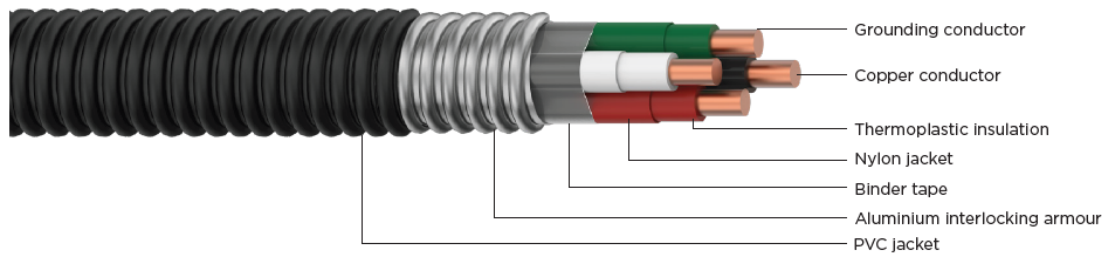


POLYCAB Type MC PVC Jacketed Copper Conductor

Industrial Cable, UL 1569, 600 V



Images not to scale. Follow table for dimensions

APPLICATION

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

- Suitable for wet location as per NEC 330.10(11)
- Direct burial applications, embedded in concrete, and where exposed to cinder fills, strong chlorides, caustic alkalis, or vapours of chlorine or of hydrochloric acids.
- Branch, feeder, and service power distribution under high ambient temperatures in Industrial park, institutional and residential buildings.
- Embedded in plaster.
- Concealed installation.
- Assembly places as per NEC 518.4 and theatres per NEC 520.5
- Installation in cable tray and approved raceways, or as aerial cable on messenger.
- 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 in hazardous location.

CHARACTERISTICS

Voltage Rating
600 V

Operation Temperature
-40°C to 90°C

CONSTRUCTION

- Soft drawn copper conductor as per ASTM B3 and ASTM B8
- 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
- Sunlight resistant overall PVC jacketed

A-C Spark Test
As per UL 83

OUTSTANDING FEATURES

- Heat resistant
- Sunlight resistant
- Moisture resistant

STANDARD FOLLOWS

UL 83
ASTM B3
ASTM B8
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



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

Dimensional Characteristics:

Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000
AWG	AWG	inches	inches	lbs
SOLID CONDUCTOR COLOURS 120/208 V				
14-2 Solid (Black/White)	14 Solid (Green)	0.015	0.545	132
14-3 Solid (Black/White/Red)	14 Solid (Green)	0.015	0.572	154
12-2 Solid (Black/White)	12 Solid (Green)	0.015	0.581	165
12-2 Solid (Red/White)	12 Solid (Green)	0.015	0.581	165
12-2 Solid (Blue/White)	12 Solid (Green)	0.015	0.581	165
12-3 Solid (Black/White/Red)	12 Solid (Green)	0.015	0.612	196
12-4 Solid (black/White/Red/Blue)	12 Solid (Green)	0.015	0.645	227
10-2 Solid (Black/White)	10 Solid (Green)	0.020	0.649	223
10-2 Solid (Red/White)	10 Solid (Green)	0.020	0.649	223
10-2 Solid (Blue/white)	10 Solid (Green)	0.020	0.649	223
10-3 Solid (Black/White/Red)	10 Solid (Green)	0.020	0.688	271
10-4 Solid (Black/White/Red/Blue)	10 Solid (Green)	0.020	0.730	318
STRANDED CONDUCTOR COLOURS 120/208 V				
12-2 Stranded (Black/White)	12 Stranded (Green)	0.015	0.592	169
12-3 Stranded (Black/White/Red)	12 Stranded (Green)	0.015	0.624	201
12-4 Stranded (Black/White/Red/Blue)	12 Stranded (Green)	0.015	0.658	233
10-2 Stranded	10 Stranded	0.020	0.661	228

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

Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000
AWG (Black/White)	AWG (Green)	inches	inches	lbs
10-2 Stranded (Red/White)	10 Stranded (Green)	0.020	0.661	228
10-2 Stranded (Blue/White)	10 Stranded (Green)	0.020	0.661	228
10-3 Stranded (Black/White/Red)	10 Stranded (Green)	0.020	0.702	275
10-4 Stranded (Black/White/Red/Blue)	10 Stranded (Green)	0.020	0.745	324
SOLID CONDUCTOR COLOURS 277/480 V				
14-3 Solid (Brown/Orange/Grey)	14 Solid (Green)	0.015	0.572	154
12-2 Solid (Yellow/Grey)	12 Solid (Green)	0.015	0.581	165
12-2 Solid (Brown/Grey)	12 Solid (Green)	0.015	0.581	165
12-2 Solid (Orange/Grey)	12 Solid (Green)	0.015	0.581	165
12-3 Solid (Brown/Yellow/Grey)	12 Solid (Green)	0.015	0.612	196
12-3 Solid (Brown/Orange/Grey)	12 Solid (Green)	0.015	0.612	196
10-2 Solid (Orange/Grey)	10 Solid (Green)	0.020	0.649	223
10-2 Solid (Yellow/Grey)	10 Solid (Green)	0.020	0.649	223
10-2 Solid (Brown/Grey)	10 Solid (Green)	0.020	0.649	223
10-3 Solid (Brown/Orange/Grey)	10 Solid (Green)	0.020	0.688	271
10-3 Solid (Brown/Yellow/Grey)	10 Solid (Green)	0.020	0.688	271
10-4 Solid (Brown/Orange/Yellow/Grey)	10 Solid (Green)	0.020	0.730	318

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

Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000
AWG	AWG	inches	inches	lbs
STRANDED CONDUCTOR COLOURS 277/480 V				
10-2 Stranded (Orange/Grey)	10 Stranded (Green)	0.020	0.661	228
10-2 Stranded (Yellow/Grey)	10 Stranded (Green)	0.020	0.661	228
INTERMEDIATE CONDUCTOR COLOURS 120/208 V				
8-2 Stranded (Black/White)	10 Stranded (Green)	0.030	0.768	301
8-3 Stranded (Black/White/Red)	10 Stranded (Green)	0.030	0.822	376
8-4 Stranded (Black/White/Red/Blue)	10 Stranded (Green)	0.030	0.879	451
6-2 Stranded (Black/White)	8 Stranded (Green)	0.030	0.847	410
6-3 Stranded (Black/White/Red)	8 Stranded (Green)	0.030	0.909	520
6-4 Stranded (Black/Red/White/Blue)	8 Stranded (Green)	0.030	0.977	631
4-3 Stranded (Black/White/Red)	8 Stranded (Green)	0.040	1.069	727
4-4 Stranded (Black/White/Red/Blue)	8 Stranded (Green)	0.040	1.155	899
3-3 Stranded (Black/White/Red)	6 Stranded (Green)	0.040	1.133	883
3-4 Stranded (Black/White/Red/Blue)	6 Stranded (Green)	0.040	1.227	1092
2-3 Stranded (Black/White/Red)	6 Stranded (Green)	0.040	1.205	1035
2-4 Stranded (Black/White/Red/Blue)	6 Stranded (Green)	0.040	1.307	1291

Above values are approximate and subject to standard manufacturing tolerance

Electrical characteristics

Conductor size	*Allowable ampacity	Maximum DC conductor resistance at 20° for solid	Maximum DC conductor resistance at 20° for stranded
AWG	Amp.	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.