

CROSS-LINKED POLYETHYLENE INSULATION (XLP) POWER CABLE, NON-SHIELDED, 2400V (5000V*), WITH OPTIONAL JACKET OVERALL TYPE MV-90, DRY, SINGLE CONDUCTOR

SCOPE:

This specification covers Aetna Insulated Wire's standard construction for single conductor non-shielded power cables, Type MV-90, insulated with solid dielectric cross-linked polyethylene (XLP) to the 2400V level and with an optional jacket overall and a "dry" rating.

*Note: NEC 2005 no longer recognizes non-shielded 5000V construction and only recognizes 2400V non-shielded with the specific constructions attributes included in this specification. These cables meet the current relevant ICEA standards for 5000V non-shielded cables.

PRODUCT SPECIFICATIONS AND RATINGS:

- i) National Fire Protection Association (NFPA) 70: National Electric Code (NEC)
- ii) Underwriters Laboratories 1072 for Medium Voltage Power Cables
- iii) ICEA S-96-659/NEMA WC71 Nonshielded 2001V - 5KV Cables
- iv) See individual product sheets for specific listings and ratings.

APPLICATION:

These cables comply with the exception notes of NEC Article 310.6 with respect to non-shielded cables above 2000V and NEC Table 310.63. Consequently where NEC requirements apply, this cable is suitable for use in dry locations at a continuous conductor operating temperature of 90°C, at an emergency overload conductor temperature of 130°C and at a short circuit conductor temperature of 250°C. Respecting the requirements for a "dry" location, these cables may be installed in duct or conduit or properly supported aurally.

CONSTRUCTION DATA:

Conductors - The conductor consists of uncoated soft, copper strands meeting the requirements of ASTM B3. Unless otherwise specified the conductor will be supplied as Class B compact per ASTM B496.

Conductor Shield - The conductor shield consists

of an extruded semi-conducting layer meeting the requirements of the governing specification.

Insulation - The insulation is cross-linked polyethylene (XLP) in black color extruded in a single pass with the conductor shield to the wall thickness as specified in the governing specifications listed and as shown on the individual product specification sheets.

Jacket - For jacketed construction a sunlight and ozone resistant jacket of polyvinylchloride (PVC) or chlorinated polyethylene (CPE) is extruded over the insulation.

ALTERNATE CONSTRUCTIONS:

- a) Aetna 3742 non-halogen, flame resistant, low smoke, low corrosion, non toxic jacket.
- b) (-40°C) PVC jacket (not U.L. listed for single conductor cables)
- c) Linear Low Density Polyethylene jackets are available.