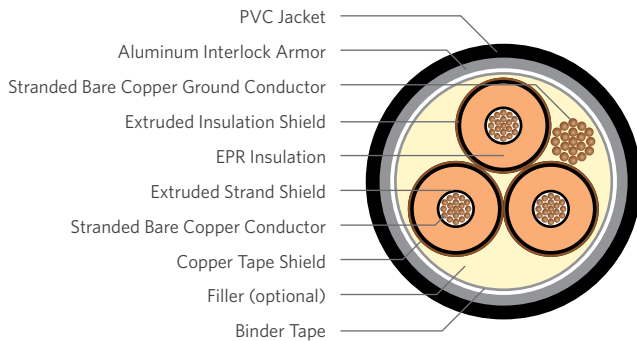


# EPR/CTS/AIA/PVC Power, Type MV-105, 3 Conductor, 5kV-15kV

Series E8



## PRODUCT DESCRIPTION

The Superior Essex 3 Conductor MV-105 Power Cables consist of fully annealed bare copper Class B stranded conductors, covered with ethylene propylene rubber (EPR), copper tape shield, a binder tape, aluminum interlock armored (AIA), and PVC jacket. These cables are used in industrial power circuits.

## APPLICATIONS

- In conduit, duct, free air, direct burial and raceways, primary installations include cable trays, and outdoor locations
- Direct burial
- Approved for Class I, Div. 2 industrial hazardous locations per NEC
- Designed to operate continuously at a conductor temperature not exceeding
  - » 105°C for normal operations
  - » 140°C for emergency overload
  - » 250°C for short circuit

## FEATURES

- Rated at 105°C wet or dry
- Excellent corona resistance
- High dielectric strength
- Low moisture absorption
- Low dielectric loss
- For CT USE per UL® 1072
- Meets cold bend test at -35°C

## MARKETS



## SPECIFICATIONS

<b>Conductor Count</b>	3 conductor
<b>Conductor</b>	Fully annealed bare copper Class B compressed strand
<b>Gauge Sizes</b>	Available in 2 AWG through 500 kcmil
<b>Conductor Strand Shield</b>	Extruded thermoset semi-conducting polymer over the conductor
<b>Insulation</b>	Ethylene Propylene Rubber (EPR)
<b>Insulation Shield</b>	Extruded thermoset semi-conducting polymer over the insulation
<b>Phase Identification</b>	Color ribbons in each phase (standard: black-red-blue)
<b>Shield</b>	Annealed copper tape helically applied with a 25% overlap
<b>Fillers</b>	Non-hygroscopic fillers, as necessary to obtain a circular cross section
<b>Ground Conductor</b>	Uninsulated bare copper ground
<b>Armor</b>	Aluminum interlock armored (AIA)
<b>Jacket</b>	Polyvinyl chloride (PVC)
<b>Jacket Marking</b>	00000 FT SUPERIOR ESSEX XXAWG (or XXXKCMIL) 3/C XXKV XXX% INSUL LEVEL XXXMILS EPR/PVC JKT TYPE MV-105 FOR CT USE (UL) SUN RES DIR BUR MADE IN USA MMDDYYYY
<b>Packaging</b>	Non-returnable reels in a variety of lengths and dimensions
<b>Performance Compliances</b>	ASTM B8 UL 1072 UL 1685 (flame compliance) ICEA S-93-639/NEMA WC74 ICEA S-97-682 AEIC CS8 CSA FT4/IEEE 1202 (flame compliance) NEC
<b>Other Compliances</b>	EPA 40 CFR, Part 261 OSHA

UL is a registered trademark of UL LLC.

## PRODUCT KEY

Conductor	Stranding	Voltage	Insulation (CCV)	Shield	Armor	Jacket
Cu	B	MV	EPR	Copper Tape	AIA	PVC

# 5kV 133%/8kV 100% I.L., 115-mils, Shielded, Type MC Series E8FLP

## PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Conductor Size AWG/kcmil	Nominal Conductor Diameter <sup>1</sup> in (mm)	Nominal Insulation Diameter <sup>1</sup> in (mm)	Ground Wire AWG	Nominal Overall Diameter Over the Armor <sup>1</sup> in (mm)	Nominal Jacket Thickness <sup>1</sup> in (mm)	Nominal Overall Diameter <sup>1</sup> in (mm)	Nominal Net Weight <sup>1</sup> lbs/kft (kg/km)
E8FLP-021B03CB00	2	0.280 (7.1)	0.563 (14.31)	6	1.64 (41.6)	60 (1.52)	1.77 (44.9)	1,819 (2,708)
E8FLP-1A1B03CB00	1/0	0.358 (9.1)	0.642 (16.31)	4	1.79 (45.3)	60 (1.52)	1.92 (48.6)	2,364 (3,520)
E8FLP-2A1B03CB00	2/0	0.401 (10.2)	0.685 (17.41)	4	1.87 (47.5)	60 (1.52)	2.00 (48.6)	2,696 (4,014)
E8FLP-4A1B03CB00	4/0	0.507 (12.9)	0.792 (20.12)	3	2.09 (53.2)	60 (1.52)	2.22 (56.5)	3,687 (5,490)
E8FLP-A11B03CB00	250	0.552 (14.0)	0.838 (21.29)	2	2.21 (56.0)	60 (1.52)	2.34 (59.3)	4,165 (6,202)
E8FLP-A31B03CB00	350	0.654 (16.6)	0.941 (23.91)	2	2.41 (61.3)	80 (2.03)	2.57 (65.4)	5,436 (8,094)
E8FLP-A61B03CB00	500	0.781 (19.8)	1.069 (27.15)	1	2.64 (67.0)	80 (2.03)	2.84 (72.0)	7,170 (10,676)

# 15kV 133% I.L., 220-mils, Shielded, Type MC Series E8JLP

## PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Conductor Size AWG/kcmil	Nominal Conductor Diameter <sup>1</sup> in (mm)	Nominal Insulation Diameter <sup>1</sup> in (mm)	Ground Wire AWG	Nominal Overall Diameter Over the Armor <sup>1</sup> in (mm)	Nominal Jacket Thickness <sup>1</sup> in (mm)	Nominal Overall Diameter <sup>1</sup> in (mm)	Nominal Net Weight <sup>1</sup> lbs/kft (kg/km)
E8JLP-021B03CB00	2	0.280 (7.1)	0.793 (20.14)	6	2.08 (52.8)	60 (1.52)	2.21 (56.1)	2,416 (3,597)
E8JLP-1A1B03CB00	1/0	0.358 (9.1)	0.872 (22.15)	4	2.22 (56.5)	60 (1.52)	2.35 (59.8)	2,997 (4,463)
E8JLP-2A1B03CB00	2/0	0.401 (10.2)	0.915 (23.24)	4	2.31 (58.7)	60 (1.52)	2.44 (62.0)	3,371 (5,019)
E8JLP-4A1B03CB00	4/0	0.507 (12.9)	1.022 (25.96)	3	2.53 (64.3)	60 (1.52)	2.70 (68.5)	4,502 (6,703)
E8JLP-A11B03CB00	250	0.552 (14.0)	1.068 (27.13)	2	2.65 (67.2)	60 (1.52)	2.81 (71.3)	5,005 (7,452)
E8JLP-A31B03CB00	350	0.654 (16.6)	1.171 (29.74)	2	2.85 (72.4)	80 (2.03)	3.01 (76.6)	6,252 (9,309)
E8JLP-A61B03CB00	500	0.781 (19.8)	1.299 (32.99)	1	3.11 (79.0)	80 (2.03)	3.30 (83.7)	8,094 (12,047)

<sup>1</sup>The dimensions and weights shown are nominal and subject to industry standards and manufacturing tolerances. Other designs available upon request.