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.

Shield
An 8 mil copper longitudinal corrugated shield (LCS) is applied over the extruded semiconducting insulation screen. The LCS resistance is also extremely stable during load cycling.

Jacket
The Okolene jacket on this cable is mechanically rugged, chemical, oil and moisture resistant.

Applications
Okoguard shielded Okolene Type MV-90 power cables are recommended for use as feeder circuits, in electric utility distribution circuits.

Type MV cables may be installed in wet or dry locations, indoors or outdoors (exposed to sunlight), in any raceway or underground duct, directly buried if installed in a system with a grounding conductor in close proximity that conforms with NEC Section 336.36 and 250.4(A)(5), or messenger supported in industrial establishments and electric utilities.

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

Strand Screen: Extruded semiconducting EPR strand screen. Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC74 & S-97-682, AEIC CS8 and UL 1072.

Insulation: Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC74 & S-97-682, AEIC CS8 and UL 1072.

Insulation Screen: Extruded semiconducting EPR insulation screen. Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC74 & S-97-682, AEIC CS8 and UL 1072.

Shield: 8 mil longitudinal corrugated, copper shield with a 0.25" overlap.

Jacket: Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC74 & S-97-682, and UL 1072 for polyethylene jackets.

UL Listed as Type MV-90, sunlight resistant in accordance with UL 1072. Okoguard-Okolene cables are also available with 5, 15, 35 and 69kV ratings and with Okolon TS-CPE jackets.

Product Features
• Triple tandem extruded, all EPR system.
• Okoguard cables meet or exceed all recognized industry standards (UL, AEIC, NEMA/ICEA, IEEE).
• 90°C continuous operating temperature.
• 130°C emergency rating.
• 250°C short circuit rating.
• Excellent corona resistance.
• Screens are clean stripping.
• Exceptional resistance to “treeing.”
• Low shield resistance.
• Moisture resistant.
• Resistant to most oils, acids and alkalies.
• Sunlight resistant.
• Improved Temperature Rating.
## Ampacities

1. **Ampacities**

   **(1)** Ampacities are in accordance with Table 311.60(C)(74) of the NEC for three single Type MV-105 conductors, or single conductors twisted together (triplaxed) and installed in an insulated conduit in air at an ambient temperature of 40°C and a conductor temperature of 90°C.

   **(2)** Ampacities are in accordance with Table 311.60(C)(82) of the NEC for an insulated single conductor directly buried with a conductor temperature rating of 90°C, ambient earth temperature of 20°C, 100% load factor and thermal resistance (RHO) of 90.

   **(3)** Ampacities are in accordance with Table 311.60(C)(78) of the NEC for three single conductors or triplexed cable in one underground raceway, three feet deep with a conductor temperature of 90°C, 100% Load Factor, an ambient earth temperature of 20°C, and thermal resistance (RHO) of 90.

   Refer to the NEC IEEE/ICEA S-135 Power Cable Ampacities, or the Okonite Engineering Data Bulletin for installation in duct banks, multiple point grounded shields, other ambient temperatures, circuit configurations or installation requirements.

   **(4)** Recommended size of rigid or nonmetallic conduit for three conductors based on 40% maximum fill.

   *The jam ratio, conduit to cable O.D. should be checked to avoid possible jamming.*

## Okoguard Insulation: 260 mils (6.60mm), 100% Insulation Level

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Conductor Size</th>
<th>AWG or kcmil</th>
<th>Conductor Size - mm²</th>
<th>Approx. Dia. over Screen (in.)</th>
<th>Jacket Thickness - mm</th>
<th>Approx. O.D. - mm</th>
<th>Approx. Net Weight lbs/1000'</th>
<th>Approx. Ship Weight lbs/1000'</th>
<th>Ampacity in Air (1)</th>
<th>Direct Burial (2)</th>
<th>Ampacity in Air (3)</th>
<th>Direct Burial (3)</th>
<th>Underground Duct Ampacity (4)</th>
<th>Conduit Size (inches)</th>
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<tr>
<td>135-23-6452</td>
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<td>0.94</td>
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<td>1.19</td>
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<td>31.2</td>
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Okonite's web site, www.okonite.com contains the most up to date information.