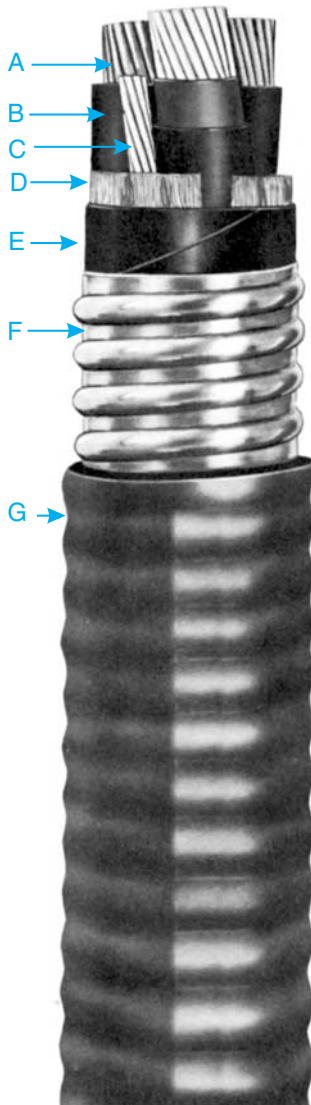




Galvanized Steel Loxarmor® Type MC (XHHW-2)



600V Power Cable—Galvanized Steel Interlocked Armor
Copper Conductors/90°C wet or Dry Rating
For Cable Tray Use - Sunlight Resistant - For Direct Burial



- A Bare, Stranded Copper Conductors
- B X-Olene Insulation — Color Coded for Identification
- C Bare, Stranded Copper Grounding Conductor
- D Non-Hygroscopic Fillers, as necessary
- E Binder Tape
- F Loxarmor — Galvanized Steel Interlocked Armor
- G Black Okoseal Jacket, when specified

Insulation

X-Olene® is Okonite's trade name for its chemically cross-linked polyethylene, with high dielectric strength.

Color Coding

Conductors are color coded using base colors and tracers in accordance with the Conductor Identification Table on the back of this Data Sheet.

Assembly and Coverings

The individual conductors are cabled together with non-hygroscopic fillers as necessary and a binder tape overall. One bare stranded copper grounding conductor is placed in one of the outer interstices. The Loxarmor is an interlocked galvanized steel armor with outstanding mechanical strength. For direct burial in the ground, embedment in concrete, or for areas subjected to corrosive atmospheres, the Loxarmor is protected with a black Okoseal® (PVC) jacket.

Applications

Loxarmor power and control cables are recommended as an economical alternate to a wire in conduit system. They are designed specifically for use on feeders and branch circuits in power distribution systems. Loxarmor power cables may be installed in both exposed and concealed work, wet and dry locations, direct burial in the earth, or embedded in concrete. They may be installed on metal racks, troughs, in cable trays or secured to supports not greater than 6 feet apart. When used with approved terminators, Loxarmor may be used in Class I and II (Division 2) and Class III (Division 1 and 2) hazardous locations - NEC Articles 501, 502 and 503.

Specifications

Conductors: Uncoated soft copper per ASTM B-3. Sizes smaller than #8 are compress stranded per ASTM B-8. Sizes #8 and larger are compact stranded per ASTM B-496.

Insulation: X-Olene per ICEA S-95-658/NEMA WC-70 and UL 44. Listed UL Type XHHW-2. Meets MIL-DTL-1377H, section 4.8.4.1.2 cold bend at -66°C and ASTM D746 brittle point at -76°C.

Conductor Identification: Base colors and tracers per ICEA S-73-532/NEMA WC-57.

Sizes 8 AWG & larger, black with print number and color.

Grounding Conductor: Bare soft copper per ASTM B-3. Stranded per ICEA S-95-658/WC57 and UL 1569.

Assembly: Per UL 1569 with binder tape overall.

Loxarmor: Per ICEA S-95-658 NEMA WC57, Section 4.5.7 and UL 1569.

Jacket: When specified, black Okoseal (PVC) per UL 1569. Meets ASTM D746 brittle point at -40°C.

UL Listed as Type MC cable.

Product Features

- Cable complies with UL 1569 for Type MC Metal-Clad Cable.
- Complete pre-packaged, factory-tested wiring system - color coded.
- Flame retardant - passes the vertical tray flame test requirements of IEEE 383-1974 and 1202-1991, UL 1569, ICEA T-29-520(210,000 BTU/hr.)
- Loxarmor cables are quality control inspected to meet or exceed applicable UL standards.
- 90°C continuous rating in wet or dry locations; 130°C emergency overload rating; 250°C short circuit rating
- Lower installed cost compared to wire in conduit or EMT.
- Excellent compression and impact resistance.
- Easily re-routed in the event of system changes.
- UL Listed for cable tray use.
- UL Listed for direct burial.
- UL Listed sunlight resistant.

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Product Data Section 4: Sheet 4

600 Volt Power Cable-Galvanized Steel Interlocked Armor
Copper Conductors/90°C Wet or Dry Rating
For Cable Tray Use - Sunlight Resistant - for Direct Burial

With PVC Jacket

Catalog Number	Conductor Size AWG kcmil	Number of Conductors	Insulation Thickness (mils)	Grounding Conductor(s) AWG*	Core O.D. - Inches	Core O.D. - mm	Loxarmor O.D. - Inches	Loxarmor O.D. - mm	Jacket Thickness - mils	Jacket Thickness - mm	Approx. O.D. - Inches	Approx. O.D. - mm	Cross-Sectional Area (sq. in.) †	Approx. Net Weight lbs./1000'	Approx. Ship Weight lbs./1000'	NEC Ampacity (1)
112-31-5244	8(7X)	3	45	10	0.53	13.5	0.75	19.1	50	1.27	0.86	21.8	0.58	506	561	55
112-31-5316		4	10	0.59	15.0	0.81	20.6	50	1.27	0.92	23.4	0.67	596	651	44	
112-31-5317	6(7X)	3	45	8	0.61	15.5	0.83	21.1	50	1.27	0.94	23.9	0.69	656	711	75
112-31-5318		4	8	0.69	17.5	0.91	23.1	50	1.27	1.02	25.9	0.82	791	858	60	
112-31-5248	4(7X)	3	45	8	0.68	17.3	0.90	22.9	50	1.27	1.01	25.7	0.80	833	900	95
112-31-5319		4	8	0.79	20.1	1.01	25.7	50	1.27	1.12	28.5	0.99	1044	1124	76	
112-31-5251	2(7X)	3	45	6	0.80	20.3	1.02	25.9	50	1.27	1.13	28.7	1.00	1153	1233	130
112-31-5320		4	6	0.94	23.9	1.16	29.5	50	1.27	1.27	32.3	1.27	1473	1589	104	
112-31-5321	1(19X)	3	55	6	0.92	23.4	1.14	29.0	50	1.27	1.25	31.8	1.23	1403	1493	150
112-31-5322		4	6	1.03	26.2	1.25	31.8	50	1.27	1.36	34.5	1.45	1737	1837	120	
112-31-5258	1/0(19X)	3	55	6	1.00	25.4	1.22	31.0	50	1.27	1.33	33.8	1.39	1648	1748	170
112-31-5323		4	6	1.12	28.5	1.34	34.0	50	1.27	1.45	36.8	1.65	2059	2202	136	
112-31-5324	2/0(19X)	3	55	6	1.09	27.7	1.31	33.3	50	1.27	1.42	36.1	1.58	1961	2104	195
112-31-5325		4	6	1.22	31.0	1.44	36.6	50	1.27	1.55	39.4	1.89	2465	2608	156	
112-31-5328	4/0(19X)	3	55	4	1.31	33.3	1.53	38.9	60	1.52	1.66	42.2	—	2900	3077	260
112-31-5329		4	4	1.46	37.1	1.68	42.7	60	1.52	1.81	46.0	—	3680	3914	208	
112-31-5331	250(37X)	3	65	4	1.45	36.8	1.67	42.4	60	1.52	1.80	45.7	—	3372	3606	290
112-31-5332		4	4	1.62	41.2	1.87	47.5	60	1.52	2.00	50.8	—	4446	4702	232	
112-31-5344	350(37X)	3	65	3	1.65	41.9	1.90	48.3	60	1.52	2.03	51.6	—	4600	4947	350
112-31-5345		4	3	1.85	47.0	2.10	53.3	60	1.52	2.23	56.6	—	5889	6289	280	
112-31-5349	500(37X)	3	65	2	1.90	48.3	2.15	54.6	60	1.52	2.29	58.2	—	6243	6802	430
112-31-5352		4	2	2.13	54.1	2.38	60.5	75	1.90	2.54	64.5	—	8088	8715	344	
112-31-5353	750(61X)	3	80	1	2.33	59.2	2.58	65.5	75	1.90	2.74	69.6	—	9092	9802	535
112-31-5354		4	1	2.61	66.3	2.86	72.6	75	1.90	3.02	76.7	—	11707	12469	428	
112-31-5356	1000(61X)	3	80	1/0	2.65	67.3	2.90	73.7	75	1.90	3.06	77.7	—	11734	12496	615
112-31-5357		4	1/0	2.96	75.2	3.21	81.5	85	2.16	3.40	86.4	—	15244	16374	492	

Visit Okonite's web site. www.okonite.com, for the most up to date dimensions.

† Cross-sectional area for calculation of cable tray fill in accordance with NEC Section 392.22.

When conductors smaller than #8 AWG are required, C-L-X Type MC is recommended.

Composite power and control cables are available on special order.

(1) Ampacities

Ampacities are based on Table 310.15(B)(16) of the National Electrical Code for XHHW-2 conductors rated 90°C, in a multi-conductor cable, at an ambient temperature of 30°C (86°F). Derating for more than three current carrying conductors within the cable is in accordance with NEC Section 310.15(B)(3)(a).

The ampacities shown apply to cables installed in cable tray in accordance with NEC Section 392.80.

*Grounds may be split.

Galvanized Steel Loxarmor® Type MC (XHHW-2)



Product Data Section 4: Sheet 4

600Volt Power Cable-Galvanized Steel Interlocked Armor
Copper Conductors/90°C Wet or Dry Rating
For Cable Tray Use - Sunlight Resistant - for Direct Burial

Without PVC Jacket

Catalog Number	Conductor Size AWG kcmil	Number of Conductors	Insulation Thickness (mils)	Grounding Conductor(s) AWG*	Core O.D. - Inches	Core O.D. - mm	Loxarmor O.D. - Inches	Loxarmor O.D. - mm	Approx. O.D. - Inches	Approx. O.D. - mm	Cross-Sectional Area (sq. In.) †	Approx. Net Weight lbs./1000' ‡	Approx. Ship Weight lbs./1000' ‡	NEC Ampacity (1)
112-31-5206 112-31-5207	8(7X)	3 4	45	10	0.53 0.59	13.5 15.0	0.75 0.81	19.1 20.6	0.75 0.81	19.1 20.6	0.44 0.52	427 510	466 549	55 44
112-31-5208 112-31-5209	6(7X)	3 4	45	8	0.61 0.69	15.5 17.5	0.83 0.91	21.1 23.1	0.83 0.91	21.1 23.1	0.54 0.65	569 696	633 760	75 60
112-31-5210 112-31-5211	4(7X)	3 4	45	8	0.68 0.79	17.3 20.1	0.90 1.01	22.9 25.7	0.90 1.01	22.9 25.7	0.64 0.80	739 939	803 1019	96 76
112-31-5212 112-31-5213	2(7X)	3 4	45	6	0.80 0.94	20.3 23.9	1.02 1.16	25.9 29.5	1.02 1.16	25.9 29.5	0.82 1.06	1047 1353	1114 1433	130 104
112-31-5201 112-31-5202	1(19X)	3 4	55	6	0.92 1.03	23.4 26.2	1.14 1.25	29.0 31.8	1.14 1.25	29.0 31.8	1.02 1.23	1285 1608	1365 1708	150 120
112-31-5214 112-31-5215	1/0(19X)	3 4	55	6	1.00 1.12	25.4 28.5	1.22 1.34	31.0 34.0	1.22 1.34	31.0 34.0	1.17 1.41	1522 1921	1622 2021	170 136
112-31-5216 112-31-5203	2/0(19X)	3 4	55	6	1.09 1.22	27.7 31.0	1.31 1.44	33.3 36.6	1.31 1.44	33.3 36.6	1.35 1.63	1826 2318	1926 2461	195 156
112-31-5218 112-31-5219	4/0(19X)	3 4	55	4	1.31 1.46	33.3 37.1	1.53 1.68	38.9 42.7	1.53 1.68	38.9 42.7	1.83 2.22	2712 3473	2855 3650	260 208
112-31-5220 112-31-5221	250(37X)	3 4	65	4	1.45 1.62	36.8 41.2	1.67 1.87	42.4 47.5	1.67 1.87	42.4 47.5	— —	3166 4216	3343 4482	290 232
112-31-5222 112-31-5223	350(37X)	3 4	65	3	1.65 1.85	41.9 47.0	1.90 2.10	48.3 53.3	1.90 2.10	48.3 53.3	— —	4367 5607	4633 5954	350 280
112-31-5224 112-31-5225	500(37X)	3 4	65	2	1.90 2.13	48.3 54.1	2.15 2.38	54.6 60.5	2.15 2.38	54.6 60.5	— —	5954 7694	6344 8253	430 344
112-31-5226 112-31-5227	750(61X)	3 4	80	1	2.33 2.61	59.2 66.3	2.58 2.86	65.5 72.6	2.58 2.86	65.5 72.6	— —	8666 11236	9293 11998	535 428
112-31-5228 112-31-5229	1000(61X)	3 4	80	1/0 1/0	2.65 2.96	67.3 75.2	2.90 3.21	73.7 81.5	2.90 3.21	73.7 81.5	— —	11257 14643	12019 15773	615 492

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* Grounds may be split

Galvanized Steel Loxarmor Type MC (XHHW-2)



Product Data Section 4: Sheet 4

600 Volt Power Cable — Galvanized Steel Interlocked Armor
Copper Conductors/ 90°C Wet or Dry Rating
For Cable Tray Use - Sunlight Resistant - For Direct Burial

Conductor Color Coding Sequence

Conductor Number	Base Color	Tracer Color
1	Black	
2	Red	
3	Blue	
4	Orange	
5	Yellow	
6	Brown	
7	Red	Black
8	Blue	Black
9	Orange	Black
10	Yellow	Black
11	Brown	Black
12	Black	Red
13	Blue	Red
14	Orange	Red
15	Yellow	Red
16	Brown	Red
17	Black	Blue
18	Red	Blue
19	Orange	Blue
20	Yellow	Blue
21	Brown	Blue
22	Black	Orange
23	Red	Orange
24	Blue	Orange
25	Yellow	Orange
26	Brown	Orange
27	Black	Yellow
28	Red	Yellow
29	Blue	Yellow
30	Orange	Yellow
31	Brown	Yellow
32	Black	Brown
33	Red	Brown
34	Blue	Brown
35	Orange	Brown
36	Yellow	Brown
37	Black	

Color Coding per ICEA Method 1, E-2
Sizes 4 AWG and larger.
Surface Printing of Numbers and color
designation per ICEA Method 3

Special Order: Any or all of the following conductors may be added when specifically requested by the customer to meet his specific application requirements. These conductor codings comply with UL and NEC requirements.

<u>Purpose</u>	<u>Base Color</u>	<u>Tracer Color</u>
Equipment Grounding	Uninsulated Green Green	1 or more continuous yellow stripes
Grounded	White White White White White White	Black continuous stripe Red continuous stripe Blue continuous stripe Orange continuous stripe Brown continuous stripe Numeric Printing