# POWER KABEL INC.

## MV-105 ALUMINUM 25KV EPR @ 100% COPPER TAPE SHIELD PVC JACKET

### APPLICATIONS & FEATURES

Primary power and distribution circuits in industrial and commercial installations, power circuits in generating plants where line to ground fault current are within shield capabilities. May be used in wet or dry locations, installed in raceways, duct, and open air, aerially or directly buried as permitted by NEC. UL Listed as MV-90. Rated as Sunlight Resistance. Oil Resistance I jacket.

### INDUSTRY COMPLIANCES

UL 1072 (Medium Voltage Power Cable.)

ICEA S-93-639/WC 74 (Shielded Power Cable for Use in the Transmission and Distribution of Electric Energy Rated 5 kV - 46 kV.)

ICEA S-97-682(Utility Shielded Power Cables rated 5 kV - 46 kV.)

AEIC CS8 (Extruded Dielectric, Shielded Power Cables rated 5 kV - 46 kV.)

ASTM B400 (Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors.)

ASTM B801 (Magnesium-Alloy Sand Castings)

### CONSTRUCTION

| | |
|---|---|
| CONDUCTORS: | Hard drawn Aluminum-1350 compacted Class B per ASTM B400 or annealed AA-8000 Aluminum compacted Class B per ASTM B801. |
| CONDUCTOR SHIELD: | Semi conducting cross-linked polyethylene (XLPE). |
| INSULATION: | Thermoset ethylene propylene rubber (EPR) |
| INSULATION SHIELD: | Semi conducting cross-linked polyethylene (XLPE). |
| METALLIC SHIELD: | Soft annealed uncoated copper tape, 5 mil thick, 25% minimum overlap |
| JACKET: | Black sunlight resistance and flame retardant polyvinyl chloride (PVC) compound. |

| AWG | STRANDS | INSULATION THICKNESS (MILS) | CONDUCTOR OD (INCHES) | INSULATION DIAMETER (INCHES) | JACKET THICKNESS (MILS) | OUTSIDE DIAMETER (INCHES) | POUNDS PER 1000 FT |
|---|---|---|---|---|---|---|---|
| 1 | 19 | 260 | 0.30 | 0.86 | 80 | 1.12 | 649 |
| 1/0 | 19 | 260 | 0.34 | 0.90 | 80 | 1.16 | 699 |
| 2/0 | 19 | 260 | 0.38 | 0.94 | 80 | 1.20 | 757 |
| 3/0 | 19 | 260 | 0.42 | 0.99 | 80 | 1.25 | 827 |
| 4/0 | 19 | 260 | 0.48 | 1.04 | 80 | 1.32 | 935 |
| 250 | 37 | 260 | 0.52 | 1.10 | 80 | 1.38 | 1016 |
| 300 | 37 | 260 | 0.57 | 1.15 | 80 | 1.43 | 1103 |
| 350 | 37 | 260 | 0.62 | 1.19 | 80 | 1.47 | 1187 |
| 400 | 37 | 260 | 0.66 | 1.24 | 80 | 1.52 | 1269 |
| 500 | 37 | 260 | 0.74 | 1.31 | 80 | 1.59 | 1426 |
| 600 | 61 | 260 | 0.81 | 1.40 | 80 | 1.68 | 1590 |
| 750 | 61 | 260 | 0.91 | 1.49 | 110 | 1.84 | 1918 |
| 1000 | 61 | 260 | 1.06 | 1.65 | 110 | 2.02 | 2338 |

All values are nominal and subject to correction.