
- PVC jacket passes oil immersion requirements per IEC 60811-404.
- Passes IEC 60332-3-23 Category B vertical tray flame test.
- Triple tandem extruded, all EPR system.
- Okoguard cables meet or exceed all recognized industry standards.
- Excellent corona resistance.
- Screens are free stripping.
- Exceptional resistance to "treeing".
- Exceptional resistance to moisture.
- Resistant to most oils, acids, and alkalies.
- Sunlight resistant.
- Aluminum and coated copper conductors available.
- Continuous sheath provides grounding safety.
- Complete prepackaged, factory tested wiring system.

* Complete certification to IEC 60502-2 is not obtainable because this standard does not recognize continuously corrugated armor.

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating

US MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | C-L-X O.D. - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | |
| 571-22-0002 | 25 | 0.098 | 0.481 | 0.541 | 0.593 | 0.799 | 0.067 | 0.949 | 510 | 577 |
| 571-22-0003 | 35 | 0.098 | 0.525 | 0.585 | 0.637 | 0.843 | 0.067 | 0.993 | 597 | 664 |
| 571-22-0005 | 50 | 0.098 | 0.565 | 0.625 | 0.677 | 0.886 | 0.071 | 1.044 | 699 | 766 |
| 571-22-0007 | 70 | 0.098 | 0.621 | 0.681 | 0.733 | 0.929 | 0.071 | 1.087 | 852 | 919 |
| 571-22-0009 | 95 | 0.098 | 0.688 | 0.748 | 0.799 | 1.020 | 0.075 | 1.186 | 1061 | 1141 |
| 571-22-0012 | 120 | 0.098 | 0.762 | 0.822 | 0.873 | 1.106 | 0.079 | 1.283 | 1287 | 1377 |
| 571-22-0015 | 150 | 0.098 | 0.850 | 0.910 | 0.961 | 1.193 | 0.083 | 1.378 | 1576 | 1692 |
| 571-22-0018 | 185 | 0.098 | 0.878 | 0.938 | 0.989 | 1.236 | 0.083 | 1.421 | 1760 | 1903 |
| 571-22-0024 | 240 | 0.102 | 0.931 | 0.991 | 1.042 | 1.288 | 0.083 | 1.473 | 2142 | 2285 |
| 571-22-0030 | 300 | 0.110 | 1.089 | 1.149 | 1.200 | 1.465 | 0.091 | 1.666 | 2758 | 2901 |
| 571-22-0040 | 400 | 0.118 | 1.237 | 1.297 | 1.348 | 1.644 | 0.098 | 1.861 | 3369 | 3635 |
| 571-22-0050 | 500 | 0.126 | 1.366 | 1.426 | 1.477 | 1.781 | 0.102 | 2.006 | 4233 | 4489 |
| **10 kV Rated Cable** | | | | | | | | | | |
| 571-23-0102 | 25 | 0.134 | 0.545 | 0.605 | 0.657 | 0.843 | 0.067 | 0.993 | 559 | 626 |
| 571-23-0103 | 35 | 0.134 | 0.607 | 0.667 | 0.719 | 0.929 | 0.071 | 1.087 | 680 | 747 |
| 571-23-0105 | 50 | 0.134 | 0.645 | 0.705 | 0.756 | 0.972 | 0.075 | 1.138 | 782 | 862 |
| 571-23-0107 | 70 | 0.134 | 0.693 | 0.753 | 0.804 | 1.020 | 0.075 | 1.186 | 934 | 1014 |
| 571-23-0109 | 95 | 0.134 | 0.764 | 0.824 | 0.875 | 1.106 | 0.079 | 1.283 | 1172 | 1262 |
| 571-23-0112 | 120 | 0.134 | 0.844 | 0.904 | 0.955 | 1.193 | 0.083 | 1.378 | 1393 | 1495 |
| 571-23-0115 | 150 | 0.134 | 0.898 | 0.958 | 1.009 | 1.236 | 0.083 | 1.421 | 1633 | 1749 |
| 571-23-0118 | 185 | 0.134 | 0.950 | 1.010 | 1.061 | 1.288 | 0.083 | 1.473 | 1844 | 1987 |
| 571-23-0124 | 240 | 0.134 | 1.048 | 1.108 | 1.159 | 1.421 | 0.091 | 1.622 | 2293 | 2436 |
| 571-23-0130 | 300 | 0.134 | 1.137 | 1.197 | 1.248 | 1.514 | 0.091 | 1.715 | 2829 | 2993 |
| 571-23-0140 | 400 | 0.134 | 1.255 | 1.315 | 1.366 | 1.644 | 0.098 | 1.861 | 3392 | 3658 |
| 571-23-0150 | 500 | 0.134 | 1.382 | 1.442 | 1.493 | 1.781 | 0.102 | 2.006 | 4255 | 4511 |
| **15 kV Rated Cable** | | | | | | | | | | |
| 571-23-0202 | 25 | 0.177 | 0.645 | 0.705 | 0.756 | 0.972 | 0.075 | 1.138 | 674 | 740 |
| 571-23-0203 | 35 | 0.177 | 0.683 | 0.743 | 0.794 | 1.020 | 0.075 | 1.186 | 765 | 831 |
| 571-23-0205 | 50 | 0.177 | 0.725 | 0.785 | 0.836 | 1.063 | 0.075 | 1.229 | 880 | 955 |
| 571-23-0207 | 70 | 0.177 | 0.783 | 0.843 | 0.894 | 1.106 | 0.079 | 1.283 | 1057 | 1132 |
| 571-23-0209 | 95 | 0.177 | 0.850 | 0.910 | 0.961 | 1.193 | 0.083 | 1.378 | 1282 | 1384 |
| 571-23-0212 | 120 | 0.177 | 0.930 | 0.990 | 1.041 | 1.288 | 0.083 | 1.473 | 1501 | 1618 |
| 571-23-0215 | 150 | 0.177 | 0.988 | 1.048 | 1.099 | 1.337 | 0.087 | 1.530 | 1762 | 1905 |
| 571-23-0218 | 185 | 0.177 | 1.048 | 1.108 | 1.159 | 1.421 | 0.091 | 1.622 | 2009 | 2152 |
| 571-23-0224 | 240 | 0.177 | 1.132 | 1.192 | 1.243 | 1.514 | 0.091 | 1.715 | 2457 | 2621 |
| 571-23-0230 | 300 | 0.177 | 1.237 | 1.297 | 1.348 | 1.644 | 0.098 | 1.861 | 3022 | 3288 |
| 571-23-0240 | 400 | 0.177 | 1.363 | 1.423 | 1.474 | 1.781 | 0.102 | 2.006 | 3596 | 3852 |
| 571-23-0250 | 500 | 0.177 | 1.480 | 1.540 | 1.591 | 1.915 | 0.106 | 2.148 | 4459 | 4806 |

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating

## US MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | C-L-X O.D. - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | | | |
| 571-23-0303 | 35 | 0.217 | 0.765 | 0.825 | 0.876 | 1.106 | 0.079 | 1.283 | 880 | 955 |
| 571-23-0305 | 50 | 0.217 | 0.805 | 0.865 | 0.916 | 1.150 | 0.079 | 1.327 | 985 | 1087 |
| 571-23-0307 | 70 | 0.217 | 0.883 | 0.943 | 0.994 | 1.236 | 0.083 | 1.421 | 1194 | 1296 |
| 571-23-0309 | 95 | 0.217 | 0.932 | 0.992 | 1.043 | 1.288 | 0.083 | 1.473 | 1386 | 1503 |
| 571-23-0312 | 120 | 0.217 | 1.008 | 1.068 | 1.119 | 1.374 | 0.087 | 1.567 | 1618 | 1752 |
| 571-23-0315 | 150 | 0.217 | 1.074 | 1.134 | 1.185 | 1.465 | 0.091 | 1.666 | 1946 | 2089 |
| 571-23-0318 | 185 | 0.217 | 1.122 | 1.182 | 1.233 | 1.514 | 0.091 | 1.715 | 2163 | 2327 |
| 571-23-0324 | 240 | 0.217 | 1.214 | 1.274 | 1.325 | 1.601 | 0.094 | 1.808 | 2595 | 2759 |
| 571-23-0330 | 300 | 0.217 | 1.323 | 1.383 | 1.434 | 1.739 | 0.098 | 1.956 | 3166 | 3432 |
| 571-23-0340 | 400 | 0.217 | 1.441 | 1.501 | 1.552 | 1.868 | 0.106 | 2.101 | 3753 | 4009 |
| 571-23-0350 | 500 | 0.217 | 1.570 | 1.630 | 1.681 | 2.012 | 0.110 | 2.253 | 4647 | 5206 |
| **30 kV Rated Cable** | | | | | | | | | | |
| 571-23-0405 | 50 | 0.315 | 1.009 | 1.069 | 1.120 | 1.374 | 0.087 | 1.567 | 1267 | 1401 |
| 571-23-0407 | 70 | 0.315 | 1.065 | 1.125 | 1.176 | 1.421 | 0.091 | 1.622 | 1457 | 1591 |
| 571-23-0409 | 95 | 0.315 | 1.132 | 1.192 | 1.243 | 1.514 | 0.091 | 1.715 | 1733 | 1961 |
| 571-23-0412 | 120 | 0.315 | 1.206 | 1.266 | 1.317 | 1.601 | 0.094 | 1.808 | 1978 | 2206 |
| 571-23-0415 | 150 | 0.315 | 1.276 | 1.336 | 1.387 | 1.687 | 0.098 | 1.904 | 2291 | 2478 |
| 571-23-0418 | 185 | 0.315 | 1.324 | 1.384 | 1.435 | 1.739 | 0.098 | 1.956 | 2517 | 2704 |
| 571-23-0424 | 240 | 0.315 | 1.414 | 1.474 | 1.525 | 1.825 | 0.102 | 2.050 | 2971 | 3256 |
| 571-23-0430 | 300 | 0.315 | 1.529 | 1.589 | 1.640 | 1.956 | 0.106 | 2.189 | 3569 | 3861 |
| 571-23-0440 | 400 | 0.313 | 1.627 | 1.687 | 1.738 | 2.058 | 0.110 | 2.299 | 4122 | 4457 |
| 571-23-0450 | 500 | 0.315 | 1.766 | 1.826 | 1.877 | 2.231 | 0.118 | 2.488 | 5089 | 5659 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating

## METRIC MEASUREMENTS

| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | C-L-X O.D. - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | |
| 571-22-0002 | 25 | 2.5 | 12.2 | 13.7 | 15.1 | 20.3 | 1.7 | 24.1 | 759 | 859 |
| 571-22-0003 | 35 | 2.5 | 13.3 | 14.9 | 16.2 | 21.4 | 1.7 | 25.2 | 888 | 988 |
| 571-22-0005 | 50 | 2.5 | 14.4 | 15.9 | 17.2 | 22.5 | 1.8 | 26.5 | 1040 | 1140 |
| 571-22-0007 | 70 | 2.5 | 15.8 | 17.3 | 18.6 | 23.6 | 1.8 | 27.6 | 1268 | 1367 |
| 571-22-0009 | 95 | 2.5 | 17.5 | 19.0 | 20.3 | 25.9 | 1.9 | 30.1 | 1579 | 1698 |
| 571-22-0012 | 120 | 2.5 | 19.4 | 20.9 | 22.2 | 28.1 | 2.0 | 32.6 | 1915 | 2049 |
| 571-22-0015 | 150 | 2.5 | 21.6 | 23.1 | 24.4 | 30.3 | 2.1 | 35.0 | 2345 | 2518 |
| 571-22-0018 | 185 | 2.5 | 22.3 | 23.8 | 25.1 | 31.4 | 2.1 | 36.1 | 2619 | 2832 |
| 571-22-0024 | 240 | 2.6 | 23.6 | 25.2 | 26.5 | 32.7 | 2.1 | 37.4 | 3187 | 3400 |
| 571-22-0030 | 300 | 2.8 | 27.7 | 29.2 | 30.5 | 37.2 | 2.3 | 42.3 | 4104 | 4317 |
| 571-22-0040 | 400 | 3.0 | 31.4 | 32.9 | 34.2 | 41.8 | 2.5 | 47.3 | 5013 | 5409 |
| 571-22-0050 | 500 | 3.2 | 34.7 | 36.2 | 37.5 | 45.2 | 2.6 | 51.0 | 6299 | 6680 |
| **10 kV Rated Cable** | | | | | | | | | | |
| 571-23-0102 | 25 | 3.4 | 13.8 | 15.4 | 16.7 | 21.4 | 1.7 | 25.2 | 832 | 931 |
| 571-23-0103 | 35 | 3.4 | 15.4 | 16.9 | 18.3 | 23.6 | 1.8 | 27.6 | 1012 | 1112 |
| 571-23-0105 | 50 | 3.4 | 16.4 | 17.9 | 19.2 | 24.7 | 1.9 | 28.9 | 1164 | 1283 |
| 571-23-0107 | 70 | 3.4 | 17.6 | 19.1 | 20.4 | 25.9 | 1.9 | 30.1 | 1390 | 1509 |
| 571-23-0109 | 95 | 3.4 | 19.4 | 20.9 | 22.2 | 28.1 | 2.0 | 32.6 | 1744 | 1878 |
| 571-23-0112 | 120 | 3.4 | 21.4 | 23.0 | 24.3 | 30.3 | 2.1 | 35.0 | 2073 | 2225 |
| 571-23-0115 | 150 | 3.4 | 22.8 | 24.3 | 25.6 | 31.4 | 2.1 | 36.1 | 2430 | 2603 |
| 571-23-0118 | 185 | 3.4 | 24.1 | 25.7 | 26.9 | 32.7 | 2.1 | 37.4 | 2744 | 2957 |
| 571-23-0124 | 240 | 3.4 | 26.6 | 28.1 | 29.4 | 36.1 | 2.3 | 41.2 | 3412 | 3625 |
| 571-23-0130 | 300 | 3.4 | 28.9 | 30.4 | 31.7 | 38.5 | 2.3 | 43.6 | 4210 | 4454 |
| 571-23-0140 | 400 | 3.4 | 31.9 | 33.4 | 34.7 | 41.8 | 2.5 | 47.3 | 5047 | 5443 |
| 571-23-0150 | 500 | 3.4 | 35.1 | 36.6 | 37.9 | 45.2 | 2.6 | 51.0 | 6331 | 6712 |
| **15 kV Rated Cable** | | | | | | | | | | |
| 571-23-0202 | 25 | 4.5 | 16.4 | 17.9 | 19.2 | 24.7 | 1.9 | 28.9 | 1003 | 1101 |
| 571-23-0203 | 35 | 4.5 | 17.3 | 18.9 | 20.2 | 25.9 | 1.9 | 30.1 | 1138 | 1237 |
| 571-23-0205 | 50 | 4.5 | 18.4 | 19.9 | 21.2 | 27.0 | 1.9 | 31.2 | 1309 | 1421 |
| 571-23-0207 | 70 | 4.5 | 19.9 | 21.4 | 22.7 | 28.1 | 2.0 | 32.6 | 1573 | 1684 |
| 571-23-0209 | 95 | 4.5 | 21.6 | 23.1 | 24.4 | 30.3 | 2.1 | 35.0 | 1908 | 2059 |
| 571-23-0212 | 120 | 4.5 | 23.6 | 25.1 | 26.4 | 32.7 | 2.1 | 37.4 | 2233 | 2408 |
| 571-23-0215 | 150 | 4.5 | 25.1 | 26.6 | 27.9 | 34.0 | 2.2 | 38.9 | 2622 | 2835 |
| 571-23-0218 | 185 | 4.5 | 26.6 | 28.1 | 29.4 | 36.1 | 2.3 | 41.2 | 2989 | 3202 |
| 571-23-0224 | 240 | 4.5 | 28.8 | 30.3 | 31.6 | 38.5 | 2.3 | 43.6 | 3656 | 3900 |
| 571-23-0230 | 300 | 4.5 | 31.4 | 32.9 | 34.2 | 41.8 | 2.5 | 47.3 | 4497 | 4893 |
| 571-23-0240 | 400 | 4.5 | 34.6 | 36.1 | 37.4 | 45.2 | 2.6 | 51.0 | 5351 | 5732 |
| 571-23-0250 | 500 | 4.5 | 37.6 | 39.1 | 40.4 | 48.6 | 2.7 | 54.6 | 6635 | 7151 |

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating

## METRIC MEASUREMENTS

| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | C-L-X O.D. - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|
| **20kV Rated Cable** | | | | | | | | | | |
| 571-23-0303 | 35 | 5.5 | 19.4 | 21.0 | 22.3 | 28.1 | 2.0 | 32.6 | 1309 | 1421 |
| 571-23-0305 | 50 | 5.5 | 20.4 | 22.0 | 23.3 | 29.2 | 2.0 | 33.7 | 1466 | 1617 |
| 571-23-0307 | 70 | 5.5 | 22.4 | 24.0 | 25.2 | 31.4 | 2.1 | 36.1 | 1777 | 1928 |
| 571-23-0309 | 95 | 5.5 | 23.7 | 25.2 | 26.5 | 32.7 | 2.1 | 37.4 | 2062 | 2236 |
| 571-23-0312 | 120 | 5.5 | 25.6 | 27.1 | 28.4 | 34.9 | 2.2 | 39.8 | 2408 | 2607 |
| 571-23-0315 | 150 | 5.5 | 27.3 | 28.8 | 30.1 | 37.2 | 2.3 | 42.3 | 2896 | 3108 |
| 571-23-0318 | 185 | 5.5 | 28.5 | 30.0 | 31.3 | 38.5 | 2.3 | 43.6 | 3219 | 3463 |
| 571-23-0324 | 240 | 5.5 | 30.8 | 32.4 | 33.7 | 40.7 | 2.4 | 45.9 | 3861 | 4105 |
| 571-23-0330 | 300 | 5.5 | 33.6 | 35.1 | 36.4 | 44.2 | 2.5 | 49.7 | 4711 | 5107 |
| 571-23-0340 | 400 | 5.5 | 36.6 | 38.1 | 39.4 | 47.4 | 2.7 | 53.4 | 5584 | 5965 |
| 571-23-0350 | 500 | 5.5 | 39.9 | 41.4 | 42.7 | 51.1 | 2.8 | 57.2 | 6915 | 7747 |
| **30 kV Rated Cable** | | | | | | | | | | |
| 571-23-0405 | 50 | 8.0 | 25.6 | 27.2 | 28.4 | 34.9 | 2.2 | 39.8 | 1885 | 2085 |
| 571-23-0407 | 70 | 8.0 | 27.1 | 28.6 | 29.9 | 36.1 | 2.3 | 41.2 | 2168 | 2367 |
| 571-23-0409 | 95 | 8.0 | 28.8 | 30.3 | 31.6 | 38.5 | 2.3 | 43.6 | 2579 | 2918 |
| 571-23-0412 | 120 | 8.0 | 30.6 | 32.2 | 33.5 | 40.7 | 2.4 | 45.9 | 2943 | 3283 |
| 571-23-0415 | 150 | 8.0 | 32.4 | 33.9 | 35.2 | 42.8 | 2.5 | 48.4 | 3409 | 3687 |
| 571-23-0418 | 185 | 8.0 | 33.6 | 35.2 | 36.4 | 44.2 | 2.5 | 49.7 | 3745 | 4024 |
| 571-23-0424 | 240 | 8.0 | 35.9 | 37.4 | 38.7 | 46.4 | 2.6 | 52.1 | 4421 | 4845 |
| 571-23-0430 | 300 | 8.0 | 38.8 | 40.4 | 41.7 | 49.7 | 2.7 | 55.6 | 5311 | 5745 |
| 571-23-0440 | 400 | 8.0 | 41.3 | 42.8 | 44.1 | 52.3 | 2.8 | 58.4 | 6134 | 6632 |
| 571-23-0450 | 500 | 8.0 | 44.9 | 46.4 | 47.7 | 56.7 | 3.0 | 63.2 | 7572 | 8421 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

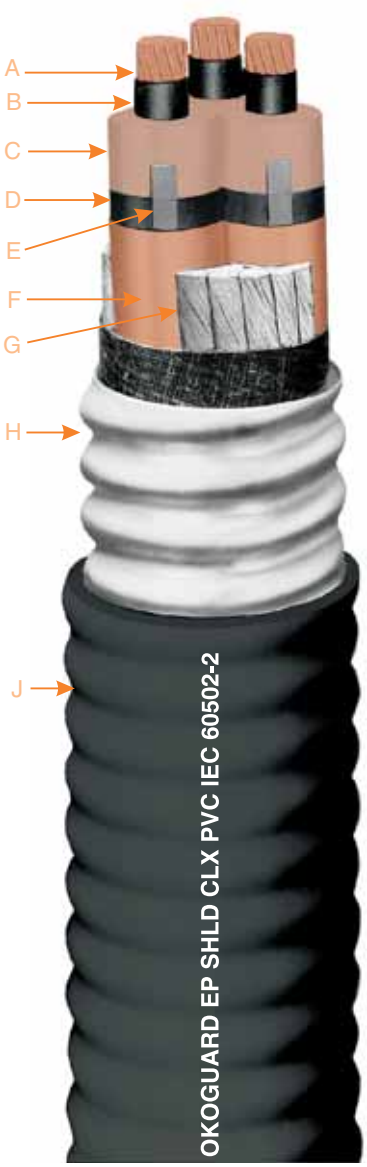
**Alternate Constructions**

Contact Applications Engineering for design options.

# C-L-X® Aluminum Sheath* Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating




A Conductor - Compact Stranded Copper
B Strand Screen - Extruded Semiconducting EPR
C Insulation - Okoguard EPR
D Insulation Screen - Extruded Semiconducting EPR
E Phase Identification Tape
F Shield - Copper Tape
G Fillers and Binder Tape
H Sheath - Impervious, Continuous, Corrugated Aluminum C-L-X
J Jacket - Okoseal PVC

### Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) based, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance of electrical and physical properties for long, problem free service.

The triple tandem extrusion of the screens with the insulation provides optimum electrical characteristics.

### Assembly

The shielded insulated conductors are assembled with fillers and a binder tape overall, encased by a continuously corrugated welded aluminum sheath (C-L-X). The impervious, continuous, corrugated aluminum C-L-X sheath provides complete protection against moisture, liquids and gases in addition to its excellent mechanical strength. In addition, the aluminum sheath has adequate ampacity capability to be used as a grounding conductor in U.S. National Electrical Code (NEC) non Hazardous Location (HL) areas.

### Jacket

The Okoseal (PVC) flame retardant jacket supplied with this cable is mechanically rugged and has excellent resistance to oil and most chemicals.

### Applications

C-L-X Type IEC 60502-2 cables are intended for use in fixed installations such as distribution networks or industrial applications.

C-L-X power cables are recommended as an economical alternate to a wire in conduit system.

### Specifications

**Conductor:** Annealed uncoated copper compact stranded per IEC 60228.

**Strand Screen:** Extruded semiconducting EPR strand screen. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation:** Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation Screen:** Extruded semiconducting EPR insulation screen applied directly over the insulation. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Shield:** 0.005 inches (0.127mm) bare copper tape helically applied with 10% minimum overlap.

**Phase Identification:** Color coded (black, red, blue) polyester ribbon laid longitudinally under the copper tape shield.

**Assembly:** Cabled with fillers and an overall binder tape.

**Sheath:** Close fitting, impervious, continuous, corrugated aluminum C-L-X per UL 1072. C-L-X is recognized as a grounding conductor by the U.S. National Electrical Code (NEC).

**Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2 for polyvinyl chloride jackets.

### Product Features

- Testing to IEC 60502-2 conducted by KEMA Nederland B.V.
- Conformance provided by means of Report of Performance TIC 1374-14.
- Passes optional flame spread requirements pre IEC 60332-1-2.
- PVC jacket passes oil immersion requirements per IEC 60811-404.
- Passes IEC 60332-3-22 Category A vertical tray flame test.
- Triple tandem extruded, all EPR system.
- Okoguard cables meet or exceed all recognized industry standards.
- Excellent corona resistance.
- Screens are free stripping.
- Exceptional resistance to "treeing".
- Exceptional resistance to moisture.
- Resistant to most oils, acids, and alkalies.
- Sunlight resistant.
- Aluminum and coated copper conductors available.
- Complete prepackaged, color coded, factory tested wiring system.
- Continuous sheath provides grounding safety.

* Complete certification to IEC 60502-2 is not obtainable because this standard does not recognize continuously corrugated armor.

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

US MEASUREMENTS

| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | C-L-X O.D. - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | |
| 571-22-0102 | 25 | 0.098 | 0.473 | 0.533 | 1.191 | 1.465 | 0.091 | 1.661 | 1458 | 1601 |
| 571-22-0103 | 35 | 0.098 | 0.515 | 0.575 | 1.282 | 1.557 | 0.094 | 1.759 | 1755 | 1919 |
| 571-22-0105 | 50 | 0.098 | 0.557 | 0.617 | 1.387 | 1.687 | 0.098 | 1.899 | 2079 | 2266 |
| 571-22-0107 | 70 | 0.098 | 0.621 | 0.681 | 1.511 | 1.825 | 0.102 | 2.045 | 2590 | 2882 |
| 571-22-0109 | 95 | 0.098 | 0.688 | 0.748 | 1.653 | 1.956 | 0.106 | 2.184 | 3187 | 3479 |
| 571-22-0112 | 120 | 0.098 | 0.762 | 0.822 | 1.813 | 2.146 | 0.114 | 2.390 | 3984 | 4319 |
| 571-22-0115 | 150 | 0.098 | 0.826 | 0.886 | 1.952 | 2.318 | 0.122 | 2.578 | 4833 | 5403 |
| 571-22-0118 | 185 | 0.098 | 0.878 | 0.938 | 2.081 | 2.446 | 0.126 | 2.714 | 5544 | 6306 |
| 571-22-0124 | 240 | 0.102 | 0.978 | 1.038 | 2.280 | 2.666 | 0.134 | 2.950 | 6923 | 7685 |
| 571-22-0130 | 300 | 0.110 | 1.089 | 1.149 | 2.520 | 2.933 | 0.142 | 3.233 | 8731 | 9664 |
| 571-22-0140 | 400 | 0.118 | 1.223 | 1.283 | 2.809 | 3.275 | 0.154 | 3.601 | 10685 | 11707 |
| 571-22-0150 | 500 | 0.126 | 1.366 | 1.426 | 3.118 | 3.668 | 0.169 | 4.024 | 13791 | 15701 |
| **10 kV Rated Cable** | | | | | | | | | | |
| 571-23-0502 | 25 | 0.134 | 0.545 | 0.605 | 1.347 | 1.644 | 0.098 | 1.856 | 1704 | 1891 |
| 571-23-0503 | 35 | 0.134 | 0.587 | 0.647 | 1.437 | 1.739 | 0.098 | 1.951 | 1986 | 2173 |
| 571-23-0505 | 50 | 0.134 | 0.629 | 0.689 | 1.528 | 1.825 | 0.102 | 2.045 | 2294 | 2586 |
| 571-23-0507 | 70 | 0.134 | 0.693 | 0.753 | 1.681 | 2.012 | 0.110 | 2.248 | 3000 | 3335 |
| 571-23-0509 | 95 | 0.134 | 0.760 | 0.82 | 1.809 | 2.146 | 0.114 | 2.390 | 3625 | 3960 |
| 571-23-0512 | 120 | 0.134 | 0.834 | 0.894 | 1.969 | 2.318 | 0.122 | 2.578 | 4350 | 4920 |
| 571-23-0515 | 150 | 0.134 | 0.898 | 0.958 | 2.120 | 2.489 | 0.126 | 2.757 | 5073 | 5783 |
| 571-23-0518 | 185 | 0.134 | 0.950 | 1.010 | 2.219 | 2.576 | 0.130 | 2.852 | 5908 | 6670 |
| 571-23-0524 | 240 | 0.134 | 1.042 | 1.102 | 2.433 | 2.851 | 0.138 | 3.143 | 7373 | 8306 |
| 571-23-0530 | 300 | 0.134 | 1.137 | 1.197 | 2.629 | 3.069 | 0.146 | 3.379 | 9051 | 10073 |
| 571-23-0540 | 400 | 0.134 | 1.255 | 1.315 | 2.897 | 3.410 | 0.157 | 3.742 | 10994 | 12803 |
| 571-23-0550 | 500 | 0.134 | 1.382 | 1.442 | 3.188 | 3.755 | 0.169 | 4.111 | 13964 | 15874 |
| **15 kV Rated Cable** | | | | | | | | | | |
| 571-23-0602 | 25 | 0.177 | 0.635 | 0.695 | 1.552 | 1.868 | 0.106 | 2.096 | 2016 | 2301 |
| 571-23-0603 | 35 | 0.177 | 0.677 | 0.737 | 1.639 | 1.956 | 0.106 | 2.184 | 2284 | 2576 |
| 571-23-0605 | 50 | 0.177 | 0.719 | 0.779 | 1.720 | 2.058 | 0.110 | 2.294 | 2759 | 3094 |
| 571-23-0607 | 70 | 0.177 | 0.783 | 0.843 | 1.876 | 2.231 | 0.118 | 2.483 | 3388 | 3773 |
| 571-23-0609 | 95 | 0.177 | 0.850 | 0.910 | 2.003 | 2.361 | 0.122 | 2.621 | 4058 | 4443 |
| 571-23-0612 | 120 | 0.177 | 0.924 | 0.984 | 2.163 | 2.532 | 0.130 | 2.808 | 4790 | 5500 |
| 571-23-0615 | 150 | 0.177 | 0.988 | 1.048 | 2.307 | 2.709 | 0.134 | 2.993 | 5791 | 6553 |
| 571-23-0618 | 185 | 0.177 | 1.040 | 1.100 | 2.433 | 2.851 | 0.138 | 3.143 | 6510 | 7443 |
| 571-23-0624 | 240 | 0.177 | 1.132 | 1.192 | 2.629 | 3.069 | 0.146 | 3.379 | 7941 | 8963 |
| 571-23-0630 | 300 | 0.177 | 1.227 | 1.287 | 2.837 | 3.320 | 0.157 | 3.652 | 9724 | 10746 |
| 571-23-0640 | 400 | 0.177 | 1.345 | 1.405 | 3.073 | 3.625 | 0.165 | 3.973 | 11726 | 13636 |
| 571-23-0650 | 500 | 0.177 | 1.472 | 1.532 | 3.430 | 4.015 | 0.181 | 4.395 | 14791 | 16701 |

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

US MEASUREMENTS

| Catalog Number | Conductor Size - mm2 | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | C-L-X O.D. - inches | Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | | | |
| 571-23-0703 | 35 | 0.217 | 0.759 | 0.819 | 1.807 | 2.146 | 0.114 | 2.390 | 2737 | 3072 |
| 571-23-0705 | 50 | 0.217 | 0.801 | 0.861 | 1.917 | 2.276 | 0.118 | 2.528 | 3142 | 3527 |
| 571-23-0707 | 70 | 0.217 | 0.865 | 0.925 | 2.036 | 2.402 | 0.122 | 2.662 | 3721 | 4106 |
| 571-23-0709 | 95 | 0.217 | 0.932 | 0.992 | 2.199 | 2.576 | 0.130 | 2.852 | 4542 | 5304 |
| 571-23-0712 | 120 | 0.217 | 1.006 | 1.066 | 2.346 | 2.753 | 0.134 | 3.037 | 5333 | 6095 |
| 571-23-0715 | 150 | 0.217 | 1.070 | 1.130 | 2.479 | 2.891 | 0.142 | 3.191 | 6199 | 7132 |
| 571-23-0718 | 185 | 0.217 | 1.122 | 1.182 | 2.591 | 3.026 | 0.146 | 3.336 | 6963 | 7896 |
| 571-23-0724 | 240 | 0.217 | 1.214 | 1.274 | 2.790 | 3.275 | 0.154 | 3.601 | 8497 | 9519 |
| 571-23-0730 | 300 | 0.217 | 1.309 | 1.369 | 3.070 | 3.625 | 0.165 | 3.973 | 10551 | 12360 |
| 571-23-0740 | 400 | 0.217 | 1.427 | 1.487 | 3.430 | 4.015 | 0.181 | 4.395 | 12740 | 14650 |
| 571-23-0750 | 500 | 0.217 | 1.554 | 1.614 | 3.524 | 4.103 | 0.181 | 4.483 | 15184 | 17094 |
| **30 kV Rated Cable** | | | | | | | | | | |
| 571-23-0805 | 50 | 0.315 | 1.001 | 1.061 | 2.346 | 2.753 | 0.134 | 3.037 | 4264 | 4735 |
| 571-23-0807 | 70 | 0.315 | 1.065 | 1.125 | 2.468 | 2.891 | 0.142 | 3.191 | 4895 | 5548 |
| 571-23-0809 | 95 | 0.315 | 1.132 | 1.192 | 2.629 | 3.069 | 0.146 | 3.379 | 5749 | 6771 |
| 571-23-0812 | 120 | 0.315 | 1.206 | 1.266 | 2.795 | 3.275 | 0.154 | 3.601 | 6657 | 7679 |
| 571-23-0815 | 150 | 0.315 | 1.270 | 1.330 | 2.911 | 3.410 | 0.157 | 3.742 | 7572 | 9381 |
| 571-23-0818 | 185 | 0.315 | 1.322 | 1.382 | 3.070 | 3.625 | 0.165 | 3.973 | 8600 | 10409 |
| 571-23-0824 | 240 | 0.315 | 1.414 | 1.474 | 3.228 | 3.798 | 0.173 | 4.162 | 10056 | 11865 |
| 571-23-0830 | 300 | 0.315 | 1.509 | 1.569 | 3.427 | 4.015 | 0.181 | 4.395 | 11873 | 13783 |
| 571-23-0840 | 400 | 0.315 | 1.627 | 1.687 | 3.700 | 4.318 | 0.189 | 4.714 | 13878 | 17678 |
| 571-23-0850 | 500 | 0.315 | 1.754 | 1.814 | 4.054 | 4.705 | 0.205 | 5.135 | 17198 | 20998 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

METRIC MEASUREMENTS

| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | C-L-X O.D. - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | |
| 571-22-0102 | 25 | 2.5 | 12.0 | 13.5 | 30.3 | 37.2 | 2.3 | 42.2 | 2170 | 2382 |
| 571-22-0103 | 35 | 2.5 | 13.1 | 14.6 | 32.6 | 39.5 | 2.4 | 44.7 | 2611 | 2855 |
| 571-22-0105 | 50 | 2.5 | 14.1 | 15.7 | 35.2 | 42.8 | 2.5 | 48.2 | 3094 | 3372 |
| 571-22-0107 | 70 | 2.5 | 15.8 | 17.3 | 38.4 | 46.4 | 2.6 | 51.9 | 3854 | 4288 |
| 571-22-0109 | 95 | 2.5 | 17.5 | 19.0 | 42.0 | 49.7 | 2.7 | 55.5 | 4742 | 5177 |
| 571-22-0112 | 120 | 2.5 | 19.4 | 20.9 | 46.1 | 54.5 | 2.9 | 60.7 | 5928 | 6427 |
| 571-22-0115 | 150 | 2.5 | 21.0 | 22.5 | 49.6 | 58.9 | 3.1 | 65.5 | 7192 | 8040 |
| 571-22-0118 | 185 | 2.5 | 22.3 | 23.8 | 52.9 | 62.1 | 3.2 | 68.9 | 8249 | 9383 |
| 571-22-0124 | 240 | 2.6 | 24.8 | 26.4 | 57.9 | 67.7 | 3.4 | 74.9 | 10301 | 11435 |
| 571-22-0130 | 300 | 2.8 | 27.7 | 29.2 | 64.0 | 74.5 | 3.6 | 82.1 | 12992 | 14380 |
| 571-22-0140 | 400 | 3.0 | 31.1 | 32.6 | 71.3 | 83.2 | 3.9 | 91.5 | 15899 | 17420 |
| 571-22-0150 | 500 | 3.2 | 34.7 | 36.2 | 79.2 | 93.2 | 4.3 | 102.2 | 20521 | 23363 |
| **10 kVRated Cable** | | | | | | | | | | |
| 571-23-0502 | 25 | 3.4 | 13.8 | 15.4 | 34.2 | 41.8 | 2.5 | 47.1 | 2536 | 2814 |
| 571-23-0503 | 35 | 3.4 | 14.9 | 16.4 | 36.5 | 44.2 | 2.5 | 49.6 | 2955 | 3233 |
| 571-23-0505 | 50 | 3.4 | 16.0 | 17.5 | 38.8 | 46.4 | 2.6 | 51.9 | 3413 | 3848 |
| 571-23-0507 | 70 | 3.4 | 17.6 | 19.1 | 42.7 | 51.1 | 2.8 | 57.1 | 4464 | 4962 |
| 571-23-0509 | 95 | 3.4 | 19.3 | 20.8 | 45.9 | 54.5 | 2.9 | 60.7 | 5394 | 5892 |
| 571-23-0512 | 120 | 3.4 | 21.2 | 22.7 | 50.0 | 58.9 | 3.1 | 65.5 | 6473 | 7321 |
| 571-23-0515 | 150 | 3.4 | 22.8 | 24.3 | 53.8 | 63.2 | 3.2 | 70.0 | 7549 | 8605 |
| 571-23-0518 | 185 | 3.4 | 24.1 | 25.7 | 56.4 | 65.4 | 3.3 | 72.4 | 8791 | 9925 |
| 571-23-0524 | 240 | 3.4 | 26.5 | 28.0 | 61.8 | 72.4 | 3.5 | 79.8 | 10971 | 12359 |
| 571-23-0530 | 300 | 3.4 | 28.9 | 30.4 | 66.8 | 78.0 | 3.7 | 85.8 | 13468 | 14989 |
| 571-23-0540 | 400 | 3.4 | 31.9 | 33.4 | 73.6 | 86.6 | 4.0 | 95.0 | 16359 | 19051 |
| 571-23-0550 | 500 | 3.4 | 35.1 | 36.6 | 81.0 | 95.4 | 4.3 | 104.4 | 20778 | 23621 |
| **15 kV Rated Cable** | | | | | | | | | | |
| 571-23-0602 | 25 | 4.5 | 16.1 | 17.7 | 39.4 | 47.4 | 2.7 | 53.2 | 3000 | 3424 |
| 571-23-0603 | 35 | 4.5 | 17.2 | 18.7 | 41.6 | 49.7 | 2.7 | 55.5 | 3399 | 3833 |
| 571-23-0605 | 50 | 4.5 | 18.3 | 19.8 | 43.7 | 52.3 | 2.8 | 58.3 | 4105 | 4604 |
| 571-23-0607 | 70 | 4.5 | 19.9 | 21.4 | 47.7 | 56.7 | 3.0 | 63.1 | 5041 | 5614 |
| 571-23-0609 | 95 | 4.5 | 21.6 | 23.1 | 50.9 | 60.0 | 3.1 | 66.6 | 6038 | 6611 |
| 571-23-0612 | 120 | 4.5 | 23.5 | 25.0 | 54.9 | 64.3 | 3.3 | 71.3 | 7128 | 8184 |
| 571-23-0615 | 150 | 4.5 | 25.1 | 26.6 | 58.6 | 68.8 | 3.4 | 76.0 | 8617 | 9751 |
| 571-23-0618 | 185 | 4.5 | 26.4 | 27.9 | 61.8 | 72.4 | 3.5 | 79.8 | 9687 | 11075 |
| 571-23-0624 | 240 | 4.5 | 28.8 | 30.3 | 66.8 | 78.0 | 3.7 | 85.8 | 11816 | 13337 |
| 571-23-0630 | 300 | 4.5 | 31.2 | 32.7 | 72.1 | 84.3 | 4.0 | 92.8 | 14469 | 15990 |
| 571-23-0640 | 400 | 4.5 | 34.2 | 35.7 | 78.1 | 92.1 | 4.2 | 100.9 | 17448 | 20290 |
| 571-23-0650 | 500 | 4.5 | 37.4 | 38.9 | 87.1 | 102.0 | 4.6 | 111.6 | 22009 | 24851 |

# C-L-X® Aluminum Sheath*
# Type IEC 60502-2



**6, 10, 15, 20, 30 kV Okoguard® Shielded Power Cable**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

## METRIC MEASUREMENTS

| Catalog Number | Conductor Size - mm2 | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | C-L-X O.D. - mm | Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|
| **20kV Rated Cable** | | | | | | | | | | |
| 571-23-0703 | 35 | 5.5 | 19.3 | 20.8 | 45.9 | 54.5 | 2.9 | 60.7 | 4073 | 4571 |
| 571-23-0705 | 50 | 5.5 | 20.3 | 21.9 | 48.7 | 57.8 | 3.0 | 64.2 | 4675 | 5248 |
| 571-23-0707 | 70 | 5.5 | 22.0 | 23.5 | 51.7 | 61.0 | 3.1 | 67.6 | 5537 | 6110 |
| 571-23-0709 | 95 | 5.5 | 23.7 | 25.2 | 55.9 | 65.4 | 3.3 | 72.4 | 6758 | 7892 |
| 571-23-0712 | 120 | 5.5 | 25.6 | 27.1 | 59.6 | 69.9 | 3.4 | 77.1 | 7936 | 9069 |
| 571-23-0715 | 150 | 5.5 | 27.2 | 28.7 | 63.0 | 73.4 | 3.6 | 81.1 | 9224 | 10612 |
| 571-23-0718 | 185 | 5.5 | 28.5 | 30.0 | 65.8 | 76.9 | 3.7 | 84.7 | 10361 | 11749 |
| 571-23-0724 | 240 | 5.5 | 30.8 | 32.4 | 70.9 | 83.2 | 3.9 | 91.5 | 12644 | 14164 |
| 571-23-0730 | 300 | 5.5 | 33.2 | 34.8 | 78.0 | 92.1 | 4.2 | 100.9 | 15700 | 18392 |
| 571-23-0740 | 400 | 5.5 | 36.2 | 37.8 | 87.1 | 102.0 | 4.6 | 111.6 | 18957 | 21799 |
| 571-23-0750 | 500 | 5.5 | 39.5 | 41.0 | 89.5 | 104.2 | 4.6 | 113.9 | 22594 | 25436 |
| **30 kV Rated Cable** | | | | | | | | | | |
| 571-23-0805 | 50 | 8.0 | 25.4 | 26.9 | 59.6 | 69.9 | 3.4 | 77.1 | 6345 | 7046 |
| 571-23-0807 | 70 | 8.0 | 27.1 | 28.6 | 62.7 | 73.4 | 3.6 | 81.1 | 7284 | 8255 |
| 571-23-0809 | 95 | 8.0 | 28.8 | 30.3 | 66.8 | 78.0 | 3.7 | 85.8 | 8555 | 10075 |
| 571-23-0812 | 120 | 8.0 | 30.6 | 32.2 | 71.0 | 83.2 | 3.9 | 91.5 | 9906 | 11426 |
| 571-23-0815 | 150 | 8.0 | 32.3 | 33.8 | 73.9 | 86.6 | 4.0 | 95.0 | 11267 | 13959 |
| 571-23-0818 | 185 | 8.0 | 33.6 | 35.1 | 78.0 | 92.1 | 4.2 | 100.9 | 12797 | 15489 |
| 571-23-0824 | 240 | 8.0 | 35.9 | 37.4 | 82.0 | 96.5 | 4.4 | 105.7 | 14963 | 17655 |
| 571-23-0830 | 300 | 8.0 | 38.3 | 39.9 | 87.0 | 102.0 | 4.6 | 111.6 | 17667 | 20509 |
| 571-23-0840 | 400 | 8.0 | 41.3 | 42.8 | 94.0 | 109.7 | 4.8 | 119.7 | 20650 | 26305 |
| 571-23-0850 | 500 | 8.0 | 44.6 | 46.1 | 103.0 | 119.5 | 5.2 | 130.4 | 25591 | 31245 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Wire Armor Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable - Aluminum Wire Armor

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating


A Conductor - Compact Stranded Copper
B Strand Screen - Extruded Semiconducting EPR
C Insulation - Okoguard EPR
D Insulation Screen - Extruded Semiconducting EPR
E Shield - Copper Tape
F Inner Jacket - Okoseal PVC
G Armor - Round Aluminum Wires
H Binder Tape
J Outer Jacket - Okoseal PVC

### Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) based, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance of electrical and physical properties for long, problem free service.

The triple tandem extrusion of the screens with the insulation provides optimum electrical characteristics.

### Assembly

The shielded insulated conductor is encased by multiple aluminum armor wires. The armor provides mechanical protection and longitudinal strength.

### Jacket

The Okoseal (PVC) flame retardant jacket supplied with this cable is mechanically rugged and has excellent resistance to oil and most chemicals.

### Applications

Wire Armor Type IEC 60502-2 cables are intended for use in fixed installations such as distribution networks or industrial applications.

### Specifications

**Conductor:** Annealed uncoated copper compact stranded per IEC 60228.

**Strand Screen:** Extruded semiconducting EPR strand screen. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation:** Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation Screen:** Extruded semiconducting EPR insulation screen applied directly over the insulation. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Shield:** 0.005 inches (0.127mm) bare copper tape helically applied with 10% minimum overlap.

**Inner Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2 for polyvinyl chloride jackets.

**Armor:** Round aluminum wires, approximate 100% coverage, meeting the requirements of IEC 60502-2, followed by a binder tape.

**Outer Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2 for polyvinyl chloride jackets.

### Product Features

- Certification to IEC 60502-2 conducted by KEMA Nederland B.V.
- Conformance provided by means of Type Test Certificate TIC 1014-14.
- Passes optional flame spread requirements per IEC 60332-1-2.
- PVC jacket passes oil immersion requirements per IEC 60811-404.
- Passes IEC 60332-3-24 Category C vertical tray flame test.
- Triple tandem extruded, all EPR system.
- Okoguard cables meet or exceed all recognized industry standards.
- Excellent corona resistance.
- Screens are free stripping.
- Exceptional resistance to "treeing".
- Exceptional resistance to moisture.
- Resistant to most oils, acids, and alkalies.
- Sunlight resistant.
- Aluminum and coated copper conductors available.

# Wire Armor Type IEC 60502-2

**6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable**
**- Aluminum Wire Armor**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating

US MEASUREMENTS



| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Inner Jacket Thickness - inches | Approx. Dia. over Inner Jacket - inches | Approx. Number x Size of Armor Wires - inches | Approx. Dia. over Armor - inches | Outer Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | | | |
| 114-23-0062 | 25 | 0.098 | 0.473 | 0.533 | 0.040 | 0.633 | 31 x 0.063 | 0.759 | 0.067 | 0.925 | 597 | 643 |
| 114-23-0063 | 35 | 0.098 | 0.515 | 0.575 | 0.040 | 0.675 | 32 x 0.063 | 0.801 | 0.067 | 0.967 | 686 | 743 |
| 114-23-0065 | 50 | 0.098 | 0.557 | 0.617 | 0.040 | 0.717 | 34 x 0.063 | 0.843 | 0.071 | 1.017 | 796 | 853 |
| 114-23-0067 | 70 | 0.098 | 0.621 | 0.681 | 0.040 | 0.781 | 37 x 0.063 | 0.907 | 0.071 | 1.081 | 969 | 1026 |
| 114-23-0069 | 95 | 0.098 | 0.688 | 0.748 | 0.040 | 0.847 | 40 x 0.063 | 0.973 | 0.075 | 1.155 | 1182 | 1276 |
| 114-23-0072 | 120 | 0.098 | 0.762 | 0.822 | 0.040 | 0.921 | 43 x 0.063 | 1.047 | 0.075 | 1.230 | 1390 | 1496 |
| 114-23-0075 | 150 | 0.098 | 0.826 | 0.886 | 0.040 | 0.985 | 38 x 0.079 | 1.141 | 0.079 | 1.334 | 1717 | 1817 |
| 114-23-0078 | 185 | 0.098 | 0.878 | 0.938 | 0.040 | 1.037 | 40 x 0.079 | 1.193 | 0.083 | 1.394 | 1946 | 2062 |
| 114-23-0084 | 240 | 0.102 | 0.978 | 1.038 | 0.048 | 1.155 | 44 x 0.079 | 1.311 | 0.087 | 1.520 | 2415 | 2558 |
| 114-23-0093 | 300 | 0.110 | 1.089 | 1.149 | 0.048 | 1.266 | 48 x 0.079 | 1.422 | 0.091 | 1.650 | 2977 | 3154 |
| 114-23-0094 | 400 | 0.118 | 1.223 | 1.283 | 0.048 | 1.400 | 43 x 0.098 | 1.596 | 0.094 | 1.830 | 3665 | 3899 |
| 114-23-0095 | 500 | 0.126 | 1.366 | 1.426 | 0.056 | 1.561 | 47 x 0.098 | 1.757 | 0.102 | 2.009 | 4634 | 4981 |
| **10 kV Rated Cable** | | | | | | | | | | | | |
| 115-23-0162 | 25 | 0.134 | 0.545 | 0.605 | 0.040 | 0.705 | 34 x 0.063 | 0.831 | 0.071 | 1.005 | 676 | 733 |
| 115-23-0163 | 35 | 0.134 | 0.587 | 0.647 | 0.040 | 0.747 | 36 x 0.063 | 0.873 | 0.071 | 1.047 | 772 | 829 |
| 115-23-0165 | 50 | 0.134 | 0.629 | 0.689 | 0.040 | 0.789 | 38 x 0.063 | 0.915 | 0.071 | 1.089 | 876 | 933 |
| 115-23-0167 | 70 | 0.134 | 0.693 | 0.753 | 0.040 | 0.852 | 40 x 0.063 | 0.978 | 0.075 | 1.160 | 1057 | 1123 |
| 115-23-0169 | 95 | 0.134 | 0.760 | 0.820 | 0.040 | 0.919 | 43 x 0.063 | 1.045 | 0.075 | 1.227 | 1267 | 1373 |
| 115-23-0172 | 120 | 0.134 | 0.834 | 0.894 | 0.040 | 0.993 | 38 x 0.079 | 1.149 | 0.079 | 1.342 | 1550 | 1652 |
| 115-23-0175 | 150 | 0.134 | 0.898 | 0.958 | 0.040 | 1.057 | 40 x 0.079 | 1.213 | 0.083 | 1.414 | 1826 | 1969 |
| 115-23-0178 | 185 | 0.134 | 0.950 | 1.010 | 0.048 | 1.127 | 43 x 0.079 | 1.283 | 0.087 | 1.489 | 2085 | 2228 |
| 115-23-0184 | 240 | 0.134 | 1.042 | 1.102 | 0.048 | 1.219 | 46 x 0.079 | 1.375 | 0.087 | 1.581 | 2509 | 2652 |
| 115-23-0193 | 300 | 0.134 | 1.137 | 1.197 | 0.048 | 1.314 | 50 x 0.079 | 1.470 | 0.091 | 1.698 | 3058 | 3235 |
| 115-23-0194 | 400 | 0.134 | 1.255 | 1.315 | 0.048 | 1.432 | 43 x 0.098 | 1.628 | 0.098 | 1.872 | 3735 | 4001 |
| 115-23-0195 | 500 | 0.134 | 1.382 | 1.442 | 0.056 | 1.577 | 48 x 0.098 | 1.773 | 0.102 | 2.025 | 4670 | 5060 |
| **15 kV Rated Cable** | | | | | | | | | | | | |
| 115-23-0262 | 25 | 0.177 | 0.635 | 0.695 | 0.040 | 0.795 | 38 x 0.063 | 0.921 | 0.071 | 1.095 | 774 | 831 |
| 115-23-0263 | 35 | 0.177 | 0.677 | 0.737 | 0.040 | 0.836 | 40 x 0.063 | 0.962 | 0.075 | 1.144 | 877 | 943 |
| 115-23-0265 | 50 | 0.177 | 0.719 | 0.779 | 0.040 | 0.878 | 42 x 0.063 | 1.004 | 0.075 | 1.186 | 987 | 1053 |
| 115-23-0267 | 70 | 0.177 | 0.783 | 0.843 | 0.040 | 0.942 | 44 x 0.063 | 1.068 | 0.079 | 1.260 | 1179 | 1285 |
| 115-23-0269 | 95 | 0.177 | 0.850 | 0.910 | 0.040 | 1.009 | 39 x 0.079 | 1.165 | 0.083 | 1.365 | 1465 | 1567 |
| 115-23-0272 | 120 | 0.177 | 0.924 | 0.984 | 0.048 | 1.101 | 42 x 0.079 | 1.257 | 0.083 | 1.458 | 1715 | 1832 |
| 115-23-0275 | 150 | 0.177 | 0.988 | 1.048 | 0.048 | 1.165 | 44 x 0.079 | 1.321 | 0.087 | 1.530 | 1998 | 2141 |
| 115-23-0278 | 185 | 0.177 | 1.040 | 1.100 | 0.048 | 1.217 | 46 x 0.079 | 1.373 | 0.087 | 1.579 | 2222 | 2365 |
| 115-23-0284 | 240 | 0.177 | 1.132 | 1.192 | 0.048 | 1.309 | 50 x 0.079 | 1.465 | 0.091 | 1.679 | 2672 | 2815 |
| 115-23-0293 | 300 | 0.177 | 1.227 | 1.287 | 0.048 | 1.404 | 43 x 0.098 | 1.600 | 0.098 | 1.844 | 3343 | 3609 |
| 115-23-0294 | 400 | 0.177 | 1.345 | 1.405 | 0.056 | 1.540 | 47 x 0.098 | 1.736 | 0.102 | 1.988 | 3964 | 4220 |
| 115-23-0295 | 500 | 0.177 | 1.472 | 1.532 | 0.056 | 1.667 | 50 x 0.098 | 1.863 | 0.106 | 2.123 | 4866 | 5256 |

# Wire Armor Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable - Aluminum Wire Armor

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating

US MEASUREMENTS



| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Inner Jacket Thickness - inches | Approx. Dia. over Inner Jacket - inches | Approx. Number x Size of Armor Wires - inches | Approx. Dia. over Armor - inches | Outer Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Weight - lbs./1000' | Approx. Ship Weight - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | | | | | |
| 115-23-0363 | 35 | 0.217 | 0.759 | 0.819 | 0.040 | 0.918 | 43 x 0.063 | 1.044 | 0.075 | 1.226 | 976 | 1051 |
| 115-23-0365 | 50 | 0.217 | 0.801 | 0.861 | 0.040 | 0.960 | 45 x 0.063 | 1.086 | 0.079 | 1.278 | 1099 | 1174 |
| 115-23-0367 | 70 | 0.217 | 0.865 | 0.925 | 0.040 | 1.024 | 39 x 0.079 | 1.180 | 0.083 | 1.380 | 1353 | 1455 |
| 115-23-0369 | 95 | 0.217 | 0.932 | 0.992 | 0.048 | 1.109 | 42 x 0.079 | 1.265 | 0.083 | 1.465 | 1606 | 1723 |
| 115-23-0372 | 120 | 0.217 | 1.006 | 1.066 | 0.048 | 1.183 | 45 x 0.079 | 1.339 | 0.087 | 1.548 | 1851 | 2011 |
| 115-23-0375 | 150 | 0.217 | 1.070 | 1.130 | 0.048 | 1.247 | 47 x 0.079 | 1.403 | 0.091 | 1.620 | 2140 | 2283 |
| 115-23-0378 | 185 | 0.217 | 1.122 | 1.182 | 0.048 | 1.299 | 49 x 0.079 | 1.455 | 0.091 | 1.669 | 2368 | 2511 |
| 115-23-0384 | 240 | 0.217 | 1.214 | 1.274 | 0.048 | 1.391 | 42 x 0.098 | 1.587 | 0.094 | 1.807 | 2917 | 3151 |
| 115-23-0393 | 300 | 0.217 | 1.309 | 1.369 | 0.056 | 1.504 | 46 x 0.098 | 1.700 | 0.098 | 1.944 | 3533 | 3799 |
| 115-23-0394 | 400 | 0.217 | 1.427 | 1.487 | 0.056 | 1.622 | 49 x 0.098 | 1.818 | 0.102 | 2.070 | 4126 | 4411 |
| 115-23-0395 | 500 | 0.217 | 1.554 | 1.614 | 0.056 | 1.749 | 53 x 0.098 | 1.945 | 0.110 | 2.213 | 5063 | 5463 |
| **30 kV Rated Cable** | | | | | | | | | | | | |
| 115-23-0465 | 50 | 0.315 | 1.001 | 1.061 | 0.048 | 1.178 | 45 x 0.079 | 1.334 | 0.087 | 1.542 | 1490 | 1633 |
| 115-23-0467 | 70 | 0.315 | 1.065 | 1.125 | 0.048 | 1.242 | 47 x 0.079 | 1.398 | 0.091 | 1.614 | 1705 | 1848 |
| 115-23-0469 | 95 | 0.315 | 1.132 | 1.192 | 0.048 | 1.309 | 50 x 0.079 | 1.465 | 0.091 | 1.681 | 1949 | 2092 |
| 115-23-0472 | 120 | 0.315 | 1.206 | 1.266 | 0.048 | 1.383 | 42 x 0.098 | 1.579 | 0.094 | 1.802 | 2301 | 2465 |
| 115-23-0475 | 150 | 0.315 | 1.270 | 1.330 | 0.048 | 1.447 | 44 x 0.098 | 1.643 | 0.098 | 1.876 | 2615 | 2802 |
| 115-23-0478 | 185 | 0.315 | 1.322 | 1.382 | 0.056 | 1.517 | 46 x 0.098 | 1.713 | 0.098 | 1.946 | 2895 | 3161 |
| 115-23-0484 | 240 | 0.315 | 1.414 | 1.474 | 0.056 | 1.609 | 49 x 0.098 | 1.805 | 0.102 | 2.046 | 3380 | 3672 |
| 115-23-0493 | 300 | 0.315 | 1.509 | 1.569 | 0.056 | 1.704 | 51 x 0.098 | 1.900 | 0.106 | 2.160 | 3964 | 4249 |
| 115-23-0494 | 400 | 0.315 | 1.627 | 1.687 | 0.056 | 1.822 | 55 x 0.098 | 2.018 | 0.110 | 2.286 | 4591 | 5150 |
| 115-23-0495 | 500 | 0.315 | 1.754 | 1.814 | 0.063 | 1.963 | 59 x 0.098 | 2.159 | 0.114 | 2.435 | 5567 | 6126 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Wire Armor Type IEC 60502-2

**6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable**
**- Aluminum Wire Armor**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating

METRIC MEASUREMENTS



| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Inner Jacket Thickness - mm | Approx. Dia. over Inner Jacket - mm | Approx. Number x Size of Armor Wires - mm | Approx. Dia. over Armor - mm | Outer Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | | | |
| 114-23-0062 | 25 | 2.5 | 12.0 | 13.5 | 1.0 | 16.1 | 31 x 1.6 | 19.3 | 1.7 | 23.5 | 888 | 957 |
| 114-23-0063 | 35 | 2.5 | 13.1 | 14.6 | 1.0 | 17.1 | 32 x 1.6 | 20.3 | 1.7 | 24.6 | 1021 | 1106 |
| 114-23-0065 | 50 | 2.5 | 14.1 | 15.7 | 1.0 | 18.2 | 34 x 1.6 | 21.4 | 1.8 | 25.8 | 1184 | 1269 |
| 114-23-0067 | 70 | 2.5 | 15.8 | 17.3 | 1.0 | 19.8 | 37 x 1.6 | 23.0 | 1.8 | 27.5 | 1442 | 1527 |
| 114-23-0069 | 95 | 2.5 | 17.5 | 19.0 | 1.0 | 21.5 | 40 x 1.6 | 24.7 | 1.9 | 29.3 | 1759 | 1899 |
| 114-23-0072 | 120 | 2.5 | 19.4 | 20.9 | 1.0 | 23.4 | 43 x 1.6 | 26.6 | 1.9 | 31.2 | 2068 | 2226 |
| 114-23-0075 | 150 | 2.5 | 21.0 | 22.5 | 1.0 | 25.0 | 38 x 2.0 | 29.0 | 2.0 | 33.9 | 2555 | 2704 |
| 114-23-0078 | 185 | 2.5 | 22.3 | 23.8 | 1.0 | 26.3 | 40 x 2.0 | 30.3 | 2.1 | 35.4 | 2896 | 3068 |
| 114-23-0084 | 240 | 2.6 | 24.8 | 26.4 | 1.2 | 29.3 | 44 x 2.0 | 33.3 | 2.2 | 38.6 | 3594 | 3806 |
| 114-23-0093 | 300 | 2.8 | 27.7 | 29.2 | 1.2 | 32.2 | 48 x 2.0 | 36.1 | 2.3 | 41.9 | 4430 | 4693 |
| 114-23-0094 | 400 | 3.0 | 31.1 | 32.6 | 1.2 | 35.6 | 43 x 2.5 | 40.5 | 2.4 | 46.5 | 5454 | 5802 |
| 114-23-0095 | 500 | 3.2 | 34.7 | 36.2 | 1.4 | 39.6 | 47 x 2.5 | 44.6 | 2.6 | 51.0 | 6895 | 7412 |
| **10 kVRated Cable** | | | | | | | | | | | | |
| 115-23-0162 | 25 | 3.4 | 13.8 | 15.4 | 1.0 | 17.9 | 34 x 1.6 | 21.1 | 1.8 | 25.5 | 1006 | 1091 |
| 115-23-0163 | 35 | 3.4 | 14.9 | 16.4 | 1.0 | 19.0 | 36 x 1.6 | 22.2 | 1.8 | 26.6 | 1149 | 1234 |
| 115-23-0165 | 50 | 3.4 | 16.0 | 17.5 | 1.0 | 20.0 | 38 x 1.6 | 23.2 | 1.8 | 27.7 | 1303 | 1388 |
| 115-23-0167 | 70 | 3.4 | 17.6 | 19.1 | 1.0 | 21.6 | 40 x 1.6 | 24.8 | 1.9 | 29.5 | 1573 | 1671 |
| 115-23-0169 | 95 | 3.4 | 19.3 | 20.8 | 1.0 | 23.3 | 43 x 1.6 | 26.5 | 1.9 | 31.2 | 1885 | 2043 |
| 115-23-0172 | 120 | 3.4 | 21.2 | 22.7 | 1.0 | 25.2 | 38 x 2.0 | 29.2 | 2.0 | 34.1 | 2306 | 2458 |
| 115-23-0175 | 150 | 3.4 | 22.8 | 24.3 | 1.0 | 26.8 | 40 x 2.0 | 30.8 | 2.1 | 35.9 | 2717 | 2930 |
| 115-23-0178 | 185 | 3.4 | 24.1 | 25.7 | 1.2 | 28.6 | 43 x 2.0 | 32.6 | 2.2 | 37.8 | 3102 | 3315 |
| 115-23-0184 | 240 | 3.4 | 26.5 | 28.0 | 1.2 | 31.0 | 46 x 2.0 | 34.9 | 2.2 | 40.2 | 3733 | 3946 |
| 115-23-0193 | 300 | 3.4 | 28.9 | 30.4 | 1.2 | 33.4 | 50 x 2.0 | 37.3 | 2.3 | 43.1 | 4550 | 4814 |
| 115-23-0194 | 400 | 3.4 | 31.9 | 33.4 | 1.2 | 36.4 | 43 x 2.5 | 41.4 | 2.5 | 47.5 | 5558 | 5953 |
| 115-23-0195 | 500 | 3.4 | 35.1 | 36.6 | 1.4 | 40.1 | 48 x 2.5 | 45.0 | 2.6 | 51.4 | 6949 | 7529 |
| **15 kV Rated Cable** | | | | | | | | | | | | |
| 115-23-0262 | 25 | 4.5 | 16.1 | 17.7 | 1.0 | 20.2 | 38 x 1.6 | 23.4 | 1.8 | 27.8 | 1152 | 1237 |
| 115-23-0263 | 35 | 4.5 | 17.2 | 18.7 | 1.0 | 21.2 | 40 x 1.6 | 24.4 | 1.9 | 29.1 | 1305 | 1403 |
| 115-23-0265 | 50 | 4.5 | 18.3 | 19.8 | 1.0 | 22.3 | 42 x 1.6 | 25.5 | 1.9 | 30.1 | 1469 | 1567 |
| 115-23-0267 | 70 | 4.5 | 19.9 | 21.4 | 1.0 | 23.9 | 44 x 1.6 | 27.1 | 2.0 | 32.0 | 1754 | 1912 |
| 115-23-0269 | 95 | 4.5 | 21.6 | 23.1 | 1.0 | 25.6 | 39 x 2.0 | 29.6 | 2.1 | 34.7 | 2180 | 2332 |
| 115-23-0272 | 120 | 4.5 | 23.5 | 25.0 | 1.2 | 28.0 | 42 x 2.0 | 31.9 | 2.1 | 37.0 | 2552 | 2726 |
| 115-23-0275 | 150 | 4.5 | 25.1 | 26.6 | 1.2 | 29.6 | 44 x 2.0 | 33.6 | 2.2 | 38.9 | 2973 | 3186 |
| 115-23-0278 | 185 | 4.5 | 26.4 | 27.9 | 1.2 | 30.9 | 46 x 2.0 | 34.9 | 2.2 | 40.1 | 3306 | 3519 |
| 115-23-0284 | 240 | 4.5 | 28.8 | 30.3 | 1.2 | 33.2 | 50 x 2.0 | 37.2 | 2.3 | 42.6 | 3976 | 4189 |
| 115-23-0293 | 300 | 4.5 | 31.2 | 32.7 | 1.2 | 35.7 | 43 x 2.5 | 40.6 | 2.5 | 46.8 | 4974 | 5370 |
| 115-23-0294 | 400 | 4.5 | 34.2 | 35.7 | 1.4 | 39.1 | 47 x 2.5 | 44.1 | 2.6 | 50.5 | 5898 | 6279 |
| 115-23-0295 | 500 | 4.5 | 37.4 | 38.9 | 1.4 | 42.3 | 50 x 2.5 | 47.3 | 2.7 | 53.9 | 7241 | 7821 |

# Wire Armor Type IEC 60502-2

**6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable**
**- Aluminum Wire Armor**

One Okopact® (Compact Stranded) Copper Conductor/90°C Rating
METRIC MEASUREMENTS



| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Inner Jacket Thickness - mm | Approx. Dia. over Inner Jacket - mm | Approx. Number x Size of Armor Wires - mm | Approx. Dia. over Armor - mm | Outer Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Weight - Kg/Km | Approx. Ship Weight - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **20kV Rated Cable** | | | | | | | | | | | | |
| 115-23-0363 | 35 | 5.5 | 19.3 | 20.8 | 1.0 | 23.3 | 43 x 1.6 | 26.5 | 1.9 | 31.1 | 1452 | 1564 |
| 115-23-0365 | 50 | 5.5 | 20.3 | 21.9 | 1.0 | 24.4 | 45 x 1.6 | 27.6 | 2.0 | 32.5 | 1635 | 1747 |
| 115-23-0367 | 70 | 5.5 | 22.0 | 23.5 | 1.0 | 26.0 | 39 x 2.0 | 30.0 | 2.1 | 35.1 | 2013 | 2165 |
| 115-23-0369 | 95 | 5.5 | 23.7 | 25.2 | 1.2 | 28.2 | 42 x 2.0 | 32.1 | 2.1 | 37.2 | 2390 | 2564 |
| 115-23-0372 | 120 | 5.5 | 25.6 | 27.1 | 1.2 | 30.0 | 45 x 2.0 | 34.0 | 2.2 | 39.3 | 2754 | 2992 |
| 115-23-0375 | 150 | 5.5 | 27.2 | 28.7 | 1.2 | 31.7 | 47 x 2.0 | 35.6 | 2.3 | 41.1 | 3184 | 3397 |
| 115-23-0378 | 185 | 5.5 | 28.5 | 30.0 | 1.2 | 33.0 | 49 x 2.0 | 37.0 | 2.3 | 42.4 | 3524 | 3736 |
| 115-23-0384 | 240 | 5.5 | 30.8 | 32.4 | 1.2 | 35.3 | 42 x 2.5 | 40.3 | 2.4 | 45.9 | 4340 | 4689 |
| 115-23-0393 | 300 | 5.5 | 33.2 | 34.8 | 1.4 | 38.2 | 46 x 2.5 | 43.2 | 2.5 | 49.4 | 5257 | 5653 |
| 115-23-0394 | 400 | 5.5 | 36.2 | 37.8 | 1.4 | 41.2 | 49 x 2.5 | 46.2 | 2.6 | 52.6 | 6139 | 6564 |
| 115-23-0395 | 500 | 5.5 | 39.5 | 41.0 | 1.4 | 44.4 | 53 x 2.5 | 49.4 | 2.8 | 56.2 | 7534 | 8129 |
| **30 kV Rated Cable** | | | | | | | | | | | | |
| 115-23-0465 | 50 | 8.0 | 25.4 | 26.9 | 1.2 | 29.9 | 45 x 2.0 | 33.9 | 2.2 | 39.2 | 2217 | 2430 |
| 115-23-0467 | 70 | 8.0 | 27.1 | 28.6 | 1.2 | 31.5 | 47 x 2.0 | 35.5 | 2.3 | 41.0 | 2537 | 2750 |
| 115-23-0469 | 95 | 8.0 | 28.8 | 30.3 | 1.2 | 33.2 | 50 x 2.0 | 37.2 | 2.3 | 42.7 | 2900 | 3113 |
| 115-23-0472 | 120 | 8.0 | 30.6 | 32.2 | 1.2 | 35.1 | 42 x 2.5 | 40.1 | 2.4 | 45.8 | 3424 | 3668 |
| 115-23-0475 | 150 | 8.0 | 32.3 | 33.8 | 1.2 | 36.8 | 44 x 2.5 | 41.7 | 2.5 | 47.7 | 3891 | 4169 |
| 115-23-0478 | 185 | 8.0 | 33.6 | 35.1 | 1.4 | 38.5 | 46 x 2.5 | 43.5 | 2.5 | 49.4 | 4308 | 4704 |
| 115-23-0484 | 240 | 8.0 | 35.9 | 37.4 | 1.4 | 40.9 | 49 x 2.5 | 45.8 | 2.6 | 52.0 | 5029 | 5464 |
| 115-23-0493 | 300 | 8.0 | 38.3 | 39.9 | 1.4 | 43.3 | 51 x 2.5 | 48.3 | 2.7 | 54.9 | 5898 | 6323 |
| 115-23-0494 | 400 | 8.0 | 41.3 | 42.8 | 1.4 | 46.3 | 55 x 2.5 | 51.3 | 2.8 | 58.1 | 6831 | 7663 |
| 115-23-0495 | 500 | 8.0 | 44.6 | 46.1 | 1.6 | 49.9 | 59 x 2.5 | 54.8 | 2.9 | 61.8 | 8284 | 9115 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Wire Armor Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable - Galvanized Steel Wire Armor

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating


A Conductor - Compact Stranded Copper
B Strand Screen - Extruded Semiconducting EPR
C Insulation - Okoguard EPR
D Insulation Screen - Extruded Semiconducting EPR
E Phase Identification Tape
F Shield - Copper Tape
G Fillers and Binder Tape
H Inner Jacket - Okoseal PVC
J Armor - Round Galvanized Steel Wires
K Binder Tape
L Outer Jacket - Okoseal PVC

## Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) based, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance of electrical and physical properties for long, problem free service.

The triple tandem extrusion of the screens with the insulation provides optimum electrical characteristics.

## Assembly

The shielded insulated conductors are assembled with fillers and a binder tape overall, encased by multiple galvanized steel armor wires. The armor provides mechanical protection and longitudinal strength.

## Jacket

The Okoseal (PVC) flame retardant jacket supplied with this cable is mechanically rugged and has excellent resistance to oil and most chemicals.

## Applications

Wire Armor Type IEC 60502-2 cables are intended for use in fixed installations such as distribution networks or industrial applications.

## Specifications

**Conductor:** Annealed uncoated copper compact stranded per IEC 60228.

**Strand Screen:** Extruded semiconducting EPR strand screen. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation:** Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Insulation Screen:** Extruded semiconducting EPR insulation screen applied directly over the insulation. Meets or exceeds the electrical and physical properties of IEC 60502-2.

**Shield:** 0.005 inches (0.127mm) bare copper tape helically applied with 10% minimum overlap.

**Phase Identification:** Color coded (black, red, blue) polyester ribbon laid longitudinally under the copper tape shield.

**Assembly:** Cabled with fillers and an overall binder tape.

**Inner Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2 for polyvinyl chloride jackets.

**Armor:** Round galvanized steel wires, approximate 100% coverage, meeting the requirements of IEC 60502, followed by a binder tape.

**Outer Jacket:** Meets or exceeds the electrical and physical properties of IEC 60502-2 for polyvinyl chloride jackets.

## Product Features

- Certification to IEC 60502-2 conducted by KEMA Nederland B.V.
- Conformance provided by means of Type Test Certificate TIC 1015-14.
- Passes optional flame spread requirements pre IEC 60332-1-2.
- PVC jacket passes oil immersion requirements per IEC 60811-404.
- Passes IEC 60332-3-22 Category A vertical tray flame test.
- Triple tandem extruded, all EPR system.
- Okoguard cables meet or exceed all recognized industry standards.
- Excellent corona resistance.
- Screens are free stripping.
- Exceptional resistance to "treeing".
- Exceptional resistance to moisture.
- Resistant to most oils, acids, and alkalies.
- Sunlight resistant.
- Aluminum and coated copper conductors available.
- Complete prepackaged, color coded, factory tested wiring system.

# Wire Armor Type IEC 60502-2

**6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable**
**- Galvanized Steel Wire Armor**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

US MEASUREMENTS



| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | Inner Jacket Thickness - inches | Approx. Dia. over Inner Jacket - inches | Approx. Number x Size of Armor Wires - inches | Approx. Dia. over Armor - inches | Outer Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Wt. - lbs./1000' | Approx. Ship Wt. - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | | | | |
| 114-23-0162 | 25 | 0.098 | 0.473 | 0.533 | 1.195 | 0.048 | 1.301 | 49 x 0.079 | 1.459 | 0.091 | 1.687 | 2242 | 2385 |
| 114-23-0163 | 35 | 0.098 | 0.515 | 0.575 | 1.286 | 0.048 | 1.392 | 42 x 0.098 | 1.589 | 0.094 | 1.823 | 2807 | 2994 |
| 114-23-0165 | 50 | 0.098 | 0.557 | 0.617 | 1.377 | 0.048 | 1.483 | 45 x 0.098 | 1.680 | 0.098 | 1.924 | 3193 | 3459 |
| 114-23-0167 | 70 | 0.098 | 0.621 | 0.681 | 1.515 | 0.056 | 1.639 | 49 x 0.098 | 1.836 | 0.106 | 2.096 | 3868 | 4160 |
| 114-23-0169 | 95 | 0.098 | 0.688 | 0.748 | 1.657 | 0.056 | 1.781 | 54 x 0.098 | 1.978 | 0.110 | 2.246 | 4708 | 5160 |
| 114-23-0172 | 120 | 0.098 | 0.762 | 0.822 | 1.817 | 0.063 | 1.955 | 59 x 0.098 | 2.152 | 0.114 | 2.428 | 5509 | 5882 |
| 114-23-0175 | 150 | 0.098 | 0.826 | 0.886 | 1.956 | 0.063 | 2.094 | 63 x 0.098 | 2.291 | 0.122 | 2.583 | 6435 | 7055 |
| 114-23-0178 | 185 | 0.098 | 0.878 | 0.938 | 2.068 | 0.063 | 2.206 | 66 x 0.098 | 2.403 | 0.126 | 2.703 | 7181 | 8206 |
| 114-23-0184 | 240 | 0.102 | 0.978 | 1.038 | 2.284 | 0.063 | 2.422 | 58 x 0.124 | 2.670 | 0.134 | 2.986 | 8984 | 9604 |
| 114-23-0193 | 300 | 0.110 | 1.089 | 1.149 | 2.524 | 0.071 | 2.678 | 64 x 0.124 | 2.926 | 0.142 | 3.258 | 10933 | 12063 |
| 114-23-0194 | 400 | 0.118 | 1.223 | 1.283 | 2.813 | 0.071 | 2.967 | 70 x 0.124 | 3.215 | 0.154 | 3.573 | 12990 | 14120 |
| 114-23-0195 | 500 | 0.126 | 1.366 | 1.426 | 3.122 | 0.071 | 3.276 | 78 x 0.124 | 3.524 | 0.165 | 3.904 | 16052 | 17652 |
| **10 kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0562 | 25 | 0.134 | 0.545 | 0.605 | 1.351 | 0.048 | 1.457 | 44 x 0.098 | 1.654 | 0.098 | 1.898 | 2802 | 2989 |
| 115-23-0563 | 35 | 0.134 | 0.587 | 0.647 | 1.441 | 0.056 | 1.565 | 47 x 0.098 | 1.762 | 0.102 | 2.014 | 3199 | 3491 |
| 115-23-0565 | 50 | 0.134 | 0.629 | 0.689 | 1.532 | 0.056 | 1.656 | 50 x 0.098 | 1.853 | 0.106 | 2.113 | 3607 | 3899 |
| 115-23-0567 | 70 | 0.134 | 0.693 | 0.753 | 1.668 | 0.056 | 1.792 | 54 x 0.098 | 1.989 | 0.110 | 2.257 | 4235 | 4570 |
| 115-23-0569 | 95 | 0.134 | 0.760 | 0.820 | 1.813 | 0.063 | 1.951 | 59 x 0.098 | 2.148 | 0.114 | 2.424 | 5145 | 5765 |
| 115-23-0572 | 120 | 0.134 | 0.834 | 0.894 | 1.973 | 0.063 | 2.111 | 63 x 0.098 | 2.308 | 0.122 | 2.600 | 5948 | 6568 |
| 115-23-0575 | 150 | 0.134 | 0.898 | 0.958 | 2.111 | 0.063 | 2.249 | 67 x 0.098 | 2.446 | 0.126 | 2.746 | 6867 | 7487 |
| 115-23-0578 | 185 | 0.134 | 0.950 | 1.010 | 2.223 | 0.063 | 2.361 | 71 x 0.098 | 2.558 | 0.130 | 2.866 | 7643 | 8668 |
| 115-23-0584 | 240 | 0.134 | 1.042 | 1.102 | 2.422 | 0.071 | 2.576 | 62 x 0.124 | 2.824 | 0.138 | 3.148 | 9495 | 10625 |
| 115-23-0593 | 300 | 0.134 | 1.137 | 1.197 | 2.627 | 0.071 | 2.781 | 66 x 0.124 | 3.029 | 0.146 | 3.371 | 11296 | 12426 |
| 115-23-0594 | 400 | 0.134 | 1.255 | 1.315 | 2.882 | 0.071 | 3.036 | 72 x 0.124 | 3.284 | 0.154 | 3.642 | 13231 | 14781 |
| 115-23-0595 | 500 | 0.134 | 1.382 | 1.442 | 3.156 | 0.079 | 3.328 | 79 x 0.124 | 3.576 | 0.165 | 3.956 | 16274 | 17824 |
| **15 kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0662 | 25 | 0.177 | 0.635 | 0.695 | 1.545 | 0.056 | 1.669 | 50 x 0.098 | 1.866 | 0.106 | 2.126 | 3296 | 3588 |
| 115-23-0663 | 35 | 0.177 | 0.677 | 0.737 | 1.634 | 0.056 | 1.758 | 53 x 0.098 | 1.955 | 0.106 | 2.183 | 3721 | 4013 |
| 115-23-0665 | 50 | 0.177 | 0.719 | 0.779 | 1.724 | 0.056 | 1.848 | 56 x 0.098 | 2.045 | 0.110 | 2.313 | 4162 | 4614 |
| 115-23-0667 | 70 | 0.177 | 0.783 | 0.843 | 1.863 | 0.063 | 2.001 | 60 x 0.098 | 2.198 | 0.118 | 2.482 | 4887 | 5507 |
| 115-23-0669 | 95 | 0.177 | 0.850 | 0.910 | 2.007 | 0.063 | 2.145 | 64 x 0.098 | 2.342 | 0.122 | 2.634 | 5678 | 6298 |
| 115-23-0672 | 120 | 0.177 | 0.924 | 0.984 | 2.167 | 0.063 | 2.305 | 69 x 0.098 | 2.502 | 0.130 | 2.810 | 6497 | 7359 |
| 115-23-0675 | 150 | 0.177 | 0.988 | 1.048 | 2.305 | 0.063 | 2.443 | 58 x 0.124 | 2.691 | 0.134 | 3.007 | 7763 | 8527 |
| 115-23-0678 | 185 | 0.177 | 1.040 | 1.100 | 2.418 | 0.071 | 2.572 | 61 x 0.124 | 2.820 | 0.138 | 3.144 | 8623 | 9753 |
| 115-23-0684 | 240 | 0.177 | 1.132 | 1.192 | 2.616 | 0.071 | 2.770 | 66 x 0.124 | 3.018 | 0.146 | 3.360 | 10158 | 11288 |
| 115-23-0693 | 300 | 0.177 | 1.227 | 1.287 | 2.822 | 0.071 | 2.976 | 71 x 0.124 | 3.224 | 0.154 | 3.582 | 11969 | 13519 |
| 115-23-0694 | 400 | 0.177 | 1.345 | 1.405 | 3.077 | 0.071 | 3.231 | 77 x 0.124 | 3.479 | 0.161 | 3.851 | 13958 | 15508 |
| 115-23-0695 | 500 | 0.177 | 1.472 | 1.532 | 3.351 | 0.079 | 3.523 | 83 x 0.124 | 3.771 | 0.173 | 4.167 | 17027 | 18577 |

# Wire Armor Type IEC 60502-2

## 6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable - Galvanized Steel Wire Armor

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

US MEASUREMENTS



| Catalog Number | Conductor Size - mm² | Nominal Insulation Thickness - inches | Approx. Dia. over Insulation - inches | Approx. Dia. over Screen - inches | Approx. Core O.D. - inches | Inner Jacket Thickness - inches | Approx. Dia. over Inner Jacket - inches | Approx. Number x Size of Armor Wires - inches | Approx. Dia. over Armor - inches | Outer Jacket Thickness - inches | Approx. O.D. - inches | Approx. Net Wt. - lbs./1000' | Approx. Ship Wt. - lbs./1000' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **20 kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0763 | 35 | 0.217 | 0.759 | 0.819 | 1.811 | 0.063 | 1.949 | 59 x 0.098 | 2.146 | 0.114 | 2.422 | 4255 | 5021 |
| 115-23-0765 | 50 | 0.217 | 0.801 | 0.861 | 1.902 | 0.063 | 2.040 | 61 x 0.098 | 2.237 | 0.118 | 2.521 | 4680 | 5300 |
| 115-23-0767 | 70 | 0.217 | 0.865 | 0.925 | 2.040 | 0.063 | 2.178 | 65 x 0.098 | 2.375 | 0.122 | 2.667 | 5362 | 5982 |
| 115-23-0769 | 95 | 0.217 | 0.932 | 0.992 | 2.184 | 0.063 | 2.322 | 69 x 0.098 | 2.519 | 0.130 | 2.827 | 6211 | 6975 |
| 115-23-0772 | 120 | 0.217 | 1.006 | 1.066 | 2.344 | 0.063 | 2.482 | 59 x 0.124 | 2.730 | 0.138 | 3.054 | 7360 | 8124 |
| 115-23-0775 | 150 | 0.217 | 1.070 | 1.130 | 2.483 | 0.063 | 2.621 | 63 x 0.124 | 2.869 | 0.142 | 3.201 | 8333 | 9463 |
| 115-23-0778 | 185 | 0.217 | 1.122 | 1.182 | 2.595 | 0.071 | 2.749 | 65 x 0.124 | 2.997 | 0.146 | 3.339 | 9210 | 10340 |
| 115-23-0784 | 240 | 0.217 | 1.214 | 1.274 | 2.794 | 0.071 | 2.948 | 70 x 0.124 | 3.196 | 0.154 | 3.554 | 10775 | 11905 |
| 115-23-0793 | 300 | 0.217 | 1.309 | 1.369 | 2.999 | 0.071 | 3.153 | 75 x 0.124 | 3.401 | 0.161 | 3.773 | 12630 | 14180 |
| 115-23-0794 | 400 | 0.217 | 1.427 | 1.487 | 3.254 | 0.079 | 3.426 | 81 x 0.124 | 3.674 | 0.169 | 4.062 | 14723 | 16273 |
| 115-23-0795 | 500 | 0.217 | 1.554 | 1.614 | 3.528 | 0.079 | 3.700 | 87 x 0.124 | 3.948 | 0.177 | 4.352 | 17738 | 19648 |
| **30 kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0865 | 50 | 0.315 | 1.001 | 1.061 | 2.334 | 0.063 | 2.472 | 59 x 0.124 | 2.72 | 0.134 | 3.036 | 6244 | 7008 |
| 115-23-0867 | 70 | 0.315 | 1.065 | 1.125 | 2.472 | 0.071 | 2.626 | 63 x 0.124 | 2.874 | 0.142 | 3.206 | 7075 | 8595 |
| 115-23-0869 | 95 | 0.315 | 1.132 | 1.192 | 2.593 | 0.071 | 2.747 | 65 x 0.124 | 2.995 | 0.146 | 3.337 | 7659 | 9179 |
| 115-23-0872 | 120 | 0.315 | 1.206 | 1.266 | 2.776 | 0.071 | 2.930 | 70 x 0.124 | 3.178 | 0.154 | 3.536 | 8883 | 10013 |
| 115-23-0875 | 150 | 0.315 | 1.270 | 1.330 | 2.915 | 0.071 | 3.069 | 73 x 0.124 | 3.317 | 0.157 | 3.681 | 9899 | 11449 |
| 115-23-0878 | 185 | 0.315 | 1.322 | 1.382 | 3.027 | 0.071 | 3.181 | 75 x 0.124 | 3.429 | 0.161 | 3.801 | 10755 | 12305 |
| 115-23-0884 | 240 | 0.315 | 1.414 | 1.474 | 3.226 | 0.079 | 3.398 | 80 x 0.124 | 3.646 | 0.169 | 4.034 | 12472 | 14022 |
| 115-23-0893 | 300 | 0.315 | 1.509 | 1.569 | 3.431 | 0.079 | 3.603 | 85 x 0.124 | 3.851 | 0.177 | 4.255 | 14404 | 16314 |
| 115-23-0894 | 400 | 0.315 | 1.627 | 1.687 | 3.686 | 0.079 | 3.858 | 91 x 0.124 | 4.106 | 0.185 | 4.526 | 16506 | 20306 |
| 115-23-0895 | 500 | 0.315 | 1.754 | 1.814 | 3.960 | 0.079 | 4.132 | 97 x 0.124 | 4.380 | 0.193 | 4.818 | 19629 | 23429 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Wire Armor Type IEC 60502-2

**6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable**
**- Galvanized Steel Wire Armor**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

METRIC MEASUREMENTS



| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | Inner Jacket Thickness - mm | Approx. Dia. over Inner Jacket - mm | Approx. Number x Size of Armor Wires - mm | Approx. Dia. over Armor - mm | Outer Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Wt. - Kg/Km | Approx. Ship Wt. - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **6 kV Rated Cable** | | | | | | | | | | | | | |
| 114-23-0162 | 25 | 2.5 | 12.0 | 13.5 | 30.4 | 1.2 | 33.0 | 49 x 2.0 | 37.1 | 2.3 | 42.8 | 3336 | 3549 |
| 114-23-0163 | 35 | 2.5 | 13.1 | 14.6 | 32.7 | 1.2 | 35.4 | 42 x 2.5 | 40.4 | 2.4 | 46.3 | 4177 | 4455 |
| 114-23-0165 | 50 | 2.5 | 14.1 | 15.7 | 35.0 | 1.2 | 37.7 | 45 x 2.5 | 42.7 | 2.5 | 48.9 | 4751 | 5147 |
| 114-23-0167 | 70 | 2.5 | 15.8 | 17.3 | 38.5 | 1.4 | 41.6 | 49 x 2.5 | 46.6 | 2.7 | 53.2 | 5756 | 6190 |
| 114-23-0169 | 95 | 2.5 | 17.5 | 19.0 | 42.1 | 1.4 | 45.2 | 54 x 2.5 | 50.2 | 2.8 | 57.0 | 7006 | 7678 |
| 114-23-0172 | 120 | 2.5 | 19.4 | 20.9 | 46.2 | 1.6 | 49.7 | 59 x 2.5 | 54.7 | 2.9 | 61.7 | 8197 | 8752 |
| 114-23-0175 | 150 | 2.5 | 21.0 | 22.5 | 49.7 | 1.6 | 53.2 | 63 x 2.5 | 58.2 | 3.1 | 65.6 | 9575 | 10498 |
| 114-23-0178 | 185 | 2.5 | 22.3 | 23.8 | 52.5 | 1.6 | 56.0 | 66 x 2.5 | 61.0 | 3.2 | 68.7 | 10685 | 12211 |
| 114-23-0184 | 240 | 2.6 | 24.8 | 26.4 | 58.0 | 1.6 | 61.5 | 58 x 3.15 | 67.8 | 3.4 | 75.8 | 13368 | 14291 |
| 114-23-0193 | 300 | 2.8 | 27.7 | 29.2 | 64.1 | 1.8 | 68.0 | 64 x 3.15 | 74.3 | 3.6 | 82.8 | 16268 | 17950 |
| 114-23-0194 | 400 | 3.0 | 31.1 | 32.6 | 71.5 | 1.8 | 75.4 | 70 x 3.15 | 81.7 | 3.9 | 90.8 | 19329 | 21011 |
| 114-23-0195 | 500 | 3.2 | 34.7 | 36.2 | 79.3 | 1.8 | 83.2 | 78 x 3.15 | 89.5 | 4.2 | 99.2 | 23885 | 26266 |
| **10 kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0562 | 25 | 3.4 | 13.8 | 15.4 | 34.3 | 1.2 | 37.0 | 44 x 2.5 | 42.0 | 2.5 | 48.2 | 4169 | 4448 |
| 115-23-0563 | 35 | 3.4 | 14.9 | 16.4 | 36.6 | 1.4 | 39.8 | 47 x 2.5 | 44.8 | 2.6 | 51.2 | 4760 | 5195 |
| 115-23-0565 | 50 | 3.4 | 16.0 | 17.5 | 38.9 | 1.4 | 42.1 | 50 x 2.5 | 47.1 | 2.7 | 53.7 | 5367 | 5802 |
| 115-23-0567 | 70 | 3.4 | 17.6 | 19.1 | 42.4 | 1.4 | 45.5 | 54 x 2.5 | 50.5 | 2.8 | 57.3 | 6302 | 6800 |
| 115-23-0569 | 95 | 3.4 | 19.3 | 20.8 | 46.1 | 1.6 | 49.6 | 59 x 2.5 | 54.6 | 2.9 | 61.6 | 7656 | 8578 |
| 115-23-0572 | 120 | 3.4 | 21.2 | 22.7 | 50.1 | 1.6 | 53.6 | 63 x 2.5 | 58.6 | 3.1 | 66.0 | 8851 | 9773 |
| 115-23-0575 | 150 | 3.4 | 22.8 | 24.3 | 53.6 | 1.6 | 57.1 | 67 x 2.5 | 62.1 | 3.2 | 69.7 | 10218 | 11141 |
| 115-23-0578 | 185 | 3.4 | 24.1 | 25.7 | 56.5 | 1.6 | 60.0 | 71 x 2.5 | 65.0 | 3.3 | 72.8 | 11373 | 12898 |
| 115-23-0584 | 240 | 3.4 | 26.5 | 28.0 | 61.5 | 1.8 | 65.4 | 62 x 3.15 | 71.7 | 3.5 | 80.0 | 14129 | 15810 |
| 115-23-0593 | 300 | 3.4 | 28.9 | 30.4 | 66.7 | 1.8 | 70.6 | 66 x 3.15 | 76.9 | 3.7 | 85.6 | 16808 | 18490 |
| 115-23-0594 | 400 | 3.4 | 31.9 | 33.4 | 73.2 | 1.8 | 77.1 | 72 x 3.15 | 83.4 | 3.9 | 92.5 | 19688 | 21994 |
| 115-23-0595 | 500 | 3.4 | 35.1 | 36.6 | 80.2 | 2.0 | 84.5 | 79 x 3.15 | 90.8 | 4.2 | 100.5 | 24216 | 26522 |
| **15 kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0662 | 25 | 4.5 | 16.1 | 17.7 | 39.2 | 1.4 | 42.4 | 50 x 2.5 | 47.4 | 2.7 | 54.0 | 4904 | 5339 |
| 115-23-0663 | 35 | 4.5 | 17.2 | 18.7 | 41.5 | 1.4 | 44.7 | 53 x 2.5 | 49.7 | 2.7 | 55.4 | 5537 | 5971 |
| 115-23-0665 | 50 | 4.5 | 18.3 | 19.8 | 43.8 | 1.4 | 46.9 | 56 x 2.5 | 51.9 | 2.8 | 58.8 | 6193 | 6866 |
| 115-23-0667 | 70 | 4.5 | 19.9 | 21.4 | 47.3 | 1.6 | 50.8 | 60 x 2.5 | 55.8 | 3.0 | 63.0 | 7272 | 8194 |
| 115-23-0669 | 95 | 4.5 | 21.6 | 23.1 | 51.0 | 1.6 | 54.5 | 64 x 2.5 | 59.5 | 3.1 | 66.9 | 8449 | 9371 |
| 115-23-0672 | 120 | 4.5 | 23.5 | 25.0 | 55.0 | 1.6 | 58.5 | 69 x 2.5 | 63.6 | 3.3 | 71.4 | 9668 | 10950 |
| 115-23-0675 | 150 | 4.5 | 25.1 | 26.6 | 58.5 | 1.6 | 62.1 | 58 x 3.15 | 68.4 | 3.4 | 76.4 | 11551 | 12688 |
| 115-23-0678 | 185 | 4.5 | 26.4 | 27.9 | 61.4 | 1.8 | 65.3 | 61 x 3.15 | 71.6 | 3.5 | 79.9 | 12831 | 14512 |
| 115-23-0684 | 240 | 4.5 | 28.8 | 30.3 | 66.4 | 1.8 | 70.4 | 66 x 3.15 | 76.7 | 3.7 | 85.3 | 15115 | 16797 |
| 115-23-0693 | 300 | 4.5 | 31.2 | 32.7 | 71.7 | 1.8 | 75.6 | 71 x 3.15 | 81.9 | 3.9 | 91.0 | 17810 | 20116 |
| 115-23-0694 | 400 | 4.5 | 34.2 | 35.7 | 78.2 | 1.8 | 82.1 | 77 x 3.15 | 88.4 | 4.1 | 97.8 | 20770 | 23076 |
| 115-23-0695 | 500 | 4.5 | 37.4 | 38.9 | 85.1 | 2.0 | 89.5 | 83 x 3.15 | 95.8 | 4.4 | 105.8 | 25336 | 27643 |

# Wire Armor Type IEC 60502-2

**6, 10, 15, 20, 30 kV Okoguard Shielded Power Cable**
**- Galvanized Steel Wire Armor**

Three Okopact® (Compact Stranded) Copper Conductors/90°C Rating

METRIC MEASUREMENTS



| Catalog Number | Conductor Size - $mm^2$ | Nominal Insulation Thickness - mm | Approx. Dia. over Insulation - mm | Approx. Dia. over Screen - mm | Approx. Core O.D. - mm | Inner Jacket Thickness - mm | Approx. Dia. over Inner Jacket - mm | Approx. Number x Size of Armor Wires - mm | Approx. Dia. over Armor - mm | Outer Jacket Thickness - mm | Approx. O.D. - mm | Approx. Net Wt. - Kg/Km | Approx. Ship Wt. - Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **20kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0763 | 35 | 5.5 | 19.3 | 20.8 | 46.0 | 1.6 | 49.5 | 59 x 2.5 | 54.5 | 2.9 | 61.5 | 6331 | 7471 |
| 115-23-0765 | 50 | 5.5 | 20.3 | 21.9 | 48.3 | 1.6 | 51.8 | 61 x 2.5 | 56.8 | 3.0 | 64.0 | 6964 | 7886 |
| 115-23-0767 | 70 | 5.5 | 22.0 | 23.5 | 51.8 | 1.6 | 55.3 | 65 x 2.5 | 60.3 | 3.1 | 67.7 | 7979 | 8901 |
| 115-23-0769 | 95 | 5.5 | 23.7 | 25.2 | 55.5 | 1.6 | 59.0 | 69 x 2.5 | 64.0 | 3.3 | 71.8 | 9242 | 10379 |
| 115-23-0772 | 120 | 5.5 | 25.6 | 27.1 | 59.5 | 1.6 | 63.0 | 59 x 3.15 | 69.3 | 3.5 | 77.6 | 10952 | 12089 |
| 115-23-0775 | 150 | 5.5 | 27.2 | 28.7 | 63.1 | 1.6 | 66.6 | 63 x 3.15 | 72.9 | 3.6 | 81.3 | 12400 | 14081 |
| 115-23-0778 | 185 | 5.5 | 28.5 | 30.0 | 65.9 | 1.8 | 69.8 | 65 x 3.15 | 76.1 | 3.7 | 84.8 | 13704 | 15386 |
| 115-23-0784 | 240 | 5.5 | 30.8 | 32.4 | 71.0 | 1.8 | 74.9 | 70 x 3.15 | 81.2 | 3.9 | 90.3 | 16033 | 17715 |
| 115-23-0793 | 300 | 5.5 | 33.2 | 34.8 | 76.2 | 1.8 | 80.1 | 75 x 3.15 | 86.4 | 4.1 | 95.8 | 18793 | 21100 |
| 115-23-0794 | 400 | 5.5 | 36.2 | 37.8 | 82.7 | 2.0 | 87.0 | 81 x 3.15 | 93.3 | 4.3 | 103.2 | 21908 | 24214 |
| 115-23-0795 | 500 | 5.5 | 39.5 | 41.0 | 89.6 | 2.0 | 94.0 | 87 x 3.15 | 100.3 | 4.5 | 110.5 | 26394 | 29236 |
| **30 kV Rated Cable** | | | | | | | | | | | | | |
| 115-23-0865 | 50 | 8.0 | 25.4 | 26.9 | 59.3 | 1.6 | 62.8 | 59 x 3.15 | 69.1 | 3.4 | 77.1 | 9291 | 10428 |
| 115-23-0867 | 70 | 8.0 | 27.1 | 28.6 | 62.8 | 1.8 | 66.7 | 63 x 3.15 | 73.0 | 3.6 | 81.4 | 10528 | 12789 |
| 115-23-0869 | 95 | 8.0 | 28.8 | 30.3 | 65.9 | 1.8 | 69.8 | 65 x 3.15 | 76.1 | 3.7 | 84.8 | 11397 | 13658 |
| 115-23-0872 | 120 | 8.0 | 30.6 | 32.2 | 70.5 | 1.8 | 74.4 | 70 x 3.15 | 80.7 | 3.9 | 89.8 | 13218 | 14899 |
| 115-23-0875 | 150 | 8.0 | 32.3 | 33.8 | 74.0 | 1.8 | 78.0 | 73 x 3.15 | 84.3 | 4.0 | 93.5 | 14730 | 17036 |
| 115-23-0878 | 185 | 8.0 | 33.6 | 35.1 | 76.9 | 1.8 | 80.8 | 75 x 3.15 | 87.1 | 4.1 | 96.5 | 16003 | 18310 |
| 115-23-0884 | 240 | 8.0 | 35.9 | 37.4 | 81.9 | 2.0 | 86.3 | 80 x 3.15 | 92.6 | 4.3 | 102.5 | 18558 | 20865 |
| 115-23-0893 | 300 | 8.0 | 38.3 | 39.9 | 87.1 | 2.0 | 91.5 | 85 x 3.15 | 97.8 | 4.5 | 108.1 | 21433 | 24275 |
| 115-23-0894 | 400 | 8.0 | 41.3 | 42.8 | 93.6 | 2.0 | 98.0 | 91 x 3.15 | 104.3 | 4.7 | 115.0 | 24561 | 30215 |
| 115-23-0895 | 500 | 8.0 | 44.6 | 46.1 | 100.6 | 2.0 | 105.0 | 97 x 3.15 | 111.3 | 4.9 | 122.4 | 29208 | 34862 |

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

**Ampacities**

Refer to IEC 60502-2 Annex B for continuous current ratings of 1/C and 3/C cables.

**Alternate Constructions**

Contact Applications Engineering for design options.

# Okonite Cables

## Facilities Overview

### District Offices, Manufacturing Plants & Service Centers

## Manufacturing Plants

Orangeburg, SC - Compound Facility

Orangeburg, SC - Manufacturing Plant

Richmond, KY - Manufacturing Plant

Santa Maria, CA - Manufacturing Plant

Ashton, RI - Manufacturing Plant

Paterson, NJ - Manufacturing Plant

Opening 2015 Cumberland, RI - Manufacturing Plant

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## Corporate HDQ

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