EK-1 Birim çevirme tablosu

Alan

1 m^2 = 10.7638 ft^2
1cm^2 = 0.155 in^2
1 in^2 = 6.4516 x 10^{-4} m^2
1 ft^2 = 0.0929 m^2

Basınç

1 Pa = 1 N/m^2
1 atm = 10.333 m H_2O, + 4 °C' de
1 atm = 29.921 in Hg, 0 °C' de
1 atm = 760 mm Hg, 0 °C' de
1 atm = 1.01325 x 10^5 Pa
1 atm = 1.01325 bar
1 atm = 14.696 psia
1 atm = 1.03333 kg_f/cm^2
1 kp/cm^2 = 981 mbar
1 bar = 0.9869 atm
1 bar = 1 x 10^5 Pa =1 x 10^5 N/m^2
1 mm Hg, 0 °C = 1.333224 x10^2 N/m^2
1 psia = 6.895 kPa
1 psia = 6.895 x 10^3 N/m^2

Enerji

1 J = 1 N m = 1 kg m^2/s^2
1 J = 0.23889 cal
1kcal = 4.184 kJ
1 Btu = 1055 J = 1.055 kJ
1 Btu = 252.16 cal
1 kcal = 3.9684 Btu
1 W h = 860 cal
1 W h = 3600 J
1 kW h = 3.6 x 10^3 kJ

Entalpi

1 kJ/kg = 0.23889 kcal/kg
1 Btu/lb_m = 2.3258 kJ/kg = 2326 J/kg

Güç

1 kW = 860 kcal/h
1 kW = 1.3410 hp
1 hp = 0.7457 kW
1 hp = 745.7 W
1 Btu/h= 0.29307 W
1 J/s = 1 W

Hacim

1litre = 0.03532 ft^3
1 litre = 0.2642 Gal (U.S.A)
1 Gal (USA) = 3.78541 L
1 m^3 = 35.32 ft^3
1 ft^3 = 7.481 Gal (U.S.A)

Isı (Birim zamanda transfer olan ısı-Heat flow)

1J/s = 1 W
1 kJ/h = 2.778 x 10^{-4} kW
1 kJ/h = 0.23889 kcal/h
1 kcal/h = 4.184 kJ/h
1 Btu/h = 0.29307 W

Isı akışı (Heat flux)

1 W/m^2 = 0.860 kcal/h m^2
1 kcal/h m^2 = 1.163 W/m^2
1 kcal/h m^2 = 0.3687 Btu/h ft^2
1 Btu/h ft^2 = 2.712 kcal/h m^2
1 Btu/h ft^2 = 3.1546 W/m^2

Isı transfer katsayısı (Heat transfer coefficient)

1 W/m^2 K = 0.860 kcal/h m^2 K
1 kcal/h m^2 K = 1.163 W/m^2 K
1 Btu/h ft^2 °F = 5.6783 W/m^2 K
1 Btu/h ft^2 °F = 1.3571 x 10^{-4} cal/s cm^2 °C

Isıl İletkenlik (Thermal conductivity)

1 W/m K = 0.860 kcal/h m K
1 kcal/h m K = 1.163 W/m K
1 Btu/h ft °F = 1.731 W/m K

Isıl yayınım (Thermal diffusivity)

$1\ m^2/s = 38745\ ft^2/h$

$1\ ft^2/h = 2.581 \times 10^{-5}\ m^2/s$

İş

1 kW h = 1.341 hp h

1 hp h = 0.7457 kW h

1 hp h = 2544.5 Btu

$1\ ft\ lb_f = 1.35582\ J$

Kuvvet

$1\ N = 1\ kg\ m/s^2$

$1\ lb_f = 4.4482\ N$

Kütle

$1\ kg = 2.2046\ lb_m$

$1\ lb_m = 0.45359\ kg$

Sıcaklık

$T_{°F} = T_{°C} \times 1.8 + 32$

$T_{°C} = (T°F - 32)/1.8$

$\Delta\ °F = 5/9\ \Delta°C$

$\Delta\ °F = \Delta K$

Uzunluk

1 m = 3.28 ft

1 ft = 0.3048 m

$1\ in = 2.54 \times 10^{-2}\ m$

$T_{(R)} = T_{(F)} + 460$

$T_{(K)} = T_{(C)} + 273.15$

1 mikron $= 10^{-6}$ m = 1 μm

$1\ °A = 10^{-10}\ m$

Viskozite

$1\ N\ s/m^2 = 1\ Pa\ s$

1 kg/ m s = 1 Pa s

$lb_m/ft\ s = 1.4881\ kg/m\ s$

1 P (poise) = 0.1 N s/m²

$1\ cp = 10^{-3}\ Pa\ s = 10^{-3}\ kg/m\ s = 10^{-3}\ N\ s/m^2$

$1\ cp = 10^{-2}\ g/cm\ s = 10^{-2}$ poise

1 St (stoke) = 10^{-4} m²/s (kinematik)

Yer çekimi ivmesi

$g = 9.80665\ m/s^2$

$g = 980.665\ cm^2/s^2$

$g = 32.174\ ft/s^2$

$1\ ft/s^2 = 0.304799\ m/s^2$

Yoğunluk

$1\ kg/m^3 = 0.06243\ lb_m/ft^3$

$1\ lb_m/ft^3 = 16.0185\ kg/m^3$

$1\ lb_m/gal = 1.198264 \times 10^2\ kg/m^3$