



# MV-105 5kV/8kV

**UL 1072, ASTM B-496, ICEA S-93-639, ICEA S-97-682, AEIC CS8-2000, IEEE 383**

Medium Voltage 5 kV 133%/8kV 100% Copper Conductor, Copper Tape Shielded Power Cable

## APPLICATIONS

### INDUSTRIAL AND COMMERCIAL

- Chemical Plants
- Petrochemical Plants
- Electrical Utility Plants
- Water Treatment Facilities
- Textile Mills
- Steel Mills
- Paper Mills
- Airports
- Shopping Malls
- Military Bases
- Medical Facilities
- Sports Stadiums

### INSTALLATIONS

- In Cable Tray
- Conduit in Air
- Aerial with Messenger Supported
- Direct Buried
- Underground Duct
- Wet and Dry Locations



## CONSTRUCTION

<b>Conductor</b>	Class B compressed annealed uncoated copper
<b>Conductor shield</b>	Extruded layer of semiconducting compound applied under simultaneous triple extrusion process
<b>Insulation</b>	Extruded layer of 105°C rated Ethylene Propylene Rubber (EPR)
<b>Insulation shield</b>	Extruded layer of semiconducting compound applied by triple extrusion process
<b>Metallic shield</b>	5 mil bare copper tape applied helically with a 25% overlap
<b>Jacket</b>	Extruded layer of black sunlight resistant Polyvinyl Chloride (PVC)

## Characteristic

<b>Maximum conductor operating temperature:</b>	+105°C
<b>Maximum conductor emergency overload temperature:</b>	+140°C
<b>Maximum short-circuit conductor temperature:</b>	+250°C

Lowest ambient temperature for mixed installation	-40°C
Lowest installation temperature	-5°C
Minimum bending radius	12xD (D-overall diameter of cable)

- Flame retardant PVC jacket
- Listed for CT use for sizes I/O AWG and larger

## Approvals

(UL): E231073

## Technical and Electrical Characteristic

Part Number	Conductor Size	Insulation Thickness	Diameter over Insulation	Jacket Thickness	Outer Diameter	Cable Weight	Ampacities *		
							Isolated in Air	Direct Buried	Underground Duct
	AWG / MCM	mils	inches	mils	inches	lbs /kft	A		
MV1058kV1	2 AWG		0.55		0.78	425	215	250	155
MV1055kV2	1 AWG		0.60	60	0.80	515	250	280	180
MV1058kV1/0	1/0 AWG		0.65		0.85	580	290	320	210
MV1055kV2/0	2/0 AWG		0.69		0.95	675	330	365	235
MV1058kV3/0	3/0 AWG		0.75		1.00	860	385	415	270
MV1055kV4/0	4/0 AWG	115	0.80		1.05	985	445	465	310
MV1058kV250	250 MCM		0.85	80	1.10	1130	495	510	345
MV1058kV350	350 MCM		0.95		1.20	1480	615	615	410
MV1058kV500	500 MCM		1.10		1.35	2000	775	745	505
MV1058kV750	750 MCM		1.30		1.55	2870	1000	910	630
MV1058kV1000	1000 MCM		1.40		1.70	3690	1200	1055	720

\* Ampacities „Underground Duct“ per NEC 2011 Table 310.60 (C) (77). Ampacities „Isolated in Air“ per NEC 2011 Table 310.60 (C) (69). Ampacities „Direct Buried“ per NEC 2011 Table 310.60 (C) (81).

### Standard print legend:

TF Cable (voltage) (size) TYPE MV-105 SHIELDED COPPER EPR 133% INS LEVEL SUN RES FOR CT USE DIRECT BURIAL UL E231073

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