

### 3-1 ASTM B502-93 (Single Wire)

Diameter		Stress at 1.0% extension		Ultimate tensile strength		Resistivity at 68°F	Density lb./in <sup>3</sup>
in.	mm	ksi	kg/mm <sup>2</sup>	ksi	kg/mm <sup>2</sup>		
0.0770 ~ 0.1289	1.956 ~ 3.274	175	123	195	137	51.01 ohm-cmil/ft.	0.2381 { 6.590 } { g/cm <sup>3</sup> }
0.1290 ~ 0.1369	3.275 ~ 3.477	170	120	190	134		
0.1370 ~ 0.1443	3.478 ~ 3.665	165	116	185	130		
0.1444 ~ 0.1549	3.666 ~ 3.934	160	112	180	127		
0.1550 ~ 0.1620	3.935 ~ 4.115	160	112	175	123		
0.1621 ~ 0.1729	4.116 ~ 4.392	155	109	170	120		
0.1730 ~ 0.1819	4.393 ~ 4.620	150	105	165	116		
0.1820 ~ 0.1880	4.621 ~ 4.775	145	102	160	112		

Resistivity 51.01 ohm-cmil/ft. at 68°F = 0.08480 ohm-mm<sup>2</sup>/m at 20°C = Conductivity 20.3% IACS at 20°C

Minimum aluminum thickness: 10% of nominal wire radius