Application

Alumoweld steel wire finds use as an overhead ground wire, shielding transmission lines against lightning damage. It is also employed by power utilities and manufacturers in formed wire and optical ground wire fields.

Advantage

Corrosion Resistance: Aluminum clad steel wire outperforms other materials in corrosive environments, leading to significant cost savings on maintenance and replacement. Compared to pure aluminum wire, it offers substantial durability benefits.
Corrosion Protection Mechanism: Its excellent corrosion resistance is achieved through a thick layer of pure aluminum, providing a strong barrier against corrosion. This ensures consistent strength and conductivity, even in harsh conditions.
Strength and Durability: The strong bond between the aluminum cladding and steel core prevents cracking or flaking, enhancing the wire's longevity and reliability.
Excellent Performance: With its high strength, aluminum clad steel wire supports longer spans, reduces sag, and withstands heavier loads, especially during storms.
Weight Efficiency: Despite its strength, it remains lightweight due to its aluminum cladding, making installation easier and reducing stresses on supporting structures.
Overall, aluminum clad steel wire offers a cost-effective solution with its lightweight design, durability, and corrosion resistance.

Construction

Concentric-stranded conductors made from round aluminum clad steel core wires.

Specification

-ASTM B415 Standard Hard-Drawn Aluminum-Clad Steel Wire
-ASTM B416 Standard Concentric-Lay-Stranded Aluminum-Clad Steel Conductors

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 Rhineland 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

Size	Calculated Cross Section Area	No.of Single Wires	Approx. Overall Diameter		Approx. Weight	Rated Strength	Coeff. of Linear Expansion	Max. D.C. Resistance at 20°C
			Single Wire	Conductor				
-	mm²	-	mm	mm	kg/km	kN	$\times10^{-6}$/°C	Ω/km
3×5AWG	50.32	3	4.62	9.96	334.1	54.42	12.9	1.6990
3×6AWG	39.00	3	4.11	8.87	265.0	45.74	12.9	2.1420
3×7AWG	31.65	3	3.67	7.90	210.1	38.36	12.9	2.7010
3×8AWG	25.10	3	3.26	7.03	166.7	32.06	12.9	3.4060
3×9AWG	19.90	3	2.91	6.26	132.2	25.43	12.9	4.2940
3×10AWG	15.78	3	2.59	5.58	104.8	20.13	12.9	5.4150
7×5AWG	117.40	7	4.62	13.90	781.1	120.27	12.9	0.7426
7×6AWG	93.10	7	4.11	12.40	619.5	101.14	12.9	0.9198
7×7AWG	73.87	7	3.67	11.00	491.1	84.81	12.9	1.1600
7×8AWG	58.56	7	3.26	9.87	389.6	70.88	12.9	1.4630
7×9AWG	46.44	7	2.91	8.71	308.9	56.20	12.9	1.8440
7×10AWG	36.83	7	2.59	7.76	245.1	44.58	12.9	2.3250
7×11AWG	29.21	7	2.30	6.91	194.4	35.35	12.9	2.9320
7×12AWG	23.16	7	2.05	6.16	154.2	28.03	12.9	3.6970
19×5AWG	318.70	19	4.62	23.10	2129.0	326.39	12.9	0.2698
19×6AWG	252.70	19	4.11	20.60	1688.0	274.55	12.9	0.3402
19×7AWG	200.40	19	3.67	18.30	1339.0	230.18	12.9	0.4290
19×8AWG	158.90	19	3.26	16.30	1062.0	192.41	12.9	0.5409
19×9AWG	126.10	19	2.91	14.50	842.0	152.58	12.9	0.6821
19×10AWG	99.96	19	2.59	12.90	667.7	121.00	12.9	0.8601
37×5AWG	620.60	37	4.62	32.30	4170.0	635.43	12.9	0.1394
37×6AWG	492.20	37	4.11	28.80	3307.0	534.85	12.9	0.1757
37×7AWG	390.30	37	3.67	25.70	2623.0	448.09	12.9	0.2216
37×8AWG	309.50	37	3.26	22.90	2080.0	374.67	12.9	0.2794
37×9AWG	245.50	37	2.91	20.30	1649.0	279.11	12.9	0.3523
37×10AWG	194.70	37	2.59	17.90	1308.0	235.61	12.9	0.4443