INDUSTRIAL CABLE, UL 1569, 600 V

Grounding conductor Copper conductor Thermoplastic insulation Nylon jacket Binder tape Aluminium interlocking armour

SPECIAL FEATURES

- Heat resistant
- Sunlight resistant
- Moisture resistant

APPLICATION

POLYCAB 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.

VOLTAGE RATING

600 V

OPERATION TEMPERATURE

-40°C to +90°C

CONSTRUCTION

- Soft drawn copper conductor as per ASTM B-3
- 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

STANDARD AND REFERENCES

UL 83

ASTM B-3

UL 1569

REACH/RoHS-2

NFPA 70 (National Electrical Code), Article 330 FT4/IEEE 1202 (70,000 Btu/hr) Vertical Cable Tray

Flame test

A-C SPARK TEST

As per UL 83

COMPLIANCE

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













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Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000 ft		
AWG	AWG	inches	inches	lbs		
SOLID CONDUCTOR COLOURS 120/208 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)	12 Solid (Green)	0.020	0.549	160		
10-2 Solid (Yellow/Grey)	12 Solid (Green)	0.020	0.549	160		
10-2 Solid (Brown/Grey)	12 Solid (Green)	0.020	0.549	160		
10-3 Solid (Brown/Orange/Grey)	12 Solid (Green)	0.020	0.588	203		
10-3 Solid (Brown/Yellow/Grey)	12 Solid (Green)	0.020	0.588	203		
10-4 Solid (Brown/Orange/Yellow/Grey)	12 Solid (Green)	0.020	0.630	247		
	STRANDED COND	OUCTOR COLOURS 277	7/480 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		







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Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000 ft
AWG	AWG	inches	inches	lbs
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 CON	NDUCTOR COLOURS 1:	20/208 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
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
STRANDED 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







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Conductor Size & Colours	Grounding conductor size & Colour	Insulation thickness	Approx. Overall Diameter	Approx. weight per 1000 ft	
AWG	AWG	inches	inches	lbs	
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					
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	

ELECTRICAL CHARACTERISTICS

Allowable ampacity and maximum conductor DC resistance.

Conductor size	*Allowable ampacity	Maximum DC conductor resistance at 20°C for solid	Maximum DC conductor resistance at 20°C 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





OUR ACCREDITATION

