

Rev. 4-99 Shaded area indicates changes

## Conversion factors for various engineering units

Multiply	By	To Obtain
Acres	43560	Sq. ft.
Acre feet	43560	Cubic ft.
Acre feet	325851	Gallons
Acre feet	1233.49	Cubic meters
Atmospheres	76.0	Cm of mercury
Atmospheres	29.92	Inches of mercury
Atmospheres	33.90	Feet of water
Atmospheres	14.70	Lb/sq. in.
Barrels - Cement	376	Lb - cement
Bags or Sacks - Cement	94	Lb - cement
Board - feet	144 sq. in. x 1 in.	Cubic in.
British Thermal Units	777.5	Foot lbs.
British Thermal Units	0.0003927	Horsepower- hrs.
British Thermal Units	0.0002928	Kilowatt - hrs.
Btu/min.	12.96	Foot lbs./sec
Btu/min.	0.02356	Horsepower
Btu/min.	0.01757	Kilowatts
Btu/min.	17.57	Watts
Centimeters	0.3937	Inches
Centimeters	0.01	Meters
Centimeters	10	Millimeters
Centimeterof mercury	0.01316	Atmospheres
Centimeterof mercury	0.4461	Ft. of water
Centimeterof mercury	136	Kg/sq. meter
Centimeterof mercury	27.85	Lb/sq. meter
Centimeterof mercury	0.1934	Lb/sq. in.
Centimeters/seconds	1.969	Feet/min.
Centimeters/seconds	0.03281	Feet/sec.
Cm/sec./sec.	0.03281	Feet/sec./sec.
Cubic centimeters	0.00003531	Cubic ft.
Cubic centimeters	0.06102	Cubic in.
Cubic centimeters	0.000001308	Cubic yds.
Cubic centimeters	0.0002642	Gallons
Cubic centimeters	0.03381	Ounces (fluid)
Cubic Cm/min.	0.002118	Cu. ft./hr.
Cubic Cm/min.	0.002641	Gal./min.
Cubic feet	1728	Cubic in.
Cubic feet	7.48052	Gallons
Cubic feet	59.84	Pints ( liq.)
Cubic feet	29.92	Quarts (liq.)
Cubic feet/min.	472.0	Cubic cm/sec.
Cubic feet/min.	0.1247	Gal/sec. 7.48 gal/min
Cubic feet/sec.	0.646317	Million gal./day
Cubic feet/sec.	448.831	Gal/min.
Cubic inches	0.0005787	Cubic ft.
Cubic inches	0.00002143	Cubic yds.
Cubic inches	0.004329	Gal
Cubic meters	35.31	Cu. ft.
Cubic meters	61.023	Cu. in.
Cubic meters	1.308	Cu. yds.
Cubic meters	264.2	Gal
Cubic yards	27	Cu. ft.
Degrees( angle)	60	Minutes
Degrees( angle)	0.01745	Radians
Degrees( angle)	3600	Seconds
Degrees/sec.	0.01745	Radians/sec.
Degrees/sec.	0.1667	Revolutions/min.
Degrees/sec.	0.002778	Revolutions/min.
Fathoms	6	Feet
Feet	30.48	Centimeters
Feet	12	Inches
Feet	0.3048	Meters
Feet of water	0.0295	Atmosphere
Feet of water	0.8826	In. of mercury
Feet of water	62.43	Lb/sq. ft.
Feet of water	0.4335	Lb/sq. in
Feet/min.	0.01667	Feet/sec.
Feet/min.	0.01136	Miles/hr.
Feet/sec.	0.6818	Miles/hr.
Foot lb.	0.001286	Btu
Foot lb.	0.000000505	Horsepowerhrs.
Foot lb.	0.0000003766	Kilowatt hrs.

Multiply	By	To Obtain
Foot lb/min.	0.001286	Btu/min.
Foot lb/min.	0.01667	Ft. lb/sec.
Foot lb/min.	0.0000303	Horsepower
Foot lb/min.	0.0000266	Kilowatts
Foot lb/sec.	0.0717	Btu/min.
Foot lb/sec.	0.001818	Horsepower
Foot lb/sec.	0.001356	Kilowatts
Gallons	3785	Cubic cm.
Gallons	0.1337	Cubic ft.
Gallons	231	Cubic in.
Gallons (Imperial)	1.20095	U.S. gallons
Gallons (U.S.)	0.83267	Imperial gallons
Gallons water	8.3453	Pounds of water
Gallons/min.	0.002228	Cu. ft./sec.
Gallons/min.	8.0208	Cu. ft./hr.
Grains/U.S. gallons	17.118	Parts/million
Grains/U.S. gallons	142.86	Lb/million
Grains/U.S. gallons	14.254	Parts/million
Grams	0.03527	Ounces
Grams	0.002205	Pounds
Grams/cu. cm	62.43	Pounds/cu.ft.
Grams/cu. cm	0.03613	Pounds/cu.in.
Grams/liter	58.417	Grains/gal.
Grams/liter	8.345	Pounds/1000gal.
Grams/liter	0.062427	Pounds/cu.ft.
Grams/liter	1000	Parts/million
Horsepower	42.44	Btu/min.
Horsepower	33000	Ft. lb/min.
Horsepower	550	Ft. lb/sec.
Horsepower	0.7457	Kilowatts
Horsepower(boiler)	33479	Btu/hr.
Horsepower(boiler)	9.803	Kilowatts
Horsepowerhours	2547	Btu
Horsepowerhours	7457	Kilowatt hours
Inches	2.540	Centimeters
Inches of mercury	0.03342	Atmospheres
Inches of mercury	1.133	Ft. of water
Inches of mercury	70.73	Lb/sq. ft.
Inches of mercury	0.4912	Lb/sq. in
Inches of water	0.002458	Atmospheres
Inches of water	0.07355	Inches in mercury
Inches of water	5.202	Lb/sq. ft.
Inches of water	0.03613	Lb/sq. in
Inches of water	0.5781	Ounces/sq.in.
Kilograms	2.205	Lb
Kg/meter	0.6720	Lb/ft
Kg/sq. meter	0.003281	Feet of water
Kg/sq. meter	0.2048	Lb/sq. ft.
Kg/sq. meter	0.001422	Lb/sq. in
Kilometers	3281	Feet
Kilometers	0.6214	Miles
Kilometers	1094	Yards
Kilometers/hr.	27.78	Centimeters/sec.
Kilometers/hr.	54.68	Feet/min.
Kilometers/hr.	0.9113	Feet/sec.
Kilometers/hr.	0.6214	Miles/hr.
Kilowatts	56.92	Btu/min.
Kilowatts	44250	Ft. lb/min.
Kilowatts	737.6	Ft. lb/sec.
Kilowatts	1.341	Horsepower
Kilowatts	1000	Watts
Kilowatt hrs.	3415	Btu
Kilowatt hrs.	2655000	Ft. lb.
Kilowatt hrs.	1.341	Horsepower- hrs.
Liters	0.03531	Cu. ft.
Liters	61.02	Cu. in.
Liters	0.2642	Gallons
Meters	100	Centimeters
Meters	3.281	Feet
Meters	39.37	Inches
Meters	1.094	Yards
Meters/sec.	196.8	Ft./min.