

## Unit conversion factors

Length	1 in = 25,4 mm	Pressure	1 lbf/in <sup>2</sup> = 6 894,76 Pa	
	1 ft = 12 in = 0,304 8 m		1 kgf/m <sup>2</sup> = 9,806 65 Pa	
	1 yd = 3 ft = 36 in = 0,914 4 m		1 Torr = 133,322 Pa	
	1 mile = 5280 ft = 1 609,344 m		1 at (technical) = 98 066,5 Pa	
	1 sea mile = 1 852 m		1 atm (standard) = 101 325 Pa	
	1 Å = 10 <sup>-10</sup> m		1 mmH <sub>2</sub> O = 9,806 65 Pa	
Surface	1 in <sup>2</sup> = 6,451 6 cm <sup>2</sup>	Energy	1 mmHg = 133,322 Pa	
	1 ft <sup>2</sup> = 0,092 903 06 m <sup>2</sup>		1 ft.lbf = 1,355 82 J	
	1 yd <sup>2</sup> = 0,836 127 m <sup>2</sup>		1 cal = 4,186 8 J	
	1 mile <sup>2</sup> = 2,589 988 km <sup>2</sup>		1 BTU = 1 055,06 J	
	1 acre = 4 046,856 m <sup>2</sup>		1 kgf.m = 9,806 65 J	
Volume	1 in <sup>3</sup> = 16,387 064 cm <sup>3</sup>	Power	1 erg = 1 dyn.cm = 10 <sup>-7</sup> J	
	1 ft <sup>3</sup> = 28,316 8 dm <sup>3</sup>		1 ft.lbf/s = 1,355 82 W	
	1 yd <sup>3</sup> = 0,764 555 m <sup>3</sup>		1 hp (fps-system) = 745,700 W	
	1 gal (UK) = 4,546 09 dm <sup>3</sup>		1 hp (metric) = 735,499 W	
	1 gal (US) = 3,785 41 dm <sup>3</sup>	1 kgf.m/s = 9,806 65 W	Temperature	1 erg/s = 10 <sup>-7</sup> W
	1 pt (UK) = 0,568 262 dm <sup>3</sup>	1 °C = 1 K		T / K = t / °C + 273,15
	1 liq pt (US) = 0,473 176 dm <sup>3</sup>	1 °F = 0,5556 °C = 0,5556 K		t / °C = (5/9) . (t <sub>F</sub> / °F - 32)
	1 dry pt (US) = 0,550 610 dm <sup>3</sup>	T / K = (5/9) . (t <sub>F</sub> / °F + 459,67)		
	1 fl oz (UK) = 28,413 1 cm <sup>3</sup>			
	1 fl oz (US) = 29,573 5 cm <sup>3</sup>			
	1 bushel (UK) = 36,368 7 dm <sup>3</sup>			
	1 bushel (US) = 35,239 1 dm <sup>3</sup>			
	1 barrel (US) = 158,987 dm <sup>3</sup>			
	1 dry barrel (US) = 115,627 dm <sup>3</sup>			
Velocity	1 ft/s = 0,304 8 m/s			
	1 mile/h = 0,447 04 m/s			
	1 knot = 0,514 444 m/s			
Acceleration	1 ft/s <sup>2</sup> = 0,304 8 m/s <sup>2</sup>			
Mass	1 lb = 0,453 592 37 kg			
	1 gr (grain) = 64,798 91 mg			
	1 oz = 1/16 lb = 28,349 5 g			
	1 cwt (UK) = 50,802 3 kg			
	1 ctw (US) = 45,359 2 kg			
	1 ton (UK) = 1 016,05 kg			
	1 ton (US) = 907,185 kg			
	1 troy ounce = 31,103 5 g			
Density	1 lb/ft <sup>3</sup> = 16,018 5 kg/m <sup>3</sup>			
Force	1 lbf = 4,448 22 N			
	1 dyn = 10 <sup>-5</sup> N			
	1 kgf = 9,806 65 N			
Dyn. viscosity	1 lb/(ft s) = 1,48816 Pa.s			
	1 P = 1 dyn.s/cm <sup>2</sup> = 0,1 Pa.s			
Kin. viscosity	1 ft <sup>2</sup> /s = 0,092 903 0 m <sup>2</sup> /s			
	1 St = 10 <sup>-4</sup> m <sup>2</sup> /s			
Moment	1 ft.lbf = 1,355 82 N.m			
	1 kgf.m = 9,806 65 N.m			

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