



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB Type MC PVC Jacketed AL Conductor, Type MC cable with flame retardant sunlight resistant PVC jacket is suitable for use as follows

- Direct burial application, installation in concrete and where exposed to cinder fills, strong chlorides, caustic alkalis or vapours of chlorine or hydrochloric acids.
- Branch, feeder, and service power distribution under high ambient temperatures in commercial, industrial institutional and multi residential buildings.
- Power, lighting, control, and signal circuits, fished or embedded in plaster, concealed or exposed installation, places of assembly per NEC 518.4 and theatres per NEC 520.5
- AS aerial cable on messenger
- Installation under cable tray and approved raceways
- Under raised floors for information technology equipment conductors and cables as per NEC 645.5(D) & 645.5(D)(2)
- Class I & II Div. 2 and Class III Div. 1 (as per NEC 645.5(D) & 645.5(D)(2))

## CHARACTERISTICS

### Voltage Rating

600 V

### Operation Temperature

-40°C to 90°C

## CONSTRUCTION

- AA-8000 series stranded compacted Aluminium Alloy conductor as per ASTM B-801 accompanied with grounding conductor
- Insulated with abrasion, moisture, and heat resistant thermoset cross linked polyethylene to UL 44
- Binder tape wrapped over the conductors as per UL 1569
- Aluminium interlocking armour over the assembly
- Jacketed with sunlight resistant PVC compound to UL 1569

### Core Identification

Phase conductors are Black with three extruded stripes

Number of conductors	Colour sequence
120/208Y	
3	Black, Red, or White Striped
4	Black, Red, Blue, or white striped
Grounding conductor	Bare

## OUTSTANDING FEATURES

- Heat resistant
- Oil resistant (PR II)
- Sunlight resistant
- Gasoline resistant
- Moisture resistant

## STANDARD FOLLOWS

UL 44

ASTM B-801

UL 1569

ICEA S-95-658 (NEMA WC 70)

National Electrical Code

IEEE 1202 (70,000 Btu/hr) Vertical Cable Tray Flame test

## COMPLIANCE

Conductor resistance test	ASTM B-801
Insulation resistance	UL 44
Cold bend test	UL 44
Tension	UL 1569
Water absorption	UL 1569
Sunlight resistance	UL 1569
Oil resistant (PR II)	UL 44
Gasoline & oil resistance	UL 44

## Bending Radius

12 x Overall Diameter

## A-C Spark Test

As per UL 44

## OUR ACCREDITATIONS



**Dimensional Characteristics:**

No. of core	Conductor size	Bare grounding conductor Size	Insulation thickness	Approximate diameter over armour	Approximate diameter Jacket	Approximate weight per 1000
	AWG	AWG	inches	inches	inches	lbs
3	6	6	0.045	0.742	0.842	306
4	6	6	0.045	0.810	0.910	361
3	4	6	0.045	0.837	0.937	381
4	4	6	0.045	0.916	1.016	457
3	2	4	0.045	0.958	1.058	506
4	2	4	0.045	1.052	1.152	612
3	1	4	0.055	1.100	1.200	617
4	1	4	0.055	1.211	1.311	751

Above values are approximate and subject to standard manufacturing tolerance

**Electrical characteristics**

Conductor Size AWG	*Allowable ampacity Amp.		Maximum DC resistance at 20°C Ω/km
	75°C	90°C	
6	50	60	2.1684
4	65	75	1.3633
2	90	100	0.8573
1	100	115	0.6798

\*Allowable ampacities shown are for general use as specified by the National Electrical Code 2011 Edition Section 310.16.

60°C – When terminated to equipment for circuit rated 100 ampere or less or marked for 14 through 1AWG conductor.

75°C – When terminated to equipment for circuit rated 100 ampere or less or marked for 14 through 1AWG conductor.

90°C – For ampacity derating purposes

As per NEC 310.15(B)(2)(a) the ampacity of 4/c cables shall be reduced by a factor of 0.8 when the neutral is considered a current carrying conductor