

Conversion Factors

Length (distance)

Inches (in)	X 25.4	= Millimetres (mm)	X 0.0394	= Inches (in)
Feet (ft)	X 0.305	= Metres (m)	X 3.281	= Feet (ft)
Miles	X 1.609	= Kilometres (km)	X 0.621	= Miles

Volume (capacity)

Cubic inches (cu in; in ³)	X 16.387	= Cubic centimetres (cc; cm ³)	X 0.061	= Cubic inches (cu in; in ³)
Imperial pints (Imp pt)	X 0.568	= Litres (l)	X 1.76	= Imperial pints (Imp pt)
Imperial quarts (Imp qt)	X 1.137	= Litres (l)	X 0.88	= Imperial quarts (Imp qt)
Imperial quarts (Imp qt)	X 1.201	= US quarts (US qt)	X 0.833	= Imperial quarts (Imp qt)
US quarts (US qt)	X 0.946	= Litres (l)	X 1.057	= US quarts (US qt)
Imperial gallons (Imp gal)	X 4.546	= Litres (l)	X 0.22	= Imperial gallons (Imp gal)
Imperial gallons (Imp gal)	X 1.201	= US gallons (US gal)	X 0.833	= Imperial gallons (Imp gal)
US gallons (US gal)	X 3.785	= Litres (l)	X 0.264	= US gallons (US gal)

Mass (weight)

Ounces (oz)	X 28.35	= Grams (g)	X 0.035	= Ounces (oz)
Pounds (lb)	X 0.454	= Kilograms (kg)	X 2.205	= Pounds (lb)

Force

Ounces-force (ozf; oz)	X 0.278	= Newtons (N)	X 3.6	= Ounces-force (ozf; oz)
Pounds-force (lbf; lb)	X 4.448	= Newtons (N)	X 0.225	= Pounds-force (lbf; lb)
Newton (N)	X 0.1	= Kilograms-force (kgf; kg)	X 9.81	= Newtons (N)

Pressure

Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)	X 0.070	= Kilograms-force per square centimetre (kgf/cm ² ; kg/cm ²)	X 14.223	= Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)
Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)	X 0.068	= Atmospheres (atm)	X 14.696	= Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)
Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)	X 0.069	= Bars	X 14.5	= Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)
Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)	X 6.895	= Kilopascals (kPa)	X 0.145	= Pounds-force per square inch (psi; lbf/in ² ; lb/in ²)
Kilopascals (kPa)	X 0.01	= Kilograms-force per square centimetre (kgf/cm ² ; kg/cm ²)	X 98.1	= Kilopascals (kPa)

Torque (moment of force)

Pounds-force inches (lbf in; lb in)	X 1.152	= Kilograms-force centimetre (kgf cm; kg cm)	X 0.868	= Pounds-force inches (lbf in; lb in)
Pounds-force inches (lbf in; lb in)	X 0.113	= Newton metres (Nm)	X 8.85	= Pounds-force inches (lbf in; lb in)
Pounds-force inches (lbf in; lb in)	X 0.083	= Pounds-force feet (lbf ft; lb ft)	X 12	= Pounds-force inches (lbf in; lb in)
Pounds-force feet (lbf ft; lb ft)	X 0.138	= Kilograms-force metres (kgf m; kg m)	X 7.233	= Pounds-force feet (lbf ft; lb ft)
Pounds-force feet (lbf ft; lb ft)	X 1.356	= Newton metres (Nm)	X 0.738	= Pounds-force feet (lbf ft; lb ft)
Newton metres (Nm)	X 0.102	= Kilograms-force metres (kgf m; kg m)	X 9.804	= Newton metres (Nm)

Vacuum

Inches mercury (in. Hg)	X 3.377	= Kilopascals (kPa)	X 0.2961	= Inches mercury
Inches mercury (in. Hg)	X 25.4	= Millimeters mercury (mm Hg)	X 0.0394	= Inches mercury

Power

Horsepower (hp)	X 745.7	= Watts (W)	X 0.0013	= Horsepower (hp)
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Velocity (speed)

Miles per hour (miles/hr; mph)	X 1.609	= Kilometres per hour (km/hr; kph)	X 0.621	= Miles per hour (miles/hr; mph)
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Fuel consumption*

Miles per gallon, Imperial (mpg)	X 0.354	= Kilometres per litre (km/l)	X 2.825	= Miles per gallon, Imperial (mpg)
Miles per gallon, US (mpg)	X 0.425	= Kilometres per litre (km/l)	X 2.352	= Miles per gallon, US (mpg)

Temperature

$$\text{Degrees Fahrenheit} = (\text{°C} \times 1.8) + 32 \quad \text{Degrees Celsius (Degrees Centigrade; °C)} = (\text{°F} - 32) \times 0.56$$

*It is common practice to convert from miles per gallon (mpg) to litres/100 kilometres (l/100km),

where mpg (Imperial) \times l/100 km = 282 and mpg (US) \times l/100 km = 235

WIND CHILL

TEMPERATURE °C / °F IN STILL AIR

MPH	0°C / 32°F	-5°C / 25°F	-10°C / 15°F	-15°C / 5°F	-20°C / 5°F	-30°C / -20°F	-35°C / -30°F	-40°C / -40°F	-45°C / -50°F	-50°C / -60°F
8 KPH / 5 MPH	-2°C / 25°F	-7°C / 20°F	-12°C / 10°F	-17°C / 0°F	-23°C / -25°F	-28°C / -20°F	-33°C / -25°F	-38°C / -35°F	-44°C / -45°F	-54°C / -70°F
16 KPH / 10 MPH	-8°C / 15°F	-14°C / 10°F	-20°C / 0°F	-26°C / -15°F	-32°C / -30°F	-38°C / -40°F	-44°C / -45°F	-51°C / -60°F	-57°C / -70°F	-63°C / -80°F
24 KPH / 15 MPH	-11°C / 10°F	-18°C / 0°F	-25°C / -10°F	-32°C / -25°F	-38°C / -40°F	-45°C / -50°F	-52°C / -60°F	-58°C / -70°F	-65°C / -85°F	-72°C / -100°F
32 KPH / 20 MPH	-14°C / 5°F	-21°C / 0°F	-28°C / -15°F	-35°C / -30°F	-42°C / -45°F	-49°C / -60°F	-57°C / -65°F	-64°C / -80°F	-71°C / -95°F	-78°C / -110°F
40 KPH / 25 MPH	-16°C / 0°F	-23°C / -5°F	-31°C / -15°F	-38°C / -35°F	-46°C / -50°F	-53°C / -65°F	-61°C / -71°F	-68°C / -90°F	-76°C / -105°F	-83°C / -120°F
48 KPH / 30 MPH	-17°C / 0°F	-25°C / -10°F	-33°C / -20°F	-41°C / -40°F	-48°C / -55°F	-56°C / -70°F	-63°C / -80°F	-72°C / -95°F	-78°C / -110°F	-85°C / -120°F
56 KPH / 35 MPH	-18°C / -5°F	-26°C / -10°F	-34°C / -25°F	-42°C / -40°F	-50°C / -60°F	-57°C / -75°F	-65°C / -80°F	-73°C / -100°F	-81°C / -115°F	-86°C / -125°F
64 KPH / 40 MPH	-19°C / -5°F	-27°C / -15°F	-35°C / -30°F	-43°C / -45°F	-51°C / -60°F	-59°C / -75°F	-66°C / -85°F	-74°C / -100°F	-82°C / -115°F	-91°C / -130°F
72 KPH / 45 MPH	-19°C / -5°F	-28°C / -17°F	-36°C / -30°F	-43°C / -43°F	-52°C / -60°F	-59°C / -75°F	-67°C / -85°F	-75°C / -100°F	-83°C / -115°F	-91°C / -130°F
80 KPH / 50 MPH	-20°C / -7°F	-28°C / -17°F	-36°C / -30°F	-44°C / -46°F	-52°C / -60°F	-60°C / -75°F	-69°C / -85°F	-76°C / -100°F	-84°C / -115°F	-92°C / -130°F

LITTLE DANGER

IMMEDIATE DANGER

VERY GREAT DANGER - FLESH MAY FREEZE WITHIN 30 SECONDS