



# POWER KABEL INC.

## TYPE MV-105, VFD WELDED ARMOR 3 CONDUCTORS 2AWG-750KCMIL 5KV 133% COPPER EPR PVC

### APPLICATIONS & FEATURES

5KV WELDED ARMOR MC HL are cables for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 105°C for normal operation, 140°C for emergency overload, 250°C for short circuit conditions, and -50°C for cold bend. For uses in Class I, II, and III, Division 1 and 2 hazardous locations per NEC Article 501, 502, and 503. Suitable for VFD application.

### INDUSTRY COMPLIANCES

ASTM B3 Standard Specification for Soft or Annealed Copper Wire  
ASTM B8 Concentric-Lay-Stranded Copper Conductors  
UL 1072 Medium-Voltage Power Cables  
UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test

ICEA S-93-639 (NEMA WC 74) 5-46 KV Shielded Power Cable  
IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test  
AEIC CS-8 Specification for extruded dielectric shielded power cables rated for 5 through 46KV

### CONSTRUCTION

<b>CONDUCTORS:</b>	7 strands class B compressed bare copper per ASTM B3 and ASTM B8
<b>CONDUCTOR SHIELD:</b>	Semi-conducting cross-linked copolymer
<b>INSULATION:</b>	Ethylene Propylene Rubber (EPR) 133% Insulation Level,
<b>INSULATION SHIELD:</b>	Stripable semi-conducting cross-linked copolymer
<b>COPPER TAPE:</b>	Helically wrapped 5 mil copper tape with 25% overlap
<b>GROUNDING:</b>	3 Class B compressed stranded bare copper ground per ASTM B3 and ASTM B8
<b>FILLER:</b>	Paper filler
<b>BINDER:</b>	Polypropylene tape
<b>ARMOR:</b>	Continuous Corrugated Welded Armor
<b>JACKET:</b>	Polyvinyl Chloride (PVC) Jacket

AWG	No of CONDUCTORS	STRANDS	INSULATION THICKNESS (MILS)	GROUND AWG	OUTSIDE DIAMETER (INCHES)	POUNDS PER 1000 FT
2	3	7	1115	10	1810	1904
1/0	3	19	115	8	2160	2524
2/0	3	19	115	8	2160	2800
4/0	3	19	115	6	2440	3987
250	3	37	115	6	2440	4692
350	3	37	115	6	2700	5902
500	3	37	115	4	3030	7534
750	3	61	115	4	3710	10969

All values are nominal and subject to correction.