

# American Wire Gauge Conductor Chart



AWG	STRANDING	TYPE STRANDING	DIAMETER <sup>(4)</sup>		AREA		WEIGHT		D.C. RESISTANCE 20°C <sup>(2)</sup>				BREAK STR. LBS
			in	mm	circ. mils	sq. mm	lbs/Mft	kg/km	TIN COATING <sup>(3)</sup>		BARE OF SILVER COATING		
									Ω/Mft	Ω/km	Ω/Mft	Ω/km	
32	7/40	Co or Bu	.0096	.254	100	.051	.21	.31	176.00	577.00	164.00	538.00	1.986
30	Solid 7/38	-	.010	.254	100	.051	.30	.45	113.00	371.00	104.00	340.00	3.157
		Bu	.012	.305	112	.057	.35	.52	106.00	348.00	92.60	303.00	
28	Solid 7/36	-	.01264	.321	159	.081	.48	.72	70.80	232.00	65.30	214.00	5.020
		Co	.015	.381	175	.089	.55	.82	67.50	221.00	59.30	194.00	
27	Solid 7/35	-	.0142	.361	202	.102	.61	.91	55.60	182.00	51.40	169.00	6.331
		Co or Bu	.017	.432	220	.111	.69	1.04	53.80	176.00	-	-	
26	Solid 7/34 10/36 19/38	-	.016	.404	253	.128	.77	1.14	44.50	146.00	41.00	135.00	7.983
		Co or Bu	.019	.483	278	.141	.87	1.29	42.50	139.00	37.30	122.00	
		Bu	.0193	.490	250	.127	.78	1.15	47.30	155.00	40.40	133.00	
		Bu or Co	.021	.533	304	.154	.97	1.44	38.90	128.00	34.10	112.00	
24	Solid 7/32 16/36 19/36	-	.0201	.511	404	.205	1.22	1.82	27.20	89.20	25.70	84.20	12.690
		Co or Bu	.024	.610	448	.227	1.38	2.05	25.70	84.20	23.10	75.90	
		Bu	.024	.610	400	.201	1.25	1.64	29.50	96.80	27.50	90.20	
		Co or Bu	.025	.635	475	.241	1.48	2.20	24.90	81.70	21.80	71.60	
22	Solid 7/30 19/34	-	.025	.643	643	.324	1.94	2.89	16.70	54.80	16.20	53.20	19.430
		Co or Bu	.030	.762	700	.355	2.19	3.26	16.60	54.40	14.80	48.60	
		Bu or Eq	.0315	.800	754	.382	2.35	3.50	15.50	50.80	13.80	45.10	
20	Solid 7/28 10/30 19/32 26/34	-	.032	.813	1,020	.519	3.10	4.61	10.50	34.40	10.10	33.20	30.890
		Co or Bu	.038	.965	-	.562	3.49	5.19	10.30	33.80	9.33	30.60	
		Bu	.037	.940	1,111	.507	3.14	4.67	11.40	37.40	10.40	34.00	
		Co, Bu or Eq	.040	1.02	1,000	.616	3.84	5.71	9.48	31.10	8.53	28.00	
		Bu	.039	.940	1,216	.523	3.28	4.88	11.30	37.10	-	-	
19	Solid	-	.0359	.912	1,032	.653	3.90	5.80	-	-	8.05	26.40	38.950
18	Solid 7/26 16/30 19/30 41/34	-	.0403	1.024	1,290	.823	4.92	7.32	6.77	22.20	6.39	21.00	49.120
		Co or Bu	.048	1.22	1,620	.897	5.55	8.26	6.45	21.20	5.55	19.20	
		Bu	.0475	1.207	1,770	.810	5.01	7.45	7.15	23.40	6.48	21.30	
		Co, Bu or Eq	.050	1.27	1,600	.963	5.95	8.85	6.10	20.00	5.46	17.90	
		Bu	.049	1.244	1,900	.824	5.09	7.08	7.08	23.20	6.60	21.60	
16	Solid 19/294 19/0117 26/30 65/34	-	.0508	1.29	1,627	1.31	7.81	11.60	4.47	14.70	4.16	13.60	78.100
		Bu or Eq	.057	1.45	2,580	1.23	7.52	11.20	4.82	15.80	4.27	14.00	
		Bu	.0585	1.50	2,426	1.32	8.02	11.90	4.39	14.40	4.13	13.50	
		Bu	.0606	1.54	2,601	1.32	8.15	12.10	4.39	14.40	3.99	13.10	
		Bu	.060	1.52	2,600	1.31	8.20	11.90	4.47	14.70	4.16	13.60	
14	Solid 7/0242 19/274 19/0147 41/30	-	.0641	1.63	2,581	2.08	12.4	18.50	2.68	8.79	2.52	8.28	124.200
		Co	.073	1.85	4,110	2.08	12.7	18.90	-	-	2.61	8.56	
		Co, Eq or Un	.071	1.80	4,100	1.94	12.1	18.00	3.05	10.00	2.71	8.88	
		Bu	.074	1.88	3,831	2.08	12.7	18.90	2.73	-	2.61	8.56	
		Bu	.077	1.96	4,106	2.08	12.9	19.20	2.81	9.22	2.53	8.30	
12	Solid 7/0305 19/254 19/0185 65/30	-	.0808	2.05	4,100	3.31	19.8	29.50	1.69	5.54	1.59	5.21	197.500
		Co	.092	2.34	6,530	3.30	20.2	30.10	-	-	1.64	5.38	
		Co, Eq or Un	.0905	2.299	6,512	3.08	19.4	28.90	1.87	6.13	1.70	5.59	
		Cu	.0925	2.35	6,088	3.30	20.2	30.10	-	-	1.64	5.25	
		Bu	.094	2.388	6,503	3.29	20.8	31.10	1.82	5.97	1.64	5.25	
10	Solid 7/0385 19/0234 37/0169 105/30	-	.1019	2.588	6,500	5.26	31.4	46.80	-	-	1.00	3.28	314.500
		Co	.116	2.95	10,380	5.25	32.0	47.60	-	-	1.00	3.28	
		Bu	.117	2.97	10,376	5.27	32.0	47.60	-	-	.98	3.21	
		Co	.112	2.84	10,404	4.74	29.2	43.40	-	-	1.25	4.10	
		Bu	.126	3.20	9,361	5.32	33.8	49.20	1.10	3.61	.99	3.24	
8	7/0486 19/0295 133/29 168/30	Bu	.146	3.71	10,500	8.38	50.1	74.50	-	-	.65	2.13	
		Bu or Eq	.144	3.66	16,534	8.38	50.0	74.40	-	-	.65	2.13	
		Ro 19 x 7/29	.169	4.293	16,535	8.61	54.0	80.40	.71	2.33	-	-	
		Ro 7 x 24/30	.174	4.42	16,983	8.51	53.4	79.00	.70	2.30	-	-	
6	19/0374 133/27 266/30	Bu	.188	4.775	16,800	13.33	81.1	121.00	-	-	.40	1.30	
		Ro 19 x 7/27	.213	5.41	26,576	13.60	84.1	125.00	.43	1.41	-	-	
		Ro 7 x 38/30	.222	5.64	26,818	13.49	83.2	124.00	.44	1.44	-	-	
4	133/25 420/30	Ro 19 x 7/25	.257	6.53	26,600	21.61	135.0	201.00	.29	.95	-	-	
		Ro 7 x 60/30	.270	6.850	42,615	21.29	140.0	208.00	.28	.92	-	-	
2	665/30	Ro 19 x 35/30	.338	8.59	42,000	33.72	213.0	317.00	.18	.59	-	-	

(1) Bu - Bunched; Co - Concentric; Eq - Equilay; Ro - Rope; Un - Unilay  
 (2) Typical D.C. Resistance values for uninsulated wires. Multiply by 1.04 for typical values after insulation  
 (3) Values are for tinned, heavy tinned, prefused, overcoated or topcoated conductors  
 (4) Does not meet UL conductor stranding requirements

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