



• Application

The MV 105 Cable, designed for wet or dry environments, operates within a temperature range of 105°C for regular use, 140°C for emergency overload situations, and 250°C for short circuits. It's versatile for installation in conduits, ducts, or aerial setups, provided proper support by a Messenger.

• Construction

Conductor: Utilizes Class B compressed concentric strand or soft drawn annealed copper per ASTM B3, or Class A or B compressed concentric stranded aluminum alloy 1350 per ASTM B 231. Stranded conductors are water-blocked with conductor filling compound.

Conductor Shield: Consists of an extruded thermosetting semiconducting shield that can be easily stripped from the conductor and bonded to the insulation.

Insulation: Insulation material is Ethylene Propylene Rubber (EPR).
Insulation Shield: Features an extruded thermosetting semiconducting shield with controlled adhesion to the insulation, providing the required balance between electrical integrity and ease of stripping.

Metallic Shield: The metallic shield is a flat, uncoated 5-mil thick copper tape helically applied with a minimum 20% overlap. A Mylar ribbon is longitudinally applied under the copper tape shield for phase identification - 1C w/Red, 1C w/Blue, and 1C w/None.

Grounding Conductors: Includes three bare stranded copper conductors, one in each interstice, for proper grounding.

Fillers: Non-hygroscopic fillers are used to form a firm and cylindrical cable core.

Binder Tape: A binder tape is applied to maintain core symmetry and mechanical stability.

Jacket: The jacket is black, flame retardant Polyvinyl Chloride (PVC).

• Specification

- AEIC CS8, Specifications for Shielded Power Cable, 5-46kV
- ICEA S-93-639, 5-46 kV Shielded Power Cable
- ICEA S-97-682, Utility Shielded Power Cable Rated 5-46 kV
- UL 1072 MV-105
- IEEE- IEEE 383 Flame Test
- For 105°C continuous, 140°C emergency, 250°C short-circuit operation.
- CSA Standard C68.5-07 File # 257759 Primary Shielded and Concentric Neutral Cable for Distribution

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

35KV CU 100% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
1/0	345	3	8	0.364	1.11	1.18	2.88	3761	21	195	215
2/0	345	3	8	0.408	1.15	1.22	2.97	4151	21	220	245
3/0	345	3	7	0.458	1.2	1.27	3.08	4662	22	250	285
4/0	345	3	7	0.515	1.26	1.33	3.21	5245	23	285	325
250	345	3	7	0.561	1.31	1.38	3.32	5762	24	310	360
350	345	3	6	0.664	1.41	1.48	3.54	7060	25	375	435
500	345	3	5	0.794	1.54	1.63	3.86	9015	27	450	535

35KV CU 133% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
1/0	420	3	8	0.364	1.26	1.33	3.21	4356	23	195	215
2/0	420	3	8	0.408	1.3	1.38	3.31	4761	24	220	245
3/0	420	3	7	0.458	1.35	1.43	3.41	5291	24	250	285
4/0	420	3	7	0.515	1.41	1.48	3.54	5895	25	285	325
250	420	3	7	0.561	1.46	1.54	3.65	6430	26	310	360
350	420	3	6	0.664	1.57	1.65	3.91	7854	28	375	435
500	420	3	5	0.794	1.7	1.78	4.19	9775	30	450	535

35KV AL 100% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
1/0	345	3	10	0.364	1.11	1.18	2.88	3031	21	150	170
2/0	345	3	8	0.408	1.15	1.22	2.97	3303	21	170	190
3/0	345	3	8	0.458	1.2	1.27	3.08	3555	22	195	220
4/0	345	3	8	0.515	1.26	1.33	3.21	3859	23	220	255
250	345	3	8	0.561	1.31	1.38	3.32	4132	24	245	280
350	345	3	7	0.664	1.41	1.48	3.54	4785	25	295	345
500	345	3	6	0.794	1.54	1.63	3.86	5771	27	355	425

● Technical Parameters

35KV AL 133% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
1/0	420	3	10	0.364	1.26	1.33	3.21	3626	23	150	170
2/0	420	3	8	0.408	1.3	1.38	3.31	3914	24	170	190
3/0	420	3	8	0.458	1.35	1.43	3.41	4184	24	195	220
4/0	420	3	8	0.515	1.41	1.48	3.54	4509	25	220	255
250	420	3	8	0.561	1.46	1.54	3.65	4800	26	245	280
350	420	3	7	0.664	1.57	1.65	3.91	5580	28	295	345
500	420	3	6	0.794	1.7	1.78	4.19	6531	30	355	425