

METRIC CONVERSION CHART

| | English to Metric | | | Metric to English | | |
|--------------------------|----------------------------------------------------------|-----------------------------------------------------|----------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------|
| | To Convert From | To | Multiply | To Convert From | To | Multiply |
| Area | sq. in. (in ²) | sq. mm. (mm ²) | 645.16 | sq. mm (mm ²) | sq. in. (in ²) | 0.00155 |
| | sq. in. (in ²) | sq. cm. (cm ²) | 6.4516 | | | |
| | sq. ft. (ft ²) | sq. metres (m ²) | 0.0929 | | | |
| Density | Pounds / cubic foot (lb/ft) | Kilograms / Cubic metre (kg/m ³) | 16.02 | Kilograms / Cubic metre (kg/m ³) | Pounds / Cubic foot (lb/ft) | 0.0624 |
| Energy | British Thermal Units (Btu) (1 J = Ws = 0.2388 cal) | Joules (J) | 1055 | Joules (J) | British Thermal Units (Btu) | 0.000947 |
| Force | Pounds - Force (lbf) (1N = 0.102 kgf) | Newtons (N) | 4.448 | Newtons (N) | Pounds - Force (lbf) | 0.2248 |
| Length | Inches (in) | Millimetres (mm) | 25.4 | Millimetres (mm) | Inches (in) | 0.03937 |
| | Feet (ft) | Metres (m) | 0.3048 | Metres (m) | Feet (ft) | 3.281 |
| | Miles (mi) | Kilometres (km) | 1.609 | Kilometres (km) | Miles (mi) | 0.621 |
| Mass (weight) | Ounces (oz.) | Grams (g) | 28.35 | Grams (g) | Ounces (oz.) | 0.035 |
| | Pounds - Mass (lb) | Kilograms (kg) | 0.4536 | Kilograms (kg) | Pounds - Mass (lb) | 2.205 |
| | Short tons (2000 lb) (tn) | Metre tons (1000 kg) | 0.0972 | Metric tonnes (1000 kg) | Short tons (2000 lb) (tn) | 1.102 |
| Power | Horsepower (550 ft. lb/s) (hp) | Kilowatts (kW) | 0.7457 | Kilowatts (kW) | Horsepower (550 ft. lb/s) (hp) | 1.341 |
| Pressure | Pounds / square / inch (psi) | Kilograms (f) / square cm (kg (f)/cm ²) | 0.0703 | Kilograms (f) / square cm (kg (f)/cm ²) | Pounds / square inch (psi) | 14.22 |
| | Pounds / square / inch (psi) | Kilopascals (kPa) | 6.8948 | Kilopascals (kPa) | Pounds / square inch (psi) | 0.145 |
| | Pounds / square / inch (psi) | Bars (100 kPa) | 0.06895 | Bars (1000 kPa) | Pounds / square inch (psi) | 14.503 |
| Stress | Pounds / square inch (psi) (1N/mm ² =1MPa) | Megapascals (MPa) | 0.006895 | Megapascals (MPa) | Pounds / square inch (psi) | 145.039 |
| Temperature | Degrees Fahrenheit (°F) | Degrees Celsius (°C) | 5/9 (after subtracting 32) | Degrees Celsius (°C) | Degrees Fahrenheit (°F) | 9/5 (then add 32) |
| Torque or bending moment | Pounds - Force - Foot (lb-ft) | Newtons-metre (Nm) | 1.3567 | Newtons-metre (Nm) | Pounds - Force - Foot (lb-ft) | 0.737 |
| | Pounds - Force - Foot (lb-in) | Newtons-metre (Nm) | 0.113 | Newtons-metre (Nm) | Pounds - Force - Foot (lb-in) | 8.85 |
| Velocity | Feet / seconds (ft/s) | Metre / second (m/S) | 0.3048 | Metre / second (m/S) | Feet / seconds (ft/s) | 3.2808 |
| Viscosity | Dynamic (centipoise) | Pascal-second (Pas) | 0.001 | Pascal-second (Pas) | Dynamic (centipoise) | 1000 |
| | Kenematic-foot ² / sec (ft ² /s) | Metre ² / sec (m ² /s) | 0.0929 | Metre ² / sec (m ² /s) | Kenematic-foot ² / sec (ft ² /s) | 10.7643 |
| Volume | Cubic inch (in ³) | Cubic centimetre (cm ³) (millimetre) | 16.3871 | Cubic centimetre (cm ³) (millimetre) | Cubic inch (in ³) | 0.061 |
| | Quarts (qt) | Litres (1000 cm ³) | 0.9464 | Litres (1000 cm ³) | Quarts (qt) | 1.057 |
| | Gallons (gal) | Litres | 3.7854 | Litres | Gallons (gal) | 0.2642 |