

Appendix General Information

Metric to US Conversions

Wire Conversion Table

Comparison of Cross-sectional Areas to Metric and US Standards

Metric Cross-sectional Areas (in line with VDE)		American Wire Gauge	
Cross-sectional Area mm ²	Equivalent Metric C.S.A. mm ²	AWG or MCM	
0.75	0.635	19 AWG	
	0.823	18	
	1.04	17	
1.5	1.31	16	
	1.65	15	
	2.08	14	
2.5	2.62	13	
	3.31	12	
4	4.17	11	
	5.26	10	
6	6.63	9	
	8.37	8	
	10.55	7	
10	13.30	6	
	16.77	5	
16	21.15	4	
	26.67	3	
25	33.63	2	
	42.41	1	
50	53.48	1/0	
	67.43	2/0	
70	85.03	3/0	
	107.20	4/0	
120	126.64	250 MCM	
	152.00	300	
150	177.35	350	
	202.71	400	
185	253.35	500	
	304.00	600	
240	354.71	700	
	405.35	800	
300	506.71	1000	
400			
500			
625			

Other Conversions

Power Conversions		
1 kilowatt (kW)	=	1.341 horsepower (hp)
1 horsepower (hp)	=	0.7457 kilowatt (kW)

Dimensions Conversions		
1 inch (in.)	=	25.4 millimeters (mm)
1 inch (in.)	=	2.54 centimeters (cm)
1 centimeter (cm)	=	0.3937 inches (in.)
1 meter (m)	=	39.37 inches (in.)

Weight Conversions		
1 ounce (oz.)	=	28.35 grams (g)
1 pound (lb.)	=	0.454 kilograms (kg)
1 kilogram (kg)	=	2.205 pounds (lbs.)

Temperature Conversions		
100 Celsius	=	212 Fahrenheit
80 Celsius	=	176 Fahrenheit
60 Celsius	=	140 Fahrenheit
40 Celsius	=	104 Fahrenheit
20 Celsius	=	68 Fahrenheit
0 Celsius	=	32 Fahrenheit

Torque		
1 Newton-meter (Nm)	=	8.85 pound-inches (lb. in.)

Fractions to Decimals to Millimeters

Millimeters to Inches¹⁾

Fractions	Decimals	Millimeters	Millimeters	Inches	Millimeters	Inches
1/64	0.015625	0.397	0.1	0.0039	46	1.8110
1/32	0.03125	0.794	0.2	0.0079	47	1.8504
3/64	0.046875	1.191	0.3	0.0118	48	1.8898
1/16	0.0625	1.588	0.4	0.0157	49	1.9291
5/64	0.078125	1.984	0.5	0.0197	50	1.9685
3/32	0.09375	2.381	0.6	0.0236	51	2.0079
7/64	0.109375	2.778	0.7	0.0276	52	2.0472
1/8	0.1250	3.175	0.8	0.0315	53	2.0866
9/64	0.140625	3.572	0.9	0.0354	54	2.1260
5/32	0.15625	3.969			55	2.1654
11/64	0.171875	4.366	1	0.0394	56	2.2047
3/16	0.1875	4.763	2	0.0787	57	2.2441
13/64	0.203125	5.159	3	0.1181	58	2.2835
7/32	0.21875	5.556	4	0.1575	59	2.3228
15/64	0.234375	5.953	5	0.1969	60	2.3622
1/4	0.2500	6.350	6	0.2362	61	2.4016
17/64	0.265625	6.747	7	0.2756	62	2.4409
9/32	0.28125	7.144	8	0.3150	63	2.4803
19/64	0.296875	7.541	9	0.3543	64	2.5197
5/16	0.3125	7.938	10	0.3937	65	2.5591
21/64	0.328125	8.334	11	0.4331	66	2.5984
11/32	0.34375	8.731	12	0.4724	67	2.6378
23/64	0.359375	9.128	13	0.5118	68	2.6772
3/8	0.3750	9.525	14	0.5512	69	2.7165
25/64	0.390625	9.922	15	0.5906	70	2.7559
13/32	0.40625	10.319	16	0.6299	71	2.7953
27/64	0.421875	10.716	17	0.6693	72	2.8346
7/16	0.4375	11.113	18	0.7087	73	2.8740
29/64	0.453125	11.509	19	0.7480	74	2.9134
15/32	0.46875	11.906	20	0.7874	75	2.9528
31/64	0.484375	12.303	21	0.8268	76	2.9921
1/2	0.500	12.700	22	0.8661	77	3.0315
33/64	0.515625	13.097	23	0.9055	78	3.0709
17/32	0.53125	13.494	24	0.9449	79	3.1102
35/64	0.546875	13.891	25	0.9843	80	3.1496
9/16	0.5625	14.288	26	1.0236	81	3.1890
37/64	0.578125	14.684	27	1.0630	82	3.2283
19/32	0.59375	15.081	28	1.1024	83	3.2677
39/64	0.609375	15.478	29	1.1417	84	3.3071
5/8	0.6250	15.875	30	1.1811	85	3.3465
41/64	0.640625	16.272	31	1.2205	86	3.3858
21/32	0.65625	16.669	32	1.2598	87	3.4252
43/64	0.671875	17.066	33	1.2992	88	3.4646
11/16	0.6875	17.463	34	1.3386	89	3.5039
45/64	0.703125	17.859	35	1.3780	90	3.5433
23/32	0.71875	18.256	36	1.4173	91	3.5827
47/64	0.734375	18.653	37	1.4567	92	3.6220
3/4	0.7500	19.050	38	1.4961	93	3.6614
49/64	0.765625	19.447	39	1.5354	94	3.7008
25/32	0.78125	19.844	40	1.5748	95	3.7402
51/64	0.796875	20.241	41	1.6142	96	3.7795
13/16	0.8125	20.638	42	1.6535	97	3.8189
53/64	0.828125	21.034	43	1.6929	98	3.8583
27/32	0.84375	21.431	44	1.7323	99	3.8976
55/64	0.859375	21.828	45	1.7717	100	3.9370
7/8	0.8750	22.225				
57/64	0.890625	22.622				
29/32	0.90625	23.019				
59/64	0.921875	23.416				
15/16	0.9375	23.813				
61/64	0.953125	24.209				
31/32	0.96875	24.606				
63/64	0.984375	25.003				
1	1.000	25.400				

1) 0.001" = 0.0254 mm
1 mm = 0.03937"