

Units for pressure, force, length, temperature and conversion factors

	Unit	Symbols	Conversion to SI units	
Pressure	Pascal	Pa	0.01 mbar	= 1 Pa
			0.1 mbar	= 1 daPa
			1 mbar	= 1 hPa
			10 mbar	= 1 kPa
			10 bar	= 1 MPa
	Newton per square metre	N/m ²	1 N/m ²	= 1 Pa
	Bar	bar	1 bar	= 10 ⁵ Pa
	Millibar	mbar	1 mbar	= 100 Pa
	Physical atmospheres	atm	1 atm	= 101.325 kPa
	Technical atmospheres	at	1 at	= 0.980665 x 10 ⁵ Pa
	Kiloponds per square centimetre	kp / cm ²	1 kp / cm ²	
	Metres of water column	mWS	1 mWS	= 9806.65 Pa
	Millimetres of water column	mmWS	1 mmWS	= 9.80665 Pa
	Kiloponds per square metre	kp / m ²	1 kp / m ²	
	Millimetres of mercury column	mmHG	1 mmHG	= 133.322 Pa
	Torr	Torr	1 Torr	= 133.322 Pa
	Pound-force per square inch	lbf / in ² (psi)	1 lbf / in ²	= 6894.76 Pa
	Poundal per square foot	pdl / ft ²	1 pdl / ft ²	= 1.48816 Pa
	Pound-force per square foot	lbf / ft ² (psf)	1 lbf / ft ²	= 47.8803 Pa
	UK tonne-force per sq foot	UK tonf / ft ²	1 UK tonf / ft ²	= 1.073 x 10 ⁵ Pa
	UK tonne-force per sq inch	UK tonf / in ²	1 UK tonf / in ²	= 1.544 x 10 ⁷ Pa
	Kip per sq inch (US)	ksi	1 ksi	= 6,895 x 10 ⁶ Pa
	Kip per sq foot (US)	ksf	1 ksf	= 4.788 x 10 ⁴ Pa
Force	Inch mercury column	inHG in.HG	1 inHG	= 3.38638 x 10 ³ Pa
	Inch water column	inH ₂ O in.H ₂ O	1 inH ₂ O	= 249.08891 Pa
	Foot water column	ftH ₂ O ft.H ₂ O	1 ftH ₂ O	= 2.989067 x 10 ³ Pa
	Newton	N		
	Pond	p	1 p	= 0.00980665 N
	Kilopond	kp	1 kp	= 9.80665 N
	Poundal	pdl	1 pdl	= 0.138255 N
Length	Pound-force	lbf	1 lbf	= 4.448222 N
	Kilopond-force	kip	1 kip	= 9.80665 N
	Dyn	dyn	1 dyn	= 1.0 x 10 ⁻⁵ N
Temperature	Metre	m		
	Inch	in	1 inch	= 0.0254 m
	Foot	ft	1 ft	= 0.3048 m
	Yard	yd	1 yd	= 0.9144 m
	Degree Celsius	°C	0°C	= 273.15 K = 32 °F = 491.67 °Rank
	Kelvin	K	1 K	= 1 °C
	Fahrenheit	°F	1 °F	= 0.555556 °C
Rankine	Rankine	°Rank	1 °Rank	= 0.555556 °C