

MV-90 3C, XLPE Insulated, PVC Jacketed

2.4 kV, Non-Shielded

CME[®]
wire and cable

A Viakable Company

Features

UL Listed as MV-90.

Rated For CT use 1/0 AWG and up.

Jacket is Listed Sunlight Resistant and Oil Resistant I.

Jacket is flame retardant.

Application

Per NEC, use is limited to 2400 volts maximum.

For use in power system in industrial establishments and utility applications, for dry locations, in accordance with NEC.

Standards

UL 1072

Medium Voltage Power Cables.

ICEA S-96-659/NEMA WC71

Standard for Nonshielded Cables Rated 2001-5000 Volts for Use in the Distribution of Electrical Energy.

Specifications

Maximum operating voltage:

- 2.4 kV in accordance with UL
- 5 kV 100%
- 3 kV 133% per ICEA

Maximum conductor operation temperatures:

Wet and dry locations

- Normal: 90 °C
- Emergency: 130 °C
- Short Circuit: 250 °C

Engineering Information

1. Conductor: Soft annealed uncoated copper compacted Class B per ASTM B496 or hard drawn Aluminum-1350 compacted Class B per ASTM B400.

Sizes: 8 AWG (6 AWG Aluminum) up to 1000 kcmil.

2. Conductor Shield: Semi conducting cross-linked polyethylene (XLPE).

3. Insulation: Thermoset crosslinked polyethylene (XLPE).

4. Grounding (Optional): One or three soft annealed bare copper conductors cabled with phase conductors.

5. Assembly: Conductors cabled with non-hygroscopic fillers, as required and binder tape.

6. Jacket: Black sunlight resistance and flame retardant thermoplastic polyvinyl chloride (PVC) compound.



ALUMINUM
CONDUCTOR

Technical Data

2.4 kV EPR Insulated

| Size AWG or kcmil | Number of Strands | Conductor Diameter in | Insulation Thickness mil | Ground Conductor* per Interstice | | Jacket Thickness mil | Approximate Outside Diameter in | Approximate Net Weight | |
|----------------------------|-------------------------|---------------------------------|------------------------------------|----------------------------------|----------|--------------------------------|--|------------------------|----------|
| | | | | Copper | Aluminum | | | Copper | Aluminum |
| | | | | AWG | | | | lb/kft | |
| 8 | 7 | 0.13 | 90 | 8 | — | 80 | 0.96 | 503 | — |
| 6 | 7 | 0.17 | 90 | 6 | 6 | 80 | 1.03 | 660 | 486 |
| 4 | 7 | 0.21 | 90 | 6 | 4 | 80 | 1.13 | 857 | 580 |
| 2 | 7 | 0.27 | 90 | 6 | 4 | 80 | 1.25 | 1156 | 716 |
| 1 | 19 | 0.30 | 90 | 4 | 4 | 80 | 1.31 | 1395 | 840 |
| 1/0 | 19 | 0.34 | 90 | 4 | 4 | 80 | 1.39 | 1648 | 947 |
| 2/0 | 19 | 0.38 | 90 | 4 | 2 | 80 | 1.48 | 1989 | 1106 |
| 3/0 | 19 | 0.42 | 90 | 3 | 2 | 80 | 1.58 | 2380 | 1265 |
| 4/0 | 19 | 0.48 | 90 | 3 | 2 | 110 | 1.76 | 2974 | 1570 |
| 250 | 37 | 0.52 | 90 | 3 | 2 | 110 | 1.88 | 3422 | 1760 |
| 300 | 37 | 0.57 | 90 | 2 | 1 | 110 | 1.99 | 4006 | 2014 |
| 350 | 37 | 0.62 | 90 | 2 | 1 | 110 | 2.08 | 4557 | 2232 |
| 400 | 37 | 0.66 | 90 | 2 | 1 | 110 | 2.18 | 5099 | 2444 |
| 500 | 37 | 0.74 | 90 | 1 | 1/0 | 110 | 2.34 | 6222 | 2901 |
| 600 | 37 | 0.81 | 90 | 1 | 1/0 | 110 | 2.53 | 7311 | 3324 |
| 750 | 61 | 0.91 | 90 | 1/0 | 2/0 | 140 | 2.80 | 9127 | 4150 |
| 1000 | 61 | 1.06 | 90 | 1/0 | 2/0 | 140 | 3.13 | 11792 | 5158 |

The above data are approximate and subject to normal manufacturing tolerances. Where required, the compatibility with glands, connectors and accessories should be verified using actual dimensions of the product. Other sizes available upon request.

Ampacities: Refer to tables at beginning of section.

* At the option of manufacturer, Ground Conductor can be divided in three, one in each interstice.