

PHYSICAL AND ELECTRICAL Characteristics

CONDUCTOR SIZE AWG	DIAMETER		BREAKING LOAD		WEIGHT		RESISTANCE ①		CROSS SECTION	
	Inches	mm	lbs.	kN	lbs./kft	kg/km	Ohm/kft	Ohm/km	sq.Inches	mm ²

Wire

No. 4	0.2043	5.19	5,081	22.6	93.63	139.34	1.222	4.009	0.03278	21.15
No. 5	0.1819	4.62	4,290	19.1	74.25	110.50	1.541	5.056	0.02599	16.77
No. 6	0.1620	4.12	3,608	16.0	58.88	87.62	1.943	6.375	0.02061	13.30
No. 7	0.1443	3.67	3,025	13.5	46.69	69.48	2.450	8.038	0.01635	10.55
No. 8	0.1285	3.26	2,529	11.3	37.03	55.11	3.089	10.135	0.01297	8.367
No. 9	0.1144	2.91	2,005	8.9	29.37	43.71	3.896	12.783	0.01028	6.632
No. 10	0.1019	2.59	1,590	7.1	23.29	34.66	4.912	16.116	0.00816	5.261
No. 11	0.0907	2.30	1,261	5.6	18.47	27.49	6.194	20.322	0.00646	4.168
No. 12	0.0808	2.05	1,000	4.5	14.65	21.80	7.811	25.627	0.00513	3.310

3-wire strand

3	No. 5	0.392	9.96	12,230	54.5	224.5	334.1	0.5177	1.699	0.07800	50.32
3	No. 6	0.349	8.86	10,280	45.7	178.1	265.0	0.6528	2.142	0.06185	39.90
3	No. 7	0.311	7.90	8,621	38.4	141.2	210.7	0.8232	2.101	0.04905	31.64
3	No. 8	0.277	7.04	7,206	32.1	112.0	166.7	1.038	3.406	0.03890	25.10
3	No. 9	0.247	6.27	5,715	25.4	88.81	132.2	1.309	4.295	0.03085	19.90
3	No. 10	0.220	5.59	4,532	20.2	70.43	104.8	1.651	5.417	0.02446	15.78

7-wire strand

7	No. 5	0.546	13.87	27,030	120.2	524.9	781.1	0.2264	0.7428	0.1820	117.4
7	No. 6	0.486	12.34	22,730	101.1	416.3	619.5	0.2803	0.9197	0.1443	93.09
7	No. 7	0.433	11.00	19,060	84.8	330.0	491.1	0.3535	1.160	0.1145	73.87
7	No. 8	0.385	9.78	15,930	70.9	261.8	389.6	0.4458	1.463	0.09077	58.56
7	No. 9	0.343	8.71	12,630	56.2	207.6	308.9	0.5621	1.844	0.07198	46.44
7	No. 10	0.306	7.77	10,020	44.6	164.7	245.1	0.7088	2.326	0.05708	36.82
7	No. 11	0.272	6.91	7,945	35.3	130.6	194.4	0.8938	2.933	0.04523	29.18
7	No. 12	0.242	6.15	6,301	28.0	103.6	154.2	1.1270	3.698	0.03590	23.16

① DC resistance at 20°C

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Intral Inc. hold a **ISO 9001:2008** certificate





wire and stranded cable

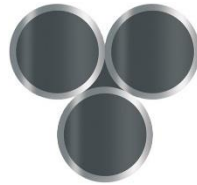
APPLICATIONS

INTRAL's single-end wire is used by the world's leading manufacturers of overhead fiber-optic ground wire (OPGW). INTAL also manufactures aluminum clad steel cable in three and seven strand configurations.

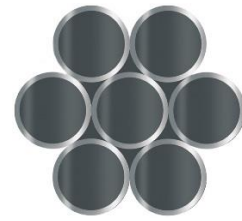
INTRAL's aluminum-clad steel cable is well known for its combination of corrosion resistance, high strength and superior electrical conductivity. These properties make it an excellent choice either as overhead ground wire or as guy strand. It can also be used as core strand in ACSR conductors.



WIRE



3-WIRE STRAND



7-WIRE STRAND

COMMON SPECIFICATIONS

- ASTM B-415 Hard Drawn Aluminum-Clad Steel Wire
- ASTM B-502 Aluminum-Clad Steel Core Wire for Aluminum Conductors, ACSR
- ASTM B-416 Concentric-Lay-Stranded Aluminum-Clad Steel Conductor
- ASTM B-549 Concentric-Lay-Stranded Aluminum Conductors, ACSR/AW

CONSTRUCTION

Intral's wire consists of a central steel core with a layer of high-conductivity aluminum extruded over it. The aluminum layer thickness is at least 10% of the wire radius and approximately 25% of the cross-sectional area.

Intral's stranded cable consists of three (3) or seven (7) strands of concentrically stranded wires with a left-hand lay, unless otherwise specified.

Each individual strand is of the same diameter.
