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.

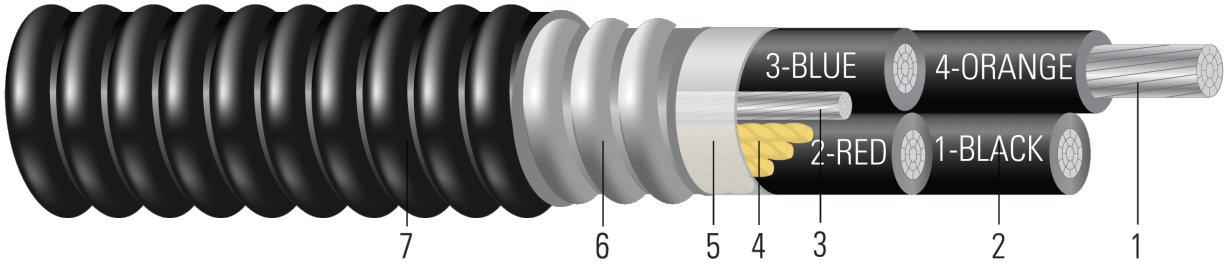

Image not to scale. See Table 1 for dimensions.

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 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

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

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
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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.