Okoguard®-Okoseal® Type MV-105
35kV Shielded Power Cable
One Okopact® (Compact Stranded) Copper Conductor/105°C Rating
100% and 133% Insulation Level

Insulation
Okoguard 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) jacket supplied with this cable is mechanically rugged and has excellent resistance to oil and most chemicals.

Applications
Okoguard shielded Okoseal Type MV-105 power cables are recommended for distribution circuits, and for feeders or branch circuits in industrial and commercial installations.

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: Annealed uncoated copper compact stranded per ASTM B-496.
Strand Screen: Extruded semiconducting EPR strand screen. Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC7 & S-97-682, AEIC CS8, CSA C68.10 and UL 1072.
Insulation: Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC7 & S-97-682 AEIC CS8, CSA C68.10 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, CSA C68.10 and UL 1072.
Shield: 5 mil bare copper tape helically applied with 12.5% nominal overlap.

Jacket: Meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC74 & S-97-682, CSA C68.10 and UL 1072 for polyvinyl chloride jackets.
UL Listed as Type MV-105 and sunlight resistant, in accordance with UL 1072.
CSA C68.10 listed as FT1, SR, and LTDD (-25°C).

Product Features
• Triple tandem extruded all EPR system.
• Okoguard cables meet or exceed all recognized industry standards (UL, AEIC, NEMA/ICEA, IEEE).
• 105°C continuous operating temperature.
• 140°C emergency rating.
• 250°C short circuit rating.
• Excellent corona resistance.
• Screens are clean stripping.
• Exceptional resistance to “treeing.”
• Moisture resistant.
• Resistant to most oils, acids, and alkalies.
• Sunlight resistant.
• Improved Temperature Rating.
• A flame retardant construction, size 1/0 AWG and larger, for installation in cable tray is available on special order.
## Okoguard-Okoseal Type MV-105

**35kV Shielded Power Cable**

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100% and 133% Insulation Level

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### Product Data

Section 2: Sheet 16

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#### Okoguard Insulation: 345 mils (8.76mm), 100% Insulation Level

<table>
<thead>
<tr>
<th>Catalog Number (1)</th>
<th>Conductor Size AWG or kcmil</th>
<th>Approx. Dia. over Insulation (in.)</th>
<th>Jacket Thickness - mils</th>
<th>Approx. O.D. - Inches</th>
<th>Approx. Net Weight lbs/1000'</th>
<th>Approx. Ship Weight lbs/1000'</th>
<th>Ampacities (2)</th>
<th>Direct Buried (3)</th>
<th>Underground Duct (4)</th>
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#### Okoguard Insulation: 420 mils (10.7mm), 133% Insulation Level

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<tr>
<th>Catalog Number (1)</th>
<th>Conductor Size AWG or kcmil</th>
<th>Approx. Dia. over Insulation (in.)</th>
<th>Jacket Thickness - mils</th>
<th>Approx. O.D. - Inches</th>
<th>Approx. Net Weight lbs/1000'</th>
<th>Approx. Ship Weight lbs/1000'</th>
<th>Ampacities (2)</th>
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**Okonite’s website, www.okonite.com contains the most up to date information.**

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**Notes:**

2. Aluminum Conductors are available on special orders.
3. Ampacities are in accordance with Table 311.60(C)(73) of the NEC for three single Type MV-105 conductors, or single conductors twisted together (triplexed) and installed in an isolated conduit in air at an ambient temperature of 40°C and a conductor temperature of 105°C.
4. Ampacities are in accordance with Table 311.60(C)(77) of the NEC for three single conductors or triplexed cable in one underground raceway, three feet deep with a conductor temperature of 105°C, 100% Load Factor, an ambient earth temperature of 20°C, and thermal resistance (RHO) of 90.
5. Recommended size of rigid or nonmetallic conduit for three conductors based on 40% maximum fill.
6. The jam ratio conduit I.D. to cable O.D. should be checked to avoid possible jamming.

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