



## 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 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.

#### 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 alkalis.
- Sunlight resistant.
- Aluminum and coated copper conductors available.

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## Product Data Section 2: Sheet 43

### US MEASUREMENTS

Catalog Number	Conductor Size - mm <sup>2</sup>	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'
<b>6 kV Rated Cable</b>								
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

<b>10 kV Rated Cable</b>								
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

<b>15 kV Rated Cable</b>								
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

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## Product Data Section 2: Sheet 43

### US MEASUREMENTS

Catalog Number	Conductor Size - mm <sup>2</sup>	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'
<b>20 kV Rated Cable</b>								
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
<b>30 kV Rated Cable</b>								
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](http://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.

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

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## Product Data Section 2: Sheet 43

### METRIC MEASUREMENTS

Catalog Number	Conductor Size - mm <sup>2</sup>	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
<b>6 kV Rated Cable</b>								
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

Catalog Number	Conductor Size - mm <sup>2</sup>	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
<b>10 kV Rated Cable</b>								
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

Catalog Number	Conductor Size - mm <sup>2</sup>	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
<b>15 kV Rated Cable</b>								
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

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### METRIC MEASUREMENTS

Catalog Number	Conductor Size - mm <sup>2</sup>	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
<b>20 kV Rated Cable</b>								
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

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<b>30 kV Rated Cable</b>								
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

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#### Alternate Constructions

Contact Applications Engineering for design options.