

MEDIUM VOLTAGE POWER CABLE

TYPE MV-105 - SHIELDED EPR-PVC POWER CABLE, 5000/8000 VOLT
105°C WET OR DRY LOCATIONS

Construction

Conductor:

- Compressed class B stranded annealed uncoated copper.

Conductor Shield:

- Extruded semi-conducting co-polymer compound.

Insulation:

- 105°C rated Ethylene Propylene Rubber (EPR) per ICEA S-93-639 section 4 and UL-1072.

Insulation Shield:

- Extruded semi-conducting co-polymer compound applied directly over the insulation. The conductor shield, insulation and insulation shield are applied in one tandem operation.

Shield:

- Uncoated helically applied 5 mil bare copper tape with a nominal overlap of 25%.

Jacket:

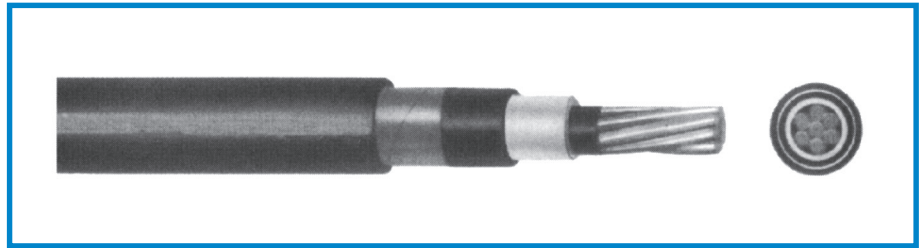
- Extruded PVC jacket with excellent mechanical properties. Jacket is UL recognized as being "sunlight resistant."

Tests:

- The finished cable shall be tested in accordance with and meet the requirements of ICEA S-93-639, UL-1072, and AEIC CS6.

Industry Approvals:

- Conforms to ICEA S-93-639, NEMA WC74 for 5-46 kV Shielded Power Cable.
- Conforms to ICEA S-97-682 for Utility Shielded Power Cables Rated 5 through 46 kV.
- Conforms to AEIC CS8 for Extruded Dielectric, Shielded Power Cables Rated 5 through 46 kV.
- Listed by UL as Type MV-105, per Standard 1072.
- Listed by UL as Sunlight Resistant.
- Listed by UL CT use. (1/0 and larger.)



| CUSTOM CATALOG NUMBER | SIZE | STRAND | NOMINAL THICKNESS (INCHES) | | NOMINAL O.D. | AMPS | | | NOMINAL WEIGHT |
|---|---------|--------|----------------------------|--------|--------------|----------------------------|-------------------|------------------|----------------|
| | AWG/MCM | | INSULATION | JACKET | INCHES | DIRECT BURIAL ¹ | DUCT ² | AIR ³ | LBS/MFT |
| 5000 VOLTS, 133% INSULATION LEVEL (UNGROUND NEUTRAL) OR 8000 VOLTS, 100% INSULATION LEVEL (GROUND NEUTRAL) | | | | | | | | | |
| 25051 | 6 | 7 | 0.115 | 0.060 | 0.695 | — | 75 | 85 | 281 |
| 25052 | 4 | 7 | 0.115 | 0.060 | 0.745 | — | 97 | 110 | 352 |
| 25053 | 2 | 7 | 0.115 | 0.080 | 0.805 | — | 130 | 145 | 452 |
| 25054 | 1 | 19 | 0.115 | 0.080 | 0.845 | — | 155 | 170 | 576 |
| 25055 | 1/0 | 19 | 0.115 | 0.060 | 0.925 | 260 | 180 | 195 | 612 |
| 25056 | 2/0 | 19 | 0.115 | 0.080 | 0.970 | 300 | 205 | 220 | 719 |
| 25057 | 3/0 | 19 | 0.115 | 0.080 | 1.020 | 345 | 240 | 250 | 886 |
| 25058 | 4/0 | 19 | 0.115 | 0.080 | 1.075 | 400 | 280 | 290 | 1051 |
| 25059 | 250 | 37 | 0.115 | 0.080 | 1.130 | 445 | 315 | 320 | 1199 |
| 25060 | 350 | 37 | 0.115 | 0.080 | 1.235 | 550 | 385 | 385 | 1602 |
| 25061 | 500 | 37 | 0.115 | 0.080 | 1.385 | 695 | 475 | 470 | 2160 |
| 25062 | 750 | 61 | 0.115 | 0.080 | 1.580 | 900 | 600 | 585 | 3048 |
| 25063 | 1000 | 61 | 0.115 | 0.080 | 1.800 | 1075 | 690 | 670 | 3908 |

- Ampacities are based on three single conductor cables directly buried in earth, conductor temperature of 105°C and ambient earth temperature of 20°C per Table 310.81 of the 2002 NEC.
- Ampacities are based on three single conductor cables in underground electrical duct, conductor temperature of 105°C and ambient earth temperature of 20°C per Table 310.77 of the 2002 NEC.
- Ampacities are based on three single conductor cables in isolated conduit in air, conductor temperature of 105°C and ambient air temperature of 40°C per Table 310.73 of the 2002 NEC.

Applications

UL listed and OSHA acceptable. Where NEC requirements apply, cables are suitable for use in wet or dry locations at maximum operating temperature of 105°C for normal operation; 140°C for emergency overload conditions; and 250°C for short circuit conditions. Cables may be installed in conduit, duct or aerially when properly supported by a messenger. Cables are also suitable for direct burial if installed in a system with a grounding conductor that is in close proximity and conforms with Article 250.4(A)(5) and 250.4(13)(4) of the 2002 NEC. NOTE: Sizes 1/0 AWG and larger are marked "Type MV-105 for CT USE" suitable for installation in cable tray per Article 392.12 of the 2002 NEC. Sizes 1/0 and larger also pass the IEEE 1202/FT4 flame test.



Custom Cable Corp.