

## **Units of torque**

4 Torque wrenches are available in Nm (Newton-metres), kgf m (kilograms-force metre), lbf ft (pounds-feet), lbf in (inch-pounds). Do not confuse lbf ft with lbf in. The preferred unit is the Newton-metre.

5 To convert kgf-m to N-m multiply by 9.804

To convert lbf-ft to N-m multiply by 1.356

To convert lbf-in to N-m multiply by 0.113

To convert lbf-in to lbf-ft multiply by 0.083

6 Where no torque setting is given fasteners can be secured according to the table below.

### **Fastener type**

<b>(thread diameter)</b>	<b>N-m</b>	<b>lbfft</b>
5 mm bolt or nut	4.41 - 5.89	3.5 - 4.5
6 mm bolt or nut	7.84 - 11.79	6 - 9
8 mm bolt or nut	17.66-24.52	13-18
10 mm bolt or nut	29.43 39.24	22 - 29
12 mm bolt or nut	49.05 - 58.86	36 - 43
5 mm screw	3.43 - 4.91	2.5 - 3.6
6 mm screw	6.87 - 10.79	5 - 8
6 mm flange bolt	9.81 - 13.73	7 - 10
8 mm flange bolt	23.54 - 29.43	17 - 22
10 mm flange bolt	29.43 - 39.24	22 - 29

7 For practical purposes, and bearing in mind the scale of the torque wrench, use the nearest whole number.

8 A manufacturer sometimes gives a torque setting as a range (8 to 10 Nm) rather than a single figure - in this case set the tool midway between the two settings. Equally, the same torque may be expressed as 9 Nm  $\pm$ 1 Nm.