

Section G

Armored Cable

Interlocked Armor

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Impervious Continuously Welded Armor

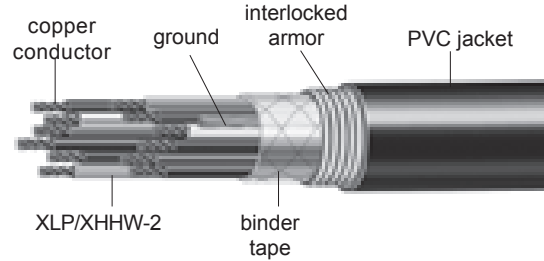
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**Specification
HW300**

Armored Cable

INTERLOCKED ARMOR - CONTROL CABLE

**600 Volt UL Type MC, CT Use, 90°C
XLP VW-1 XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW300 01402	14	2	7	30	14	.50	50	.61	176	424CU02	416MC02
HW300 01403	14	3	7	30	14	.52	50	.63	185	424CU02	416MC03
HW300 01404	14	4	7	30	14	.56	50	.67	210	424CU03	416MC03
HW300 01405	14	5	7	30	14	.60	50	.71	270	424CU03	416MC03
HW300 01407	14	7	7	30	14	.65	50	.76	320	424CU03	416MC03
HW300 01409	14	9	7	30	14	.73	50	.84	388	424CU04	416MC04
HW300 01410	14	10	7	30	14	.77	50	.88	410	424CU04	416MC04
HW300 01412	14	12	7	30	14	.80	50	.91	460	424CU04	416MC04
HW300 01415	14	15	7	30	14	.84	50	.95	550	424CU04	416MC04
HW300 01419	14	19	7	30	14	.92	50	1.03	660	424CU04	416MC05
HW300 01425	14	25	7	30	14	1.06	50	1.17	877	424CU05	416MC06
HW300 01437	14	37	7	30	14	1.21	50	1.32	1200	424CU06	416MC06

Application:

For use in harsh environments where maximum conductor protection is required. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per UL Standard 44 for Type XHHW-2, VW-1 conductors.

Grounding Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1569.

Armor:

Aluminum interlocked tape armor per UL Standard 1569. Also available in galvanized steel armor.

Jacket:

Black sunlight-resistant PVC per UL Standard 1569.

Flame Tests:

UL 1581 70,000 BTU/hr flame test

Color Code:

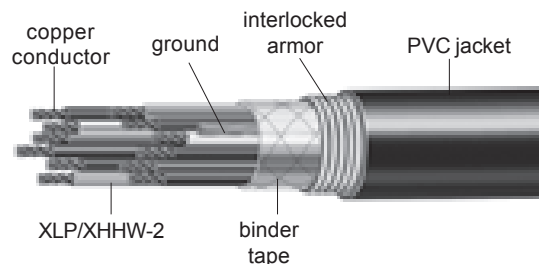
ICEA Method 1, Table E-2

Connectors:

- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

INTERLOCKED ARMOR - CONTROL CABLE

**600 Volt UL Type MC, CT Use, 90°C
XLP VW-1 XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW300 01202	12	2	7	30	12	.54	50	.65	185	424CU02	416MC03
HW300 01203	12	3	7	30	12	.58	50	.69	215	424CU03	416MC03
HW300 01204	12	4	7	30	12	.62	50	.73	295	424CU03	416MC03
HW300 01205	12	5	7	30	12	.65	50	.76	325	424CU03	416MC03
HW300 01207	12	7	7	30	12	.72	50	.83	400	424CU04	416MC04
HW300 01209	12	9	7	30	12	.79	50	.90	460	424CU04	416MC04
HW300 01210	12	10	7	30	12	.84	50	.95	560	424CU04	416MC04
HW300 01212	12	12	7	30	12	.89	50	1.00	615	424CU04	416MC05
HW300 01215	12	15	7	30	12	.93	50	1.04	680	424CU05	416MC05
HW300 01219	12	19	7	30	12	1.05	50	1.16	900	424CU05	416MC05
HW300 01225	12	25	7	30	12	1.17	50	1.28	1200	424CU06	416MC06
HW300 01237	12	37	7	30	12	1.35	50	1.46	1450	424CU06	416MC07

Application:

For use in harsh environments where maximum conductor protection is required. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per UL Standard 44 for Type XHHW-2, VW-1 conductors.

Grounding Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1569.

Armor:

Aluminum interlocked tape armor per UL Standard 1569. Also available in galvanized steel armor.

Jacket:

Black sunlight-resistant PVC per UL Standard 1569.

Flame Tests:

UL 1581 70,000 BTU/hr flame test

Color Code:

ICEA Method 1, Table E-2

Connectors:

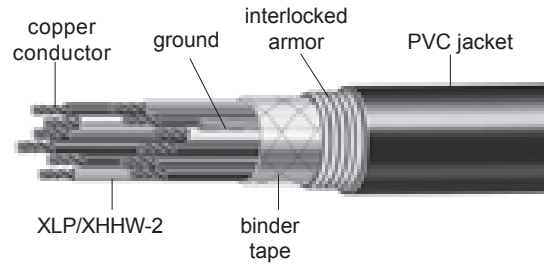
- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

**Specification
HW300**

Armored Cable

INTERLOCKED ARMOR - CONTROL CABLE

**600 Volt UL Type MC, CT Use, 90°C
XLP VW-1 XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW300 01002	10	2	7	30	10	.59	50	.70	230	424CU03	416MC03
HW300 01003	10	3	7	30	10	.61	50	.72	300	424CU03	416MC03
HW300 01004	10	4	7	30	10	.68	50	.79	345	424CU04	416MC04
HW300 01005	10	5	7	30	10	.72	50	.83	450	424CU04	416MC04
HW300 01007	10	7	7	30	10	.78	50	.89	560	424CU04	416MC04
HW300 01009	10	9	7	30	10	.88	50	.99	640	424CU04	416MC04
HW300 01012	10	12	7	30	10	1.02	50	1.13	880	424CU05	416MC05
HW300 01015	10	15	7	30	10	1.07	50	1.18	965	424CU05	416MC05
HW300 01019	10	19	7	30	10	1.16	50	1.27	1300	424CU06	416MC06
HW300 01025	10	25	7	30	10	1.31	50	1.42	1500	424CU06	416MC06
HW300 01037	10	37	7	30	10	1.52	50	1.64	2450	424CU06	416MC07

Application:

For use in harsh environments where maximum conductor protection is required. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per UL Standard 44 for Type XHHW-2, VW-1 conductors.

Grounding Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1569.

Armor:

Aluminum interlocked tape armor per UL Standard 1569. Also available in galvanized steel armor.

Jacket:

Black sunlight-resistant PVC per UL Standard 1569.

Flame Tests:

UL 1581 70,000 BTU/hr flame test

Color Code:

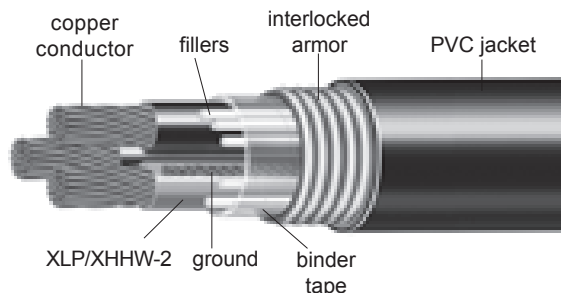
ICEA Method 1, Table E-2

Connectors:

- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

INTERLOCKED ARMOR - POWER CABLE

**600 Volt UL Type MC, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW301 00803	8	3	7	45	10	.75	50	.86	600	424CU04	416MC04
HW301 00804	8	4	7	45	10	.81	50	.92	660	424CU04	416MC04
HW301 00603	6	3	7	45	8	.83	50	.94	810	424CU04	416MC04
HW301 00604	6	4	7	45	8	.91	50	1.02	900	424CU04	416MC05
HW301 00403	4	3	7	45	8	.93	50	1.04	1000	424CU04	416MC05
HW301 00404	4	4	7	45	8	1.04	50	1.15	1120	424CU05	416MC05
HW301 00203	2	3	7	45	8	1.08	50	1.19	1265	424CU05	416MC05
HW301 00204	2	4	7	45	6	1.18	50	1.29	1550	424CU06	416MC06
HW301 00103	1	3	19	45	6	1.21	50	1.32	1520	424CU06	416MC06
HW301 00104	1	4	19	45	6	1.33	50	1.44	1880	424CU06	416MC06
HW301 10103	1/0	3	19	45	6	1.31	50	1.42	1780	424CU06	416MC06
HW301 10104	1/0	4	19	45	6	1.43	50	1.54	2235	424CU07	416MC07

Application: For use in harsh environments where maximum conductor protection is required. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation: Cross-linked polyethylene (XLP) per UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1569.

Armor: Aluminum interlocked tape armor per UL 1569 and applicable ICEA standards. Also available in galvanized steel armor.

Jacket: Black sunlight-resistant PVC per UL Standard 1569.

Flame Tests: UL 1581 70,000 BTU/hr flame test

Color Code: ICEA Method 4

Connectors:

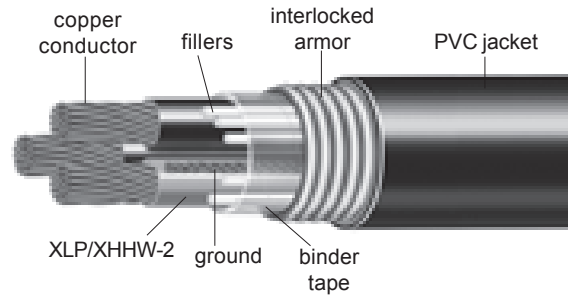
- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – Rain Tight: 416MC series – all nickel-plated brass

**Specification
HW301**

Armored Cable

INTERLOCKED ARMOR - POWER CABLE

**600 Volt UL Type MC, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW301 20103	2/0	3	19	55	6	1.39	50	1.50	2110	424CU06	416MC07
HW301 20104	2/0	4	19	55	6	1.53	50	1.64	2690	424CU06	416MC07
HW301 30103	3/0	3	19	55	6	1.50	50	1.61	2625	424CU06	416MC07
HW301 30104	3/0	4	19	55	4	1.66	50	1.79	3285	424CU07	416MC08
HW301 40103	4/0	3	19	55	4	1.62	60	1.75	3130	424CU07	416MC08
HW301 40104	4/0	4	19	55	4	1.82	60	2.05	4075	424CU07	416MC08

Application:

For use in harsh environments where maximum conductor protection is required. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1569.

Armor:

Aluminum interlocked tape armor per UL 1569 and applicable ICEA standards. Also available in galvanized steel armor.

Jacket:

Black sunlight-resistant PVC per UL Standard 1569.

Flame Tests:

UL 1581 70,000 BTU/hr flame test

Color Code:

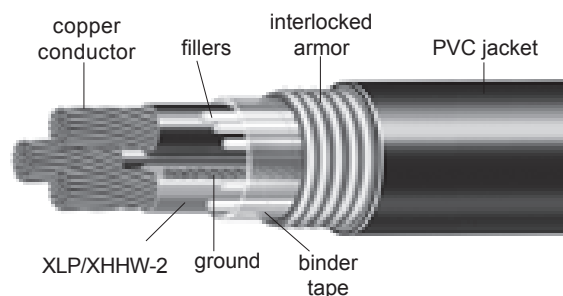
ICEA Method 4

Connectors:

- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

INTERLOCKED ARMOR - POWER CABLE

**600 Volt UL Type MC, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW301 25003	250	3	37	65	4	1.80	60	1.93	3760	424CU07	416MC08
HW301 25004	250	4	37	65	4	1.99	60	2.12	4745	424CU07	416MC08
HW301 30003	300	3	37	65	4	1.94	60	2.07	4460	424CU07	416MC08
HW301 30004	300	4	37	65	4	2.15	60	2.28	5530	424CU08	416MC09
HW301 35003	350	3	37	65	3	2.02	60	2.15	4920	424CU08	416MC09
HW301 35004	350	4	37	65	3	2.24	60	2.37	6220	424CU08	416MC09
HW301 50003	500	3	37	65	2	2.31	75	2.46	6795	424CU09	416MC09
HW301 50004	500	4	37	65	2	2.56	75	2.72	8625	424CU09	416MC09
HW301 75003	750	3	61	80	1	2.77	75	2.93	9690	424CU09	416MC10
HW301 10003	1000	3	61	80	1/0	3.09	85	3.26	12400	424MA10V	416MC10

Application:

For use in harsh environments where maximum conductor protection is required. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1569.

Armor:

Aluminum interlocked tape armor per UL 1569 and applicable ICEA standards. Also available in galvanized steel armor.

Jacket:

Black sunlight-resistant PVC per UL Standard 1569.

Flame Tests:

UL 1581 70,000 BTU/hr flame test

Color Code:

ICEA Method 4

Connectors:

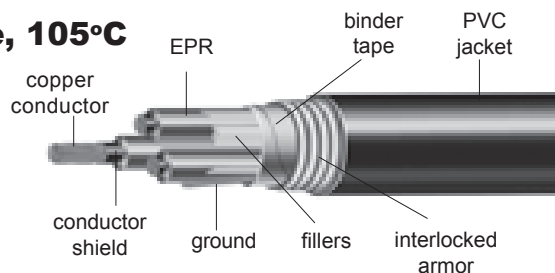
- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass
- For size 1000 kcmil, see 424MA series in Section J.

**Specification
HW302**

Armored Cable

INTERLOCKED ARMOR - POWER CABLE

**5KV UL Type MV-105 or MC, CT Use, 105°C
Non-Shielded, EPR Insulation
100% and 133% Insulation Level
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW302 00603	6	3	7	115	6	1.19	50	1.30	905	424CU06	416MC06
HW302 00403	4	3	7	115	6	1.29	50	1.40	1115	424CU06	416MC06
HW302 00203	2	3	7	115	6	1.42	50	1.53	1430	424CU06	416MC07
HW302 00103	1	3	19	115	4	1.50	50	1.61	1770	424CU06	416MC07
HW302 10103	1/0	3	19	115	4	1.59	60	1.72	2025	424CU07	416MC08
HW302 20103	2/0	3	19	115	4	1.72	60	1.85	2390	424CU07	416MC08
HW302 30103	3/0	3	19	115	3	1.83	60	1.96	3000	424CU07	416MC08
HW302 40103	4/0	3	19	115	3	1.95	60	2.08	3395	424CU07	416MC08
HW302 25003	250	3	37	115	3	2.07	60	2.20	3900	424CU08	416MC09
HW302 35003	350	3	37	115	2	2.30	75	2.46	5105	424CU09	416MC09
HW302 50003	500	3	37	115	1	2.57	75	2.73	6800	424CU09	416MC09
HW302 75003	750	3	61	115	1/0	2.98	85	3.14	9400	424MA	416MC10

Application: For use in harsh environments where maximum conductor protection is required. Used for primary power and feeder circuits in a broad range of commercial and industrial power distribution systems. Approved for use in wet or dry locations at 105°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 5000 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 105°C for continuous operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8, with a semi-conducting conductor shield.

Insulation: Ethylene propylene rubber (EPR) per ICEA S-96-659.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1072.

Armor: Aluminum interlocked tape armor per UL Standard 1072 and applicable ICEA standards. Also available in galvanized steel armor.

Jacket: Yellow sunlight-resistant PVC per UL Standard 1072 and applicable ICEA standards.

Flame Tests:

- UL and IEEE 383 70,000 BTU/hr flame test
- IEEE 1202 (2AWG and larger) CSA FT4 flame test
- ICEA 210,000 BTU/hr flame test

Color Code: ICEA Method 4

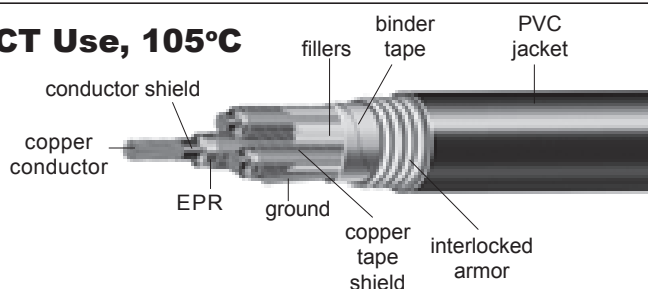
Additional Standards: NEMA WC71

Connectors:

- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass
- For size 750 kcmil, see 424MA series in Section J.

INTERLOCKED ARMOR - POWER CABLE

**15KV UL Type MV-105 or MC, CT Use, 105°C
Shielded, EPR Insulation
133% Insulation Level
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW303 00203	2	3	7	220	6	2.11	60	2.24	2605	424CU08	416MC09
HW303 00103	1	3	19	220	4	2.08	60	2.21	2835	424CU08	416MC09
HW303 10103	1/0	3	19	220	4	2.17	60	2.30	3100	424CU08	416MC09
HW303 20103	2/0	3	19	220	4	2.27	60	2.39	3530	424CU09	416MC09
HW303 30103	3/0	3	19	220	3	2.37	75	2.53	3990	424CU09	416MC09
HW303 40103	4/0	3	19	220	3	2.49	75	2.65	4615	424CU09	416MC09
HW303 25003	250	3	37	220	3	2.61	75	2.77	5315	424CU09	416MC09
HW303 35003	350	3	37	220	2	2.84	75	2.99	6600	424MA09V	416MC10
HW303 50003	500	3	37	220	1	3.11	85	3.29	8710	424MA10V	416MC10
HW303 75003	750	3	61	220	1/0	3.52	85	3.69	11695	424MA11V	416MC10

Application: For use in harsh environments where maximum conductor protection is required. Used for primary power and feeder circuits in a broad range of commercial and industrial power distribution systems. Approved for use in wet or dry locations at 105°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 15000 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 105°C for continuous operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions. Aluminum interlocked armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8, with a semi-conducting conductor shield.

Insulation: Ethylene propylene rubber (EPR) per ICEA S-97-682 with a semi-conducting insulation shield.

Shield: Uncoated copper tape with a minimum 12.5% overlap per ICEA S-97-682.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1072.

Armor: Aluminum interlocked tape armor per UL Standard 1072 and ICEA S-93-639. Also available in galvanized steel armor.

Jacket: Red sunlight-resistant PVC per UL Standard 1072 and ICEA S-93-639.

Flame Tests:

- UL and IEEE 383 70,000 BTU/hr flame test
- IEEE 1202 flame test
- ICEA 210,000 BTU/hr flame test

Color Code: ICEA Method 4

Additional Standards: NEMA WC74

Connectors:

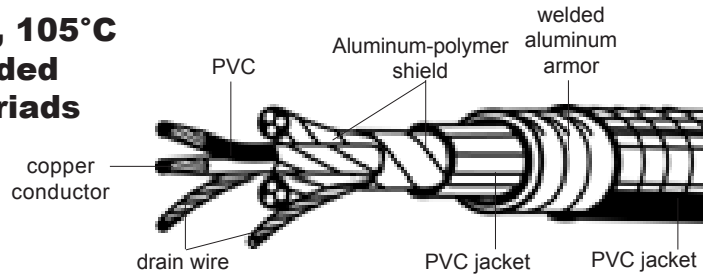
- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass
- For sizes 350-500 kcmil, see 424MA series in Section J.

**Specification
HW304**

Armored Cable

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
INSTRUMENTATION CABLE**

**300 Volt UL Type PLTC, ITC, 105°C
Single Pair and Triad - Shielded
Multiple Shielded Pairs or Triads
with Overall Shield
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG	No. of Pairs	Insulation Thickness Mils	Inner Jacket Thickness Mils	Inner Jacket Overall Diameter Inch	Armor Overall Diameter Inch	Outer Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW304 1802P	18	2	15	40	.38	.58	40	.66	185	424CU03	416MC03
HW304 1804P	18	4	15	50	.46	.70	50	.80	271	424CU04	416MC04
HW304 1808P	18	8	15	50	.59	.84	50	.94	385	424CU04	416MC04
HW304 1812P	18	12	15	60	.74	1.02	60	1.14	540	424CU05	416MC05
HW304 1824P	18	24	15	70	1.02	1.33	70	1.47	920	424CU06	416MC06
HW304 1836P	18	36	15	70	1.17	1.51	70	1.65	1190	424CU06	416MC07

Application: For use in harsh environments where maximum conductor and electrostatic interference protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for instrumentation and process and control applications in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications.

Approved for continuous use at 105°C in wet or dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions. May be installed indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 300 volts.

UL listed as, NEC Type MC per UL Standard 1569 and is approved for use in Class I, Division 2 hazardous locations. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: 7-strand soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation: Flame-retardant PVC

Individual Shield: Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire.

Overall Shield: Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire.

Communication Wire: 22AWG stranded bare copper wire with PVC insulation.

Inner Jacket: Flame-retardant PVC

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Black sunlight-resistant PVC

Flame Tests:

- UL 1581 70,000 BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test

Color Code: ICEA Method 9: black and white for pairs and black, white and red for triads with printed number

Additional Standards:

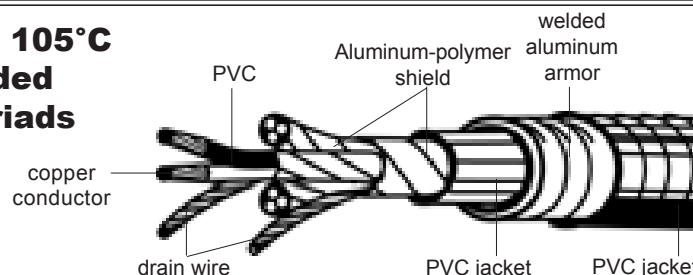
- Individual conductors UL listed as Type FPL
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test

Connectors:

- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

IMPERVIOUS CONTINUOUSLY WELDED ARMOR - INSTRUMENTATION CABLE

**300 Volt UL Type PLTC, ITC, 105°C
Single Pair and Triad - Shielded
Multiple Shielded Pairs or Triads
with Overall Shield
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG	No. of Pairs	Insulation Thickness Mils	Inner Jacket Thickness Mils	Inner Jacket Overall Diameter Inch	Armor Overall Diameter Inch	Outer Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW304 1601P	16	1 Pair	15	35	.25	.40	35	.47	110	424CU02	416MC02
HW304 1602P	16	2 Pair	15	50	.44	.66	50	.76	241	424CU03	416MC03
HW304 1603P	16	3 Pair	15	50	.47	.70	50	.80	280	424CU04	416MC04
HW304 1604P	16	4 Pair	15	50	.51	.74	50	.84	316	424CU04	416MC04
HW304 1606P	16	6 Pair	15	50	.61	.88	50	.98	410	424CU04	416MC04
HW304 1608P	16	8 Pair	15	60	.68	.97	60	1.09	511	424CU05	416MC05
HW304 1612P	16	12 Pair	15	60	.82	1.13	60	1.25	670	424CU05	416MC06
HW304 1624P	16	24 Pair	15	70	1.14	1.46	70	1.60	1165	424CU06	416MC07
HW304 1636P	16	36 Pair	15	80	1.33	1.71	80	1.87	1615	424CU07	416MC08
HW304 1601T	16	1 Triad	15	35	.27	.44	35	.51	129	424CU02	416MC02
HW304 1604T	16	4 Triad	15	50	.58	.84	50	.94	400	424CU04	424MC04

Application: For use in harsh environments where maximum conductor and electrostatic interference protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for instrumentation and process and control applications in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications.

Approved for continuous use at 105°C in wet or dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions. May be installed indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 300 volts.

UL listed as, NEC Type MC per UL Standard 1569 and is approved for use in Class I, Division 2 hazardous locations. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: 7-strand soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation: Flame-retardant PVC

Individual Shield: Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire.

Overall Shield: Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire.

Communication Wire: 22AWG stranded bare copper wire with PVC insulation.

Inner Jacket: Flame-retardant PVC

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Black sunlight-resistant PVC

Flame Tests:

- UL 1581 70,000 BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test

Color Code:

- ICEA Method 9: black and white for pairs and black, white and red for triads with printed number

Additional Standards:

- Individual conductors UL listed as Type FPL
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test

Connectors:

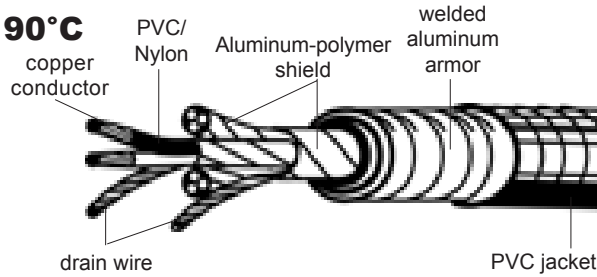
- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

**Specification
HW305**

Armored Cable

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
INSTRUMENTATION CABLE**

**600 Volt UL Type MC-HL, CT USE, 90°C
Single Pair and Triad - Shielded
Multiple Shielded Pairs or Triads
with Overall Shield
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG	Pair or Triad	PVC-Nylon Insulation Thickness Mils	Inner Jacket Thickness Mils	Inner Jacket Diameter Inch	Armor Overall Diameter Inch	Outer Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Connector No.	Rain Tight Connector No.
HW305 1601P	16	1 Pair	15-4	40	.29	.44	50	.54	144	424MA02	416MC02
HW305 1602P	16	2 Pair	15-4	40	.50	.70	50	.80	255	424MA03	416MC04
HW305 1604P	16	4 Pair	15-4	50	.61	.84	50	.94	355	424MA03	416MC04
HW305 1608P	16	8 Pair	15-4	50	.76	1.02	50	1.12	518	424MA04	416MC05
HW305 1612P	16	12 Pair	15-4	50	.93	1.19	50	1.29	675	424MA05	416MC06
HW305 1624P	16	24 Pair	15-4	50	1.21	1.56	60	1.68	1170	424MA06	416MC08
HW305 1636P	16	36 Pair	15-4	50	1.41	1.80	60	1.92	1607	424MA07	416MC08
HW305 1601T	16	1 Triad	15-4	40	.31	.48	50	.58	165	424MA02	416MC02
HW305 1604T	16	4 Triad	15-4	50	.68	.92	50	1.02	430	424MA04	416MC05
HW305 1606T	16	6 Triad	15-4	50	.79	1.07	50	1.17	560	424MA04	416MC05

Application: For use in harsh environments where maximum conductor and electrostatic interference protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for instrumentation and process and control applications in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications.

Approved for continuous use at 90°C in wet or dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions. May be installed indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts.

UL listed, Type MC-HL per UL Standard 2225 for use in Class I, Division I hazardous locations. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: 7-strand soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation: Heat- and moisture-resistant PVC.

Conductor Jacket: Clear nylon

Individual Shield: Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire.

Overall Shield: Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire.

Inner Jacket: Flame-retardant PVC

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Black sunlight-resistant PVC.

Flame Tests:

- UL 1581 70,000 BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test

Color Code: ICEA Method 9: black and red for pairs and black, red and blue for triads with printed number.

Additional Standards:

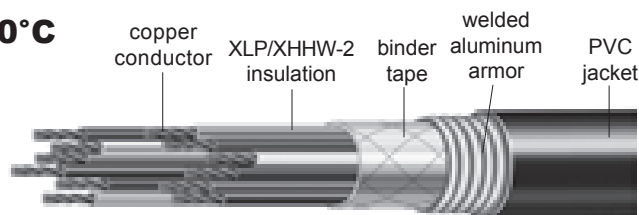
- UL listed, NEC Type MC, UL Standard 1569
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test

Connectors:

- Explosion Proof, Class I Division 1: 424MA series – all nickel-plated aluminum
- Rain Tight: 416MC series – all nickel-plated brass

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
CONTROL CABLE**

**600 Volt UL Type MC, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW306 01402	14	2	7	30	.44	50	.55	135	424CU02	416MC02
HW306 01403	14	3	7	30	.44	50	.55	155	424CU02	416MC02
HW306 01404	14	4	7	30	.48	50	.59	185	424CU02	416MC02
HW306 01405	14	5	7	30	.54	50	.65	210	424CU02	416MC03
HW306 01407	14	7	7	30	.58	50	.69	250	424CU03	416MC03
HW306 01409	14	9	7	30	.70	50	.81	320	424CU04	416MC04
HW306 01412	14	12	7	30	.74	50	.85	380	424CU04	416MC04
HW306 01419	14	19	7	30	.88	50	.99	530	424CU04	416MC05
HW306 01425	14	25	7	30	1.07	50	1.18	685	424CU05	416MC05
HW306 01437	14	37	7	30	1.26	50	1.37	935	424CU06	416MC06

Application:

For use in harsh environments where maximum conductor protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded corrugated armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Armor:

Impervious continuously welded and corrugated aluminum.

Jacket:

Black sunlight-resistant PVC

Flame Tests:

- UL 1581 70,000BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000/hr flame test

Color Code:

ICEA Method 1, Table E-2

Additional Standards:

- UL listed, NEC Type MC, UL Standard 1569
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test.

Connectors:

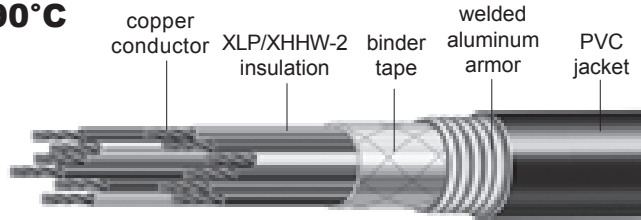
- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

**Specification
HW306**

Armored Cable

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
CONTROL CABLE**

**600 Volt UL Type MC, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW306 01202	12	2	7	30	.48	50	.59	165	424CU02	416MC02
HW306 01203	12	3	7	30	.48	50	.59	190	424CU02	416MC02
HW306 01204	12	4	7	30	.54	50	.65	230	424CU02	416MC03
HW306 01205	12	5	7	30	.62	50	.69	265	424CU03	416MC03
HW306 01207	12	7	7	30	.66	50	.77	330	424CU03	416MC03
HW306 01209	12	9	7	30	.74	50	.85	410	424CU04	416MC04
HW306 01212	12	12	7	30	.84	50	.95	500	424CU05	416MC04
HW306 01219	12	19	7	30	.97	50	1.07	715	424CU05	416MC05

Application:

For use in harsh environments where maximum conductor protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded corrugated armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Armor:

Impervious continuously welded and corrugated aluminum.

Jacket:

Black sunlight-resistant PVC

Flame Tests:

- UL 1581 70,000BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000/hr flame test

Color Code:

ICEA Method 1, Table E-2

Additional Standards:

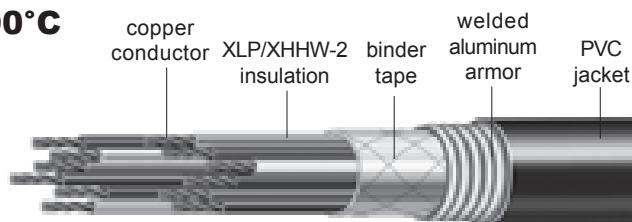
- UL listed, NEC Type MC, UL Standard 1569
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test

Connectors:

- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

IMPERVIOUS CONTINUOUSLY WELDED ARMOR - CONTROL CABLE

**600 Volt UL Type MC, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 2 Connector No.	Rain Tight Connector No.
HW306 01002	10	2	7	30	.54	50	.65	205	424CU02	416MC03
HW306 01003	10	3	7	30	.58	50	.69	240	424CU03	416MC03
HW306 01004	10	4	7	30	.62	50	.73	300	424CU03	416MC03
HW306 01005	10	5	7	30	.66	50	.77	345	424CU03	416MC03
HW306 01007	10	7	7	30	.74	50	.85	440	424CU04	416MC04
HW306 01009	10	9	7	30	.84	50	.95	550	424CU04	416MC04
HW306 01012	10	12	7	30	.97	50	1.07	690	424CU05	416MC05

Application:

For use in harsh environments where maximum conductor protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded corrugated armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Armor:

Impervious continuously welded and corrugated aluminum.

Jacket:

Black sunlight-resistant PVC

Flame Tests:

- UL 1581 70,000BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000/hr flame test

Color Code:

ICEA Method 1, Table E-2

Additional Standards:

- UL listed, NEC Type MC, UL Standard 1569
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test

Connectors:

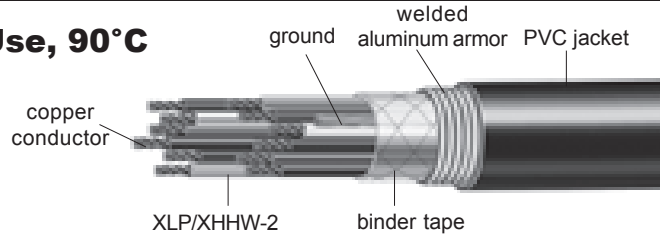
- Explosion Proof, Class 1 Division 2: 424CU series – aluminum exterior components, nickel-plated brass interior components
- Rain Tight: 416MC series – all nickel-plated brass

Specification
HW307

Armored Cable

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER AND CONTROL CABLE**

**600 Volt UL Type MC-HL, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size No. - AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Connector No.	Rain Tight Connector No.
HW307 01403	14	3	7	30	3-18	.44	50	.55	165	424MA02	416MC02
HW307 01404	14	4	7	30	2-16	.48	50	.59	195	424MA02	416MC02
HW307 01405	14	5	7	30	1-14	.58	50	.68	233	424MA02	416MC03
HW307 01407	14	7	7	30	1-14	.62	50	.72	272	424MA02	416MC03
HW307 01409	14	9	7	30	1-14	.70	50	.80	331	424MA03	416MC04
HW307 01412	14	12	7	30	1-14	.78	50	.88	395	424MA03	416MC04
HW307 01419	14	19	7	30	1-14	.92	50	1.02	551	424MA04	416MC05
HW307 01437	14	37	7	30	1-14	1.19	50	1.30	934	424MA05	416MC06
HW307 01203	12	3	7	30	3-16	.48	50	.59	223	424MA02	416MC03
HW307 01204	12	4	7	30	3-16	.54	50	.65	252	424MA02	416MC03
HW307 01205	12	5	7	30	1-12	.62	50	.72	294	424MA02	416MC03
HW307 01207	12	7	7	30	1-12	.70	50	.80	357	424MA03	416MC04
HW307 01209	12	9	7	30	1-12	.84	50	.94	448	424MA03	416MC04
HW307 01212	12	12	7	30	1-12	.88	50	.98	528	424MA04	416MC05
HW307 01219	12	19	7	30	1-12	1.07	50	1.17	755	424MA04	416MC05
HW307 01237	12	37	7	30	1-12	1.33	50	1.43	1293	424MA05	416MC06

Application: For use in harsh environments where maximum conductor protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications.

Approved for use in wet or dry locations at 90°C, installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts.

UL listed, Type MC-HL per UL Standard 2225 for use in Class I, Division I hazardous locations. National Electric Code approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation: Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with NEC requirements.

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Black flame-retardant and sunlight resistant PVC.

Flame Tests:

- UL 1581 70,000 BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test

Color Code: ICEA Method 1, Table E-2

Additional Standards:

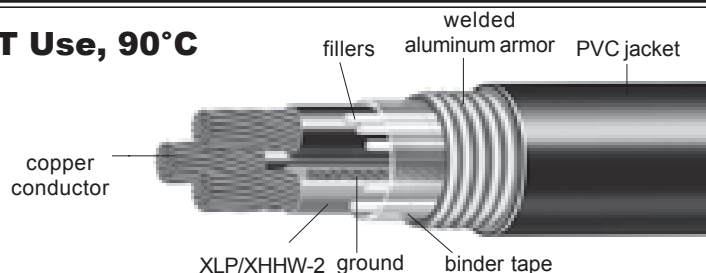
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test.

Connectors:

- Explosion Proof, Class I Division 1: 424MA series – all nickel-plated aluminum
- Rain Tight: 416MC series – all nickel-plated brass

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER AND CONTROL CABLE**

**600 Volt UL Type MC-HL, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size No. - AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Connector No.	Rain Tight Connector No.
HW307 01003	10	3	7	30	3-14	.58	50	.69	290	424MA02	416MC03
HW307 01004	10	4	7	30	3-14	.62	50	.73	335	424MA02	416MC03
HW307 01009	10	9	7	30	1-10	.92	50	1.02	482	424MA04	416MC05
HW307 00803	8	3	7	45	3-14	.70	50	.81	385	424MA03	416MC04
HW307 00804	8	4	7	45	2-12	.78	50	.89	480	424MA03	416MC04
HW307 00603	6	3	7	45	3-12	.78	50	.89	550	424MA03	416MC04
HW307 00604	6	4	7	45	2-10	.88	50	.99	660	424MA04	416MC04
HW307 00403	4	3	7	45	3-12	.92	50	1.03	720	424MA04	416MC05
HW307 00404	4	4	7	45	2-10	1.07	50	1.18	915	424MA04	416MC05
HW307 00203	2	3	7	45	3-10	1.13	50	1.24	1035	424MA05	416MC05
HW307 00204	2	4	7	45	2-8	1.19	50	1.30	1436	424MA05	416MC06

Application: For use in harsh environments where maximum conductor protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications.

Approved for use in wet or dry locations at 90°C, installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts.

UL listed, Type MC-HL per UL Standard 2225 for use in Class I, Division I hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation: Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with NEC requirements.

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Black flame-retardant and sunlight resistant PVC.

Flame Tests:

- UL 1581 70,000 BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test

Color Code:

- 10 AWG: ICEA Method 1, Table E-2
- 8 AWG – 2 AWG: ICEA Method 4

Additional Standards:

- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test.

Connectors:

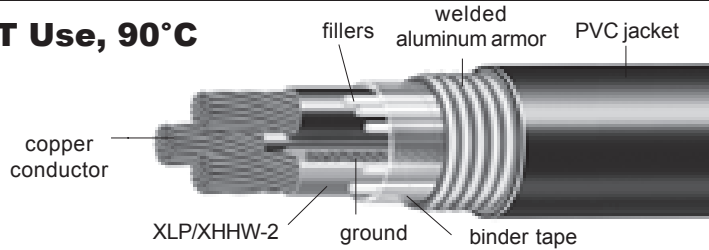
- Explosion Proof, Class I Division 1: 424MA series – all nickel-plated aluminum
- Rain Tight: 416MC series – all nickel-plated brass

**Specification
HW307**

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER AND CONTROL CABLE**

Armored Cable

**600 Volt UL Type MC-HL, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size No.-AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Connector No.	Rain Tight Connector No.
HW307 10103	1/0	3	19	55	3-10	1.33	50	1.44	1500	424MA05	416MC06
HW307 10104	1/0	4	19	55	1-6	1.46	50	1.57	1955	424MA06	416MC07
HW307 20103	2/0	3	19	55	3-10	1.46	50	1.57	1860	424MA06	416MC07
HW307 20104	2/0	4	19	55	1-6	1.64	60	1.77	2410	424MA06	416MC08
HW307 30131	3/0	3	19	55	3-8	1.56	60	1.69	2310	424MA06	416MC08
HW307 30104	3/0	4	19	55	1-4	1.71	60	1.84	2970	424MA06	416MC08
HW307 40103	4/0	3	19	55	3-8	1.71	60	1.84	2790	424MA06	416MC08
HW307 40104	4/0	4	19	55	1-4	1.87	60	2.00	3560	424MA07	416MC08
HW307 25003	250	3	37	65	3-8	1.87	60	2.00	3245	424MA07	416MC08
HW307 25004	250	4	37	65	1-4	2.12	60	2.25	4170	424MA08	416MC09
HW307 35003	350	3	37	65	3-7	2.12	60	2.25	4340	424MA08	416MC09
HW307 35004	350	4	37	65	1-3	2.35	75	2.51	5670	424MA08	416MC09
HW307 50003	500	3	37	65	3-6	2.41	75	2.57	6020	424MA08	416MC09
HW307 50004	500	4	37	65	1-2	2.71	75	2.87	7780	424MA09	416MC09
HW307 75003	750	3	61	80	3-5	3.03	85	3.21	8860	424MA10	416MC10

Application: For use in harsh environments where maximum conductor protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications.

Approved for use in wet or dry locations at 90°C, installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts.

UL listed, Type MC-HL per UL Standard 2225 for use in Class I, Division I hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation: Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with NEC requirements.

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Black flame-retardant and sunlight-resistant PVC.

Flame Tests:

- UL 1581 70,000 BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test

Color Code: ICEA Method 4

Additional Standards:

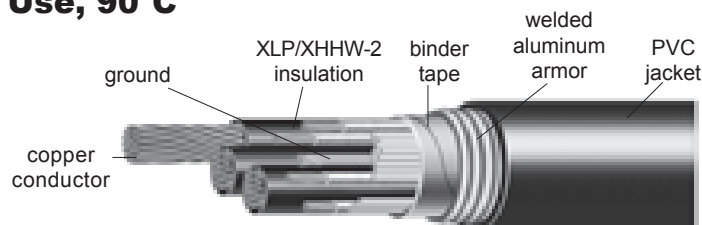
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test.

Connectors:

- Explosion Proof, Class I Division 1: 424MA series – all nickel-plated aluminum
- Rain Tight: 416MC series – all nickel-plated brass

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER AND CONTROL COMPOSITE CABLE**

**600 Volt UL Type MC-HL, CT Use, 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Power Size AWG	No. of Conductors	Insulation Thickness Mils	Ground Wire Size AWG	Control Size AWG	No. of Conductors	Insulation Thickness Mils	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Explosion Proof Conn. No.	Rain Tight Connector No
Power					Control								
HW308 01003	10	3	30	10	12	4	30	.74	50	.86	420	424MA03	416MC04
HW308 08003	8	3	45	10	12	4	30	.92	50	1.05	510	424MA04	416MC05
HW308 06003	6	3	45	8	12	4	30	.97	50	1.09	650	424MA04	416MC05
HW308 06004	4	3	45	6	12	4	30	1.07	50	1.19	805	424MA04	416MC05

Application:

For use in harsh environments where maximum conductor protection is required. Impervious armor prevents the entrance of water, gas and corrosive elements into the electrical core. Used for power, control and lighting circuits in a broad range of commercial and industrial pulp and paper, mining, and petroleum applications. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. UL listed, Type MC-HL per UL Standard 2225 for use in Class I, Division I hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded corrugated armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors:

7-strand soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with NEC requirements.

Armor:

Impervious continuously welded and corrugated aluminum.

Jacket:

Black flame-retardant and sunlight-resistant PVC.

Flame Tests:

- UL 1581 70,000BTU/hr flame test
- ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test
- IEEE 383 70,000/hr flame test

Color Code:

- Control Conductors: red, blue, orange and yellow
- Power Conductors: ICEA Method 4

Additional Standards:

- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test

Connectors:

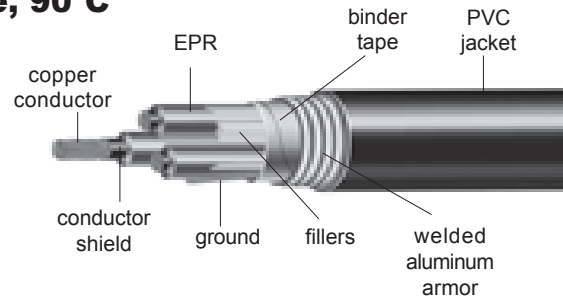
- Explosion Proof, Class 1 Division 1: 424MA series – all nickel-plated brass
- Rain Tight: 416MC series – all nickel-plated brass

Specification
HW309

Armored Cable

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER CABLE**

5KV UL Type MV 90, MC-HL, CT Use, 90°C
Non-Shielded, EPR Insulation
100% and 133% Insulation Level
Aluminum Armor
Copper Conductors



Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size No.-AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Connector No.	Rain Tight Connector No.
HW309 00603	6	3	7	90	3-10	1.13	50	1.24	730	424MA04V	416MC06
HW309 00403	4	3	7	90	3-10	1.19	50	1.30	920	424MA04V	416MC06
HW309 00203	2	3	7	90	3-10	1.33	50	1.44	1215	424MA05V	416MC06
HW309 00103	1	3	19	90	1-4	1.46	50	1.57	1525	424MA06V	416MC07
HW309 10103	1/0	3	19	90	3-8	1.56	60	1.69	1810	424MA06V	416MC08
HW309 20103	2/0	3	19	90	3-8	1.64	60	1.77	2130	424MA06V	416MC08
HW309 40103	4/0	3	19	90	3-7	1.94	60	2.07	3040	424MA07V	416MC08
HW309 25003	250	3	19	90	3-7	2.02	60	2.15	3475	424MA07V	416MC08
HW309 35003	350	3	37	90	3-6	2.35	75	2.50	4695	424MA08V	416MC09
HW309 50003	500	3	37	90	3-5	2.62	75	2.78	6315	424MA08V	416MC09

Application: For use in harsh environments where maximum conductor protection is required. Used for primary power and feeder circuits in a broad range of commercial and industrial power distribution systems. Approved for use in wet or dry locations at 90°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 5000 volts. UL listed, Type MC-HL per UL 2225 for use in Class I, Division I hazardous locations. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, compact Class B stranding per ASTM B-8, with a semi-conducting conductor shield.

Insulation: Ethylene propylene rubber (EPR) per ICEA S-97-682/S-93-639.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL 1072.

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Yellow flame-retardant and sunlight-resistant PVC.

Flame Tests:
ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test

Color Code:
ICEA Method 4

Additional Standards:

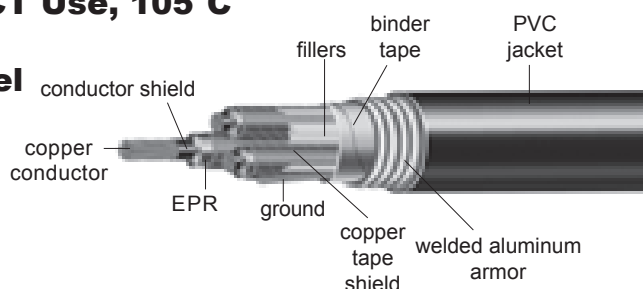
- Single conductors are qualified per AEIC CS8
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.

Connectors:

- Explosion Proof, Class I Division 1: 424MA series – all nickel-plated aluminum
- Rain Tight: 416MC series – all nickel-plated brass

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER CABLE**

**5KV UL Type MV-105, MC-HL, CT Use, 105°C
Shielded, EPR Insulation
100% and 133% Insulation Level
Aluminum Armor
Copper Conductors**



Armored Cable

Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Connector No.	Rain Tight Connector No.
HW310 00603	6	3	7	115	6	1.51	50	1.61	1205	424MA06	416MC07
HW310 00403	4	3	7	115	6	1.64	60	1.76	1450	424MA06	416MC08
HW310 00203	2	3	7	115	6	1.80	60	1.92	1880	424MA07	416MC08
HW310 00103	1	3	19	115	4	1.87	60	1.99	2100	424MA07	416MC08
HW310 10103	1/0	3	19	115	4	1.94	60	2.06	2375	424MA07	416MC08
HW310 20103	2/0	3	19	115	4	2.02	60	2.14	2715	424MA07	416MC08
HW310 40103	4/0	3	19	115	3	2.25	60	2.37	3685	424MA08	416MC09
HW310 25003	250	3	19	115	3	2.41	75	2.56	4300	424MA08	416MC09
HW310 35003	350	3	37	115	2	2.71	75	2.86	5530	424MA09	416MC09
HW310 50003	500	3	37	115	1	3.03	75	3.21	7245	424MA10	416MC10

Application: For use in harsh environments where maximum conductor protection is required. Used for primary power and feeder circuits in a broad range of commercial and industrial power distribution systems. Approved for use in wet or dry locations at 105°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 5000 volts. UL listed, Type MC-HL per UL Standard 2225 for use in Class I, Division I hazardous locations. UL approved for use at 105°C for continuous operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, compact Class B stranding per ASTM B-496, with a semi-conducting conductor shield.

Insulation: Ethylene propylene rubber (EPR) per ICEA S-97-682/S-93-639 with a semi-conducting insulation shield.

Shield: Uncoated 5 mil copper tape with a minimum of 12.5% overlap.

Grounding Conductor: Soft bare annealed copper

per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1072.

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Yellow flame-retardant and sunlight-resistant PVC.

Flame Tests: ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test

Color Code: ICEA Method 4

Additional Standards:

- UL listed, NEC Type MV-105 and Type MC, UL Standard 1072.
- Single conductors are qualified per AEIC CS8.
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test.

Connectors:

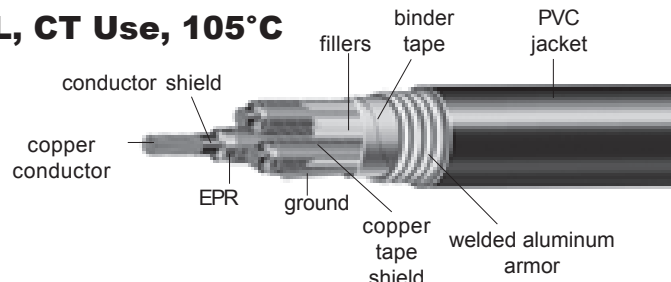
- Explosion Proof, Class I Division 1: 424MA series – all nickel-plated aluminum
- Rain Tight: 416MC series – all nickel-plated brass

**Specification
HW311**

Armored Cable

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER CABLE**

**15KV UL Type MV-105, MC-HL, CT Use, 105°C
Shielded, EPR Insulation
133% Insulation Level
Aluminum Armor
Copper Conductors**



Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft	Class I Div. 1 Connector No.	Rain Tight Connector No.
HW311 00203	2	3	7	220	6	2.35	75	2.50	2790	424MA08	416MC09
HW311 00103	1	3	19	220	4	2.35	75	2.50	3180	424MA08	416MC09
HW311 10103	1/0	3	19	220	4	2.47	75	2.62	3425	424MA08	416MC09
HW311 20103	2/0	3	19	220	4	2.55	75	2.70	3850	424MA08	416MC09
HW311 40103	4/0	3	19	220	3	2.81	75	2.96	4950	424MA09	416MC09
HW311 25003	250	3	19	220	3	3.03	75	3.18	5700	424MA10	416MC10
HW311 35003	350	3	37	220	2	3.22	75	3.40	7030	424MA10	416MC10
HW311 50003	500	3	37	220	1	3.41	85	3.59	8690	424MA10	- - -

Application: For use in harsh environments where maximum conductor protection is required. Used for primary power and feeder circuits in a broad range of commercial and industrial power distribution systems. Approved for use in wet or dry locations at 105°C, for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 15000 volts. UL listed, Type MC-HL per UL 2225 for use in Class I, Division I hazardous locations. UL approved for use at 105°C for continuous operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions. Impervious continuously welded and corrugated aluminum armor cable is recommended as an economical alternative to wire in conduit systems.

Conductors: Soft bare annealed copper per ASTM B-3, compact Class B stranding per ASTM B-496, with a semi-conducting conductor shield.

Insulation: Ethylene propylene rubber (EPR) per ICEA S-97-682/S-93-639 with a semi-conducting insulation shield.

Shield: Uncoated 5 mil copper tape with a minimum 12.5% overlap per ICEA S-97-682.

Grounding Conductor: Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1072.

Armor: Impervious continuously welded and corrugated aluminum.

Jacket: Red flame-retardant and sunlight-resistant PVC.

Flame Tests: ICEA 70,000 BTU/hr and 210,000 BTU/hr flame test

Color Code: ICEA Method 4

Additional Standards:

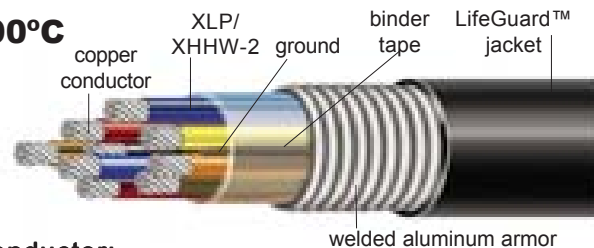
- UL listed, NEC Type MV-105 and Type MC, UL Standard 1072
- Single conductors are qualified per AEIC CS8
- Meets requirements of CSA-C22.2 No. 0.3, -40°C cold impact test
- UL listed Type CWCMC to IEEE 45/IEEE 1580 (46 CFR Part 111.60-23) Marine Shipboard Cable.

Connectors:

- Explosion Proof, Class I Division 1: 424MA series – all nickel-plated aluminum
- Rain Tight: 416MC series – all nickel-plated brass

IMPERVIOUS CONTINUOUSLY WELDED ARMOR - CONTROL CABLE

**600 Volt UL Type MC-LS, CT Use 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Low Smoke Zero Halogen Jacket
Copper Conductors**



Armored Cable

Application:

LifeGuard™ Low Smoke Zero Halogen* cable is for use in power, control and lighting circuits in a broad range of commercial and industrial applications. The impervious armor provides maximum conductor protection and prevents the entrance of water, gas and corrosive elements into the electrical core. The LifeGuard™ jacket is highly flame retardant, produces very small amounts of smoke when burned and contains no halogens. It is ideal for applications where a high degree of safety and equipment protection is required.

LifeGuard™ cable is UL listed, Type MC-LS per UL Standard 2225 and approved for installation indoors or outdoors, aerially, in conduits, ducts, cable trays and direct burial in circuits not exceeding 600 volts. It may be installed in temperatures as low as -30°C and used in NEC Class 1, Division 1 hazardous locations. It is UL approved for continuous operation at 90°C in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Impervious continuously welded and corrugated aluminum armor is recommended as an economical alternative to wire in conduit systems.

Product Features:

- Tray rated
- Sunlight-resistant
- Approved for direct burial
- Tinned conductors provide ease of termination and added protection in caustic environments
- Very low smoke production when burned
- LifeGuard™ jacket produces zero halogens during fire – less toxic and corrosive
- LifeGuard™ jacket is environmentally safe – lead, sulfur and halogen free
- Highly chemical resistant
- Very flame retardant
- Burns to an ash – does not exhibit thermoplastic drip
- Excellent compression and impact resistance
- Superior tensile strength and abrasion resistance
- Flexible jacket with low coefficient of friction

Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor:

Soft annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1277.

Armor:

Impervious continuously welded and corrugated aluminum.

Jacket:

Sunlight-resistant and flame-retardant, Low Smoke Zero Halogen polyolefin per UL Standard 1277.

Flame Tests:

- IEEE 1202 70,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test
- ICEA T-29-520 210,000 BTU/hr flame test

Color Code:

ICEA Method 1, Table E-2

Additional Standards:

- UL 1685
- NEMA WC70

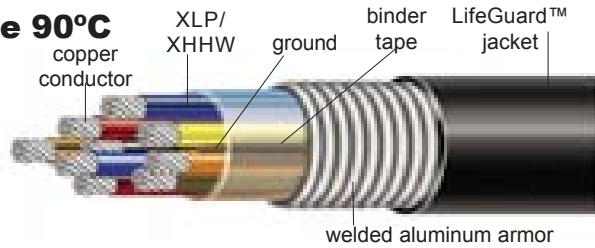
*Some cable insulations may contain trace amounts of halogens.

Specification
HW320

Armored Cable

IMPERVIOUS CONTINUOUSLY WELDED ARMOR - CONTROL CABLE

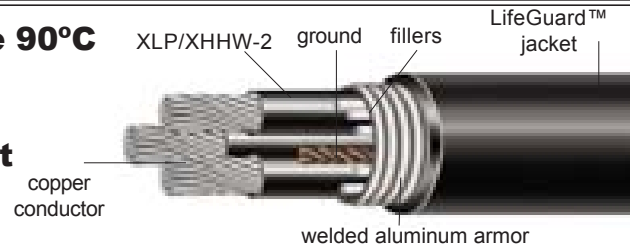
**600 Volt UL Type MC-HL-LS, CT Use 90°C
 XLP XHHW Insulation
 Aluminum Armor
 Low Smoke Zero Halogen Jacket
 Copper Conductors**



Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness/Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness/Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW320 01402	14	2	7	30	14	.52	60	.64	180
HW320 01403	14	3	7	30	14	.56	60	.68	210
HW320 01404	14	4	7	30	14	.60	60	.72	241
HW320 01407	14	7	7	30	14	.64	60	.76	278
HW320 01409	14	9	7	30	14	.74	60	.86	337
HW320 01412	14	12	7	30	14	.83	60	.95	412
HW320 01419	14	19	7	30	14	.91	60	1.03	557
HW320 01437	14	37	7	30	14	1.30	60	1.42	987
HW320 01202	12	2	7	30	12	.56	60	.68	215
HW320 01203	12	3	7	30	12	.60	60	.72	255
HW320 01204	12	4	7	30	12	.64	60	.76	296
HW320 01207	12	7	7	30	12	.69	60	.81	350
HW320 01209	12	9	7	30	12	.83	60	.95	435
HW320 01212	12	12	7	30	12	.88	60	.98	513
HW320 01219	12	19	7	30	12	1.06	60	1.16	730
HW320 01237	12	37	7	30	12	1.42	60	1.52	1315
HW320 01002	10	2	7	30	10	.61	60	.71	258
HW320 01003	10	3	7	30	10	.65	60	.75	310
HW320 01004	10	4	7	30	10	.70	60	.80	356
HW320 01007	10	7	7	30	10	.79	60	.89	450
HW320 01009	10	9	7	30	10	.88	60	.98	555
HW320 01012	10	12	7	30	10	1.06	60	1.12	700

IMPERVIOUS CONTINUOUSLY WELDED ARMOR - POWER CABLE

**600 Volt UL Type MC-LS, CT Use 90°C
XLP XHHW-2 Insulation
Aluminum Armor
Low Smoke Zero Halogen Jacket
Copper Conductors**



Armored Cable

Application:

LifeGuard™ Low Smoke Zero Halogen* cable is for use in power, control and lighting circuits in a broad range of commercial and industrial applications. The impervious armor provides maximum conductor protection and prevents the entrance of water, gas and corrosive elements into the electrical core. The LifeGuard™ jacket is highly flame retardant, produces very small amounts of smoke when burned and contains no halogens. It is ideal for applications where a high degree of safety and equipment protection is required.

LifeGuard™ cable is UL listed, Type MC-LS per UL Standard 2225 and approved for installation indoors or outdoors, aerially, in conduits, ducts, cable trays and direct burial in circuits not exceeding 600 volts. It may be installed in temperatures as low as -30°C and used in NEC Class 1, Division 1 hazardous locations. It is UL approved for continuous operation at 90°C in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Impervious continuously welded and corrugated aluminum armor is recommended as an economical alternative to wire in conduit systems.

Product Features:

- Tray rated
- Sunlight-resistant
- Approved for direct burial
- Tinned conductors provide ease of termination and added protection in caustic environments
- Very low smoke production when burned
- LifeGuard™ jacket produces zero halogens during fire – less toxic and corrosive
- LifeGuard™ jacket is environmentally safe – lead, sulfur and halogen free
- Highly chemical resistant
- Very flame retardant
- Burns to an ash – does not exhibit thermoplastic drip
- Excellent compression and impact resistance
- Superior tensile strength and abrasion resistance
- Flexible jacket with low coefficient of friction

Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

Cross-linked polyethylene (XLP) per ICEA S-95-658 and UL Standard 44 for Type XHHW-2 conductors.

Grounding Conductor:

Soft annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL Standard 1277.

Armor:

Impervious continuously welded and corrugated aluminum.

Jacket:

Sunlight-resistant and flame-retardant, Low Smoke Zero Halogen polyolefin per UL Standard 1277.

Flame Tests:

- IEEE 1202 70,000 BTU/hr flame test
- IEEE 383 70,000 BTU/hr flame test
- ICEA T-29-520 210,000 BTU/hr flame test

Color Code:

ICEA Method 4

Additional Standards:

- UL 1685
- NEMA WC70

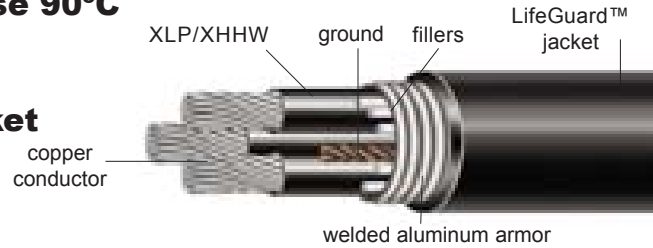
*Some cable insulations may contain trace amounts of halogens.

Specification
HW321

Armored Cable

**IMPERVIOUS CONTINUOUSLY WELDED ARMOR -
POWER CABLE**

600 Volt UL Type MC-LS, CT Use 90°C
XLP XHHW Insulation
Aluminum Armor
Low Smoke Zero Halogen Jacket
Copper Conductors



Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness/Mils	Ground Wire Size AWG	Armor Diameter Inch	Jacket Thickness/Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW321 00803	8	3	7	45	10	.78	60	.90	437
HW321 00804	8	4	7	45	10	.83	60	.95	507
HW321 00603	6	3	7	45	8	.87	60	.99	585
HW321 00604	6	4	7	45	8	.91	60	1.03	683
HW321 00403	4	3	7	45	8	.91	60	1.03	747
HW321 00404	4	4	7	45	8	1.05	60	1.17	919
HW321 00203	2	3	7	45	6	1.30	60	1.42	1377
HW321 00204	2	4	7	45	6	1.30	60	1.42	1356
HW321 00103	1	3	19	55	6	1.30	60	1.42	1330
HW321 00104	1	4	19	55	6	1.43	60	1.55	1642
HW321 10103	1/0	3	19	55	6	1.35	60	1.47	1566
HW321 10104	1/0	4	19	55	6	1.47	60	1.59	1950
HW321 20103	2/0	3	19	55	6	1.47	60	1.59	1930
HW321 20104	2/0	4	19	55	4	1.59	70	1.73	2420
HW321 40103	4/0	3	19	55	6	1.67	70	1.81	2782
HW321 40104	4/0	4	19	55	4	1.87	70	2.01	3548
HW321 25003	250	3	37	65	3	1.87	70	2.01	3269
HW321 25004	250	4	37	65	4	2.04	70	2.18	4116
HW321 35003	350	3	37	65	3	2.04	70	2.18	4376
HW321 35004	350	4	37	65	3	2.29	85	2.46	5633
HW321 50003	500	3	37	65	2	2.43	85	2.60	6041
HW321 50004	500	4	37	65	2	2.67	85	2.84	7891
HW321 75003	750	3	61	80	1	2.93	85	3.10	8906
HW321 75004	750	4	61	80	1	3.22	95	3.41	11530