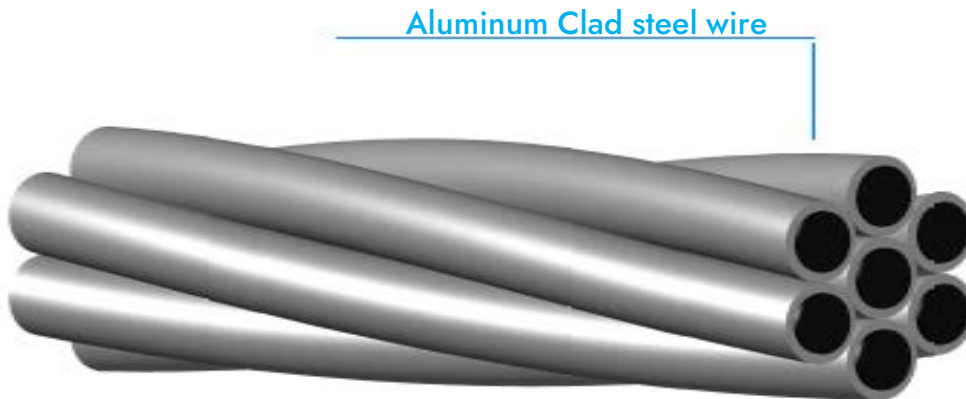


## ALUMINUM CLAD STEEL STRANDED CONDUCTORS

**Aluminum Clad steel wire (ACS):** Aluminum-clad steel wire, commonly abbreviated as AW or AS or AC, is an electrical conductor composed of an inner steel core and outer Aluminum cladding. Aluminum clad steel wire is a bimetallic in which aluminum covers on the steel core continuously and evenly. The ACS Stranded Conductors are used as Earthwires, Shieldwires or core of Aluminum Conductors.

### Construction

Aluminum clad steel Wires, concentrically stranded over a central wire of Aluminum clad steel wire.



- Aluminum Clad Steel Stranded wires can be customized for strength and conductivity on request as per customer requirements.
- Aluminum Clad Invar stranded conductors can be customized on request as per customer requirements.

## ALUMINUM CLAD STEEL CONDUCTOR (ACS) - EN 50182

Code Name	Sectional Area	Stranding		Overall Diameter of Conductor	Weight	D C Resistance at 20°C	Rated Strength
		No. of Wires	Individual wire diameter				
	mm <sup>2</sup>	No.	mm	mm	Kg/km	Ω/Km	KN
24-A20SA	24.2	7	2.10	6.30	161.5	3.5364	32.49
34-A20SA	34.4	7	2.50	7.50	229.0	2.4953	46.04
49-A20SA	49.5	7	3.00	9.00	329.7	1.7328	66.30
66-A20SA	65.8	19	2.10	10.50	441.0	1.3102	88.18
93-A20SA	93.3	19	2.50	12.50	624.9	0.9245	124.98
117-A20SA	117.0	19	2.80	14.00	783.9	0.7370	156.77
147-A20SA	147.1	37	2.25	15.80	989.2	0.5881	197.13
182-A20SA	181.6	37	2.50	17.50	1 221.2	0.4764	243.38
243-A20SA	242.5	61	2.25	20.30	1 636.1	0.3579	325.00
299-A20SA	299.4	61	2.50	22.50	2 019.8	0.2899	401.24

**ALUMINUM CLAD STEEL CONDUCTOR (ACS) - ASTM B416**

Size Designation	Sectional Area	Stranding		Overall Diameter of Conductor	Weight	D C Resistance at 20°C	Rated Strength
		No. of Wires	Individual wire diameter				
	mm <sup>2</sup>	No.	AWG	mm	Kg/km	Ω/Km	KN
37 No. 5 AWG	620.6	37	4.62	32.26	4169.82	0.1393	635.21
37 No. 6 AWG	492.2	37	4.11	28.70	3306.69	0.1757	534.68
37 No. 7 AWG	390.3	37	3.67	25.65	2622.14	0.2216	447.94
37 No. 8 AWG	309.5	37	3.26	22.83	2080.45	0.2794	374.54
37 No. 9 AWG	245.5	37	2.91	20.35	1648.88	0.3524	297.01
37 No. 10 AWG	194.6	37	2.59	18.11	1308.09	0.4442	235.53
19 No. 5 AWG	318.7	19	4.62	23.11	2128.07	0.2698	326.28
19 No. 6 AWG	252.7	19	4.11	20.57	1687.57	0.3402	274.46
19 No. 7 AWG	200.5	19	3.67	18.31	1338.60	0.4292	230.11
19 No. 8 AWG	159.0	19	3.26	16.31	1061.80	0.5410	192.34
19 No. 9 AWG	126.1	19	2.91	14.53	842.00	0.6821	152.53
19 No. 10 AWG	99.9	19	2.59	12.93	667.74	0.8603	120.95
7 No. 5 AWG	117.4	7	4.62	13.87	781.14	0.7428	120.24
7 No. 6 AWG	93.1	7	4.11	12.34	619.52	0.9197	101.11
7 No. 7 AWG	73.9	7	3.67	11.00	491.09	1.1598	84.78
7 No. 8 AWG	58.6	7	3.26	9.78	389.60	1.4627	70.86
7 No. 9 AWG	46.4	7	2.91	8.71	308.94	1.8443	56.18
7 No. 10 AWG	36.8	7	2.59	7.77	245.10	2.3256	44.57
7 No. 11 AWG	29.2	7	2.30	6.91	194.35	2.9326	35.34
7 No. 12 AWG	23.2	7	2.05	6.15	154.17	3.6977	28.03
3 No. 5 AWG	50.3	3	4.62	9.96	334.09	1.6986	54.40
3 No. 6 AWG	39.9	3	4.11	8.86	265.04	2.1418	45.73
3 No. 7 AWG	31.6	3	3.67	7.90	210.13	2.7009	38.35
3 No. 8 AWG	25.1	3	3.26	7.04	166.67	3.4057	32.05
3 No. 9 AWG	19.9	3	2.91	6.27	132.16	4.2948	25.42
3 No. 10 AWG	15.8	3	2.59	5.59	104.81	5.4169	20.16