KUMHO (주)금호테크TECH

## PRESSURE

1 standard atmoshpere (표준대기압, ATM.) = 101,325 pa = 760 mmHg = 1013.25 mbar = 1.0332 kgf/cm2
= 14.2231 lb/in$^3$ (= p.s.i) = 10.332 mAq(℃) = 10.3 m$H_2$ O
= 34 ft$H_2$ 0 = 29.92 inHg ( ercury)
= 101,325 N/m$^2$ = 2,048 psf
(중력가속도가 9.8 m/sec$^2$ 인 곳에서 밀도가 13.59 g/m$^3$ 인 수은주 760mm에 해당하는 압력)

1 tech. atmosphere absolute atmosphere (공학대기압) (ATA.) = 1 kg/cm$^2$ = 735.6 mmHg = 10 mAq = 0.98 bar = 98,070 pa
= 0.9679 atm = 28.96 inHg
(1 kg의 힘이 1 cm$^2$의 면적에 작용하는 압력)

1 bar = 10 dyne/cm$^2$ = $10^5$ pasca! (= 1 N/ms$^2$ = N/m$^2$)
(hectopieze) = 0.1 Mpa (Mega Pascal) = $10^3$ mbar

1 in of mercury = 0.03453 kg/cm$^2$ = 0.4912 lb/in$^2$ (pai)
1 Newton/m$^2$ = 1 pascal
1 mmHg (=1 Torr) = 1.330 mbar = 0.133 Kpa = 13.6 mmAq (Aqueous)
1" Hg x 1.139 = 1 ft
1 m$H_2$ O (mAq) = 9,806 pa
1 mbar = 100 pa
1 mmAq = 1 kg/m$^2$, 1 pa = 1 N/m$^2$
1 Mpa = 1 N/m$^2$ = 1 MN/m$^2$ = 1,000,000 pa = 1000 kpa
1 kpa = 0.1450 lb/in$^2$ = 0.01 kg/cm$^2$
1 Psi = 0.0684 atm = 0.069 bar = 6.894 kpa = 68.94 mbar
= 2.307 feet of water (ft $H_2$ O) = 27,684(in $H_2O$) = 0.0007mm $H_2O$
= 2036 in of mercury = 0.0703 kg/cm$^2$ = 6.90 Kpa = 703.1 kg/mm$^2$
= 0.0069 N/mm$^2$ = 6.89 x 103 N/m$^2$
1 Ksi = 1,000 psi = 6.89 N/M$^2$
1 pa = 1 N/m$^2$

## VACUUM PRESSURE

1 micron (μnHg) = 0.0010 torr = 61020 in$^3$ = 35.31 ft$^3$
1 milibar (mbar) = 0.7501 torr
1 in.water at 4℃ (1 inch.$H_2O$) = 1.868 torr
1 inHg = 25.4 torr = 33.86 mbar
1 ata = 735.6 torr
1 pa = 0.0075 torr
1 mm mercury (mmHg) = 1 torr = 1.33 mbar = 0.133 kpa
1 bar = 750.1 torr
1 atm = 760.1 torr
1 psi = 51.7 torrr
1 torr = 1.3 x 102 N/m$^2$