

## TORQUE CONVERSION CHART

KNOWN VALUE								DESIRED VALUE	
lb-ft x	lb-in x	oz-in x	dyne-cm x	N-m x	N-cm x	kg-m x	gr-cm x		
1	0.08333	0.005208	7.376x10 <sup>-8</sup>	0.7376	0.007376	7.233	7.233x10 <sup>-5</sup>		=lb-ft
12	1	0.0625	8.851x10 <sup>-7</sup>	8.8509	0.08851	86.796	0.000868		=lb-in
192	16	1	1.416x10 <sup>-5</sup>	141.61	1.4161	1,389	0.01389		=oz-in
1.356x10 <sup>7</sup>	1.1298x10 <sup>6</sup>	70,620	1	10 <sup>7</sup>	10 <sup>6</sup>	9.8067x10 <sup>6</sup>	980.67		=dyne-cm
1.356	0.113	0.007062	10 <sup>-7</sup>	1	.01	9.8066	9.8x10 <sup>-5</sup>		=N-m
135.6	11.3	0.7062	10 <sup>-6</sup>	100	1	980.66	9.8x10 <sup>-3</sup>		=N-cm
0.1383	0.01152	7.201x10 <sup>-4</sup>	1.0197x10 <sup>-8</sup>	0.10197	0.001097	1	0.00001		=Kg-m
13,830	1,152	72.01	1.0197x10 <sup>-3</sup>	11019.7	101.97	100,000	1		=gr-cm

### Conversion factors may be read directly from the tables

#### Example:

If you need to convert 10 kg-m to oz-in, take known value (10 kg-m) multiply (X) by conversion factor (1,389) to convert to oz-in. The same method applies to the inertia conversion chart.

kg-m x	gr-cm x	
7.233	7.233x10 <sup>-5</sup>	=lb-ft
86.796	0.000868	=lb-in
1,389	0.01389	=oz-in

**10kg-m x 1,389 = 13,890 oz-in**

## INERTIA CONVERSION CHART

KNOWN VALUE										DESIRED VALUE	
lb-ft <sup>2</sup> x	lb-in <sup>2</sup> x	lb-ft-sec <sup>2</sup> x	lb-in-sec <sup>2</sup> x	oz-in <sup>2</sup> x	oz-in-sec <sup>2</sup> x	kg-m <sup>2</sup> x	kg-m-sec <sup>2</sup> x	gr-cm <sup>2</sup> x	gr-cm-sec <sup>2</sup> x		
1	0.006944	32.17	2.681	0.000434	0.1676	23.73	232.7	2.73x10 <sup>-5</sup>	0.002327		=lb-ft <sup>2</sup>
144	1	4,633	386.1	0.0625	24.13	3,417	33,510	3.417x10 <sup>-4</sup>	0.3351		=lb-in <sup>2</sup>
0.03108	0.0002158	1	0.08333	1.349x10 <sup>-5</sup>	0.005208	1	7.233	7.376x10 <sup>-8</sup>	7.233x10 <sup>-5</sup>		=lb-ft-sec <sup>2</sup>
0.373	0.00259	12	1	0.0001619	0.0625	8.851	86.8	8.851x10 <sup>-7</sup>	0.000868		=lb-in-sec <sup>2</sup>
2,304	16	74,130	6,177	1	386.1	54,670	536,200	0.005467	5.362		=oz-in <sup>2</sup>
5.968	0.04144	192	16	0.00259	1	141.6	1,389	1.416x10 <sup>-5</sup>	0.01389		=oz-in-sec <sup>2</sup>
0.04214	0.0002926	1.356	0.113	1.829x10 <sup>-5</sup>	0.007062	1	9.807	10 <sup>-7</sup>	9.807x10 <sup>-5</sup>		=Kg-m <sup>2</sup>
0.004297	2.984x10 <sup>-5</sup>	0.1383	0.01152	1.856x10 <sup>-6</sup>	0.0007201	0.102	1	1.02x10 <sup>-8</sup>	10 <sup>-5</sup>		=kg-m-sec <sup>2</sup>
421,400	2,926	1.356x10 <sup>7</sup>	1,130,000	182.9	70,620	10 <sup>7</sup>	9.807x10 <sup>7</sup>	1	9.807	=gr-cm <sup>2</sup>	
429.7	2.984	1.383x10 <sup>-4</sup>	1,152	0.1865	72.01	10,200	100,000	0.00102	1	=gr-cm-sec <sup>2</sup>	



### DID YOU KNOW...

The Lin Engineering website has automated tools for conversions.