



# AL 600/1000V XLPE Insulation AIA PVC Jacket XHHW-2. CT Rated - Sunlight Resistant - For Direct Burial - 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 3 Bare AL Ground. Silicone Free.

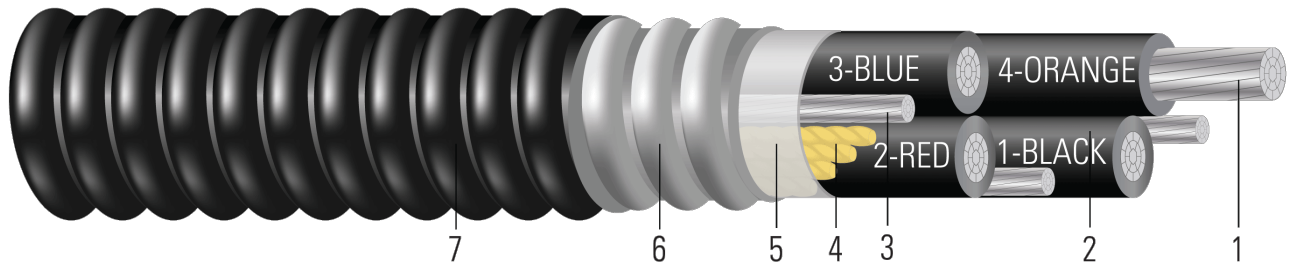


Image not to scale. See Table 1 for dimensions.

## 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:** Three separate ground wires with a combined circular mil of 50% of the phase conductor. Class 4. B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
- Filler:** Paper filler or 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. The ground is sized to 50% of the phase conductor with three separate bare grounds one in each interstecie between conductors. Silicone Free.

## SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- 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





**SAMPLE PRINT LEGEND:**

{SQFTG} SOUTHWIRE {UL} 4/C 750 KCMIL COMPACT 8000 AL. --- TRIPLE E ALLOY AA8176 XHHW CDRS 600 VOLTS GW 3 X 2/0 AWG 3E AL TYPE MC EZ-JKT FOR CT USE SUN. RES. DIRECT BURIAL 90°C

**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/Kcmil		No. of Strands	inch	mil	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
TBA	1/0	4	19	0.336	55	3 x 6	1.291	50	1.391	609	883
TBA	2/0	4	19	0.376	55	3 x 6	1.388	50	1.488	727	1024
TBA	3/0	4	19	0.422	55	3 x 4	1.599	60	1.719	877	1246
TBA	4/0	4	19	0.474	55	3 x 4	1.725	60	1.845	1119	1521
TBA	250	4	37	0.52	65	3 x 2	1.885	60	2.005	1387	1867
TBA	300	4	37	0.569	65	3 x 2	2.004	60	2.124	1606	2121
TBA	350	4	37	0.615	65	3 x 2	2.115	60	2.235	1821	2368
TBA	500	4	37	0.735	65	3 x 1	2.405	75	2.555	2480	3188
TBA	600	4	61	0.812	80	3 x 1/0	2.664	75	2.814	2922	3795
587658◇	750	4	58	0.908	80	3 x 2/0	2.896	80	3.062	3688	4896

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

\* Strand count meets minimum number per ASTM

**Table 2 – Electrical and Engineering Data**

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Capacitive Reactance @ 60Hz	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	Amp	Amp
TBA	1/0	4	9.7	2027	0.168	0.201	0.019	0.044	96	108
TBA	2/0	4	10.4	2555	0.133	0.160	0.017	0.043	108	120
TBA	3/0	4	12.0	3221	0.105	0.126	0.015	0.042	124	140
TBA	4/0	4	12.9	4062	0.084	0.100	0.014	0.041	144	164
TBA	250	4	14.0	4800	0.071	0.086	0.015	0.041	164	184
TBA	300	4	14.9	5760	0.059	0.071	0.013	0.041	184	208
TBA	350	4	15.6	6720	0.050	0.062	0.012	0.040	200	224
TBA	500	4	17.9	9600	0.035	0.044	0.010	0.039	248	280
TBA	600	4	19.7	11520	0.029	0.037	0.012	0.039	272	308
587658◇	750	4	21.4	14400	0.024	0.031	0.011	0.038	308	348

\* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

\* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

