



# MV-105 3C, EPR Insulated, PVC Jacketed 35 kV Copper Tape Shielded

## Description

Medium voltage multi conductor, shielded power cable. Primary power and distribution circuits in industrial and commercial installations. True Triple extrusion system and closed handling raw materials system, to eliminate any contact with ambient, until extrusion process ends.

## Approvals

UL listed as MV-105  
UL 1072  
ICEA S-93-639/NEMA WC74:  
Shielded power cables 5,000 to 46,000V  
ICEA S-97-682: utility  
Shielded power cables 5,000 to 46,000V  
AEIC CS8: extruded dielectric shielded  
Power cables 5,000 to 46,000V

## Construction

- Stranded soft annealed bare copper conductor, Class B per ASTM B496 or hard drawn Aluminum-1350 compacted class B per ASTM B 400.
- Semi conducting cross-linked polyethylene (XLPE) conductor shield.
- Thermoset Ethylene Propylene Rubber (EPR) insulation.
- XLPE Insulation shield, colored strings (black, red and white)
- Soft annealed uncoated copper tape, 5 mil thick, 25% min overlap.
- Optional ground wire - one or three soft annealed bare copper or covered conductors cabled with phase conductors.
- Black Oil Resistant, sunlight resistant and flame retardant Polyvinyl Chloride (PVC) compound jacket. \*EPR/CPE jacket available upon request.

## Temperature Rating

105°C Normal Operating Temperature

## Voltage Rating

35kV 100% and 133% IL

## Application

Power circuits in generating plants where line to ground faults current are within shield capabilities. May be used in wet or dry locations, installed in cable trays, raceways, duct and open air, aerially or directly buried as permitted by NEC.



| Sycor Part No   | AWG | Strands | Cond. Diam. | 100% Insulation Level (345 mil) |     |                  |                 |               |          | 133% Insulation Levels (420 mil) |     |                  |                 |               |          |
|-----------------|-----|---------|-------------|---------------------------------|-----|------------------|-----------------|---------------|----------|----------------------------------|-----|------------------|-----------------|---------------|----------|
|                 |     |         |             | Ground                          |     | Jacket Thickness | Appr. O.D. (in) | Approx Weight |          | Ground                           |     | Jacket Thickness | Appr. O.D. (in) | Approx Weight |          |
|                 |     |         |             | Cu                              | Al  |                  |                 | Copper        | Aluminum | Cu                               | Al  |                  |                 | Copper        | Aluminum |
| MV10535KT3C-1/0 | 1/0 | 19      | 0.34        | 4                               | 4   | 140              | 2.91            | 4294          | 3593     | 4                                | 4   | 140              | 3.25            | 5046          | 4344     |
| MV10535KT3C-2/0 | 2/0 | 19      | 0.38        | 4                               | 2   | 140              | 3.00            | 4709          | 3826     | 4                                | 2   | 140              | 3.33            | 5480          | 4596     |
| MV10535KT3C-3/0 | 3/0 | 19      | 0.42        | 3                               | 2   | 140              | 3.10            | 5250          | 4135     | 3                                | 2   | 140              | 3.43            | 6043          | 4928     |
| MV10535KT3C-4/0 | 4/0 | 19      | 0.48        | 3                               | 2   | 140              | 3.21            | 5869          | 4465     | 3                                | 2   | 140              | 3.55            | 6688          | 5283     |
| MV10535KT3C-250 | 250 | 37      | 0.52        | 2                               | 1   | 140              | 3.33            | 6489          | 4828     | 2                                | 1   | 140              | 3.67            | 7335          | 5674     |
| MV10535KT3C-300 | 300 | 37      | 0.57        | 2                               | 1   | 140              | 3.44            | 7159          | 5167     | 2                                | 1   | 140              | 3.77            | 8029          | 6037     |
| MV10535KT3C-350 | 350 | 37      | 0.62        | 2                               | 1   | 140              | 3.54            | 7822          | 5497     | 2                                | 1   | 140              | 3.94            | 8897          | 6571     |
| MV10535KT3C-400 | 400 | 37      | 0.66        | 1                               | 1/0 | 140              | 3.63            | 8514          | 5858     | 1                                | 1/0 | 140              | 4.03            | 9614          | 6958     |
| MV10535KT3C-500 | 500 | 37      | 0.74        | 1                               | 1/0 | 140              | 3.86            | 9958          | 6638     | 1                                | 1/0 | 140              | 4.20            | 10923         | 7602     |
| MV10535KT3C-600 | 600 | 61      | 0.81        | 1/0                             | 2/0 | 140              | 4.05            | 11280         | 7293     | 1/0                              | 2/0 | 140              | 4.39            | 12288         | 8301     |
| MV10535KT3C-750 | 750 | 61      | 0.91        | 1/0                             | 2/0 | 140              | 4.26            | 13096         | 8119     | 1/0                              | 2/0 | 140              | 4.59            | 14149         | 9127     |

\* Ground Conductor may be divided into 3, one in each interstice

\*\*Available in 100% and 133% Insulation Levels.