

CONTINUOUS CORRUGATED ARMOR 5kV, 8kV, 15kV

Aluminum Armored UL Type MV-105 HL

Construction

Conductor: Bare, compact, annealed copper conforming to ASTM B-496.

Conductor Shield: Extruded thermosetting semi-conducting layer.

Insulation: EPR as per UL 1072; AEIC CS 8-00; and ICEA S-93-639.

Insulation Shield: Extruded thermosetting semi-conducting layer followed by overlapping copper tapes (as required).

Assembly: Insulated conductors are cabled in concentric layers with ground wire(s) and interstices are filled with suitable non-hygroscopic fillers, as required. A binder tape of synthetic material assembles the core in an essentially round configuration.

Armor: Continuous corrugated aluminum sheath with no more than 0.4% trace copper providing complete protection against liquid and gas ingress. It also provides excellent mechanical protection, additional electrostatic shielding, and serves as an easy means of grounding equipment.

Jacket: Overall polyvinyl chloride jacket per UL 1072, 90°C temperature rating; low gas emission; limited flame, spread and excellent corrosion resistance.

Conductor Identification

Unshielded cable: Number coded.

Shielded cable: Colored marker rope between insulation shield and metallic copper tape shield.

Bending Radius

Fixed Position:

Unshielded: 7 x cable overall diameter.

Shielded: 12 x cable overall diameter.

During Pulling:

Unshielded: 12 x cable overall diameter.

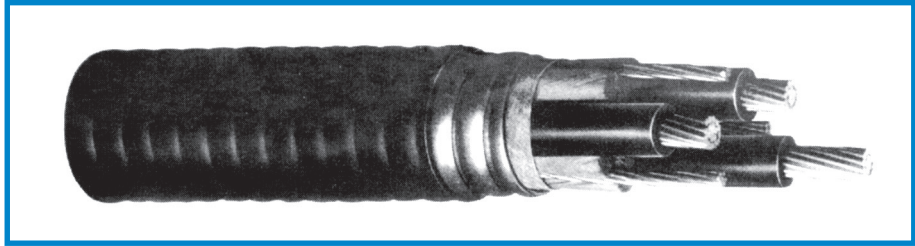
Shielded: 18 x cable overall diameter.

Specifications

- Meets ICEA S-93-639 and AEIC CS-8-00 (AEIC for shielded cables only).
- Meets UL 1072 for Medium Voltage Cables, Type MV-105.
- Meets UL 2225 for Hazardous Locations.
- Designated Type MV as per NEC Article 328.

Options

- Also available in XLP Insulation. Contact factory for details.



CUSTOM CATALOG NUMBER	SIZE	GROUND WIRE SIZE AWG	INSULATION THICKNESS (MILS)	JACKET THICKNESS (MILS)	NOM. DIA. OVER JACKET (INCHES)	AMPACITY		NET WEIGHT LBS./MFT.
	AWG					AMPS (1, 2)	AMPS (3)	
3 CONDUCTORS, 5KV, NON-SHIELDED, EPR INSULATION, WITH BARE GROUNDS								
14400	2(7w)	3x10(7w)	90	60	1.52	140	180	1340
14403	2/0(18w)	3x8(7w)	90	60	1.80	215	260	2526
14405	4/0(18w)	3x6(7w)	90	60	2.08	285	335	3188
14407	350(36w)	3x6(7w)	90	75	2.36	395	440	4732
14408	500(36w)	3x4(7w)	90	75	2.64	485	530	6558
3 CONDUCTORS, 8KV, SHIELDED, EPR INSULATION, WITH BARE GROUNDS*								
14420	2(7w)	3x10(7w)	115	60	1.89	140	180	1877
14422	2/0(18w)	3x8(7w)	115	60	2.11	215	260	2768
14424	4/0(18w)	3x6(7w)	115	75	2.35	285	335	3785
14426	350(36w)	3x6(7w)	115	75	2.64	395	440	5540
14427	500(36w)	3x4(7w)	115	85	3.34	485	530	7795
3 CONDUCTORS, 15KV, 133% SHIELDED, EPR INSULATION, WITH BARE GROUNDS								
14430	2(7w)	6(7w)	220	75	2.35	165	185	2520
14432	2/0(18w)	4(7w)	220	75	2.64	245	270	3632
14434	4/0(18w)	3(7w)	220	85	2.96	325	350	4957
14436	350(36w)	2(7w)	220	85	3.38	435	460	6848
14437	500(36w)	1(7w)	220	85	3.69	535	550	8998

***This cable may also be considered 5kV 100% and 133% shielded.**

Note: XLP Insulation available on special order.

Other sizes available on special order, consult factory.

- (1) Ampacity for cable in accordance with Table 310.71 of NEC, conductor temperature of 90°C and ambient air temperature at 40°C.
- (2) Ampacity for cable in ventilated tray in accordance with Article 392.13(A)(2) and Table 310.71 of NEC.
- (3) Ampacity for cable direct buried in accordance with table 310.83 with 90°C conductor temperature, R.H.O. 90, 100% load factor, 20°C earth temperature, one circuit.

Product Features

- UL approved cables Type MV-105, 5kV and 15kV.
- UL, AEIC and ICEA approved insulated conductors.
- Cables pass UL 1685 and IEEE 383 vertical tray fire tests at 70,000 BTU/hr, ICEA T-29-520 fire test at 210,000 BTU/hr, IEC 332-3 category A fire test, IEEE 1202 and CSA FT4.
- Cables are American Bureau of Shipping (ABS) listed as CWC MC Type MV/MC.
- Cables exhibit a low temperature rating in excess of -25°C impact and -40°C bend with suitable precautions.
- Temperature rating of 105°C.
- 130°C emergency rating and 250°C short circuit rating.
- Continuous, impervious metallic sheath corrugated for flexibility, prevents ingress of moisture, gases and liquids.
- Aluminum sheath cross-section exceeds requirements of the NEC Section 250.122 for grounding conductor.
- Excellent mechanical & physical properties.
- Sunlight and oil resistant jacket.
- Suitable for direct burial, use in cable tray and embedment in concrete.

Custom Cable Corp.

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