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 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.

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 standards.
- Meets RUS 1728.204 for cables with filled strand or solid conductor and 133% insulation level.
- 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 by UL as Type MV-90 on Special Orders.
- Cable CSA Listed to C68.5 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.

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100% Insulation Level

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.)	Aprox. Net Weight lbs./1000'	Aprox. Ship Weight lbs./1000'	90°C Ampacity Direct Burial (2)	90°C Ampacity Duct (2)	105°C Ampacity Direct Burial (2)	105°C Ampacity Duct (2)
FULL NEUTRAL											
161-23-2057	2(1x)	0.66	0.73	10 x 14	0.97	513	603	170	125	185	135
▲ 161-23-2060	2(7x)	0.67	0.75	10 x 14	0.98	517	568	170	125	185	135
161-23-2066	1(19x)	0.72	0.80	13 x 14	1.03	608	698	195	145	210	155
161-23-2069	1/0(1x)	0.72	0.80	16 x 14	1.04	657	747	220	160	235	175
▲ 161-23-2072	1/0(19x)	0.75	0.83	16 x 14	1.06	667	725	220	160	235	175
161-23-2075	2/0(19x)	0.81	0.88	13 x 12	1.15	820	910	250	185	270	205
161-23-2078	3/0(19x)	0.86	0.93	16 x 12	1.20	939	1029	285	210	310	230
161-23-2081	4/0(19x)	0.91	0.99	13 x 10	1.30	1138	1238	320	240	350	260
161-23-2084	250(37x)	0.97	1.04	16 x 10	1.36	1302	1418	350	270	380	295
161-23-2090	350(37x)	1.07	1.17	20 x 10	1.49	1615	1793	425	310	460	340
1/3 NEUTRAL											
160-23-2057	2(1x)	0.66	0.73	6 x 14	0.97	467	528	150	120	165	135
160-23-2060	2(7x)	0.68	0.76	6 x 14	1.00	489	579	150	120	165	135
160-23-2066	1(19x)	0.72	0.80	6 x 14	1.03	527	617	175	140	185	150
160-23-2069	1/0(1x)	0.72	0.80	6 x 14	1.04	541	663	195	155	215	170
160-23-2072	1/0(19x)	0.76	0.84	6 x 14	1.07	572	662	195	155	215	170
160-23-2075	2/0(19x)	0.81	0.88	7 x 14	1.12	636	726	225	180	240	195
160-23-2078	3/0(19x)	0.86	0.93	9 x 14	1.17	722	889	255	200	275	220
160-23-2081	4/0(19x)	0.91	0.99	11 x 14	1.23	822	922	285	235	310	255
160-23-2084	250(37x)	0.97	1.04	13 x 14	1.28	918	1018	305	250	330	275
160-23-2090	350(37x)	1.07	1.17	18 x 14	1.41	1166	1315	375	310	405	335
160-23-2093	500(37x)	1.20	1.30	16 x 12	1.57	1513	1691	450	370	490	405
160-23-2096	750(61x)	1.39	1.49	15 x 10	1.87	2152	2402	545	460	595	505
160-23-2099	1000(61x)	1.54	1.68	18 x *(A)	2.06	2711	3059	620	520	675	570

* - Special Conductor Size (A) Wire O.D. =0.1052"
(1) Individual wire size and count may vary. The resulting combination meets the 1/3 or full neutral, size requirement.

Okonite's web site, www.okonite.com contains the most up to date information

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

Ampacities

(2) Full neutral, single phase ampacities are based on ICEA P-117-734 for 90°C or 105°C conductor temperature, 25°C ambient temperature, 100% load factor, and earth thermal resistivity of RHO 90.
One third neutral ampacities are based on triplexed or triangular configuration for the same conditions stated above.

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Aluminum Conductor/105°C Rating
133% Insulation Levels

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°C Ampacity Direct Burial (2)	90°C Ampacity Duct (2)	105°C Ampacity Direct Burial (2)	105°C Ampacity Duct (2)
FULL NEUTRAL											
▲ 161-23-3057	2(1x)	0.74	0.82	10 x 14	1.06	577	635	170	125	185	135
▲ 161-23-3060	2(7x)	0.77	0.84	10 x 14	1.08	595	662	170	125	185	135
161-23-3066	1(19x)	0.81	0.89	13 x 14	1.13	691	781	195	145	210	155
▲ 161-23-3069	1/0(1x)	0.81	0.89	16 x 14	1.12	726	792	220	160	235	175
*▲ 161-23-9525	1/0(1x)	0.81	0.89	10 x 14*	1.12	651	718	230	170	245	185
▲ 161-23-3072	1/0(19x)	0.84	0.92	16 x 14	1.15	752	818	220	160	235	175
161-23-3075	2/0(19x)	0.90	0.97	13 x 12	1.24	912	1012	250	185	270	205
161-23-3078	3/0(19x)	0.95	1.02	16 x 12	1.29	1036	1136	285	210	310	230
161-23-3081	4/0(19x)	1.01	1.08	13 x 10	1.39	1241	1357	320	240	350	260
161-23-3084	250(37x)	1.06	1.16	16 x 10	1.48	1441	1619	350	270	380	295
161-23-3090	350(37x)	1.17	1.27	20 x 10	1.58	1734	1912	425	310	460	340
1/3 NEUTRAL											
160-23-3057	2(1x)	0.75	0.82	6 x 14	1.06	544	621	150	120	165	135
160-23-3060	2(7x)	0.78	0.85	6 x 14	1.09	569	659	150	120	165	135
160-23-3066	1(19x)	0.81	0.89	6 x 14	1.13	610	700	175	140	185	150
160-23-3069	1/0(1x)	0.82	0.89	6 x 14	1.13	625	715	195	155	215	170
160-23-3072	1/0(19x)	0.85	0.93	6 x 14	1.17	658	748	195	155	215	170
160-23-3075	2/0(19x)	0.90	0.97	7 x 14	1.21	726	826	225	180	240	195
160-23-3078	3/0(19x)	0.95	1.02	9 x 14	1.26	816	916	255	200	275	220
▲ 160-23-3081	4/0(19x)	0.99	1.06	11 x 14	1.30	889	1002	285	235	310	255
160-23-3084	250(37x)	1.06	1.16	13 x 14	1.40	1052	1168	305	250	330	275
160-23-3090	350(37x)	1.17	1.27	18 x 14	1.50	1280	1458	375	310	405	335
160-23-3093	500(37x)	1.29	1.39	16 x 12	1.73	1709	1959	450	370	490	405
▲ 160-23-3096	750(61x)	1.48	1.58	15 x 10	1.96	2237	2518	545	460	595	505
160-23-3099	1000(61x)	1.64	1.77	18 x (A)**	2.15	2875	3223	620	520	675	570
***▲ 160-23-9590	1100(61x)	1.61	1.75	18 x 12***	2.01	2471	2833	675	575	730	620

* - Special design 64% neutral
** - Special conductor size (A) Wire O.D. =0.1052"
*** - Special design 1/6 neutral, compact conductor
(1) Individual wire size and count may vary. The resulting combination meets the 1/3 or full neutral, size requirement.

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One third neutral ampacities are based on triplexed or triangular configuration for the same conditions stated above.

THE OKONITE COMPANY
Ramsey, New Jersey 07446