
Gas Correction Factors

Gas correction factor tables are only reproduced for the convenience of the user and do not imply that use with other gases will be safe with BA ion gauges.

Divide sensitivity by 100 for Pa⁻¹; multiply by 1.33 for Torr⁻¹.

| Gas | Symbol | Gas Correction Factor | NGC Sensitivity S, mBar-1 |
|-------------------------|------------------------------------|-----------------------|------------------------------|
| Acetone | (CH ₃) ₂ CO | 3.6 | 68 |
| Air | --- | 1.0 | 19 |
| Ammonia | NH ₃ | 1.3 | 25 |
| Argon | Ar | 1.3 | 24 |
| Benzene | C ₆ H ₆ | 5.9 | 112 |
| Bromine | Br | 3.8 | 72 |
| Bromomethane | CH ₃ Br | 3.7 | 70 |
| Cadmium | Cd | 2.3 | 44 |
| Carbon Dioxide | CO ₂ | 1.4 | 27 |
| Carbon Disulfide | CS ₂ | 5.0 | 95 |
| Carbon Monoxide | CO | 1.05 | 20 |
| Carbon Tetrachloride | CCl ₄ | 6.0 | 114 |
| Cesium | Cs | 4.3 | 82 |
| Chlorine | Cl ₂ | 0.68 | 13 |
| Chlorobenzene | C ₆ H ₅ Cl | 7.0 | 133 |
| Chloroethane | C ₂ H ₅ Cl | 4.0 | 76 |
| Chloroform | CHCl ₃ | 4.7 | 89 |
| Chloromethane | CH ₃ Cl | 2.6 | 49 |
| Cyanogen | (CN) ₂ | 2.8 | 53 |
| Cyclohexylene | C ₆ H ₁₂ | 7.9 | 150 |
| Deuterium | D ₂ | 0.35 | 7 |
| Dichlorodifluoromethane | CCl ₂ F ₂ | 2.7 | 51 |

| | | | |
|-------------------|--------------------------------------|------|-----|
| Dichloromethane | CH_2Cl_2 | 3.7 | 70 |
| Ethane | C_2H_6 | 2.6 | 49 |
| Ethanol | $\text{C}_2\text{H}_5\text{OH}$ | 3.6 | 68 |
| Ethyl Acetate | $\text{CH}_3\text{COOC}_2\text{H}_5$ | 5.0 | 95 |
| Ethyl ether | $(\text{C}_2\text{H}_5)_2\text{O}$ | 5.1 | 97 |
| Ethylene | C_2H_4 | 2.3 | 44 |
| Ethylene oxide | $(\text{CH}_2)_2\text{O}$ | 2.5 | 47 |
| Helium | He | 0.18 | 3 |
| Heptane | C_7H_{16} | 8.6 | 163 |
| Hexane | C_6H_{14} | 6.6 | 125 |
| Hydrogen | H_2 | 0.46 | 9 |
| Hydrogen Bromide | HBr | 2.0 | 38 |
| Hydrogen Chloride | HCl | 1.5 | 28 |
| Hydrogen Cyanide | HCN | 1.5 | 28 |
| Hydrogen Fluoride | HF | 1.4 | 27 |
| Hydrogen Iodide | HI | 3.1 | 59 |
| Hydrogen Sulfide | H_2S | 2.2 | 42 |
| Iodine | I_2 | 5.4 | 103 |
| Iodomethane | CH_3I | 4.2 | 80 |
| Isoamyl Alcohol | $\text{C}_5\text{H}_{11}\text{OH}$ | 2.9 | 55 |
| Isobutylene | C_4H_8 | 3.6 | 68 |
| Krypton | Kr | 1.9 | 36 |
| Lithium | Li | 1.9 | 36 |
| Mercury | Hg | 3.6 | 68 |
| Methane | CH_4 | 1.4 | 27 |
| Methanol | CH_3OH | 1.8 | 34 |
| Methyl Acetate | $\text{CH}_3\text{COOCH}_3$ | 4.0 | 76 |
| Methyl ether | $(\text{CH}_3)_2\text{O}$ | 3.0 | 57 |
| Naphthalene | C_{10}H_8 | 9.7 | 184 |
| Neon | Ne | 0.3 | 6 |

| | | | |
|----------------------|-----------------------------------|-----|-----|
| Nitrobenzene | $\text{C}_6\text{H}_5\text{NO}_2$ | 7.2 | 137 |
| Nitric Oxide | NO | 1.3 | 25 |
| Nitrogen | N_2 | 1.0 | 19 |
| Nitrogen Oxide | NO_2 | 1.2 | 23 |
| Nitrous Oxide | N_2O | 1.5 | 28 |
| Oxygen | O_2 | 1.0 | 19 |
| Phosphine | PH_3 | 2.6 | 49 |
| Potassium | K | 3.6 | 68 |
| Propane | C_3H_8 | 4.2 | 80 |
| Rubidium | Rb | 4.3 | 82 |
| Sodium | Na | 3.0 | 57 |
| Sulphur Dioxide | SO_2 | 2.1 | 40 |
| Sulphur Hexafluoride | SF_6 | 2.3 | 44 |
| Toluene | $\text{C}_6\text{H}_5\text{CH}_3$ | 6.8 | 129 |
| Water | H_2O | 1.1 | 21 |
| Xenon | Xe | 2.9 | 55 |
