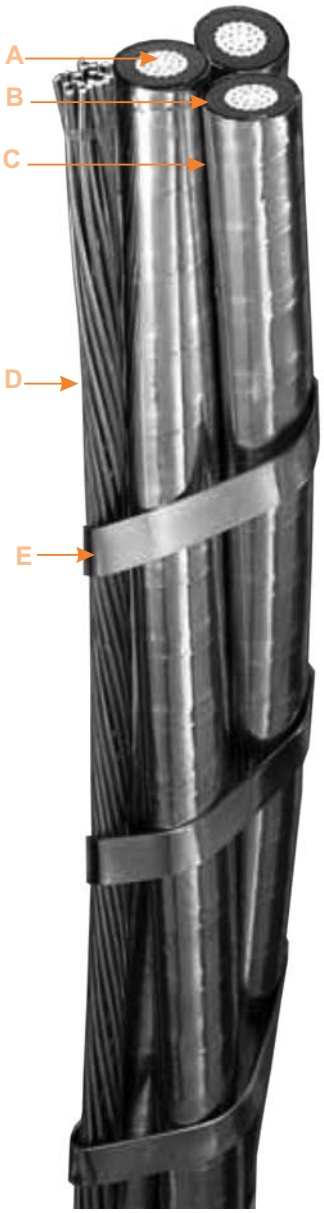
Okoguard® Type MV-105

15kV Okoguard Shielded Self Supporting Aerial Cable

3 Okopact® (Compact Stranded) Aluminum Conductors/105°C Rating
100% & 133% Insulation Level
Copperweld Messenger



A Okopact (Compact Stranded) Aluminum Conductors
B Okoguard Insulation System - EPR Insulation & Screens
C Copper-Nickel Shielding Tape
D Copperweld Messenger
E Bare Copper Binder Strap

Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) base, 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.

Assembly

Three 1/C Class B stranded compact aluminum conductors, triple tandem extruded, semiconducting EPR strand screen - Okoguard EPR insulation - extruded semiconducting EPR insulation screen, and copper-nickel shielding tape. Three single conductors are cabled together and laid parallel to a copper clad steel messenger. The messenger and triplexed assembly are bound together with a bare copper strap.

Applications

Okoguard shielded three conductor Type MV-105 power cables are recommended for distribution circuits, and for feeders or branch circuits in industrial and utility power distribution systems. Type MV cables may be installed in wet or dry locations, indoors or outdoors, in industrial establishments and electric utilities, residential and commercial applications and others. An excellent alternative where aesthetics and clearances are an issue.

Specifications

Conductors: Aluminum compact stranded per ASTM B-400.
Strand Screen: Extruded semiconducting EPR strand screen meets or exceeds electrical and physical requirements of AEIC CS8/ICEA S-97-682, ICEA S-93-639/NEMA WC74 and UL 1072.
Insulation: Okoguard meets or exceeds the electrical and physical requirements of ICEA S-93-639/NEMA WC74 and UL 1072. The insulated conductors are tested in accordance with AEIC CS8/ICEA S-97-682.
Insulation Screen: Extruded semiconducting EPR insulation screen per ICEA S-93-639/NEMA WC74, AEIC CS8/ICEA S-97-682 and UL 1072.
Shield: 5 mil copper-nickel tape helically applied with 12.5% nominal overlap.
Copperweld Messenger: Copper-clad steel stranded conductor per ASTM B228, and sized in accordance with ICEA P-79-561 for 150 ft. spans.
Assembly: Three single conductors are cabled together and laid parallel to a copper clad steel messenger.
Binder Strap: A bare flat copper binder strap with an open lay is wound around the assembly to hold the messenger parallel to the cable axis.

Product Features

- Triple tandem extruded, all EPR system.
- Complete assembled, factory tested wiring system.
- Passes the UL 1072 requirements.
- Excellent corona resistance.
- Screens are clean stripping.
- Exceptional resistance to “treeing”.
- Improved temperature rating.
- Minimum installation temperature of -40°C (-40°F)
- A standard messenger of copper-clad steel.
- Additional voltage classes are available.
- Tree trimming requirements reduced.
- Clearance levels reduced due to the use of insulated conductors.
- Eases right-of-way requirements.
- Different size messengers available for different span lengths.

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100% & 133% Insulation Level

Copperweld Messenger

Catalog Number	Conductor Size AWG\kcmil	Conductor Size - mm²	Approx. Diameter over Insulation - Inches	Copper Clad Steel Messenger - Inches (stranding) (1)	Diameter - Inches	Approx. 1/C O.D. - Inches	Approx. 1/C O.D. - mm	Approx. O.D. - Inches	Approx. O.D. -mm	Approx. Net Weight lbs./1000'	Approx. Ship Weight lbs./1000'	Ampacities in Air (2)
Okoguard Insulation: 175 mils (4.45mm), 100% Insulation Level												
135-23-9900	2	33.6	0.66	3/8 (7)	0.375	0.73	18.5	2.03	51.6	1341	2071	150
135-23-9901	1/0	53.5	0.73	3/8 (7)	0.375	0.80	20.3	2.18	55.4	1576	2306	200
135-23-9902	2/0	67.4	0.77	3/8 (7)	0.375	0.84	21.4	2.27	57.7	1695	2425	230
135-23-9903	4/0	107.0	0.87	3/8 (7)	0.375	0.94	24.0	2.48	63.0	2070	2996	305
135-23-9904	250	127.0	0.92	3/8 (7)	0.375	1.00	25.4	2.60	66.0	2268	3194	335
135-23-9905	350	177.0	1.02	3/8 (7)	0.375	1.09	27.8	2.81	71.3	2702	3628	415
135-23-9906	500	253.0	1.14	3/8 (7)	0.375	1.21	30.8	3.07	77.9	3310	4440	515
135-23-9907	750	380.0	1.31	1/2 (7)	0.500	1.38	35.1	3.53	89.7	4479	5609	660
Okoguard Insulation: 220 mils (5.59mm), 133% Insulation Level												
135-23-9920	2	33.6	0.75	3/8 (7)	0.375	0.83	21.0	2.23	56.6	1557	2287	150
135-23-9921	1/0	53.5	0.82	3/8 (7)	0.375	0.90	22.7	2.38	60.4	1809	2539	200
135-23-9922	2/0	67.4	0.86	3/8 (7)	0.375	0.94	24.0	2.47	62.6	1938	2864	230
135-23-9923	4/0	107.0	0.96	3/8 (7)	0.375	1.04	26.3	2.76	70.1	2351	3277	305
135-23-9924	250	127.0	1.02	3/8 (7)	0.375	1.09	27.8	2.80	71.1	2550	3476	335
135-23-9925	350	177.0	1.11	3/8 (7)	0.375	1.19	30.1	3.01	76.3	3008	4033	415
135-23-9926	500	253.0	1.23	3/8 (7)	0.375	1.31	33.3	3.27	83.0	3646	4776	515
135-23-9927	750	380.0	1.40	1/2 (7)	0.500	1.48	37.5	3.73	94.8	4858	6408	660

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

(1) Messenger size based on 150 ft. spans and normal loading in accordance with ICEA P-79-561 "Guide for Selecting Aerial Cable Messengers and Lashing Wires".

(2) Ampacities are in accordance with Table 315.60 (C)(2) of the NEC for insulated Single Copper conductor cables triplexed isolated in air, with a conductor operating temperature of 105°C and an ambient air temperature of 40°C.

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