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 1 Bare AL Ground. Silicone Free.

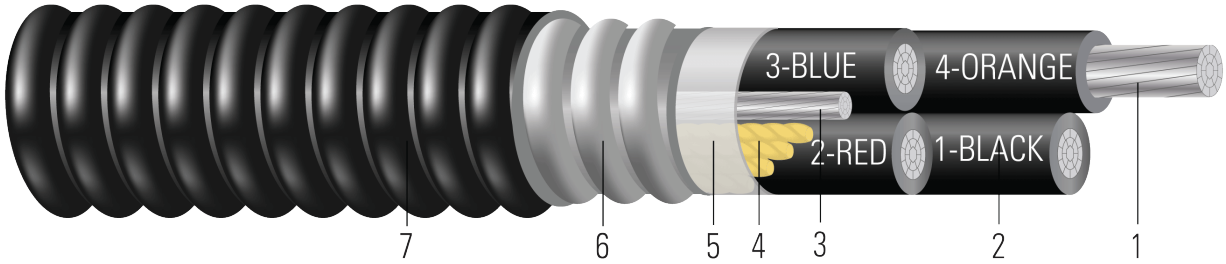


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Grounding Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
4. **Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
5. **Binder:** Polypropylene tape
6. **Armor:** Aluminum Interlocked Armor (AIA)
7. **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. 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 1309 Marine Shipboard Cable
- 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-58-679 Control Cable Conductor Identification Method 4
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

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SAMPLE PRINT LEGEND:

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

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	8	4	7	0.134	45	1 x 8	0.754	50	0.854	162	295
TBA	6	4	7	0.169	45	1 x 8	0.839	50	0.939	213	364
TBA	1/0	4	19	0.336	55	1 x 4	1.291	50	1.391	609	883
TBA	2/0	4	19	0.376	55	1 x 4	1.388	50	1.488	727	1024
TBA	3/0	4	19	0.422	55	1 x 4	1.599	60	1.719	877	1246
TBA	4/0	4	19	0.474	55	1 x 2	1.725	60	1.845	1119	1521
644656	250	4	22	0.52	65	1 x 2	1.887	65	2.019	1318	1869
644652	350	4	35	0.615	65	1 x 2	2.118	65	2.250	1784	2432
644649	500	4	35	0.735	65	1 x 2/0	2.408	80	2.574	2403	3232
TBA	600	4	61	0.812	80	1 x 1	2.664	75	2.814	2922	3795
640988	750	4	58	0.908	80	1 x 1/0	2.896	80	3.062	3409	4356

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	8	4	6.0	316	1.072	1.290	0.034	0.052	32	36
TBA	6	4	6.6	503	0.674	0.812	0.029	0.051	40	44
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
644656	250	4	14.1	4800	0.071	0.086	0.015	0.041	164	184
644652	350	4	15.8	6720	0.050	0.062	0.012	0.040	200	224
644649	500	4	18.0	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
640988	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.