

Equivalent Values & U.S./Metric Conversions

LENGTH

- 1 micron (μ) = 0.00004 inch (in.)
- 1 millimeter (mm) = 0.039 in.
- 1 centimeter (cm) = 0.3937 in.
- 1 decimeter (dm) = 0.3281 foot (ft.)
- 1 meter (m) = 39.37 in.
= 3.281 ft.
= 1.0937 yards (yds.)

AREA - SQUARE

- 1 square millimeter = 0.00155 square inch (sq. in.)
- 1 square centimeter = 0.155 sq. in.
- 1 square decimeter = 15.5 sq. in.
= 0.10764 square feet (sq. ft.)

AREA - CUBIC

- 1 cubic centimeter = 0.061 cubic inch (in.³)
= 0.0002642 U.S. liquid gallons
- 1 cubic decimeter = 61.023 in.³

LIQUID MEASURE

- 1 milliliter (ml) = 0.0338176 ounce (oz.)
- 1 deciliter (dl) = 3.381 oz.
- 1 liter (l) = 1.0569 quarts (qt.)
= 0.26417 gallon (gal.)
- 1 drop = 0.05 cubic centimeter (cc)
= 0.00169 oz.

WEIGHT

- 1 gram (g) = 0.0353 ounce (oz.)
- 1 kilogram (kg.) = 2.2046 pounds (lb.)
- 1 metric ton = 0.9842 U.S. ton

TEMPERATURE

- $^{\circ}\text{Celsius} = 5/9 (^{\circ}\text{Fahrenheit} - 32)$

FLOW - LIQUID

- 1 liter/minute (lpm) = 0.2642 U.S. gallon/minute (gpm)

FORCE

- 1 Newton (N) = 0.225 pound (lb.)

FREQUENCY

- 1 cycle/second (cps) = 1 Hertz (H)

ABSOLUTE VISCOSITY

- 1 centipoise (@ 0.9 specific gravity) = 5.35 SUS

POWER

- 1 kilowatt (kw) = 1.34 horsepower (HP)
- 1 horsepower (HP) = 33,000 foot-pounds (ft. lbs.)/minute
= 550 foot-pounds (ft. lbs.)/second
= 42.4 BTU/minute
= 746 watts

PRESSURE

- 1 bar = 14.5 pounds per square inch (psi) —
above atmospheric
= 33.8 foot water column
= 42 foot oil column
= 29.92 inches of mercury (in. Hg)
- 1 millimeter of mercury (mm Hg) = 0.03937 in. Hg —
below atmospheric
- 1 psi = 2.0416 in. Hg
= 27.71 in. water
- 1 foot column of water = 0.433 psi
- 1 foot column of oil = 0.390 psi

TORQUE

- 1 Newton-meter (Nm) = 0.7375621ft-lbs \approx 0.738
(Machinery's handbooks)
- 1 Newton-meter (Nm) = 8.8507542 lbs-in \approx 8.85 (x12in)

VELOCITY

- 1 meter per second (m/s) = 3.28 feet/second (fps)