

## 1-2 Stranded Wire ASTM B416-93

Size Nos/ AWG	Diameter		Stranded diameter		Breaking load		Weight		Resistance at 20°C		Cross section		
	in.	mm	in.	mm	lb.	kg	lb./1,000 ft.	kg/km	Ω/1,000 ft.	Ω/km	C mils	in <sup>2</sup>	mm <sup>2</sup>
37/5	0.1819	4.620	1.27	32.36	142,800	64,770	2,802	4,170	0.04247	0.1394	1,225,000	0.9619	620.6
37/6	0.1620	4.115	1.13	28.70	120,200	54,520	2,222	3,307	0.05356	0.1758	971,300	0.7629	492.2
37/7	0.1443	3.665	1.01	25.65	100,700	45,670	1,762	2,622	0.06754	0.2216	770,300	0.6050	390.3
37/8	0.1285	3.264	0.899	22.83	84,200	38,190	1,398	2,080	0.08516	0.2794	610,900	0.4798	309.5
37/9	0.1144	2.906	0.801	20.35	66,770	30,250	1,108	1,649	0.1074	0.3524	484,400	0.3805	245.5
37/10	0.1019	2.588	0.713	18.11	52,950	24,010	879.0	1,308	0.1354	0.4443	384,200	0.3017	194.6
19/5	0.1819	4.620	0.910	23.11	73,350	33,270	1,430	2,128	0.08224	0.2699	628,900	0.4940	318.7
19/6	0.1620	4.114	0.810	20.57	61,700	27,980	1,134	1,688	0.1037	0.3403	498,800	0.3917	252.7
19/7	0.1443	3.665	0.721	18.31	51,730	23,460	899.5	1,339	0.1308	0.4292	395,500	0.3107	200.4
19/8	0.1285	3,264	0.642	16.31	43,240	19,610	713.5	1,062	0.1649	0.5411	313,700	0.2464	159.0
19/9	0.1144	2.906	0.572	14.53	34,290	15,550	565.8	842.0	0.2079	0.6821	248,800	0.1954	126.1
19/10	0.1019	2.588	0.509	12.93	27,190	12,330	448.7	667.8	0.2622	0.8603	197,300	0.1549	99.93
7/5	0.1819	4,620	0.546	13.87	27,030	12,260	524.9	781.2	0.2264	0.7428	231,700	0.1820	117.4
7/6	0.1620	4.115	0.486	12.34	22,730	10,310	416.3	619.5	0.2803	0.9197	183,800	0.1443	93.09
7/7	0.1443	3.665	0.433	11.00	19,060	8,645	330.0	491.1	0.3535	1.1598	145,700	0.1145	73.87
7/8	0.1285	3,264	0.385	9.779	15,930	7,225	261.8	389.6	0.4458	1.4627	115,600	0.09077	58.56
7/9	0.1144	2.906	0.343	8.712	12,630	5,728	207.6	308.9	0.5621	1.8442	91,650	0.07198	46.44
7/10	0.1019	2.588	0.306	7.772	10,020	4,544	164.7	245.1	0.7088	2.3255	72,680	0.05708	36.82
7/11	0.0907	2.304	0.272	6.909	7,945	3,603	130.6	194.4	0.8938	2.9325	57,590	0.04523	29.18
7/12	0.0808	2.052	0.242	6.147	6,301	2,858	103.6	154.2	1.127	3.6976	45,710	0.03590	23.16
3/5	0.1819	4.620	0.392	9.957	12,230	5,547	224.5	334.1	0.5177	1.6985	99,310	0.07800	50.32
3/6	0.1620	4.115	0.349	8.864	10,280	4,662	178.1	265.0	0.6528	2.1418	78,750	0.06185	39.90
3/7	0.1443	3.665	0.311	7.899	8,621	3,910	141.2	210.7	0.8232	2.1009	62,450	0.04905	31.64
3/8	0.1285	3.264	0.277	7.036	7,206	3,268	112.0	166.7	1.038	3.4057	49,530	0.03890	25.10
3/9	0.1144	2.907	0.247	6.274	5,715	2,592	88.81	132.2	1.309	4.2947	39,280	0.03085	19.90
3/10	0.1019	2.588	0.220	5.588	4,532	2,055	70.43	104.8	1.651	5.4168	31,150	0.02446	15.78

Coefficient of linear expansion: 0.000 0007 2/deg F (12.96 x 10<sup>-6</sup>/deg C)  
 Modulus of elasticity: 23,500 ksi (16,520 kg/mm<sup>2</sup>)  
 Temperature coefficient of resistance: 0.0020/deg F (0.0036/deg C)