

Three Conductor 15kV 133%/100% Shielded MV-105



APPLICATION:

15kV Shielded MV-105 cable is primarily used for power circuits in commercial, industrial, refinery and petro-chemical plants; utility power generation and substations. The cable can be used in wet or dry locations when installed in accordance with NEC as well as cable trays, duct, open air and direct burial installations. The cable has excellent heat, moisture and sunlight resistance. The cable meets the cold bend test at -35°C and is approved for temperatures up to 105°C wet or dry.

CONDUCTORS:

- Class B annealed compact bare copper per ASTM

CONDUCTOR SHIELD:

- Extruded thermoset semi-conducting stress-control layer over conductor

INSULATION:

- High dielectric strength lead-free EPR insulation, contrasting in color to the black semi-conducting shield layers

INSULATION SHIELD:

- Extruded thermoset semi-conducting polymeric layer free stripping from insulation

METALLIC SHIELD:

- Helically applied 5 mil annealed copper tape over the insulation shield with an overlap of 25%
- Color ribbons in each phase for identification for sizes 2 AWG and above (standard: black-red-blue)

GROUND CONDUCTOR:

- Uninsulated bare stranded copper conductor may be in contact with metallic shielding tape

ASSEMBLY:

- Three phase identified shielded conductors cabled with fillers and grounding conductor (as specified), forming a firm and cylindrical cable core. A binder tape is applied over the core

JACKET:

- Black low-friction, lead-free, flame-retardant, moisture and sunlight resistant polyvinyl chloride (PVC) jacket applied over the assembly

STANDARDS:

- UL 1072 Listed sunlight resistant, direct burial and for CT use
- UL 1685 Flame Test (70,000 BTU/hr)
- UL Listed as Type MV-105 for use in accordance with NEC
- ICEA S-93-639/NEMA WC74
- ICEA S-97-682
- AEIC CS8
- EPA 40 CFR, Part 261
- OSHA Compliant



Three Conductor 15kV 133%/100% Shielded MV-105



Part Number	Conductor Size	Conductor Diameter	Insulation Diameter	Ground Wire	Jacket Thickness	Overall Diameter	Cable Weight	Ampacity		
								105°C in Air*	105°C in Duct**	105°C in Tray***
	AWG/kcmil	inches	inches	AWG	inches	inches	lbs/kft	amps	amps	amps
15 kV 133% INS. LEVELS, TYPE MV-105, 220 MILS, 3 CONDUCTOR										
2-0315KVSEPG	2	0.27	0.793	6	0.110	2.04	2226	165	160	185
1/0-0315KVSEPG	1/0	0.34	0.850	4	0.110	2.20	2811	215	210	240
2/0-0315KVSEPG	2/0	0.38	0.890	4	0.110	2.30	3163	245	235	275
4/0-0315KVSEPG	4/0	0.48	0.995	3	0.110	2.52	4203	320	305	360
350-0315KVSEPG	350	0.62	1.100	2	0.110	2.94	6182	430	400	490
500-0315KVSEPG	500	0.74	1.200	1	0.140	3.21	7686	525	485	600
750-0315KVSEPG	750	0.91	1.430	1/0	0.140	3.61	10978	635	585	745

All values are nominal and subject to correction

*Ampacities are in accordance with NEC table 310.60(C)(75), Type MV-105, 5001-35000 Volts, for tray or conduit in air.

**Ampacities are in accordance with NEC table 310.60(C)(79), Type MV-105, 5001-35000 Volts s, for underground duct, one circuit.

***Ampacities are in accordance with NEC table 310.60(C)(71), Type MV-105, 5001-35000 Volts, for in air (tray).

