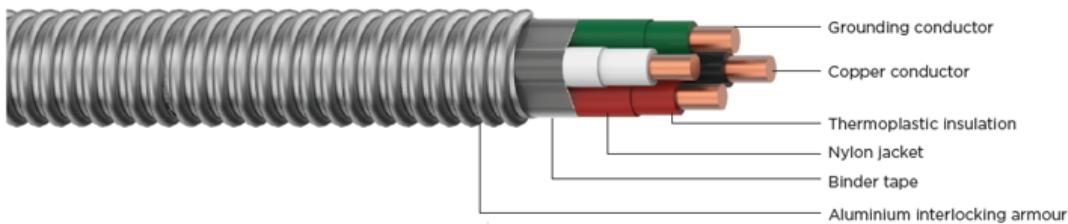


POLY CAB Type MC cable Copper Conductor Industrial Cable, UL 1569, 600 V

POLY CAB
IDEAS. CONNECTED.



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 1569
- 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

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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 |

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

POLY CAB
IDEAS. CONNECTED.

| 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 |

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

POLY CAB
IDEAS. CONNECTED.

| 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 |

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

POLY CAB
IDEAS. CONNECTED.

| 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 | | | | |

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

POLY CAB
IDEAS. CONNECTED.

| 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 | *Allowable ampacity | Maximum DC conductor resistance at 20° for solid | Maximum DC conductor resistance at 20° for stranded |
|----------------|---------------------|--|---|
| | | Ohm/km | Ohm/km |
| AWG | Amp. | | |
| 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.