

Größe, Formelzeichen	Einheit, Kurzzeichen	Beziehung
Länge, l	Meter, m	1 m = 10dm = 100cm = 1000mm 1 Seemeile (sm) = 1852m 1 □ngström (□) = 10 ⁻¹⁰ m 1 Siegbahn-X-Einheit (X-E) = 10 ⁻¹³ m 1 mile (mi) = 1609m 1 yard (yd) = 3ft = 0,9144m 1 foot (ft) = 12 inch = 0,3048m 1 inch (in) = 25,4mm
Fläche, A	Quadratmeter, m ² Ar oder a Hektar, ha	1 Km ² = 1000m ² = 100ha 1 Ar = 100m ² 1 ha = 100 Ar = 10000m ²
Volumen, V	Kubikmeter, m ³	1m ³ = 1000dm ³ 1 Liter (l) = 1dm ³ 1 cubic foot (ft ³) = 28,32dm ³ 1 register ton = 100ft ³ 1 brit. gallon (gal) = 4,5461dm ³ 1 US gallon (gal) = 3,785dm ³ 1 US-Barrel = 42 US gallon = 158,987 Liter
Masse, m	Kilogramm, Kg	1 Kg = 1000g 1 long ton (ltn) = 1016,047Kg 1 pound (lb) = 16oz = 0,45359237Kg 1 oz (aV-avoirdupois=Handelsgewicht) = 28,3495g 1 oz (tr-troy=Edelmetallgewicht) = 31,1035g 1 Karat (Edelstingewicht) = 0,2g 1 Zentner (ztr) = 50Kg
Kraft, F	Newton, N	1 N = 1Kg m/s ² = 1 W s/m = 1J/m 1 kp = 9,80665N
Arbeit, W Energie, E	Joule, J	1 J = 1Nm = 1Kg m ² /s ² = 1Ws = 10 ⁷ erg 1 kWh = 3,6*10 ⁶ J = 860 kcal 1 cal = 4,1868J
Leistung, P	Watt, W	1 W = 1J/s = 1Nm/s = 1Kg m ² /s ³ 1 horsepower (PS) = 735,49875W 1 PS = 1,3596 KW
Druck, p	Pascal, Pa Bar Torr mm Wassersäule mm Quecksilbersäule	1 Pa = 1N/m ² = 1Kg/(m s ²) = 1J/m ³ 1 bar = 10 ⁵ Pa = 0,1N/mm ² = 0,1MPa 1 Torr = 1,333224mbar 1 mmWS = 98,0665*10 ⁻³ mbar 1 mmHg = 133,322Pa 1 atü = 0,980665 bar
Geschwindigkeit, v	Meter pro Sekunde Knoten (kn)	1 m/s = 3,6 Km/h = 2,2369 mile/h 1 kn = 1 sm/h = 1 ft/s = 1,852Km/h 1 Km/h = 0,6214 mile/h
dynamische Viskosität, η	Pascalsekunde, Pa s	1 m Pa s = 10 ⁻³ N/m ²

kinematische Viskosität, ν		$1 \text{ mm}^2/\text{s} = 10^{-6} \text{ m}^2/\text{s}$
elektr. Ladung, Q	Coulomb, As	$1 \text{ C} = 1 \text{ As}$ $1 \text{ Ah} = 3,6 \cdot 10^3 \text{ As} = 3,6 \text{ KAs}$
Spannung, U	Volt, V	$1 \text{ V} = 1 \text{ W/A} = 1 \text{ A}\Omega = 1 \text{ Kg m}^2/\text{A s}^3$
Stromstärke, I	Ampere, A	$1 \text{ A} = 1000 \text{ mA}$
elctr. Kapazität, C	Farad, F	$1 \text{ F} = 1 \text{ C/V} = 1 \text{ Ss} = 1 \text{ H}/\Omega^2$
magnetischer Fluß, Φ	Weber, Wb	$1 \text{ Wb} = 1 \text{ Vs} = 1 \text{ Tm}^2 = 1 \text{ AH}$
mag. Flußdichte, B	Telsa, T	$1 \text{ T} = 1 \text{ Wb/m}^2 = 1 \text{ Vs/m}^2$
Induktivität, L	Henry, H	$1 \text{ H} = 1 \text{ Wb/A} = 1 \Omega \text{ s} = 1 \text{ F}\Omega^2 = 1 \text{ s/S}$