

## Metric Conversions

Table 11: Temperature Conversion Chart and Formula

Table 12: Distance and Weight Conversion Formulas, Table 13: RG Types

**Table 11: Temperature Conversion Chart**

°C	↔	°F	°C	↔	°F	°C	↔	°F	Temp. Conversion Formulas
210		410	125		257	40		104	
205		401	120		248	35		95	
200		392	115		239	30		86	
195		383	110		230	25		77	
190		374	105		221	20		68	
185		365	100		212	15		59	
180		356	95		203	10		50	
175		347	90		194	5		41	
170		338	85		185	0		32	
165		329	80		176	-5		23	
160		320	75		167	-10		14	
155		311	70		158	-15		5	
150		302	65		149	-20		-4	
145		293	60		140	-25		-13	
140		284	55		131	-30		-22	
135		275	50		122	-35		-31	
130		266	45		113	-40		-40	

**Table 12: Conversion Chart**

To Convert Imperial to Metric			
inch	mm	x 25.4	#
ft.	m	: 0.3048	#
mi	km	x 1.6093	▲
lbs.	kg	x 0.4536	▲
lbs./100 ft.	kg/km	x 1.488	▲
To Convert Metric to Imperial			
mm	inch	: 25.4	#
m	ft.	x 0.3048	#
km	mi	x 0.6214	▲
kg	lbs.	x 2.204	▲
kg/km	lbs./100 ft.	x 0.67197	▲

# = Exact value  
 ▲ = Approximate value  
 x = multiply by  
 : = divide by

**Table 13: RG Types**

For example RG-59 is a common type of coaxial cable used in a wide variety of professional and commercial applications. The term RG itself is quite generic and refers to a wide variety of cable designs, which differ from one another in shielding characteristics, center conductor material, and dielectric type.

RG was originally a military spec, but is now obsolete; in practice, the term RG is generally used to refer to coaxial cables with 50, 75 or 93 Ohm characteristic impedance and a center conductor as follows:

Type	CDR (mm approx)	Impedance Ohm
RG-6	1	75
RG-8	1.5 - 2.7	75
RG-11	1.6	75
RG-58	0.7 - 1.2	75
RG-58	0.7 - 4.5	50
RG-59	0.6 - 0.8	75
RG-62	0.6	93
RG-401	1.6	50
RG-402	0.9	50
RG-405	0.5	50

**Metric Conversions**

Table 14: Conductor Size Equivalents (Square Millimeters/Square Inches/Circular Mils/AWG)

mm <sup>2</sup>	sq. in.	Circular mils	AWG	mm <sup>2</sup>	sq. in.	Circular mils	AWG	mm <sup>2</sup>	sq. in.	Circular mils	AWG
1000	1.550	1974000		55	0.0853	108570		5.00	0.00775	9870	
975	1.511	1924700		—	—	105600	1/0	4.75	0.00736	9377	
950	1.472	1875300		50	0.0775	98700		4.50	0.00698	8883	
925	1.434	1826000		45	0.0698	88830		4.25	0.00659	8390	
900	1.395	1776600		—	—	83690	1	—	—	8230	11
875	1.356	1727300		40	0.0620	78960		4.00	0.00620	7896	
850	1.317	1677900		35	0.0542	69090		3.75	0.00581	7403	
825	1.279	1628600		—	—	66360	2	3.50	0.00542	6909	
800	1.240	1579200		30	0.0465	59220		—	—	6530	12
775	1.201	1529900		—	—	52620	3	3.25	0.00504	6416	
750	1.163	1480500		25	0.0388	49350		3.00	0.00465	5922	
725	1.124	1431200		—	—	41740	4	2.75	0.00426	5429	
700	1.085	1381800		20.0	0.0310	39480		2.63	—	5180	13
675	1.046	1332500		19.5	0.0302	38490		2.50	0.00388	4935	
650	1.008	1283100		19.0	0.0294	37510		2.25	0.00349	4422	
625	0.969	1233800		18.5	0.0287	36520		—	—	4110	14
600	0.930	1184400		18.0	0.0279	35530		2.00	0.00310	3948	
575	0.891	1135100		17.5	0.0271	34550		1.75	0.00271	3455	
550	0.853	1085700	1000 MCM	17.0	0.0264	33560		1.65	—	3260	15
525	0.814	1036400		—	—	33090	5	1.50	0.00233	2961	
500	0.775	987000		16.5	0.0256	32560		—	—	2580	16
475	0.736	937700		16.0	0.0248	31580		1.25	0.00194	2468	
450	0.698	888300		15.5	0.0240	30600	6	—	—	2050	17
425	0.659	839000		15.0	0.0233	29610		1.00	0.00155	1974	
400	0.620	789600	750 MCM	14.5	0.0225	28620		0.90	0.00140	1777	
375	0.581	740300		14.0	0.0217	27640		—	—	1620	18
350	0.542	690900		13.5	0.0209	26650		0.75	0.00116	1481	
325	0.504	641600	600 MCM	—	—	26420		0.70	0.00109	1382	
300	0.465	592200		13.0	0.0201	25660		0.65	—	1290	19
275	0.426	542900	500 MCM	12.5	0.0194	24680		0.60	0.00093	1184	
250	0.388	493500		12.0	0.0186	23690		—	—	1029	20
225	0.349	444200	350 MCM	11.5	0.0178	22700		0.50	0.000775	987	
200	0.310	394800		11.0	0.0171	21710					
185	—	—		—	—	20820	7				
175	0.271	345500	300 MCM	10.5	0.0163	20730					
150	0.233	296100		10.0	0.0155	19740					
125	0.1938	246800		9.5	0.01472	18753					
120	—	211600	4/0	9.0	0.01395	17766					
100	0.1550	197400		8.5	0.01317	16779					
95	0.1472	187530		—	—	16510	8				
90	0.1395	177660		8.0	0.01240	15792					
—	—	167800	3/0	7.7	0.01163	14805					
85	0.1317	167790		7.0	0.01085	13818					
80	0.1240	157920		—	—	13090	9				
75	0.1163	148050		6.5	0.01008	12831					
70	0.1085	138180		6.0	0.00930	11844					
—	—	133100	2/0	5.5	0.00853	10857					
65	0.1008	128310		—	—	10380	10				
60	0.0930	118440									

To Convert:	Multiply by:
Inches to millimeters	25.4
Millimeters to inches	0.03937