MC, XHHW-2 Aluminum

AI-8000, XLPE Insulated, 600 V

CIVIE wire and cable

Features

UL listed as MC.

Cable rated for Sunlight Resistance for CT use.

Jacket is rated Oil Resistance I.

Single conductors are rated XHHW-2, and CT Use 1/0 AWG and larger.

Aluminum armor is rated for Direct Burial, using 6 AWG and larger conductors, with overall jacket.

Application

These cables according to NEC, are permitted to be installed for services, feeders, and branch circuits, and for power, lighting, control, and signal circuits.

May be used in wet or dry locations, where exposed or concealed, installed in cable trays, raceways, duct, and open air, aerially.

In hazardous (classified) as permitted by NEC.

Standards

UL 1569

Metal Clad Cables.

UL 44

Rubber-Insulated wires and cables.

ICEA S-95-658

Standard for Nonshielded Power Cables Rated 2000 Volts or Less.

Specifications

Maximum operating voltage:

• 600 volts

Maximum conductor operation temperature:

· 90 °C wet and dry

Engineering Information

1. Conductor: Stranded Aluminum alloy (AA-8176) compacted conductor, Class B stranding, per ASTM B801.

Sizes: 6 AWG up to 1000 kcmil.

2. Insulation: Flame retardant thermoset crosslinked polyethylene (XLPE).



Conductor Identification:

Black insulation with printed numbers, 1, 2, 3, and/or 4.

On request, longitudinal extruded colored stripes on three conductors, WHITE, RED and BLUE.

- 3. Grounding: One bare aluminum alloy (AA-8176) compacted stranded conductor.
- **4. Assembly:** Phase and grounding conductors cabled together with binder tape.
- **5. Armor:** Aluminum interlocked armor, applied over the binder tape and a longitudinal marker tape, for ID, when unjacketed.
- 6. Jacket (optional): Black sunlight resistant and flame retardant polyvinyl chloride (PVC) compound.



FOUR CONDUCTOR



Technical Data

A Viakable Company

Three Conductors Armored and Sheathed

Size AWG or	Number of	Insulation Thickness	Minimum Grounding* Conductor Size	Approximate OD Over Armor	Outer Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight	
							Steel Armor	Aluminum Armor
kcmil	Strands	mil	AWG	in	mil	in	lb/kft	lb/kft
6	7	45	8	0.78	50	0.89	547	351
4	7	45	6	0.89	50	1.00	724	516
2	7	45	6	0.99	50	1.10	875	643
1	19	55	4	1.12	50	1.23	1051	785
1/0	19	55	4	1.18	50	1.29	1170	887
2/0	19	55	4	1.26	50	1.37	1322	1019
3/0	19	55	4	1.36	50	1.47	1516	1186
4/0	19	55	2	1.52	60	1.65	1712	1399
250	37	65	2	1.66	60	1.79	1959	1615
350	37	65	2	1.87	60	2.00	2447	2055
500	37	65	1	2.13	60	2.26	3145	2694
750	61	80	1/0	2.57	75	2.73	4458	3909

Four Conductors Armored and Sheathed

Size AWG or	Number of	Insulation Thickness	Minimum Grounding* Conductor Size	Approximate OD Over Armor	Outer Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight	
							Steel Armor	Aluminum Armor
kemil	Strands	mil	AWG	in	mil	in	lb/kft	lb/kft
6	7	45	8	0.87	50	0.98	684	479
4	7	45	6	0.99	50	1.10	852	613
2	7	45	6	1.10	50	1.21	1046	776
1	19	55	4	1.25	50	1.36	1260	948
1/0	19	55	4	1.33	50	1.44	1414	1081
2/0	19	55	4	1.41	50	1.52	1600	1243
3/0	19	55	4	1.55	60	1.68	1777	1440
4/0	19	55	2	1.71	60	1.84	2104	1727
250	37	65	2	1.85	60	1.98	2391	1979
350	37	65	2	2.07	60	2.20	2997	2528
500	37	65	1	2.37	75	2.53	3959	3406
750	61	80	1/0	2.85	75	3.01	5536	4855

The above data are approximate and subject to normal manufacturing tolerances. Where required, the compatibility with glands, connectors and accessories should be verified using actual dimensions of the product. Other sizes available upon request.

Ampacities: Refer to beginning of section.

* At the option of manufacturer, Ground Conductor can be divided in three, one in each interstice.