



# Okoguard® URO-J

## 15kV Underground Primary Distribution Cable-Jacketed Red Identification Stripes

Aluminum Conductor/105°C Rating  
100% and 133% Insulation Levels



- A Conductor-Stranded Aluminum
- B Strand Screen-  
Extruded Semiconducting EPR
- C Insulation-Okoguard-EPR
- D Insulation Screen-  
Extruded Semiconducting EPR
- E Concentric Conductor-Bare  
Copper Wires
- F Encapsulating Jacket-Okolene  
with 3 extruded red ID stripes  
and NESC lightning bolt

### 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 unequalled 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.

An insulation screen of ethylene-propylene rubber is extruded over the insulation. The bare copper concentric wires are uniformly spaced around the insulation screen. The overall polyethylene jacket provides protection against mechanical damage and corrosion.

Product identification is provided through the use of three red stripes placed 120° apart in the black jacket with an NESC lightning bolt.

### Applications

Okoguard URO-J cables provide maximum circuit longevity in underground residential distribution systems. They can be buried directly or installed in underground ducts or conduits.

### Specifications

**Central Conductor:** Aluminum per ASTM B-609, Class B stranded per B-231.

**Conductor Screen:** Extruded semiconducting ethylene-propylene rubber meets or exceeds the requirements of ICEA S-94-649 and AEIC CS8.

**Insulation:** Extruded Okoguard meets or exceeds the requirements of ICEA S-94-649 for ethylene-propylene rubber and AEIC CS8.

**Insulation Screen:** Extruded semiconducting ethylene-propylene rubber meets or exceeds the requirements of ICEA S-94-649 and AEIC CS8.

**Concentric Conductor:** Bare copper wires.

**Jacket:** Black Okolene with red extruded stripes meets or exceeds the requirements of ICEA S-94-649 for polyethylene jackets.

### Product Features

- Triple tandem extruded, all EPR system
- Okoguard cables meet or exceed ICEA and RUS U-1 standards.
- 105°C continuous operating temperature.
- 140°C emergency rating.
- 250°C short circuit rating.
- Excellent corona resistance.
- Low dielectric constant and power factor.
- Screens are clean stripping.
- Exceptional resistance to "treeing".
- Moisture resistant.
- Overall jacket provides extended life.
- Red extruded stripes.
- Excellent resistance to most chemicals.
- Can be listed as Type MV-90 for use in accordance with Article 328 of the NEC on special orders.
- Cable CSA Listed to C68.3 on special orders.
- Design Options:
  - Additional conductor sizes
  - Filled strand
  - Copper central conductor
  - Copper flat strap concentric neutral
  - Product identification via colored jackets.
  - Semiconducting jacket
- Improved Temperature Rating.  
Okoguard insulation system has been tested and qualified for operation at 105°C continuous and 140°C emergency operating temperature.
- Minimum installation temperature of -40°C.

# Okoguard URO-J

15kV Underground Primary Distribution Cable-Jacketed  
 Red Identification Stripes  
 Aluminum Conductor/105°C Rating  
 100% Insulation Level

## Product Data Section 2: Sheet 35

### Okoguard Insulation: 175 mils 100% Insulation Level

Catalog Number	Conductor Size AWG/kcmil	Nominal Dia. over Insulation (in.)	Nominal Dia. over Insulation Screen (in.)	Copper Neutral No. x AWG (1)	Nominal O.D. (in.)	Approx. Net Weight lbs./1000'	Approx. Ship Weight lbs./1000'	90° Ampacity Direct Burial (2)	90° Ampacity Duct (2)	105° Ampacity Direct Burial (2)	105° Ampacity Duct (2)
<b>FULL NEUTRAL</b>											
161-23-2057	2(1x)	0.66	0.73	10 x 14	0.97	513	603	165	120	180	130
▲ 161-23-2060	2(7x)	0.67	0.75	10 x 14	0.98	517	568	165	120	180	130
161-23-2066	1(19x)	0.72	0.80	13 x 14	1.03	608	698	185	135	205	150
161-23-2069	1/0(1x)	0.72	0.80	16 x 14	1.04	657	747	210	155	235	170
▲ 161-23-2072	1/0(19x)	0.75	0.83	16 x 14	1.06	667	725	235	170	235	170
161-23-2075	2/0(19x)	0.81	0.88	13 x 12	1.15	820	910	240	175	270	200
161-23-2078	3/0(19x)	0.86	0.93	16 x 12	1.20	939	1029	270	200	305	225
161-23-2081	4/0(19x)	0.91	0.99	13 x 10	1.30	1138	1238	310	230	650	260
161-23-2084	250(37x)	0.97	1.04	16 x 10	1.36	1302	1418	340	255	385	285
161-23-2090	350(37x)	1.07	1.17	20 x 10	1.49	1615	1793	405	300	455	340
<b>1/3 NEUTRAL</b>											
160-23-2057	2(1x)	0.66	0.73	6 x 14	0.97	467	528	155	135	165	130
160-23-2060	2(7x)	0.68	0.76	6 x 14	1.00	489	579	155	135	165	130
160-23-2066	1(19x)	0.72	0.80	6 x 14	1.03	527	617	175	155	190	150
160-23-2069	1/0(1x)	0.72	0.80	6 x 14	1.04	541	663	200	175	215	175
160-23-2072	1/0(19x)	0.76	0.84	6 x 14	1.07	572	662	200	175	215	175
160-23-2075	2/0(19x)	0.81	0.88	7 x 14	1.12	636	726	230	200	245	195
160-23-2078	3/0(19x)	0.86	0.93	9 x 14	1.17	722	889	260	230	280	225
160-23-2081	4/0(19x)	0.91	0.99	11 x 14	1.23	822	922	290	240	315	225
160-23-2084	250(37x)	0.97	1.04	13 x 14	1.28	918	1018	320	260	345	280
160-23-2090	350(37x)	1.07	1.17	18 x 14	1.41	1166	1315	380	320	415	345
160-23-2093	500(37x)	1.20	1.30	16 x 12	1.57	1513	1691	455	385	495	415
160-23-2096	750(61x)	1.39	1.49	15 x 10	1.87	2152	2402	555	470	600	510
160-23-2099	1000(61x)	1.54	1.68	18 x *(A)	2.06	2711	3059	645	550	685	585

\* - Special Conductor Size (A) Wire O.D. =0.1066"

(1) Individual wire size and count may vary. The resulting combination meets the 1/3 or full neutral, size requirement.

Visit Okonite's web site [www.okonite.com](http://www.okonite.com) for the most up to date dimensions.

▲ **Authorized stock item.** Available from our Customer Service Centers.

#### Ampacities

(2) Full neutral, single phase ampacities are based on ICEA's S-94-649, Appendix F for 90°C conductor temperature, 20°C ambient temperature, 100% load factor, and earth thermal resistivity of RHO 90 and modified for jacketed cable. One third neutral ampacities are based on ICEA P-53-426 triplexed or triangular configuration for the same conditions stated above.

# Okoguard URO-J

15kV Underground Primary Distribution Cable-Jacketed  
 Red Identification Stripes  
 Aluminum Conductor/105°C Rating  
 133% Insulation Levels

## Product Data Section 2: Sheet 35

### Okoguard Insulation: 220 mils 133% Insulation Level

Catalog Number	Conductor Size AWG/kcmil	Nominal Dia. over Insulation (in.)	Nominal Dia. over Insulation Screen (in.)	Copper Neutral No. x AWG (1)	Nominal O.D. (in.)	Aprox. Net Weight lbs./1000'	Aprox. Ship Weight lbs./1000'	90° Ampacity Direct Burial (2)	90° Ampacity Duct (2)	105° Ampacity Direct Burial (2)	105° Ampacity Duct (2)
<b>FULL NEUTRAL</b>											
▲ 161-23-3057	2(1x)	0.74	0.82	10 x 14	1.06	577	635	165	120	180	130
▲ 161-23-3060	2(7x)	0.77	0.84	10 x 14	1.08	595	662	165	120	180	130
161-23-3066	1(19x)	0.81	0.89	13 x 14	1.13	691	781	185	135	205	150
▲ 161-23-3069	1/0(1x)	0.81	0.89	16 x 14	1.12	726	792	210	170	235	170
▲ 161-23-3072	1/0(19x)	0.84	0.92	16 x 14	1.15	752	818	210	170	235	170
161-23-3075	2/0(19x)	0.90	0.97	13 x 12	1.24	912	1012	240	175	270	200
161-23-3078	3/0(19x)	0.95	1.02	16 x 12	1.29	1036	1136	270	200	305	225
161-23-3081	4/0(19x)	1.01	1.08	13 x 10	1.39	1241	1357	310	230	650	260
161-23-3084	250(37x)	1.06	1.16	16 x 10	1.48	1441	1619	340	255	385	285
161-23-3090	350(37x)	1.17	1.27	20 x 10	1.58	1734	1912	405	300	455	340
<b>1/3 NEUTRAL</b>											
160-23-3057	2(1x)	0.75	0.82	6 x 14	1.06	544	621	155	135	165	130
160-23-3060	2(7x)	0.78	0.85	6 x 14	1.09	569	659	155	135	165	130
160-23-3066	1(19x)	0.81	0.89	6 x 14	1.13	610	700	175	155	190	150
160-23-3069	1/0(1x)	0.82	0.89	6 x 14	1.13	625	715	235	170	215	175
160-23-3072	1/0(19x)	0.85	0.93	6 x 14	1.17	658	748	235	170	215	175
160-23-3075	2/0(19x)	0.90	0.97	7 x 14	1.21	726	826	230	200	245	195
160-23-3078	3/0(19x)	0.95	1.02	9 x 14	1.26	816	916	260	230	280	225
▲ 160-23-3081	4/0(19x)	0.99	1.06	11 x 14	1.30	889	1002	310	260	315	255
160-23-3084	250(37x)	1.06	1.16	13 x 14	1.40	1052	1168	320	260	345	280
160-23-3090	350(37x)	1.17	1.27	18 x 14	1.50	1280	1458	380	320	415	345
160-23-3093	500(37x)	1.29	1.39	16 x 12	1.73	1709	1959	455	385	495	415
▲ 160-23-3096	750(61x)	1.48	1.58	15 x 10	1.96	2237	2518	600	505	600	510
160-23-3099	1000(61x)	1.64	1.77	18 x *(A)	2.15	2875	3223	645	550	685	585

\* - Special Conductor Size (A) Wire O.D. =0.1066"

(1) Individual wire size and count may vary. The resulting combination meets the 1/3 or full neutral, size requirement.

Visit Okonite's web site [www.okonite.com](http://www.okonite.com) for the most up to date dimensions.

#### Ampacities

(2) Full neutral, single phase ampacities are based on ICEA's S-94-649, Appendix F for 90°C conductor temperature, 20°C ambient temperature, 100% load factor, and earth thermal resistivity of RHO 90 and modified for jacketed cable.  
 One third neutral ampacities are based on ICEA P-53-426 triplexed or triangular configuration for the same conditions stated above.

