

Unit Conversion Table (单位换算表)

Units of Length(长度单位)

1 in	=25.4	mm
1 ft	=0.3048	m
1 mile	=1609.3	m
1 micron	=10 ⁻⁶	m

Units of Mass(质量单位)

1 lb	=453.6	g
1 cwt	=50.8	kg
1 ton(imp)	=1016	kg
1 ton(us)	=907.2	kg
1 tonne	=1000	kg

Units of Moment(力矩单位)

1 inlb	=0.113	Nm
1 ftlb	=1.356	Nm
1 kgm	=9.807	Nm
1 ftpoundal	=0.0421	Nm

Temperature Conversion Table(温度单位)

(F-32) x 5/9	=°C
K-273.15	=°C

Flow Volume(流量)

CV Value= Water Flow Volume: 1 US Gal/min at 60° F & Pressure Differential 1 Psi.(Cv x 1000=l/min)
 CV Value(值)=水流量 (US Gal/min)60° F下, 流经差压力为1Psi之阀门而所得出之流量定值。
 Kv Value= Water Flow Volume: L/min at 20° C & Pressure Differential 1kgf/cm².
 Kv Value(值)=水流量 (L/min)於20° C下, 流经差压力为1kgf/cm²之阀门而所得出之流量定值。
 Kv Value= Air Flow Volume: m³/min at 20° C & Pressure Differential 1kgf/cm².
 Kv value(值)=空气流量 (cm³/min)於20° C下, 流经差压力为1kgf/cm²之阀门而所得出之流量定值。

S.T.P=Temp.: 0°C, Absolute Pressure: 101.3kPa.
 S.T.P=标准温度及压力 (0°C及101.3kPa绝对压力)

N.T.P=Temp.: 20°C, Absolute Pressure: 101.3kPa.
 N.T.P=正常温度及压力 (20°C及101.3kPa绝对压力)

M.S.C=Temp.: 15°C, Absolute Pressure: 101.3kPa.
 M.S.C= 标准温度及压力 (15°C及101.3kPa绝对压力)

ANR=Temp.: 20°C & Relative Humidity: 65%.
 ANR=温度: 20°C及相对湿度: 65%

Units of Area(面积单位)

1 in ²	=6.45	cm ²
1 ft ²	=0.093	m ²

Units of Pressure(压力单位)

1 psi	=6.89	kPa
1 kgf/cm ²	=98.07	kPa
1 bar	=100	kPa
1 bar	=14.5	Psi
1 atmosphere	=98.1	kPa
1"(STANDRD)	=101.33	kPa
1 cm water	=97.89	Pa
1 in water	=248.64	Pa
1 mm mercury	=133.3	pa
1 in mercury	=3.39	kPa
1 Torr	=133.3	Pa
1 ft water	=0.0298	bar
1 bar	=33.33	ft water

Units of Work(能量单位)

1 lbft	=1.356	J
1 Nm	=1	J
1 Kgm	=9.807	J
1 kW/hr	=3.6	MJ

Units of Volume(体积单位)

1 litre	=0.001	m ³
1 cu.ft.	=0.0283	m ³
1 cu.in.	=16.39	cm ³
1 gal(imp)	=4.546	L
1 gal(us)	=3.79	L
1 fluid oz.(imp)	=28.41	mL
1 fluid oz.(us)	=29.57	mL

Units of Force(力单位)

1 lbf	=4.45	N
1 kgf	=9.81	N
1 kp(kilopond)	=9.81	N
1 poundal	=138.3	mN
1 ton force	=9.964	kM

Units of Power (Work/Time)(功率单位(功/时间))

1 lbft/sec	=1.356	W
1 kgm/sec	=9.807	W
1 Nm/sec	=1	W
1 Joule/sec	=1	W
1 H.P.(imp)	=745.7	W

Units(单位)

Abbreviation(缩写)

Pascal	Pa
Newton	N
metre	m
litre	L
watt	W
Newton metre	Nm
Joule	J
Megajoule	MJ
°Kelvin	K

Equivalent(等值换算)

1 Psi=6.895 kPa=0.07kgf/cm²=0.06895 bar=0.0703 atm
 1 standard atmosphere=14.7 psi=101.3 kPa=1.01325 bar
 1 kgf/cm²=98.07 kPa=14.22 psi=28.96 ins mercury
 1 ft lb=0.13826 kgm=1.356 Nm

1 L=1000cm³=1.7598 pint=10³mm³
 1 tonne=1000kg=0.984 ton=2205 lb
 1 m³=10⁶cm³
 1 cu ft/min.=0.0283m³/min=28.3 l/min
 1 Pa=1 N/m²

