



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB Type MC Copper Conductor 600 V Grade, THHN/THWN insulated with green insulated ground conductor, lightweight Aluminium interlocked armour cable is suitable for use as below:

- Branch, feeder, and service power distribution under high ambient temperatures in Industrial Park, institutional and residential buildings.
- Embedded in plaster.
- Concealed or exposed installation.
- Environmental air handling spaces covered by NEC 300.22(C)
- Assembly places as per NEC 518.4 and theatres as per NEC 520.5
- Installation in cable tray and approved raceways
- 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 in hazardous location.

CHARACTERISTICS

Voltage Rating

600 V

Operation Temperature

-40°C to 90°C

CONSTRUCTION

- Soft drawn copper conductor as per ASTM B3
- Accompanied with insulated grounding conductor (green colour)
- Insulated with thermoplastic material PVC to UL 83
- Jacketed with Nylon (polyamide) or UL listed similar jacket compound to UL 83
- Binder tape wrapped over the conductors as per UL 1569
- Aluminium interlocking armour over the assembly

A-C Spark Test

As per UL 83

OUTSTANDING FEATURES

- Heat resistant
- Sunlight resistant
- Moisture resistant

STANDARD FOLLOWS

UL 83

ASTM B3

UL 1569

REACH/RoHS-2

NFPA 70 (National Electrical Code), Article 330

FT4/IEEE 1202 (70,000 Btu/hr) Vertical Cable Tray Flame test

COMPLIANCE

Conductor resistance test	ASTM B8
Insulation resistance	UL 83
Cold bend test	UL 83
Tension	UL 1569
Water absorption	UL 1569

OUR ACCREDITATIONS



APPROVAL



POLY CAB Type MC cable Copper Conductor Industrial Cable, UL 1569, 600 V

POLY CAB
IDEAS. CONNECTED.

Dimensional Characteristics:

Conductor Size & Colours AWG	Grounding conductor size & Colour AWG	Insulation thickness inches	Approx. Overall Diameter inches	Approx. weight per 1000 lbs
SOLID CONDUCTOR COLOURS 120/208 V				
14-2 Solid (Black/White)	14 Solid (Green)	0.015	0.445	80
14-3 Solid (Black/White/Red)	14 Solid (Green)	0.015	0.472	99
14-4 Solid (Black/White/Red/Blue)	14 Solid (Green)	0.015	0.500	119
12-2 Solid (Black/White)	12 Solid (Green)	0.015	0.481	109
12-2 Solid (Red/White)	12 Solid (Green)	0.015	0.481	109
12-2 Solid (Blue/White)	12 Solid (Green)	0.015	0.481	109
12-3 Solid (Black/White/Red)	12 Solid (Green)	0.015	0.512	137
12-3 Solid (Black/White/Blue)	12 Solid (Green)	0.015	0.512	137
12-3 Solid (Red/White/Blue)	12 Solid (Green)	0.015	0.512	137
12-4 Solid (black/White/Red/Blue)	12 Solid (Green)	0.015	0.545	165
10-2 Solid (Black/White)	10 Solid (Green)	0.020	0.549	160
10-2 Solid (Red/White)	10 Solid (Green)	0.020	0.549	160
10-2 Solid (Blue/white)	10 Solid (Green)	0.020	0.549	160
10-3 Solid (Black/White/Red)	10 Solid (Green)	0.020	0.588	203
10-4 Solid (Black/White/Red/Blue)	10 Solid (Green)	0.020	0.630	247
STRANDED CONDUCTOR COLOURS 120/208 V				
12-2 Stranded	12 Stranded	0.015	0.491	112

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Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000
AWG (Black/White)	AWG (Green)	inches	inches	lbs
12-3 Stranded (Black/White/Red)	12 Stranded (Green)	0.015	0.524	140
12-4 Stranded (Black/White/Red/Blue)	12 Stranded (Green)	0.015	0.558	169
10-2 Stranded (Black/White)	10 Stranded (Green)	0.020	0.561	163
10-3 Stranded (Black/White/Red)	10 Stranded (Green)	0.020	0.602	207
10-4 Stranded (Black/White/Red/Blue)	10 Stranded (Green)	0.020	0.645	250
SOLID CONDUCTOR COLOURS 277/480 V				
12-2 Solid (Yellow/Grey)	12 Solid (Green)	0.015	0.481	109
12-2 Solid (Brown/Grey)	12 Solid (Green)	0.015	0.481	109
12-2 Solid (Orange/Grey)	12 Solid (Green)	0.015	0.481	109
12-2 Solid (Purple/Grey)	12 Solid (Green)	0.015	0.481	109
12-3 Solid (Brown/Yellow/Grey)	12 Solid (Green)	0.015	0.512	137
12-3 Solid (Brown/Orange/Grey)	12 Solid (Green)	0.015	0.512	137
12-3 Solid (Orange/Yellow/Grey)	12 Solid (Green)	0.015	0.512	137
12-4 Solid (Brown/Orange/Yellow/Grey)	12 Solid (Green)	0.015	0.545	165
10-2 Solid (Orange/Grey)	10 Solid (Green)	0.020	0.549	160
10-2 Solid (Yellow/Grey)	10 Solid (Green)	0.020	0.549	160
10-2 Solid (Brown/Grey)	10 Solid (Green)	0.020	0.549	160

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Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000
AWG	AWG	inches	inches	lbs
10-3 Solid (Brown/Orange/Grey)	10 Solid (Green)	0.020	0.588	203
10-3 Solid (Brown/Yellow/Grey)	10 Solid (Green)	0.020	0.588	203
10-4 Solid (Brown/Orange/Yellow/Grey)	10 Solid (Green)	0.020	0.630	247
STRANDED CONDUCTOR COLOURS 277/480 V				
12-2 Stranded (Yellow/Grey)	12 Stranded (Green)	0.015	0.491	112
12-2 Stranded (Brown/Grey)	12 Stranded (Green)	0.015	0.491	112
12-2 Stranded (Orange/Grey)	12 Stranded (Green)	0.015	0.491	112
12-3 Stranded (Brown/Yellow/Grey)	12 Stranded (Green)	0.015	0.524	140
12-3 Stranded (Brown/Orange/Grey)	12 Stranded (Green)	0.015	0.524	140
12-4 Stranded (Brown/Orange/Yellow/Grey)	12 Stranded (Green)	0.015	0.558	169
10-2 Stranded (Brown/Grey)	10 Stranded (Green)	0.020	0.561	163
10-3 Stranded (Brown/Orange/Grey)	10 Stranded (Green)	0.020	0.602	207
10-4 Stranded (Brown/Orange/Yellow/Grey)	10 Stranded (Green)	0.020	0.645	250
INTERMEDIATE CONDUCTOR COLOURS 120/208 V				
8-2 Stranded (Black/White)	10 Stranded (Green)	0.030	0.668	225
8-2 Stranded (Red/White)	10 Stranded (Green)	0.030	0.668	225
8-2 Stranded (Blue/White)	10 Stranded (Green)	0.030	0.668	225
8-3 Stranded (Black/White/Red)	10 Stranded (Green)	0.030	0.722	294

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Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000
AWG	AWG	inches	inches	lbs
8-3 Stranded (Red/Blue/White)	10 Stranded (Green)	0.030	0.722	294
8-4 Stranded (Black/White/Red/Blue)	10 Stranded (Green)	0.030	0.779	364
6-2 Stranded (Black/White)	8 Stranded (Green)	0.030	0.746	326
6-3 Stranded (Black/White/Red)	8 Stranded (Green)	0.030	0.809	429
6-4 Stranded (Black/Red/White/Blue)	8 Stranded (Green)	0.030	0.877	533
4-3 Stranded (Black/White/Red)	8 Stranded (Green)	0.040	0.969	619
4-4 Stranded (Black/White/Red/Blue)	8 Stranded (Green)	0.040	1.055	782
3-3 Stranded (Black/White/Red)	6 Stranded (Green)	0.040	1.033	768
3-4 Stranded (Black/White/Red/Blue)	6 Stranded (Green)	0.040	1.126	968
2-3 Stranded (Black/White/Red)	6 Stranded (Green)	0.040	1.105	912
2-4 Stranded (Black/White/Red/Blue)	6 Stranded (Green)	0.040	1.207	1158
INTERMEDIATE CONDUCTOR COLOURS 277/480 V				
8-2 Stranded (Brown/Grey)	10 Stranded (Green)	0.030	0.668	225
8-2 Stranded (Yellow/Grey)	10 Stranded (Green)	0.030	0.668	225
8-2 Stranded (Orange/Grey)	10 Stranded (Green)	0.030	0.668	225
8-3 Stranded (Brown/Orange/Grey)	10 Stranded (Green)	0.030	0.722	294
8-3 Stranded (Brown/Orange/Yellow)	10 Stranded (Green)	0.030	0.722	294
INTERMEDIATE CONDUCTOR COLOURS 277/480 V				

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Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000
AWG	AWG	inches	inches	lbs
6-2 Stranded (Brown/Grey)	8 Stranded (Green)	0.030	0.746	326
6-2 Stranded (Yellow/Grey)	8 Stranded (Green)	0.030	0.746	326
6-3 Stranded (Brown/Orange/Yellow)	8 Stranded (Green)	0.030	0.809	429
6-3 Stranded (Brown/Orange/Yellow)	8 Stranded (Green)	0.030	0.809	429
6-4 Stranded (Brown/Orange/Yellow/Grey)	8 Stranded (Green)	0.030	0.877	533
4-3 Stranded (Brown/Orange/Yellow)	8 Stranded (Green)	0.040	0.969	619
4-4 Stranded (Brown/Orange/Yellow/Grey)	8 Stranded (Green)	0.040	1.055	782
2-3 Stranded (Brown/Orange/Yellow)	6 Stranded (Green)	0.040	1.105	912
2-4 Stranded (Brown/Orange/Yellow/Grey)	6 Stranded (Green)	0.040	1.207	1158

Above values are approximate and subject to standard manufacturing tolerance

Electrical characteristics

Conductor size AWG	*Allowable ampacity Amp.	Maximum DC conductor resistance at 20° for solid		Maximum DC conductor resistance at 20° for stranded	
		Ohm/km	Ohm/km	Ohm/km	Ohm/km
14	25	8.45		8.62	
12	30	5.31		5.43	
10	40	3.34		3.41	
8	55	2.10		2.14	
6	75	1.32		1.35	
4	95	0.832		0.848	
3	115	0.660		0.673	
2	130	0.523		0.534	

*Table is as per NEC 310.15(B)(16)

As per NEC 310.15(B)(5), the ampacity of 4 core cable shall be reduced by a factor of 0.80 when neutral is considered a current carrying conductor.

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