

4/C AL 600V XLPE XHHW-2 AIA PVC Power Cable With Ground. Silicone Free

Type MC Power Cable 600Volt Four Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with 1 Bare AL Ground. Silicone Free.

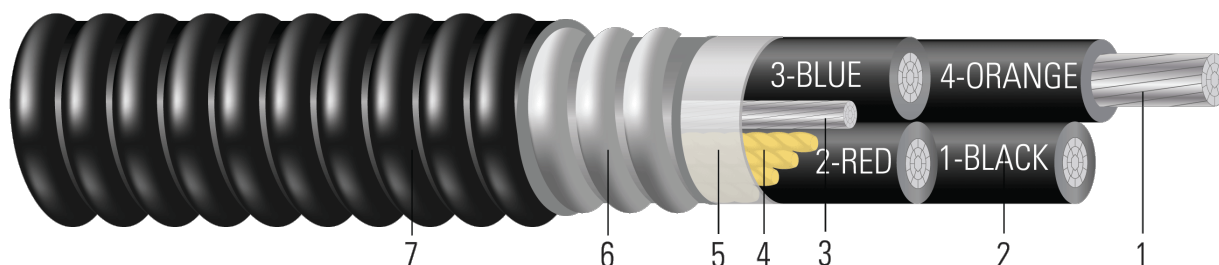


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- Grounding Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polypropylene tape
- Armor:** Aluminum Interlocked Armor (AIA)
- Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10. Silicone Free.

SPECIFICATIONS:

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1309 Marine Shipboard Cable
- UL 1569 Metal-Clad Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 Control Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- ABS Listed as CWC/MC

SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE MASTER-DESIGN {UL} E96627 4/C XXX KCMIL COMPACT AL.--- {ALUMAFLEX}{R} AA8176 XX MILS XLP 600 VOLTS GW 1 X X/0 AWG 3E AL TYPE MC FOR CT USE SUN. RES. DIRECT BURIAL 90{D}C USA



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



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Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Diameter Over Conductor | Insul. Thickness | Diameter Over Insulation | Ground | Diameter Over Armor | Jacket Thickness | Approx. OD | Aluminum Weight | Approx. Weight |
|--------------|---------------|-------------------------|------------------|--------------------------|--------------|---------------------|------------------|------------|-----------------|----------------|
| | AWG/ Kcmil | inch | mil | inch | No. x AWG | inch | mil | inch | lb/1000ft | lb/1000ft |
| TBA | 8 | 0.134 | 45 | 0.224 | 1 x 8 | 0.751 | 50 | 0.851 | 168 | 316 |
| TBA | 6 | 0.169 | 45 | 0.259 | 1 x 8 | 0.835 | 50 | 0.935 | 216 | 388 |
| 560780 | 2 | 0.268 | 45 | 0.358 | 1 x 6 | 1.074 | 50 | 1.174 | 409 | 655 |
| 552595 | 1 | 0.299 | 55 | 0.409 | 1 x 4 | 1.197 | 50 | 1.297 | 506 | 813 |
| TBA | 1/0 | 0.336 | 55 | 0.446 | 1 x 4 | 1.287 | 50 | 1.387 | 600 | 941 |
| TBA | 2/0 | 0.376 | 55 | 0.486 | 1 x 4 | 1.383 | 50 | 1.483 | 716 | 1093 |
| TBA | 3/0 | 0.423 | 55 | 0.533 | 1 x 4 | 1.497 | 50 | 1.597 | 864 | 1285 |
| TBA | 4/0 | 0.475 | 55 | 0.585 | 1 x 2 | 1.622 | 60 | 1.742 | 1070 | 1573 |
| 644656 | 250 | 0.520 | 65 | 0.650 | 1 x 2 | 1.879 | 60 | 1.999 | 1313 | 1934 |
| 644652 | 350 | 0.616 | 65 | 0.746 | 1 x 2 | 2.111 | 60 | 2.231 | 1731 | 2464 |
| 646649 | 500 | 0.736 | 65 | 0.866 | 1 x 1 | 2.401 | 75 | 2.551 | 2369 | 3322 |
| TBA | 600 | 0.813 | 80 | 0.973 | 1 x 1 | 2.659 | 75 | 2.809 | 2791 | 3981 |
| 640988 | 750 | 0.908 | 80 | 1.068 | 1 x 1/0 | 2.888 | 75 | 3.038 | 3420 | 4756 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

| Stock Number | Cond. Size | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 90°C | Inductive Reactance @ 60Hz | Shield Short Circuit Current 6 Cycles | Allowable Ampacity At 60°C† | Allowable Ampacity At 75°C† | Allowable Ampacity At 90°C† |
|--------------|---------------|--------------------|------------------|----------------------|----------------------|----------------------------|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| | AWG/ Kcmil | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | Amp | Amp | Amp |
| TBA | 8 | 6.0 | 396 | 1.070 | 1.345 | 0.037 | 3785 | 28 | 32 | 36 |
| TBA | 6 | 6.5 | 630 | 0.675 | 0.848 | 0.035 | 6016 | 32 | 40 | 44 |
| 560780 | 2 | 8.2 | 1593 | 0.266 | 0.334 | 0.032 | 15213 | 60 | 72 | 80 |
| 552595 | 1 | 9.1 | 2009 | 0.211 | 0.265 | 0.032 | 19186 | 68 | 80 | 92 |
| TBA | 1/0 | 9.7 | 2534 | 0.168 | 0.211 | 0.031 | 24209 | 80 | 96 | 108 |
| TBA | 2/0 | 10.4 | 3194 | 0.133 | 0.167 | 0.031 | 30513 | 92 | 108 | 120 |
| TBA | 3/0 | 11.2 | 4027 | 0.105 | 0.132 | 0.030 | 38468 | 104 | 124 | 140 |
| TBA | 4/0 | 12.2 | 5078 | 0.084 | 0.105 | 0.030 | 48509 | 120 | 144 | 164 |
| 644656 | 250 | 14.0 | 6000 | 0.071 | 0.089 | 0.030 | 57313 | 136 | 164 | 184 |
| 644652 | 350 | 15.6 | 8400 | 0.051 | 0.064 | 0.029 | 80238 | 168 | 200 | 224 |
| 646649 | 500 | 17.9 | 12000 | 0.035 | 0.045 | 0.029 | 114625 | 208 | 248 | 280 |
| TBA | 600 | 19.7 | 14400 | 0.030 | 0.037 | 0.029 | 137550 | 228 | 272 | 308 |
| 640988 | 750 | 21.3 | 18000 | 0.024 | 0.030 | 0.029 | 171938 | 256 | 308 | 348 |

† Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

