



Okoguard® URO-J

25kV 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
three extruded red ID stripe, 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 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 UL Listed as MV90 for use in accordance with Art 328 of the NEC on special orders.
- Can be 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 jackets
- 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.

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25kV Underground Primary Distribution Cable-Jacketed

Red Identification Stripes

Aluminum Conductor/105°C Rating

100% Insulation Levels

Product Data

Section 2: Sheet 39

Okoguard Insulation: 260 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.)	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)
FULL NEUTRAL											
161-23-4066	1 (19x)	0.90	0.97	13 x 14	1.21	772	872	185	135	205	150
▲ 161-23-4069	1/0 (1x)	0.89	0.97	16 x 14	1.20	803	870	210	150	235	170
161-23-4072	1/0 (19x)	0.92	1.00	16 x 14	1.23	832	898	210	150	235	170
▲ 163-23-4072*	1/0 (19x)	0.92	1.00	16 x 14	1.23	833	899	210	150	235	170
161-23-4075	2/0 (19x)	0.98	1.05	13 x 12	1.33	1001	1117	240	175	270	200
161-23-4078	3/0 (19x)	1.03	1.13	16 x 12	1.40	1157	1273	270	200	305	225
161-23-4081	4/0 (19x)	1.09	1.19	13 x 10	1.50	1372	1550	305	225	345	260
161-23-4084	250 (37x)	1.14	1.24	16 x 10	1.56	1546	1724	335	250	380	285
161-23-4090	350 (37x)	1.25	1.35	20 x 10	1.73	1916	2166	405	300	450	345

1/3 NEUTRAL											
160-23-4066	1 (19x)	0.90	0.97	6 x 14	1.21	691	791	175	155	190	150
160-23-4072	1/0 (19x)	0.94	1.01	6 x 14	1.25	741	841	200	175	215	175
160-23-4075	2/0 (19x)	0.98	1.05	7 x 14	1.29	812	912	230	200	245	200
160-23-4078	3/0 (19x)	1.03	1.13	9 x 14	1.37	935	1051	260	230	280	230
160-23-4081	4/0 (19x)	1.07	1.17	11 x 14	1.40	1010	1128	290	245	315	260
▲ 162-23-4081*	4/0 (19x)	1.07	1.17	11 x 14	1.40	1011	1129	290	245	315	260
160-23-4084	250 (37x)	1.14	1.24	13 x 14	1.48	1152	1330	315	265	340	285
160-23-4090	350 (37x)	1.25	1.35	18 x 14	1.59	1388	1566	375	325	410	350
160-23-4093	500 (37x)	1.37	1.47	16 x 12	1.80	1782	1986	450	390	495	415
▲ 162-23-4093*	500 (37x)	1.37	1.47	16 x 12	1.80	1784	1988	450	390	495	415
160-23-4096	750 (61x)	1.56	1.70	15 x 10	2.06	2450	2754	550	480	600	515
▲ 162-23-4096*	750 (61x)	1.56	1.70	15 x 10	2.08	2450	2754	550	480	600	515
160-23-4099	1000 (61x)	1.71	1.85	18 x **(A)	2.23	3027	3533	640	565	680	585
▲ 162-23-4099*	1000 (61x)	1.71	1.85	18 x **(A)	2.23	3024	3535	640	565	680	585

* These items include filled strand

** 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 for the most up to date dimensions.

▲ **Authorized Stock Item** - Available from 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

25kV Underground Primary Distribution Cable-Jacketed

Red Identification Stripes

Aluminum Conductor/105°C Rating

133% Insulation Levels

Product Data

Section 2: Sheet 39

Okoguard Insulation: 320 mils 133% Insulation Level

Catalog Number	Conductor Size AWG/komil	Number of Strands	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)
FULL NEUTRAL												
161-23-5066	1 (19x)	1.02	1.12	13 x 14	1.36	931	1047	185	135	205	150	
161-23-5072	1/0 (19x)	1.06	1.16	16 x 14	1.40	1022	1138	210	150	235	170	
161-23-5075	2/0 (19x)	1.10	1.20	13 x 12	1.47	1175	1353	240	175	270	200	
161-23-5078	3/0 (19x)	1.15	1.25	16 x 12	1.52	1308	2503	270	200	305	225	
161-23-5081	4/0 (19x)	1.21	1.31	13 x 10	1.69	1600	1819	305	225	345	260	
161-23-5084	250 (37x)	1.27	1.37	16 x 10	1.74	1782	2032	335	250	380	285	
161-23-5090	350 (37x)	1.37	1.47	20 x 10	1.85	2099	2349	405	300	450	345	
1/3 NEUTRAL												
160-23-5066	1 (19x)	1.02	1.12	6 x 14	1.36	850	966	175	155	190	150	
160-23-5072	1/0 (19x)	1.06	1.16	6 x 14	1.40	906	1022	200	175	215	175	
160-23-5075	2/0 (19x)	1.10	1.20	7 x 14	1.44	983	1099	230	200	245	200	
160-23-5078	3/0 (19x)	1.15	1.25	9 x 14	1.49	1083	1261	260	230	280	230	
160-23-5081	4/0 (19x)	1.21	1.31	11 x 14	1.55	1200	1378	290	245	315	260	
160-23-5084	250 (37x)	1.27	1.37	13 x 14	1.60	1312	1490	315	265	340	285	
160-23-5090	350 (37x)	1.37	1.47	18 x 14	1.77	1631	1881	375	325	410	350	
160-23-5093	500 (37x)	1.50	1.60	16 x 12	1.93	2025	2275	450	390	495	415	
160-23-5096	750 (61x)	1.69	1.83	15 x 10	2.20	2722	3122	550	480	600	515	
160-23-5099	1000 (61x)	1.84	1.98	18 x ** (A)	2.35	3265	3771	640	565	680	585	

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

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

Visit Okonite's web site 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.

