Metric Conversions

LS Cable & System U.S.A., Inc. uses the U.S. customary system of weights and measures as well as the metric equivalents. If you need help calculating these figures, please consult the conversion charts below.

INTO METRIC CONVERSIONS

	If You Know	Multiply By	To Get
Length	milli-inch (mil)	25.40	microns (µm)
	inches (in)	25.40	millimeters (mm)
	inches (in)	2.54	centimeters (cm)
	feet (ft)	304.8	meters (m)
	yards (yd)	0.91	meters (m)
	miles (mi)	1.61	kilometers (km)
Area	sq. inches (in^2)	6.45	sq. centimeters (cm^2)
	sq. feet (ft^2)	0.09	sq. meters (m^2)
	sq. yards (yd^2)	0.84	sq. meters (m^2)
	sq. miles (mi^2)	2.59	sq. kilometers (km^2)
	acres	0.40	hectares (ha)
Mass (Weight)	ounces (oz)	28.35	grams (g)
	pounds (lbs)	0.45	kilograms (kg)
	short tons	0.91	tons (t)
Temperature	Fahrenheit (°F)	Subtract 32, then multiply by 0.56	Celsius (°C)
Mass per Length	pounds per 1,000 feet (lbs/kft)	1.49	kilograms per kilometers (kg/km)
Force	pounds force (lbf)	4.45	newtons (N)
	foot-pounds (ft-lbs)	1.36	newtons-meters (N-m)
	pounds force per inches (lbf/in)	1.75	newtons per centimeters (N/cm)
	pounds per sq. inches (PSI)	6.89	kiloPascals (kPa)

OUT OF METRIC CONVERSIONS

	If You Know	Multiply By	To Get
Length	microns (µm)	0.04	milli-inch (mil)
	millimeters (mm)	0.04	inches (in)
	centimeters (cm)	0.39	inches (in)
	meters (m)	3.28	feet (ft)
	meters (m)	1.09	yards (yd)
	kilometers (km)	3,280.84	feet (ft)
	kilometers (km)	0.62	miles (mi)
Area	sq. centimeters (cm^2)	0.16	sq. inches (in^2)
	sq. meters (m^2)	1.20	sq. yards (yd^2)
	sq. kilometers (km^2)	0.39	sq. miles (mi^2)
	hectares (ha)	2.47	acres
Weight	grams (g)	0.04	ounces (oz)
	kilograms (kg)	2.20	pounds (lbs)
	tons (t)	1.10	short tons
Temperature	Celsius (°C)	Multiply by 1.80, then add 32	Fahrenheit (°F)
Weight per Unit Length	kilograms per kilometers (kg/km)	0.67	pounds per 1,000 feet (lbs/kft)
Force	newtons (N)	0.22	pounds force (lbf)
	newtons-meters (N-m)	0.74	foot-pounds (ft-lbs)
	newtons per centimeters (N/cm)	0.57	pounds force per inches (lbf/in)
	kilo Pascals (kPa)	0.15	pounds per sq. inches (PSI)

American Wire Gauge Sizes

The table below shows various data for copper and aluminum stranded conductors.

AMERICAN WIRE GAUGE (AWG) SIZES

AWG/ kcmil	Stranding[2]	Diameter		Copper DC Resistance @ 20°C		Aluminum DC Resistance @ 20°C	
		in	mm	(Ω/kft)	(Ω/km)	(Ω/kft)	(Ω/km)
1,000	61	1.117	28.372	0.0106	0.0348	0.0173	0.0568
750	61	0.968	24.587	0.0141	0.0462	0.0231	0.0758
600	61	0.866	21.996	0.0177	0.0581	0.0289	0.0948
500	37	0.789	20.041	0.0212	0.0695	0.0035	0.1140
400	37	0.706	17.932	0.0264	0.0866	0.0434	0.1420
350	37	0.661	16.789	0.0302	0.0991	0.0495	0.1620
300	37	0.611	15.519	0.0353	0.1160	0.0578	0.1870
250	37	0.558	14.173	0.0423	0.1390	0.0694	0.2280
0000 (4/0)	19	0.512	13.005	0.0500	0.1640	0.0820	0.2690
000 (3/0)	19	0.456	11.582	0.0630	0.2070	0.1030	0.3380
00 (2/0)	19	0.405	10.287	0.7950	0.2610	0.1300	0.4270
0 (1/0)	19	0.362	9.195	0.1000	0.3280	0.1640	0.5380
1	19	0.322	8.179	0.1270	0.5220	0.2070	0.6790
2	7	0.283	7.188	0.1590	0.6590	0.2610	0.8560
4	7	0.225	5.715	0.2530	1.0500	0.4160	1.3600
6	7	0.178	4.521	0.4030	1.3200	0.6610	2.1700
8[1]	19	0.142	3.607	0.6400	2.1000	1.0500	3.4400
10	7	0.126	3.200	1.0200	3.3500	1.6700	5.4800
12	7	0.113	2.870	1.6300	5.3500	2.6700	8.7600
14	7	0.071	1.803	2.5800	8.4600	4.2200	13.8000
16	7	0.0576	1.463	4.1000	13.4000	6.7100	22.0000
18	7	0.0456	1.158	6.5400	21.4000	10.7000	35.1000
20	7	0.0363	0.922	10.3000	33.8000	16.9000	55.4000
22	7	0.0288	0.732	16.4000	53.8000	-	-
24	-	0.0228	0.579	26.1000	85.6000	-	-
25	-	0.0179	0.455	106.2000	32.3700	-	-
26	-	0.0159	0.405	133.9000	40.8100	-	-
27	-	0.0142	0.361	168.9000	51.4700	-	-
28		0.0126	0.321	212.9000	64.9000	-	-

[1] *8AWG, Combination Unilay-Stranded, Per ASTM B787*
[2] *24AWG through 1000kcmil, Reverse Concentric Compressed Class B, ASTM B8*

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