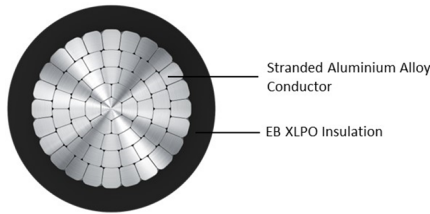


POLYCAB ALUMINIUM XHHW/XHHW-2

Industrial Cable, UL 44, 600 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB AL XHHW/XHHW-2, cable with AA8000 series aluminum alloy conductor, cross linked polyolefin insulation is intended to use in conduit and cable trays for services, feeders, and branch circuits in commercial or industrial application as specified in National Electrical Code 2011.

Type XHHW is suitable to use in dry location with ambient temperature not exceeding 90°C or in wet location not exceeding 75°C and Type XHHW-2 is suitable to use in wet or dry location with ambient temperature not exceeding 90°C, suitable to use in healthcare facilities.

CHARACTERISTICS

Voltage Rating
600 V

Operation Temperature
-40°C to 90°C

CONSTRUCTION

- AA-8000 series stranded compacted Aluminum Alloy conductor as per ASTM B-801.
- Insulated with abrasion, moisture, and heat resistant thermoset E-beam cross linked polyolefin to UL 44

Core Identification

Available in Red, Black, White, Blue, Purple, Green, Yellow, Orange, Brown, and Grey.

Bending Radius

12 x Overall Diameter

A-C Spark Test

As per UL 44

OUTSTANDING FEATURES

- Heat resistant
- Oil resistant (PR II)
- Sunlight resistant
- Gasoline resistant
- Moisture resistant
- Flame retardant

STANDARD FOLLOWS

UL 44
ASTM B-801
NEC, NFPA 70, 2011 Edition
NEMA WC 70 construction requirement

COMPLIANCE

| | |
|---|---------|
| Conductor resistance test | ASTM B8 |
| Insulation resistance | UL 44 |
| Cold bend test | UL 44 |
| Smoke emission | UL 44 |
| Halogen acid gas emission | UL 44 |
| Weather resistance | UL 44 |
| Oil resistance (PR II) | UL 44 |
| Gasoline & oil resistance | UL 44 |
| VW-1, FT1, FT2 | UL 44 |
| FT4 and CT Flame rated (for 1/0 AWG and above) | UL 1685 |
| RoHS and REACH Compliant | |

OUR ACCREDITATIONS



APPROVAL



NOTES

Other colours are available subject to economic order quantity.

Dimensional and Electrical characteristics:

| No. of core | Conductor size | Number of strands | Insulation thickness | Nominal overall diameter | Approximate Weight | *Allowable ampacity Amp. | | | Maximum DC resistance at 20°C |
|-------------|----------------|-------------------|----------------------|--------------------------|--------------------|--------------------------|------|------|-------------------------------|
| | AWG or kcmil | | mils | mils | Lbs/1000 ft | 60°C | 75°C | 90°C | Ω/km |
| 1 | 8 | 7 | 45 | 225 | 29 | 35 | 40 | 45 | 3.4464 |
| 1 | 6 | 7 | 45 | 261 | 39 | 40 | 50 | 60 | 2.1684 |
| 1 | 4 | 7 | 45 | 305 | 56 | 55 | 65 | 75 | 1.3633 |
| 1 | 2 | 7 | 45 | 361 | 82 | 75 | 90 | 100 | 0.8573 |
| 1 | 1 | 18 | 55 | 427 | 107 | 85 | 100 | 115 | 0.6798 |
| 1 | 1/0 | 18 | 55 | 448 | 130 | 100 | 120 | 135 | 0.5387 |
| 1 | 2/0 | 18 | 55 | 488 | 158 | 115 | 135 | 150 | 0.4275 |
| 1 | 3/0 | 18 | 55 | 535 | 195 | 130 | 155 | 175 | 0.3389 |
| 1 | 4/0 | 18 | 55 | 587 | 240 | 150 | 180 | 205 | 0.269 |
| 1 | 250 | 22 | 65 | 655 | 290 | 170 | 205 | 230 | 0.2277 |
| 1 | 300 | 35 | 65 | 700 | 340 | 195 | 230 | 260 | 0.1896 |
| 1 | 350 | 35 | 65 | 746 | 392 | 210 | 250 | 280 | 0.1624 |
| 1 | 400 | 35 | 65 | 790 | 444 | 225 | 270 | 305 | 0.1424 |
| 1 | 500 | 35 | 65 | 865 | 542 | 260 | 310 | 350 | 0.1139 |
| 1 | 600 | 58 | 80 | 983 | 665 | 285 | 340 | 385 | 0.0948 |
| 1 | 700 | 58 | 80 | 1050 | 768 | 310 | 375 | 420 | 0.0814 |
| 1 | 750 | 58 | 80 | 1081 | 819 | 320 | 385 | 435 | 0.0758 |

*Allowable ampacities shown are for general use as specified by the National Electrical Code 2011 Edition Section 310.16 & 240.4(D).

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 – XHHW wet or dry locations for ampacity adjustment purposes using NEC section 310.16

*For compact stranded construction the number of wires as permitted by UL 44 and ASTM B-801 may be reduced as follows

19 wire Construction - 18 wires minimum

37 wire Construction – 35 wire minimum

61 wire Construction – 58 wires minimum