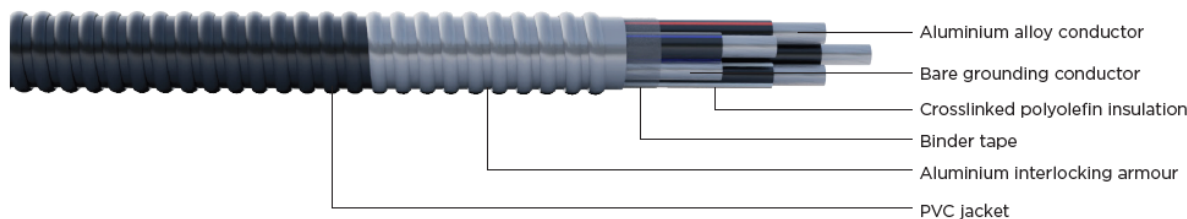


POLYCAB Type MC PVC Jacketed AL Conductor

Industrial Cable, UL 1569, 600 V



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB 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



POLYCAB Type MC PVC Jacketed AL Conductor Industrial Cable, UL 1569, 600 V

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